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Mothers and young adolescent daughters in the online world: Navigating dynamics, understanding maternal modelling of psychosocial health and physical activity behaviours, and collaboratively creating educational materials

By

Sara Santarossa

A Dissertation
Submitted to the Faculty of Graduate Studies
through the Department of Kinesiology
in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy
at the University of Windsor

Windsor, Ontario, Canada

2020

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Mothers and young adolescent daughters in the online world: Navigating dynamics, understanding maternal modelling of psychosocial health and physical activity behaviours, and collaboratively creating educational materials

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DECLARATION OF CO-AUTHORSHIP / PREVIOUS PUBLICATION

I. Co-Authorship

I hereby declare that this thesis incorporates material that is result of joint research, as follows: Chapters 2, 3, and 4 of the thesis was co-authored with Advisor Dr. Sarah J. Woodruff. In all cases, the key ideas, primary contributions, experimental designs, data analysis, interpretation, and writing were performed by Sara Santarossa, and the contribution of co-author was primarily through the provision of critical feedback to enhance the quality of the research. Dr. Sarah J. Woodruff provided feedback on the refinement of ideas and interpretation of study results, and assisted with the editing of the manuscript.

I am aware of the University of Windsor Senate Policy on Authorship and I certify that I have properly acknowledged the contribution of other researchers to my thesis, and have obtained written permission from each of the co-author(s) to include the above material(s) in my thesis.

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II. Previous Publication

This thesis includes three original papers that have been previously published/submitted for publication in peer reviewed journals, as follows:

Thesis Chapter	Publication title/full citation	Publication status*
Chapter 2	Santarossa. S., & Woodruff, S. J. (2020). Using focus groups to understand the dynamics of mothers and daughters on social networking sites. *Journal of Child and Family Studies*. doi: 10.1007/s10826-020-01700-w	*published*
Chapter 3	Santarossa. S., & Woodruff, S. J. (2019). Maternal modelling online: Assessing the dynamics of mother/daughter dyads on social networking sites using the Actor-Partner Interdependence Model.	*submitted*

Chapter 4	Santarossa. S., & Woodruff, S. J. (in press). Understanding effective development: Using a community–academic partnership to create a workshop and interactive toolkit for parent education. *The Canadian Journal of Action Research 20*(2), 3-28.	*in press*

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ABSTRACT

In the offline world, research suggests that the mother/daughter relationship influences every stage of the daughter's development and self-perception (Flaake, 2005), with the mother serving as a central role model and critical influencer in the positive growth of their daughters. However, the ever important mother/daughter relationship has become further complicated and/or redefined as connection and communication now extends into the ever evolving online world. Spending time online and particularly on social networking sites (SNSs) appears to be a part of daily behaviour for most Canadians (Statistics Canada, 2019). With maternal modelling existing offline between mothers and daughters, a similar influence could be exercised by the fast evolution of the digital environment and culture, thus making it imperative that online mother/daughter relationships be further considered. In addition, research suggests that parents feel unprepared to raise children in today's online, media-rich world (Yardi & Bruckman, 2011), therefore, parent education programs/tools are needed to help guide appropriate navigation. As such, the purpose of this dissertation was to better understand the mother/daughter relationship on SNSs by exploring maternal modelling in relation to several psychosocial health and physical activity variables. Moreover, an overall goal of this dissertation was to use action research to develop a community-academic partnership (CAP) to create an evidence-based, sustainable, and usable outreach service for a community organization, for mothers, to use and evaluate in the future. These objectives were accomplished in three empirical studies. In Study 1 (Chapter 2) the mother/daughter dynamic on SNSs, with particular emphasis on exploring the SNS-related influences and understanding what role mothers play in developing their daughters' SNS beliefs,

attitudes, social norms, and behaviours as well as to determine what daughters have learned from their mothers about SNSs, was examined through focus groups. Using a deductive and inductive approach, thematic analysis revealed five themes: being your authentic self, co-creating a digital footprint and online expectations, mother as a role model, connecting offline, and transmission of beauty ideals. The objective of Study 2 (Chapter 3) was to understand the dyadic relationships between SNS behaviours (i.e., use, photo activities, and interaction activities) and self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours among mothers and their daughters, through an online survey. Using a pooled regression Actor-Partner Interdependence Model (APIM) approach, results indicated that SNS behaviours predicted outcome variables for both mothers and daughter individually, as well as mothers' SNS behaviours predicted daughters' outcome variables. Lastly, using action research, in Study 3 (Chapter 4) the development phase of a CAP that designed a workshop and interactive toolkit (based on the formative research collected in Study 1 and 2) to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint while fostering a transformative learning experience for the mothers with the desired impact to then reach their daughter, was explored. Findings suggest that although both collaborative processes (interpersonal and operational) were referenced as influential facilitating factors during the CAP's development, operational processes were expressed as facilitating factors more often. The findings of this dissertation can be used to better understand online mother/daughter relationships, inform future research designs or directions, and make contribution to action research as it pertains to the development of parent education.

DEDICATION

To my husband, for always keeping my clothes clean and supporting me in all I do.

To my father, for showing me what it means to have the eye of the tiger.

To my mother, for making me believe I could do anything.

To my brother, for always standing beside me.

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CHAPTER 1

INTRODUCTION

The importance of the mother/daughter relationship, on positive development, has been emphasized in the literature. In particular, the literature consistently emphasizes the significance of the mother/daughter relationship in contributing to the formation of the adolescent girl's perception of herself and her body (Flaake, 2005). The mother acts as a critical role model and a major source of information and guidance for the adolescent daughter regarding her body and how she should feel and behave while experiencing the transition to womanhood (Usmiani & Daniluk 1997). A mother's conduct, together with her relationship with her daughter, can directly and indirectly contribute to her daughter's self-esteem (Openshaw, Thomas, & Rollins, 1984), body satisfaction (e.g., maternal modelling of body-image attitudes and behaviours act as social development precursor for daughters; Rieves & Cash, 1996; Vincent & McCabe, 2000), societal and interpersonal aspects of appearance ideals (e.g., role of maternal modelling as a process through which this ideal is acquired in daughters; Pike & Rodin, 1991), eating attitudes and behaviours (e.g., weight-loss attempts such as dietary restraint and exercising; Benedikt, Wertheim, & Love, 1998), as well as leisure interests, values, and behaviour patterns (e.g., activities chosen for relaxation, pleasure, or other emotional satisfaction; Shannon & Shaw, 2008). What remains unexplored is the online mother/daughter relationship and its role on the adolescent girl's development. Therefore, the purpose of this dissertation was to better understand the mother/daughter relationship and dynamic on social networking sites (SNSs) by exploring maternal modelling in relation to several psychosocial health and physical activity variables. Moreover, with research suggesting

that parents feel unprepared to raise children in today's online, media-rich world (Yardi & Bruckman, 2011), an overall aim of this dissertation was to use action research to develop a community-academic partnership (CAP) to create an evidence-based, sustainable, and usable outreach service for a community organization, for mothers, to use and evaluate in the future.

SNSs Defined

Although there is no single official definition for SNSs, they have been defined as "web-based services that allow individuals to (1) construct a public/semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (Ellison, 2007, p. 211). A type of social media platform (Kaplan & Haenlein, 2010), SNSs have the ability to generate direct communication and two-way interaction between users, thus generating networks (i.e., communities) of users. SNSs reveal important information on how individuals are interacting with one another (Pempek, Yermolayeva, & Calvert, 2009) and within the online world. Through these online interactions SNSs have created an environment for social comparison. Users are able to learn what the social norms are in their SNS community, gain feedback from an audience on their own SNS content, and compare their lives and/or experiences to those of others online (Jong & Drummond, 2013; Pempek et al., 2009). Moreover, SNSs have created an online environment that acts as a space for social relationships to be explored, developed, and negotiated (Rosen, Cheever, & Carrier, 2008). An opportunity exists for comparison to not only the beliefs, attitudes, social norms, and behaviours of peers and celebrities (e.g., a person who is widely recognized in a given society; entertainers,

athletes, influencers) but also from family members such as parents. Parents have an opportunity to influence their children both intentionally and unintentionally through modelling behaviours online.

SNS Use among Children and Parents

With continual accessibility to the Internet and subsequently SNSs, for most Canadians, spending time online appears to be a part of their daily behaviour (Coyne, Santarossa, Polumbo, Woodruff, 2018; Statistics Canada, 2019). The popularity of SNSs exists from children to adults. Many children are spending more than two hours per day on SNSs, having multiple profiles on a variety of platforms (American Academy of Child and Adolescent Psychiatry, 2018). Despite age restrictions (i.e., 13 years), SNSs are quickly becoming a primary media source for children, as a national survey of Canadian students (grades 4-6; 9-12 years) indicated that 32% and 16% have a Facebook and Twitter account, respectively, with membership to SNSs only increasing with age (Steeves, 2014). Research suggests that online risks may exist for children and adolescents including: improper use of technology, lack of privacy, sharing too much information, posting false information about themselves or others (Barnes, 2006), and/or vulnerability to negative online influences (Espinoza & Juvonen, 2011). Moreover, gender differences exist as it appears girls (in grades 4 through 11; 9 to 17 years old) not only use SNSs more frequently, but are more concerned with their online image than their male counterparts (Steeves, 2014).

A similar popularity of SNSs exists among adults. Recent research suggests seven-in-ten adults (69%) use Facebook, with 74% of users visiting the site daily, and about half visiting several times a day (Perrin & Anderson, 2019). In particular, parents

(i.e., those with children under 18 years of age) appear to use SNSs to "respond to the good news others post, answer others' questions, or receive support via online network" (Duggan, Lenhart, Lampe, & Ellison, 2015, p. 2). Mothers, compared to fathers, are more likely to use popular SNSs platforms such as Facebook, Instagram, and Pinterest as well as use SNSs as a parenting resource and to engage their networks daily through frequent shares, comments, or posts (Duggan et al., 2015). Specifically mothers, more than fathers, are using SNSs to post about other aspects of their life as well as sharing photos of their children and parenting moments (Ipsos Media CT, 2015).

Psychosocial Impacts of SNSs

Psychosocial health is composed of mental, emotional, social, and spiritual dimensions and can include an individual's psychological development in relation to or mediated through his/her social environment (Upton, 2013). As SNSs exist as a popular digital social environment, the potential for these online platforms to impact psychosocial health exists and research findings suggest gender differences. Increased SNS use and activities in women and girls has been associated with decreased self-esteem (Santarossa & Woodruff, 2017; Valkenburg, Peter, & Schouten, 2006), increased concern on appearance-related variables (Houge & Mills, 2019; Jong & Drummond, 2013; Meier & Gray, 2014; Santarossa & Woodruff, 2017; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014), increased problematic eating behaviours (Mabe, Forney, & Keel, 2014; Santarossa & Woodruff, 2017), and support/providing companionship towards physical activity (Zhang et al., 2015). Moreover, frequency and direct tone of the feedback left on the user's profile can potentially impact self-esteem and well-being (Valkenburg et al., 2006).

The speed and ease at which girls and women can make social comparisons with others while using SNSs may be a contributing factor to the potential impacts on their psychosocial health (Jong & Drummond, 2013; Tiggemann & Slater, 2014). Potentially, parents' SNS behaviour may be a source of social comparison for children as parents' SNS posts (e.g., types of photos, posts, comments; valance of posts) and/or engagement (e.g., likes, comments, emojis) may convey societal standards and virtually support beauty ideals, leading to body dissatisfaction, low self-esteem, and/or unhealthy behaviours in their children. Specifically, social comparison can be exacerbated between mothers and daughters if mothers are competing (in terms of their posts and pictures) with their daughters on SNSs (Sales, 2016) and the daughter feels the need to upstage her mother online. Although previous research has suggested that for young adult women (i.e., 17 to 27 years), social media engagement with a female family member does not affect state body image (Hogue & Mills, 2019), research into adolescent girls and engagement with their mothers is needed, as well as exploring other psychosocial health variables. As literature has emphasized the importance of the mother/daughter relationship in the positive development of their daughter, the popularity of SNSs among mothers, and the potential associations between SNS consumption and psychosocial health in girls and women, research exploring the online relationship between mothers and daughters is warranted.

Parent/Child Relationship on SNSs

While previous studies have been devoted to understanding the role parental monitoring and mediation activities and family cohesion strength have on the online activities of adolescents (Buelga, Martínez-Ferrer, & Musitu, 2016; Shin & Kang, 2016),

limited literature exists on understanding the role of parental modelling in the online world. How the parent chooses to self-present online (e.g., types of photos, posts, comments, sentiment of posts) may directly (Steinberg, 2016) or indirectly influence their child's digital footprint (He, Piché, Beynon, & Harris, 2010). A digital footprint is the collective, ongoing record of one's Web activity (O'Keeffe & Clarke-Pearson, 2011), and can be positive or negative based on the context and content one leaves behind on the sites they visit. One of the biggest threats to young people on SNSs is their digital footprint and future reputation as preadolescents and adolescents may lack awareness and understanding of appropriate content (O'Keeffe & Clarke-Pearson, 2011). Therefore, children need to learn how to contribute positively to their own digital footprint while parents need to understand that they too play a large role in constructing their children's digital identity. Parental education, described as a process during which parents are 'educated' to support their children's development and learning, to enhance their parenting identity, and strengthen their parent–child relationship (Croake & Glover, 1977), is needed regarding their SNS behaviours and the potential negative effects they may have on their children.

A promising component in the development of an effective parent education program/tool is the use of action research (Loizou, 2013). Action research has been described as "a family of practices of living inquiry that aims, in a great variety of ways, to link practice and ideas in the service of human flourishing," where the orientation of change is with others (Reason & Bradbury, 2001, p. 1). CAPs (a practice of action research) have fared well when academics, parents, and community-based organizations were actively engaged in the design, implementation, and evaluation of parent education

programs (Davison, Jurkowski, Li, Kranz, & Lawson, 2013; Loizou, 2013). However, guidance on how to develop successful CAPs is limited within the literature.

Review of Relevant Theoretical Approaches

While using appropriate theoretical underpinning, the goals of this dissertation were to better understand the mother/daughter relationship and dynamic on SNSs and use action research to develop a CAP to create an outreach service to use and evaluate in the future. Specifically, this dissertation was guided by (a) the social cognitive theory (Bandura, 1986); (b) the contextualistic model of development (Freysinger, 1999); (c) a constructionist approach (Crotty, 1998); (d) the Sociocultural Model (Davydov, 1995; Vygotsky, 1978); and (e) the Model of Research-Community Partnership (Gomez, Drahota, & Stahmer, 2018). Below, each of the above theoretical approaches are described in relation to the three studies that comprise this dissertation.

The *social cognitive theory* explains that human behaviour is determined through the reciprocal interactions of personal, environmental, and behavioural factors and that learning occurs through observation of a model (Bandura, 1986). From a developmental perspective, the idea of modelling is considered one of the "most powerful means of transmitting values, attitudes, and patterns of thought and behaviour" (Bandura 1986; p. 47). Thus, if mothers serve as an important model for their daughters, then their daughters' behaviour may be influenced by what they observe in their mothers. Coupled with the idea that social models provided by mass media, such as digital platforms like SNSs, convey a large amount of information about human values, styles of thinking, and behaviour (Bandura, 2001), maternal modelling in the online environment may have a

role in the mother/daughter relationship and the development and maintenance of beliefs, attitudes, social norms, and behaviours in their daughters.

A *contextualistic model of development*, which places emphasis on the environment or context in which development takes place (e.g., for children this is the family environment/context; Freysinger, 1999), further supports the idea that through behaviours modelled online (i.e., a digital family environment) mothers may influence their daughters. However, daughters do not passively accept messages communicated or modelled by their mothers, it is an active process wherein they collect information; reflect on that information; and accept, reject and/or modify the messages communicated (Crotty, 1998). Therefore, exploring the perspectives of both the mothers and daughters throughout this dissertation is supported by a *constructionist approach* (e.g., children have agency in the learning and development process; Crotty, 1998) in that understanding how the daughters actively interpret and respond to their mother's SNS activity has important implications for the development of their SNS-related beliefs, attitudes, social norms, and behaviours.

Moreover, examining the online mother/daughter dynamic in relationship to psychosocial health and physical activity behaviours is supported by the *sociocultural model.* Specifically, much of the work investigating SNSs and psychosocial health outcomes to date has utilized the Sociocultural Model which emphasizes the role of culture and society on individual development (Davydov, 1995; Vygotsky, 1978). The sociocultural model, for girls and women (Tiggemann, 2011), suggests that exposure to idealized images and content of what women should do and look like, attributes to the negative effects of SNSs on psychosocial health (e.g., upward comparisons to idealised

standards can be accompanied by social anxiety, depression, eating disturbances, and poor self-esteem; Cash & Pruzinsky, 2004). With the constructs of the Sociocultural Model (i.e., media, peers, and family) suggesting a merged influence, SNSs are important transmitters of subjective norms (e.g., weight and appearance). Thus, examining the mother/daughter relationship in the online environment will assist researchers in further understanding the role of SNSs on psychosocial health, in its abilities to convey societal standards and virtually support different types of behaviours.

Lastly, to better understand action research as it pertains to the development of parent education, the *Model of Research-Community Partnerships* (Gomez et al., 2018) was used to explore the facilitating and hindering factors that influence the collaborative process during the Formation phase of the CAP used in this dissertation. The Model of Research-Community Partnerships (Gomez et al., 2018) uses three phases (i.e., Formation, Execution of Activities, and Sustainment) to illustrate the iterative processes of research-community partnership development and conceptualize outcome constructs. As there is limited guidance on how to develop successful CAPs, it is important to explore the Formation phase because understanding influencing factors during the development of CAPs may in turn lead to successful sustainment over time, maximizing the possible benefits of the CAP and the attempt to educate parents on a desired issue.

Overview of Current Research Studies

The overarching aim of this dissertation was to examine, within the online world, mother/daughter dynamics by exploring maternal modelling in relation to several psychosocial health and physical activity variables. In addition, the ultimate goal of this dissertation was to use action research to develop a CAP to create an evidence-based,

sustainable, and usable outreach service for a community organization, for mothers, to use and evaluate in the future. This outreach service would consist of a workshop and interactive toolkit, aimed to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint while fostering a transformative learning experience for the mothers with the desired impact to then reach their daughter. These objectives were accomplished through three separate studies. In Study 1 (Chapter 2), using separate, but simultaneous focus groups, mother/daughter dynamics on SNSs were qualitatively assessed. Specifically, the role mothers play in developing their daughters' SNSs beliefs, attitudes, subjective norms, and behaviours as well as to determine what daughters learned from their mothers about SNSs were explored. In Study 2 (Chapter 3), a pooled regression Actor-Partner Interdependence Model (APIM) approach (Tambling, Johnson, & Johnson, 2011) was utilized wherein, a short online survey using parallel questions helped to quantitatively understand the dyadic relationships between SNS behaviours (i.e., use, photo activities, and interaction activities) and self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours among mothers and their young adolescent daughters. Finally, Study 3 (Chapter 4) highlights the development phase of a workshop and interactive toolkit created for parent education based on findings from Study 1 and 2 while using a CAP. Specifically, while being guided by the Model of Research-Community Partnership (Gomez et al., 2018), Chapter 4 presents a study exploring the relative influence of facilitating and hindering factors within the CAP during its development phase using an online survey. Generally, this dissertation contributes to the existing body of literature regarding the mother/daughter relationship

by illustrating the dyadic dynamic on SNSs as it relates to maternal modelling of psychosocial health and physical activity behaviours. In addition, this dissertation emphasizes knowledge translation and exchange by understanding action research as it pertains to the development of parent education.

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CHAPTER 2

USING FOCUS GROUPS TO UNDERSTAND THE DYNAMICS OF MOTHERS AND DAUGHTERS ON SOCIAL NETWORKING SITES[1]

Quality relationships with parents have been found to have a significant impact on adolescents' general well-being and mental health (Goldberg, 1994; Newland, 2015). In particular, the mother-adolescent relationship has been deemed critical for the positive development of self-esteem for both boys and girls, but especially for adolescent girls (Gilligan, 1982; Keizer, Helmerhorst, & van Rijn-van Gelderen, 2019). The mother serves as a central role model and is critical in the positive development of their daughters. Research on women's development emphasizes the importance of the mother/daughter dyad. For adolescent girls, their mothers' opinions remain important (Guassi Moreira & Telzer, 2018; Poole & Gelder, 1985), however, at the same time they seek autonomy, are increasingly making their own decisions, and parents' control over these decisions declines. The mother/daughter relationship is a unique and important one, with particular influence in the formation of the adolescent girl's perception of herself and her body (Flaake, 2005). For adolescent girls, mothers appear to serve as significant role models and sources of information and guidance regarding their bodies and how they should feel and behave as girls transitioning into womanhood (Usmiani & Daniluk 1997). The literature on adolescent development consistently emphasizes the importance of the mother/daughter relationship in contributing to the development of body image and body satisfaction (Usmiani & Daniluk 1997), eating attitudes and behaviours (e.g., weight-loss

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attempts such as dietary restraint and exercising; Benedikt, Wertheim, & Love, 1998), sex role attitudes and behaviour (Fox, 1980), psychological development (Youniss & Ketterlinus, 1987), as well as leisure interests, values, and behaviour patterns (e.g., activities chosen for relaxation, pleasure, or other emotional satisfaction; Shannon & Shaw, 2008). However, mother/daughter connection and communication now extends into the ever evolving online world, which may further complicate and/or redefine this important relationship. Spending time online appears to be a part of daily behaviour for most Canadians (Statistics Canada, 2013) and has thus created a thriving, new environment in which the impact of the mother/daughter relationship should be explored. As parent modelling exists offline between mothers and adolescent daughters, a similar influence could be exercised in the online world, such as social networking sites (SNSs), thus making it imperative that online mother/daughter relationship be considered and investigated.

SNSs are quickly becoming a primary media source for children, with many having multiple profiles on a variety of platforms and spending more than two hours per day on SNSs (American Academy of Child and Adolescent Psychiatry, 2018). Similarly, SNSs are popular among adults, with more parents than non-parents using SNSs (Duggan, Lenhart, Lampe, & Ellison, 2015). However, parents tend to feel unprepared to raise children in such an online, media-rich world (Yardi & Bruckman, 2011). With the online environment acting as a space for family relationships to be explored, developed, and negotiated it is natural that parental styles have been found to influence online behaviour in adolescents (Rosen, Cheever, & Carrier, 2008). Adolescents who positively appreciate communication with their parents and feel supported and respected are more

likely to talk about harmful Internet contents with their parents (Appel, Stiglbauer, Batinic, & Holtz, 2014) and less likely to engage in negative online behaviours such as cyberbullying (Law, Shapka, & Olson, 2010; Stattin & Kerr 2000). While previous studies have been devoted to understanding the role parental monitoring and mediation activities and family cohesion strength has on the online activities of adolescents (Buelga, Martínez-Ferrer, & Musitu, 2016; Shin & Kang, 2016), limited literature exists on understanding the role of parental modelling in the online world.

SNSs create an environment for social comparison as they offer platforms for individuals to observe interactive Internet advertising campaigns, follow their favourite celebrities (e.g., a person who is widely recognized in a given society; entertainers, athletes, influencers), express themselves through photographs and text, gain social feedback from an audience, and learn what the social norms are in their SNS community (Jong & Drummond, 2013; Pempek, Yermolayeva, & Calvert, 2009). However, for women, the speed and ease at which they can make social comparisons with their friends and celebrities while using SNSs may be a contributing factor to body dissatisfaction and internalization of the thin ideal (Jong & Drummond, 2013; Tiggemann & Slater, 2014). Furthermore, increased SNS usage in women has been associated with low self-esteem (Mehdizadeh, 2010), increased dissatisfaction in a number of appearance related variables (Fardouly & Vartanian, 2015; Meier & Gray 2014), increased problematic eating behaviours (Mabe, Forney, & Keel, 2014; Santarossa & Woodruff, 2017), and a promotion of physical activity (Zhang et al., 2015). Moreover, frequency and direct tone of the feedback left on the user's profile can impact self-esteem and well-being (Valkenburg, Peter, & Schouten, 2006). Although the online environment is filled with

opportunities for comparison from peers and celebrities, it is also filled with pictures and posts from family members such as a mother, which may further provide opportunities for the potential transmission of ideals about beauty and body shapes.

In addition to a mother's self-presentation on SNSs potentially influencing their daughter, research indicates that children express frustration and embarrassment when parents publicly contribute to their online presence without permission (He, Piché, Beynon, & Harris, 2010; Hiniker, Schoenebeck, & Kientz, 2016). In friend/peer circles, children have tried to mitigate this problem by agreeing not to tag (i.e., specifically mention by name) one another in photos or doing so only with explicit consent, so that their parents will not see the photo (James & Jenkins, 2014). Research also has shown that a main reason among children for untagging (i.e., removing one's name) themselves in photos is because they did not like the way they looked (Lewis, 2014), further indicating a child's desire to control their online presence. Thus, it has been suggested that children's need to control their online image may be sabotaged by the common parent practice of sharing information about children online (He et al., 2010). Parents who share information or photographs without their children's permission may limit their children from the opportunity to create their own digital footprints (e.g., the collective, ongoing record of one's Web activity; O'Keeffe & Clarke-Pearson, 2011), moreover, perhaps these children might also become young adults who choose not to create a digital footprint at all (Stienberg, 2016). Consequently, there is a need for parents to become more aware of the impact their SNS behaviour can have on their children, and gain a greater understanding of parental modelling in the online world.

Bandura (1986) suggested that patterns of behaviour are learned and acquired in part based on the behaviour individuals observe in others and the perceived consequences of those behaviours. Described as the social cognitive theory, Bandura (1986) stresses observational learning, imitation, and modelling as ways in which behaviour is learned and acquired. This idea of modelling, from a developmental perspective, is considered one of the "most powerful means of transmitting values, attitudes, and patterns of thought and behaviour" (Bandura, 1986, p. 47). The importance of the mother/daughter relationship involves mothers as role models of their daughters. As young girls are taught to identify with their mothers (Notar & McDaniel, 1986), it is a natural progression that some adolescent girls want to imitate and be most like their mothers (Vescio, Wilde, & Crosswhite, 2005). Thus, understanding the role of the mother/daughter relationship throughout the lifespan of women, but especially for adolescents is critically important for if mothers serve as an important model for their daughters, then their daughters' behaviour may be influenced by what they observe in their mothers. For example, in the context of SNSs, if daughters see their mothers engaging in certain forms of SNS behaviour (e.g., promoting dieting and weight loss in their posts), they may want to imitate that behaviour. At the same time, if daughters observe their mothers avoiding certain SNS behaviours (e.g., not filtering or editing their photographs before posting), daughters may also develop similar patterns of behaviour. Moreover, the contextualistic model of development places emphasis on the environment or context in which development takes place (Freysinger, 1999). For children, the family is a primary context and, in this digital era, that family environment/context can be extended into the online world. Thus, mothers may influence daughters in unintentional and non-deliberate ways,

such as through modelling behaviours or through common everyday interactions (Bandura, 1986), on or offline. Therefore, mothers' behaviours, including what they do and say on SNSs, are important to understand because these actions communicate messages to their daughters about how they should act on SNSs. At the same time, using a constructionist framework (e.g., children have agency in the learning and development process; Crotty, 1998) to understand how daughters interpret and respond to such messages is important. By exploring the perspectives of both groups (mothers and daughters) one can begin to understand that the way they interact and engage could have important implications for development of SNS-related beliefs, attitudes, social norms, and behaviours. In addition, the mother-daughter influence may be crucial from a psychosocial health perspective as well. Psychosocial health is composed of mental, emotional, social, and spiritual dimensions and can be described as an individual's psychological development in relation to or mediated through his/her social environment (Upton, 2013). Since adolescent psychosocial health perceptions are affected by gender (Piko, 2007), and since parental roles within the family are also gendered, daughters may learn important information about the gendering of psychosocial health perceptions from interacting with and observing their mothers.

Given the popularity of SNSs among both mothers and daughters, the potential associations between SNS consumption and body comparison and pressure of societal beauty standards in women, and the concept of maternal modelling, further research into the online relationship between mothers and daughters is warranted. As SNSs are a primary media source and have created an online social environment it is important to investigate the influence of mothers on their daughters' psychosocial health in this online

world. Thus, gaining further understanding of the influence of mothers on daughters' SNS beliefs (e.g., individuals' subjective estimates about whether a particular behaviour will lead to particular consequences; Bandura 1977, 1986), attitudes (e.g., determined by personal conceptions concerning a given object/behaviour and thus creating a learned disposition to respond in a consistently favorable or unfavorable manner with respect to a given object/behaviour; Fishbein & Ajzen, 1975), subjective norms (e.g., the expectation of other significant persons' opinions and beliefs and the degree/social pressures to which an individual feels the motivation to comply; Fishbein & Ajzen, 1975) and ultimately behaviours is important. Further, focusing beyond the mothers' beliefs, attitudes, and deliberate teachings (e.g., intentional and purposive opportunities created for educational and developmental reasons; Shannon & Shaw, 2008) to investigate the daughters' responses to their mothers is important with respect to how daughters' own SNS behavioural intentions and actions are constructed through their responses to the messages that their mothers communicate. Therefore, using separate focus groups, the overall purpose of the current study was to qualitatively assess mother/daughter dynamics on SNSs. The separate focus groups, containing parallel questions were conducted with: 1.) mothers of girls born in 2003-2007 (11-14 years old) who both use the same SNSs, and 2.) girls who were born in 2003-2007 (11- 14 years old) who use the same SNSs as their mother. The purpose of our analysis was to examine the SNS-related influences and to understand what role mothers played in developing their daughters' SNS beliefs, attitudes, subjective norms, and behaviours as well as to determine what daughters learned from their mothers about SNSs. The study used a constructivist approach and incorporated important theoretical understandings from social cognitive theory and a

contextualist developmental perspective. The following research question was addressed in the current study: Within the online world (i.e., SNSs), what types of posts, pictures, comments, and actions do mothers and girls born in 2003-2007 (a) display, (b) prefer from one another, and (c) what feelings/emotions do these posts, pictures, comments, and actions evoke?

Method

Participants

Based on study intent (e.g., data was not yoked between mother and daughter), and to avoid ethical concerns related to dyads (e.g., setting up undue influence on the daughter to participate), mothers and girls were not recruited together (i.e., as dyads; see Appendix A). However, the authors acknowledged that dyad recruitment could occur organically (i.e., if mother/daughter pairs came together, it was a voluntary decision rather than an expectation of the research). Participants of the current study included 42 individuals, 16 mothers and 26 girls, where 11 mother/daughter dyads occurred organically. Inclusion criteria for the mother included that she used at least one of the same SNS platforms as her own daughter (born 2003-2007; 11-14 years old) and have access to each other's account (i.e., each other's friends/followers, or the mother monitors the daughter's account and the daughter is a friend/follower of the mother). The girls must have been born in 2003-2007, making their age between 11-14 years in the calendar year that the study was conducted. Additional inclusion criteria included that the girl used at least one of the same SNS platforms as her own mother and they have access to each other's account (i.e., each other's friends/followers, or the mother monitors the girls account and the girl is a friend/follower of her mother). The age range of 11-14 years was chosen because this age range is the period when they are just entering adolescence

(Pfeifer et al., 2011) and compared to older adolescents, early adolescents are less experienced and less critical about media practices, and more likely to be vulnerable to negative online influences (Espinoza & Juvonen, 2011). A nonprobability purposeful snowball sample was used to identify potential participants (Patton, 1990). Moreover, *mother* was defined as person identified in the primary woman care giver role and *girl* was not based on biological sex but rather anyone who identified with this gender and fit the above inclusion criteria.

Based on Krueger and Casey's (2009) recommendations when conducting focus groups with children, an attempt was made to stratify the focus groups by age (i.e., 11-12, 13-14 years) and size (i.e., 6-10 participants; Morgan, 1998). Therefore, mother focus groups were grouped by the age of their daughter, similarly, among girls, focus groups were constructed based on age cohorts. In total, eight focus groups were conducted (4 with mothers, ranging from 3-5 participants; 4 with girls, ranging from 4-9 participants), and all focus groups were stratified based on the age of the mother's daughter or the girls (i.e., 11-12 and 13-14 years).

To provide a context for the mother/daughter interactions and the mother to daughter influences that are reported in the results section, descriptive information on mothers and girls is provided. Participants involved in the study were from a range of different economic backgrounds and from both rural and urban families (based on postal code). The geographical context for the study was Southwestern Ontario, Canada. Of the 16 mothers that participated, the mean age of their daughters was 12.78 years (*SD* = 1.31), with 4 (25%) of the mothers having more than one daughter born 2003-2007, and their SNS use ranged from 2-10 years' experience. Mothers reported Facebook as their

favourite SNS, compared to other platforms but used Instagram and Snapchat to monitor and "creep" (i.e., a lurking behaviour in which one is looking at another users' profile but not actually communicating with them; Pempek et al., 2009) daughters. Of the 26 girls who participated the mean age was 13.17 years (*SD* = 1.16), their SNS use ranged from being a "brand new user" to four years' experience. Girls reported Snapchat and Instagram as their favourite SNSs to use.

Procedures

Each focus group, lasting for 45 – 60 minutes, was audio recorded and consisted of the participants based on age cohort, a moderator (i.e., primary researchers), and a technical assistant (i.e., a trained graduate or undergraduate student; responsible for recording and taking notes). To ensure rigor in this qualitative inquiry, consistency of moderators was taken into consideration, and the same primary researcher moderated all mother focus groups and the other primary researcher moderated all girl focus groups. In addition, it was emphasized that the role of the moderator was to generate discussion and keep the group focused and on track, while not influencing conversation with their own opinions (Krueger, 1998).

The structure of the focus group interview was separated into three sections and an interview-guide approach was used (Patton, 2002; see Appendix B): 1.) information regarding what was to be expected during the focus group; 2.) exploring the mother/daughter relationship in regards to SNSs using questions regarding the types of posts, pictures, comments, and actions they display, prefer, and their feelings/emotions; and 3.) a debriefing session allowing an opportunity for any final comments and to discuss any issues that may have been omitted. Notably, separate interview guides, with

appropriate language and parallel questions, for mothers and girls were used in the focus groups. For example, to examine SNS preferences a probe, in the girls' interview guide, included "Are there types of pictures/posts you like moms posting on social networking sites?" versus the mothers' interview guide asking "Are there types of pictures/posts moms like daughters posting on social networking sites?" Furthermore, probes were used to gain a more in-depth understanding of SNS use and the role of parental modelling. For example, in the question exploring the action of filtering/editing in the girls' interview guide, "Should moms be filtering or editing their photos before posting them?" the probing questions of, "Why do girls your age think they should/should not?" and "Do girls your age think they should filter/edit before posting?" were used. In addition, to allow for participants to feel more comfortable and anonymous, more general language was used while asking questions. Meaning the verbiage "daughters and/or girls your daughter's age" or "moms" and "moms/ your mom's friends" or "girls your age" was used while questioning mothers and girls, respectively.

Ethics approval was obtained from the Research Ethics Board of the University of Windsor. Participation was voluntary. Prior to commencing the focus group session, active, written consent was obtained from both the mothers and the girls (see Appendices C and D). The girls were considered competent to consent for themselves, however, their parent/guardian was made aware of their participation in the study and provided consent via email (i.e., copied on all correspondence with the interested girl), by assisting with scheduling/logistics of the focus group, and as the girls were not of driving age, their parent/guardian had to bring them to the focus group location (indicating they knew what their daughter is participating in).

