

# A Review of the Literature on the Social and Economic Determinants of Parental Time

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**Abstract** Parental time has been identified as a key determinant in the healthy development of a child. The literature on this topic has rapidly increased in recent years and has revealed large variations in the amount of time that parents devote to their children, including variations over time and across social and economic subgroups of the population. This paper synthesizes research devoted to parental time to provide a more succinct understanding of its significance and its variations. Beginning with the measurement issues associated with parental time research and the theoretical foundations, the paper goes on to document the social and economic determinants of parental time. It concludes with a discussion of the theoretical implications of the findings and suggestions for future research.

**Keywords** Child care · Family policy · Parenting · Time use

## Introduction

The time that parents devote to their children is key to their healthy development; educationally, socially and psychologically (Belsky 1991; Belsky and Eggebeen 1991; Bianchi and Robinson 1997; Bianchi 2000; Mullan Harris and Marmer 1996; Snarey 1993; Yeung et al. 2000; Zick et al. 2001). Yet, there are major differences among parents in the time that they can devote, and that they actually devote, to their children. While specific social and economic factors may constrain parents' time availability, personal preferences and

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other factors may also affect the way in which parents allocate their time, including the amount of time they spend with their children.

There has been an increasing interest in the study of the time use of families and children in the literature in recent years (Folbre et al. 2005; Gauthier et al. 2004; Hallberg and Klevmarken 2003; Milkie et al. 2004; Sayer et al. 2004). While this literature has pointed to sources of social and economic differentiation in parental time, it also tends to be fragmented and to focus mainly on specific subgroups of parents, for example, African American fathers (Ahmeduzzaman and Roopnarine 1992) (see also Baruch and Barnett 1981; Cooksey and Fondell 1996; Fisher et al. 1999; Ishii-Kuntz 1994; Marsiglio 1991; Pleck 1997; Radin 1994). This paper addresses this limitation by providing a comprehensive review of the literature on parental time and its related determinants.

Parental time, for the purposes of this review, refers to the amount of time, in hours and minutes, parents spend in childcare activities, including the provision of personal care for the child, playing with and reading to the child, talking with the child, transporting the child to and from different locations, and providing supervision. The literature makes reference to these many types of activities using a variety of terms. Most commonly, terms such as *involvement*, *engagement* and *active* childcare are used when referring to activities spent in direct interaction with the child (Lamb 1987; Marsiglio 1991; Pleck et al. 1986). Activities such as playing, talking, reading and providing personal care to the child fall under this category. The literature also uses the terms *accessibility* or *responsibility* when referring to activities that are less intensive than those captured under the heading of engagement. These so-called “passive” childcare activities nonetheless require the parent to be available to the child and are thus part of a parent’s time investment into the child (Lamb 1987; Marsiglio 1991; Pleck et al. 1986). In order to be as comprehensive as possible, this review includes studies that focus on all of the various forms of parental time.

The review was conducted by searching academic research databases with the keywords *time use*, *family or parent* in combination with *child*, *childcare*, *childrearing*, *parenting*, *family relations*, *household task behavior*, and *motherhood/fatherhood*, all limited to the years of 1979 to the first months of 2008. The academic databases searched included: Academic Search Premier, Expanded Academic ASAP, Social Sciences Abstracts, SocINDEX, and Sociological Abstracts. A secondary search of papers cited in the included papers was also undertaken in order to ensure comprehensiveness. Given that much of the literature comes from American studies, most of the results reported are based on American data, unless otherwise noted.

The review begins with a brief account of the theoretical foundations in the study of parental time and subsequently follows with a section on the methods used in the literature to measure parental time. It discusses the difficulties faced by researchers when attempting to measure parental time, and draws attention to differences in the estimates of parental time based on different instruments and methodologies. It then proceeds with a detailed review of the major determinants of, and variances in, parental time. Finally, the review concludes with a critique of the literature and draws attention to potential new avenues of research.

## Theoretical Foundations

Three main theoretical frameworks have been used in the literature to predict parental time investment in children: gender role and ideology theory; social and economic exchange

theory (including the relative resource perspective and time availability theory), and family systems theory. The discussion and criticism of these theories are, however, not the focus of this paper and will only be highlighted in order to help frame the findings presented within the review.

Of the more general family theories, gender role and ideology theories have been widely used in childcare and housework studies (Bianchi et al. 2000; Haas 1999). Gender role theory argues that attitudes and beliefs that mothers and fathers hold determine their contribution to parental time (Hofferth 2003). Society's expectations of what is appropriately male or female behavior are assumed to help form attitudes that can influence the division of labor within the home. As a consequence, specific behavior, such as the time that mothers and fathers spend with their children, can be said to be a symbolic enactment of the definition of gender relations within households (Bianchi et al. 2000). In contrast, gender ideology theory predicts that fathers with more egalitarian attitudes are more likely to spend time with their children, as compared to fathers with more traditional attitudes. Family history, cultural background and even socio-economic circumstances may dictate specific parental expectations and attitudes, and in turn the amount of time devoted to children. Child's gender may also play a role, with an increase in the time that parents spend with their same-sex child because this increased parental time may help foster traditional gender roles within the family (L. Lesnard 2001, Unpublished Manuscript).

