NIH Public Access
Author Manuscript
J Marriage Fam. Author manuscript; available in PMC 2015 October 01.

Published in final edited form as:
J Marriage Fam. 2014 October 1; 76(5): 1047–1062. doi:10.1111/jomf.12135.

Diet and Exercise in Parenthood: A Social Control Perspective

Corinne Reczek, **Mieke Beth Thomeer**[*], **Amy C. Lodge**[**], **Debra Umberson**[***], and **Megan Underhill**

Corinne Reczek: reczek.2@osu.edu

Department of Sociology and Department of Women's, Gender, and Sexuality Studies, The Ohio State University, 238 Townshend Hall, 1885 Neil Avenue Mall, Columbus, OH 43210-1222

[*]Department of Sociology, University of Alabama at Birmingham, HHB 460, 1720 2nd Ave. South, Birmingham, AL 35294-1152

[**]Department of Sociology, University of Texas at Austin, CLA 4.608, Austin, TX 78712

[***]Department of Sociology, University of Texas at Austin, CLA 2.708B, Austin, TX 78712

[****]Department of Sociology, University of Cincinnati,1018 Crosley, Cincinnati, OH 45221-0378

Abstract

Previous work on social control—the direct and indirect regulation of an individual's health behaviors by others—suggests that parent–child relationships promote healthy diet and exercise. Yet parenthood is associated with less healthy diet and exercise patterns. The authors investigated this paradox by examining social control processes in 40 in-depth interviews with mothers and fathers. They found that parenthood involves social control processes that both promote and compromise healthy behavior, contributing to contradictory perceived effects of parenthood on health behavior. Moreover, the dynamics of social control appear to unfold in different ways for mothers and fathers and depend on the child's gender and life stage, suggesting that gender and age dyads are central to understanding the seemingly contradictory consequences of parenthood at the population level. These articulations of gendered social control processes provide new insight into the consequences of the gendered organization of parenthood for diet and exercise.

Keywords

diet; exercise; gender; parenthood

Social control refers to direct, purposeful attempts to monitor and regulate another's health behavior and indirect internalization of norms and meanings of a social role that influence health behaviors (Tucker, Klein, & Elliott, 2004; Umberson, 1987). Theoretical work suggests that family ties such as marriage and parenthood promote healthy diet and exercise through social control processes (Umberson, 1987), yet empirical evidence tends to show that parenthood—in particular, parenting school-age children—is associated with less healthy diets (e.g., consumption of fewer fruits and vegetables) and less exercise (Aschemann-Witzel, 2013; Bellows-Riecken & Rhodes, 2008; Brown, Heesch, & Miller, 2009; Hamilton & White, 2010; Nomaguchi & Bianchi, 2004). In the present study we explored this paradox with one of the first empirical investigations of social control

NIH-PA Author Manuscript
NIH-PA Author Manuscript
NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

processes in parenthood. Given the social fact that most people become parents (Umberson, Pudrovska, & Reczek, 2010) and that diet and exercise are strongly and independently associated with morbidity and mortality risk (Breeze, Clarke, Shipley, Marmot, & Fletcher, 2006; Kant, Schatzkin, Graubard, & Schairer, 2000), a clear understanding of how social control processes shape parents' diet and exercise is necessary for both public health efforts and scholarship on family dynamics.

Social control processes are highly gendered (Reczek & Umberson, 2012; Umberson, 1992), and the meanings and experiences of parenthood, diet, and exercise differ for men and women (DeVault, 1991; Douglas & Michaels, 2004). Therefore, we theorized that social control processes regarding diet and exercise will unfold in different ways for mothers and fathers. Furthermore, the effects of parenthood on health behaviors appear especially salient when children are of school age (approximately 6–17) given that this parental stage is characterized by the most time- and energy-intensive obligations to shape children's health (see Umberson et al., 2010, for an overview). As children age into adulthood (i.e., age 18 and older), the meanings and obligations of parenthood change but remain salient. Few studies, however, have examined the effects of parenting adult children on parents' diet and exercise (Birditt & Fingerman, 2012). We analyzed in-depth interviews with mothers and fathers ($N = 40$) to articulate the social control processes experienced by parents of school-age and adult children. Our qualitative data are uniquely suited to address three specific questions. First, how do parents perceive social control processes as shaping their diet and exercise? Second, how are these perceived processes similar or different for mothers and fathers? Third, how do these perceived processes differ when parenting school-age and adult children (i.e., across life stages)?

Background

Theorizing Gendered Direct Social Control Processes in Parenthood

Nearly all previous studies on direct social control in parenthood have focused on parents' attempts to regulate school-age children's exercise and diet through direct social control processes (e.g., telling children to play outside and to eat their vegetables; Baxter, Bylund, Imes, & Scheive, 2005). Few studies have gone beyond this unidirectional dynamic to explore how direct social control from children—adult or school age—may matter for parents' health behaviors. The receipt of direct social control from children is theoretically most likely for parents of adult children (Umberson, 1992). Previous research has demonstrated that direct social control efforts from social networks that include adult children promote the healthy behavior of adults in later life; however, this work has not isolated adult children from other network members and thus cannot determine the specific processes that characterize children's direct social control efforts (Laroche & Snetselaar, 2011; Tucker et al., 2004; Williams, 2004). It is also plausible that school-age children attempt to regulate their parents' diet and exercise habits as they become more aware of healthy behavior norms through school, media sources, and parents themselves (Backett-Milburn & Harden, 2004; Backett-Milburn & Jackson, 2012).

Of note is that direct social control from both adult and school-age children may not promote healthy habits. Research on social control in marriage suggests that direct efforts to

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

promote another's health can undermine healthy behaviors and in fact promote unhealthy behaviors, most often when social control efforts involve criticism (Rook, August, Stephens, & Franks, 2011). Furthermore, because both adult and school-age children, especially daughters, tend to have closer relationships and more frequent contact with their mothers than their fathers (Greenfield & Marks, 2006; Kalmijn, 2007; Milkie, Bierman, & Schieman, 2008), we expected that children's social control attempts are more likely to be directed at mothers than fathers.

Theorizing Gendered Indirect Social Control Processes in Parenthood

Indirect social control processes—the internalization of norms and meanings associated with a social role (e.g., feelings of obligation and responsibility) that shape health behavior (Lewis & Rook, 1999; Novak & Webster, 2011; Umberson, 1992)—are theorized to be present in parenthood; these indirect social control processes may in turn influence parents' diet and exercise. Indirect social control in parenthood has received relatively little empirical attention; however, we suggest that indirect social control may be both health promoting and health deterring for parents' exercise and diet in two primary ways.

First, indirect social control may promote healthy behaviors. A central component of the parenthood role includes the responsibility to provide a stable, healthy, and enriching environment for children (Backett-Milburn, Airey, McKie, & Hogg, 2008). For example, public discourses around healthy family environments mandate that children conform to medically endorsed diet and exercise habits (U.S. Maternal and Child Health Bureau, 1992). Parents' perceived obligation to enhance children's healthy behaviors may in turn promote parents' own healthy behaviors through, for example, resource sharing (e.g., shared meals; Spink, Strachan, & Odnokon, 2008). Parenthood further includes the expectation that parents will provide emotional and financial support to children across the life course (Birditt & Fingerman, 2012). In response to this expectation, parents may attempt to enhance their longevity through healthy diet and exercise (Arendell, 2004; Avison & Davies, 2005; Hays, 1996; Milkie, 2011; Umberson & Gove, 1989). Parents' perceived obligation to provide a healthy environment for children and increase their own longevity may be especially salient when children are of school age due to the fact that child care responsibilities are more intensive and because parents have increased control over children's behavior at this stage (Bird & Rieker, 2008; Birditt & Fingerman, 2012). These indirect social control norms may persist even when children are adults because parents and adult children tend to share instrumental, emotional, and economic resources (Backett-Milburn, Wills, Roberts, & Lawton, 2010; Story, Kaphingst, Robinson-O'Brien, & Glanz, 2008; Suitor, Sechrist, Gilligan, & Pillemer, 2011).