Data Analyses

All focus groups were conducted in English, audio-recorded, and transcribed verbatim by the primary researcher after the focus group discussions. Based on Braun and Clark's (2006) recommendations, six phases were implemented during the thematic analysis: 1.) familiarising yourself with your data, 2.) generating initial codes, 3.) searching for themes, 4.) reviewing themes, 5.) defining and naming themes, and 6.) producing the report. The primary investigator became familiar with the data set by assigning individuals codes, transcribing the audio files, reading the transcripts, and listening to the recorded focus groups for verification, clarification, and tone of conversation during analysis. The transcripts resulted in 156 single spaced pages of text. It has been suggested that when conducting qualitative research, a combination of deductive and inductive techniques is most accurate, as almost all studies are designed based on previous theory and research (Patton, 2002; Vazou, Ntoumanis, & Duda, 2005). Thus, a hybrid approach of qualitative methods of thematic analysis was chosen as the method of analysis for this study, and it incorporated both a deductive a priori template of codes approach (Crabtree & Miller, 1999; Stuckey, 2015) and a data-driven inductive approach (Boyatzis, 1998; Hsieh & Shannon, 2005). The deductive a priori template of codes approach involves organizing text for subsequent interpretation using a template in the form of codes from a codebook. The codebook and predetermined coding may be based on a preliminary scanning of the text, on a previous coding dictionary from another researcher, key concepts in a theoretical construct, or they may derive from the interview guide or list of research questions (Stuckey, 2015). For instance, in the current study, participants were asked about maternal modelling ("modelling") which was based on

parental modelling literature (Bandura, 1986; He et al., 2010; Vescio et al., 2005). Participants were also asked questions about SNSs and psychosocial health variables ("dieting", "weight loss", "physical activity", "appearance") developed from previous research in the SNSs domain (Fardouly & Vartanian, 2015; Meier & Gray 2014). These began as five a priori codes, because they were specifically asked to participants in the focus groups. Next, the data-driven inductive approach, involves developing other codes that are emergent, which means that they were concepts, actions, or meanings, that evolved from the data and are different, but may be guided by, the a priori codes (Boyatzis, 1998; Stuckey, 2015). Segments of data that described a new theme observed in the text, were assigned these emergent codes (Boyatzis, 1998). At this stage, themes were developed through several iterations of interaction with the text and codes. During this interpretive phase of the data analysis five overarching themes were identified that were felt to capture the phenomenon described in the raw data. These themes were used to draw comparisons between the mothers and the girls.

Trustworthiness and rigor. To ensure trustworthiness of the data, 20% of the transcriptions coded by the primary investigator were also be coded by an expert in the field and were compared to determine percentage agreement. Similar to Muir, Munroe-Chandler, & Loughead (2019), 20% of the transcriptions were selected by the authors as a feasible and manageable strategy that would still capture sufficient variation in responses (Barbour, 2001). Barbour (2001) has suggested that multiple coding can be a valuable process for inter-rater reliability, and refining interpretations or coding frameworks, but has cautioned against multiple coding of entire datasets. As a result, 90% agreement was found between the two researchers, thus, classified as a good

agreement between researchers (i.e., equal to or greater than 85%; MacQueen, McLellan-Lemal, Bartholow, & Milstein, 2008). Furthermore, during the final section of the focus group the moderator allowed for any additional comments or clarifications to be made from participants. In addition, as suggested in Krueger (1998), immediately following the focus group the moderator and technical assistant debriefed to ensure the conversation recorded correctly and compared field notes.

In order to strengthen the research design and expose biases in the researcher's approach to constructing knowledge and also while developing the methods and interpreting the findings of the current study, a reflexive journal was maintained by the first author throughout the study (Finlay & Gough, 2003; Shannon & Shaw, 2008). Reflexive journals create transparency and can enable researchers to make their experiences, opinions, thoughts, and feelings visible and an acknowledged part of the research design, data generation, analysis, and interpretation process (Ortlipp, 2008). Thus, the memos from the reflective journal allowed the first author to evaluate and process perceptions and emerging thoughts throughout the analysis of the data.

Results

In an attempt to provide a complete picture of how mothers and girls responded and conversed within the focus groups, from the analysis specific to the research question: "Within the online world (i.e., SNSs), the types of posts, pictures, comments, and actions do mothers and girls a) display, (b) prefer from one another, and (c) what feelings/emotions do these posts, pictures, comments, and actions evoke?", the transcripts were looked at as a whole and themes were drawn across the mothers and girls focus groups. The results are presented in multiple formats to demonstrate the similarities and difference within the themes, between mothers and girls. Often, quotes from individuals

are presented to support the various themes, indicated by an anonymized identification number (e.g., Mother8). The age of the mother's daughter(s), or the age of the girl is indicated next to the respected direct quotes (e.g., Mother8, daughter 13 years; Girl1, 12 years), for context. Using the aforementioned deductive and inductive approach, content was categorized based on contextual markers into the following themes: being your authentic self, co-creating a digital footprint and online expectations, mother as a role model, connecting offline, and transmission of beauty ideals. In subsequent paragraphs, each of these major themes are described in detail.

Being Your Authentic Self: Mothers

Mothers discussed authenticity in a number of ways. Most mothers felt that their daughters and/or girls their daughter's age were not being authentic when they posted content on SNSs that was focused on vanity or what they felt was simply seeking attention, as well as a profile that was highly curated. Most mothers felt that posting in such a way created an alternate persona as to who their daughters and/or girls their daughter's age are in the offline world: "Ummm she's got boobs, yah she's a pretty girl…and I've caught her many times on Instagram – with you know, every shot, they are up in her chin. Well when I see you're coming over to my house and you're coming to play with [daughter's name] to play with Monster High Dolls, your boobs aren't in your chin" (Mother 16, daughter 11 years).

Furthermore, these "vanity" or "attention seeking posts," as described by the mothers, often contained specific types of poses or a sexually suggestive nature. Most mothers suggested that not only was this behaviour unauthentic, but it was not age appropriate and something that they would be worried about seeing on SNSs: "Like, just,

make it all…covered, and then go ahead and be who you are. Just for now, while you are under age, just cover your bits. And, so none of that stuff goes out" (Mother4, daughter 12 years). One mother suggested that this type of unauthentic behaviour: "The fish face, the cleavage, the pouty, the selfies – and excessive amount of selfies…" (Mother14, daughter 14 years), could lead to not only self-absorption, but sending or posting nude photos, thus creating a vicious cycle.

One mother discussed how her daughter uses multiple accounts to portray various personas on SNSs: "But she also has two different accounts you know. She's got an Instagram friends and an Instagram open to everybody. The Instagram open to everybody she likes to do artistic looking photos. And the Instagram friends is all friends, and its private, but the one that is open to everybody she actually just does really interesting photos with captions. So she keeps the private one much more anonymous" (Mother13, daughter 14 years).

When it came to talking about filtering or editing photographs before posting on SNSs, some mothers discussed how their daughters and/or girls their daughter's age should not be using a filter if it is to "edit who they are", but it is ok if they are "using cool apps to look neat – you know like puppy dog ears, pig nose, etc." (Mother5, daughters 11, 13, and 14 years). The idea of their daughter being "unfiltered" was important to most mothers and led mothers to discuss the type of content they do like seeing their daughters post on SNSs: "I like to see pictures of the girls doing things. Being active or baking cookies, or whatever it is, um. I dislike the vanity shots that you mentioned earlier, that looks like they are modelling. And I like the non-filtered ones too because the authentic picture of girls just enjoying each other's company and doing

something, and having/not posting it to get those ‘oh, you’re so beautiful’. I don’t like the fishing or when it feels like they need it and that is why they are doing it. Those are the ones that I like the most” (Mother3, daughter 12 years).

Moreover, most mothers discussed that they enjoyed seeing their daughters and/or girls their daughter’s age post SNS content that genuinely reflected who their daughter was in the offline world, their authentic self: “Genuine, fun ones. I don’t like the posed selfie nonsense. Like if they are having fun – like those genuinely fun photos…or if your kid is into sports then them doing their sports, and them being proud of what they – or any of their accomplishments. And crafts and painting…anything I don’t care it if it a sandcastle. Things that like take away the self-absorbed interest that social media can project on kids. It’s like nothing sexual, nothing like just look at me – just like genuine good times. Genuine stuff, genuine good times that they want to share with people that is cool with me” (Mother15, daughter 11 years).

One mother felt authenticity was important even when it comes to their daughter posting content about dieting or weight loss on SNSs: “Like, cuz I want her to be authentic so I don’t want it to be like ‘don’t show anything bad about yourself on social media’. So, I want her to be authentic but that’s [posting about dieting or weight loss] a little much at her age” (Mother4, daughter 12 years). Overall, all mothers felt that providing this genuine type of content was seen as a positive behaviour of their daughters and/or girls their daughter’s age using SNSs because that type of content could provide an environment to keep track of their meaningful memories.

Finally, some mothers also talked about the role they can play towards being authentic towards their daughters’ SNS content. Some mothers felt that they need to

provide authentic reactions towards their daughters' SNS content: "I don't even 'like' all her pictures because …. I don't LIKE all them. So, its real life – I don't like that – so, it doesn't interest me at all. I'm not gonna 'like' it" (Mother4, daughter 12 years).

Being Your Authentic Self: Girls

Most girls discussed that mothers should not be using filters or editing their photographs before posting on SNSs because not only are they too old for that type of behaviour, but more importantly it is not who they really are: "I don't think really anyone should be doing it… Cause it's not who you really are" (Girl1, 12 years); "Like it makes themselves look bad" (Girl14, 14 years).

In addition to filtering and editing their photographs, some girls felt that there were type of posts mothers needed to avoid as it wasn't a necessity for their mother's online persona and it would feel disingenuous: "If my mom posted that [dieting and weight loss], I would be like 'why are you needing to post this', like it is not something that is necessary" (Girl1, 12 years); "Oh like if they are in a bikini – forget it. Don't want to see my mom in a skimpy bikini" (Girl13, 14 years).

However, there was some SNS content that some girls would like to see their mother post as they felt would it be authentic and reflect who their mother is and what they do: "Um, well, my mom likes to post pictures of what she does at work. It's nice to know what she like does. It makes me feel good because I know what she is doing, and stuff. If, like my friends ask "what does she do for work?" I can show them 'here, this is what she does'" (Girl5, 12 years).

Co-creating a Digital Footprint and Online Expectations: Mothers

All mothers spoke of wanting to help their daughters in navigating how to create a positive and appropriate online persona/digital footprint: "And you know, I just want to make sure she is comporting herself with how I want her to comport herself. And she's 11 and I think that it's up to me to help to mold her, in a way that I deem is appropriate. Cuz again – I don't want her to be 18 and on social media, half naked with her ass showing – doing everything and anything for likes on Instagram" (Mother15, daughter 11 years).

Assisting in co-creating this digital footprint included the need for them to approve the picture or post prior to their daughter being allowed to put it on a SNS, thus helping their daughter to understand what type of content should be put online: "I always tell them – once it's out there you can't get it back" (Mother2, daughter 12 years); "So we have some rules around, like, messaging. In general, if you have a problem that should come to family. If you would like to celebrate something, that could go outward. But problem stuff has to stay inside" (Mother4, daughter 12 years). Most mothers also discussed specific images that contained overly sexual poses, suicidal posts, or inappropriate content (e.g., guns, alcohol, cigarettes, and partying) would concern them and lead to a discussion of online expectations.

Online expectations and rules were discussed by all of the mothers. The types of expectations mothers discussed included: teaching their daughters about privacy (e.g., no personal information given, only allow followers to be people you know offline, never provide locations), housing their daughter's account on their own SNS accounts or emails, having or knowing their daughter's passwords, no SNSs when someone is trying

to have a face to face conversation with you, and time limits with smartphones. However, mothers that had daughters at various ages brought up the fact that rules and expectations may need to be adjusted as their daughter ages, as it is important for the daughter to develop independence: "Well when they are younger 11, 12 years old I did [comment on daughter's SNS posts]. I engaged with the kids. But the older they get they do need to grow a sense of self. So you have to sort of encourage that, without there being a risk. So you try to separate. It's a painful, painful, difficult thing – to step back" (Mother14, daughter 14 years).

Furthermore, one mother mentioned how when she is on her own SNS, she has expectations that her daughter needs to follow: "At night time, I finally get to have my phone conversations – playing my games, I'm catchin' up – and she's like 'I want to talk to you'. You've been in this house since 3 o'clock, and you've had every opportunity...this is MY time now. And, as soon as I get on my phone – she's like 'I want to talk to you'. But …now it's my time, back off. I'm allowed to do what I want now, because you had every opportunity from 3 o'clock on to have this conversation with me. She gets me with that 'well you're on your phone'. Well…I'm sorry" (Mother8, daughter 13 years).

Most mothers agreed that they needed to learn how to use the SNS apps prior to allowing their daughters to use it because having involvement in curating and reviewing their daughter's SNS platforms was important and a priority: "Some have called me a stalker. They [her children] can have privacy in their house but never on the internet" (Mother14, daughter 14 years); "I think it's – the kids that I see, um, that are using it inappropriately or using in a way that makes me go 'ugh' their parents are not on social

media. So, more often than not their parents are not actively engaged in the same things that they are" (Mother4, daughter 12 years).

Furthermore, all mothers recognized how they are contributing to their daughter's digital footprint. Many of the mothers gave specific examples or stories of times their daughter openly expressed feeling embarrassed of what they posted on their own SNS platforms, however, some mothers felt like because they were the "mother" those feelings of embarrassment did not have relevance: "But, and I thought about, like, do I ask her about it [posting a picture of her daughter]? But, at this stage, she is 12 and uh, I don't have to ask her permission necessarily to put up something that's, like, fun and her being – whatever" (Mother4, daughter 12 years); "A big thing with me is, this is MY phone not YOURS – so what I do with my device, is none of your business. None of it. So, if I want to take a picture of you, don't ask what it's for – cause I'm gunna post it whether you like it or not" (Mother8, daughter 13 years). In comparison, one mother discussed how she did "not want to cross that line of boundaries of invasion" (Mother 14, daughter 14 years) so she frequently asks her daughter if the pictures she chooses to post embarrass her.

Co-creating a Digital Footprint and Online Expectations: Girls

Digital footprints and online expectations were discussed by all of the girls. Specifically, many of the girls mentioned their mothers wanting to help their daughters better understand what type of content should be put online, assisting in co-creating their digital footprint: "Mom says if you wouldn't show me, then don't post it" (Girl7, 14 years). The type of content mothers wanted to expose their daughters to was also mentioned by many of the girls. For example, one girl stated that to encourage physical activity her mother gives her SNS accounts to follow: "So, I am used to, like, having a lot

of athletic posts because she is like ‘you should follow this account’ - an entire yoga thing. I am like, well this is normal now. She’s like ‘you should motivate yourself with these accounts’” (Girl5, 12 years).

The types of online expectations girls discussed included: privacy settings, getting approval before posting, and posting appropriate content (e.g., not smoking, vaping, or alcohol). Similar to the mother groups, some of the girls felt that if a mother was not monitoring their daughter’s account the mother would not find out about any inappropriate content. However, most of the girls felt that mothers were “naive” when it came to SNSs, and that they need help in how to navigate it: “We should just have like a class and just tell them what to do and what not to do” (Girl16, 14 years). Furthermore, in two of the focus groups girls discussed how it becomes an invasion of privacy if the mothers put too many SNS rules in place: “I just think it is an invasion of privacy. Like, my mom had my Instagram password and she starts, like, reading my conversations with my friend. We weren’t saying anything bad, but at the same time like that’s something you don’t need to know that” (Girl13, 14 years). One girl discussed how if they were banned from SNSs altogether she would just create a “secret account” and use it anyways, without telling her mother.

All of the girls that participated discussed how their mother’s posts can influence their digital footprint and agreed that mothers should ask their daughter’s permission before posting something on SNSs with them in it. Not asking their daughter’s permission resulted in feelings of embarrassment, negativity, and the sense that their mother was intentionally trying to make them “look bad”: “Like if something happened on the weekend, and it’s like a weird photo of us and they post it. That kinda makes me

feel uncomfortable" (Girl6, 12 years); "My mom takes pictures of my room and posts it on her Facebook "oh look how messy my daughter's room is" (Girl10, 13 years); "Especially [should not post the photograph] if I say it's ugly" (Girl10, 13 years). In addition, all of the girls felt that mothers do not need to share their daughter's private moments on their SNSs (e.g., getting hurt, crying, did bad on a test, self-harming behaviours).

Most of the girls also felt like how their mother interacts with their daughter's SNS content contributes to their daughter's digital footprint and can influence their daughter's offline reputation. Specially, girls mentioned how the way in which a mother comments on a daughter's SNS post has offline ramifications: "It also creates a reputation like, people, are like they don't want to hang out with you. Because they think you tell your mom everything, ya know, it's just like…ahh" (Girl10, 13 years); "Sometimes I feel embarrassed because she will like…I will take a picture of me and my friends and I will put it on Instagram with her permission…and then she will like, like it and write like 'ahh you guys are so cute'…and everybody at school would just be talking about it" (Girl23, 11 years). Overall, most of the girls do not feel like it is important for their mothers to comment on their pictures or posts. Not only did the girls talk about mothers leaving embarrassing messages, but some girls felt as if the way the mother was commenting was meant to mimic or make fun of how the girl interacts with her friends (e.g., using the same emojis, language, etc).

Mother as Role Model: Mother

Most of the mothers felt that there was a maternal role modelling effect when using SNSs. A majority of mothers emphasized the need to model appropriate behaviour

on SNSs in terms of what they post or comment, as it can affect how a daughter thinks and feels about herself: “I just think we, what we do post, has such an effect on them. That if we are posting pictures in the brook with our rain boots on, or whatever, that that’s showing them that that’s important to you. And, that you don’t need to be getting glamour shots um, to feel good about yourselves” (Mother3, daughter 12 years).

If the mother does engage in inappropriate behaviour their daughter may also engage in this type of SNS behaviour: “And its sad right, like the apple doesn’t fall far from the tree. Her mom is a social media junkie who is attention seeking…who is very inappropriate…you know….” (Mother10, daughter 12 and 14 years). One mother acknowledged that some mothers may not be thinking about how their behaviour can impact their daughters later on: “About sex, about what they did, and partying and drinking and this and that. You are like 30! Your kids are going to grow up to see this horrible behaviour from their mom. And you’re not teaching them anything differently from what you complained about having to learn when we were teenagers. Like there is no changing or breaking that cycle. So, like those things drive me crazy. The fact that your kids are going to get to come back and see their mom talking about some guy’s dick at like 30 years old, like when you were 4…like it’s ridiculous! Like it is so inappropriate” (Mother15, daughter 11 years).

Mother as Role Model: Girls

All of the girl focus groups emphasized mothers as role models on SNSs. For example, the type of content a mother should want to display on their SNSs was discussed, as it could influence how their daughter would behave: “Because you know they have a child and like if they starting posting bad stuff it may run in the family, and

you know they need to set a good example" (Girl8, 12 years); "But, if a mom would do it [asking to be rated or graded online], I would be like, you're supposed to look up to them. They are supposed to be a role model for you. And, that is not something you really should do" (Girl1, 12 years); "There are people who would take that information [if a mother posts about physical activity] and try that food that is really good for you or go for a half hour run every day" (Girl20, 11 years).

A mother being a role model on SNSs appears to be particularly important surrounding the topic of sharing dieting and weight loss on SNSs. When a mother posts about dieting or weight loss, all of the girls felt that they learn from their mom and it could make them consider engaging in this type of behaviour: "It makes you want to do it because people start talking about it, and you're like…you're fat…like your mom is real fit and you don't want to do it" (Girl13, 14 years); "It might make them think about themselves cuz like, you like learn from your mom – right, and if they like do that then you might think that you have to do that. I dunno like you might consider it" (Girl17, 14 years); "Probably, especially if it is your mom. I'd be like – I don't need to do that I am ok. But sometimes I don't feel like that. So if I ever saw my mom doing that kind of thing I would feel like I should try harder to try and lose weight" (Girl26, 14 years).

Some girls felt like the type of behaviour a mother engages in on SNSs could be modelled by the daughter but also the daughters' friends who are following that mother. For example when discussing the use of filters: "It's like, if moms are doing it [filtering or editing images], it's kind of setting a bad example for the younger people. So, like, if my mom posts a picture I would be like 'why did you do that' because other people, like

my friends following my mom, would be like ‘oh I want to do that to my picture too’” (Girl1, 12 years).

Most of the girls felt that mothers should not be modelling inappropriate behaviour such as drinking, partying or talking about “wine”, as well as photos of them in the bath tub or in a bikini on SNSs. Furthermore, sexualized poses were deemed as both age and role inappropriate: “Like that would be so weird for a mom. Like moms should not be sticking their butts out...it’s just like you are a mom, don’t do that. You have children” (Girl16, 14 years).

In addition, the action of mothers posting, what the girls considered to be inappropriate content, made the girls feel “weird” and “uncomfortable” and that mothers who were acting as poor SNS role models may be viewed differently by society: “And they’re like -‘oh your mom is trying to be your friend’-they all say that. Oh, she’s not even a mom figure to you, she’s just like your best friend” (Girl11, 14 years).

Furthermore, if their mother was acting as a poor SNS role model this could lead the girls to feel conflicted by what their mother tells them offline: “Yah, cuz they tell you, you shouldn’t care what other people think, but then they care” (Girl17, 14 years); “Like moms tell their kids that they are pretty and like everything like that. So I feel like they are going against that if they say they are not pretty or like being a good influence on their kids saying that their kids are pretty and then they are kinda turning on that by saying they are ugly” (Girl20, 11 years).

Connecting Offline: Mothers

Acknowledging that what transpires on SNSs should be further discussed in the offline world was common among the mothers. These offline discussions could happen

with their own daughter, other mothers, or their daughter's friends. Some mothers felt like it was not important for them to comment on their daughter's posts because it is not their (the mother/daughter relationship) means of communication. Having offline conversation was more important when it came to mother/daughter discussions. Specifically, some mothers discussed that if their daughter did not follow the online expectations there were consequences put in place, including the need for an offline discussion. For example, some mothers talked about how they would want their daughters to come to them with personal problems rather than post that on SNSs: "Um, you can take it down and then discuss with us and then put it back up if we have the family discussion; but, while we are having the discussion you take it down" (Mother4, daughter 12 years).

In terms of seeing any type of inappropriate pictures or posts that their daughter had put on SNSs, most mothers agreed that they would need to have a conversation with their daughter to further understand their daughter's reasoning for posting what they did. For example, when discussing being worried about inappropriate or sexualized photos one mother said: "I think I would dig deeper than just the photo. I would want to have a very serious, aside from the 'hand over your phone', um, but I would want to have a very serious conversation about…why, do you feel the need to post such a photo? Like, what is lacking in your life? Or, what do you feel the need for? Are you thriving for, or striving for additional attention? What is it that you are lacking, or needing, that you would post such a photo?" (Mother3, daughter 12 years). Furthermore, some mothers saw these kinds of posts (what may be considered inappropriate or not meeting online expectations) as teachable moments and would use it as an opportunity for offline conversation: "but it

has provided so many opportunities for me to talk to my daughter about things that we don't want…as much as things we do like. See your friend kissing that boy and it's on the Internet – like really?" (Mother14, daughter 14 years). Moreover, when it came to dieting and weight loss some mothers said that if their daughters posted content surrounding this topic they would need to have an offline conversation and perhaps connect with community organizations.

Offline teachable moments also could occur if their daughter came to their mother asking for advice or requesting that they speak to another's mother, based on SNS behaviour they had witnessed: "My daughter has come to me because all the moms are friends, right?! And she is like 'can you touch base with so-and-so's mom because we have been asking her what's wrong', and then she'll show me what she puts on [posting on SNS]" (Mother2, daughter 12 years). However, some mothers mentioned that they would only reach out to other mothers in regards to SNS behaviour based on how well they knew each other in the offline world and based on the severity of the post (e.g., impact on mental health, attracting predators).

In some instances mothers discussed a need to reach out to other mothers to seek advice and support while navigating SNSs: "I had a mom come over and say 'I just found a private account that my daughter had…'and dadada…'did you know about this?' and I said…'I didn't know her daughter had this'….but my younger daughter will show me 'mom, look what this girl is doing, smoking on this…'" (Mother12, daughters 13 and 14 years).

Connecting Offline: Girls

Overall, some of the girls thought that an adult should be informed via an offline conversation if people online are being mean, bullying, or if they tried to deal with a certain SNS situation themselves and that it did not work. When it came to offline discussions with their mothers, the majority of the girls discussed whether they or their friends did not follow expectations there were consequences including the need for an offline discussion. For example, if a girl posted content that was considered inappropriate (e.g., drinking, smoking, revealing clothing) they felt their mother would talk with them offline: "Probably punish them in some type of way, just probably say 'like take down that photo' and whatever they were doing just like 'don't do it again, it's not something you're supposed to do'" (Girl1, 12 years). The majority of the girls felt it was more important and easier to have an offline conversation about inappropriate content compared to a mother leaving a comment on the daughter's post.

When it came to commenting on posts, many of the girls thought that mothers do not need to engage with them online because they can just talk in person and have an offline conversation: "Ok my friend's mom, she follows her on Facebook and she is always like 'I love you so much'…yah that's what she usually posts. Literally…like they live in the same house, like just walk into the other room and say hi" (Girl26, 14 years). In addition, some of the girls described feeling annoyed if their mother was commenting on their posts, but that if they were going to comment online it should remain positive.

Transmission of Beauty Ideals: Mothers

Most of the mothers agree that their daughters and/or girls their daughter's age are living in a different time than when they grew up and SNSs play a role in the

transmission of beauty ideals: “Because it is such a different society right now, then even when I was growing up. You didn’t need Snapchat for everyone to tell you - you were pretty. You know what I mean? That wasn’t a part of my childhood at all” (Mother14, daughter 11 years). SNSs can cultivate beauty norms and transmit beauty ideals and some mothers feel their daughters and/or girls their daughter’s age will feel pressure to meet beauty standards: “I worry about always having the expectation to look good in every picture. To always be posting interesting pictures. To always having to comment on a friend’s picture or…it is just a lot more pressure it seems like for girls to constantly be connected, what they are posting, what they are reading…you know, we just went home and like maybe called someone for half an hour and that was it for the night. So it is definitely…I think it is a lot more pressure on them. And umm a lot more expectations on them. And that might only get worse, I don’t know” (Mother13, daughter 14 years).

In all of the groups the mothers suggested that a lot of the posts girls their daughter’s age share on SNSs are vanity based, for attention, sexualized (e.g., duck lips, cleavage, pouty face), and to get those appearance based comments like “oh, you’re so beautiful” (Mother2, daughter 12 years) or “You’re beautiful! You’re so skinny!” (Mother9, daughters 12 and 14 years). There was an emphasis on the fact that in the content their daughters and/or girls their daughter’s age posted on SNSs they had to “look fantastic” (Mother3, daughter 12 years), and that once they start to create a certain aesthetic the daughter feels they must keep that up: “I think there is some kind of addiction to that too [filtering and editing images] because once you put one out lookin’ really good – your next post, you gotta look good. Right, you gotta keep it up” (Mother3, daughter 12 years).

Most mothers felt worried about their daughters and/or girls their daughter's age having a constant expectation to look good in every picture. However, most mothers also discussed how they often leave or give comments that are appearance-based on SNSs: "Let them know their kids are beautiful and they look great, ya know, cuz it's good – people like good feedback and stuff" (Mother7, daughter 11 years).

One mother felt that it was her responsibility to oppose the transmission of beauty ideals on SNSs: "Me personally as a mom-no way in hell is my daughter going to sexually portray herself, under the age of 18-nice try…and if you want to try over the age of 18, good luck! I just think you need to learn to have more class than that. And you are MORE than your boobs, and your ass and your smile, and your teeth…you're more, right? Like you are more. And the sexuality behind the intention in a lot of social media in regards to what the girls are being influenced with…is my reason for not giving my daughter free access to utilize it however they want" (Mother15, daughter 11 years).

Most mothers feel that social comparison on SNSs with peers happens all the time: "But to teach my daughter too that everyone is not shaped the same and that they should not be judging and looking at other people based on their size or their height, how big their legs are, how big their stomach is – none of that is relevant to anything… It is kind of sickening how early on how self-conscious girls are of their bodies and this and that and they need to be perfect and ugh" (Mother15, daughter 11 years).

Two of the mothers suggested that they were using filters and apps to change their body shape and size: "I mean I have even used one myself, I used it and thought look how younger I look, look how skinner I look" (Mother13, daughter 14 years); "My phone filters me and I kind of like that, I don't do it on purpose" (Mother8, daughter 13 years).

When prompted about online psychosocial health behaviours (i.e., posting pictures or posts about dieting/weight loss, exercising/physical activity, appearance ranking) the majority of mothers agreed that it would be appropriate for them (the mothers) to post about their own fitness and weight loss journeys, however, their daughter's size was the determining factor as to if she (their daughter) should be posting about it on SNSs: "Yah I think if an already really thin girl posts about it you think-well… umm yah it depends on the context and whether the girl really seems to need to lose weight, I guess…" (Mother13, daughter 14 years).

Transmission of Beauty Ideals: Girls

Some girls talked about posting on SNSs so that they would get appearance-based comments (e.g., so pretty, hottie) and feel better about themselves: "Yah, maybe because like the whole point of like posting the picture is to get the comments that make you feel good. So like you'll post more if you get good comments. Cuz like it makes you feel better" (Girl15, 14 years). Moreover, some girls discussed the need to ask their friends before posting anything on SNSs, to receive peer approval. In addition, in all groups it was mentioned that if a mother does comment on their daughter's SNS post it is an appearance-based message. Some girls mentioned that getting these types of comments, focused on their looks, from their mother would make them feel good. However, others talked about how a mother leaving appearance-based comments can embarrass them and that they may even block their mom on SNSs.

Most of the girls talked about using filters to feel better about themselves, get appearance-based comments, and if they have edited their picture once that they needed to keep doing so to "meet that goal" (Girl16, 14 years). Moreover, some girls

acknowledged that mothers may want to use filters to achieve certain beauty standards or expectations: “I know so nobody really likes getting older, so maybe she like I dunno the mom has like a wrinkle or something and she might be insecure about that so she tries to cover it” (Girl18, 14 years); “Cuz they want to make themselves look prettier than they actually – well than they think that they are” (Girl22, 14 years).

Some girls felt that it was okay for mothers to post about dieting and weight loss because they were getting support from others. However, other girls felt that posting about dieting and weight loss should be dependent on the size/shape of the mother: “She is literally the skinniest person I have ever met. Like actually. I would be like you are small, like why?” (Girl19, 13 years).

Discussion

The present study provides insight into the mother/daughter dynamic on SNSs. Using a constructionist approach and incorporating important theoretical understandings from social cognitive theory and a contextualist developmental perspective, focus groups were used to explore the SNS-related influences and to understand what role mothers play in developing their daughters' SNS beliefs, attitudes, social norms, and behaviours as well as to determine what daughters have learned from their mothers about SNSs. From these focus groups with mothers (of girls born in 2003-2007) and girls (born in 2003-2007), we have identified what types of posts, pictures, comments, and actions are displayed, preferred from one another, and what feelings/emotions these posts, pictures, comments, and actions evoke. In support of the contextualistic model of development (Freysinger, 1999), the learning environment of the digital world appears to be an important context in which development of girls is taking place. Specifically, the family dynamic of the mother/daughter relationship on SNSs, how mother/daughters are

interacting and engaging online, and the development of SNS beliefs, attitudes, social norms, and behaviours are highlighted throughout the discussion. As there is a paucity of research in understanding mothers/daughters dynamics on SNSs some results emerging from the current study are novel and provide information for future implications on maternal modelling, influence, communication, and psychosocial health in the online world.

Mothers and girls who participated in the study uniformly believed that authenticity is important on SNSs, which is supported by previous literature that suggests individuals value the authenticity of others (Franzese, 2007). Authenticity is both a feeling and a practice that includes "sincerity, truthfulness, and originality" that must take into account both the self and the other (Vannini & Franzese, 2008, p. 1612). As a self-reflective and emotional experience, authenticity is about being true to one's self and consequently, SNS behaviours that challenge or obstruct the true-self were not viewed favourably by mothers or girls. However, it should be noted that a constructionist approach recognizes that each person has a unique view of the world in line with his/her own perception and description of himself/herself and their reality (Burr 2007). Therefore, individuals construct meaning of the same object or phenomenon in different ways and thus it is important to acknowledge that the constructed meaning of one's "true-self" and what it means to be "authentic" can vary from girl to girl and mother to mother. Across groups, the content being presented on SNSs, if that content matched offline persona, was age appropriate, and contained filters/editing contributed to whether or not one was being their authentic self. Specifically, mothers felt that their daughters and/or girls their daughter's age were being unauthentic if they were posting content that

revolved around vanity or was highly curated. Similarly, girls did not like posts that contained content that would make mothers look disingenuous (e.g., highly edited, dieting, weight loss, pictures in a bikini). For mothers, these types of unauthentic behaviours created feelings of worry and fear of future negative behaviour (e.g., self-objectification on SNSs, sending nude photos). As previous research has suggested that mothers may use the appearances of their child to establish their identities as mothers and to verify their identities as "good mothers" (Collett, 2005), their daughter's appearance online may be an integral part of their own self-presentation, and an underlying reason for a desire towards authenticity on SNSs. As such, mothers felt that authentic behaviour includes the posting of content that created an online environment where genuine memories (e.g., candid, doing activities, etc.) were being kept. In addition, mothers felt it is important to react authentically towards their daughter on SNSs, reinforcing the behaviour they want their daughter to display online. Further research into what is considered unauthentic posting (by both mothers and daughters) and a mother's need for impression management (i.e., accentuating certain facts and concealing others; Goffman, 1959) on SNSs by using their daughter to convey competence to both self and audience is needed to better understand the mother/daughter dynamic on SNSs.

Mothers and girls believed in the idea of collaboratively managing a daughter's SNS use and behaviour. Both mothers and girls talked about mothers wanting to help navigate/teach their daughters about appropriate online self-presentation (e.g., types of photos, posts, comments, valance of posts; O'Keeffe & Clarke-Pearson, 2011) and impression management (i.e., highlight facts about themselves that might otherwise not become apparent in the short interactions in which they normally engage; Goffman

1959). However, the findings from the study suggest that mothers need to be seen as knowledgeable users of SNSs by their daughters for this to be effective. Recent literature suggests that children perceive themselves, and are perceived by their parents, as agents teaching their parents how to use digital media, at least to some extent (Nelissen & Van den Bulck, 2018). Therefore, it may be important for mothers to become well-versed in the SNSs platform and/or online environment prior to their daughter so that a collaborative SNS relationship can be forged, and so they can teach their daughter to be a responsible user of the online world (Barnes, 2006; Sullivan, 2005). Thus, mothers appear to have the added weight of negotiating not only their own SNS identities, but also those of their daughter.

Mothers can be a formidable force on SNSs and are using it to share things about their daughters. Both mothers and girls discussed that mothers are using SNS discourse to intentionally and unintentionally embarrass and shame their daughters and that there is a need for parents to become more aware of the impact their SNS behaviour can have on their children. The findings suggest that consideration should be given to daughters creating and controlling their online persona. Similarly, previous research has urged parents to anticipate how children will feel about their identity being formed online without their consent (Kumar & Schoenebeck, 2015). Children have expressed frustration and embarrassment when parents publicly contribute to their online presence without permission (He et al., 2010; Hiniker et al., 2016), and may limit their children from the opportunity to create their own digital footprints (Stienberg, 2016). Girls in the current study created a dialogue about how mothers can compromise their offline reputation and that the types of appropriate SNS interaction and behaviours should be discussed and

agreed upon, together. Although a mother may use her daughter to serve as an impression management marker (Collett, 2005), presenting a constructed view of her "mothering" on SNSs, consideration should be made on behalf of the daughter's potential inability to block or erase this information about themselves and the possible repercussions they may face. Thus, it appears that mothers need to consider the scope and permanency of the amount of photos and stories they choose to disclose about their daughter on SNSs. Therefore, the right a mother has to serve as gatekeeper of information regarding their daughter does not supersede their responsibility to serve as stewards of that information and their daughter's digital footprint (Bartels, 2016).

SNS rules and expectations were discussed by both mothers and girls. A majority of participants believed that having rules and expectations were important to keep daughters safe online and an attempt should be made by mothers to use active mediation on SNSs. In previous literature, active mediation (compared to restrictive mediation) appeared to have more of an empowering effect, allowing young adolescents to actively engage with others online, experience some level of risk, and form coping strategies for protecting themselves from harm (Wisniewski, Jia, Xu, Rosson, & Carroll, 2015). In addition, in the current study, mothers discussed how expectations should be age sensitive and meet the needs of their daughters' growing sense of independence, expressing the duality in the mother/daughter relationship. The mother/daughter relationship offline faces duality in dealing with distance and closeness, separation and connection, borders and autonomy, and independence and dependence (Barak-Brandes & Lachover, 2015). This dichotomy appears to be evident in the online world as well. In keeping with Yardi and Bruckman (2011) the findings from this study suggests that there

is a requirement for mothers to set online rules/expectations consistent with their own family values as well as collaboratively with their daughter, considering the complexity of the mother/daughter dyadic relationship.