Rooted in sociology and economics, social and economic exchange theories are two related theoretical perspectives that have also been used in the literature to explain individual differences in parental time. The relative resources perspective posits that the distribution of family work is determined by relative levels of income and education within a household. Higher levels of these resources translate into power to allocate responsibilities within the home to members of the household with fewer resources (Bianchi et al. 2000; Finley 1989). Together with social exchange theory, the economic exchange perspective takes a pragmatic approach to the division of labour within the home. Assuming that parents are rational actors, they will divide their responsibilities for work, children and the home in such a way that it optimizes the wellbeing of the family as a whole<sup>1</sup> (Finley 1989; McFarlane et al. 2000; W. J. Yeung and F. Stafford 2003, Unpublished Manuscript). As a result, mothers and fathers will specialize in the activities that provide the most efficiency and functionality for their family (Becker 1991). Given that men traditionally hold the advantage in the paid labor market, they are more likely to specialize in providing financial security for the family, while women will take greater responsibility for the affective domains. Therefore, not only will mothers spend more time with their children, but activities such as feeding, bathing and caring for the child are also predicted to be performed mainly by mothers. In contrast, fathers are predicted to spend less time with their children and participate in activities that take advantage of their relatively more powerful positions in the labor market.

More specific to parental time, the time availability model holds that the time parents devote to their children is dependent upon the amount of time they have available, as well

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<sup>1</sup> There has been much discussion in the literature about this rationality assumption; however this debate is beyond the scope of this paper. Interested readers are referred to Folbre (1994) for a discussion of the criticism of this assumption. In addition, other authors have also criticized the unitary assumption, i.e. the assumption that there is only one unique set of preferences per household; for example preferences regarding time allocation made by the household as a single unit (Bergstrom 1997).

as the time it takes to be responsible for children (Haas 1999). More specifically, the theory argues that parents make rational choices about the division of labor within the home based on their respective time availability (Hiller 1984). This theory thus predicts that unemployed mothers, as well as parents with more flexible schedules, will spend more time with their children as compared to employed parents or parents with less flexibility in their work schedules.

Finally, family systems theory argues that relationships within the family can impact relations with other family members (Belsky and Volling 1987; Cowan and Cowan 1987). Widely utilized in psychological studies, this theory contends that relations within one subsystem, such as the marital subsystem, can spill over and affect relations in another subsystem, such as the parent–child subsystem (Aldous et al. 1998). Poor marital quality, which is often characterized by negative exchanges between spouses, can lead to one or both spouses becoming less responsive and emotionally available to their children. Therefore, the marital relationship can become an important predictor of parental time spent with children.

## Measurement

Parental time has been measured in various ways in the literature including direct observation, stylized questioning, and time diary reports (described below). Some researchers have also constructed and used various scales and indexes of parenting engagement and involvement, most of them based on a series of stylized questions (Ahmeduzzaman and Roopnarine 1992; McBride and Mills 1993; Radin 1994; Volling and Belsky 1991). Below, a brief summary of each of these methods is provided along with an outline of their respective strengths and limitations.

Stylized questions refer to survey items in which respondents are asked to estimate the typical frequency and duration of specific activities over a fixed recall period (Fedick et al. 2005; Juster and Stafford 1991; Pleck 1979). For example, respondents may be asked to estimate the amount of time they devoted to children during the week prior to the survey, or the number of times a week that parents read to their child, or go on outings with their child. While widely used in the literature, this method is often criticized for its “social desirability” bias, that is, the respondents’ tendency to provide answers that present them in the best light. In the case of parental time, this would mean a tendency to overestimate the time actually devoted to children (Budig and Folbre 2004). Stylized estimates are also criticized for their inaccuracy in view of the respondents’ difficulty to recall their use of time over a long period of time (Robinson and Godbey 1997).

Time diaries, in contrast, require respondents to record or recall detailed activities over a 24-h period, either into set time intervals, such as every 15 min, or into free units of time with a self-set beginning and end time (Robinson 1991, 1996). Researchers often praise this method because respondents are not asked to focus on any specific activity, for instance on parental care or housework (Robinson 1991). As such, the general purpose of time-use surveys reduces the risk of social desirability, especially because respondents are asked to report their activities following real-time sequencing (Robinson and Bostrom 1994). In fact, most studies show that estimates of childcare are almost always higher when measured with stylized questions than with time diaries (Paille 1994; Sayer et al. 2004).

Parental time is, however, difficult to assess even with time diaries in view of its inherent simultaneous nature (Folbre and Yoon 2007). Childcare activities often take place

at the same time as other activities. Dialogue and interaction with the child while preparing a meal, for instance, means that parental time might not always be reported as the main activity. In order to address this issue, numerous time-use surveys have collected data on both primary and secondary activities; where secondary activities refer to those carried out at the same time as the primary activity. As research shows, the inclusion of secondary activities is important as it substantially increases estimates of parental time (Fedick et al. 2005). Research has shown that, on average, secondary activities make up between 30% and 35% of the total time that parents spend in childcare (Bianchi 2000; Budig and Folbre 2004; Robinson 2002; Zick and Bryant 1996).

