Indicators of Child, Family, and Community Connections: Companion Volume of Related Papers

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Introduction

This collection of papers represents the views of several noted researchers on a number of topics related to the development of family indicators. It is a companion volume to the chartbook, *Indicators of Child, Family, and Community Connections*, and is meant to highlight some of the many areas where additional discussion of data and measurement issues could help inform the development of indicators describing the societal context of families.

The chartbook and companion volume of papers were funded by the Office of the Assistant Secretary for Planning and Evaluation at the U.S. Department of Health and Human Services. The project's purpose is to help expand the traditional set of indicators used to describe families, characterizing both the situation within families and how families relate to the community at large. This exploratory effort, described in greater detail in the chartbook, included (1) synthesizing research on the multiple dimensions of the social context of families; (2) identifying data sources and indicators to describe and monitor these dimensions; and (3) identifying critical gaps in knowledge and data, as well as future directions for measuring and monitoring these dimensions. The chartbook and companion volume of papers illustrate these dimensions by presenting a select number of indicators and discussing a variety of related data and measurement gaps. Selection of indicators and paper topics was done with the assistance of an expert panel and is described in more detail in the chartbook.   Authors provided the following papers for this volume:

- *The Measurement of Family Religiosity and Spirituality*, by Laura Lippman,, Erik Michelsen and Eugene Roehlkepartain

- *Family Time*, by Lina Guzman and Susan Jekielek

- *Longitudinal Indicators of the Social Context of Families: Beyond the Snapshot,* by Kristin Anderson Moore and Sharon Vandivere

- *The New Chronology of Union Formation: Strategies for Measuring Changing Pathways,* by Steven Nock

Indicators of the Social Context of Families

The Measurement of Family Religiosity and Spirituality

by

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The Measurement of Family Religiosity and Spirituality

I. Introduction

This paper identifies some of the many studies that have linked the importance of religiosity to family functioning, child, youth, and family outcomes, and social networking. It also describes existing measures of family religiosity and spirituality in national surveys that can and have been used as indicators, as well as promising new measures from a recent survey. The paper outlines gaps and limitations in existing measures, and discusses important considerations for recommending new measures in this area. New measures are then recommended that are more inclusive of a wide range of religious expression and spirituality, and that portray religiosity within the context of families and their broader social context. Finally, the paper recommends additional analyses to shed light on the relationship of new measures to family outcomes, which may guide the future selection of measures to be developed into indicators.

Religiosity as an Indicator

American religious engagement has remained fairly constant for the past several decades, contrary to the claims that the processes of modernization and secularization would eventually reduce the interest in religious participation (Berger, 1999). The nature of religiosity has, however, changed over time, both as a function of the growing diversity of the religious communities in the United States, including the Muslim, Hindu, and Buddhist communities (Eck, 2001), as well as in the range of personal activities that constitute religiosity among individuals.

Religiosity has received significant attention as an indicator because it has been found to have complex associations with a variety of positive family outcomes. These relationships between religiosity and well-being have been measured at several different levels, including the parental-level (e.g., marital satisfaction) the family-level (e.g., parenting styles, intrafamilial conflict), and the child-level (e.g., youth outcomes).

Marriage. Several studies have examined the effects of religiosity on various outcomes related to marriage, such as marital satisfaction, marital conflict, divorce, marital stability and commitment, and cohabitation/marital outcomes among children of religious parents. Religiosity as measured by religious service attendance has been linked to higher levels of marital satisfaction, marital stability, less marital conflict, lower risk of divorce, and the probability of marriage among young adults (Johnson et al, 2002; Call and Heaton, 1997; Thornton, 1992). Other studies have found less clear relationships between religiosity and marital satisfaction (Sullivan, 2001; Booth et al, 1995). In their meta-analysis of studies of family religiosity, Mahoney, Pargament, Tarakeshwar, & Swank (2001) concluded that the results on the association of global measures of religious involvement with marital satisfaction are mixed, but they found evidence that personal religiosity (indicated by engagement in multiple spiritual practices) and religious

commitment were linked to marital satisfaction and commitment, controlling for various demographic factors.