Maternal modelling on SNSs had strong convergence between the groups as both mothers and girls discussed daughters modelling both positive and negative online behaviours of their mothers. Evidence from the current study could then suggest a need to further explore the idea of modelling (Bandura, 1986) in the online world as it appears mothers do transmit beliefs, attitudes, and patterns of thought and behaviour on SNSs. Therefore, there is a need for mothers to be concerned with how the content that they post when their daughter is young can impact them when they are older, as daughters' behaviour may be influenced by what they observe on their mothers' SNSs. Furthermore, the mothers' discourse within the current study included the need to consider the long term consequences of the digital footprint they were creating on SNSs, specifically in terms of the quantity of SNS posts and inappropriate or self-objectifying content that may indirectly influence their daughters in the future. These findings align with previous research that has suggested young adolescents overshare a considerable amount on SNSs if their parents have overshared (Erickson, 2014). In addition, girls specifically talked about how their mothers' SNSs can be a space for social comparison, and that mothers need to model consistent behaviour on and offline. Therefore, similar to the offline world (Handford, Rapee, & Fardouly, 2018; Rodgers, Paxton, & Chabrol, 2009), maternal modelling on SNSs may influence daughters' body image, self-esteem, and eating habits. As SNS maternal modelling may lead to daughters wanting to imitate the behaviour of their mother (e.g., making appearance comparisons or posting about dieting/weight loss)

and/or because their mother's self-critical comments/posts about their weight and shape, and weight loss behaviours may teach girls to place great value on the importance of being thin, both of which could result in girls becoming dissatisfied with their appearance. The mother/daughter relationship constitutes a unique site in which young women learn how to construct their own views about femininity in that from a constructionists standpoint meanings are constructed by human beings as they participate in the world they are interpreting (Crotty 1998), thus future research is needed to further examine the role a mother's SNS beliefs, attitudes, social norms, and behaviours can impact a daughter's body image, self-esteem, and eating behaviours.

For both mothers and girls connecting offline appears to be more important for the mother/daughter relationship than interaction or discourse on SNSs. As mothers are often viewed by their daughters as strong sources of support (Steinberg & Silk, 2002), and an important resource for encouraging healthy behaviours, attentive listening, and dialogue are central to the mother/daughter relationship (Barak-Brandes & Lachover, 2015). Creating emotional closeness, connection, and mutual understanding in the mother/daughter relationship is influenced by the frequency and quality of interactions (Barak-Brandes & Lachover, 2015; Berge et al., 2015). Thus, face-to-face communication, combining verbal, nonverbal, and contextual cues, could be assumed to provide the richest source of information, perhaps the best quality interactions, and most meaningful conversation. Moreover, in the current study, offline conversation based on SNSs appeared to be content driven, particularly when online behaviours of the daughter were deemed to be risky by the mother. The mothers suggested using these offline conversations as "teachable moments" to guide their daughters on SNSs. Covertly

waiting for children to make a mistake and expose a teachable moment on SNSs has been seen in previous research exploring parenting styles and online behaviours (Yardi & Bruckman, 2011). In particular, Yardi and Bruckman (2011) suggested that by creating a system that supports an authoritative parenting practice, children can learn to make informed choices and become stewards of their own technology use. In addition, previous literature has suggested that the offline mother/daughter relationship promotes health and well-being for the daughters and those mothers who guide their daughters, rather than control them, during interactions tend to have more success in getting them to avoid risky behaviours (Askelson, Campo, & Smith, 2012; LaBrie, Boyle, & Napper, 2015). Thus, findings from the current study may suggest that exposing teachable moments by using a guiding dialogue may help to prevent a daughter's online risky behaviours as well. However, parents tend to feel unprepared to raise children in such an online, media-rich world (Yardi & Bruckman, 2011). Mothers in the current study brought up the need for support networks when it came to understanding the correct balance of loving guidance and setting clear rules and boundaries in the SNS world. Future research should consider exploring how to implement support and collaboration from the broader community for the development of the mother/daughter relationship in the online world.

Our findings, around appearance-based feedback (e.g., compliments), concur with previous evidence concerning the associations between the ability of SNSs to create an environment for social comparison and contribute to the transmission of beauty ideals (Holland & Tiggemann, 2017; Tiggemann & Slater, 2014) and further emphasize the importance of exploring the mother/daughter relationship in the online world. The findings indicate that mothers should consider that by leaving appearance-based content

on their daughters' SNSs they may be cultivating beauty standards. Previous research has suggested that positive appearance-related comments may be just as, or even more, likely to give rise to self-objectification as negative appearance-related comments (Slater & Tiggemann, 2015). Self-objectification (a form of self-consciousness characterised by frequent and habitual self-monitoring of one's outward appearance or self-surveillance; Fredrickson & Roberts, 1997), is linked to negative psychological consequences, namely increased body shame and appearance anxiety, which could lead to depression, sexual dysfunction, and eating disorders. The concept of self-objectification was a worry discussed among mothers in the current study, in terms of their daughter's SNS behaviours (e.g., putting makeup on for selfies, using filters, duck lips, cleavage, pouty face), and creating a pressure to meet certain beauty standards. Research suggests that exposure to SNSs is associated with self-objectification (Slater & Tiggemann, 2015). Therefore, mothers should be advised to avoid making appearance-related comments and be provided with alternative suggestions (i.e., commenting on internal characteristics).

In addition, SNSs appear to create a pervasive societal pressure to meet idealized standards. Mothers and girls may be digitally editing their photos in an attempt to create an idealized portrayal of the self. In the current study, mothers and girls may be transmitting beauty ideals when they edit and/or filter certain aspects of their appearance (e.g., removing imperfections on their skin, changing the size of their body) before posting content on SNSs. By altering their photos, it can be argued that respondents were constructing a self-image that maximizes attractiveness and adheres to the unrealistic ideals defining beauty held by similar peers (Mingoia, Hutchinson, & Gleaves, 2019). Similar to previous research that reported women and girls spend a great deal of time and

effort in taking, selecting, and editing the photographs of themselves they choose to upload on Instagram (Chua & Chang, 2016; Dumas, Maxwell-Smith, Davis, & Giulietti, 2017), mothers and girls in the current study explained how SNSs create a constant expectation to look good in every picture. Furthermore, when discussing posting about dieting or weight loss on SNSs both mothers and girls believed posting this type of content was favourable, based on the size of the person, further perpetuating the idea that women need to be a certain size and shape. Thus, mothers should avoid posting weight-based content on SNSs, as although these comments/posts may be made with the best intentions, they could lead to unintended and/or harmful consequences for their daughter's thoughts and feelings about their body shape and size. Finally, some mothers in the current study discussed the important role they can play in opposing beauty ideals. Similar to previous research, mothers appear to want to help their daughters avoid the oppressive dictates of beauty and encourage their daughters to find their own form of liberated expression (Barak-Brandes & Lachover, 2015). Therefore, mothers need to be taught to become aware of the appearance and social pressures involved in participating in SNSs so that they can be encouraged to discuss, with their daughters, the role SNSs can play in the appearance pressures and the objectifying nature of the online world.

Limitations

Despite the strengths of the current study, which include contributing to the limited research on mother/daughter relationships on SNSs, there are limitations that should be noted. Firstly, future research should consider external variables that may be contributing to the development of the mother/daughter relationship, including demographic variables such as socio-economic status, marital status, and parenting styles.

In addition, culture should be considered in future studies as cross-cultural differences in the mother/daughter relationship have been reported in the literature (Jensen & Dost-Gözkan, 2015; Rastogi & Wampler, 1999). In addition, future studies should aim to recruit mothers and girls together as a mother/daughter dyad so that complex and mutually influential nature of their relationship dynamics can be captured and triangulated. Lastly, although a particular strength of the focus group methodology is that participants develop ideas collectively, a limitation can include the tendency for certain types of participants to dominate the conversations and types of socially acceptable opinion to emerge (Smithson, 2000). Although the moderator implemented appropriate strategies to account for the aforementioned limitation, it was evident that some participants were more in control of the discourse than others, which may have led to certain opinions to develop based on those participants' thoughts and feelings.

Conclusion

Overall, future research should continue to use a constructivist approach and interventions should be created to teach mothers that identities may be created through social interactions (verbal and otherwise), thus teaching their daughter how their bodies are perceived by others and the social significance of that perception. The results of the current study may also have important implications for body image and disordered eating prevention programs, suggesting that in addition to fostering positive body image in young girls, greater emphasis could be placed on discouraging negative modelling behaviours among mothers. Interventions encouraging mothers to model healthful and positive body image and self-esteem on their own SNSs and that discourage mothers from making appearance-based comments on their daughters SNS post, may be effective

in preventing the onset of body dissatisfaction and eating disturbances during adolescence. In addition, future studies may wish to explore other parental dyadic relationships on SNSs and the role they play in developing their child's SNS beliefs, attitudes, social norms, and behaviours as well as to determine what children learn from their parents about SNSs.

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CHAPTER 3

MATERNAL MODELLING ONLINE: ASSESSING THE DYNAMICS OF MOTHER/DAUGHTER DYADS ON SOCIAL NETWORKING SITES USING THE ACTOR-PARTNER INTERDEPENDENCE MODEL

Research is comprehensive on mother/daughter relationships as well as a mother's influence on her daughter's beliefs (e.g., individuals' subjective estimates about whether a particular behaviour will lead to particular consequences; Bandura, 1986), attitudes (e.g., determined by personal conceptions concerning a given object/behaviour and thus creating a learned disposition to respond in a consistently favorable or unfavorable manner with respect to a given object/behaviour; Fishbein & Ajzen, 1975), subjective norms (e.g., the expectation of other significant persons' opinions and beliefs and the degree/social pressures to which an individual feels the motivation to comply; Fishbein & Ajzen, 1975) and ultimately behaviours is important. Daughters identify more closely with their mothers than their fathers and this sense of identification (e.g., ability to relate to) is viewed as a contributing factor in the ability for a mother to influence her daughter's life (Starrels, 1994). Research has shown that the mother/daughter relationship influences every stage of the daughter's development, with particular influence in the formation of the adolescent girl's perception of herself and her body (Flaake, 2005). A mother's conduct, together with her relationship with her daughter, can directly and indirectly impact her daughter's self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours. Self-esteem can be described as how an individual feels about all the characteristics that make up their person (e.g., skills and abilities, interactions with

others, and physical self-image; Piers & Herzberg, 2002). A mother's behaviour and own sense of self-esteem is related to the positive and negative development of her daughter's self-esteem (Openshaw, Thomas, & Rollins, 1984). Body satisfaction denotes the degree of discrepancy between one's actual and ideal body weight/shape (Stormer & Thompson, 1996); the subjective evaluation of one's body (Stice & Shaw, 2002). Literature has suggested that maternal modelling of body-image attitudes and behaviours act as social development precursor for daughters (Rieves & Cash, 1996) and are a direct influence on predicting body dissatisfaction (Vincent & McCabe, 2000). The feminine appearance or beauty ideal is the socially constructed notion that "physical attractiveness is one of women's most important assets, and something all women should strive to achieve and maintain" (Baker-Sperry & Grauerholz, 2003, p.711) and evidence has supported the role of maternal modelling as a process through which this ideal is acquired in daughters (Pike & Rodin, 1991).

Development of eating habits in young adolescent girls, particularly those described as disordered are influenced by their mother's eating attitudes and behaviours (Neumark-Sztainer et al., 2010; Woodruff & Hanning, 2008). Disordered eating has been described as eating attitudes and behaviours that are a particularly dangerous health risk, as they represent the subjective experiences and behaviours ranging from "normative discontent with weight and moderately dis-regulated eating, to clinical extremes of anorexia nervosa and bulimia nervosa" (Leung, Geller, & Katzman, 1996, p.253). Finally, physical activity (including sport participation) can be considered a form of leisure (Greendorfer & Ewing, 1981; Trost et al., 1997) and research suggests that through observation (i.e., modelling), mothers have an influence on their daughters'

leisure beliefs, attitudes, and behaviours. As parent modelling exists offline between mothers and their young adolescent daughters in the development of these beliefs, attitudes, social norms, and behaviours, a similar influence could be exercised by the fast evolution of digital culture, such as social networking sites (SNSs), thus making it imperative that online mother/daughter relationship be considered and investigated.

Spending time online and on SNSs appears to be a part of daily behaviour for most Canadians (Coyne, Santarossa, Polumbo, Woodruff, 2018; Statistics Canada, 2019). Both children and adults in North America have continual accessibility to the Internet and subsequently social media. SNSs are a category of social media that have the ability to generate direct communication and two-way interaction between users, thus generating networks (i.e., communities) of users. SNSs reveal important information on how individuals are interacting with one another and within the online world. The most recent data of Canadian students (grades 4-6; 9-12 years) indicated that 32% and 16% have a Facebook and Twitter account, respectively, despite age restrictions of 13 years, in which membership to SNSs increases with age (Steeves, 2014). Specifically, girls in grades 4 through 11 (9 to 17 years old) use SNSs more frequently and are more concerned with their online image than their male counterparts (Steeves, 2014). In addition, mothers, compared to fathers, are not only using popular SNS platforms more frequently, but also engage more often with their networks (e.g., frequent shares, posts; Duggan, Lenhart, Lampe, & Ellison, 2015).

Research has examined the role of SNSs on psychosocial health (e.g., composed of mental, emotional, social, and spiritual dimensions; an individual's psychological development in relation to or mediated through his/her social environment; Upton, 2013),

and how duration/frequency of SNS use, as well as how specific SNS actions relate to various psychosocial health variables. Increased SNS use and activities in women and girls has been associated with decreased self-esteem (Santarossa & Woodruff, 2017; Valkenburg, Peter, & Schouten, 2006), increased concern on appearance-related variables (Houge & Mills, 2019; Jong & Drummond, 2013; Meier & Gray 2014; Santarossa & Woodruff, 2017; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014), increased eating disorder symptoms/concerns (Santarossa & Woodruff, 2017), and support/providing companionship towards physical activity (Zhang et al., 2015). In addition, frequency and direct tone of the feedback left on the user's profile can impact self-esteem and well-being (Valkenburg et al., 2006). Given the rapid growth of SNSs, and their potential associations to various psychosocial health variables, coupled with the role mother's play in their daughter's development of these psychosocial health variables, further research into this online media source is needed. Specifically, research is needed that examines the pressure for daughters to internalize beauty ideals, adopt unhealthy eating or exercise behaviours, and how these pressures/messages may be conveyed by their mothers through a variety of channels (e.g., comments left on SNSs, images posted). Knowledge about if and how these pressures/messages are conveyed may help researchers educate mothers on how to promote a healthy, positive, and well balanced use of SNS to their daughters.

It is hypothesized that how the parent chooses to self-present online (e.g., types of photos, posts, comments, sentiment of posts) may directly (Steinberg, 2016) or indirectly influence their child's digital footprint (He, Piché, Beynon, & Harris, 2010). A digital footprint is the collective, ongoing record of one's Web activity (O'Keeffe & Clarke-

Pearson, 2011). In essence, a digital footprint can be positive or negative based on the context and content one leaves behind on the sites they visit. Adolescents and young adults (11-21 years) tend to lack awareness and understanding that "what goes online stays online", often posting inappropriate messages, comments, pictures, and videos (O'Keeffe & Clarke-Pearson, 2011). Research suggests that learning safe online practices begin at home, and parents need to be educated about how to teach their children to be responsible users of the online world (Barnes, 2006) even though children need to learn how to contribute positively to their own digital footprint. Parental education is needed regarding their posts, pictures, and videos and the potential negative effects these SNS postings may have on their children.

Theoretical Approaches

Social cognitive theory. Patterns of behaviour are learned and acquired in part based on the behaviour individuals observe in others and the perceived consequences of those behaviours (Bandura, 1986). Described as the social cognitive theory, Bandura (1986) stresses observational learning, imitation, and modelling as ways in which behaviour is learned and acquired. From a developmental perspective, modelling is considered one of the "most powerful means of transmitting values, attitudes and patterns of thought and behaviour" (Bandura, 1986, p. 47). Specifically, social learning occurring either "deliberately or inadvertently by observing the actual behaviour of others and the consequences for them" (Bandura, 1989, p. 21), is a concept that may help to explain how maternal influence underlies the development and maintenance of beliefs, attitudes, social norms, and behaviours in their young adolescent daughters. Identification and internalized standards are two central concepts in understanding social learning.

Identification is an indirect process whereby daughters internalize standards of evaluation and self-reinforcement exhibited by exemplary models. Additionally, the latter concept internalized standards, involves the evaluation of one's own performance relative to the internalized standards and acting as one's own reinforcing agent, suggesting daughters may evaluate themselves as their mothers evaluate themselves and model their mothers' behaviour when their performances are similar to their mother. Thus, if mothers serve as an important model for their daughters, then their daughters' behaviour may be influenced by what they observe in their mothers. Potentially, mothers' SNS photographs may be a source of social comparison for children as parents' SNS posts/engagement (e.g., likes, comments, emojis) may convey societal standards and virtually support beauty ideals, which could lead to body dissatisfaction, low self-esteem, and/or unhealthy behaviours in their daughter.

Although previous research has suggested that for young adult women (17 to 27 years), social media engagement with a female family member does not affect state body image (Hogue & Mills, 2019), research into adolescent girls is needed. In addition, the aforementioned research study did not specifically focus on the mother/daughter relationship, as participants (n = 62) were asked to look and comment on, what was considered, a "not-more-attractive" female family member's social media (Hogue & Mills, 2019). Sales (2016) suggests the mothers may be competing (in terms of their posts and pictures) with their adolescent daughters on SNSs which could further exacerbate social comparison if a daughter feels strongly about the need to upstage her mother online. If daughters see their mothers engaging in certain forms of SNS behaviour, they may want to imitate that behaviour. Given the popularity of SNSs among mothers and the

potential associations between SNS consumption and body comparison and pressure of societal beauty standards in women, further research into the online relationship between mothers and daughters is warranted.

Sociocultural Model. Much of the work investigating SNSs and psychosocial health outcomes to date has utilized the Sociocultural Model which emphasizes the role of culture and society on individual development (Davydov, 1995; Vygotsky, 1978). For women, the Sociocultural Model (Tiggemann, 2011) attributes the negative effects of exposure to idealized images and content of what women should do and look like, with the ideal (i.e., comparisons on both dimensions of thinness and tone are likely to be upwards, resulting in body dissatisfaction). This pervasive societal pressure to meet idealized standards is often accompanied by social anxiety, depression, eating disturbances, and poor self-esteem (Cash & Pruzinsky, 2004). Children learn in the context of their social and cultural environment (Davydov, 1995; Greenfield, 2009; Vygotsky, 1978). Since individuals spend significant amounts of time in digital learning environments it is reasonable to believe that the digital world is an important influence on growing social cognition beginning at a very young age, continuing through adolescence, and beyond. According to the constructs of the Sociocultural Model (i.e., media, peers, and family), SNSs are particularly powerful transmitters of messages about weight and appearance. Learning how mother/daughter dyads use the online environment will enable researchers to begin to understand subjective norms created on SNSs and how a merged influence (i.e., media, peers, and family) convey societal standards and virtually support different types of behaviours.

Purpose and Hypotheses

The current study aimed to understand the dyadic relationships between SNS behaviours (i.e., use, photo activities, and interaction activities) and self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours among mothers and their early adolescent daughters (born 2003-2007). Due to the paucity of research investigating whether mothers/daughters have an online/SNS relationship, and the difficulty recruiting pairs in large numbers (Kenny, Kashy, & Cook, 2006), this study utilized a small sample for the purpose of exploring the dyadic associations.

Hypothesized associations between pairs of variables. The following associations between pairs of variables were tested within the Actor-Partner Interdependence Model (APIM; Kenny et al., 2006; see Figure 1 for example), which treats the dyad, rather than the individual, as the unit of analysis. The following hypotheses were addressed in the current study:

Hypothesis 1 (actor effects): Greater overall SNS use, photo activities, and interaction activities will be associated with lower levels of own self-esteem and higher levels of own body dissatisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical inactivity.

Hypotheses 2 (partner effects): H2a.) Greater mother's overall SNS use, photo activities, and interaction activities will be associated with lower levels of daughter's self-esteem and higher levels of daughter's body dissatisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical inactivity

(daughters' partner effect). H2b.) None of the daughters' predictor variables will have a direct effect on mothers' outcome variables (mothers' partner effect).

Method

Participants

A total of 56 dyads showed interest in the study and received an individual research identification numbers (RID) and survey link. Of the mothers, 9 (16.1%) did not start the survey, and the remaining 47 (83.9%) started and completed the survey in its entirety. Among the daughters, 14 (25.0%) did not start the survey after receiving the study information, and 40 (71.4%) completed it in its entirety. Only dyads where both members responded were included in the final sample (N = 40). On average, mothers took 20 minutes and daughters took 16 minutes to complete the survey. Most of the mothers were married (n = 35; 87.5%), working full-time for pay (n = 26; 65.0%), had a total household income from $90,563 to $140,388 ($n$ = 12; 30.0%), and had finished College/University (n = 31; 77.5%). Most daughters were born in 2003 (n = 13; 32.5%).

Inclusion criteria for the dyad comprised of the mother and the daughter used at least one of the same SNS platforms and had access to each other's account (i.e., each other's friends/followers, or the mother monitors the daughter's account and the daughter is a friend/follower of the mother). The daughters must have been born within 2003-2007, making their age between 11-14 years in the calendar year that the study was conducted. This age range was chosen because some are considered underage based on age restrictions of most SNSs (Steeves, 2014) and they tend to engage in more risky behaviours versus older adolescents (Pfeifer et al., 2011).

Recruitment. Mother/daughter dyads were recruited in Southwestern Ontario, Canada through SNSs (e.g., shared on Facebook fitness groups and mother-based groups), and nonprobability purposeful snowball sampling (i.e., mother/daughter participants that had showed previous interest in participating in this type of research). Interested mothers and/or daughters were instructed to contact the primary investigator through a means of communication that best suits them (call, text, email, or direct message on social media), as listed on recruitment materials (see Appendix E). A standard dyadic design (i.e., each person is linked to one and only one other person in the sample and both persons are measured on the same variables; Kenny et al., 2006) was used. Dyads were recruited together, as a pair, meaning that both the mother and daughter needed to participate in the study for the dyadic data set to be valid. *Mother* was defined as person identified in the primary woman care giver role, and *daughter* was anyone who identified as such and fit the other inclusion criteria.

Procedure

All procedures were reviewed and approved by the University's Research Ethics Board. For the dyads that met the inclusion criteria, mothers were sent an email[2] that included an individual one-time login link to a short online survey using parallel questions (administered using the Qualtrics software, 2018; see Appendix G) and a unique, RID for themselves as well as their daughters. RIDs were linked for the mother/daughter dyad (e.g., M001; D001). In addition, to ensure that members of the mother/daughter dyad completed the survey independently various strategies (i.e., question randomization) were used. Participants were instructed to complete the survey

[2] Prior to the email including the survey details, study details were sent to any interested mothers and/or daughters (see Appendix F) along with the questions that related to inclusion criteria.

within 14 days of receiving their login information. Prior to commencing the online survey active, written consent was obtained from both the mothers and the daughters (see Appendix G). The daughters were considered competent to consent for themselves; however, their mother was made aware of their participation in the study as she would have provided her one-time login link and appropriate RID.

Materials

Alpha scores for all applicable measures can be found in Table 1.

Measures: Predictor variables.

Overall SNS use. Similar to Cohen, Newton-John, and Slater (2017), SNS usage was measured in time/day using the question "What is the average amount of time you spend on social networking sites a day?" Options were recorded on a 12-point Frequency response scale ranging from 1 (0-15mins) to 12 (10 or more hours). Frequency of checking profile was measured using the question "How many times do you access/check your social networking site accounts daily?" (Cohen et al., 2017). Options were recorded on a 7-point Likert-type response scale ranging from 1 (hardly ever) to 7 (More times than I can count). Lastly, a composite variable (i.e., *Overall SNS Use*) was computed by summing the standardized scores (i.e., z-scores) of the two above questions, with higher scores indicating greater SNS use/frequency.

SNS photo activities. Similar to Cohen et al. (2017) SNS activities included the Photo Subscale of the Facebook Questionnaire (i.e., users' photo-based activity reflective of their appearance exposure on SNSs; Meier & Gray, 2014), an 8-item measure scored on a 5-point Frequency response scale ranging from 0 (never) to very often (4). A sample statement is "How often do you do the following on social networking sites? Untag

yourself in friends' photos." Additionally, as adapted from Santarossa and Woodruff (2017) a ninth item was added that states "Filter/edit your photos before posting them on a social networking site". Items were summed and the overall score represents users' photo-based activity and appearance exposure (e.g., SNSs have content that is appearance focused operationalized by the use of photo-related features; Meier & Gray, 2014).

SNS interaction activities. To determine specific mother/daughter SNS interaction activity, participants were provided with two statements, "I comment on my [daughter's/ mother's] photos and/or posts…" and "I "like" or "react[3]" to my [daughter's/mother's] photos and/or posts…". Responses were recorded on a 5-point Frequency response scale ranging from 0 (never) to very often (4) and summed, with higher scores indicating greater SNS interaction activity.

Measures: Outcome variables.

Rosenberg Self-Esteem Scale (RSES). The 10-item RSES (Rosenberg, 1965, 1979) was used to measure global trait self-esteem, on a 4-point Likert-type response scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating higher self-esteem. A sample item is "I take a positive attitude toward myself".

Body Shape Satisfaction Scale (BSSS). A modified version of the BSSS (The Project Eat Survey (http://www.sphresearch.umn.edu/epi/project-eat/) was used to measure the level of satisfaction on a 5-point Likert-type response scale ranging from 1 (very dissatisfied) to 5 (very satisfied) with 10 areas of the body. Items were summed with higher scores indicating higher body satisfaction.

[3] Facebook reactions facilitate emotional conversation and include a series of 6 emojis that social media users can select to respond to a post.

Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4). The SATAQ-4 is 22-item measure designed to assess the internalization of appearance ideals (i.e., personal acceptance of societal ideals) and appearance pressures (i.e., pressures to achieve the societal ideal; Schaefer et al., 2015), using five subscales (i.e., Internalization: Thin/Low Body Fat, Internalization: Muscular/Athletic, Pressures: Family, Pressures: Peers, Pressures: Media). Items from all five subscales were scored on a 5-point Likert-type response scale ranging from 1 (definitely disagree) to 5 (definitely agree) and then summed together, with higher scores indicating greater internalization of appearance ideals. A sample statement is, "It is important for me to look athletic".

Children's Eating Attitude Test (ChEAT). The ChEAT is a 26-item measure for children, used for the assessment of eating behaviour (Maloney, McGuire, & Daniels, 1988). In the current study only the daughters completed this measure. Items were scored on a 6-point Likert-type response scale ranging from 0 (never, rarely, sometimes) to 3 (always) with higher summed scores indicating greater eating disorder symptoms/concerns. A sample item is "I am scared about being overweight".

The Eating Attitudes Test (EAT-26). The 26-item measure was used to measure self-reported symptoms/concern characteristics of eating disorders (Garner, Olmsted, Bohr & Garfinkel, 1982). In the current study only the mothers completed this measure. Items were scored on a 4-point Likert-type response scale ranging from 0 (never, rarely, sometimes; #1-25) to 3 (always; #1-25), with reverse coding on question 26. Summed items with a score of ≥20 was considered at risk. A sample item is "Am terrified about being overweight". The EAT-26 also asks several questions to assess the behavioural symptoms representative of an eating disorder, however, the ChEAT (Maloney et al.,

1988) does not have a comparable subscale and, therefore, the behavioural questions were not included.

Physical activity behaviours. To determine physical activity (PA) behaviours, PA time was modified from the Canadian Assessment of Physical Literacy Questionnaire (Healthy Active Living and Obesity Group, 2014). Weekly activity time was measured using the question "During the past week (7 days), think of all the time you spent in activities that increased your heart rate and made you breathe hard; consider work, leisure, home. On each day, how long were you active for?" For each of the 7 days options were on a 6-point Likert-type response scale, increasing in 15 min increments ranges (i.e., 1-15 minutes, 16-30 minutes, etc.), ranging from 1 (0 minutes; was not active this day) to 6 (more than 2 hours). Items were summed, with higher scores indicating higher amounts of PA.

Measures: Demographic variables. Questions around family social economic status, marital status, employment, and education status of mother were present on the mothers' survey only (Correa, 2014; *The Project EAT Survey*). Three questions to inform mother/daughter relationship/communication, such as "How much do you feel your daughter [mother] cares about you?" were obtained from both dyad members (Correa, 2014; *The Project EAT Survey*). Response options were on a 5-point Likert-type response scale ranging from 0 (Not at all) to 4 (Very much). Moreover, the question, "How often do you believe your daughter has [you have] hidden what she has [you have] done on social media from you [your mother] (e.g., has a secret account, be friends/talk to people they shouldn't or don't know, breaks a rule, sent inappropriate pictures or messages, etc…)?" was used to further understand the mother/daughter SNS relationship. Response

options were on a 6-point Likert-type response scale ranging from 0 (Never) to 5 (Always).

As parental styles have been found to influence online behaviour in adolescents (Rosen et al. 2008), to determine the level of active and restrictive parent mediation on SNSs, two questions from EU Kids Online (2010) were modified (i.e., replacing the word Internet with SNSs, and formulating the questions for mothers and daughters) for the current study. Active mediation was measured by asking participants, "How often do you [does your mom] do the following with your daughter [you]?" on five items. With a sample item being "sit with her [you] while she [you] uses SNSs". Response options were recorded on a 6-point Likert-type response scale (i.e., Never, Rarely, Sometimes, Often, Usually, and Always). The latter four options were combined to calculate the percentage of supportive forms of active mediation and co-use by mothers (Livingstone, Haddon, Görzig, & Ólafsson, 2011). Restrictive mediation was measured by asking participants, "For each of these things, please tell me if your daughter is [you are] CURRENTLY allowed to do them all of the time, allowed to do them but only with permission or supervision, or never allowed to do them…" on six items. The latter two options were combined to calculate the percentage for whom rules or restrictions apply (Livingstone et al., 2011). With a sample item being "have her [your] own SNSs". Furthermore, to determine parent SNS monitoring an additional question from EU Kids Online (2010) was used. Participants were asked, "When your daughter uses [you use] the internet at home, do you [does your mother] sometimes check any of the following things afterwards…" on four items. With a sample item being "her [your] profile on a SNSs or an online community". Response recorded on a 6-point-type response Likert

scale (i.e., Never, Rarely, Sometimes, Often, Usually, and Always). The latter four options were combined to calculate the percentage of mother monitoring on their daughter during or after use of SNSs (Livingstone et al., 2011).

Data Analysis

Prior to the main data analysis, exploratory data analyses were conducted to describe the participants' characteristics and check for assumptions. The paired sample t-Test was then conducted to investigate the mean differences in variables between mothers and daughters. Pearson correlations among variables between mothers and daughters were also conducted.

The type of mother/daughter dyads in this study are considered "distinguishable dyads" (i.e., can be distinguished if there is a variable that allows the researcher to differentiate members). Given that traditional research analytic strategies are inappropriate for use with dyadic data because they violate assumptions of independence and generate biased estimates of statistical significance (Kenny et al., 2006), dyadic analyses (APIM) were used to capture the complex and mutually influential nature of relationship dynamics in mother/daughter pairs.

The current study used a pooled regression APIM approach that is appropriate smaller sample sizes (e.g., at least 28 dyads, Lim, 2014; Tambling, Johnson, & Johnson, 2011). Prior to analysis, all study variables were assessed for adherence to the assumptions of regression and data screening showed that 0% of the data were missing. As recommended by Kenny and colleagues (2006) for the general analyses, it was necessary to create a dyadic dataset with dyadic variables by computing the average of each member's score in the variables of interest and the difference of each member score

in the variables of interest. The predictor variables were mean centered (i.e., subtracting the (arithmetic) mean from all its values) in order to give zero a meaningful value and to aid in the interpretation of the results (Aiken, West, & Reno, 1991). In a pooled regression approach, two regression equations are estimated; one on the individual level (i.e., within-dyad effects) and one on the dyad level (i.e., between-dyad effects) and the results are pooled together to obtain the actor effect, partner effect, and associated parameters for each predictor variable (Kenny et al., 2006; Tambling et al., 2011). Here, a variable related to the role (mother or daughter) and the interaction between the role variable and the other predictor was included in all of the analyses to explore potential role differences (mother = 1, daughters = −1). The within-dyad and between-dyads regression equations can be seen in Appendix H. Next, the path coefficients of the two regression equations are used to compute the actor (i.e., the estimate of an individual's impact on herself or himself; they are intraindividual effects) and partner effects (i.e., interdependence is modeled through the partner effect and is the degree to which a person's outcome is influenced by the partner's score on the predictor variable; see Appendix I).

Pooled standard errors and *pooled degrees of freedom* must then be estimated in order to calculate the *t* statistic for assessing the significance level of the actor and partner effects (see Tambling et al., 2011). The pooled regression analysis procedure was conducted a total of 15 times (i.e., once for each of the five outcome variables and for each of the three predictor variables; see Figure 1 for example model). All analyses were calculated with the use of the Statistical Package for Social Sciences (IBM, 2012) and hand computations. Based on previous literature (Perneger, 1998; Rothman, 1990) a

Bonferonni adjustment was deemed unnecessary and therefore was not used. All hypotheses were tested with a $p<0.05$ criterion of significance for a two-sided test.

Results

Of the 40 dyads, the most popular SNS that both used the most was Instagram (*n* = 35; 87.5%), followed by Snapchat (*n* = 27; 67.5%), Facebook (*n* = 12; 30.0%), and Twitter (*n* = 3; 7.5%). Most of the dyads used two of the same SNSs (*n* = 23; 50.5%), with Instagram and Snapchat being the most popular (*n* = 12; 52.1%). In terms of feelings around the mother/daughter relationship/communication, most mothers felt that their daughters talk to them about their problems *quite a bit* (*n* = 24; 60.0%) whereas the most daughters felt that they could talk to their mom about problems *very much* (*n* = 17; 42.5%). Most mothers felt that their daughter cares about them *very much* (*n* = 32; 80.0%) and similarly, most daughters felt that their mother cares about them *very much* (*n* = 38; 95.0%). Most mothers felt that compared to others (i.e., their friends), they are *somewhat more strict* with their daughter (*n* = 18; 45.0%), while most daughters felt that compared to others (i.e., their friends), their mom is *about the same strictness* with them (*n* = 18; 45.0%). Most mothers (*n* = 16; 40.0%) believed that their daughter has *rarely hidden* what she has done on social media from them, and most daughters (*n* = 30; 75.0%) said that they have *never hidden* what they've done on social media from their mom.

The percentage of supportive forms of active mediation and co-use by mothers, in response to "How often do you [does your mom] do the following with your daughter [you]?" are described below for both mothers and daughters on each of the five items. Active mediation for the item "Sit with her [you] while she [you] uses social media" was reported by majority of mothers (*n* = 28; 70.0%) and daughters (*n* = 23; 57.5%). Active

mediation for the item “Stay near her [you] when she [you] use social media” was reported by majority of mothers (*n* = 27; 67.5%) and daughters (*n* = 29; 72.5%). Active mediation for the item “Encourage her [you] to explore and learn things on social media on her [your] own” was reported less often by mothers (*n* = 19; 47.5%) than daughters (*n* = 25; 62.5%). Active mediation for the item “Do shared activities together on social media” was reported by almost half of the mothers (*n* = 18; 45.0%) and daughters (*n* = 19; 47.5%). Finally, active mediation in response to the item “Talk to her [you] about what she [you] does on social media” was reported by almost all of the mothers (*n* = 39; 97.5%) and most daughters (*n* = 33; 82.5%)

The percentage for whom rules or restrictions apply in response to “For each of these things, please tell me if your daughter is [you are] CURRENTLY allowed to do them all of the time, allowed to do them but only with permission or supervision, or never allowed to do them…” are describe below for both mothers and daughters on each of the six items. Few mothers (*n* = 6; 15.0%) and daughters (*n* = 8; 20.0%) reported rules or restrictions applying to the item “Use instant messaging”. Some mothers (*n* = 13; 32.5%) and daughters (*n* = 11; 27.5%) reported rules or restrictions applying to the item “Download music or films”. More mothers (*n* = 18; 45.0%) than daughters (*n* = 13; 32.5%) reported rules or restrictions applying to the item ‘Have her [your] own social media’. Rules or restrictions applying to the item “Give out personal information to others” were reported by most mothers (*n* = 38; 95.0%) and daughters (*n* = 30; 75.0%). More mothers (*n* = 21; 52.5%) than daughters (*n* = 12; 30.0%) reported rules or restrictions applying to the item “Upload photos, videos, or music to share with others”.

Few mothers (*n* = 5; 12.5%) and daughters (*n* = 3; 7.5%) reported rules or restrictions applying to the item "Watch video clips".