Time use diaries are, however, much less successful in capturing supervision time or time during which parents are ‘simply’ available, that is when they are engaged in other activities, but could be called in at any time to help a child. As Budig and Folbre (2004) argue, childcare “is also a state of mind” (p. 59) and requires a lot of ‘on call’ time, which cannot necessarily be captured in primary or even secondary activities in time diaries. This may also partly explain why stylized estimates of parental time tend to be higher than those based on time diaries.

With regard to scales of parental time or engagement, they are most often products of a series of questions that are similar to stylized ones. For example, Radin’s (1994) Paternal Index of Child Care Involvement (PICCI) seeks to operationalize as many aspects of paternal involvement in children’s lives as possible with measures that tap physical and social responsibilities for the child, as well as the father’s involvement in decision making and availability to the child. Other scales related to parental engagement include the Interaction/Accessibility Time Chart and McBride’s Parental Responsibility Scale (Baruch and Barnett 1986; Lamb et al. 1988; McBride 1990; McBride and Mills 1993). For reasons of space, these various scales are not further discussed here. Interested readers are referred to Pleck (1997) for more information.

Given that methodological studies have demonstrated that time diaries provide greater measurement accuracy (Fedick et al. 2005; Folbre et al. 2005; Robinson 2002; Robinson and Bostrom 1994), we have given preference to research that uses time diaries when compiling our selection of studies and in selecting results to report in the paper. In some cases, we do report studies based on other types of data. We did so when the topic was relevant, documenting it accordingly. Measurement methods are therefore not further specified unless results differ when other methods are used.

What follows is a detailed account of the main variables that are expected theoretically, and/or that have been shown empirically, to affect parental time. The studies presented include a wide methodological variety in terms of their data collection methods (24-h diary or other), samples (nationally representative or sub-samples of parents of specific ethnicity/race/income group/gender and with children of specific ages), measures of parental time, and statistical methods used to analyze the data. In order to best account for this variety, for each of the reviewed variables we selected results that summarized the findings and that were consistent across studies, while noting any major discrepancies. These determinants have been grouped for the purpose of this review into four main categories: the demographic characteristics of the parents (gender, age, race/ethnicity and family structure), children’s characteristics, parents’ socio-economic characteristics (education, income, occupation), and parents’ values, norms and ideologies. It should be noted however, that complex interactions between various determinants mean that some determinants, gender for example, may be cited in more than one section.

## Individual Variations in Parental Time

### The Demographic Characteristics of Parents and Families

#### *Gender*

The fact that mothers devote more time to their children compared to fathers has been well documented in the literature (Abroms and Goldscheider 2002; Bianchi 2000; Hill et al. 2004; Sayer et al. 2004; Tausig and Fenwick 2001). It is usually explained with a reference to the norm in Western societies that childcare is typically a woman's responsibility. This norm has however, partly changed since the 1970s as a result of the paradigmatic shift in the culture of fatherhood with the emergence of the concept of the "involved father" (LaRossa et al. 2000; Pleck 1997; Sayer et al. 2004a). As a result, time devoted to childcare activities has become more evenly distributed between parents, especially in dual-earner households (Zuzanek 2001). In Canada, the time devoted to childcare by employed fathers reached approximately 75% of that reported by employed mothers in 1998, compared to 60% in 1986 (Zuzanek 2001). Similar trends have also been reported in other countries as well (Gauthier et al. 2004).

Research shows however, that even as fathers have increased their involvement with their children, the types of activities they engage in remain characteristically different than those of mothers. For instance, fathers tend to spend more time in more rewarding childcare activities such as playing and teaching (Craig 2006a; Darling-Fisher and Tiedje 1990; Grossman et al. 1988), while mothers spend more time in personal childcare activities such as bathing and feeding (Craig 2006a; DeStefano and Colasanto 1990; L. Lesnard 2001, Unpublished Manuscript; Renk et al. 2003; Sayer et al. 2004a). Mothers also spend almost twice as much time alone with their children and are more likely to experience "high intensity overlaps," that is caring for more than one child at a time (Budig and Folbre 2004). Indeed, Cooksey and Fondell (1996) show that when fathers spend time with their children, a consistent positive relationship exists with mothers' time, so that fathers are more likely to spend time with their children at the same time as mothers do, rather than by themselves (see also Budig and Folbre 2004).

#### *Age of Parents*

Most studies show that the age of parents does not seem to play a crucial role in determining the amount of time spent with children (Gustavus Philliber and Graham 1981), although some do show an effect (Hofferth 2001; Sayer et al. 2004a). Sanik's (1990) study of first-time parents shows that a 1-year increase in the age of mothers, increases time spent in childcare by about 3 min per day. Other research instead seems to suggest an overall U-shaped pattern to describe the effect of parents' age on time with children. Parents aged 25–34 show the highest quantity of time devoted to children, as compared to younger and older parents (Miller and Mulvey 2000; Sayer et al. 2004a). Sayer et al. (2004a) argue that older parents are prone to a selection effect because they are more likely to have planned the birth of their children and may therefore be more inclined to spend time in childcare. However, older parents may also have increased demands placed on their time, due to more advanced careers (Sayer et al. 2004a).