The potential positive consequences of indirect social control processes for parents' diet and exercise are likely gendered and depend on life stage. Women shoulder the bulk of child care and responsibility for the health of school-age children because of the demands of an "intensive mothering" ideology (Arendell, 2004; Bird, 1997; Bird & Rieker, 2008), and they have more contact and emotional closeness with their children at all ages than do fathers (Birditt & Fingerman, 2012; Coltrane, 2000; Gottzen, 2011; Suitor et al., 2011). As a result, these indirect social control processes may be more salient for the diet and exercise habits of

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

mothers than fathers. Of note, however, is that fathers may feel obligated to be more involved in physical activities, especially sports, with their school-age children because of notions of masculinity (Eggebeen & Knoester, 2001; Gottzen & Kremer-Sadilk, 2012; Knoester, Petts, & Eggebeen, 2007; Pleck & Masciadrelli, 2003; Roy, 2006; Shows & Gerstel, 2009). For example, Grzywacz and Marks (1999) found that perceived obligation to both school-age and adult children was associated with more exercise for men, but less exercise for women. In summary, both mothers and fathers may experience benefits from obligations to children's well-being at all ages, but because of the gendered structure of parenthood these benefits may operate in gendered ways as children age.

Second, indirect social control may be health deterring when parenting norms add to parents' stress burden in ways that promote unhealthy habits dependent on gender and life stage. For example, parents, especially mothers, face a perceived moral obligation to promote their school-age children's mental and social well-being, particularly in the face of contemporary norms of "successful" child rearing related to concerted cultivation and accomplishment (Hamilton & White, 2012; Hays, 1996; Lareau, 2003). This obligation may increase time demands, resource limitations, and overall stress levels, especially for mothers of school-age children (Backett-Milburn et al., 2010; DeVault, 1991; Duncan & McAuley, 1993; Hays, 1996), potentially undermining healthy behaviors (Almeida, 2005; Kiecolt-Glaser & Newton, 2001; Macht, 2008; Nomaguchi & Bianchi, 2004; Oliver, Wardle, & Gibson, 2000; Olsen, Strawderman, Hinton, & Pearson, 2003). This effect may be exacerbated for parents who have few economic and social resources (Bird & Rieker, 2008; Pechey et al., 2013), especially single and/or working mothers who experience pronounced time pressures and economic disadvantage coupled with the expectations of intensive-mothering ideology (Backett-Milburn et al., 2008; Backett-Milburn, Wills, Gregory, & Lawton, 2006; Harden, MacLean, Backett-Milburn, & Cunningham-Burley, 2012). Fathers may also experience increased stress burden due to the obligation to provide for children financially as provider and breadwinner, contributing to worse health habits.

As children age into adulthood, parents' leisure time and resources increase (Henderson, Bialeschki, Shaw, & Freysinger, 1996) and expectations of support and obligation to children decrease, perhaps allowing parents to devote more attention to their own diet and exercise. Thus, indirect social control processes may become less relevant for parents' health behavior as their children age into adulthood. Alternatively, adult children may heighten stress, especially for mothers, if they experience problems (e.g., joblessness, physical health problems; Kalmijn, 2013; Mitchell & Lovegreen, 2009). A stressful relationship with an adult child may in turn contribute to a parent's less healthy behavior (Greeno & Wing, 1994; Laitinen, Ek, & Sovio, 2002).

The Present Study

Taken together, the previous research points to the presence of social control in parenthood but has yet to empirically articulate how direct and indirect social control processes promote or deter healthy diet or exercise patterns in the context of parenthood. To fill this gap, we analyzed qualitative in-depth interview data to identify specific social control processes that shape diet and exercise—for better or worse—in parenthood. We further explored whether

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

these processes are similar or different for mothers and fathers and across life stages when children are of school age or adults.

Method

In the present study we analyzed data from the Relationships and Health Habits over the Life Course project, which included 60 in-depth interviews conducted between 2008 and 2009 by the first, second, and fourth authors, with institutional review board approval, in a large southwestern U.S. city. The main purpose of each semistructured interview was to obtain narratives on how social ties shape health habits (e.g., diet, exercise) over the life course, with equal numbers of Black and White men and women in the sample (15 people in each racial/gender group). Respondents were recruited through a variety of methods. Flyers were posted in racially and socioeconomically diverse areas of the city, calls for participants were sent out to local professional and community-based (e.g., neighborhood groups) email listservs, and various organizational contacts were developed (e.g., Kiwanis Club and African American Chamber of Commerce). Snowball sampling from these various recruitment efforts yielded the remaining participants. Interviews lasted, on average, 1.5 hours and were digitally recorded in the respondent's home or at university offices. The interviews were professionally transcribed.

Analytical Sample Composition

The original sample included both parents and nonparents. Because we were interested in health behavior in parenthood, the analytical sample for this study included only respondents who reported ever parenting a child, including stepparents and foster parents ($N = 40$; 17 men, 23 women). This reduced the original sample size from 60 to 40. The median household income of the analytical sample was $43,500 (range: $0–$120,000). Educational levels ranged from less than a high school diploma ($n = 2$) and high school diploma ($n = 2$) to postgraduate degree ($n = 7$); the majority of respondents had undergraduate degrees ($n = 18$) or had attended some college ($n = 11$). Fourteen respondents were married, 18 were divorced, five had never been married, two were widowed, and one was in a cohabiting relationship at the time of the interview. Respondents were, on average 54 years old, and children were, on average, 25 years old at the time of the interview (excluding children for whom age data are missing). Respondents had an average of 2.5 children (range: 1–6). The average age at first birth was 24 (range: 17–37). This study focused on data of parents with school-age and/or adult children; we chose on these age groups because children younger than school age are likely unable to provide direct social control over parents' healthy behavior and because we did not reach saturation on our analytical themes for children younger than school age. Twenty-seven parents in our analytical sample self-identified as Black, and 13 self-identified as White. We conducted analyses to identify the role of race in social control processes, but these did not reveal any systematic patterns. Therefore, we spotlight our findings on the gender and age of the child, with some discussion of economic disadvantage. Our data are retrospective; retrospective data are used routinely in qualitative research to demonstrate perceptions of individual experiences such as the perceived consequences of parenthood on health and well-being (e.g., Allen & Pickett, 1987; Reczek

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

& Umberson, 2012). This approach also allowed respondents to reflect on how different stages of parenthood influenced health behaviors.

Interview Protocol

Each interviewee was asked to describe whether—and, if so, how—they thought their social relationships shaped their health behaviors, including diet, exercise, body weight, sleep, and substance use, from childhood to the present day. For example, respondents were asked a series of questions such as, "Tell me about times when your diet changed," and "Were there times when you attended to your diet more than others?" The interviewer would then ask follow-up questions to ascertain additional information about parenthood, such as, "Did your eating habits/exercise habits change at all after you had children, and if so, how?" Interviewers allowed respondents to discuss what they perceived were important social ties and health behaviors; however, if a key social tie (e.g., child, spouse) or health behavior (e.g., diet, exercise) was not brought up, respondents were subsequently prompted to discuss that specific behavior or social tie. There is always a potential for overestimation of effects due to latently leading questions during semistructured interviews (Esterberg, 2002); however, we found that nearly all respondents brought up changes in exercise and diet as a result of parenthood without being prompted. We did not define or dictate the meaning of "healthy" or "unhealthy" diet or exercise; instead, we relied on respondents' subjective interpretations of the meaning of healthy diet and exercise.