The percentage of mother monitoring on their daughter during or after use of SNSs in response to "When your daughter uses [you use] the internet at home, do you [does your mother] sometimes check any of the following things afterwards…" are describe below for both mothers and daughters on each of the six items. Majority of mothers (*n* = 24; 60.0%) and some daughters (*n* = 16; 40.0%) reported mother monitoring applying to "Which websites she [you] visited". More mothers (*n* = 27; 67.5%) than daughters (*n* = 15; 37.5%) reported mother monitoring applying to "The messages in her [your email] or instant messaging". Similarly, almost all (*n* = 39; 97.5%) but just over half of the daughters (*n* = 24; 60.0%) reported mother monitoring applying to "Her [Your] profile on social media or an online community". Lastly, more mothers (*n* = 32; 80.0%) than daughters (*n* = 21; 52.5%) reported mother monitoring applying to "Which friends or contacts you add to your social media profile or instant messaging service".

Comparison based on dyad member type. Mothers and daughters were compared on major study variables (see Table 1) using paired samples t-Tests. Compared to mothers, daughters reported a significantly higher level of body satisfaction (BSSS), SNS use and frequency (SNS overall use), and photo-based activity and appearance exposure (SNS photo activities). There were no dyad differences with respect to self-esteem (RSES), internalization of appearance ideals and pressures (SATAQ-4), eating disorder symptoms and concerns (ChEAT, EAT-26), physical activity behaviours, or mother/daughter SNS interaction activity.

Bivariate correlations. Bivariate correlations are presented in Table 2. The bivariate correlations between mothers' and daughters' variables were low, ranging from r = -0.052 to r = .343. The within-dyad correlation was relatively higher for daughters than mothers ranging from r = .005 to r =.647 and r = .013 to r = .627, respectively.

Hypothesis Testing

Pooled regression results for Hypothesis 1 and 2 are presented in Table 3.

Hypothesis 1: Actor Effects of Overall SNS use, SNS photo activities, and SNS interaction activities on self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity.

The actor effects between Overall SNS use and RSES (t = 2.60, p<0.05) was significant for mothers only. This indicates that greater use of SNSs was related to an increase in self-esteem for mothers. In the relationships between SNS photo activities and the outcome variables, the only actor effect significant was between SNS photo activities and BSSS (t = -2.22, p<0.05) for daughters. This indicates that the greater photo activities/exposure on SNSs experienced by daughters was related to lower body satisfaction.

The actor effects between SNS interaction activities and RSES (t = -3.54, p<0.05), BSSS (t = -2.83, p<0.05), SATAQ-4 (t = 4.10, p<0.05), and EAT-26 (t = 3.01, p<0.05) was significant for mothers only. This indicates that mothers who interact (i.e., comment, like, react) more with their daughter's photos/posts on SNSs have lower self-esteem, lower body satisfaction, higher internalization of beauty standards, and higher eating disorder symptoms and concerns. The actor effects between SNS interaction

activities and physical activity was significant for both mothers (t = -3.16, p<0.05) and daughters (t = 2.75, p<0.05). This indicates that mothers who interact (i.e., comment, like, react) more with their daughter's photos/posts on SNSs have a lower physical activity frequency, however, daughters who interact more with their mother's photos/posts on SNSs have a higher physical activity frequency.

Hypotheses 2: Partner Effects of Overall SNS use, SNS photo activities, and SNS interaction activities on self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity.

H2a.) For the daughter partner effects, eight relationships were significant: 1) Overall SNS use and RSES (t = -2.28, p<0.05), 2) Overall SNS use and BSSS (t = -2.50, p<0.05), 3) Overall SNS use and SATAQ-4 (t = 4.47, p<0.05), 4) Overall SNS use and EAT-26/ChEAT (t = 4.59, p<0.05), 5) SNS photo activities and SATAQ-4 (t = 4.03, p<0.05), 6) SNS photo activities and EAT-26/ChEAT (t = 3.92, p<0.05), 7) SNS interaction activities and RSES (t = 2.46, p<0.05), and 8) SNS interaction activities and RSES (t = -3.83, p<0.05). This indicates that mothers' overall SNS use was related to the daughters' lower self-esteem, lower body satisfaction, higher internalization of beauty standards, and higher eating disorder symptoms and concerns. Furthermore, mothers' photo activity/exposure was related to the daughters' higher internalization of beauty standard, and higher eating disorder symptoms and concerns. Lastly, mothers' SNS interaction activities with daughters' was related to daughters' higher self-esteem and lower physical activity frequency.

H2b.) As expected, there was no mothers' partner effect observed in any of the possible relationships. This indicated that none of the daughters' predictor variables had a direct effect on mothers' outcome variables.

Discussion

The overall goal of the current study was to better understand the online mother/daughter relationship. To date, there appears to be a paucity of empirical research on maternal modelling in digital culture, specifically, SNSs. Thus, to capture the complex and mutually influential nature of relationship dynamics in mother/daughter pairs, the current study used the APIM (Kenny et al., 2006) to explore at the dyadic level. Guided the social cognitive theory (Bandura, 1986) and the Sociocultural Model (Davydov, 1995; Vygotsky, 1978), online surveys were used to explore the dynamics of mother/daughter dyads on SNSs and the influence of mothers' SNS use on various psychosocial health variables in their daughters. Hypotheses were partially supported and overall, study findings demonstrate a need for further research into the online mother/daughter relationship, the need to foster positive SNS behaviour, and that greater emphasis should be placed on discouraging negative modelling behaviours among mothers.

Findings from the current study suggest that mothers with greater SNS use have increased self-esteem. This actor effect is contrary to previous findings that suggest increased SNS usage in women is associated with low self-esteem (Vogel, Rose, Roberts, & Eckles; 2014). As self-esteem is calibrated to cues of inclusion or rejection within the social environment it could be that mothers' SNS usage is creating positive development (Diafarova & Trofimenko, 2017) of self-esteem through potential moderators such as

positive feedback (e.g., likes on Facebook) or feeling a sense of purpose online (Burrow & Rainone, 2017). In addition, the hypothesis known as "rich get richer", which assumes that persons with a high level of self-esteem also receive strong gratification on the Internet (Zywica & Danowski, 2008), may help to explain the findings in the current study. The "rich get richer" hypothesis (Zywica & Danowski, 2008) could suggest that mothers who manage well in the offline world will also manage well in the virtual world (e.g., are active online, have large number of friends) thus potentially experiencing an increase in self-esteem. Moreover, the mothers' who interact (i.e., comment, like, react) more with their daughter's photos/posts on SNSs had lower self-esteem, lower body satisfaction, higher internalization of beauty standards, and higher eating disorder symptoms/ concerns.

Research has suggested that mothers may use the appearance of their child to establish their identities as mothers and to verify their identities as "good mothers" (Collett, 2005). For example, their daughter's appearance online may be an integral part of their own self-presentation and may be an underlying reason for using interaction as a tool towards impression management, projecting their beliefs, attitudes, and social norms, by reinforcing the behaviour they want their daughter to display on SNSs. In addition, the mother could in turn be looking for validation through interaction (e.g., like for a like), as previous research has suggested that feelings of low self-esteem and insecurity underpinned women SNS users' efforts in a quest for recognition online (Chua & Chang, 2016). As likes/reactions can be seen as an indicator of popularity and can assist in the transmission of ideals about beauty and body shapes, as users learn what the social norm is in their SNS community (Jong & Drummond, 2013), mothers need to consider the

potential impacts of their interactions with their daughters online. The current study suggests that mothers who interact (i.e., comment, like, react) more with their daughter's photos/posts have a lower physical activity frequency, which could be a result of SNS behaviour as a form of sedentary behaviour. However, the current study does not take into account the nature of feedback provided by mothers and daughters. This is an important shortcoming, as the type of feedback (e.g., confirming dominant appearance ideals or not) may greatly influence whether or not daughters will internalize appearance ideals or other beliefs or attitudes and act accordingly, and is an important consideration for future research in this area.

The current study suggests that daughters experiencing greater photo activities/exposure on SNSs have a lower body satisfaction. This actor effect is consistent with pervious literature exploring the role photo-based activity on SNSs can play on appearance concern and investment (Holland & Tiggemann, 2016; Meier & Gray, 2014; Mingoia, Hutchinson, Gleaves, & Wilson, 2019). In their systematic review, Holland and Tiggemann (2016) concluded photo-based activity (e.g., posting photos and viewing or making comments on others' photos) is particularly significant in developing body concerns (compared to just increased SNS use). Furthermore, Mingoia et al. (2019) suggested a large association between a user's level of photo investment on SNSs and the tendency to engage in appearance comparisons. Photo activities/exposure predicting daughters' body satisfaction may then be related to daughters engaging in more frequent appearance comparisons. Moreover, the fact that mothers' SNSs can be a space for comparison (Sales, 2016) may help to explain why daughters who interact (i.e., comment, like, react) more with their mother's photos/posts on SNSs have a higher physical activity

frequency. It could be that mothers' are modelling physical activity behaviours on SNSs. As maternal modelling may lead to daughters wanting to imitate the behaviour of their mother (e.g., engaging in physical activity, dieting/weight loss behaviour), further research is needed to understand the motivations daughters' may have gained from their interaction with mothers' SNSs. Uncovering motivations of the daughters will assist in leading to a better understanding of the intention of the daughters' behaviour and if it was positive or based on appearance investment.

Moreover, future research should consider exploring maternal modelling on SNSs in relation to constructs such as anxiety and depression as upward comparisons to idealized standards have been found to accompany these dimensions of psychosocial health as well (Cash & Pruzinsky, 2004; Tiggemann, 2011). Anxiety and depression, in adolescents, can be elevated by compulsive SNS (Dhir, Yossatorn, Kaur, & Chen, 2018) and/or being emotionally invested in SNSs (Woods & Scott, 2016). It has been observed that anxious SNS users invest in different coping strategies (Primack et al., 2017) and tend to be more engaged with SNS to ally their anxious state (e.g., searching for attention or support on SNSs; Vannucci, Flannery, & Ohannessian, 2017) compared to non-anxious SNS users. Previous literature has recommended that parents and guardians monitor and moderate the excessive social media use of adolescents (Dhir et al., 2018) and be cognisant of other psychosocial health behaviours such as anxiety or depression.

Further supporting the ideal of maternal modelling on SNSs, the daughter's partner effect suggests that mothers' overall SNS use was associated with daughters' lower self-esteem, lower body satisfaction, higher internalization of beauty standards, and higher eating disorder symptoms/ concerns. Our findings concur with previous evidence

concerning the associations between maternal modelling in the offline world and the influence mothers have on their daughters' body image, self-esteem, and eating habits (Handford, Rapee, & Fardouly, 2018). Specifically, mothers' photo activity/exposure was related to the daughters' higher internalization of beauty standards, and higher eating disorder symptoms/concerns. One interpretation is that maternal modelling exists on SNSs and that modes of maternal influence, directly and indirectly impact their daughter self-esteem, body satisfaction, internalization of beauty standards and eating disorder symptoms/concerns. Mothers may be expressing their expectations and beliefs about physical appearance and eating behaviour through their SNSs use and photo-based activity.

As Instagram, a primary photo-based platform, was the most popular SNSs used between dyads and has been suggested to have a stronger relationship with appearance comparison compared to other platforms (Turner & Lefevre, 2017) further research specifically exploring mothers' Instagram use is warranted. Mothers may be competing (in terms of their posts and pictures) with their daughters on SNSs (Sales, 2016) which could further exacerbate social comparison if a daughter feels strongly about the need to upstage her mother online. However, further research is needed to fully understand what exact content or behaviour on SNSs, which a mother engages in, is in fact influencing their daughters' development. Findings from the current study suggest the importance of working with mothers to help them provide an online environment that nurtures young adolescent girls' lifestyle patterns of diet, exercise, and evaluation of self and others. A direction for future research should thus include linking self-reports of SNS use and related outcomes with an analysis of the actual content of SNS posts by mothers and

daughters. Mothers need to be concerned with how they are presenting themselves online so to help foster positive expectations and beliefs about physical appearance and eating behaviour among their daughters.

Several limitations of the current study need to be acknowledged. As the sample was predominately comprised of mothers who were married, work-full time for pay, had high socioeconomic status, and were well educated, future studies need to explore a more diverse sample to make findings generalizable. Further, race/ethnicity data was not collected in the current study and is recognized as a major shortcoming. Despite attempts to recruit a more diverse community sample, the mother/daughter relationship does not serve the same needs across cultures (Gore, Frederick, & Ramkissoon, 2018) and attempts should be made to extend these findings to other populations and accurately measure these important demographic variables. Moreover, sampling bias may exist as results suggested the majority of the mother/daughter dyads reported having a 'good relationship' (e.g., talking about problems, caring, not hiding behaviour) and thus, may have been more likely to participate in the study than those dyads who do not have a 'good relationship'. Results should also be taken with caution as causal interpretations are not possible due to the correlational nature of the current study and future longitudinal studies would provide more compelling evidence of causation. In addition, the measurement of Overall SNS use many not be an exhaustive measurement of SNS use/frequency as it relies on self-report. Moreover, it should be noted as a limitation that a simple sum score may not be adequate for the RSES due to the positive and negative phrasing (Hyland, Boduszek, Dhingra, Shevlin, & Egan, 2014; Marsh, Scalas, & Nagengast, 2010). Lastly, although a pooled regression approach to the APIM is known

to be an appropriate approach for analyzing dyadic data with smaller samples, future research should attempt to recruit a larger sample size to have adequate power to use a Structural Equation Modelling approach to account for the measurement error (Peugh, DiLillo, & Panuzio 2013), detect further associations (i.e., mother effects) of interest and learn more about the mother/daughter dyads in the context of the online world.

Despite these limitations, the present study delivers a better understanding towards the dyadic relationships between SNS behaviours and self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours among mothers and their early adolescent daughters. This study suggests that SNS behaviours predict outcome variables for both mothers and daughters individually (actor effects). In addition, maternal modelling exists on SNSs, as a number of relationships where the mothers' predictor variables were associated with the daughters' outcome variables (daughters' partner effects) were statistically significant. Thus, suggesting that mothers need to foster positive SNS behaviour, and that greater emphasis should be placed on discouraging negative modelling behaviours online. Further research in this area is warranted and researchers should create tools that help mothers navigate the online world and better understand the role they can play in the creation of their daughter's digital footprint.

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CHAPTER 4

UNDERSTANDING EFFECTIVE DEVELOPMENT: USING A COMMUNITY–ACADEMIC PARTNERSHIP TO CREATE A WORKSHOP AND INTERACTIVE TOOLKIT FOR PARENT EDUCATION[4]

In the offline world, research suggests that the mother/daughter relationship influences every state of the daughter's development (Flaake, 2005), however, parents tend to feel unprepared to raise children in the online, media-rich world we live in today (Yardi & Bruckman, 2011). Recent research has suggested that within the mother/daughter relationship, girls (11-14 years) feel that their mothers do not understand how to use social networking sites (SNSs) and that if they are on these platforms, they need to act as role models to their daughters (Santarossa & Woodruff, in press). Moreover, findings have suggested that a mother's SNS behaviours are associated with their daughter's (11-14 years) psychosocial well-being (i.e., self-esteem, body satisfaction, internalization of beauty standards, eating disorder symptoms and concerns, and physical activity (Santarossa & Woodruff, 2019). Thus, scholars and community practitioners need to facilitate the flow of research knowledge about online parenting practices to those who can help young adolescents regulate negative affect as a means of preventing the development of harmful or excessive behaviours (e.g., eating disorders, poor body image, and low self-esteem). Although children need to learn how to contribute positively to their own digital footprint, parents need to understand that they also play a large role in shaping their children's digital identity. A promising component

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in the development of an effective parent education program/tool is the use of action research (Loizou, 2013).

Reason and Bradbury (2001) described action research as "a family of practices of living inquiry that aims, in a great variety of ways, to link practice and ideas in the service of human flourishing," where the orientation of change is with others (p. 1). An umbrella term, action research is an 'orientation to inquiry' that seeks answers to questions by working with participants, through constant cycles of action and reflection to produce practical knowledge that can be used by people in their everyday lives, while working together to address problems and create positive change (Bradbury Huang, 2010; Reason & Bradbury, 2001). Community-academic partnerships (CAPs), falling under the practices of action research, are designed to increase collaboration between researchers and the community. Drahota et al. (2016) has defined CAPs as "partnerships in which researchers and community stakeholders have equitable control in addressing a cause(s) that is primarily relevant to the community of interest and aims to achieve a goal(s) relevant to both community members (representatives or agencies) and researchers" (p. 192). CAPs are not one directional and thus, are addressing the needs for improved collaboration between academics and community practitioners hoping to disseminate and implement promising interventions and community programs (Drahota et al., 2016). CAPs are believed to increase the effectiveness and feasibility of action research (Drahota et al., 2016; Gomez, Drahota, & Stahmer, 2018).

Although there is a rich body of literature on the process of action research, a paucity exists on using action research with parents, particularly within the framework of parent education (Loizou, 2013). Parent education has been described as a process during

which parents are ‘educated’ to support their children’s development and learning, to enhance their parenting identity, and strengthen their parent–child relationship (Croake & Glover, 1977). The attempt to educate parents looks differently according to the goals and expectations of every program wherein, specific activities are developed to enhance parents’ knowledge, skills, and strategies to support their children and deal with specific issues (Loizou, 2013). The establishment of CAPs in research where academics, parents, and community-based organizations were actively engaged in the design, implementation, and evaluation of parent education programs have fared well (Davison, Jurkowski, Li, Kranz, & Lawson, 2013; Loizou, 2013). However, the existing literature provides limited guidance on how to develop successful CAPs, it is criticized with being descriptive, and is not focused on specific factors that influence the development phase (i.e., initiation and early period) of the CAP but rather factors that sustain it (Drahota et al., 2016; Gomez et al., 2018). Thus, as much of the current research has not focused on the factors that influence success over the developmental course of CAPs (Drahota et al., 2016), the focus of the current study was to build on the work of Gomez et al. (2018) wherein the development phase was specifically explored.

According to the theory-based Model of Research-Community Partnerships as proposed by Gomez et al. (2018), there are three phases (i.e., Formation, Execution of Activities, and Sustainment) to illustrate the iterative processes of research-community partnership development and conceptualize outcome constructs of these efforts. Across the three phases in the Model of Research-Community Partnerships (Gomez et al., 2018) important processes correspond to each phase: (1) the Formation phase corresponds with the collaboration process and development of the CAP (i.e., Interpersonal and

Operational Processes) and subsequent facilitating and hindering factors, (2) the Execution of Activities phase includes proximal (process) outcomes (e.g., knowledge exchange) focusing on the partnership functioning of the CAP, and (3) the Sustainment phase coincides with distal outcomes of the CAP (e.g., improved community care, policy changes). Recently, Gomez et al. (2018) used the aforementioned model to explore the facilitating and hindering factors (as identified in Drahota et al., 2016 systematic review) during a CAP's development phase by categorizing these factors as either Interpersonal or Operational Processes (see Table 4). Interpersonal processes have been defined as "constructs pertaining to the quality of relationships or communication among CAP members" (Gomez et al., 2018, p. 15). Whereas in comparison, operational processes "include constructs pertaining to the logistics and quality of partnership functioning, such as meeting quality, partnership member selection, and finances" (Gomez et al., 2018, p. 15).

Overall the aim of this action research project was to use a CAP to create an evidence-based, sustainable, and usable outreach service for a community organization to use and evaluate in the future. The collaborating community organization specializes in the treatment and prevention of eating disorders through clinical programs and health promotion services, and currently offers media literacy education and presentations on self-esteem, body image, nutrition, physical activity, size acceptance, and body-based harassment. Therefore, the purpose of the present study was to (1) use a CAP to design a workshop and interactive toolkit to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint while creating a transformative learning experience for the mothers with the desired impact to then reach their daughter,

(2) highlight the development of this workshop and interactive toolkit, and (3) specifically explore the relative influence of facilitating and hindering factors while being guided by the Model of Research-Community Partnership (Gomez et al., 2018) within the CAP during the development phase using an online survey.

Method

The current study uses the Model of Research-Community Partnership (Gomez et al., 2018) to assist in guiding and evaluating the development of the CAP as well as to interpret outcomes of the partnership effort during this development phase. The CAP was comprised of researchers, the community organization, and a group of mothers interested in the development of a parent education program. Specifically, as established by the partners, the goal of the CAP was to develop a workshop and interactive toolkit that would educate mothers by exchanging knowledge about online parenting practices, promoting positive use of SNSs, understanding how SNSs can impact psychosocial well-being (i.e., body image, self-esteem, eating disorders), understanding how to model SNS behaviours appropriately, and to create a positive digital footprint.

Developing the Workshop and Interactive Toolkit

Building relationships. The authors have been working alongside the community organization for several years on a number of research and community outreach endeavours. This was the first time, however, that the CAP and the Model of Research-Community Partnership (Gomez et al., 2018) was used to develop and evaluate a collaborative effort. The research described in this article was carried out in partial fulfillment of the first author's doctoral degree in Kinesiology. Wherein the first author collected formative data with mother/daughter dyads through focus groups (Santarossa &

Woodruff, in press) and online surveys (Santarossa & Woodruff, 2019) to assist in the development of the CAP as well as the workshop and interactive toolkit. The formative data collection allowed the first author to build a relationship with mothers in the community, who then became important stakeholders in the CAP.

Participants. A total of 10 participants, located in Southwestern Ontario, Canada, were recruited by the first author to help develop the workshop and interactive toolkit. Participants included one academic, one undergraduate student, two members of the community organization's Health Promotion Team (who would be the ones eventually implementing the workshop and interactive toolkit in the community), the community organization's Executive Director, the community organization's Communications and Office Administrator, and four mothers from the community. The academic and the undergraduate student where recruited based on their interest and expertise in the area and their familiarity with the community organization. To recruit the core group of stakeholders from the community organization the first author circulated several emails as well as held information sessions at the community organization to explain the project and outline the goals. To recruit the mothers, emails were circulated to those who had participated in the previous formative data collection. Recruitment ran smoothly since many of the partners were familiar with the formative research project. All those who expressed interest in the study ultimately participated (N = 10).

Planning meetings. Participation in the CAP included meetings to co-design, review, and provide feedback related to the materials developed by the research team[5]. The first author facilitated all planning meetings (N = 4). Prior to each meeting,

[5] Prior to the beginning of the planning meetings written consent was obtained by all participants (see Appendix J)

participants were provided an agenda (see Appendix K) to review and/or a summary of notes from the previous meeting(s) (see Appendix L). The academic, the undergraduate student, and the community organization stakeholders met with the first author three times for two hours each in a boardroom at the community organization. The academic and the mothers met with the first author for a single planning meeting for two hours that was situated before the last planning meeting with the community organization stakeholders so that ideas could be compared and contrasted. The meetings consisted of clearly defining the aims and objectives of the CAP, providing an understanding to what a CAP is, reviewing previous research in the area of online mother/daughter relationships (i.e., an infographic of the formative data collection created by the first author; see Appendix M), numerous interactive activities (e.g., role play, brainstorming, problem-based learning; see Appendix N), and the use of an evidence-based practice checklist (Sociocultural Approach and the Social Cognitive Theory, Bandura, 2001; cf. Pagoto et al., 2016; see Appendix O). The first author would take time to reflect after each meeting, integrating research and the participant knowledge and experience, and bring that back to the subsequent meetings.

Interpreting Outcomes of Partnership Effort

The current study was conducted at the end of the CAP planning meetings and included appropriate institutional research ethics board approval, wherein attending CAP partners had agreed to be recruited prior to the commencement of the planning meetings (see Appendix J). To determine which specific factors were perceived to be present within the design phase of the workshop (see Appendix P) and interactive toolkit (see Appendix Q) as well as the development phase of the CAP, and how influential each

selected factor was on the collaborative process, a cross-sectional web-based survey was used to collect both quantitative and qualitative data. Participating CAP partners (N = 10) were sent a link via email to the approved consent form and survey using qualtrics.com (see Appendix R). Similar to Gomez et al. (2018), a menu of facilitating and hindering factors was listed for participants to choose from which were present during the development phase of the CAP. The list of facilitating and hindering factors were developed from the results of a CAP systematic review (Drahota et al., 2016), and additional literature (cf. Brookman-Frazee et al., 2012; Fook, Johannessen & Psoinos, 2011; Garland, Plemmons, & Koontz, 2006) was used for the quantitative portion of the CAP survey, followed by three open-ended questions. Complete definitions for the facilitating and hindering factors are outlined in Table 4.

CAP survey. The survey consisted of three sections and participants were provided with definitions of CAPs and what the term 'Partner' (i.e., a member of the CAP) was referring to. The first section asked participants to use a list of facilitating factors that were located on the left hand side of the page and "A. DRAG and DROP the FACILITATING FACTORS into the box on the right that you believe were "present" during the collaborative group process." Participants were then guided to "B. For each factor you selected as "present," RANK (from highest to lowest by moving them up and down within the box) how influential you believe it to be in facilitating the collaborative group process." The second survey section asked participants to use a list of hindering factors that were located on the left hand side of the page and to "A. DRAG and DROP the HINDERING FACTORS into the box on the right that you believe were "present" during the collaborative group process." Participants were then guided to "B. For each

factor you selected as "present," RANK (from highest to lowest by moving them up and down within the box) how influential you believe it to be in hindering the collaborative group process." Thus, participants ranked all of the facilitating and hindering factors that they selected and did not rank factors that they did not select as present. The third, and final section of the survey, consisted of open ended questions developed based on questions from the phone interviews conducted in Gomez et al. (2018) and the suggestion from Bailey et al. (2019) that action researchers should consider acquiring formal feedback about their facilitation skills embedded within the action research process. The open-ended questions included:

1. What was the most useful or effective part of the planning session(s) for you?
2. What changes would make the planning session(s) more effective?
3. Additional comments about the facilitator or the planning session(s)?

Data analysis. Using the first and second sections of the survey, frequencies, means, standard deviations, and visual inspections were used to rank order the most and least frequently cited factors. Secondly, deductive qualitative analysis was used to analyze the responses from the open ended questions using the facilitating and hindering factors present in Gomez et al. (2018) as a source of codes with further data categorization guided by the interpersonal and operational process factors identified in the Model of Research-Community Partnership (Gomez et al., 2018).

Results

A total of eight out of 10 potential partners participated in the study. Factors were ordered by frequency from most to least frequent (Table 4). The number of facilitating factors selected by participants on the survey ranged from 5 to 12 (M = 10.5, SD = 2.4)

and no hindering factors were selected by any participant. Open-ended questions were then connected to the quantitative data by the deductive qualitative analysis used. The results are broken down further for both quantitative and qualitative analysis (see Table 4).

Quantitative (Rank Order Questions)

At least one participant endorsed each facilitating factor presented in the survey. Of the facilitating factors, three were endorsed by all participants and had a high ranking in the most influential factors facilitating. However, "Well-structured meeting" was ranked as the most influential facilitating factor, yet, it was not endorsed by all participants. Of the top three most influential facilitating factors (i.e., "Shared vision, goals, and/or mission", "Effective and/or frequent communication", and "Well-structured meetings") two were interpersonal process factors and one was an operational process factor. Lastly, no hindering factors were chosen by any participants.

Qualitative (Open Ended Questions)

In subsequent paragraphs, each of the three open-ended questions are discussed and the frequency counts are provided to illustrate the number of participants who responded to a particular factor.

What was the most useful or effective part of the planning session(s) for you? Responses were received from all eight participants. This data was categorized into facilitating factors, where six of the 12 facilitating factors were present in the data in which the majority were operational process factors. The most common factor, mentioned by six participants, was "Well-structured meetings," an operational process factor. With a sample quote being, "The structure of the meetings was very effective to

not only me, but the success of the group as a whole." "Good quality of leadership (i.e., the facilitator of the partnership/planning sessions)," also an operational process factor, was the next most common factor within the dataset with four participants making reference to the facilitation leader. For example, "Our leader was extremely organized. We could have talked forever but she kept us focused and on task." Two participants indicated the "Respect among partners," an interpersonal process factors, in their response. For example, "I loved that each member was able to contribute their strengths and add to the conversation from their own personal lens." Similarly, two participants identified "Good relationship between partners," also an interpersonal process factor, in their response. A sample quote includes, "Collaboration with all of the members was extremely positive." "Positive community impact" was a facilitating factor, an operational process factor, evident in two participants' responses. For example, "It helped to see that there was a need for the research (toolkit) and realize how many people can benefit from it." Finally, one participant identified "Clearly differentiated roles/functions of partners," an operational process factor, suggesting, "Our leader was always well prepared and communicated objectives and desired outcomes with the group."

What changes would make the planning session(s) more effective? All eight participants left a response to this question. This data was categorized into hindering factors. Although five of the participants mentioned that they would change nothing about the planning sessions, two of the 13 hindering factors were present in the data, in which one was an operational and the other an interpersonal process factor. Two participants identified "Unclear roles and/or functions of partners," an operational process factor, as a possible area for planning session effectiveness improvement. For

example, “Perhaps adding 1-2 more sessions would be helpful as a ‘wrap up meeting’ to finalize details.” Lastly, one participants’ suggestion identified “Lack of shared vision, goals, and/or mission,” an interpersonal process factor, as a potential area to address for effectiveness of planning sessions, stating: “The second brainstorming meeting was super effective, but I think some members had a different vision and therefore it was hard for the leader of the group to move towards their vision.”

Additional comments about the facilitator or the planning session(s)? Six out of eight participants left a response to this question. This data was categorized into facilitating and/or hindering factors, four of the 12 facilitating factors were present, no hindering factors were present and the majority were operational process factors. Two participants indicated “Good quality of leadership (i.e., the facilitator of the partnership/planning sessions),” an operational process factor, in their response. For example, “Our leader always was very prepared and communicated all details of the project clearly”. “Well-structured meetings” another operational process factor, was mentioned by two participants. With a sample quote being that the meetings were “Excellent and organized.” The interpersonal process factor, “Good relationship between partners” was identified in two responses, for example “I think the partners as a whole worked very well together.” Finally, one participant alluded to “Positive community impact,” an operational processes factor in their response, with the statement: “Was great and looking forward to the outcome!”

Discussion

This study highlights the use and importance of CAPs in creating a workshop and interactive toolkit designed to educate mothers on how to navigate SNSs appropriately

and create a positive digital footprint while creating a transformative learning experience for the mothers with the desired impact to then reach their daughter. The purpose of the larger CAP project is to test and implement this workshop and interactive toolkit in the community, however, the current study focuses on specifically exploring the developmental phase of the CAP and the subsequent influential facilitating and hindering factors from the perspective of the collaborative partners. Using an online survey and collecting both quantitative and qualitative data, the developmental phase of the CAP can be discussed not only by influential facilitating and hindering factors but the quality of the action research project can be reviewed. Similar to Bailey et al. (2019), using the quality criteria of partnership and participation, action, reflection, and significance, outlined by Bradbury Huang (2010) and the Journal's criteria for quality (http://journals.sagepub.com/pb-assets/cmscontent/ARJ/ARJ_Quality_ Criteria.pdf), the results of this study can be reviewed in terms of the quality of this CAP's developmental phase.

Understanding the quality of relationships formed with stakeholders and their involvement in inquiry is referred to as partnership and participation (Bradbury Huang, 2010), and in the current study can specifically be described by the results of the survey data. In comparison to previous literature (Gomez et al., 2018), operational processes (vs. interpersonal processes) were referenced as influential facilitating factors more often during the CAP's development, and included having well-structured meetings, strong leadership, a perception of a positive community impact, and clarity of specific roles within the group that contributes to its progress. However, similar to Gomez et al. (2018) there is a need to differentiate the meaning of good quality of leadership, and the role it

plays in the CAP development. Future research should aim to better understand leadership as an influential facilitating factor with members of a CAP by distinguishing leadership as an operational process (e.g., organized leadership, closely related to well-structured meetings) and/or an interpersonal process (e.g., personal characteristics of the leader such as charisma). Partnership and participation (Bradbury Huang, 2010) can further be understood through the many interpersonal processes that were found to be influential during the CAP's development, which included having shared group vision, an atmosphere of with open communication, and good relationships between the partners that were respectful. Previous literature (Baliey et al., 2019; Brookman-Frazee et al., 2012; Gomez et al., 2018; Perrault, McClelland, Austin, & Sieppert, 2011; Sibbald, Tetroe, & Graham, 2014) have highlighted similar interpersonal factors as important elements of a CAP's success. Notably, as cited in previous literature (Baliey et al., 2019; Gomez et al., 2018) having a shared group vision appears to be of higher importance than other interpersonal processes that are facilitating the development of the CAP, and should be emphasized in future action research projects.

In addition to monitoring the operational and interpersonal processes that have been highlighted as important for the successful development of a CAP, understanding the hindrances and how to mitigate them is also necessary. Research has suggested that to best inform success in future collaborations, lessons learned from unsuccessful experiences should be highlighted in the literature (Perrault et al., 2011). Within the current study, no hindering factors were endorsed by participants in the quantitative sections of the survey. Conversely, the qualitative data revealed that perhaps some members of the CAP felt that there were unclear roles and a lack of shared vision.

However, future research may better explain this finding through the use of in-depth interviews that would allow the opportunity for probing questions and a more in-depth textual analysis. In addition, these findings may indicate hindering factors are commonly not experienced during the development phase of CAPs, compared to the implementation and/or CAP sustainment and perhaps longitudinal designs are needed (Gomez et al., 2018).

This study being actionable refers to the extent to which it provides new ideas that guide action in response to need (Bradbury Huang, 2010). Based on interaction with the community organization and mothers, as well as various community members (e.g., teachers, principals, social workers), a need was expressed to better understand the online dynamics of the mother/daughter relationship and subsequently create parental education tools that could aid in navigating this relationship. To address the aforementioned need, a CAP with stakeholders (i.e., the community and mothers) who had worked closely with the first author during the formative studies (Santarossa & Woodruff, in press; 2019) were sought out. The development of this workshop and interactive toolkit is specifically filling a need for the community organization, as they will become actionable as a sustainable component for future implementation and evaluation. However, within the current study, the finding that the interpersonal process of having a shared group vision was one of the most influential facilitating factors during the CAP's development indicates that a mutual need existed.

As a way for the first author/CAP facilitator to understand and acknowledge their role as an instrument of change among change agents and stakeholders (Bradbury Huang, 2010), reflexivity was used throughout the project. As outlined in the methodology, the

first author would reflect after each planning meeting, and spend time integrating the research literature and the participant knowledge and experiences. The first author would then craft summaries and agendas rooted in this reflexive activity and deliver it back to the CAP members at the subsequent meeting, with the hopes of emphasizing the wants and needs of the CAP and the potential for community impact. The reflexivity of the first author appears to be acknowledged by the CAP in that the results suggest facilitating factors such as shared vision, well-structured meetings, leadership, and understanding the potential for positive community impact were seen as influential. These factors comprised of both interpersonal and operational process may indicate the impact of the facilitator's impact and that change efforts are unfolding. Notably, participants endorsing understanding the potential for positive community impact perhaps suggests that the facilitator is significantly impacting the thought process of participants from meeting to meeting. In addition, investigating the findings from the current study allows for reflexivity moving forward into the next stages of the overall project, and will aid in continuing to foster a positive and productive CAP.

Finally, significance, defined as having meaning and relevance beyond an immediate context (Bradbury Huang, 2010), is demonstrated in the current study. The community organization has been provided with an evidence-based, sustainable, and usable outreach service. Within the community, the workshop and interactive toolkit will promote parent education for raising children, specifically in terms of the mother/daughter relationship, in the online, media-rich world we live in today. Beyond this immediate study, significance is demonstrated both in the delivery of the workshop throughout the community and in the vast reach that the interactive toolkit can potentially

have. Wherein, the final design of the interactive toolkit contains a mobile application housed through the community organization's website, a podcast series, and various innovative worksheets that complement the workshop. All those who participated in the CAP, including the facilitator, will be able to take the lessons learned throughout this development phase and apply them to life beyond the action research project.

Limitations

A limitation of the current study is that generalization of findings may be limited in that only a single CAP was explored, thus only representing the perspectives of one stakeholder team. Moreover, this CAP was limited, as only one parental figure (i.e., mothers) was recruited to participate in this collaboration. Thus, the lack of paternal perspective may limit the workshop and interactive toolkit's use to only the maternal parent. In addition, similar to Gomez et al. (2018) a limitation that exists in the current study is that the design is researcher-driven. The list of facilitating and hindering factors, along with the collaborative process classifications were created based on previous literature, opposed to asking the CAP members to provide input. Increasing the involvement of the CAP in the research design and subsequent processes will add value in future action research. Finally, although the open-ended questions provided some additional information, future action research should conduct in depth interviews with CAP members to gain more robust knowledge on the development phase and use probing questions to uncover what aids in facilitating or hindering the collaboration process. In addition, written responses tend to produce short answers and may not contain the rich information oral interviews can generate (Fairweather, Rinne, & Steel, 2012). Thus future researchers may consider using a face-to-face interview process as individuals are more

likely to elaborate in person, therefore gaining more detailed information on how the participants interpreted the whole action research process. Despite these limitations, the current study provides information to researchers who are looking to conduct quality action research, specifically when it comes to understanding the development phase of CAPs, the collaboration process, and subsequent facilitating and hindering factors.