### *Ethnicity/Race*

Frequent studies refer to African American parents as being more authoritarian and authoritative than Euro-American parents (Bulcroft et al. 1996). This suggests that African American parents may exhibit less warmth and engagement toward their children, but more control until the child reaches adolescence and increasingly becomes the responsibility of the community (Bulcroft et al. 1996; Hofferth 2003; McLoyd 1990). Statistically however, apart from the larger use of support networks, African American parents are very similar to Euro-Americans in terms of parental time, once demographic and economic factors such as family size, family structure, employment and income are taken into account (Hofferth 2003). On the other hand, because black fathers are less likely to reside with their biological children, are more likely to suffer from financial constraints and have less flexible work schedules, they tend to spend less time with their children (Hofferth 2003; Golden 2008). McLoyd's (1990) review article also shows that African American parents, who have insecure jobs or struggle economically, are more likely to display negative parenting behaviors and spend less time with their children. In contrast, Eriksen et al. (1979) show that African-American men actually share in housework and childcare responsibilities to a greater extent than Euro-American men.

In contrast, the time allocation of Hispanic parents tends to be affected very much by their strong familial orientations with a focus on the collective family. In particular, research shows that they tend to use relatives as caregivers for their children to a larger extent than any other ethnic group (Delgado and Canabal 2006; Fuller and Holloway 1996). They are also significantly more likely to share meals and engage in leisure activities with their children. As a result, Hispanic children tend to spend more time with parents, as compared to non-Hispanic children (Bulcroft et al. 1996; Fuller and Holloway 1996; Hofferth 2001, 2003).

Race and ethnicity, however, interact with other social and economic variables in complex ways. Once some of these variables are taken into account in multivariate analyses, most of the differences between ethnic groups disappear.

### *Marital Relationship*

As theorized by family systems theory, the quality of the marital relationship can be posited to have an impact on parental time. However, studies testing this theory have found mixed results. Deutsch et al. (1993) found that measures of the marital relationship such as marital consensus, cohesion and satisfaction were not significantly related to mothers' and fathers' ratings of paternal participation in childcare tasks. Similarly, Aldous et al. (1998) found that both mothers and fathers' marital happiness was not significantly associated with estimates of the time fathers spend in physical care of the child, general time with the child, and talks about worries with the child. On the other hand, Harris and Morgan's (1991) study does find a significant positive relationship between mothers' reports of marital satisfaction and their children's reports of paternal involvement. Brody et al. (1986) instead found that mothers who report less satisfying marriages seem to be more involved in teaching their children.

### *Family Structure*

While there are few differences in the parental time allocation patterns of cohabitating and married parents (Kalenkoski et al. 2007), the literature consistently shows that single or



divorced parents spend less time with their children as compared to biological two-parent families (Baydar et al. 1999; Furstenberg Jr. and Winquist Nord 1985; Marsiglio et al. 2000; Robinson 1989; Thomson et al. 1994; Zuzanek 2001). For example, although the time spent with children in single-mother families has remained constant, around 21 h per week over the period of 1981–1997 in the United States (Sandberg and Hofferth 2001), it is still about 10 h fewer per week than the time that is spent with children in two-parent families (Hofferth 2001). Research also shows that single mothers are more likely to place their children in non-family care than mothers in two-parent families (Sandberg and Hofferth 2001; Smith et al. 1998) and that children of single mothers tend to watch more television as compared to children in two-parent families (Goff Timmer et al. 1985; Sandberg and Hofferth 2001). Some authors refer to possible differences in the time allocation preferences of single and married mothers in order to explain these differences (Douthitt et al. 1990), while others refer to differences in time availability and needs (Sandberg and Hofferth 2001). In particular, some studies find no statistically significant differences in the allocation of time to children by single and married mothers after controlling for employment status (Rowland et al. 1986; Sanik and Mauldin 1986).

When researchers distinguish between stepparents and remarried biological parents, the conclusions become more complicated. Overall, stepparents are reported to spend the least amount of time with their children, when compared to other parent types (Cooksey and Fondell 1996; Thomson et al. 1994; Thomson et al. 1992). In contrast, remarried custodial fathers report parenting activities that are similar to those reported by stepmothers. On average, they show the highest number of hours with children, as compared to all other types of fathers (Cooksey and Fondell 1996; Thomson et al. 1994).

### *Children's Characteristics*

Most research shows that mothers devote more time to childcare activities in larger families as compared to smaller ones. Sayer et al. (2004a) show that each additional child in a family is associated with a 6-min per day increase in mothers' childcare time. Hofferth (2001) suggests, however, that while the overall time allocation to children may be higher in larger families, the increase is mostly in passive rather than in direct childcare. As Baydar et al. (1999) show, mothers with two or more children spend more time in passive supervision and less time in interactive care with their children than mothers with smaller families. In fact, Nock and Kingston (1988) show that mothers with larger families tend to spend more time in "double duty", that is, watching their children while completing household chores. While some may argue that the time that mothers devote in larger families is 'diluted' among several children (Zajonc and Markus 1975), Budig and Folbre (2004) point out that developmentally rich activities, such as reading and giving instruction, can often benefit more than one child at a time.