Data Analysis

We took a multistaged standardized approach to analyzing qualitative data that emphasized the dynamic construction of codes for the purpose of developing analytical and theoretical interpretations of data (Silverman, 1997). Inductive reasoning primarily guided the analysis, wherein conceptual categories were identified as they emerged from the transcripts, not from predetermined categories. However, because the analysis focused on uncovering social control processes, a theoretical understanding of social control was used as a guide to identify the presence and operation of direct and indirect social control (e.g., Lewis & Rook, 1999; Umberson, 1987, 1992). In line with a standard approach to qualitative data analysis, the first four authors read the transcripts two or more times to ensure understanding of the content of the interviews; thereafter, the authors developed a three-step coding process for the purpose of developing analytical and theoretical interpretation of data (Charmaz, 2006). First, each of the first four authors conducted line-by-line categorization of textual data in order to summarize and identify data that related to parenthood, diet, and exercise (e.g., "diet change" or "becomes parent"). We performed intercoder reliability between the initial line-by-line coding scheme (Miles & Huberman, 1984) and developed a standardized codebook from these initial coding schemes to analyze data during subsequent analytic stages.

Second, the first author developed focused categories by connecting initial line-by-line codes. During this stage, general descriptions of how parents perceived parenthood as shaping diet and exercise at the broadest conceptual level were identified. In the third and final stage of analysis, the first author examined how these descriptive categories related to one another on a theoretical level, as well as how categories varied by the gender of the parent and gender and age of the child. The first author systematically analyzed how focused

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

codes formed patterns in the data across the sample. The descriptive codes were then analyzed in connection with broader conceptualizations of direct and indirect social control. Through this process, indirect and direct social control themes were identified, elaborated, and extended. Some pieces of data fit closely with previous theorizations of direct and indirect social control processes and thus were coded in those categories (Rook et al., 2011; Umberson, 1992). Other pieces of data were coded as direct social control or indirect social control and subsequently refined into concepts that extend previous aspects of social control (e.g., echo control). In addition, gender, social class, and age dynamics were highlighted at this stage, wherein the focused codes were placed into gender categories and child's age categories. Themes and subthemes were developed from this final stage of analysis, as detailed below. Theoretical saturation is integral to our analytical approach (Bowen, 2008; Strauss & Corbin, 1998). We analyzed our data prior to the end of data collection to determine that the sample size was sufficient for theoretical saturation. Theoretical saturation was achieved once no new themes regarding parenthood and health behavior emerged and when data for existing themes were sufficient in terms of both depth and breadth (Bowen, 2008; Charmaz, 2006). This ensures that our findings are valid and complete for a non-representative, non-population–based sample (Bowen, 2008; Charmaz, 2006).

Results

Respondents' descriptions of parenthood, diet, and exercise were analytically coded under the broad conceptual categories of direct social control and indirect social control. Subthemes under these two major categories demonstrate in-depth gendered social control processes that shift as children age. Different quotes from the same respondent are typified in multiple categories in this analysis; therefore, the themes below are not mutually exclusive but reflect the range of responses provided by respondents.

Direct Social Control

The findings revealed two direct social control processes that shape parents' diet and exercise: (a) direct social control from adult daughters and (b) cooperative social control with adult daughters. Respondents viewed both of these processes as primarily health promoting.

Direct Social Control From Adult Daughters—Fifteen mothers and two fathers described how adult children, mainly daughters, made direct social control efforts to improve their exercise and diet. Mabel, a 54-year-old married mother of three adult daughters who had been sedentary most of her adult life and recently experienced concerns about high blood pressure, illustrated direct control efforts, saying, "My girls really want me to get healthy so they encourage me to exercise." When asked if she exercised with them, Mabel said that she does "when they are home." Rosa, a 63-year-old mother of an adult daughter and son who had recently taken an interest in eating well and exercising to reduce her dependence on medication, explained how her adult daughter attempts to control her eating and exercise habits:

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

> When I got divorced … I just didn't have any appetite at all. I wouldn't exercise and I just wouldn't eat. [My] daughter was the one that pointed that out to me that you have to eat something. "When was the last time you ate?" "I don't remember. This morning?" "Did you eat last night?" … So she would put me in the car and we would go and get something (to eat). And she would try to say to me even when I was sitting here not eating, "Mother come go to the gym with me."

A minority of parents (n = 3 mothers) noted that the absence of direct social control from adult sons (but not adult daughters) prevented them from pursuing healthy diets and exercise. For example, Darcy, a 78-year-old widowed mother of a deceased daughter and four adult sons, discussed how she enjoys swimming for exercise but does not have access to a pool. When asked whether her adult sons promoted her health habits, she responded, "No, they don't do that. Stan and Nancy have their own pool. I think they swim every day. I've never been over there." Darcy illustrated the potential for her son to provide her with access to his pool and the opportunity to exercise, but she was frustrated because they have failed to do so.

Social control efforts were made nearly exclusively by adult daughters toward their mothers. However, Jerry, a 55-year-old married father of two adult sons, an adult daughter, and one school-age son, was a notable exception. Jerry was interested in improving his diet and exercise habits to avoid health problems and was one of the two men in this sample who described receiving social control from an adult son:

> My oldest son … was on this health kick for awhile. He was telling me about it … how he would get off work and he would go straight to the gym, how he would work out and he started to teach me about different ways to fix food, to be healthy…. And he started educating me on a lot of things, on why you feel like this and why this happened. I started listening.

This counterexample of Jerry receiving social control from his son is an exception to general patterns but serves as an indicator that although social control processes occur primarily between women, it may also occur between men.

Cooperative Direct Social Control With Adult Daughters—In a second direct social control subtheme, five mothers typified interactions with adult daughters as demonstrating what we term *cooperative* direct social control. Cooperative direct social control occurred when both the mother and the adult daughter performed direct social control. Margie is a 70-year-old divorced mother of three adult daughters. When her children were school age, she tried to maintain a healthy diet for both herself and her daughters. As her daughters aged into adulthood, however, both she and they performed cooperative social control:

> I think it's a mutual feedback in a lot of respects. My middle daughter is almost a vegan, and she will fix things that are different than what I would fix, and I find I like them and I will try them …. [like] edamame. I have never eaten that until I had a salad and I tried it and wow, that is good. So I'm still learning about good health habits, all the time. I read an awful lot and they do, too. So it's kind of an exchange. I subscribe to several health letters, read stuff on the Internet, read stuff in the paper … and I share what I found out and they sometimes do the same with me.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

As this quote from Margie illustrates, this subtheme demonstrates how social control processes take a cooperative form in mother–adult daughter dyads.

Indirect Social Control

Our findings reveal that indirect social control processes shaped parents' diet and exercise in both health-promoting and health-deterring ways. These primary gendered themes and subthemes are described next.

Indirect Social Control as Health Promoting—The theoretical construct of indirect social control suggests that parenthood, like all familial roles, is embedded with shared meanings of "good" motherhood and fatherhood that influence parental health behavior (Elliott, Powell, & Brenton, 2013). More than half of the mothers and fathers in this study described at least one of three primary notions of "good" parenting that in turn promoted parents' healthy behavior: (a) *sense of responsibility*, (b) *active together*, and (c) *echo control*. Parents described these themes primarily in regard to parenting school-age children, with some parents describing these processes as continuing as children aged into adulthood.