Conclusions

This paper describes the development phase of a CAP to design a workshop and interactive toolkit to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint while creating a transformative learning experience for the mothers with the desired impact to then reach their daughter. Wherein the relative influence of facilitating and hindering factors while being guided by the Model of Research-Community Partnership (Gomez et al., 2018) within the CAP were explored using an online survey. Although both collaborative processes (interpersonal and operational) were referenced as influential facilitating factors during the CAP's development, operational processes were expressed as facilitators more often. Similar to other action research it appears that hindering factors are commonly not experienced during the development phase of CAPs. Overall, this study specifically makes a significant contribution to action research as it pertains to the development of parent education. Understanding the facilitating and hindering factors that influence the collaborative process during the development phase of CAPs may in turn lead to successful sustainment over time, maximizing the possible benefits of the CAP and the attempt to educate parents on a desired issue.

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CHAPTER 5

DISCUSSION AND CONCLUSIONS

While research pertaining to mother/daughter relationships has traditionally been explored in the offline world, the study of the online mother/daughter relationship is needed as there appears to be a paucity of empirical research on maternal modelling in digital culture, specifically, social networking sites (SNSs). Although, literature on adolescent development consistently emphasizes the significance of the mother/daughter relationship in contributing to the formation of the adolescent girl's perception of herself and her body (Flaake, 2005), limited research exists (Hogue & Mills, 2019) on not only SNS engagement between mothers and adolescent girls but also its potential effects on psychosocial health variables. Therefore, the objective of this dissertation was to examine, within the online world, mother/daughter dynamics by exploring maternal modelling in relation to several psychosocial health and physical activity variables. In addition, one goal of this dissertation was to use action research to develop a community-academic partnership (CAP) to create an evidence-based, sustainable, and usable outreach service for a community organization, for mothers, to use and evaluate in the future. Specifically, of interest, was understanding potential influential factors during the development phase of the CAP. These objectives were accomplished through three separate studies (i.e., reported in chapters).

In Study 1 (reported in Chapter 2), the mother/daughter dynamic on SNSs was explored qualitatively. Using a constructionist approach (Crotty, 1998) and incorporating important theoretical understandings from the social cognitive theory (Bandura, 1986) and a contextualist developmental perspective (Freysinger, 1999), separate focus groups

were used to explore the SNS-related influences and to understand what role mothers play in developing their early adolescent daughters' SNS beliefs, attitudes, social norms, and behaviours as well as to determine what early adolescent daughters have learned from their mothers about SNSs. From these focus groups (N = 8; n = 4 mother focus group discussions and n = 4 girl focus group discussions) with 16 mothers of girls born in 2003-2007 (M_{age} of their daughters = 12.78, SD = 1.31) and 26 girls born in 2003-2007 (M_{age} = 13.17, SD = 1.16), we have identified what types of posts, pictures, comments, and actions are displayed, preferred from one another, and what feelings/emotions these posts, pictures, comments, and actions evoke. The transcripts from the focus groups (N = 8) were looked at as a whole and themes were drawn across the mothers' and girls' focus groups. Using a deductive and inductive approach, thematic analysis revealed five themes: being your authentic self, co-creating a digital footprint and online expectations, mother as a role model, connecting offline, and transmission of beauty ideals. Taken together the results presented in Study 1 (Chapter 2) offer important information regarding maternal modelling on SNSs and a better understanding of mother/daughter dynamics in the online environment. In particular, the findings shed light on the need for mothers to model healthful and positive body image and self-esteem on their own SNSs as they seem to play a role in developing their daughter's SNS beliefs, attitudes, social norms, and behaviours and potentially psychosocial health. However, as data was not yoked between mother and daughter, and further analysis (specifically using mother/daughter dyads) was warranted.

The purpose of Study 2 (reported in Chapter 3) was to quantitatively understand the dyadic relationships between SNS behaviours (i.e., use, photo activities, and

interaction activities) and self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours between mothers and their early adolescent daughters. Guided by the social cognitive theory (Bandura, 1986) and the Sociocultural Model (Davydov, 1995; Vygotsky, 1978), online surveys were used to further explore the dynamics of the mother/daughter dyads (N = 40 dyads) in the online environment. Deemed appropriate due to a smaller sample size (e.g., at least 28 dyads, Lim, 2014; Tambling, Johnson, & Johnson, 2011), data were analyzed using a pooled regression Actor-Partner Interdependence Model (APIM) for mother/daughter dyads. Overall, hypotheses were partially supported. Specifically, SNS behaviours predicted outcome variables for both mothers and daughters individually. In addition, the mothers' overall SNS use predicted daughters' lower self-esteem, lower body satisfaction, higher internalization of beauty standards, and higher eating disorder symptoms/concerns. The mothers' photo activity/exposure was related to daughters' higher internalization of beauty standard, and higher eating disorder symptoms/concerns. Lastly, mothers' SNS interaction activities were related to daughters' higher self-esteem and lower physical activity frequency. Having used dyadic data, further conclusions can be drawn on the existence of maternal modelling on SNSs, as a number of relationships where the mothers' predictor variables were associated with the daughters' outcome variables were found to be statistically significant. Study 2 findings demonstrate a need for further research into the online mother/daughter relationship, the need to foster positive SNS behaviour, and that greater emphasis should be placed on discouraging negative modelling behaviours among mothers. Further, with the role mothers may play on SNSs in regard to their daughter

psychosocial health, tools that help mothers navigate the online world and better understand how they impact the creation of their daughter's digital footprint was suggested.

Finally, the focus of Study 3 (reported in Chapter 4) shifted from understanding and exploring the mother/daughter dynamics in the online world to collaboratively creating parent educational materials. Overall the aim of this action research project was to use a CAP to create an evidence-based, sustainable, and usable outreach service for a community organization to use and evaluate in the future. There were three main aims to this study: (1) use a CAP to design a workshop and interactive toolkit to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint while creating a transformative learning experience for the mothers with the desired impact to then reach their daughter, (2) highlight the development of this workshop and interactive toolkit, and (3) specifically explore the relative influence of facilitating and hindering factors while being guided by the Model of Research-Community Partnership (Gomez, Drahota, & Stahmer, 2018) within the CAP during the development phase using an online survey. A total of 10 participants worked to help develop the workshop and interactive toolkit by attending various planning meetings to co-design, review, and provide feedback related to the materials developed by the research team. Out of 10 potential partners, eight participated in a brief cross-sectional web-based survey to collect both quantitative and qualitative data to interpret outcomes of the partnership effort, specifically factors that facilitated or hindered the development phase of the CAP. Both collaborative processes (interpersonal and operational) were referenced as influential facilitating factors during the CAP's development, and operational processes were

expressed as facilitators more often. Similar to other action research it appears that hindering factors were not commonly experienced during the development phase of the CAP. The findings make a significant contribution to action research as it pertains to the development of parent education. By understanding the facilitating and hindering factors that influence the collaborative process during the development phase of CAPs, partnership may have more successful sustainment over time, maximizing the possible benefits of the CAP and the attempt to educate parents on a desired issue.

New Directions for Research and Practice

The findings from the studies that formed this dissertation can be used to better understand online mother/daughter relationships, inform future research designs or directions, and make contribution to action research as it pertains to the development of parent education. A research area that requires more attention is the idea of modelling (Bandura, 1986) in the online world. It appears maternal modelling online exists as mothers do transmit beliefs, attitudes, and patterns of thought and behaviours on SNSs. The mother/daughter relationship acts as an important context where girls learn how to construct their own views about femininity (Crotty, 1998). The findings from the studies that formed this dissertation concur with previous evidence concerning the associations between maternal modelling in the offline world and the influence mothers have on their daughters' body image, self-esteem, and eating habits (Handford, Rapee, & Fardouly, 2018). However, if mothers want to help their daughters avoid the oppressive dictates of beauty (Barak-Brandes & Lachover, 2015), in the online world, they need to not only become aware of the appearance and social pressures involved in participating in SNSs but also need to become well-versed in SNSs so they can teach their daughter to be a

responsible user of the online world (Barnes, 2006; Sullivan, 2005). Further research is needed to understand the motivations daughters' may have gained from their interaction with mothers' SNSs as maternal modelling may lead to daughters wanting to imitate the behaviour of their mother. Having a better understanding of the intention of the daughters' behaviour and if that behaviour was intended to be positive or based on appearance investment can help researchers gain a greater insight into maternal modelling online.

Future researchers should consider addressing the limitations outlined throughout the studies that formed this dissertation. Specifically, further research is needed to fully understand the exact content or behaviour(s), which a mother engages in on SNSs, that is in fact influencing their daughters' development. For example, if researchers linked self-reports of SNS use and related outcomes with an analysis of the actual content of SNS posts by mothers and daughters (i.e., linkage analysis) potential measurement error would decrease (Scharkow & Bachl, 2017). Using linkage analysis (i.e., combining measures of media messages and media use; Fazekas & Larsen, 2016) would also allow researchers to account for the nature of feedback provided by mothers and daughters. This is an important consideration for future research, as the type of feedback (e.g., confirming dominant appearance ideals or not) may greatly influence whether or not daughters will internalize appearance ideals or other beliefs or attitudes and act accordingly (Valkenburg, Peter, & Schouten, 2006). Linkage analysis could also be used as a beneficial design in further research specifically exploring mothers' Instagram. As Instagram, a primary photo-based platform, was the most popular SNSs used between dyads (Study 2) and has been suggested to have a stronger relationship with appearance

comparison compared to other platforms (Turner & Lefevre, 2017) it is important to explore the actual content mothers are posting and/or interacting with. Understanding the exact content or behaviour(s) on SNSs, which a mother engages in, will help better understand the mother/daughter relationship on SNSs.

Gathering larger, more diverse samples is another future research direction that warrants investigation. For example, a larger sample of mother/daughter dyads would allow for structural equation modelling (SEM) to be used as a form of data analysis compared to pooled regression analysis. SEM could be used to account for the measurement error (Peugh, DiLillo, & Panuzio, 2013) and detect further associations of interest, thus allowing researchers to learn more about the mother/daughter dyads in the context of the online world. Researchers are also strongly encouraged to collect race/ethnicity data and recruit diverse samples so that the results can become more generalizable. There is some evidence that cross-cultural differences exist in the mother/daughter relationship literature (Jensen & Dost-Gözkan, 2015; Rastogi & Wampler, 1999), thus dyads that come from a number of different cultural or racial/ethnic backgrounds should be sought out. Future researchers should also consider specifically recruiting those with different parenting styles. Although previous research has suggested that by creating a system that supports an authoritative parenting practice, children can learn to make informed choices and become stewards of their own technology use (Yardi & Bruckman, 2011), more research is needed into the influence of parenting styles in regard to online behaviours.

Diversity in sampling should also be considered in the type of dyadic relationships explored in the online world. Future research should aim to explore children

of different ages, as well as other parental or influential persons (e.g., teachers) dyadic relationships on SNSs and the role they play in developing a child's SNS beliefs, attitudes, social norms, and behaviours as well as the impact on psychosocial health. For example, in the offline world maternal weight concerns/behaviours also impact the weight and disordered eating outcomes (i.e., binge eating and extreme weight control like vomiting, diet pills, laxatives, and diuretics) for their adolescent sons, in addition to their adolescent daughters (Neumark-Sztainer et al., 2007). Furthermore, the paternal/child relationship should also be explored, as research suggests fathers play an important role with their sons for both gaining muscle and losing weight strategies (McCabe & Ricciardelli, 2005) and that paternal weight concerns/behaviours can affect adolescent daughters' weight and disordered eating outcomes (Neumark-Sztainer et al., 2001). Exploring a number of different dyadic relationships in the online world can then lead to better forms of parent education. For example, specific to the CAP used in Study 3 (reported in Chapter 4), a limitation exists in the lack of paternal perspective, as insight from only one parental figure (i.e., mothers) may limit the workshop and interactive toolkit's use to only the maternal parent. Although an objective of Study 3 was to target mothers, a need exists to gain multiple perspectives so to create the most efficient and effective tools based on the intended audience.

Finally, action research as it pertains to the development of parent education, specific to the online world, should be an area of interest for future researchers. Using multiple CAPs that contain diverse partners, and that are more involved in the research design and subsequent processes will add value in future action research. Additionally, researchers should consider using an in-depth, face-to-face interview process to gain

more detailed information on how the participants interpreted the whole action research process. For example, it is important within action research to understand unsuccessful experiences and highlight them in the literature so to better inform success in future collaborations (Perrault, McClelland, Austin, & Sieppert, 2011). Using an in-depth, face-to-face interview process would allow for the opportunity for more rich information (Fairweather, Rinne, & Steel, 2012) and the ability to probe responses further, resulting in a more in-depth textual analysis that could contribute positively to the future phases of the CAP (i.e., Execution of Activities and Sustainment; Gomez et al., 2018).

Conclusion

The current dissertation sought to extend our knowledge of mother/daughter dynamics by exploring maternal modelling in relation to several psychosocial health and physical activity variables in the context of an online environment. Moreover, the ultimate goal of this dissertation was to use action research to develop a CAP to create an evidence-based, sustainable, and usable outreach service for a community organization, for mothers, to use and evaluate in the future. A workshop and interactive toolkit to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint was created and the development phase of the CAP was explored. These contributions have, in turn, highlighted the role of maternal modelling on SNSs for young adolescent daughters, thus leading to a better understanding of online mother/daughter relationships. In addition, findings suggest new directions for research, and make contribution to action research as it pertains to the development of parent education. It is hoped that the work of this dissertation serves as a foundation for future research on the

understanding of the mother/daughter relationship in the ever evolving online world, and the need for parent education in creating positive online environments.

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TABLES

Table 1

Descriptive Statistics and Paired Samples t-Tests Comparing Mother/Daughter Differences on Study Variables

	Mothers (n = 40)			Daughters (n = 40)			t-Test		
Variable (Range)	Mean (SD)	Actual Range	α	Mean (SD)	Actual Range	α	*df*	*t*	*p**
Social networking site monitoring (score, 0-30)	10.42 (5.18)	2-20	0.882	6.65 (5.53)	0-20	0.864	39	-4.78	0.00
Rosenberg Self-Esteem Scale (score, 10-40)	33.37 (5.60)	13-40	0.893	32.47 (6.13)	17-40	0.907	39	-0.63	0.53
Body Shape Satisfaction Scale (score, 10-50)	32.95 (8.84)	12-50	0.933	38.35 (8.92)	19-50	0.917	39	2.65	0.01
Sociocultural Attitudes Towards Appearance Questionnaire-Female (score, 22-110)	52.02 (14.67)	24-85		45.77 (17.18)	22-81		39	-2.01	0.05
Internalization: Thin/Low Body Fat			0.856			0.910			
Internalization: Muscular/Athletic			0.945			0.874			
Pressures: Family			0.880			0.794			
Pressures: Peers			0.894			0.858			
Pressures: Media			0.955			0.960			
The Eating Attitudes Test (score, 0-78), Children's Eating Attitude Test (score, 0-78)	7.00 (7.61)	0-35	0.830	7.32 (8.19)	0-46	0.851	39	0.21	0.83
Physical Activity Behaviours (active time; score, 7-42)	27.65 (7.25)	11-42	0.922	26.75 (9.77)	7-42	0.903	39	-0.50	0.62
Overall social networking site use (score, 2-19)	6.85 (2.64)	2-13	0.736	8.77 (3.96)	2-16	0.837	39	2.70	0.01
Social networking site photo activities (score, 0-36)	15.90 (4.49)	8-27	0.689	18.42 (6.38)	7-36	0.811	39	2.30	0.03
Social networking site interaction activities (score, 0-8)	3.40 (1.97)	0-7	0.707	3.52 (2.37)	0-8	0.805	39	0.31	0.76

Note. *Significant at the $p<0.05$ level

Table 2

Pearson Correlations between Study Variables

	1	2	3	4	5	6	7	8
RSES	**-0.151**	.627**	-.483**	-.501**	-0.150	-0.044	0.219	0.295
BSSS	.647**	**-0.052**	-.410**	-.430**	0.079	-0.246	-0.050	0.019
SATAQ-4	-.451**	-.598**	**0.243**	.485**	0.106	-0.132	0.073	0.038
EAT26/ ChEAT26	-.448**	-.424**	.540**	**0.242**	0.031	-0.143	0.013	-0.297
PA	.378*	.431**	-0.014	0.005	**0.113**	-0.184	-0.135	0.080
Overall SNS use	-0.284	-.442**	.559**	.445**	-0.140	**0.114**	.505**	.367*
SNS photo activities	-0.012	-0.060	.510**	.378*	0.026	.556**	**0.225**	.317*
SNS interaction activities	0.153	0.094	-0.036	-0.228	-0.248	-0.031	0.245	**.343***

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Note. Mothers above, daughters below, and between mothers and daughters along the diagonal; RSES=Rosenberg Self-Esteem Scale; BSSS=Body Shape Satisfaction Scale; SATAQ-4=Sociocultural Attitudes Towards Appearance Questionnaire; EAT26=The Eating Attitudes Test' ChEAT=Children's Eating Attitude Test; PA=Physical Activity Behaviours; SNS=Social Networking Site.

Table 3

A Pooled Regression Actor-Partner Interdependence Model

Variables	Mother Actor Effect	Daughter Actor Effect	Mother Partner Effect	Daughter Partner Effect
	t-test (Unstandardized Estimates)			
RSES				
Overall SNS use	2.60*	1.45	-0.69	-2.28*
SNS photo activities	0.11	0.53	1.85	-0.11
SNS interaction activities	-3.54*	1.11	1.92	2.46*
BSSS				
Overall SNS use	-0.81	-0.52	-1.01	-2.50*
SNS photo activities	0.14	-2.22*	0.22	-0.44
SNS interaction activities	-2.83*	-1.21	0.68	1.09
SATAQ-4				
Overall SNS use	0.97	0.49	-1.47	4.47*
SNS photo activities	0.92	0.71	0.50	4.03*
SNS interaction activities	4.10*	1.31	0.04	-0.29
EAT-26/ChEAT				
Overall SNS use	1.07	1.48	-0.08	4.59*
SNS photo activities	0.89	1.21	0.36	3.92*
SNS interaction activities	3.01*	0.80	0.67	0.49
PA				
Overall SNS use	0.31	-1.98	-1.28	-1.13
SNS photo activities	-1.80	0.26	-1.21	0.50
SNS interaction activities	-3.16*	2.75*	1.47	-3.83*

*$p<0.05$

Note. RSES=Rosenberg Self-Esteem Scale; BSSS=Body Shape Satisfaction Scale; SATAQ-4=Sociocultural Attitudes Towards Appearance Questionnaire; EAT26= The Eating Attitudes Test' ChEAT=Children's Eating Attitude Test; PA=Physical Activity Behaviours; SNS=Social Networking Site.

Table 4
Influential facilitating and hindering factors during a community-academic partnership development phase categorized by collaborate process factors

Factor	Definition	Category*	Selected (*N*; %)	Top 5 selected (*N*; %)
Facilitating factors (n = 12)				
Shared vision, goals, and/or mission	•Partners share the same identified vision or values. •Partners identify the same goals or mission for CAP.	Interpersonal	8; 100.0%	5; 62.5%
Effective and/or frequent communication	•Partners engage in ongoing communication that is open and respectful. •Communication that encompasses personal and professional matters.	Interpersonal	8; 100.0%	5; 62.5%
Clearly differentiated roles/functions of partners	•Each partner has a specific role in the group that contributes to its progress. •CAP has a specific group structure with different roles for different partners.	Operational	8; 100.0%	4; 50.0%
Trust between partners	•Partners have faith in the honesty, integrity, reliability, and/or competence of one another. •Partners are comfortable sharing because they believe that the sensitive information that they provide in the collaboration will remain in the group.	Interpersonal	7; 87.5%	2; 28.6%
Respect among partners	•Partners honor and value one another's opinions. •Partners are careful to ensure that each member is able to share his or her beliefs.	Interpersonal	7; 87.5%	3; 42.9%
Good relationship	•Partners work well together, group cohesion, strong reciprocal	Interpersonal	7; 87.5%	3; 42.9%

between partners	relationship, get along well, or like each other.			
Well-structured meetings	•Meetings are held with satisfactory or effective frequency. •The logistics of the meetings facilitate productivity, satisfaction, effectiveness, partnership, opportunities to interact, etc. (e.g., food available, formality/lack of formality at meetings). •The style of the meeting is satisfactory (e.g., face-to-face, telephone, web-based).	Operational	7; 87.5%	5; 71.4%
Good quality of leadership (i.e., the facilitator of the partnership/ planning sessions)	•A person with strong and experienced leadership skills. •A leader who is open, listens, and takes suggestions into consideration. •A leader who cares about members of the group.	Operational	7; 87.5%	4; 57.1%
Good initial selection of partners	•Selecting the "right" people to be a part of the collaborative group. •The personality characteristics of partners contribute to the success of the CAP.	Operational	6; 75.0%	3; 50.0%
Positive community impact	•Partners perceive the group as having/will have a positive impact on the community.	Operational	6; 75.0%	3; 50.0%
Mutual benefit for all partners	•All partners benefit from the group's progress. •Benefit may be different, but all receive some benefit.	Operational	6; 75.0%	3; 50.0%
Effective conflict resolution	•Conflicts are discussed and resolved openly by partners.	Interpersonal	5; 62.5%	0; 0.0%

	•The team develops as it deals with problems, tensions, and frustrations.			
Hindering factors (n = 13)				
Excessive time commitment	•Partners leave the group, want to leave the group, or the CAP does not function well because the time the partners have to spend collaborating is too large.	Operational	0; 0.0%	0; 0.0%
Excessive funding pressures or control struggles	•Partners struggle over control of funding. •CAP experiences external pressures from funding sources related to decisions, CAP outcomes, or its progress.	Operational	0; 0.0%	0; 0.0%
Unclear roles and/or functions of partners	•Many or all of the partners do not know what their role in the group is supposed to be. •Partners are not assigned any roles and therefore do not know how they can best contribute to the CAP.	Operational	0; 0.0%	0; 0.0%
Poor communication among partners	•CAP has limited or unclear methods of communication. •Partners experience difficulty maintaining communication.	Operational	0; 0.0%	0; 0.0%
Inconsistent partner participation or membership	•There is inconsistent or fluctuating partner attendance at meetings. •CAP membership is inconsistent. There is attrition or turnover in partnering agencies/organizations or individuals.	Interpersonal	0; 0.0%	0; 0.0%
High burden of activities/ tasks	•Some, many, or all members are dissatisfied with the amount of work	Operational	0; 0.0%	0; 0.0%

	they have to do in order to sustain the CAP. •Partners are dissatisfied because the tasks they have to complete are boring, expensive, not meaningful, or otherwise upsetting.			
Lack of shared vision, goals, and/or mission	•There are unclear or undefined vision, goals, values or mission of the CAP. •Partners have different agendas/vision for the CAP.	Interpersonal	0; 0.0%	0; 0.0%
Differing expectations of partners	•Struggles emerge because not all members expect the same structure, procedures, and/or outcomes.	Operational	0; 0.0%	0; 0.0%
Mistrust among partners	•Partners do not have faith in one another's honesty, integrity, reliability, and/or competence of one another. •Partners are uncomfortable sharing because they believe that the sensitive information that they provide in the CAP will not remain in the group.	Interpersonal	0; 0.0%	0; 0.0%
Lack of common language or shared terms among partners	•Partners lack common terms or definitions related to the topic of interest or work of the CAP. •Partners lack a shared understanding of the terms used.	Operational	0; 0.0%	0; 0.0%
Bad relationship	•Partners do not value each other’s opinions. •Partners make no effort to ensure that each member is able to share his or her beliefs.	Interpersonal	0; 0.0%	0; 0.0%

Lack of community impact	•Partners have perceptions that the group will not have/did not have a positive or meaningful impact on the community.	Operational	0; 0.0%	0; 0.0%
Lack of mutual benefit	•Not all members benefit equally from the group's progress	Operational	0; 0.0%	0; 0.0%

Note. Based on Gomez et al., (2018) lack of mutual benefit and lack of community impact do not appear as hindering factors in the paper by Drahota et al. (2016), but were derived from additional literature (cf. Brookman-Frazee et al., 2012; Fook et al., 2011; Garland et al., 2006) and included in the current study.
*Category is based on the Collaborative Process Factors found in the formation phase of the Model of Research-Community Partnership (Gomez et al., 2018; adapted from Brookman-Frazee et al., 2012).

FIGURES

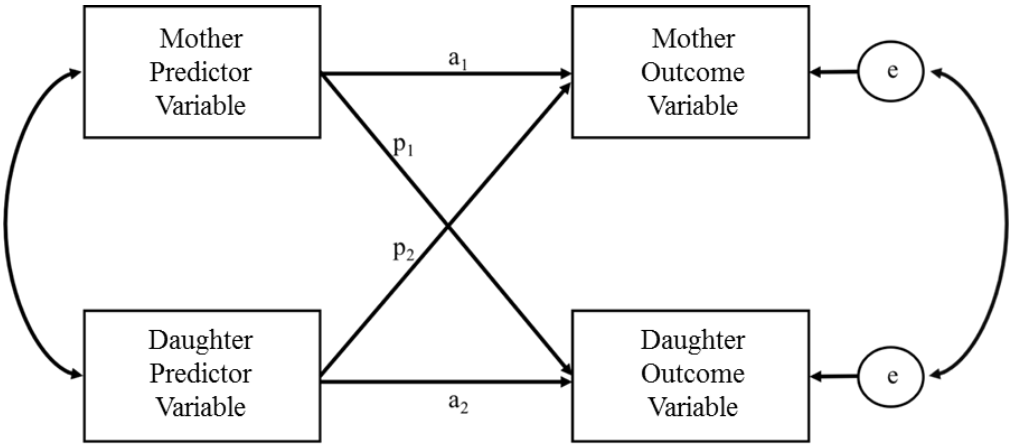


Figure 1. The Actor-Partner Interdependence model (APIM). a = actor effect (i.e., the effect of an individual's predictor variable on their own outcome variable); p = partner effect (i.e., the effect of an individual's predictor variable on their partner's outcome variable); e = residual. Note that effects are labelled by referring to the dyad member of the outcome variable; thus, a direct effect from mothers' predictor variable to daughters' outcome variable is referred to as the daughters' partner effect (p1). A direct effect from a daughters' predictor variable to mothers' outcome variable is referred to as the mothers' partner effect (p2).

APPENDICES

APPENDIX A

RECRUITMENT MATERIALS
(Chapter 2)

Social Media

Poster Recruitment

APPENDIX B

INTERVIEW GUIDES
(Chapter 2)

Interview Guide - Girls

Section 1

1. **Welcome:**
   a. Thank you for taking the time to join the discussion group on social networking sites. My name is _____. Assisting me is _____.
2. **Guidelines:**
   a. Before we begin, let me suggest some ways to help the discussion go smoothly. You will be audio-recorded because we don't want to miss any of your comments. Be sure to speak loud and clear enough for everyone to hear. Please only speak one at a time as all of your comments are important to us. Your first names will be used here today, but when we transcribe this conversation after collecting our data, your names will not be used, you will be given a secret identity and we will substitute it with your real name so that no one will know who made which comments.
   b. My role is to ask questions and listen to your comments. I won't be participating in the conversation, but I want you to feel free to speak with one another. I will be asking about 10-15 questions and I will be moving the discussion from one question to the next. We will be done in about 60-120 minutes. It is important that I hear from each of you because you all have different experiences using social networking sites. So if one of you is sharing a lot, I may ask if others have something to share as well. And if you aren't saying too much, I may ask if you have something to add. There are no right or wrong answers, I value what each of you have to say. We've placed name cards on the table in front of you to help us remember each other's names.
   c. Before we begin, it is important to remember that anything you hear in our discussion today should be confidential. This means if you feel you need to talk to someone about what is said here today, you should not use the real names of anyone in this room.
3. **Getting to Know You**: (approx. 5 minutes)
   a. Let's find out some more about each of you by going around the table. Please state your name, favourite social networking site, and about how long you have been using social networking sites. (Each person will be asked to respond)
4. **Overview of the Topic:**
   a. We want to hear how girls your age use social networking sites and also how moms use social networking sites.
   b. Definition: Social networking sites are websites on the Internet where you can create a profile and connect with people like friends or family. Examples include Instagram, Facebook, and Snapchat. (Use examples given in 'Getting to Know You')
   c. You were selected to join our discussion group because you use social networking sites and so does your mom.

a. Today we will be talking about how certain things on social networking sites make girls your age think and feel. I'll be asking questions about the types of pictures and posts girls your age see on social networking sites and the types of comments they may leave or receive. We want to hear about your own experiences but if you cannot think of examples from your own life you can talk about your friends.

5. **Introductory Questions:**
   a. **General posts:** Are there types of pictures or posts girls your age like seeing on social networking sites?
      Probe: What about these pictures/post makes girls your age like them?
      Probe: How do these pictures/posts make girls your age feel or what do they make girls your age think about?
   b. **General posts:** Are there types of pictures or posts girls your age do not like seeing on social networking sites?
      Probe: What about these pictures/post makes girls your age not like them?
      Probe: How do these pictures/posts make girls your age feel or what do they make girls your age think about?
   c. **General comments:** What type of comments do girls your age usually leave on pictures/posts
      Probe: How do you think those types of comments make people feel?
   d. **General comments:** What type of comments do girls your age normally get on your own pictures/posts?
      Probe: How do those types of comments make girls your age feel?
      What type of social networking site rules do moms have for their daughters your age to follow? Probe: Do girls your age follow them?

Section 2

6. **Key Questions:**
   a. **Mother comments**: What types of comments do moms leave for girls your age on photos/posts?
      Probe: How do these comments make girls your age feel? Anyone have a different experience?
      Probe: Is it important for a mom to comment on posts for girls your age? Why or why not?
   b. **Mother posts:** Are there types of pictures/posts you like moms posting on social networking sites?
      Probe: What about these posts makes girls your age like them?
   c. **Mother posts:** Are there types of pictures/posts that girls your age do not like moms posting on social networking sites?
      Probe: What about these posts makes girls your age not like them?
   d. **Mother judgment:** What types of posts/pictures would you be worried about moms seeing?
      Probe: What would a mom do if she saw this type of post?
   e. **Mother filtering/editing:** Should moms be filtering or editing their photos before posting them?
      Probe: Why do girls your age think they should/should not?
      Probe: Do girls your age think they should filter/edit before posting?

f. **Mother inappropriate:** Can you think of a time where a mom, posted something that girls your age would feel was embarrassing or inappropriate to be on a social networking site.
   Probe: Describe what the post was like and why girls your age felt embarrassed or that it was inappropriate.
g. **Mother online health behaviours:** What would girls your age think and feel if a mom posted a picture or post about…
   i. Dieting or weight loss?
   ii. Exercising or physical activity behaviours?
   iii. That they feel ugly or asking to be rated/graded?

Section 3

h. **Final Thoughts:** Is there anything that we have discussed today that you would like to expand on or talk more about?

Interview Guide – Mothers

Section 1

1. **Welcome:**
   a. Thank you for taking the time to join the discussion group on social networking sites. My name is _____. Assisting me is _____.
2. **Guidelines:**
   a. Before we begin, let me suggest some ways to help the discussion go smoothly. You will be audio-recorded because we don't want to miss any of your comments. Be sure to speak loud and clear enough for everyone to hear. Please only speak one at a time as all of your comments are important to us. Your first names will be used here today, but when we transcribe this conversation after collecting our data, your names will not be used, you will be given a pseudo name and we will substitute it with your real name so that no one will know which comments were made by who.
   b. My role is to ask questions and listen to your comments. I won't be participating in the conversation, but I want you to feel free to speak with one another. I will be asking about 10-15 questions and I will be moving the discussion from one question to the next. We will be done in about 60-120 minutes. It is important that I hear from each of you because you all have different experiences social networking sites. So if one of you is sharing a lot, I may ask if others have something to share as well. And if you aren't saying too much, I may ask if you have something to add. There are no right or wrong answers, I value what each of you have to say. We've placed name cards on the table in front of you to help us remember each other's names.
   c. Before we begin, it is important to remember that anything you hear in our discussion today should be kept confidential. This means if you feel you need to talk to someone about what is said here today, you should not use the real names of anyone in this room.
3. **Getting to Know You**: (approx. 5 minutes)
   a. Let's find out some more about each of you by going around the table. Please state your name, favourite social networking site, and about how long you have been using social networking sites. (Each person will be asked to respond)
4. **Overview of the Topic:**
   b. We want to hear how moms and daughters use social networking sites.
   c. Definition: Social networking sites are websites on the Internet where you can create a profile and connect with people like friends or family. Examples include Instagram, Facebook, and Snapchat. (Use examples given in 'Getting to Know You')
   d. You were selected to join our discussion group because you use social networking sites and so does your daughter.
   e. Today we will be talking about how certain things on social networking sites make moms think and feel. I'll be asking questions about the types and pictures and posts moms see on social networking sites and the types of comments they may leave or receive. We want to hear about your own

experiences but if you cannot think of examples from your own life you can talk about your friends.

5. **Introductory Questions:**

a. **General posts:** Are there types of pictures or posts moms like seeing on social networking sites?
Probe: What about these pictures/post makes moms like them?
Probe: How do these pictures/posts make moms feel or what do they make moms think about?

b. **General posts:** Are there types of pictures or posts moms do not like seeing on social networking sites?
Probe: What about these pictures/post makes moms not like them?
Probe: How do these pictures/posts make moms feel or what do they make you think about?

c. **General comments:** What type of comments do moms usually leave on pictures/posts
Probe: How do moms think these types of comments make people feel?

d. **General comments:** What type of comments do moms normally get on their own pictures/posts?
    a. What type of social networking site rules do moms have for their daughters to follow? Probe: Do the daughters follow these rules?

Section 2

6. **Key Questions:**
    a. **Daughter comments:** What types of comments have daughters left for moms' photos/posts?
    Probe: How do these comments make moms feel? Anyone have a different experience?
    Probe: Is it important for daughters to comment on moms' posts? Why or why not?
    b. **Daughter posts:** Are there types of pictures/posts moms like daughters posting on social networking sites?
    Probe: What about these posts makes moms like them?
    c. **Daughter posts:** Are there types of pictures/posts that moms do not like daughters posting on social networking sites?
    Probe: What about these posts makes moms not like them?
    d. **Mother judgment:** What types of posts/pictures would a mom be worried about her daughter posting?
    Probe: What would a mom do if they saw this type of post?
    e. **Daughter filtering/editing:** Should daughters be filtering or editing their photos before posting them?
    Probe: Why would moms think they should/should not?
    Probe: Should moms be filter/editing before posting?
    f. **Mother inappropriate:** Can you think of a time where a mom may have posted something that their daughter would feel was embarrassing or inappropriate to be on a social networking site?
    Probe: Describe what the post was like and why it made the daughter feel embarrassed or that it was inappropriate.

g. **Daughter online health behaviours:** What would you think and feel if a girl the same age as your daughter posted a picture or post about…
    i. Dieting or weight loss? Wanting to be skinnier or more tone?
    ii. Exercising or physical activity behaviours?
    iii. That they feel ugly or asking to be rated/graded?

Section 3

b. **Final Thoughts:** Is there anything that we have discussed today that you would like to expand on or talk more about?

APPENDIX C

LETTER OF INFORMATION FOR CONDUCTING RESEARCH
(Chapter 2)

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH (MOTHERS)

Title of Study: Using focus groups to understand the dynamics of mothers and daughters on social networking sites

You are asked to participate in a research study conducted by Ms. Sara Santarossa, a PhD Candidate from the Faculty of Human Kinetics at the University of Windsor. The results of this research will contribute to Ms. Santarossa's PhD Dissertation.

If you have any questions or concerns about the research, please feel free to contact Ms. Sara Santarossa at [redacted] or santaros@uwindosr.ca her advisor Dr. Sarah Woodruff at (519)-253-3000 (x4982), woodruff@uwindsor.ca.

PURPOSE OF THE STUDY
This study is designed to look at mother/daughter relationships on social networking sites through the use of focus groups. Specifically, we are interested in the types of posts, pictures, comments, and actions mothers and daughters display, prefer from one another, and/or how these posts make each other feel.