Sex of the child is also significant in determining the amount of time that parents spend with their children. Overall, the literature suggests that parents spend more time with a same sex child. As Cooksey and Fondell (1996) show, fathers with only daughters or with both sons and daughters are less likely to engage in activities with their children as compared to fathers with only sons. Fathers also tend to spend more time in solo interactive care when their children are of the same sex (Barnett and Baruch 1987; L. Lesnard 2001, Unpublished Manuscript; Marsiglio 1991; Zick and Bryant 1996). Similarly, daughters tend to receive more attention from their mothers as compared to sons (Hofferth 2001; Zick and Bryant 1996).



Research is also consistent in finding that parents spend more time with younger children than with older ones. Zick and Byrant (1996) find that the age of the youngest child is the most important variable in predicting time spent by parents with children. As Silver (2000) points out, activities with preschoolers are characterized by personal care (feeding, washing, dressing, medical), and therefore tend to be very time intensive. She shows that time devoted to personal care drops significantly when children reach school-age, at which point activities like helping, teaching and reading emerge (see also Aman-Back and Bjorkqvist 2004; Barnett and Baruch 1987; Baydar et al. 1999; Goff Timmer et al. 1985; Harris and Morgan 1991; Hofferth 2001; Miller and Mulvey 2000; Sanik 1990). On the other hand, qualitative literature suggests a contrary pattern where fathers engage in more activities with their children when they are older because they have more in common (Daly 1996). In an interview of 32 fathers from intact families, fathers stated that it was easier to spend time with older children, rather than younger children, because of the opinion that there “was a convergence of interests” as children age (Daly 1996). This perceived increase in time, however, does not appear in the quantitative time diary studies.

## Parents' Socioeconomic Characteristics

### *Employment Status*

Perhaps not surprisingly, research show that, on average, children of dual-earner families spend less time with their mothers as compared to children whose mothers are not employed (Bianchi 2000; Hofferth 2001; Sandberg and Hofferth 2001). The difference is however, relatively small and, more importantly, tends to affect mainly time spent in passive supervision rather than time spent in direct engagement with children (Hofferth 2001; Nock and Kingston 1988). It is estimated that an additional hour of paid work for a mother results in only a 3-min decrease in direct childcare per day (Zick and Bryant 1996). Working parents will instead forgo activities such as sleep and television watching to contend with the time squeeze brought on by hours of paid employment (Bianchi 2000; Craig 2007; Hill and Stafford 1985). Moreover, qualitative interviews with children of working parents show that they are much more interested in their parents' mood and disposition when they arrive home from work, as opposed to how many hours they are actually working (Galinsky 2000).

The effect of employment hours on parental time is complex and varies depending on the employment status of the spouse, and the parent's gender. While an increase in father's work hours usually results in an increase in the mother's childcare time, the reverse is not always found (Kitterød and Pettersen 2006). For example, in a Swedish study, Hallberg and Klevmarken (2003) found that variations in the wife's work hours had no effect on the husband's childcare time. In contrast, other researchers have found that an increase in mothers' work hours is associated with an increase in time spent with children by fathers (Bonney et al. 1999; Hofferth 2003). When detailed time diaries are used, Nock and Kingston (1988) show that when a mother's employment is separated into different time periods, every hour worked by the mother after 6:00 p.m. is associated with an increase in the father's time with children of about 18 min. A wife's work in other periods in the day does not affect the husband's time with children.

Employment hours also affect the types of activities shared by parents and children. Cooksey and Fondell (1996), show that longer work hours for fathers decreases the probability of sharing meals with children. Studies have also shown that evening work

has a negative impact on leisure time with children for both mothers and fathers (Rapoport and Le Bourdais 2008). For example, Nock and Kingston (1988) found that evening work for fathers results in less television watching with children, whereas mothers' evening work increases the time fathers spend watching television with their children.

The co-scheduling of work is also important to consider as it has implications for parental time. When spouses' work times do not overlap with each other, fathers are more likely to increase the time that they spend in childcare (Brayfield 1995; Hofferth 2001; Presser 1988). L. Lesnard (2001, Unpublished Manuscript) finds the more off-scheduling between a husband and wife, that is when parents are working on different schedules, the less time is spent in activities where both spouses and children are present.

### *Household Income and Personal Wages*

Mixed results are found with regard to the impact of income on the time that parents spend with their children. Nock and Kingston (1988) show that a \$1,000 increase in family income slightly reduces the time mothers spend with their children by about 2 min per day, while it does not influence father's time. Robinson (1989) also finds that American women in the highest household income bracket in 1985 spent less time caring for their children as compared to those women in lower income brackets. However, Yeung and Stafford (2005) argue that both mothers and fathers spend less time with their children when mothers earn a larger proportion of the family income.