Sense of responsibility: About one quarter of both mothers and fathers said that a sense of responsibility toward their school-age children improved their health habits. Margie said the following about raising three school-age daughters as a divorced mother:

> We could have peanut butter sandwiches every night or eat out. Or I could cook and I could make a decent meal for us and I thought, maybe that's the way we need to go because nobody else was going to do it for us … I was the responsible one and I needed to do it.

Allen, a 78-year-old divorced father of five adult children who exercised regularly and ate healthy foods, described how fatherhood led him to be healthier because of a sense of responsibility: "I would have been a different person. The reality that [fatherhood] imposed on me drove my whole outlook and my aspirations and my efforts to make sure I took care of her [first-born daughter]." For Allen and other parents in this sample, this sense of responsibility meant feeling compelled to take better care of themselves by exercising and eating healthier.

A majority of mothers and fathers in this sense-of-responsibility theme further suggested that they altered their health habits specifically because of a sense of responsibility to be healthy enough to take care of their school-age children, as well as to be healthy enough to live into old age so as to continue to be there for their children. This sense of responsibility overlapped with an ideal of longevity, a goal that remained central even as their children aged into adulthood. Andrew, a 51-year-old married father of an adult daughter, an adult son, and a school-age daughter, had recently been trying to eat healthier and exercise more to improve his health and lose weight: "[Parenting] keeps me more aware that I need to really watch what I eat, to be able to be around longer, to be behind [my younger daughter] more." Donald, a 56-year-old divorced father of one adult son and daughter, shared the following:

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

> I would have gone out for hamburgers and fries more often than I did after I got married. Suddenly it matters how much health I'm in. When you're 25 and single … it doesn't really matter to anybody but you. But when you have a wife and two kids that you're providing for … it matters what kind of health I'm in.

Whereas men related this change to understandings of themselves as breadwinners, women saw this shift as important because of their position as the primary caregiver in the domestic sphere. Anna, a 52-year-old divorced mother of an adult son and daughter, noted,

> I took better care of myself after I had children because I had to be okay for them. And I never was one to tell them they had to do something that I didn't do. I always cooked good meals.

Mabel, introduced above, was concerned about her high blood pressure and weight and described how being a mother reinforced an emphasis on her health, especially her eating habits: "My children and my husband believe that the family would never run if I was not around so that's why they are always telling me 'Mom, you are the nucleus that holds everything together. You must be here.'" Even as Mabel's children transitioned to adulthood, they continued to tell her that she must be healthy for the good of the family. These respondents suggested that the responsibility of parenthood means living into old age to continue the parent–child relationship, and they felt they must work to be healthier via healthy exercise and diet to reach this goal.

Active together: In this second subtheme, 12 fathers, but no mothers, described how the meaning and expectations of being a father was synonymous with being active with children, in turn positively shaping men's exercise habits. This is indirect social control in that these men exercised with their children because being active with children embodied notions of "good" fatherhood. Mitch, a 48-year-old married father of an adult son who has been very active his entire life, situated his exercise as part of fathering:

> I've always been exercising. If anything, having a child … helped to reinforce some things because I like to do physical stuff with my son. We would go bike riding a lot. We would go camping, walking. I would try to … get in a workout by being with him rather than having to go to the gym by myself or running by myself.

Like Mitch, Jerry has been physically active most of his life. Jerry explained that exercising with his daughter—age 19—was a bonding activity for them: "Out of all the boys, my daughter is the most athletic, and we spend a lot of time in the gym together. That has kept me healthier by being around her and doing those types of things."

Of note is that the norms of fatherhood changed for some men ($n = 4$) after their children became adults. Mark, a 57-year-old married father of two adult children, described how he exercised when his son was an active adolescent because it was fun and part of fatherhood; however, after his son graduated from high school, Mark stopped exercising: "So I was active all the way through his high school and then after he graduated high school and went on to college … I just slowly stopped doing it." This suggests that as children age into adulthood, some fathers exercise less because of the loss of indirect social control processes, previously central to their exercise habits.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Echo control: Our findings revealed a third indirect social control process that shaped parents' diet and exercise habits that we labeled *echo control*. Nearly all mothers, and one quarter of fathers, in our sample described regularly exerting direct control over the diet and exercise of their children. Parents perceived that these direct social control efforts improved their children's health habits, yet they also perceived these efforts as inadvertently and indirectly echoing back onto parents' own health behavior in health-promoting ways. Although parents perceived this echo effect as promoting healthy behavior regardless of parents' gender and children's age, the contexts and consequences of the echo effect were more pronounced for mothers than fathers and lessened as children aged.

In the first type of echo control, four fathers and nine mothers attempted to affect their children's health habits by serving as an explicit example with their own good health habits (i.e., role modeling). Karl, a 61-year-old single father of five adult children and one school-age child, noted that "I just stay active in their lives as far as the lifestyle they lead. So, more than preaching to them, I can lead by example." Donald, introduced above, similarly said of parenting his children when they were school age: "I probably ate a little bit better … I wanted the kids to eat good and so I would eat good … So I would eat more vegetables, because I wanted to model for them." Kimberly, a 51-year-old divorced mother of a school-age daughter, pointed, like others, to the importance of setting a good example through her own diet and exercise: "My daughter, I set a good example for her. It's always in my mind to walk the talk. Don't be a hypocrite." This was most commonly described when discussing school-age children, but a minority of mothers described this dynamic continuing as children aged into adulthood. Overall, these mothers and fathers described a direct link between their own health habits and their children's health habits, which in turn prompted greater attention to being a good example.

Second, about one quarter of the women, but only two men, described an additional echo dynamic wherein parents attempted to make their children healthier and inadvertently adopted healthier habits as a consequence. This dynamic emerged when children were school age and shifted as children became adults. As Paula, a 42-year-old married mother of a school-age daughter who has diabetes and high blood pressure and is currently trying to improve her health and lose weight, said,

> I think [motherhood] has changed my health habits for the better. When I first got married I started out trying to be a good wife and trying to make meals all the time. But me and my husband ate out a lot. [When my daughter was born] I knew I had to make sure that she had square meals. I am always trying … to figure out how to give her square meals because she doesn't like a lot of vegetables. I have to come up with different ways [for her] to eat more vegetables.

Beverly, a 58-year-old divorced mother of three adult daughters who had recently improved her diet because of health concerns associated with diabetes, also described working to make her school-age daughter healthier; in turn, Beverly felt these actions promoted her own healthy diet. She described how this dynamic changed as her daughter transitioned into adulthood:

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

> I've tried to [say] "Let's do this together." She comes over in the evening, and she'll call me from her work and say, "I'll pick up something." She'd love to pick up a pizza, and I'll say, "I'll fix us a salad." She would rather she be in charge of what we eat. But if I control it, she knows she's going to have to eat healthy. When you love somebody, you want them to stay healthy and you want to keep them around for years … You can make suggestions or you can be an example, and you can encourage them and try to help them.

This dimension of echo control—wherein a priority is placed on keeping a child healthy but secondarily promotes parents' healthy behavior—was highly gendered, likely because mothers emphasized their role in influencing the health of their children. Fathers in this sample rarely described this dynamic. However, as an important related theme, two fathers suggested that the social control their wives exerted for their young children echoed back to influence fathers' health. Thus, women's social control efforts directed toward children boosted both mothers' and fathers' habits. For example, Mitch, described above, shared the following:

> [My wife] … was very good about making nutritious meals for our son. We probably ate healthier after he was born. She was concerned about having him in great health. Instead of us just living off … junk food … she actually started making nutritious, healthy meals.