PROCEDURES
Participation is the study is voluntary. If you volunteer to participate in this study, you will be asked to:

a) **Participate in a focus group**

Participants will take part in one short (60-120 min) focus group at the University of Windsor Human Kinetics Building. The focus group will consist of 6-10 other participants. We will be creating focus groups based on the age of your daughter.

a) A moderator, with the help of an assistant, will lead the focus group. The assistant will be responsible for audio recording the sessions as well as keeping accurate field notes. Audio recording is necessary in order to capture all discussion.

b) We will begin by asking questions regarding the participants' experiences with social networking sites, where they use it, when they use it, preferences on types of posts, pictures, and comments as well as SNS actions of daughters will be discussed to explore the mother/daughter relationship. Specific probes will used in order to gain a greater understanding around ideas emerging from focus groups.

b) **Be audio recorded**

Each focus group will be audio recorded to capture all participants' responses. Audio recording is mandatory for participation in the focus groups. You are free to excuse yourself from the discussion at any time, however, you cannot request that the audio recording be stopped, nor can you request that any data that has been recorded prior to you leaving be withdrawn. If you do not wish to be recorded, you will not be part of the study. Your name will not be revealed to anyone, as only the researchers will have access to the

recordings. Audio files will be stored in a locked cabinet in the lead researcher's office. The audio files are for research use only. The audio files will be appropriately disposed of after the study is completed.

POTENTIAL RISKS AND DISCOMFORTS

There are no known or anticipated risks from discussing social networking sites. However, because we are asking you to talk about your feelings, some psychological discomfort may occur. We will remind you that leaving the focus group at any time and/or not answering a question is allowed without repercussion.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participants will gain a better understanding of their own social networking site use. Participants may also gain a deeper understanding for how their actions and behaviours on social networking sites may be influencing others. Additionally, you may gain a greater insight into the social networking world by discussing their experiences with fellow mothers.

There is currently no established research examining mother/daughter relationships on social networking sites and, therefore, results from the proposed study may further contribute to the scientific literature and aid in the creation of tools to help mothers deal with the online world.

COMPENSATION FOR PARTICIPATION

All parking fees at the Human Kinetics Building will be compensated. Light refreshments will be provided at the focus groups. All participants will receive a thank you gift and be entered into a draw to win a $50 gift certificates to [TBA].

CONFIDENTIALITY

The focus group is a group event. All members of the group will be asked to keep the information they hear confidential. However, this means that while confidentiality of all the information given by the participants will be protected by the researchers themselves, this information will be heard by all the participants and, therefore, will not be strictly confidential. During the data collection phase, all participant data will be kept in a locked cabinet, to which only the listed investigators have access. After five years, all hard copies of the data will be destroyed and audio files erased. Once the data collection phase is complete, each participant will be assigned a participant number and participant's data, identified only by participant number, will be entered into a qualitative analysis program. The resulting data set will be password-protected to ensure that only the listed investigators are able to access the data. In release of the findings, the results will be referred to only by a participant number, and thus, it will not be possible to identify or link any results to any one specific participant. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. You may also refuse to answer any questions you don't want to answer and still remain in the study. If you volunteer to be in

this study, you may withdraw at any time during the study or be excused from the focus group without penalty. However, any information that has been recorded before you leave cannot be withdrawn. However, it should be noted that participants must complete the focus group in order to be entered into the draw. If a participant withdraws before completion of the focus group, she will not be entered into the draw. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

The investigator will provide a written summary of the study's findings to you upon request. The results will also be posted on the REB website at http://www1.uwindsor.ca/reb/study-results (December 1, 2018). If you have any additional concerns or questions you can email or call the investigator(s) at the address or number provided above. Please keep this Letter of Information.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____	_____
Signature of Investigator	Date

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH (GIRLS)

Title of Study: Using focus groups to understand the dynamics of mothers and daughters on social networking sites

You are asked to participate in a research study conducted by Ms. Sara Santarossa, a PhD Candidate from the Faculty of Human Kinetics at the University of Windsor. The results of this research will contribute to Ms. Santarossa's PhD Dissertation.

If you have any questions or concerns about the research, please feel free to contact Ms. Sara Santarossa at [redacted] santaros@uwindsor.ca or her advisor Dr. Sarah Woodruff at (519)-253-3000 (x4982), woodruff@uwindsor.ca.

PURPOSE OF THE STUDY

This study is designed to look at mother/daughter relationships on social networking sites through the use of focus groups. Specifically, we are interested in the types of posts, pictures, comments, and actions mothers and daughters display, prefer from one another, and/or how these posts make each other feel.

PROCEDURES

Participation is the study is voluntary. If you volunteer to participate in this study, you will be asked to:

a) **Participate in a focus group**

Participants will take part in one short (60-120 min) focus group at the University of Windsor Human Kinetics Building. The focus group will consist of 6-10 other participants. We will be creating focus groups based your age.

a) A moderator, with the help of an assistant, will lead the focus group. The assistant will be responsible for audio recording the sessions as well as keeping accurate field notes. Audio recording is necessary in order to capture all discussion.

b) We will begin by asking questions regarding the participants' experiences with social networking sites, where they use it, when they use it, preferences on types of posts, pictures, and comments as well as SNS actions of mothers will be discussed to explore the mother/daughter relationship. Specific probes will used in order to gain a greater understanding around ideas emerging from focus groups.

b) **Be audio recorded**

Each focus group will be audio recorded to capture all participants' responses. Audio recording is mandatory for participation in the focus groups. You are free to excuse yourself from the discussion at any time, however, you cannot request that the audio recording be stopped, nor can you request that any data that has been recorded prior to you leaving be withdrawn. If you do not wish to be recorded, you will not be part of the study. Your name will not be revealed to anyone, as only the researchers will have access to the recordings. Audio files will be stored in a locked cabinet in the lead researcher's office. The audio files are for research use only. The audio files will be appropriately disposed of after the study is completed.

POTENTIAL RISKS AND DISCOMFORTS
There are no known or anticipated risks from discussing social networking sites. However, because we are asking you to talk about your feelings, some psychological discomfort may occur. We will remind you that leaving the focus group at any time and/or not answering a question is allowed without repercussion.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY
Participants will gain a better understanding of their own social networking site use. Participants may also gain a deeper understanding for how their actions and behaviours on social networking sites may be influencing others.

There is currently no established research examining mother/daughter relationships on social networking sites and, therefore, results from the proposed study may further contribute to the scientific literature and aid in the creation of tools to help mothers deal with the online world.

COMPENSATION FOR PARTICIPATION
Light refreshments will be provided at the focus groups. All participants will receive a thank you gift and be entered into a draw to win a $50 gift certificates to [TBA].

CONFIDENTIALITY
The focus group is a group event. All members of the group will be asked to keep the information they hear confidential. However, this means that while confidentiality of all the information given by the participants will be protected by the researchers themselves, this information will be heard by all the participants and, therefore, will not be strictly confidential. During the data collection phase, all participant data will be kept in a locked cabinet, to which only the listed investigators have access. After five years, all hard copies of the data will be destroyed and audio files erased. Once the data collection phase is complete, each participant will be assigned a participant number and participant's data, identified only by participant number, will be entered into a qualitative analysis program. The resulting data set will be password-protected to ensure that only the listed investigators are able to access the data. In release of the findings, the results will be referred to only by a participant number, and thus, it will not be possible to identify or link any results to any one specific participant. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission.

PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not. You may also refuse to answer any questions you don't want to answer and still remain in the study. If you volunteer to be in this study, you may withdraw at any time during the study or be excused from the focus group without penalty. However, any information that has been recorded before you leave cannot be withdrawn. However, it should be noted that participants must complete the focus group in order to be entered into the draw. If a participant withdraws before

completion of the focus group, she will not be entered into the draw.The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

The investigator will provide a written summary of the study's findings to you upon request. The results will also be posted on the REB website at http://www1.uwindsor.ca/reb/study-results (December 1, 2018). If you have any additional concerns or questions you can email or call the investigator(s) at the address or number provided above. Please keep this Letter of Information.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____	_____
Signature of Investigator	Date

APPENDIX D

CONSENT FORM
(Chapter 2)

Mother/Primary Female Caregiver Consent Form

Using focus groups to understand the dynamics of mothers and daughters on social networking sites

I have read the Letter of Information, have had the nature of the study explained to me, and understand that the focus group is a group event. All members of the group will be asked to keep the information they hear confidential. However, this means that while confidentiality of all the information given by the participants will be protected by the researchers themselves, this information will be heard by all the participants and, therefore, will not be strictly confidential.

I consent to the audio recording of focus groups, procedures, or treatment. Participation in the study is voluntary but audio recording is mandatory. I understand that I am free to excuse myself from the discussion at any time, however I am not able to request that the audio recording be stopped given it is a group discussion. I understand that anything I say prior to leaving the discussion cannot be withdrawn. I also understand that my name will not be revealed to anyone and that taping will be kept confidential. Audio files are numbered only and stored in a locked cabinet. The destruction of the audio recording will be completed 5 years after the study is completed. I understand that confidentiality will be respected and that the audio files will be for professional use only. All questions have been answered to my satisfaction.

_____
Name of Participant (PRINT)

_____ _____
Signature of Participant Date

_____ _____
Signature of Person Obtaining Consent Date

11-14 year old girl Consent Form

Using focus groups to understand the dynamics of mothers and daughters on social networking sites

I have read the Letter of Information, have had the nature of the study explained to me, and understand that the focus group is a group event. All members of the group will be asked to keep the information they hear confidential. However, this means that while confidentiality of all the information given by the participants will be protected by the researchers themselves, this information will be heard by all the participants and, therefore, will not be strictly confidential.

I consent to the audio recording of focus groups, procedures, or treatment. Participation in the study is voluntary but audio recording is mandatory. I understand that I am free to excuse myself from the discussion at any time, however I am not able to request that the audio recording be stopped given it is a group discussion. I understand that anything I say prior to leaving the discussion cannot be withdrawn. I also understand that my name will not be revealed to anyone and that taping will be kept confidential. Audio files are numbered only and stored in a locked cabinet. The destruction of the audio recording will be completed 5 years after the study is completed. I understand that confidentiality will be respected and that the audio files will be for professional use only. All questions have been answered to my satisfaction.

_____

Name of Participant (PRINT)

_____ _____

Signature of Participant Date

_____ _____

Signature of Person Obtaining Consent Date

APPENDIX E

RECRUITMENT MATERIALS
(Chapter 3)

APPENDIX F

LETTER OF INFORMATION FOR CONDUCTING RESEARCH
(Chapter 3)

Daughter Letter of Information

Title of Study: Using surveys to understand the dynamics of mother/daughter dyads on social networking sites

You are asked to participate in a research study conducted by Ms. Sara Santarossa, a PhD Candidate from the Faculty of Human Kinetics at the University of Windsor. The results of this research will contribute to Ms. Santarossa's PhD Dissertation.
If you have any questions or concerns about the research, please feel free to contact Ms. Sara Santarossa at [redacted] santaros@uwindsor.ca or her advisor Dr. Sarah Woodruff at (519)-253-3000 (x4982), woodruff@uwindsor.ca.

PURPOSE OF THE STUDY
This study is designed to look at mother/daughter relationships on social networking sites through the use of online surveys. Specifically, we are interested in your social networking site behaviour and how it may influence you and your well-being.

PROCEDURES
Participation is the study is voluntary. If you volunteer to participate in this study, you will be asked to:
Take part in one short (30 min) online survey that will ask various questions about you and your personal well-being, as well as, social networking site usage.
In a single email the mother/daughter pair will receive individual survey links and individual research identification numbers. These survey links and research identification numbers are for a **one-time log on only.**
The survey is to be filled out **independently** and on your own time. You will be given 2-weeks to complete the survey, with an automatic reminder sent after 7 days of receiving the survey link.

POTENTIAL RISKS AND DISCOMFORTS
There are no known or anticipated risks associated with participating in the current study.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY
Participants may benefit from being part of this study. Both the mothers and daughters will be exposed to questions about social networking site usage, body image satisfaction and self-esteem, and in turn, may become more aware of their habits.

There is currently no established research examining mother/daughter relationships on social networking sites and, therefore, results from the proposed study may further contribute to the scientific literature and aid in the creation of tools to help mothers deal with the online world.

COMPENSATION FOR PARTICIPATION
Participants who complete the survey (regardless of the survey status of the other member of the pair) will be entered in a draw to win a Cineplex Movie Package Gift Card (1 gift card available for mothers and 1 gift card available for daughters).

CONFIDENTIALITY
Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The information obtained from the study will not be used for any purpose other than research and the communication of results. All surveys will only be accessed by the researchers of this study. Data are identified by a code; your name will not be kept track of at all.

PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not, and your participation or lack of it will not be disclosed to the other member of your mother/daughter pair. If you volunteer to take this survey, you may withdraw at any time without consequences of any kind, by closing the browser.. However, it should be noted that participants must complete the survey in order to be entered into the draw. If you have completed the survey, you will be unable to withdrawal your data after October 30, 2018. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS
The investigator will provide a written summary of the study's findings to you upon request. The results will also be posted on the REB website at http://www1.uwindsor.ca/reb/study-results (January 31, 2019). If you have any additional concerns or questions you can email or call the investigator(s) at the address or number provided above. Please print a copy of this Letter of Information.

SUBSEQUENT USE OF DATA
These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS
If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____ _____
Signature of Investigator Date

Mother Letter of Information

Title of Study: Using surveys to understand the dynamics of mother/daughter dyads on social networking sites

You are asked to participate in a research study conducted by Ms. Sara Santarossa, a PhD Candidate from the Faculty of Human Kinetics at the University of Windsor. The results of this research will contribute to Ms. Santarossa's PhD Dissertation.
If you have any questions or concerns about the research, please feel free to contact Ms. Sara Santarossa at [redacted] santaros@uwindsor.ca or her advisor Dr. Sarah Woodruff at (519)-253-3000 (x4982), woodruff@uwindsor.ca.

PURPOSE OF THE STUDY

This study is designed to look at mother/daughter relationships on social networking sites through the use of online surveys. Specifically, we are interested in your social networking site behaviour and how it may influence you and your well-being.

PROCEDURES

Participation is the study is voluntary. If you volunteer to participate in this study, you will be asked to:
Take part in one short (30 min) online survey that will ask various questions about you and your personal well-being, as well as, social networking site usage.
In a single email the mother/daughter pair will receive individual survey links and individual research identification numbers. These survey links and research identification numbers are for a **one-time log on only.**
The survey is to be filled out **independently** and on your own time. You will be given 2-weeks to complete the survey, with an automatic reminder sent after 7 days of receiving the survey link.

POTENTIAL RISKS AND DISCOMFORTS

There are no known or anticipated risks associated with participating in the current study. However, you will be provided both you and your daughter's survey link and research identification numbers. It is important that the surveys are completed independently from one another, and that you are aware that the information provided to you is for a one-time log on only. This is a safeguard that has been put in place so that each member of the mother/daughter pair can only access their own survey.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participants may benefit from being part of this study. Both the mothers and daughters will be exposed to questions about social networking site usage, body image satisfaction and self-esteem, and in turn, may become more aware of their habits.
There is currently no established research examining mother/daughter relationships on social networking sites and, therefore, results from the proposed study may further contribute to the scientific literature and aid in the creation of tools to help mothers deal with the online world.

COMPENSATION FOR PARTICIPATION
Participants who complete the survey (regardless of the survey status of the other member of the pair) will be entered in a draw to win a Cineplex Movie Package Gift Card (1 gift card available for mothers and 1 gift card available for daughters).

CONFIDENTIALITY
Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The information obtained from the study will not be used for any purpose other than research and the communication of results. All surveys will only be accessed by the researchers of this study. Data are identified by a code; your name will not be kept track of at all.

PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not, and your participation or lack of it will not be disclosed to the other member of your mother/daughter pair. If you volunteer to take this survey, you may withdraw at any time without consequences of any kind, by closing the browser.. However, it should be noted that participants must complete the survey in order to be entered into the draw. If you have completed the survey, you will be unable to withdrawal your data after October 30, 2018. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS
The investigator will provide a written summary of the study's findings to you upon request. The results will also be posted on the REB website at http://www1.uwindsor.ca/reb/study-results (January 31, 2019). If you have any additional concerns or questions you can email or call the investigator(s) at the address or number provided above. Please print a copy of this Letter of Information.

SUBSEQUENT USE OF DATA
These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS
If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR
These are the terms under which I will conduct research.

_____ _____
Signature of Investigator Date

APPENDIX G

ONLINE SURVEY
(Chapter 3)

Daughter Consent Form and Survey

Title of Study: Using surveys to understand the dynamics of mother/daughter dyads on social networking sites

You are asked to participate in a research study conducted by Ms. Sara Santarossa, a PhD Candidate from the Faculty of Human Kinetics at the University of Windsor. The results of this research will contribute to Ms. Santarossa's PhD Dissertation.

If you have any questions or concerns about the research, please feel free to contact Ms. Sara Santarossa at [redacted]santaros@uwindsor.ca or her advisor Dr. Sarah Woodruff at (519)-253-3000 (x4982), woodruff@uwindsor.ca.

PURPOSE OF THE STUDY
This study is designed to look at mother/daughter relationships on social networking sites through the use of online surveys. Specifically, we are interested in your social networking site behaviour and how it may influence you and your well-being.

PROCEDURES
Participation is the study is voluntary. If you volunteer to participate in this study, you will be asked to:

Take part in one short (30 min) online survey that will ask various questions about you and your personal well-being, as well as, social networking site usage.

In a single email the mother/daughter pair will receive individual survey link and individual research identification numbers. These survey links and research identification numbers are for a **one-time log on only.**

The survey is to be filled out **independently** and on your own time. You will be given 2-weeks to complete the survey, with an automatic reminder sent after 7 days of receiving the survey link.

POTENTIAL RISKS AND DISCOMFORTS
There are no known or anticipated risks associated with participating in the current study.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY
Participants may benefit from being part of this study. Both the mothers and daughters will be exposed to questions about social networking site usage, body image satisfaction and self-esteem, and in turn, may become more aware of their habits.

There is currently no established research examining mother/daughter relationships on social networking sites and, therefore, results from the proposed study may further contribute to the scientific literature and aid in the creation of tools to help mothers deal with the online world.

COMPENSATION FOR PARTICIPATION

Participants who complete the survey (regardless of the survey status of the other member of the pair) will be entered in a draw to win a Cineplex Movie Package Gift Card (1 gift card available for mothers and 1 gift card available for daughters).

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The information obtained from the study will not be used for any purpose other than research and the communication of results. All surveys will only be accessed by the researchers of this study. Data are identified by a code; your name will not be kept track of at all.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not, and your participation or lack of it will not be disclosed to the other member of your mother/daughter pair. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not wish to answer and still remain in the study. However, it should be noted that participants must complete the focus group in order to be entered into the draw. You will be unable to withdrawal your data after October 30, 2018. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

The investigator will provide a written summary of the study's findings to you upon request. The results will also be posted on the REB website at http://www1.uwindsor.ca/reb/study-results (January 31, 2019). If you have any additional concerns or questions you can email or call the investigator(s) at the address or number provided above. Please print a copy of this Letter of Information.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

Please remember to print a copy of this consent form for your records. Please remember that your survey link and research identification number are good for a one-time log on only. Do you agree to participate?

- ○ Yes
- ○ No

Skip To: End of Survey If Daughter's Consent Form = No

What is your Research Identification Number?

_____

What social media sites do you and your mom use?

- ☐ Instagram
- ☐ Snapchat
- ☐ Facebook
- ☐ Twitter
- ☐ Other _____

What is the month of your birthday?

▼ January ... December

What year are you born?

▼ 2003 ... 2007

How often does your mom do the following with you?

	Always	Usually	Often	Sometimes	Rarely	Never
Sit with you while you use social media	○	○	○	○	○	○
Stay near you when you use social media	○	○	○	○	○	○
Encourage you to explore and learn things on social media on your own	○	○	○	○	○	○
Do shared activities together on social media	○	○	○	○	○	○
Talk to you about what you does on social media (	○	○	○	○	○	○

Are you CURRENTLY allowed to...

	Can do this anytime	Can only do this with permission or supervision	Can never do this	Don't know
Use instant messaging	○	○	○	○
Download music or films	○	○	○	○
Have your own social media	○	○	○	○
Give out personal information to others	○	○	○	○
Upload photos, videos, or music to share with others	○	○	○	○
Watch video clips	○	○	○	○

When you use the internet at home, how often does your mom check the following things afterwards?

	Always	Usually	Often	Sometimes	Rarely	Never
Which websites you visited	○	○	○	○	○	○
The messages in your email or instant messaging	○	○	○	○	○	○
Your profile on social media or a online community	○	○	○	○	○	○
Which friends or contacts you add to your social media profile or instant messaging service	○	○	○	○	○	○

How much do you feel you can talk to your mom about your problems?

- ○ Not at all
- ○ A little
- ○ Somewhat
- ○ Quite a bit
- ○ Very much

How much do you feel your mom cares about you?

- ○ Not at all
- ○ A little
- ○ Somewhat
- ○ Quite a bit
- ○ Very much

Compared to others (i.e., your friends), how strict would you say your mom is with you?

- ○ Much less strict
- ○ Somewhat less strict
- ○ About the same
- ○ Somewhat more strict
- ○ Much more strict

How often have you hidden what you've done on social media from your mom (e.g., have a secret account, be friends/ talk to people you shouldn't, broken a rule, sent inappropriate pictures or messages, etc…)?

- ○ Always (1)
- ○ Usually (2)
- ○ Often (3)
- ○ Sometimes (4)
- ○ Rarely (5)
- ○ Never (6)

How often do you do the following on social media?

	Never	Almost never	Sometimes	Fairly often	Very often
Create a photo album with photos of yourself and friends/family.	○	○	○	○	○
Update your profile photo.	○	○	○	○	○
Post a photo.	○	○	○	○	○
View friends' photos that they've added of you.	○	○	○	○	○
View friends' photos of themselves.	○	○	○	○	○

Comment on friends' photos.	○	○	○	○	○
Tag yourself in friends' photos.	○	○	○	○	○
Untag yourself in friends' photos.	○	○	○	○	○
Filter/edit your photos before posting them on social media.	○	○	○	○	○

How often do you do the following on social media?

	Never	Almost never	Sometimes	Fairly often	Very often
I comment on my mom's/mom's friends photos and/or posts. (1)	○	○	○	○	○
I "like" or "react" to my mom's/ mom's friends photos and/or posts. (2)	○	○	○	○	○

What is the average amount of time you spend on social media a day?

- ○ 0-15 minutes
- ○ 15-30 minutes
- ○ 1-2 hours
- ○ 2-3 hours
- ○ 3-4 hours
- ○ 4-5 hours
- ○ 5-6 hours
- ○ 6-7 hours
- ○ 7-8 hours
- ○ 8-9 hours
- ○ 9-10 hours
- ○ 10 or more hours

Indicate how strongly you agree with the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
On the whole, I am satisfied with myself.	○	○	○	○
At times I think I am no good at all.	○	○	○	○
I feel that I have a number of good qualities.	○	○	○	○
I am able to do things as well as most other people.	○	○	○	○
I feel I do not have much to be proud of.	○	○	○	○
I certainly feel useless at times.	○	○	○	○

I feel that I'm a person of worth, at least on an equal plane with others.	○	○	○	○
I wish I could have more respect for myself.	○	○	○	○
All in all, I am inclined to feel that I am a failure.	○	○	○	○
I take a positive attitude toward myself.	○	○	○	○

How satisfied are you with your:

	1 (Very dissatisfied)	2	3	4	5 (Very satisfied)
height	○	○	○	○	○
weight	○	○	○	○	○
body shape	○	○	○	○	○
waist	○	○	○	○	○
hips	○	○	○	○	○
thighs	○	○	○	○	○
stomach	○	○	○	○	○
face	○	○	○	○	○
body build	○	○	○	○	○
shoulders	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement.

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
It is important for me to look athletic.	○	○	○	○	○
I think a lot about looking muscular.	○	○	○	○	○
I want my body to look very thin.	○	○	○	○	○
I want my body to look like it has little fat.	○	○	○	○	○
I think a lot about looking thin.	○	○	○	○	○
I spend a lot of time doing things to look more athletic.	○	○	○	○	○
I think a lot about looking athletic.	○	○	○	○	○
I want my body to look very lean.	○	○	○	○	○
I think a lot about having very little body fat.	○	○	○	○	○
I spend a lot of time doing things to look more muscular.	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement. Answer the following questions with relevance to your FAMILY (include parents, brothers, sisters, relatives):

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
I feel pressure from family members to look thinner.	○	○	○	○	○
I feel pressure from family members to improve my appearance.	○	○	○	○	○
Family members encourage me to decrease my level of body fat.	○	○	○	○	○
Family members encourage me to get in better shape.	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement. Answer the following questions with relevance to your PEERS (include close friends, classmates, and other social contacts):

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
My peers encourage me to get thinner.	○	○	○	○	○
I feel pressure from my peers to improve my appearance.	○	○	○	○	○
I feel pressure from my peers to look in better shape.	○	○	○	○	○
I get pressure from my peers to decrease my level of body fat.	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement. Answer the following questions with relevance to the MEDIA (include television, magazines, the internet, movies, billboards, and advertisements):

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
I feel pressure from the media to look in better shape.	○	○	○	○	○
I feel pressure from the media to look thinner.	○	○	○	○	○
I feel pressure from the media to improve my appearance.	○	○	○	○	○
I feel pressure from the media to decrease my level of body fat.	○	○	○	○	○

Pick a response for each of the following statements:

	Always	Very often	Often	Sometimes	Rarely	Never
I am scared about being overweight.	○	○	○	○	○	○
I stay away from eating when I am hungry.	○	○	○	○	○	○
I think about food a lot of the time.	○	○	○	○	○	○
I have gone on eating binges where I feel like I might not be able to stop.	○	○	○	○	○	○
I cut my food into small pieces.	○	○	○	○	○	○
I am aware of the energy (calorie) content in food that I eat.	○	○	○	○	○	○

I try to stay away from food such as breads, potatoes, and rice.	○	○	○	○	○	○
I feel that others would like me to eat more.	○	○	○	○	○	○
I vomit after I have eaten.	○	○	○	○	○	○
I feel very guilty after eating.	○	○	○	○	○	○
I think a lot about wanting to be thinner.	○	○	○	○	○	○
I think about burning up energy (calories) when I exercise.	○	○	○	○	○	○
Other people think I am too thin.	○	○	○	○	○	○
I think a lot about having fat on my body.	○	○	○	○	○	○
I take longer that other to eat my meals.	○	○	○	○	○	○
I stay away from food with sugar in them.	○	○	○	○	○	○
I eat diet foods.	○	○	○	○	○	○
I think that food controls my life.	○	○	○	○	○	○
I can show self-control around food.	○	○	○	○	○	○
I feel that others pressure me to eat.	○	○	○	○	○	○
I give too much time and thought to food.	○	○	○	○	○	○
I feel uncomfortable after eating sweets.	○	○	○	○	○	○

I have been dieting.	○	○	○	○	○	○
I like my stomach to be empty.	○	○	○	○	○	○
I enjoy trying new rich foods.	○	○	○	○	○	○
I have the urge to vomit after eating.	○	○	○	○	○	○

During the past week (7 days), think of all the time you spent in activities that increased your heart rate and made you breathe hard; consider work, leisure, home. On each day, how long were you active for?

	0 minutes (was not active this day)	1-15 minutes	16-30miutes	31-60 minutes	61 minutes - 2 hours	more than 2 hours
Monday	○	○	○	○	○	○
Tuesday	○	○	○	○	○	○
Wednesday	○	○	○	○	○	○
Thursday	○	○	○	○	○	○
Friday	○	○	○	○	○	○
Saturday	○	○	○	○	○	○
Sunday	○	○	○	○	○	○

How many times a day do you access/check your social media accounts?

- ○ Hardly ever
- ○ 1 or 2 times
- ○ 3-5 times
- ○ 5-10 times
- ○ 11-15 times
- ○ 15-20 times
- ○ More times than I can count

Mother Consent Form and Survey

Title of Study: Using surveys to understand the dynamics of mother/daughter dyads on social networking sites

You are asked to participate in a research study conducted by Ms. Sara Santarossa, a PhD Candidate from the Faculty of Human Kinetics at the University of Windsor. The results of this research will contribute to Ms. Santarossa's PhD Dissertation.

If you have any questions or concerns about the research, please feel free to contact Ms. Sara Santarossa at [redacted] santaros@uwindsor.ca or her advisor Dr. Sarah Woodruff at (519)-253-3000 (x4982), woodruff@uwindsor.ca.

PURPOSE OF THE STUDY
This study is designed to look at mother/daughter relationships on social networking sites through the use of online surveys. Specifically, we are interested in your social networking site behaviour and how it may influence you and your well-being.

PROCEDURES
Participation is the study is voluntary. If you volunteer to participate in this study, you will be asked to:

Take part in one short (30 min) online survey that will ask various questions about you and your personal well-being, as well as, social networking site usage.

In a single email the mother/daughter pair will receive individual survey link and individual research identification numbers. These survey links and research identification numbers are for a **one-time log on only.**

The survey is to be filled out **independently** and on your own time. You will be given 2-weeks to complete the survey, with an automatic reminder sent after 7 days of receiving the survey link.

POTENTIAL RISKS AND DISCOMFORTS
There are no known or anticipated risks associated with participating in the current study. However, you will be provided both you and your daughter's survey link and research identification numbers. It is important that the surveys are completed independently from one another, and that you are aware that the information provided to you is for a one-time log on only. This is a safeguard that has been put in place so that each member of the mother/daughter pair can only access their own survey.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY
Participants may benefit from being part of this study. Both the mothers and daughters will be exposed to questions about social networking site usage, body image satisfaction and self-esteem, and in turn, may become more aware of their habits.

There is currently no established research examining mother/daughter relationships on social networking sites and, therefore, results from the proposed study may further contribute to the scientific literature and aid in the creation of tools to help mothers deal with the online world.

COMPENSATION FOR PARTICIPATION

Participants who complete the survey (regardless of the survey status of the other member of the pair) will be entered in a draw to win a Cineplex Movie Package Gift Card (1 gift card available for mothers and 1 gift card available for daughters).

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The information obtained from the study will not be used for any purpose other than research and the communication of results. All surveys will only be accessed by the researchers of this study. Data are identified by a code; your name will not be kept track of at all.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not, and your participation or lack of it will not be disclosed to the other member of your mother/daughter pair. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not wish to answer and still remain in the study. However, it should be noted that participants must complete the focus group in order to be entered into the draw. You will be unable to withdrawal your data after October 30, 2018. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

The investigator will provide a written summary of the study's findings to you upon request. The results will also be posted on the REB website at http://www1.uwindsor.ca/reb/study-results (January 31, 2019). If you have any additional concerns or questions you can email or call the investigator(s) at the address or number provided above. Please print a copy of this Letter of Information.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

Please remember to print a copy of this consent form for your records. Please remember that your survey link and research identification number are good for a one-time log on only. Do you agree to participate?

- ○ Yes
- ○ No

Skip To: End of Survey If Mother's Consent Form = No

What is your Research Identification Number?

_____

What social media sites do you and your daughter use? Choose all that apply.

- ☐ Instagram
- ☐ Snapchat
- ☐ Facebook
- ☐ Twitter
- ☐ Other _____

What month is your daughter's birthday?

▼ January ... December

What year was your daughter born?

▼ 2003... 2007

Are you...?

- ○ Married
- ○ Divorced
- ○ Separated
- ○ Never been married
- ○ Widowed
- ○ Common law

Do you...?

- ○ Work full-time for pay
- ○ Work part-time for pay
- ○ Not work for pay
- ○ Other

Thinking about your income and the income of everyone else who lives with you, what was your total household income over the past 12 months?

- ○ $45,282 or less
- ○ $45,282 to $90,563
- ○ $90,563 to $140,388
- ○ $140,388 to $200,000
- ○ More than $200,00
- ○ Prefer not to answer

What is the highest degree or level of school you have completed?

- ○ Did not finish high school
- ○ Finished high school or GED
- ○ Did some college/University or training after high school
- ○ Finished college/University
- ○ Master's degree or PhD
- ○ Prefer not to answer

How much do you feel your daughter talks to you about her problems?

- ○ Not at all
- ○ A little
- ○ Somewhat
- ○ Quite a bit
- ○ Very much

How much do you feel your daughter cares about you?

- ○ Not at all
- ○ A little
- ○ Somewhat
- ○ Quite a bit
- ○ Very much

Compared to others (i.e., your friends), how strict would you say you are with your daughter?

- ○ Much less strict
- ○ Somewhat less strict
- ○ About the same
- ○ Somewhat more strict
- ○ Much more strict

How often do you do the following with your daughter?

	Always	Usually	Often	Sometimes	Rarely	Never
Sit with her while she uses social media	○	○	○	○	○	○
Stay near her when she uses social media	○	○	○	○	○	○
Encourage her to explore and learn things on social media on her own	○	○	○	○	○	○
Do shared activities together on social media	○	○	○	○	○	○
Talk to her about what she does on social media (	○	○	○	○	○	○

Is your daughter CURRENTLY allowed to...

	Can do this anytime	Can only do this with permission or supervision	Can never do this	Don't know
Use instant messaging	○	○	○	○
Download music or films	○	○	○	○
Have her own social media accounts	○	○	○	○

Give out personal information to others	○	○	○	○
Upload photos, videos, or music to share with others	○	○	○	○
Watch video clips	○	○	○	○

When your daughter uses the internet at home, how often do you check the following things afterwards?

	Always	Usually	Often	Sometimes	Rarely	Never
Which websites she visited	○	○	○	○	○	○
The messages in her email or instant messaging	○	○	○	○	○	○
Her profile on social media or an online community	○	○	○	○	○	○
Which friends or contacts she adds to her social media profile or instant messaging service	○	○	○	○	○	○

How often do you believe your daughter has hidden what she has done on social media from you (e.g., has a secret account, be friends/talk to people they shouldn't or don't know, breaks a rule, sent inappropriate pictures or messages, etc…)?

- ○ Always (1)
- ○ Usually (2)
- ○ Often (3)
- ○ Sometimes (4)
- ○ Rarely (5)
- ○ Never (6)

Indicate how strongly you agree with the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
On the whole, I am satisfied with myself.	○	○	○	○
At times I think I am no good at all.	○	○	○	○
I feel that I have a number of good qualities.	○	○	○	○
I am able to do things as well as most other people.	○	○	○	○
I feel I do not have much to be proud of.	○	○	○	○
I certainly feel useless at times.	○	○	○	○
I feel that I'm a person of worth, at least on an equal plane with others.	○	○	○	○
I wish I could have more respect for myself.	○	○	○	○
All in all, I am inclined to feel that I am a failure.	○	○	○	○
I take a positive attitude toward myself.	○	○	○	○

How satisfied are you with your:

	1 (Very dissatisfied)	2	3	4	5 (Very satisfied)
height	○	○	○	○	○
weight	○	○	○	○	○
body shape	○	○	○	○	○
waist	○	○	○	○	○
hips	○	○	○	○	○
thighs	○	○	○	○	○
stomach	○	○	○	○	○
face	○	○	○	○	○
body build	○	○	○	○	○
shoulders	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement.