With regard to wages, time diary data from the 1997 American Panel Study of Income Dynamics, indicates that although a father's wage level is not a significant factor in predicting how much time he will spend with his children, it does show a negative association with maternal childcare time (Hofferth 2001). Meanwhile, Connelly and Kimmel (2007) showed that higher wages for working mothers are associated with more time caring for children, only when they are employed during nonstandard work hours. It is important to keep in mind, however, that poverty and financial distress usually negatively affect the ability that parents have to provide support, nurturance and control and not just the amount of time they are spending with their children (Demo and Cox 2000; Elder et al. 1992).

### *Type of Occupation*

Few studies have examined the impact of the type of occupation or the occupational prestige or ranking on parental time. Gerson's (1993) study shows that fathers in lower white-collar jobs and in professional jobs have the highest daily childcare participation rates, while fathers employed in blue collar, middle management, and self-employed positions have the lowest. Furthermore, Menaghan and Parcel's (1991) study from the National Longitudinal Survey of Youth in the U.S. suggests that the nature of the work itself has an impact on parenting behavior. More specifically, the study found that mothers in occupationally stimulating or complex roles are more likely to provide cognitively enriching home environments for their children.

### *Parents' Educational Level*

Numerous studies have found that highly educated parents tend to spend more time with their children than their less educated counterparts (Bianchi et al. 2004; Chalasani 2007;

Craig 2006b; Hofferth 2001; Marsiglio 1991; Sayer et al. 2004a, b). Overall, Gauthier et al. (2004), found that in Canada, education can account for a 40–50-min difference in time spent with children per day, with large differences by sex and employment status. Three main reasons have been suggested in the literature to explain the association between parental education and increased time with children. Firstly, it has been argued that better-educated parents recognize the influence that time investments have upon a child's development and therefore they make a concerted effort to increase their time commitments (Cooksey and Fondell 1996; Kalenkoski and Foster 2008; Marsiglio 1991; Sayer et al. 2004b). Secondly, better educated parents are more likely to be critical of substitutes for parental care. As Lehrer and Kawasaki show in their 1985 study, American parents with high levels of education are more likely to use care from organized facilities and babysitters as opposed to care by relatives. Finally, highly educated parents are more likely to conform to societal norms and standards of “involved parenting” (Craig 2006b; Sayer et al. 2004b) and “involved fatherhood” (Hofferth 2001).

While the amount of time parents spend with their children increases with levels of education, the types of activities parents engage in with their children also differ. For instance, college-educated parents tend to spend more time reading to children, playing with them and helping them with their homework than non-college educated parents (Cooksey and Fondell 1996; Goff Timmer et al. 1985; Hill and Stafford 1985; Kalenkoski and Foster 2008; Marsiglio 1991; Sayer et al. 2004a). Higher educated fathers are also more likely to share a meal with their children as compared to lower educated fathers (Cooksey and Fondell 1996). Kitterød (2002) finds that more educated mothers tend to spend a larger proportion of their time with children in active care and concentrated focus activities. Activities such as reasoning and negotiating with children, and personally supervising children's play are more likely to be performed by higher educated mothers. These activities are much more time intensive and therefore may help to account for the positive association between education and parental time (Kitterød 2002; Sayer et al. 2004b). In addition, highly educated mothers spend more time in child-related travel time (Hill and Stafford 1985). This could either signal that these mothers are enrolling their children in more extra-curricular activities, or that they are more likely to live in suburban residences which require increased driving time.

### Parents' Values, Norms and Ideologies

Given the changes that have taken place in the family in the last 50 years, it is understandable that ideology plays an important role in the time that parents spend with their children. The literature most notably shows the impacts of ideology on fathers' time, but it has also been shown to have an important impact on mothers' time as well. Research shows that mothers with more egalitarian attitudes tend to have family work more evenly divided in their household, including childcare (Barnett and Baruch 1988; Baydar et al. 1999; Blair and Lichter 1991; Gunter and Gunter 1991).

With the increase of women in the workforce, as well as the emergence of smaller families, there exists an increasing awareness of the need for fathers to spend more time with their children. Daly (1996) states in his qualitative study that for fathers, this new ideology of spending increased time with children has been in response to today's cultural conditions, rather than inherited from their own fathers. As men become more egalitarian and liberal in their sex role attitudes, they increase the amount of time that they spend with their children (Hofferth 2003; Ishii-Kuntz and Coltrane 1992). However, as LaRossa

(1988) contends, there still exists a gap between the “culture of fatherhood” and the “conduct of fatherhood,” so that mothers are still shouldering the bulk of the responsibility when it comes to children.