Of note is that although a majority of mothers described echo control processes continuing after their children left home, three mothers described that after their children left the home they exercised less and ate less healthy diets because they no longer provided direct social control for their children. For example, Sharon, a 53-year-old married mother of two adult children (one son and one daughter) who previously took great care to make sure her children ate well, which promoted her own healthy eating habits, said that when her children became adults "It changed the eating habits tremendously … We're always eating out now. I could go a whole week and never turn on my oven." In turn, Sharon said that she has gained weight as a result. In this sense, mothers viewed the loss of echo control as detrimental to their health.

Indirect Social Control as Health Deterring—The second subtheme in this section indicates that parenting school-age children sometimes interfered with parents' healthy diet and exercise habits. Both mothers and fathers described parenthood as health deterring via indirect social control; however, they did so in very different ways as elucidated in the following two subthemes: (a) motherhood as self-sacrificing and (b) changing social networks and fatherhood. Both themes emerged from parents' descriptions of parenting school-age children, but these processes were sometimes sustained and sometimes altered as children age into adulthood.

Motherhood as self-sacrificing: Over half of mothers (n = 16) in the sample believed that mothering school-age children necessitated sacrificing their own health; internalization and self-enforcement of the meaning and norms of motherhood as self-sacrificing is one dimension of indirect social control that deterred mothers' healthy diet and exercise. This was intensified for mothers who experienced work–family conflict, for single and divorced

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

mothers, and for mothers who had insufficient economic resources. In particular, the meaning of motherhood indirectly led to stress and structural obstacles, which in turn limited the time and resources available to exercise and eat healthy. Men did not describe sacrificing their own health habits for their children or experiencing parenting-related time constraints that adversely affected their diet and exercise habits.

For many women, perceptions of being a good mother—which included working to give their children resources—served as a primary justification for why they did not exercise or eat healthy foods, especially when they worked outside the home. Jennifer, a 35-year-old full-time worker and divorced mother of a school-age son, who described wanting to exercise more and eat a healthier diet to lose weight and improve her health, said that norms of motherhood contributed to time constraints that limited exercise:

> I just focused on him. I didn't worry about my own self. It was just all about Isaac and everything was about doing stuff for Isaac, whatever Isaac needed, whatever Isaac wanted. Not necessarily am I going to take time out for me and work at the gym. I'm either dropping [him] off at practice, picking [him] up from practice. Or he has a game on top of everything else I do. It's really kind of ridiculous. I have two meetings for work. One at six thirty, one is at seven thirty tonight.

Anna, described above, described feeding her children healthy meals but because of time constraints did not eat a healthy diet herself:

> I would just eat what I had, like what I could eat on the run. I still fed my kids. But I just didn't always stick to what they were doing. Maybe I would be so busy. I would be out and grab something and eat later… be on a different schedule from them. That was always hard. I would take extra work … and type at home. So I would feed my kids, put them to bed and get to work … I would be up until 2 in the morning. I would be hungry and eat more.

The work–family tension was especially deleterious for women who described economic hardship and were divorced or single. For example, Katherine, a 28-year-old single mother of one school-age daughter, said she would like to exercise more to lose weight but that being a single mother curtailed these efforts: "Exercise totally stopped because … I didn't have anybody … to watch [my daughter]." Katherine did not have the financial resources to hire a child care worker.

Changing social networks and fatherhood: Five men described how fatherhood was associated with a change in the meaning and structure of their lives in ways that decreased social interactions, including those that involved exercise. Donald, introduced above, was very active as a young adult as well as since getting divorced. However, he said that getting married and having kids did not allow him to exercise the way he desired:

> You have different friends, so that's what happened … my social life changed [when I had kids]. The way I spent my day and engaged myself with other people suddenly was completely different. [Exercise] was a social event and not a conscious effort…. And then it got replaced by other social centers, which were music, family.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Jared, a 31-year-old married father of three school-age children, said he would like to exercise more to lose weight and improve his health but described the difficulties with this goal:

> I probably quit going to the gym. We moved out [to suburbs] … I don't have my friends stopping out here, "Hey, let's go play ball." [My wife] wanted me home. She works full time … She doesn't want to be stuck at home with the kids all the time.

Because of the indirect social control associated with the meaning and norms that arise with fathering school-age children, Jerry, Donald, and other men described the loss of friends due to the privilege of family responsibility, with a main consequence being less exercise.

Discussion

In the present study we aimed to identify and elaborate on specific social control processes that shape parents' diet and exercise habits when parenting school-age and adult children. Although previous research has typified social control as a health behavior–enhancing process, a large body of research shows that parenthood is associated with a less healthy diet and less exercise (Bellows-Riecken & Rhodes, 2008; Hamilton & White, 2010; Nomaguchi & Bianchi, 2004). Our results provide new insight into this paradox, revealing that both indirect and direct forms of social control are key to understanding how parenthood sometimes promotes and sometimes deters healthy diet and exercise habits. Our results also challenge a reductionist view of parenthood—and social control processes—as wholly bad or good for healthy behaviors and further suggest that previous quantitative research has underemphasized the health-prompting aspects of social control due to the more potent health-deterring aspects of social control. Qualitative analyses revealed the nuanced ways that the gendered organization of parenthood at different life stages involves direct and indirect social control processes that both promote and compromise healthy diet and exercise. Most strikingly, the form and consequences of direct and indirect social control processes demonstrated in our interviews advance a theoretical understanding of not only gendered social control processes but also the gendered organization and consequences of parenthood across life stages (Bird & Rieker, 2008; Grzywacz & Marks, 1999; Simon, 1995).

Regarding direct social control, we found that direct social control processes occurred in relationships with both school-age and adult children and are highly gendered. Most notably, mothers described how adult daughters (but rarely sons) attempt to enhance their diet and exercise through direct and cooperative social control processes (Reczek & Umberson, 2012; Suitor et al., 2011; Tucker et al., 2004). Cooperative social control is a synchronistic and mutual process of health behavior promotion between mothers, but few fathers, and adult daughters. Mothers, more so than fathers, described interconnected and reciprocal social control dynamics, likely because research shows they are emotionally, geographically, and instrumentally closer to their children—especially daughters—whereas notions of fatherhood emphasize less time- and emotionally intensive bonds with children (Noël-Miller, 2013; Suitor & Pillemer, 2006; Suitor et al., 2011). Thus, it may be that although mothers experience some health behavior–deterring indirect social control dynamics when

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

children are young, as we discuss below, they experience a delayed benefit from motherhood later in the life course. Of note is that fathers, and mothers with sons, do not experience these health-enhancing effects of direct social control, which may in turn explain population-based findings that parenthood does not enhance diet and exercise.

Although direct social control processes seem to enhance parents' health behaviors, indirect social control processes appear to most clearly promote but sometimes deter fathers' healthy behaviors and most clearly deter, but sometimes promote, mothers' healthy behaviors. These dimensions of indirect social control emerge in the context of normative gendered expectations to be a "good" mother relative to a "good" father (Coltrane, 2000; DeVault, 1991). Mothers and fathers described an increased responsibility to stay healthy when parenting school-age children, demonstrating indirect social control processes as health promoting. In particular, we identified the concept of echo control, which reveals how mothers' often intensive and time-consuming efforts to promote both school-age and adult children's health behavior echo back to mothers' own health behavior in positive ways. The conceptualization of echo control contributes to a new way of thinking about the complex and gendered ways that family ties shape health behaviors. Still, time and economic constraints likely play a major role in preventing mothers from carrying out the health-promoting aspects of echo control found in this theme, given that attempts to prioritize children's own health behavior are a positive influence only when mothers have time for their own healthy behavior after caring for their children's health (Bianchi, 2000; Mattingly & Bianchi, 2003). Although fathers did not consistently describe this echo effect, an echo benefit appears to "spill" over onto fathers when they are married to women who routinely attempt to regulate their children's health behavior. Much past research has concluded that heterosexual marriage is more beneficial to the health of men than to the health of women (Kiecolt-Glaser & Newton, 2001; Liu & Reczek, 2012); our study suggests that this may be amplified when marriage intersects with parenthood, because married fathers receive additional health benefits via women's social control efforts directed toward children.