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
It is important for me to look athletic.	○	○	○	○	○
I think a lot about looking muscular.	○	○	○	○	○
I want my body to look very thin.	○	○	○	○	○
I want my body to look like it has little fat.	○	○	○	○	○
I think a lot about looking thin.	○	○	○	○	○
I spend a lot of time doing things to look more athletic.	○	○	○	○	○
I think a lot about looking athletic.	○	○	○	○	○
I want my body to look very lean.	○	○	○	○	○
I think a lot about having very little body fat.	○	○	○	○	○
I spend a lot of time doing things to look more muscular.	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement. Answer the following questions with relevance to your FAMILY (include parents, brothers, sisters, relatives):

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
I feel pressure from family members to look thinner.	○	○	○	○	○
I feel pressure from family members to improve my appearance.	○	○	○	○	○
Family members encourage me to decrease my level of body fat.	○	○	○	○	○
Family members encourage me to get in better shape.	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement. Answer the following questions with relevance to your PEERS (include close friends, colleagues, and other social contacts):

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
My peers encourage me to get thinner.	○	○	○	○	○
I feel pressure from my peers to improve my appearance.	○	○	○	○	○
I feel pressure from my peers to look in better shape.	○	○	○	○	○
I get pressure from my peers to decrease my level of body fat.	○	○	○	○	○

Please read each of the following items carefully and indicate which response best reflects your agreement with the statement. Answer the following questions with relevance to the MEDIA (include television, magazines, the internet, movies, billboards, and advertisements):

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
I feel pressure from the media to look in better shape.	○	○	○	○	○
I feel pressure from the media to look thinner.	○	○	○	○	○
I feel pressure from the media to improve my appearance.	○	○	○	○	○
I feel pressure from the media to decrease my level of body fat.	○	○	○	○	○

Pick a response for each of the following statements:

	Always	Usually	Often	Sometimes	Rarely	Never
Am terrified about being overweight.	○	○	○	○	○	○
Avoid eating when I am hungry.	○	○	○	○	○	○
Find myself preoccupied with food.	○	○	○	○	○	○
Have gone on eating binges where I feel that I may not be able to stop.	○	○	○	○	○	○
Cut my food into small pieces.	○	○	○	○	○	○
Aware of the calorie content of foods that I eat.	○	○	○	○	○	○
Particularly avoid food with high carbohydrate	○	○	○	○	○	○

content (i.e., bread, rice, potatoes, etc.).						
Feel that others would prefer if I ate more.	○	○	○	○	○	○
Vomit after I have eaten.	○	○	○	○	○	○
Feel extremely guilty after eating.	○	○	○	○	○	○
Am preoccupied with a desire to be thinner.	○	○	○	○	○	○
Think about burning up calories when I exercise.	○	○	○	○	○	○
Other people think that I am too thin.	○	○	○	○	○	○
Am preoccupied with the thought of having fat on my body.	○	○	○	○	○	○
Take longer than others to eat my meals.	○	○	○	○	○	○
Avoid foods with sugar in them.	○	○	○	○	○	○
Eat diet foods.	○	○	○	○	○	○
Feel that food controls my life.	○	○	○	○	○	○
Display self-control around food.	○	○	○	○	○	○
Feel that others pressure me to eat.	○	○	○	○	○	○
Give too much time and thought to food.	○	○	○	○	○	○
Feel uncomfortable after eating sweets.	○	○	○	○	○	○

Engage in dieting behaviour.	○	○	○	○	○	○
Like my stomach to be empty.	○	○	○	○	○	○
Have the impulse to vomit after meals.	○	○	○	○	○	○
Enjoy trying new rich foods.	○	○	○	○	○	○

During the past week (7 days), think of all the time you spent in activities that increased your heart rate and made you breathe hard; consider work, leisure, home. On each day, how long were you active for?

	0 minutes (was not active this day)	1-15 minutes	16-30 minutes	31-60 minutes	61 minutes - 2 hours	more than 2 hours
Monday	○	○	○	○	○	○
Tuesday	○	○	○	○	○	○
Wednesday	○	○	○	○	○	○
Thursday	○	○	○	○	○	○
Friday	○	○	○	○	○	○
Saturday	○	○	○	○	○	○
Sunday	○	○	○	○	○	○

How many times a day do you access/check your social media accounts?

- ○ Hardly ever
- ○ 1 or 2 times
- ○ 3-5 times
- ○ 5-10 times
- ○ 11-15 times
- ○ 15-20 times
- ○ More times than I can count

What is the average amount of time you spend on social media a day?

- ○ 0-15 minutes
- ○ 15-30 minutes
- ○ 1-2 hours
- ○ 2-3 hours
- ○ 3-4 hours
- ○ 4-5 hours
- ○ 5-6 hours
- ○ 6-7 hours
- ○ 7-8 hours
- ○ 8-9 hours
- ○ 9-10 hours
- ○ 10 or more hours

How often do you do the following on social media?

	Never	Almost never	Sometimes	Fairly often	Very often
Create a photo album with photos of yourself and friends/family.	○	○	○	○	○
Update your profile photo.	○	○	○	○	○
Post a photo.	○	○	○	○	○
View friends' photos that they've added of you.	○	○	○	○	○
View friends' photos of themselves.	○	○	○	○	○
Comment on friends' photos.	○	○	○	○	○
Tag yourself in friends' photos.	○	○	○	○	○
Untag yourself in friends' photos.	○	○	○	○	○
Filter/edit your photos before posting them on a social media.	○	○	○	○	○

How often do you do the following on social media?

	Never	Almost never	Sometimes	Fairly often	Very often
I comment on my daughter's/daughter's friends photos and/or posts.	○	○	○	○	○
I "like" or "react" to my daughter's/ daughter's friends photos and/or posts.	○	○	○	○	○

APPENDIX H

WITHIN-DYAD AND BETWEEN-DYADS REGRESSION EQUATIONS (Chapter 3)

$DV_{diff} = b_{w1}(IV_{diff}) + b_{w2}(R_{diff}) + b_{w3}(IVIN_{diff}) + E_{wi}$

$DV_{avg} = b_{b0} + b_{b1}(IV_{avg}) + b_{b2}(IVIN_{avg}) + E_{bi}$

Definition of Symbols:

DV_{diff} = the difference between each partner's scores on the outcome variable

IV_{diff} = the difference between each partner's scores on the predictor variable

R_{diff} = the difference between each partner's scores on the role (mother/daughter role)

$IVIN_{diff}$ = the difference in the interaction between the predictor variable and role

DV_{avg} = the dyad mean of the outcome variable

IV_{avg} = the dyad mean of the predictor variable

$IVIN_{avg}$ = the dyad average of the interaction between the predictor variable and role

b_{wn} = unstandardized regression coefficients for the within-dyads regression

b_{bn} = unstandardized regression coefficients for the between-dyads regression

E_{wi} = error term for the within-dyads regression

E_{bi} = error term for the between-dyads regression

APPENDIX I

ACTOR AND PARTNER EFFECTS EQUATIONS
(Chapter 3)

Actor Effects = $b_{b1} + b_{w1}/2$

Partner Effects = $b_{b1} – b_{w1}/2$

APPENDIX J

CONSENT FORM
(Chapter 4)

Be Yourself: How to be a Positive Influencer On and Offline
"educating mothers and other positive influencers who directly influence children, on how to promote a positive and well-balanced use of social networking sites"

I am asking you to participate in a planning session(s) to help in the development and creation of the toolkit/workshop for the outreach program "Be Yourself: How to be a Positive Influencer On and Offline". I am hoping that by participating in this planning process you will be able to become a co-producer of this program contributing input regarding content, relevancy, format, and creative processing.

During the planning session you will be provided with current research in the area of the mother/daughter dynamic on social networking sites, be asked to reflect on your own experiences, and contribute to the co-creation of the outreach program. After the planning session you will be asked to comment and evaluate on the co-creation process.

Your participation is completely voluntary, and you can choose to answer/not answer any questions during the planning session as well as not answer/not answer any follow up questions.

Lastly, as a PhD candidate in the Department of Kinesiology, I would like to be able to potentially use the data from the post-planning session evaluation as a part of my doctoral dissertation. Any information that is obtained in connection with your evaluation will remain confidential [meaning, only I will have access to the information] and will not be used for any other purpose other than subsequent studies and communicating the results. By consenting to this, you are agreeing that your data can be used in my dissertation.

If you have questions contact: Sara Santarossa by phone/text message [redacted] or email at santaros@uwindsor.ca

_____ _____

Signature Date

APPENDIX K

SAMPLE PLANNING MEETING AGENDA
(Chapter 4)

Be Yourself: How to be a Positive Influencer On and Offline
Planning Session Outline – BANA; May 21, 2019

Materials needed:
- chart paper/markers

- Welcome
    - thank everyone for attending and giving their time to this project
- Aims
    (1) An evidence-based workshop and toolkit to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint
    (2) Aimed to create a transformative learning experience for the mothers with the desired impact to then reach their daughter
- Objectives
    1. Describe and debate previous research conducted on the mother/daughter online relationship
    2. Through interactive experiences and reflection develop concrete ideas for the sustainable workshop portion of this project
- Icebreaker
    - Think – Pair – Share: Think of a time that you have been influenced by something you saw, read, or heard on social media…what was this experience, how were you influenced, and what was the outcome?
    [give example of shopping online, sponsored ads, workouts]
- Participatory Action Research
    - WHAT? Brings about improvement or practical change. A group of people who know about a problem work together in a 'partnership' to develop an idea about how it might be resolved. They then go and test this idea.
        -co-creation: collaborative intervention development by academics working alongside other stakeholders and end-users
    - WHO?
        - end-users - The group of people or population that is the target of the intervention
        - stakeholders - The group of people who are interested or involved in the implementation of the intervention
        - academic researchers - Individuals who, in a traditional model, conduct the research
    - WHERE/WHEN?
        - 3 BANA planning session
        - 1 mother planning session
    - HOW? **PRODUCES** framework (**PR**oblem, **O**bjective, **D**esign,
    (end- **U**sers, **C**o- creators, **E**valuation, **S**calability
- Goals

- Earlier I shared what I believe the aims and objectives are for this project and today's planning session BUT I want to hear from you, take a second and write down what your goal is for this project or maybe just this session. Why are you here?

- Previous Research
  - go through infographic handout – and describe links to previous literature throughout (e.g., active parenting vs. restrictive, impression management, positive spaces for both mothers and daughters)
- Brainstorm #1
  - based on the research presented and lived experience what do you think is needed in the workshop?
- Quotes
  - Each pair gets a different quote
  - How does this quote make you think or feel?
  - Is there a "problem"? What advice would you give this mother?
  - Based on the quote is a conversation with the daughter needed? If so what does this conversation look like?
  - Come back to the group and discuss ideas
- Continuum
  - Creating a positive digital footprint, where does the responsibility lie?
  - Give chart paper and word bank
  - As a group on the continuum place the phrase based on whose responsibility you believe this action to be. It is ok if you believe some actions do not fit on this continuum, but have reasons for why not.
  - Did your group have any disagreements? Why? How did you work through them?
  - Describe continuum as a group with the facilitator.
- Role Play
  - These scenarios have been created based on the research previously conducted.
  - If your description has the probe CONFRONT you start off the role play.
  - Work through the probes to solve the problem at hand.
  - Debrief as a pair
  - Debrief as an entire group
- Brainstorm #1
  - based on the research presented and lived experience what do you think is needed in the workshop?
- Next steps
  - We are meeting with moms tomorrow and will then be combining their thoughts and feelings with the finding from this meeting.
  - In the next planning session we will be focus solely on creating the toolkit/ takeaway portion of this project. Homework is to start thinking about what would be useful and serve a dual purpose.

APPENDIX L

SAMPLE SUMMARY OF NOTES
(Chapter 4)

Be Yourself: How to be a Positive Influencer On and Offline
Planning Session Summary

Recall Overall Aims:
(1) An evidence-based workshop and toolkit to educate mothers on how to navigate SNSs appropriately and create a positive digital footprint
(2) Aimed to create a transformative learning experience for the mothers with the desired impact to then reach their daughter

Recall End-user:
Mothers of daughters that use social media, or want to use social media (based on the formative research (11-15 years old; however, if mothers with daughters of other ages inquire they will be able to attend). Positive influencers of youth (i.e., teachers, health educators, social workers)

Themes to remember:
Focus Groups: (1) Mother as a role model on social media, (2) Being your authentic self on social media, (3) Co-creating digital footprint and online expectations, (3) Transmission of beauty ideals, and (4) Connecting offline.

Planning Sessions: (1) Reflective (thinking about thoughts, feelings, and behaviours), (2) Intentional (thoughtfully prepared with a purpose), (3) Interactive, and (4) Universal (make accessible to all people)

Workshop (1 hour):
Possible interactive components:
1. Reflection
- provide worksheet where mother can reflect on her own online behaviours, use 5 themes from focus group to drive content (e.g., embarrassing post…what if you daughter posted a photo of you without your permission?)

2. Online interactions
- use mentimeter to address appearance-based comments, impacts on self-esteem, body image, eating behaviours and physical activity and the idea of social comparison

3. Scenarios/role play
- have mothers work through problems

Toolkit (takeaway continued learning experience):
Paper-based component (fortune teller aka cootie catcher):
- need 4 categories, 8 questions, 8 responses
- responses will be used to direct user to additional resources

- e.g., privacy, how to, policies, filtering/editing apps, sexting, emoji dictionary

Digital component (virtual interactive experience):

- chose your own adventure type game
- played as mother (positive influencer) or as a pair, no winner
- could grow, addition of new "chapters" based on age of child
- outcome = social media contract, outcome = mother/daughter conversations
- Game with scenario's, road blocks, discussion, script to follow (for those that aren't comfortable with the scenario) but then have discussion points; scale type question to start the question
- using meme's, music, art, GIFs
- having "other" as an option so to generate conversation

Key notes from planning session (for your review):

BANA 1:

- include current statistics: what's average use, what platforms, age restrictions
- show how an Instagram poll works/looks like
- where to find out about settings, privacy tips
- behaviours online (e.g., lurking, advertisements, social comparison, screenshots, filtering)
- separate accounts (finsta) – authentic self
- giving compliments that aren't appearance based, practice it, suggestions (menti activity)
- how what you're written is perceived (food, appearance, etc)
- co-creating the digital footprint, contracts → how to approach subject
- internal reflection for moms → oppose their weight biases (subconsciously how they feel about their body), language offline – how you're eating; good and bad foods; oversharing; inappropriate sharing
- consider parenting styles and culture, values in household (response to kids saying 'well my friend doesn't to this')

Mothers:

- considering social media users and non-users
- age must be considered
- mothers need to take on more responsibility when it comes to social media
- Mom's reflect on their own behaviours and be accountable
- interactive → Sentence stems, Discussion banks, Guiding discussion (mad libs), create a pledge together with their daughter (videos are really popular), Scenarios
- mom is not a friend she is a mom, lines can get blurred on social media
- might not use it (toolkit) right away, felt like it could be a resource when they're having a problem that they could go to

BANA 2:

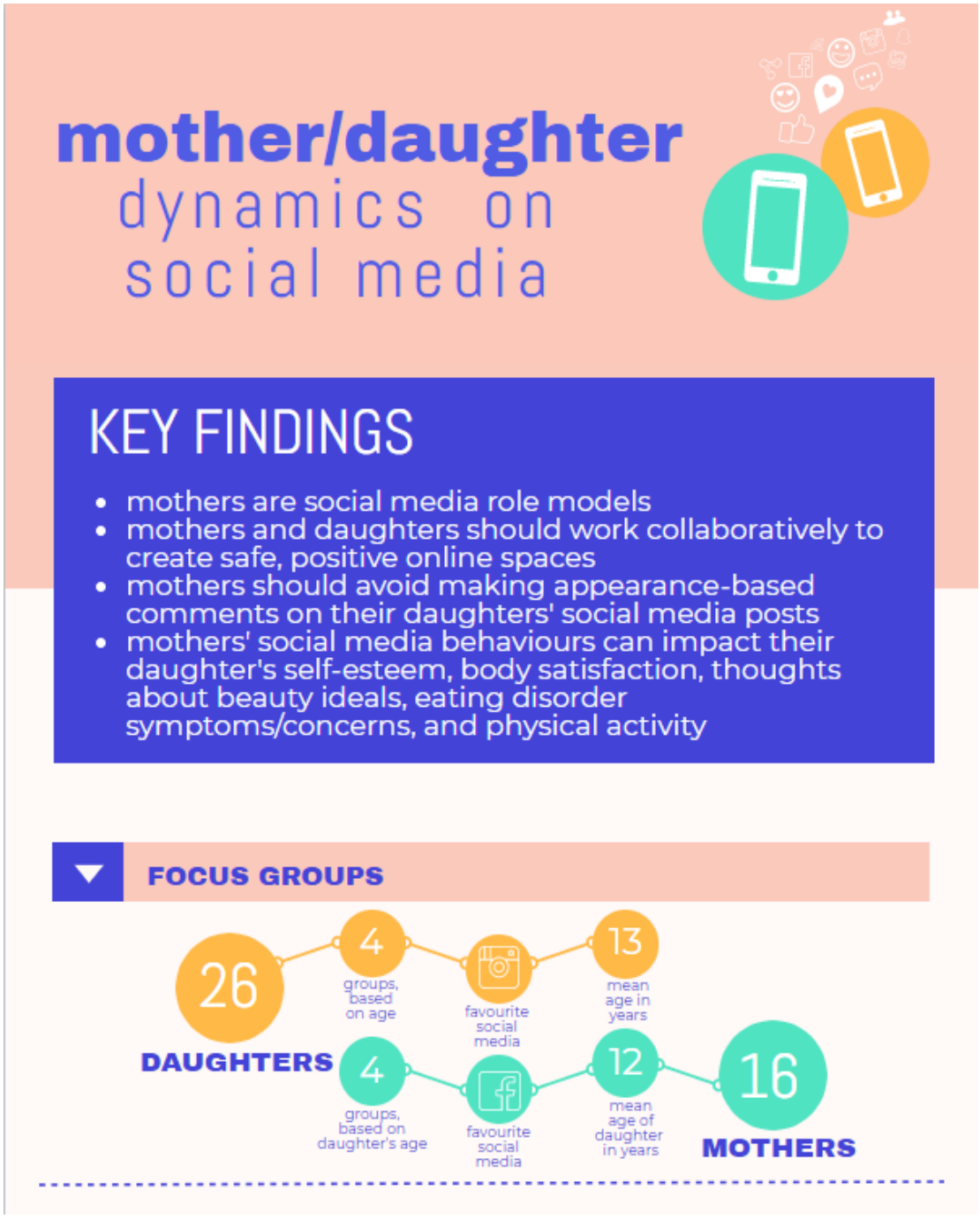
- conversation starters:
    - I want Instagram.
    - My daughter is messaging random people and I don't know who they are.
    - I found an account with a fake name but my daughter's pictures are on it.

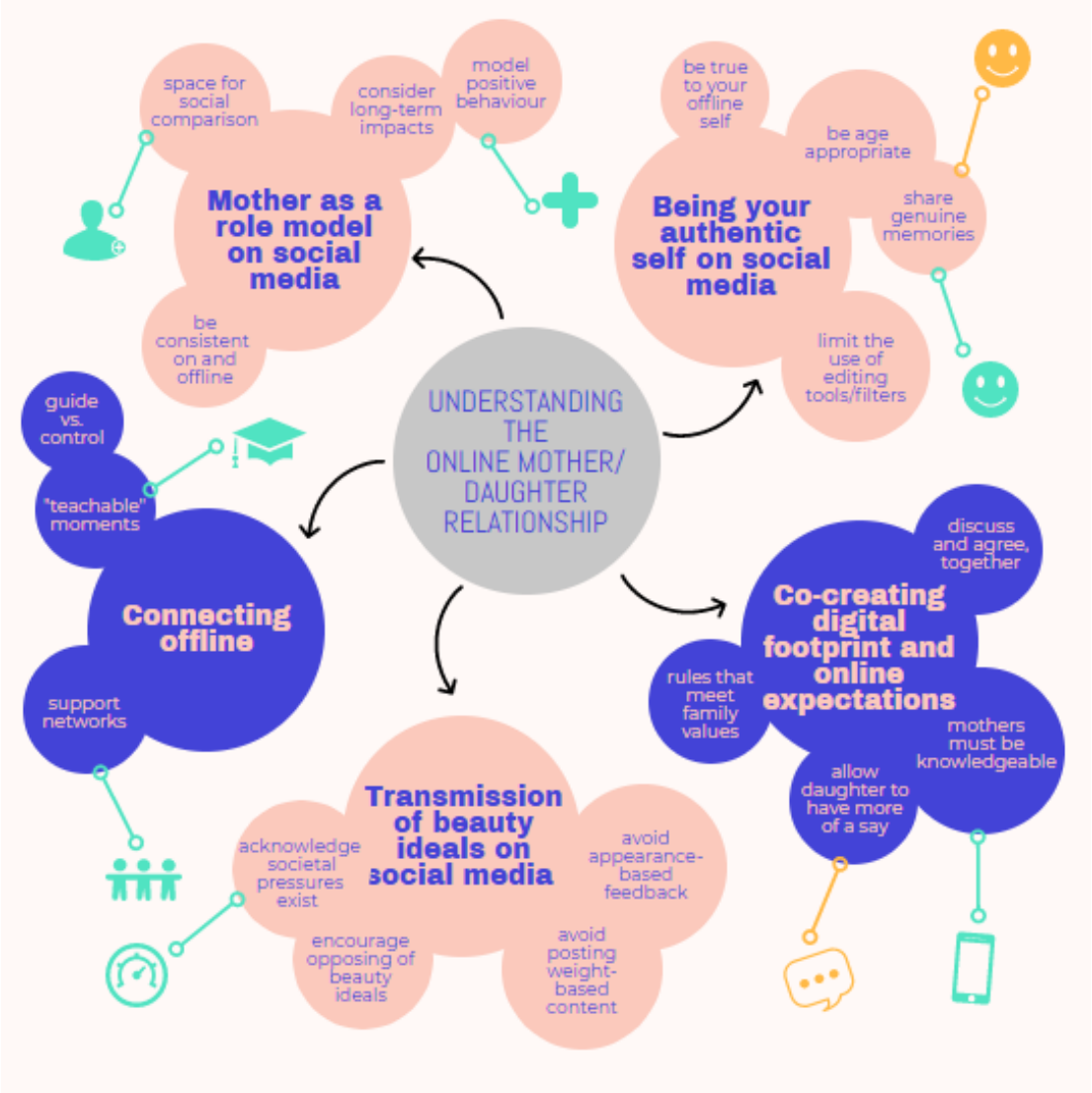
- My daughter changed her passwords and now I don't have access.
- I have my location on Snap Chat because I want people to know where I am.
- My ex-friend has a video of me doing inappropriate things and is sending it around.
- Daughter is being bullied online, but then it extends to real-life situation.
- Talk to new friend online, like in US, but are driving through town and want to hook up.
- Saw post online it made me feel weird; my friend was posting sad and disturbing pics of self.
- How do I do _____ on social media?
- What does ____ mean?
- Daughters looking to use social media to help with school project but is using it excessively?
- Moms not following the rules?
- Why did you post such an awful pic of me or can you take it down?

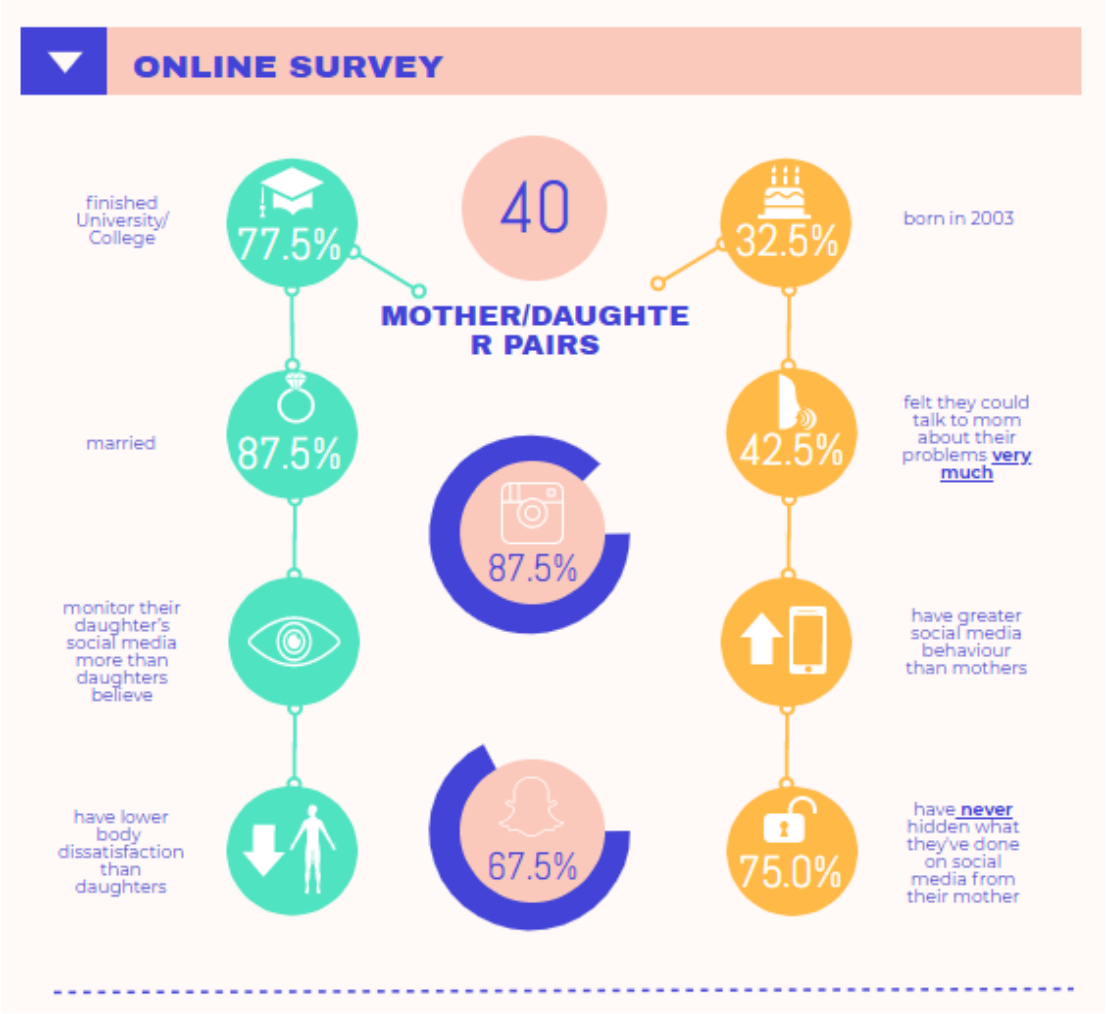
- toolkit brainstorm (see above):
    - prep before you post, getting kids interested in sharing with parents
    - if not digital → cards against humanity type game

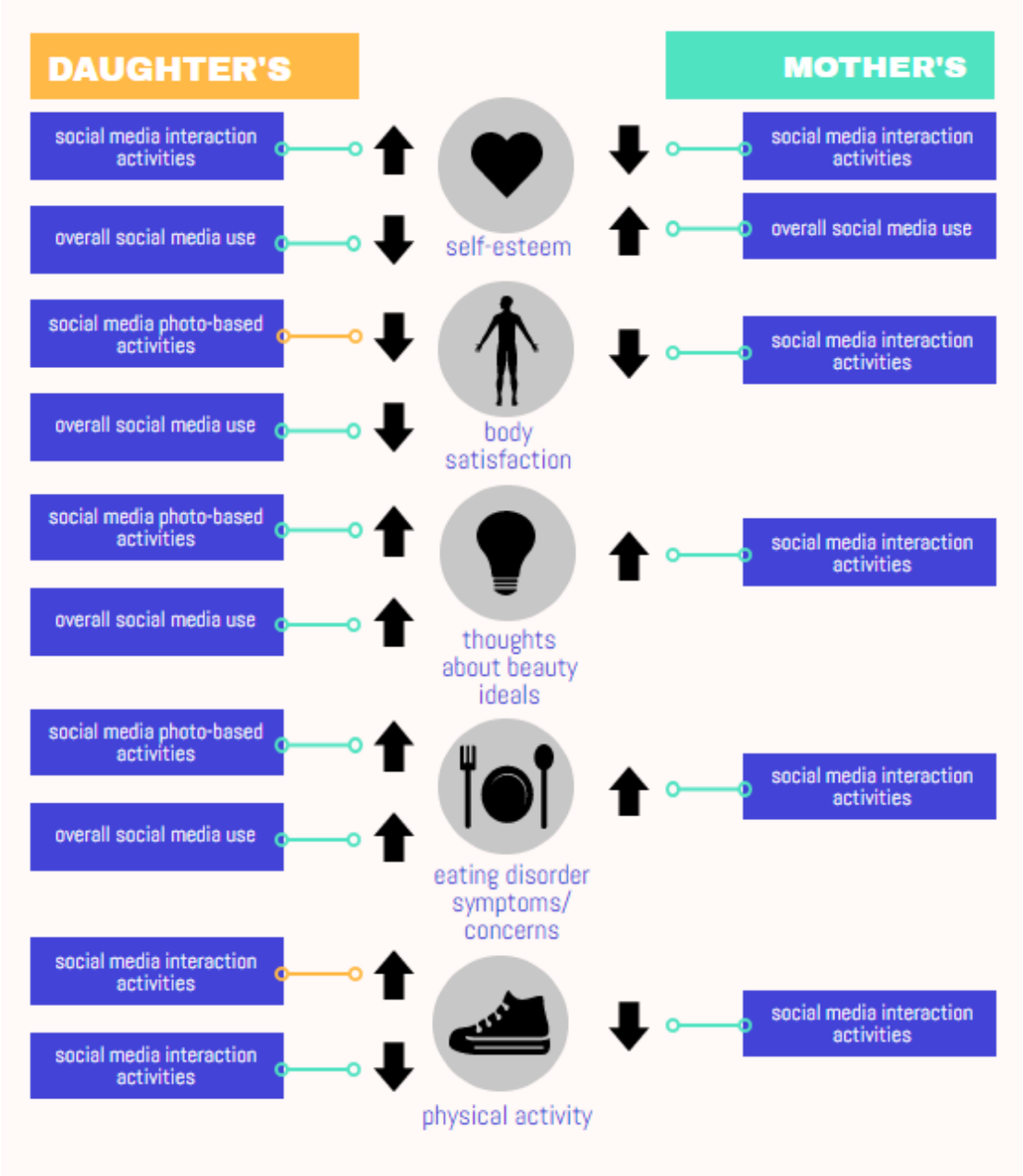
APPENDIX M

INFOGRAPHIC
(Chapter 4)




UNDERSTANDING THE ONLINE MOTHER/ DAUGHTER RELATIONSHIP
Mother as a role model on social media
space for social comparison
consider long-term impacts
model positive behaviour
be consistent on and offline
Being your authentic self on social media
be true to your offline self
be age appropriate
share genuine memories
limit the use of editing tools/filters
Connecting offline
guide vs. control
"teachable" moments
support networks
Co-creating digital footprint and online expectations
discuss and agree, together
rules that meet family values
mothers must be knowledgeable
allow daughter to have more of a say
Transmission of beauty ideals on social media
acknowledge societal pressures exist
avoid appearance-based feedback
encourage opposing of beauty ideals
avoid posting weight-based content


ONLINE SURVEY
40
MOTHER/DAUGHTER PAIRS
finished University/ College
77.5%
married
87.5%
monitor their daughter's social media more than daughters believe
have lower body dissatisfaction than daughters
87.5%
67.5%
32.5%
born in 2003
42.5%
felt they could talk to mom about their problems very much
have greater social media behaviour than mothers
75.0%
have never hidden what they've done on social media from their mother


DAUGHTER'S
MOTHER'S
social media interaction activities
overall social media use
self-esteem
social media interaction activities
overall social media use
social media photo-based activities
overall social media use
body satisfaction
social media interaction activities
social media photo-based activities
overall social media use
thoughts about beauty ideals
social media interaction activities
social media photo-based activities
overall social media use
eating disorder symptoms/ concerns
social media interaction activities
social media interaction activities
social media interaction activities
physical activity
social media interaction activities

APPENDIX N

SAMPLE INTERACTIVE ACTIVITY
(Chapter 4)

Activity: Quotes

Instructions:

- Each pair gets a different quote (see below; quotes were printed and cut into strips that could be easily handed to pairs)
- How does this quote make you think or feel?
- Is there a "problem"? What advice would you give this mother?
- Based on the quote is a conversation with the daughter needed? If so what does this conversation look like?
- Come back to the group and discuss ideas

Finsta

"But she also has two different accounts you know. She's got an Instagram friends and an Instagram open to everybody. The Instagram open to everybody she likes to do artistic looking photos. And the Instagram friends is all friends, and its private, but the one that is open to everybody she actually just does really interesting photos with captions. So she keep the private one much more anonymous."

Growing sense of independence

"Well when they are younger 11, 12 years old I did [comment on daughter's SNS posts]. I engaged with the kids. But the older they get they do need to grow a sense of self. So you have to sort of encourage that, without there being a risk. So you try to separate. It's a painful, painful, difficult thing – to step back."

Differing expectations

"At night time, I finally get to have my phone conversations – playing my games, I'm catchin' up – and she's like "I want to talk to you". You've been in this house since 3 o'clock, and you've had every opportunity...this is MY time now. And, as soon as I get on my phone – she's like 'I want to talk to you'. But …now it's my time, back off. I'm allowed to do what I want now, because you had every opportunity from 3 o'clock on to have this conversation with me. She gets me with that 'well you're on your phone'. Well…I'm sorry."

Pressures to meet beauty standards

"I worry about always having the expectation to look good in every picture. To always be posting interesting pictures. To always having to comment on a friend's picture or…it is just a lot more pressure it seems like for girls to constantly be connected, what they are posting, what they are reading…you know, we just went home and like maybe called someone for half an hour and that was it for the night. So it is definitely…I think it is a lot more pressure on them. And umm a lot more expectations on them. And that might only get worse, I don't know."

APPENDIX O

EVIDENCE-BASED PRACTICE CHECKLIST
(Chapter 4)

Be Yourself: How to be a Positive Influencer On and Offline
Check List for Evidence-Based Practice:

- **social situation** (i.e., increasing perceived social norms on what should be posted on SNSs to contribute to a positive digital footprint)
    - HOW?

- **behavioural capability** (i.e., knowledge of the influence of certain types of posts and/or comments and skills to alter posting behaviour)
    - HOW?

- **expectations** (i.e., belief that mother's SNSs behaviour impacts their daughter)
    - HOW?

- **observational learning** (i.e., in stories from real mothers/daughters about the impact of SNSs, including the impacts on self-esteem, body satisfaction, societal and interpersonal aspects of appearance ideals, eating disorder symptoms/concerns, and physical activity behaviours)
    - HOW?

- **self-efficacy to navigate SNSs and produce a positive digital footprint** (i.e., suggestions for how to create a positive digital footprint and how to help their daughter create one as well)
    - HOW?

- **skills for communicating with their daughters** (i.e., active listening, self-disclosure, showing empathy, and managing conflict)
    - HOW?

Adapted from Sociocultural Approach and the Social Cognitive Theory (Bandura, 2004). Content, modelled from Pagoto et al., (2016).

APPENDIX P

WORKSHOP OUTLINE AND ACTIVITIES
(Chapter 4)

Be Yourself: How to be a Positive Influencer On and Offline
Health Promotion Workshop – Template Outline

Grabbing Attention

- Health Promotion Educators act out mother/daughter scenario live.

Mother:

Daughter:

BANA Introduction and Workshop Goal

- Health Promotion Educators introduce themselves and BANA
- Clearly define the intent of the workshop:
    1. Educate you on how to navigate social media appropriately and create a positive digital footprint.
    2. Create a transformative learning experience* for the mothers with the desired impact to then reach their daughter

    **Aside - Transformative learning refers to those learning experiences that cause a shift in an individual's perspective*

Social Media Introduction (*use stats to support when appropriate)

- Possible questions to pose:
    - What is social media?
    - Who is using social media?
    - Did you know there are age restrictions on social media?
    - How are you using social media? Have you ever thought about how your social media behaviour can impact how you think and feel about yourself?

ACTIVITY 1: Reflection

- Have the participants take time to fill out the reflective worksheet (see below) that has been created around the 5 focus group themes
- Bring the audience back for a group discussion – ask how answering these questions has made them feel or question their social media us

who are your role models online? why?

HAVE YOU EVER?

CHECK OFF YOUR BEHAVIOURS

- ❑ Posted a selfie
- ❑ Posted about food
- ❑ Posted about a diet
- ❑ Used a filter
- ❑ Posted about fitness
- ❑ Shared an inappropriate joke
- ❑ Shared genuine memories
- ❑ Got a comment about how you look

describe **SOCIAL MEDIA** in one word:

Online RULES THAT HAVE WORKED — LIST HERE

Online RULES THAT HAVE NOT WORKED — LIST HERE

WHAT DOES BEING AUTHENTIC ONLINE LOOK LIKE TO YOU?

WHEN I NEED A BREAK FROM SOCIAL MEDIA I CAN...

who are you a role model for online? why?