Barnett and Baruch (1987) instead contend that men’s ideology on fatherhood is rooted in their experiences as children themselves. They either imitate their own father’s patterns, or compensate for them by contributing more to their children’s lives than their own father had. Using data from the National Survey of Families and Households in the U.S., Cooksey and Fondell (1996) show that fathers who did not have a father or stepfather present in their own childhood were less likely to spend time with their own children. Similarly, Hofferth (2003) shows that men with positive attitudes toward parenting and gender equity, who had taken a parenting class and whose father was involved with them as a child, spent more time with their own children. On the other hand, Barnett and Baruch (1987) posited that men in single-earner families spent more time with their children if they reported dissatisfaction with the quality of fathering they received when they were young. However, the increase in father’s time did not take the form of personal care or traditionally feminine responsibilities, as fathers tend to invest more time in more rewarding and enjoyable childcare activities (Barnett and Baruch 1987; Sayer et al. 2004a).

Barnett and Baruch (1987) also argue that high paternal participation is unlikely to occur unless their wives’ sex role attitudes encourage participation. Mothers’ gate-keeping beliefs and behaviors may limit fathers’ opportunities for greater involvement within the family (Allen and Hawkins 1999; DeLuccie 1995). Unless wives put pressure on their husbands to increase their family work contribution, the distribution of parental time will continue to be unbalanced (Barnett and Baruch 1987; Beitel and Parke 1998; Daly 1996).

## Discussion

Research in recent decades has substantially increased our understanding of the determinants of parental time and has revealed the complexity of interaction between numerous social, demographic and economic determinants. Viewed as a whole, these research findings have provided support for each of the parental time theories outlined above. However, this body of literature also has a number of shortcomings. In this last section of the paper, we first briefly summarize the results with reference to the key theories outlined earlier in the paper, then provide a number of critiques as well as outline future avenues of research.

### The Theoretical Implications of the Findings

As discussed at the beginning of the paper, three main theoretical frameworks have been used in the literature to predict parental time investment into children: gender and ideology theory, the social and economic exchange perspective, and family systems theory. Findings summarized above provide support for all three theories. In particular, the literature clearly demonstrates the persistence of a strong gendered dimension with respect to both the amount and quality of time that mothers and fathers spend with their children. The literature shows that overall, women do retain the majority of responsibility for childcare and therefore tend to spend more time with their children as compared to fathers. This discrepancy decreases as children age, while the proportionate amount of time fathers spend with their children increases and overall parental time decreases. Moreover, mothers and

fathers who hold more liberal sex-role attitudes tend to have a more equal distribution of parental time between them, compared to those who are more traditional. At the same time, sex of the child can also play a determinant role in the amount of time that parents spend with their children. Marsiglio (1991) suggests that fathers in particular may feel that they are better equipped to socialize their sons, rather than their daughters.

The studies reviewed also provide support for the relative resources perspective. In particular, this theoretical perspective may help explain why fathers' time with children is largely characterized by leisure or 'fun' activities. Men, the majority of the time, hold a dominant position within a household due to their higher income levels, relative to their wives and therefore may have more power to negotiate for child activities that are more appealing to them.

The time availability model is mainly supported by the effect of employment variables on parental time. Employment hours always play an important role on the time that parents spend with their children. Most notably, the literature showed that hours worked later in the day tended to have a stronger negative effect on parental time than hours worked earlier in the day. Single parents are probably most affected by time availability, as the absence of a second adult in the household may increase time strains and thereby decrease the time spent with children. However, this impact is evidenced mostly in passive childcare time rather than active childcare time.

Finally, support for family systems theory showed mixed results. Few studies testing this theory use time use data and few of them examine the impact of the quality of marital relationship on both maternal and paternal time with children in the same study. This theory may be particularly helpful in understanding the more distant relationship that many divorced parents have with their children.

### A Critique of Research

The first problem that the literature on parental time has confronted is its very definition and measurement. As discussed earlier in this paper, one of the criticisms formulated by scholars is that parental time is oftentimes restricted to direct parent–child interaction, such as playing with or reading to the child, and fails to take into consideration less direct forms of parental time such as supervision or being available to the child if he/she requires it. Moreover, research on parental time frequently neglects to include the time spent in activities on behalf of the child or for the benefit of the child. For instance, while significant attention has been paid to parental involvement in schools within the education literature, such a form of parental time is rarely included in estimates of parental time. Similarly, the time that parents spend organizing and planning activities for their children is not necessarily included in estimates of parental time.

When the focus of studies is upon parents, the analyses are obviously restricted to parental time investment into children. However, if the objective of these studies is to improve children's well-being, a focus on children is instead called for, and with it, the inclusion of both parental and non-parental time investments. Time spent by other adults, such as sport coaches, tutors, and relatives, should be taken into account if the aim is to understand the total investment into children (Bryant 1992; Drago 2001; Hunts and Avery 1998; Joesch 1998). The role that grandparents, siblings and the community play in providing childcare should also be considered (Budig and Folbre 2004).

The second limitation of the literature refers to the analysis of parental time itself. The large majority of studies on parental time examine the total time spent by parents on childcare activities as well as the total time spent in other activities, such as paid work.