Notions of "good" fatherhood operate as indirect social control, seemingly benefiting fathers' exercise habits. Fathers' perceived responsibility to have healthy diet and exercise habits for the sake of their school-age children appear to be tied to hegemonic notions of the provider role (Connell, 2000); good fathers are those who are healthy enough to provide materially for their children. Fatherhood is further positioned to bolster the masculine enterprise of exercise (Courtenay, 2000; Reczek, 2012). Exercise time with friends is often supplanted by exercise time with children, framing father–child exercise as part and parcel of good fatherhood. Herein, we theorize that the very meaning of being a father is in part linked to being active with school-age children (Doucet & Merla, 2007; Grzywacz & Marks, 1999) via what we call active fatherhood. Active fatherhood is in stark contrast to, and reliant on, norms of feminine and "passive" motherhood (Hays, 1996; Simon, 1995), wherein fathers' participation and emphasis on their school-age children's sports and physical play activities are prioritized over, and depend on, mothers' housework and routine child care (DeVault, 1991; Doucet & Merla, 2007).

Indirect social control also appears to negatively affect healthy behaviors, especially for mothers of school-age children. Whereas active fatherhood distances fathers from the

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

feminized labor of routine child care by emphasizing masculinized sport within the realm of fatherhood (Doucet, 2006; Gottzen & Kremer-Sadlik, 2012), these same dynamics situate "good" motherhood as synonymous with sacrificing personal health for the well-being of school-age children (Simon, 1995). This norm of motherhood (i.e., intensive motherhood), along with the structural and material conditions of parenting school-age children, resulted in several mothers in this sample disregarding their own diet and exercise needs in the interests of their children's needs (Elliott et al., 2013; Hays, 1996; Lareau, 2003). Mothers with more constraints and demands (e.g., working mothers), as well as mothers who described deficient economic and social resources (e.g., single mothers) appear to experience a heightened healthy behavior disadvantage, in line with past research (Williams, Sassler, Frech, Cooksey, & Adoo, 2011). These findings reveal a new consequence of Hochschild's (1989) "second shift," wherein an emphasis on intensive mothering conflicts with efforts to find time to promote or even sustain mothers' own health, especially for mothers in disadvantaged contexts. The gendered division of household labor means that mothers are charged with the responsibility of cultivating "successful" children; success in this context includes normative diet and exercise prescriptions that stem from increased moral panic and neoliberal discourses regarding the obesity epidemic (Bird & Rieker, 2008; Farrell, 2011; Hays, 1996; Saguy, 2013). This finding reveals a crucial health-deterring aspect of indirect social control that aligns with population-based research demonstrating that mothers have less healthy diets and exercise than childless women (Bellows-Riecken & Rhodes, 2008; Brown et al., 2009; Hamilton & White, 2010).

Past survey-based studies have tended to conclude that parenthood is detrimental to diet and exercise. The present qualitative study led us to conclude that parents appear to experience both health-promoting and health-deterring effects of social control processes. We suggest two reasons for this seeming contradiction. First, our study was retrospective and subjective, and thus respondents may have overlooked the long-term negative consequences of these social control processes, focusing instead on short-term positive results. For instance, although women appear to be advantaged by cooperative social control processes, this type of direct social control may also contribute to expectations placed on women to enhance their adult children's health, creating stress and reducing women's overall health and well-being (Reczek & Umberson, 2012). Because the effects of health behaviors accumulate over time, future research should examine whether and how the long-term effects of health-behavior–deterring social control processes during the prime child-rearing years may have long-term health consequences; these effects may not be reversed by cooperative direct social control efforts that occur later in the life course. Second, survey-based research is limited by closed-ended questions and therefore does not allow for respondents to provide their own subjective understandings of the relationships between parental status and particular health and health behavior outcomes; neither does survey methodology allow for respondents to discuss possible pathways that lead to these relationships, focusing only on overall patterns. Thus, if parenthood both positively and negatively affects health behaviors, the stronger of these effects will be reflected in the results. Qualitative data are uniquely able to show variation and complexity that quantitative data are not, namely, how there exist more complex processes that both promote and deter health not shown in survey research.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Some limitations of this study provide new avenues for future research. First, we analyzed first-hand accounts of how exercise and diet patterns shift over time and in response to changing family relationships, yet these narratives are subject to retrospective bias (Esterberg, 2002). Future research should use observational or daily diary studies to observe the objective effects of social control on parents' health behavior. Second, we call for future work to further explore how the consequences of parenthood vary by shifting gendered norms of parenthood. For example, questions remain regarding whether women's increased labor force participation (U.S. Census Bureau, 2012), men's increased participation in child care, and increasing rates of single fatherhood (Hook, 2006; Sayer, 2005) will shift social control dynamics and thus the health consequences of parenthood. It is notable that fathers rarely discussed work–family, economic, or single-parent constraints on their health habits in our sample—a finding generally consistent with previous research on the organization of parenthood in marriage and divorce (Seltzer, 1994; Simon, 1995) and on work–family conflict (Glavin, Schieman, & Reid, 2011). This may, however, reflect the specific cohort we sampled (Mattingly & Bianchi, 2003). Third, we found that perceptions of economic disadvantage appear to influence the dynamics of social control and, in turn, health behavior. However, we obtained a measure of parents' socioeconomic status only at the time of the interview and thus did not have lifetime measures of economic resources. Future research should collect data that are better suited to addressing socioeconomic diversity across the life course in order to clarify these effects. Fourth, exercise and diet (A. C. King et al., 2000), as well as the dynamics of parenthood (V. King, Harris, & Heard, 2004), differ by race/ethnicity. We conducted a systematic analysis regarding racial differences in key social control processes around parenthood and found that these patterns were consistent for White and Black respondents; however, future research should continue to examine potential racial and ethnic differences in social control processes in parenthood.

Conclusion

This study sheds light on the paradox that parenthood is associated with a less healthy diet and less exercise, whereas social control theory suggests that parenthood would promote diet and exercise (Aschemann-Witzel, 2013; Bellows-Riecken & Rhodes, 2008; Brown et al., 2009; Hamilton & White, 2010; Nomaguchi & Bianchi, 2004). Most notably, we suggest that although social control in parenthood can clearly enhance diet and exercise in important ways, it can also have overpoweringly negative consequences; these positive and negative dimensions are limited to the particular life course and gendered positions that are further contextualized within social, environmental, and economic constraints. This study not only fills a critical gap in theory and research on the operation of both direct and indirect social control in parenthood, but also extends research by revealing previously unexplored health consequences of the gendered organization of parenthood that has different meanings and forms across the life course. Our research highlights that parenthood is not unequivocally associated with better or worse health behaviors; instead, it is the gendered and life course contexts and structures of parenthood that matter for parents' health behavior in both health-promoting and health-deterring ways. We call for future research to further examine the consequences of family ties for health given shifting gendered and demographic terrains.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Acknowledgments

This research was supported in part by a National Institute on Aging Grant RO1 AGO26613, Debra Umberson, Principal Investigator.

References

Allen KR, Pickett RS. Forgotten streams in the family life course: Utilization of qualitative retrospective interviews in the analysis of lifelong single women's family careers. Journal of Marriage and the Family. 1987; 49:517–526.

Almeida DM. Resilience and vulnerability to daily stressors assessed via diary methods. Current Directions in Psychological Science. 2005; 14:64–68.