ON SOCIAL MEDIA I AM

CONFIDENT IN

SOCIAL MEDIA MAKES ME THINK	SOCIAL MEDIA MAKES ME FEEL	SOCIAL MEDIA MAKES ME DO

ON SOCIAL MEDIA I NEED

TO LEARN MORE ABOUT

The Social Media Impact – Part 1

- Social media can impact our body image and self-esteem
    - What is body image? What is self-esteem?
    - Social media is a space for social comparison, because one of the most popular behaviours is lurking/creeping, we also know people using only post the "best" versions of themselves or their days, etc…

ACTIVITY 2: Online interactions

- Use mentimeter to address appearance-based comments
- Show an Instagram image and ask the participants to respond with what type of comments they would expect to see on this type of image

The Social Media Impact – Part 1

- Words and language matter on and offline
    - challenge the participants to be mindful of the types of comments that they are leaving
- Digital footprint
    - in the background how digital footprint could be impacted (e.g., screenshot or film Snapchat story, anonymous re-posting of content, sharing inappropriate content)

Mother/Daughter Relationship on Social Media

- We know offline that mothers can influence how their daughters think and feel about themselves…but what about online?
- Did you know you that what you do on your social media and how you engage with your daughter online can impact her daughter's self-esteem, body satisfaction, thoughts about beauty ideals, eating disorder symptoms/concerns, and physical activity?
    - *You are a role model:* This means your social media is a space for social comparison – think about what you are posting, sharing, and the persona you are creating and modelling online and how that is shaping your daughter
    - *You need to be authentic:* Limit the use of editing tools and filters, share genuine memories, be age appropriate and be true to your offline self.
    - *You need to collaborate with your daughter:* This means that it is important that you feel comfortable and confident in the online world, become knowledgeable, listen to your daughter and allow her to have more of a say when it comes to her digital footprint and online expectations
    - *You need to be concerned with transmitting beauty ideals*: Keep in mind that times have changed from when you were growing up and try to understand that your daughter feels pressured to act and look a certain way online, think about how you could oppose those ideals, avoid posting weight-based content (e.g., diets), and remember words matter – keep those comments based on internal characteristics
    - *You need to connect offline with your daughter:* Talking in person is more important to the mother/daughter relationship than talking online or liking your daughter's post. Use events that arise online to fuel teachable

moment's offline. Think about guiding vs. controlling - as we know this parenting style tends to work better, let's practice!

ACTIVITY 3: Role Play

- Get into partners, one person will be the mother and one will be the daughter
- Use the script and prompts (see below) to help guide you – but keep that script secret from your partner! If your script says CONFRONT it means you are beginning the role play.
- Try to work through the problem the best way you can
- Bring back for final group discussion
- Provide a solution for problems to be using an online contract, and creating it collaboratively, if not mentioned

Mother

Warning! Inappropriate content…

Scenario: On a hunch you went through your daughter's phone and you found that she has been taking inappropriate pictures and videos of her body (e.g., highly sexualized positions or touching, nudes, etc)…

- ❑ **CONFRONT** your daughter.
- ❑ What information is important for you to get across? Think of digital footprint, ask about underlying body image or self-esteem issues, ask who else has these pictures, ask her WHY she took them…
- ❑ Talk to her about the steps moving forward. Are you giving a consequences? How would you help her create a safe and positive space online?

Daughter

Warning! Inappropriate content…

Scenario: Your mom went through your phone! She found that you are taking inappropriate pictures of yourself (e.g., highly sexualized positions or touching, nudes, etc). You took them because a boy asked you to…but you never ended up sending them. You are mad your mom went through your phone but you are also really embarrassed and feel ashamed.

- ❑ When your mom confronts you, explain the pressure you are feeling as a *young* teenager to fit in and have people like you, especially on social media.
- ❑ Ask your mom for advice on how to feel better about how you think and feel about yourself and your body.

Mother

Rules, rules, and more rules

Scenario: Social media scares you! At first you had a few rules in place… you monitored accounts, you had all the passwords, you had to approve pictures but you have now placed a BAN on all social media accounts. Your friend just called and told you your daughter has a secret account…

- ❑ **CONFRONT** your daughter about this secret account and hear what she has to say.
- ❑ You realize that you don't really understand how social media works. How can you work through your daughter's concerns? Try asking your daughter her opinion
- ❑ Create collaborative steps to move forward.

Daughter

Rules, rules, and more rules

Scenario: Your mom has imposed SO many rules about social media and it has caused you to rebel! Recently she has forbid you to use any type of social media. But you know she really doesn't understand the ins and outs of social media…and you have created a secret account.

- ❑ Listen to your mom's concerns but voice your opinion. You have felt like she has been invading your privacy, you are getting made fun of at school and feeling left you.
- ❑ Tell your mom that you think she needs a lesson in how social media works. If she understood it more you would maybe take her rules more seriously.
- ❑ Raise the concern that you are getting older and want to learn how to be independent.

Mother

Mom! You're embarrassing me!

Scenario: You LOVE sharing your life online. It is important that people know what you are doing and you love sharing moments of your family life. However, you may have gone too far…you posted a photo of your daughter that you thought was cute – but she is absolutely mortified and thinks she looks disgusting.

- ❑ Listen to your daughter's thoughts and feelings
- ❑ Move the conversation away from being appearance focused.
- ❑ How can you move forward? What solution could you both agree on when it comes to posting?

Daughter

Mom! You're embarrassing me!

Scenario: Your mom has always been an over-sharer online…but this time she has gone WAY too far. She posted a photo of you without your permission and you feel totally embarrassed. Not only do you think the picture is totally unflattering, your friends at school are making fun of you...you decide you need to confront your mom.

- ❑ **CONFRONT** your mom about this post and tell her how she has made you feel.
- ❑ Bring up the idea to co-create online rules and expectations… what do you think that should look like?

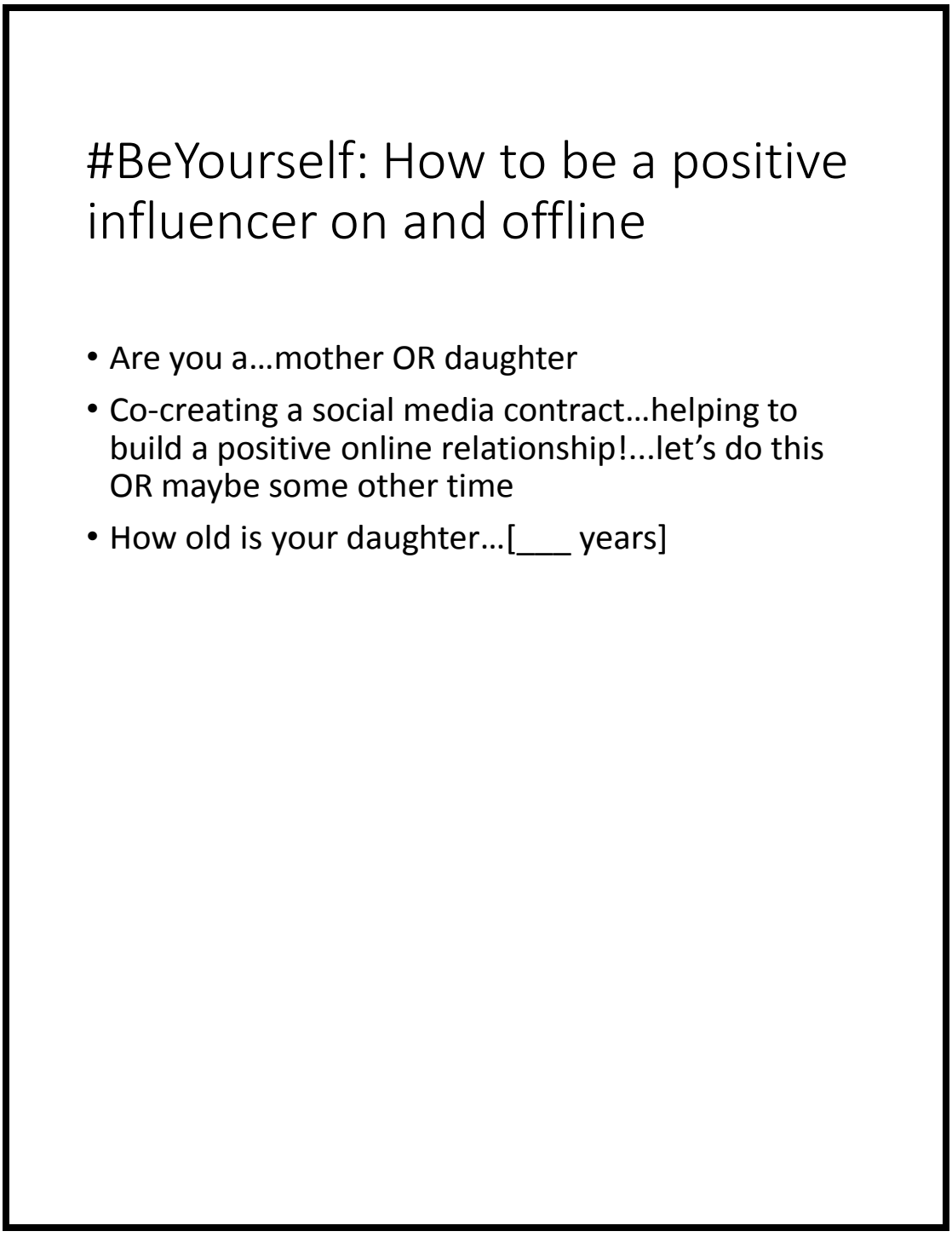
Toolkit and Questions

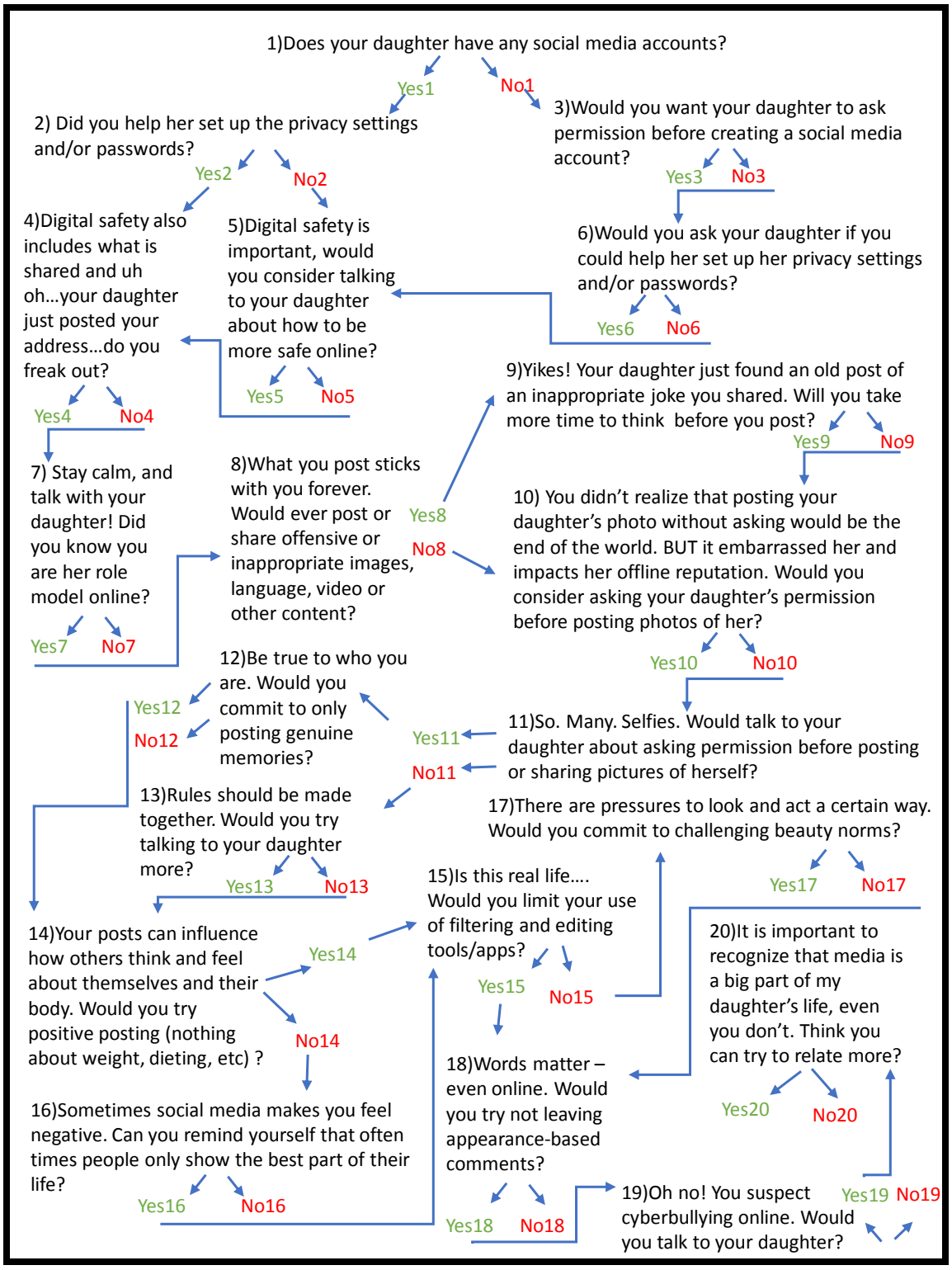
- Explain that further resources are provided via the toolkit and by engaging in the online virtual learning experience you can work through creating a contract together
- Time permitting, take questions
- Provide exit survey to participants

APPENDIX Q

TOOLKIT COMPONENTS
(Chapter 4)

Mother's Interactive Online Learning Experience Outline




1)Does your daughter have any social media accounts?
Yes1
No1
2) Did you help her set up the privacy settings and/or passwords?
Yes2
No2
3)Would you want your daughter to ask permission before creating a social media account?
Yes3
No3
4)Digital safety also includes what is shared and uh oh…your daughter just posted your address…do you freak out?
Yes4
No4
5)Digital safety is important, would you consider talking to your daughter about how to be more safe online?
Yes5
No5
6)Would you ask your daughter if you could help her set up her privacy settings and/or passwords?
Yes6
No6
7) Stay calm, and talk with your daughter! Did you know you are her role model online?
Yes7
No7
8)What you post sticks with you forever. Would ever post or share offensive or inappropriate images, language, video or other content?
Yes8
No8
9)Yikes! Your daughter just found an old post of an inappropriate joke you shared. Will you take more time to think before you post?
Yes9
No9
10) You didn't realize that posting your daughter's photo without asking would be the end of the world. BUT it embarrassed her and impacts her offline reputation. Would you consider asking your daughter's permission before posting photos of her?
Yes10
No10
11)So. Many. Selfies. Would talk to your daughter about asking permission before posting or sharing pictures of herself?
Yes11
No11
12)Be true to who you are. Would you commit to only posting genuine memories?
Yes12
No12
13)Rules should be made together. Would you try talking to your daughter more?
Yes13
No13
14)Your posts can influence how others think and feel about themselves and their body. Would you try positive posting (nothing about weight, dieting, etc) ?
Yes14
No14
15)Is this real life…. Would you limit your use of filtering and editing tools/apps?
Yes15
No15
16)Sometimes social media makes you feel negative. Can you remind yourself that often times people only show the best part of their life?
Yes16
No16
17)There are pressures to look and act a certain way. Would you commit to challenging beauty norms?
Yes17
No17
18)Words matter – even online. Would you try not leaving appearance-based comments?
Yes18
No18
19)Oh no! You suspect cyberbullying online. Would you talk to your daughter?
Yes19
No19
20)It is important to recognize that media is a big part of my daughter's life, even you don't. Think you can try to relate more?
Yes20
No20

Different types of questions that could be asked and responses generated on contract.

Don't get lost behind the screen! By decreasing screen time, you will have more time for…
Check all that apply to you:
❑ Reading
❑ Sleeping
❑ Being with friends
❑ Playing outside
❑ Doing hobbies I like
❑ Joining a team or playing a sport
❑ Having creative time
❑ Other (talk about with your mom)

Let's create some screen-free zones! As a family mobile devices or other screens will not be used when…
Check all that apply to you:
❑ Doing homework
❑ Eating dinner
❑ It's family time
❑ Driving in the car
❑ It's bedtime
❑ Other (talk about with your mom)

I will be off my social media by
___ p.m. during the week and
___ p.m. on the weekend.

Great! Now we can create your social media contract! BUT remember, it is important to co-create rules and online expectations as a family, and it is OK if things need to change over time.

Consequences (to be hand written on contract??)
I understand that I risk the following consequences for violating any of the above:
❑
❑
❑

Signature (to be hand written on contract??)
I, _____, agree to the above conditions for using social media. I also understand that we are setting these conditions because it is important for me us to use social media in a positive and safe way.

*Signature:*_____
Date: _____

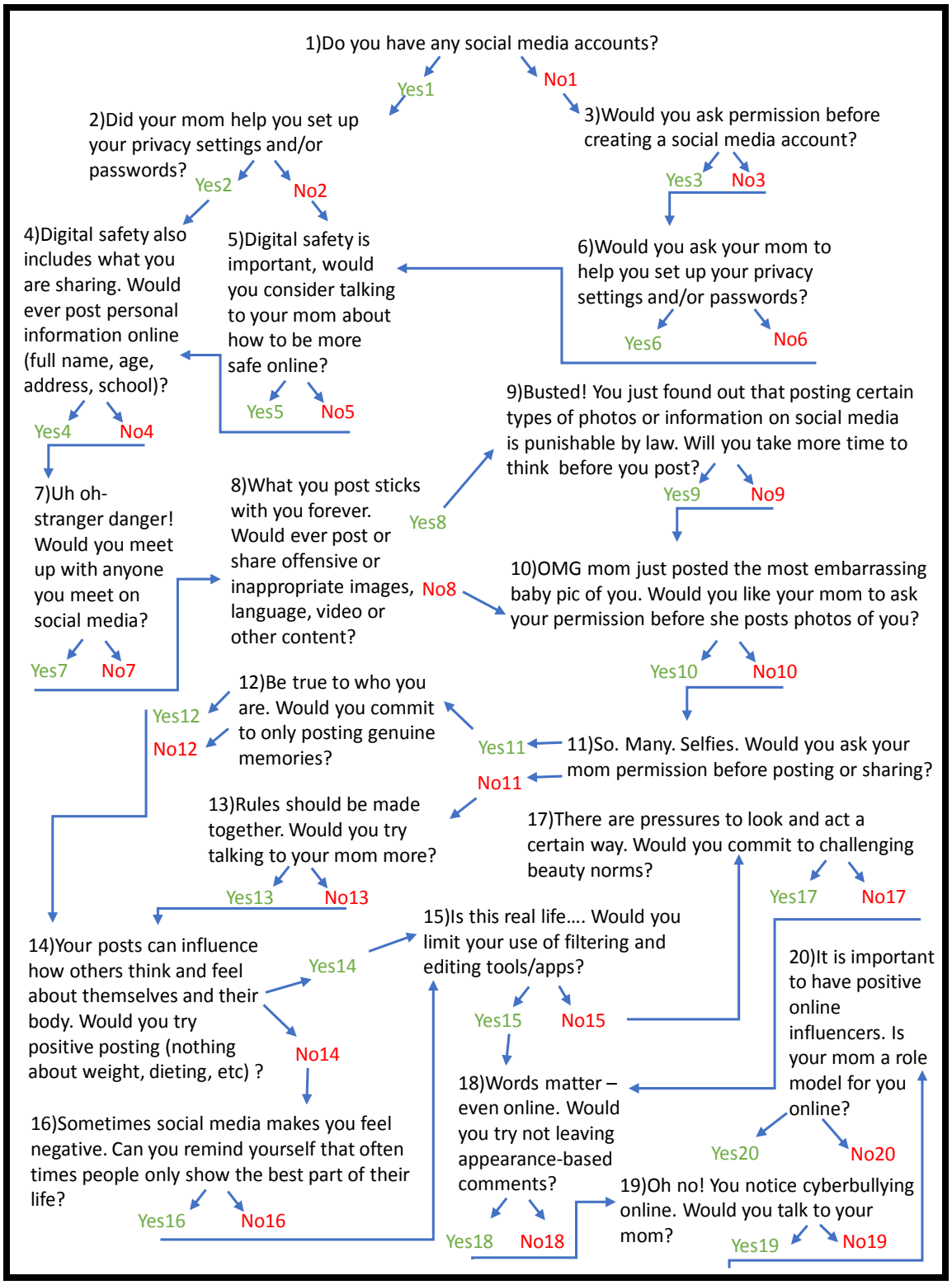
Generated contract phrases based on chosen response.

- Setting Up
  - Yes2/Yes6 = I will help my daughter to set up her privacy settings passwords on her social media accounts
  - Yes3 = I will talk to my daughter about her interests and embrace her world, including helping her find media that's appropriate and fun.
- Sharing
  - Yes4/No4 = I promise not to overreact if I see something on social media that concerns me. Rather, I will calmly discuss the matter with my daughter and work through the situation together.
  - No8/Yes9 = I promise to set a good example on how to behave on social media for my child by avoiding profanity, mean-spiritedness, bullying, sarcastic, or other antisocial behaviors or attitudes.
  - Yes10 = I will have an offline conversation with my daughter about respecting her digital footprint and how it makes her feel when I post certain content.
  - Yes11 = I promise to help my child identify the pros and cons of using social media, especially when it comes to the type of online persona she is creating.
  - Yes12 = I will make every effort to be my authentic self online and share genuine memories
- Conduct
  - Yes14 = I will make every effort to be a positive poster on social media
  - Yes15 = I will make every effort to limit my use of filtering and editing tools/apps
  - Yes18 = I will make every effort to leave comments that focus on internal qualities and characteristics vs. those that are about appearance or looks
  - Yes19 = I promise that my child may come to me at any time to troubleshoot a social media challenge, such as bullying, taunting, or other bad behaviours.

Daughter's Interactive Online Learning Experience Outline

#BeYourself: How to be a positive influencer on and offline

- Are you a…mother OR daughter
- Co-creating a social media contract….picking your own rules and expectations!...run and hide OR let your voice be heard
- How old are you…[___ years]


1)Do you have any social media accounts?
Yes1
No1
2)Did your mom help you set up your privacy settings and/or passwords?
Yes2
No2
3)Would you ask permission before creating a social media account?
Yes3
No3
4)Digital safety also includes what you are sharing. Would ever post personal information online (full name, age, address, school)?
Yes4
No4
5)Digital safety is important, would you consider talking to your mom about how to be more safe online?
Yes5
No5
6)Would you ask your mom to help you set up your privacy settings and/or passwords?
Yes6
No6
7)Uh oh- stranger danger! Would you meet up with anyone you meet on social media?
Yes7
No7
8)What you post sticks with you forever. Would ever post or share offensive or inappropriate images, language, video or other content?
Yes8
No8
9)Busted! You just found out that posting certain types of photos or information on social media is punishable by law. Will you take more time to think before you post?
Yes9
No9
10)OMG mom just posted the most embarrassing baby pic of you. Would you like your mom to ask your permission before she posts photos of you?
Yes10
No10
11)So. Many. Selfies. Would you ask your mom permission before posting or sharing?
Yes11
No11
12)Be true to who you are. Would you commit to only posting genuine memories?
Yes12
No12
13)Rules should be made together. Would you try talking to your mom more?
Yes13
No13
14)Your posts can influence how others think and feel about themselves and their body. Would you try positive posting (nothing about weight, dieting, etc) ?
Yes14
No14
15)Is this real life…. Would you limit your use of filtering and editing tools/apps?
Yes15
No15
16)Sometimes social media makes you feel negative. Can you remind yourself that often times people only show the best part of their life?
Yes16
No16
17)There are pressures to look and act a certain way. Would you commit to challenging beauty norms?
Yes17
No17
18)Words matter – even online. Would you try not leaving appearance-based comments?
Yes18
No18
19)Oh no! You notice cyberbullying online. Would you talk to your mom?
Yes19
No19
20)It is important to have positive online influencers. Is your mom a role model for you online?
Yes20
No20

Different types of questions that could be asked and responses generated on contract.

Don't get lost behind the screen! By decreasing screen time, you will have more time for…
Check all that apply to you:
❑ Reading
❑ Sleeping
❑ Being with friends
❑ Playing outside
❑ Doing hobbies I like
❑ Joining a team or playing a sport
❑ Having creative time
❑ Other (talk about with your mom)

Let's create some screen-free zones! As a family mobile devices or other screens will not be used when…
Check all that apply to you:
❑ Doing homework
❑ Eating dinner
❑ It's family time
❑ Driving in the car
❑ It's bedtime
❑ Other (talk about with your mom)

I will be off my social media by
___ p.m. during the week and
___ p.m. on the weekend.

Great! Now we can create your social media contract! BUT remember, it is important to co-create rules and online expectations as a family, and it is OK if things need to change over time.

Consequences (to be hand written on contract??)
I understand that I risk the following consequences for violating any of the above:
❑
❑
❑

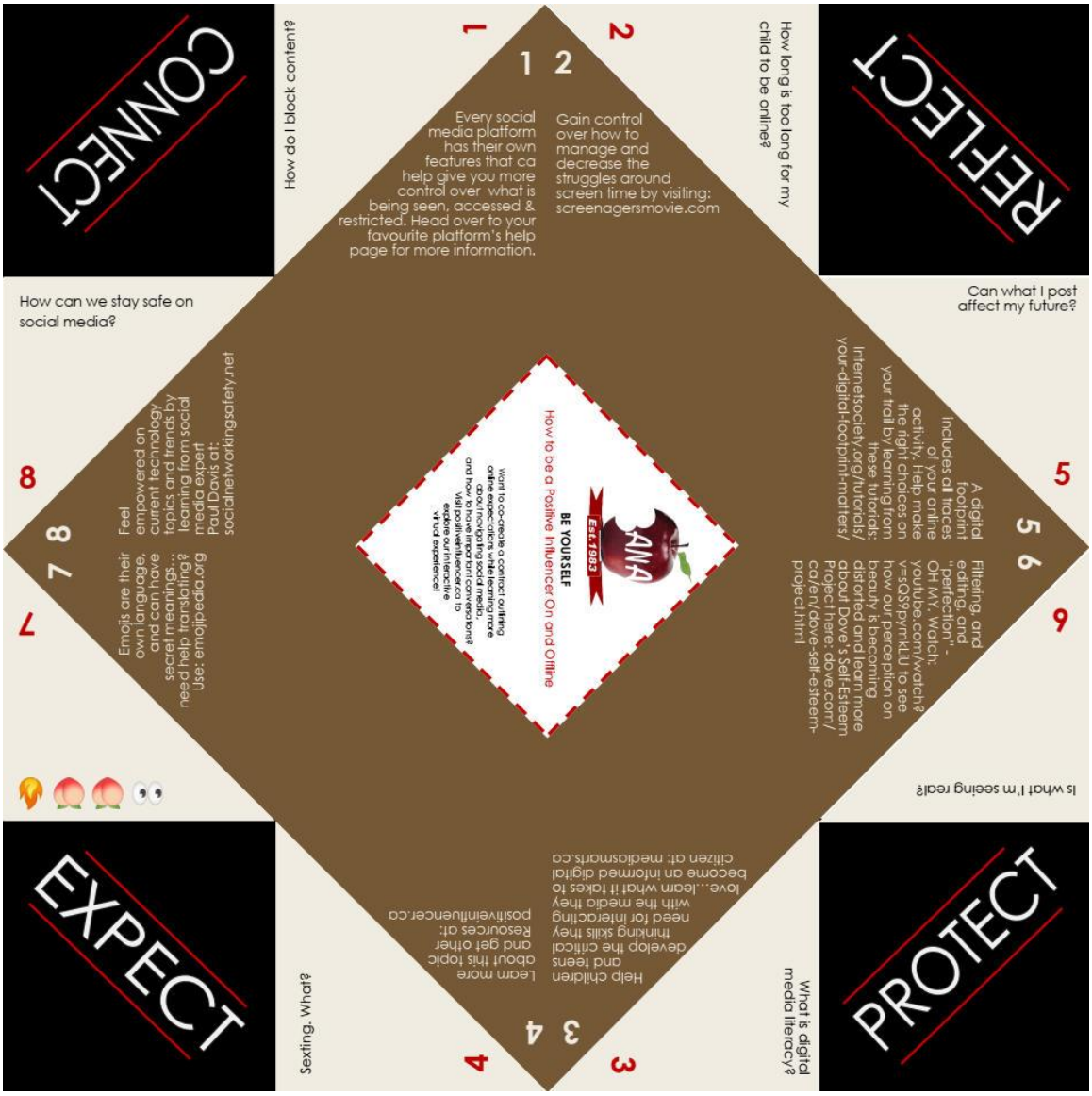
Signature (to be hand written on contract??)
I, _____, agree to the above conditions for using social media. I also understand that we are setting these conditions because it is important for me us to use social media in a positive and safe way.

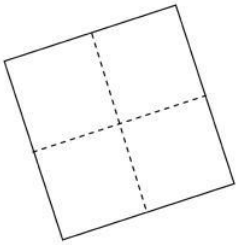
*Signature:*_____
Date: _____

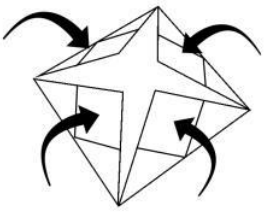
Generated contract phrases based on chosen response.

- Setting Up
  - Yes2/Yes6 = I will allow my parents to help me set up my privacy settings passwords on my social media accounts
  - Yes3 = I will ask my parents' permission before joining any social media
- Sharing
  - No4 = I will not share: my full name, age, address, school, or other personal information without my parents permission
  - No8 = I will not post or share offensive or inappropriate images, language, video, or other content.
  - Yes10 = I will have an offline conversation with my parents about respecting my digital footprint and how it makes me feel when they post certain content
  - Yes11 = I will not post or share photos of myself without my parents' permission
  - Yes12 = I will make every effort to be my authentic self online and share genuine memories
- Conduct
  - No7 = I will not meet up with anyone in person who I have met through social media
  - Yes14 = I will make every effort to be a postive poster on social media
  - Yes15 = I will make every effort to limit my use of filtering and editing tools/apps?
  - Yes18 = I will make every effort to leave comments that focus on internal qualities and characteristics vs. those that are about appearance or looks
  - Yes19 = I will not engage in online bullying and I will left my parents know if moe or a friend is a victim of cyberbullying

“Cootie Catcher” Handout

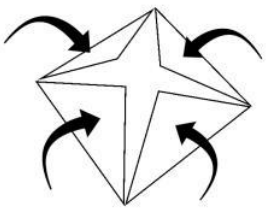


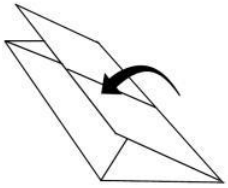




Folding Instructions:

1. Fold into four equal sections, crease.
2. Unfold and fold corners into center point, crease.
3. Turn over, and fold corners into center point, crease.
4. Fold in half, crease.
5. Turn over, place fingers in the openings and play!





APPENDIX R

ONLINE SURVEY
(Chapter 4)

Participatory Action Research

Be Yourself: How to be a Positive Influencer On and Offline

"educating mothers and other positive influencers who directly influence children, on how to promote a positive and well-balanced use of social networking sites"

You are asked participate in this process evaluation (a short 10min online survey) because you recently participated as a partner in the planning process for the development and creation of the toolkit/workshop for the outreach program "Be Yourself: How to be a Positive Influencer On and Offline". As a co-producer of this program you contributed to input regarding content, relevancy, format, and creative processing. We now would like to gather feedback on your experiences working in this community–academic partnership. Specifically, we are interested in what you believe the **facilitating and hindering factors** were in the community–academic partnership. Your participation is completely voluntary, and you may withdraw at any time and/or refuse to answer any questions you do not wish to answer without consequences of any kind. Lastly, as a PhD candidate in the Department of Kinesiology, I would like to be able to use the data from this process evaluation as a part of my doctoral dissertation. Any information that is obtained in connection with your evaluation will remain confidential [meaning, only I will have access to the information] and will not be used for any other purpose other than subsequent studies and communicating the results. By consenting to this, you are agreeing that your data can be used in my dissertation.

If you have questions contact: Sara Santarossa by phone/text message [redacted] or email at santaros@uwindsor.ca

Do you agree to participate?

○ Yes

○ No

Skip To: End of Survey If = No

On the left hand side, there is a list of FACILITATING FACTORS (Items):

A. DRAG and DROP the FACILITATING FACTORS (Items) into the box on the right that you believe were "present" during the collaborative group process.

B. For each factor you selected as "present," RANK (from highest to lowest by moving them up and down within the box) how influential you believe it to be in facilitating the collaborative group process.

Additional information: CAP = community–academic partnership; Partner = all those involved in the planning session (e.g., BANA, Moms, University researchers, the facilitator Sara Santarossa)

FACILITATING FACTORS	Present
_____ Trust between partners (e.g., Partners have faith in the honesty, integrity, reliability, and/or competence of one another. Partners are comfortable sharing because they believe that the sensitive information that they provide in the collaboration will remain in the group.)	
_____ Respect among partners (e.g., Partners honor and value one another's opinions. Partners are careful to ensure that each member is able to share his or her beliefs.)	
_____ Shared vision, goals, and/or mission (e.g., Partners share the same identified vision or values. Partners identify the same goals or mission for CAP.)	
_____ Good relationship between partners (e.g., Partners work well together, group cohesion, strong reciprocal relationship, get along well, or like each other.)	
_____ Effective and/or frequent communication (e.g., Partners engage in ongoing communication that is open and respectful. Communication that encompasses personal and professional matters.)	
_____ Well-structured meetings (e.g., Meetings are held with satisfactory or effective frequency. The logistics of the meetings facilitate productivity, satisfaction, effectiveness, partnership, opportunities to	

interact. The style of the meeting is satisfactory)

_____ Clearly differentiated roles/functions of partners (e.g., Each partner has a specific role in the group that contributes to its progress. CAP has a specific group structure with different roles for different partners.)

_____ Good quality of leadership (e.g., A person with strong and experienced leadership skills. A leader who is open, listens, and takes suggestions into consideration. A leader cares about members of the group.)

_____ Effective conflict resolution (e.g., Conflicts are discussed and resolved openly by partners. The team develops as it deals with problems, tensions, and frustrations.)

_____ Good initial selection of partners (e.g., Selecting the "right" people to be a part of the collaborative group. The personality characteristics of partners contribute to the success of the CAP.)

_____ Positive community impact (e.g., Partners perceive the group as having/will have a positive impact on the community.)

_____ Mutual benefit for all partners (e.g., All partners benefit from the group's progress. Benefit may be different, but all receive some benefit.)

On the left hand side, there is a list of HINDERING FACTORS (Items):

A. DRAG and DROP the HINDERING FACTORS (Items) into the box on the right that you believe were "present" during the collaborative group process.

B. For each factor you selected as "present," RANK (from highest to lowest by moving them up and down within the box) how influential you believe it to be in hindering the collaborative group process.

Additional information: CAP = community–academic partnership; Partner = all those involved in the planning session (e.g., BANA, Moms, University researchers, the facilitator Sara Santarossa)

HINDERING FACTORS	Present
_____ Excessive time commitment (e.g., Partners leave the group, want to leave the group, or the CAP does not function well because the time the partners have to spend collaborating is too large.)	
_____ Excessive funding pressures or control struggles (e.g., Partners struggle over control of funding. CAP experiences external pressures from funding sources related to decisions, CAP outcomes, or its progress.)	
_____ Unclear roles and/or functions of partners (e.g., Many or all of the partners do not know what their role in the group is supposed to be. Partners are not assigned any roles and, therefore, do not know how they can best contribute to the CAP.)	
_____ Poor communication among partners (e.g., CAP has limited or unclear methods of communication. Partners experience difficulty maintaining communication.)	
_____ Inconsistent partner participation or membership (e.g., There is inconsistent or fluctuating partner attendance at meetings. CAP membership is inconsistent. There is attrition or turnover in partnering agencies/ organizations or individuals.)	
_____ High burden of activities/ tasks (e.g., Some, many, or all members are dissatisfied	

with the amount of work they have to do in order to sustain the CAP. Partners are dissatisfied because the tasks they have to complete are boring, expensive, not meaningful, or otherwise upsetting.)

_____ Lack of shared vision, goals, and/or mission (e.g., There are unclear or undefined vision, goals, values or mission of the CAP. Partners have different agendas/vision for the CAP.)

_____ Differing expectations of partners (e.g., Struggles emerge because not all members expect the same structure, procedures, and/or outcomes.)

_____ Mistrust among partners (e.g., Partners do not have faith in one another's honesty, integrity, reliability, and/or competence of one another. Partners are uncomfortable sharing because they believe that the sensitive information that they provide in the CAP will not remain in the group.)

_____ Lack of common language or shared terms among partners (e.g., Partners lack common terms or definitions related to the topic of interest or work of the CAP. Partners lack a shared understanding of the terms used.)

_____ Bad relationship (e.g., Partners do not value each other's opinions. Partners make no effort to ensure that each member is able to share his or her beliefs.)

_____ Lack of community impact (e.g., Partners have perceptions that the group will not have/did not have a positive or meaningful impact on the community.)

_____ Lack of mutual benefit (e.g., Not all members benefit equally from the group's progress.)

What was the most useful or effective part of the planning session(s) for you?

_____

_____

_____

_____

_____

What changes would make the planning session(s) more effective?

_____

_____

_____

_____

_____

Additional comments about the facilitator or the planning session(s)?

_____

_____

_____

_____

_____

VITA AUCTORIS

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	University of Windsor, MHK in Applied Human Performance, Windsor, ON, 2015