What very few studies do is examine in detail the daily rhythm of families; especially the times of the day when parents devote time to their children. Sarah Fenstermaker (1996) draws attention to the fact that activities that parents spend their time in are not independent of one another and therefore cannot be studied that way. Time spent in any particular activity, takes place within the context of that particular day and is largely determined by the activities that precede it (Fenstermaker 1996; Harvey, 1996). The analyses by Nock and Kingston (1988) and Connelly and Kimmel (2007) stand out in their detailed consideration of the timing of paid work and its impact on parental time. For example, Nock and Kingston show that parental time is significantly reduced for both mothers and fathers only when work hours are carried into “after school” periods of the day. At the same time, fathers work hours even within conventional work times, 9 a.m. to 5 p.m., can affect the types of activities that mothers orchestrate with their children. In Nock and Kingston’s study, it meant less time engaging in “fun” activities for mothers and their children.

Given that numerous time-use surveys collect information on only one random individual per household, the analysis of shared parenting strategies and how these affect parental time have also been limited (Barnett et al. 1994; Hertz 1997; Hertz and Ferguson 1996; Sayer et al. 2004a). The analysis of French data by L. Lesnard (2001, Unpublished Manuscript) is unique in that the time use diaries of both spouses are analyzed, thus allowing the author to identify the overlaps in childcare and how families function as a whole within a system.

The third limitation of the literature refers to the analysis of socioeconomic differences in parental time investment into children and the possible polarization of families. Despite social and economic trends that may have restricted the time availability of parents, data shows that parents have in fact increased the time that they spend with their children since the 1960s (Gauthier et al. 2004). This overall increase, however, conceals a possible polarization of parents into two distinct groups. First, there are the highly educated parents, those with fewer children, and those in flexible employment positions and stable relationships who have increased the time devoted to their children. Then there are the less educated and single parents with a high number of work hours who are spending less time with children (Sayer et al. 2004a). Whether differences in the time availability, economic circumstances and/or ideology of these two groups of parents explain these differential trends in parental time is unclear. Nor is it clear whether this possible polarization of parents reflects interactions between individual circumstances and wider economic and social patterns that may stratify societies and the time investment into children. Further research is needed in this field, in particular one that adopts a micro–macro perspective in order to understand the constraints and opportunities of parents and children and their time allocation.

Finally, the last limitation refers to the role of policies. Although results presented in this review suggest a number of policy implications in order to increase the quantity and quality of parent–child interaction, surprisingly few studies have addressed this issue. The study by Gornick and Meyers (2003) may be the exception with their review and proposal for the implementation of social policies. Their focus was, however, on the overall gender division of labor rather than on parental time per se. Nonetheless, some of their suggestions are relevant for parental time. Among them is the provision of paternal family leave in order to address the persistent gender gap in parental time. Results from Hook’s (2006) cross-national study on men’s time spent in housework and childcare revealed that policies that free women from work (e.g., maternity leave) decrease men’s participation in unpaid work time. On the other hand, extending parental leave to men increases their contributions at home. Although some progress has been made in some Western countries in recent years,

the take up rates of paternal leave as well as the sharing of parental leave by fathers is still very low (Gornick and Meyers 2003). Higher wage-replacement rates, nontransferable rights and public education campaigns have been suggested to help increase fathers' use of family leave benefits (Gornick and Meyers 2003; Smith and Williams 2007). As Daly (1996) notes, family time needs to be encouraged in human resources departments so that it is not viewed solely as something that competes with productivity and efficiency.

Reductions in weekly work hours as well as protection for part-time workers have also been suggested as ways of lowering work hours so that more time can be distributed to the family, as well as aiding in gender equality (Comer and Stites-Doe 2006; Elliott 2003; Gornick and Meyers 2003). In their analysis of workplace flexibility policies, Noonan et al. (2007) showed that work at home is associated with an increase in time spent in child care for mothers. If women are able to maintain their ties to the paid labor market, this may improve gender equality in earnings and thereby alter society's expectations of what is appropriately male and female gendered parenting behavior (Bittman 1999). Further, given that education plays a sizable role in parental time, some researchers have called for subsidized post-secondary education, especially for women, in order to help equalize opportunities and parenting orientations (Miller and Mulvey 2000).

## Conclusion

Despite the time constraints that parents confront, especially when it comes to combining work and family responsibilities, results of studies show that today's parents are in fact devoting more time to their children than they did some 30 or 40 years ago (Bryant and Zick 1996; Gauthier et al. 2004; Sayer et al. 2004a). The reasons for this increase are numerous including increased parental education, altered social norms about parental involvement, and changes in the gender division of labor. Other community level forces may also be at work including heightened perception of crime, increasing suburban residences and the disconnection of community bonds (Sayer et al. 2004a); resulting in increased parental time, especially in terms of supervision. While from a societal point of view one may applaud this increase in parental time investment into children, one should also consider the possible cost to parents in terms of decreased personal time. Also, the possible polarization of parents who can afford and manage to devote more time to their children and those who cannot warrants attention and consideration.

The investment that parents make in their children is important for understanding the disparities that exist for children's cognitive, behavioral and health outcomes. By documenting the sources and variations in parental time, this review can inform new investigations that can begin to address the inequalities in the quantity and quality of the time that is spent with children. In combination with policy initiatives, research may then generate an increase in the wellbeing of future generations.

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