Arendell T. Conceiving and investigating motherhood: The decade's scholarship. Journal of Marriage and Family. 2004; 62:1192–1207.

Aschemann-Witzel J. Danish mothers' perception of the healthiness of their dietary behaviors during transition to parenthood. Journal of Family Issues. 2013; 34:1335–1355.

Avison WR, Davies L. Family structure, gender, and health in the context of the life course. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2005; 60:S113–S116.

Backett-Milburn K, Airey L, McKie L, Hogg G. Family comes first or open all hours? How low paid women working in food retailing manage webs of obligation at home and work. The Sociological Review. 2008; 56:474–496.

Backett-Milburn K, Harden J. How children and their families construct and negotiate risk, safety and danger. Childhood. 2004; 11:429–447.

Backett-Milburn K, Jackson S. Children's concerns about their parents' health and well-being: Researching with ChildLine Scotland. Children & Society. 2012; 26:381–393.

Backett-Milburn KC, Wills WJ, Gregory S, Lawton J. Making sense of eating, weight and risk in the early teenage years: Views and concerns of parents in poorer socio-economic circumstances. Social Science & Medicine. 2006; 63:624–635. [PubMed: 16569470]

Backett-Milburn KC, Wills WJ, Roberts ML, Lawton J. Food, eating and taste: Parents' perspectives on the making of the middle class teenager. Social Science & Medicine. 2010; 71:1316–1323. [PubMed: 20692083]

Baxter LA, Bylund CL, Imes RS, Scheive DM. Family communication environments and rule-based social control of adolescents' healthy lifestyle choices. Journal of Family Communication. 2005; 5:209–227.

Bellows-Riecken KH, Rhodes RE. A birth of inactivity? A review of physical activity and parenthood. Preventive Medicine. 2008; 46:99–110. [PubMed: 17919713]

Bianchi S. Maternal employment and time with children: Dramatic change or surprising continuity? Demography. 2000; 37:401–414. [PubMed: 11086567]

Bird CE. Gender differences in the social and economic burdens of parenting and psychological distress. Journal of Marriage and the Family. 1997; 59:809–823.

Bird, CE.; Rieker, P. Gender and health: The effects of constrained choices and social policies. Cambridge, UK: Cambridge University Press; 2008.

Birditt, KS.; Fingerman, KL. Parent–child and intergenerational relationships in adulthood. In: Fine, MA.; Fincham, FD., editors. Handbook of family theories: A content-based approach. New York: Routledge; 2012. p. 71-86.

Bowen GA. Naturalistic inquiry and the saturation concept: A research note. Qualitative Research. 2008; 8:137–152.

Breeze E, Clarke R, Shipley MJ, Marmot MG, Fletcher AE. Cause-specific mortality in old age in relation to body mass index in middle age and in old age: Follow up of the Whitehall cohort of male civil servants. International Journal of Epidemiology. 2006; 35:169–178. [PubMed: 16284405]

Brown WJ, Heesch C, Miller YD. Life events and changing physical activity patterns in women at different life stages. Annals of Behavioral Medicine. 2009; 37:294–305. [PubMed: 19506989]

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Charmaz, K. Constructing grounded theory: A practical guide through qualitative analysis. London: Sage; 2006.

Coltrane S. Research on household labor: Modeling and measuring the social embeddedness of routine family work. Journal of Marriage and the Family. 2000; 62:208–233.

Connell, RW. The men and the boys. Berkeley: University of California Press; 2000.

Courtenay WH. Constructions of masculinity and their influence on men's well-being. Social Science & Medicine. 2000; 50:1385–1401. [PubMed: 10741575]

DeVault, ML. Feeding the family: The social organization of caring as gendered work. Chicago: University of Chicago Press; 1991.

Doucet, A. Do men father? Fathering, care, and domestic responsibility. Toronto, Ontario, Canada: University of Toronto Press; 2006.

Doucet A, Merla L. Stay-at-home fathering: A strategy for balancing work and home in Canadian and Belgian families. Community, Work & Family. 2007; 10:455–473.

Douglas, SJ.; Michaels, MW. The mommy myth: The idealization of motherhood and how it has undermined women. New York: Free Press; 2004.

Duncan TE, McAuley E. Social support and efficacy cognitions in exercise adherence: A latent growth curve analysis. Journal of Behavioral Medicine. 1993; 16:199–218. [PubMed: 8315646]

Eggebeen DJ, Knoester C. Does fatherhood matter for men? Journal of Marriage and Family. 2001; 63:381–393.

Elliott S, Powell R, Brenton J. Being a good mom: Low-income, Black, single mothers negotiate intensive mothering. Journal of Family Issues. 2013 Advance online publication.

Esterberg, KG. Qualitative methods in social research. Boston: McGraw-Hill; 2002.

Farrell, AE. Fat shame: Stigma and the fat body in American culture. New York: New York University Press; 2011.

Glavin P, Schieman S, Reid S. Boundary-spanning work demands and their consequences for guilt and psychological distress. Journal of Health and Social Behavior. 2011; 52:43–57. [PubMed: 21362611]

Gottzen L. Involved fatherhood? Exploring middle-class fathers' educational work. Gender and Education. 2011; 23:619–634.

Gottzen L, Kremer-Sadlik T. Fatherhood and youth sports: A balancing act between care and expectations. Gender &Society. 2012; 26:639–644.

Greenfield EA, Marks NF. Linked lives: Adult children's problems and their parents' psychological and relational well-being. Journal of Marriage and Family. 2006; 68:442–454. [PubMed: 17710218]

Greeno CG, Wing RR. Stress-induced eating. Psychological Bulletin. 1994; 115:444–464. [PubMed: 8016287]

Grzywacz JG, Marks NF. Family solidarity and health behaviors. Journal of Family Issues. 1999; 20:243–268.

Hamilton K, White KM. Identifying parents' perceptions about physical activity: A qualitative exploration of salient behavioural, normative and control beliefs among mothers and fathers of young children. Journal of Health Psychology. 2010; 15:1157–1169. [PubMed: 20472605]

Hamilton K, White KM. Social influences and the physical activity intentions of parents of young-children families: An extended theory of planned behavior approach. Journal of Family Issues. 2012; 33:1351–1372.

Harden J, MacLean A, Backett-Milburn K, Cunningham-Burley S. The "family–work project": Children's and parents' experiences of working parenthood. Families, Relationships and Societies. 2012; 1:207–222.

Hays, S. The cultural contradictions of motherhood. New Haven, CT: Yale University Press; 1996.

Henderson, KA.; Bialeschki, MD.; Shaw, SM.; Freysinger, VJ. Both gains and gaps: Feminist perspectives on women's leisure. State College, PA: Venture; 1996.

Hochschild, AR. The second shift: Working parents and the revolution at home. New York: Viking; 1989.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Hook JL. Care in context: Men's unpaid work in 20 countries, 1965–2003. American Sociological Review. 2006; 71:639–660.

Kalmijn M. Gender differences in the effects of divorce, widowhood and remarriage on intergenerational support: Does marriage protect fathers? Social Forces. 2007; 85:1079–1104.

Kalmijn M. How mothers allocate support among adult children: Evidence from a multiactor survey. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2013; 68:268–277.

Kant AK, Schatzkin A, Graubard BI, Schairer C. A prospective study of diet quality and mortality in women. Journal of the American Medical Association. 2000; 283:2109–2115. [PubMed: 10791502]

Kiecolt-Glaser J, Newton T. Marriage and health: His and hers. Psychological Bulletin. 2001; 127:472–503. [PubMed: 11439708]

King AC, Castro C, Wilcox S, Eyler AA, Sallis JF, Brownson RC. Personal and environmental factors associated with physical inactivity among different racial and ethnic groups of U.S. middle-aged and older-aged women. Health Psychology. 2000; 19:354–364. [PubMed: 10907654]

King V, Harris KM, Heard HE. Racial and ethnic diversity in nonresident father involvement. Journal of Marriage and Family. 2004; 66:1–21.

Knoester C, Petts RJ, Eggebeen DJ. Commitments to fathering and the well-being and social participation of new, disadvantaged fathers. Journal of Marriage and Family. 2007; 69:991–1004.

Laitinen J, Ek E, Sovio U. Stress-related eating and drinking behavior and body mass index and predictors of this behavior. Preventive Medicine. 2002; 34:29–39. [PubMed: 11749094]

Lareau, A. Unequal childhoods: Class, race, and family life. Berkeley: University of California Press; 2003.

Laroche HH, Snetselaar L. Rural parents and exercise: Children as barriers and motivators. Top Clinical Nutrition. 2011; 3:234–245.

Lewis MA, Rook KS. Social control in personal relationships: Impact on health behaviors and psychological distress. Health Psychology. 1999; 18:63–71. [PubMed: 9925047]

Liu H, Reczek C. Cohabitation and US adult mortality: An examination by gender and race. Journal of Marriage and Family. 2012; 74:794–811.

Macht M. How emotions affect eating: A five-way model. Appetite. 2008; 50:1–11. [PubMed: 17707947]

Mattingly MJ, Bianchi SM. Gender differences in the quantity and quality of free time: The U.S. experience. Social Forces. 2003; 81:999–1030.

Miles, MB.; Huberman, AM. Qualitative data analysis. Thousand Oaks, CA: Sage; 1984.

Milkie MA. Social and cultural resources for and constraints on new mothers' marriages. Journal of Marriage and Family. 2011; 73:18–22.

Milkie MA, Bierman A, Schieman S. How adult children influence older parents' mental health: Integrating stress-process and life-course perspectives. Social Psychology Quarterly. 2008; 71:86–105.

Mitchell BA, Lovegreen LD. The empty nest syndrome in midlife families: A multimethod exploration of parental gender differences and cultural dynamics. Journal of Family Issues. 2009; 30:1651–1670.

Noël-Miller CM. Repartnering following divorce: Implications for older fathers' relations with their adult children. Journal of Marriage and Family. 2013; 75:697–712.

Nomaguchi KM, Bianchi SM. Exercise time: Gender differences in the effects of marriage, parenthood, and employment. Journal of Marriage and Family. 2004; 66:413–430.

Novak SA, Webster GD. Spousal social control during a weight loss attempt: A daily diary study. Personal Relationships. 2011; 18:224–241. [PubMed: 21666854]

Oliver G, Wardle J, Gibson EL. Stress and food choice: A laboratory study. Psychosomatic Medicine. 2000; 62:853–865. [PubMed: 11139006]

Olson CM, Strawderman MS, Hinton PS, Pearson TA. Gestational weight gain and postpartum behaviors associated with weight change from early pregnancy to 1 year postpartum. International Journal of Obesity. 2003; 27:117–127. [PubMed: 12532163]

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Pechey R, Jebb SA, Kelly MP, Almiron-Roig E, Conde S, Nakamura R, Marteau TM. Socioeconomic differences in purchases of more vs. less healthy foods and beverages: Analysis of over 25,000 British households in 2010. Social Science & Medicine. 2013; 92:22–26. [PubMed: 23849275]

Pleck, JH.; Masciadrelli, BP. Paternal involvement: Levels, sources, and consequences. In: Lamb, M., editor. The role of the fathers in child development. New York: Wiley; 2003. p. 222-271.

Reczek C. The promotion of unhealthy habits in gay, lesbian, and straight intimate partnerships. Social Science & Medicine. 2012; 75:1114–1121. [PubMed: 22703888]

Reczek C, Umberson D. Gender, health behavior, and intimate relationships: Lesbian, gay, straight contexts. Social Science & Medicine. 2012; 74:1783–1790. [PubMed: 22227238]

Rook KS, August KJ, Stephens MAP, Franks MM. When does spousal social control provoke negative reactions in the context of chronic illness? The pivotal role of patients' expectations. Journal of Social and Personal Relationships. 2011; 28:772–789.

Roy KM. Father stories: A life course examination of paternal identity among low-income African American men. Journal of Family Issues. 2006; 27:31–54.

Saguy, A. What's wrong with fat?. New York: Oxford University Press; 2013.

Sayer LC. Gender, time and inequality: Trends in women's and men's paid work, unpaid work and free time. Social Forces. 2005; 84:285–303.

Seltzer JA. Consequences of marital dissolution for children. Annual Review of Sociology. 1994; 20:235–266.

Shows C, Gerstel N. Fathering, class, and gender: A comparison of physicians and emergency medical technicians. Gender & Society. 2009; 23:161–187.

Silverman, D. Qualitative research: Theory, method and practice. Thousand Oaks, CA: Sage; 1997.

Simon RW. Gender, multiple roles, role meaning, and mental health. Journal of Health and Social Behavior. 1995; 36:182–194. [PubMed: 9113142]

Spink KS, Strachan SM, Odnokon P. Parental physical activity as a moderator of the parental social influence–child physical activity relationship: A social control approach. Social Influence. 2008; 3:189–201.

Story M, Kaphingst KM, Robinson-O'Brien R, Glanz K. Creating healthy food and eating environments: Policy and environmental approaches. Annual Review of Public Health. 2008; 29:253–272.

Strauss, A.; Corbin, J. Basics of qualitative research: Techniques and procedures for developing grounded theory. 2nd ed.. Thousand Oaks, CA: Sage; 1998.

Suitor JJ, Pillemer K. Choosing daughters: Exploring why mothers favor adult daughters over sons. Sociological Perspectives. 2006; 49:139–161.

Suitor, JJ.; Sechrist, J.; Gilligan, M.; Pillemer, K. Intergenerational relationships in late-life families. In: Settersten, R.; Angel, J., editors. Handbook of the sociology of aging. New York: Springer; 2011. p. 161-178.

Tucker JS, Klein DJ, Elliott MN. Social control of health behaviors: A comparison of young, middle-aged, and older adults. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2004; 59:P147–P150.

Umberson D. Family status and health behaviors: Social control as a dimension of social integration. Journal of Health and Social Behavior. 1987; 28:306–319. [PubMed: 3680922]

Umberson D. Relationships between adult children and their parents: Psychological consequences for both generations. Journal of Marriage and the Family. 1992; 54:664–674.

Umberson D, Gove WR. Parenthood and psychological well-being: Theory, measurement, and stage in the family life course. Journal of Family Issues. 1989; 10:440–462.

Umberson D, Pudrovska T, Reczek C. Parenthood, childlessness, and well-being: A life course perspective. Journal of Marriage and Family. 2010; 72:612–629. [PubMed: 21869847]

U.S. Census Bureau. America's changing labor force. 2012. Retrieved from http://www.census.gov/how/infographics/acs_infographic_eeo.html

U.S. Maternal and Child Health Bureau. Healthy Children 2000: National health promotion and disease prevention objectives related to mothers, infants, children, adolescents, and youth. Burlington, MA: Jones & Bartlett Learning; 1992.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Williams K. The transition to widowhood and the social regulation of health: Consequences for health and health risk behavior. Journals of Gerontology Series B: Psychological Sciences and Social Sciences. 2004; 59:S343–S349.

Williams K, Sassler S, Frech A, Cooksey E, Adoo F. Nonmarital fertility, union history and health at midlife. American Sociological Review. 2011; 76:465–486. [PubMed: 22199398]