Parenting. Studies have linked religiosity with parenting styles and level of parental involvement. A wide variety of studies have examined the relationship between specific religious orientations and styles of parental discipline, use of corporal punishment, and related issues, with mixed results, suggesting the difficulty of associating particular religious ideological beliefs with specific parenting practices (Mahoney, Pargament, Tarakeshwar, & Swank, 2001). However, parental religiosity has been linked to greater involvement, warmth and positivity in parent-child relationships (Pearce & Axinn, 1998; King, 2003) and with authoritative parenting (demanding and responsive parenting), and has been negatively associated with authoritarian parenting (highly demanding and directive but not responsive) (Gunnoe, et al, 1999).

Transmission of Religiosity. The transmission of religiosity itself within families has been the focus of research on socialization, and is of interest as a special case of family communication. Many factors influence the transmission of religious beliefs and practices to children and adolescents, with parents and family generally being viewed as the primary agent of religious socialization (King, Furrow, & Roth, 2002). Some researchers have found that parents transmit their religious beliefs, affiliation, and activities to their children, and this is more likely to happen when parent-child relationships are warm and parental communication about religion is clear (Bao et al, 1999; Benson et al, 1989). Myers (1996) found that three factors aid in the familial transfer of religiosity: parental religiosity, quality of the family relationship, and traditional family structure. Of these factors, parental religiosity was the biggest determinant of offspring's religiosity.

Other researchers have added insights into the process of religious transmission. For example, Regenerus, Smith, & Smith (2004) find that parental religiosity is more strongly related to adolescents' religious participation (a behavior over which parents can maintain a certain level of control) than it is to their sense of the importance of religion. Erickson (1992) found that parents' religious influence and activity had an indirect influence on adolescents' religious commitments by directing them to other social influencers (peers, school, faith community) that have increasing salience during adolescence. Similarly, Martin, White, and Perlman's (2003) analyses found that parents have an effect on adolescent religiosity through peer influence.

Youth Outcomes. The research literature has linked both parental and youth religiosity with youth outcomes. Researcher Christian Smith (2003) identifies nine key factors that provide the mechanisms through which religion is linked to positive outcomes for adolescents. They include moral directives, spiritual experiences, role models, community and leadership skills, coping skills, cultural knowledge and experiences, social ties, network closure, and extra-community links. These factors can be grouped into three broad areas of influence: moral order, learned competencies, and social and organizational ties. In other research literature, parental involvement in religious activities was linked to youth outcomes across several domains, including avoidance of

early sexual activity and delinquent behaviors, reduced incidence of depression, increased cognitive and social competence and social responsibility (Bridges and Moore, 2002; Brody, et al., 1996; Gunnoe, et al., 1999; Miller, et al., 1997; Sherkat and Ellison, 1999; Moore et al, 2004; Amoateng and Bahr, 1986; Hundleby and Mercer, 1987).

Religiosity among youth themselves has also been linked to youth behaviors, mental health, and social connections. For example, several studies have linked religiosity and the development of morality and altruism (Kedem and Cohen, 1987; Donahue and Benson, 1995), although the mechanism, whether the inclusion of community service activities in religious youth group participation, or religious service attendance, or the social networks to which youth are exposed through religious participation, is debated (King and Furrow 2001). Related research from Search Institute has found that religious contexts can provide resources to help youth develop and mediate the influence of religion (Wagener, Furrow, King, Leffert, & Benson, 2003). They find, for example, that the frequency of religious attendance seems to enhance positive engagement with adults outside of one's own family (Scales, Benson, & Mannes, 2003). Markstrom (1999) found that three different measures of religious involvement - frequency of service attendance, participation in a Bible study group, and participation in a church youth group - were all positively associated with school-related self esteem in a sample of 11th grade students. Church attendance also was related to the ego strength of the will (i.e., the awareness of free will and the ability to exert self-control). Similarly, Wright, Frost, and Wisecarver (1993) found that adolescents who attended church more frequently, and those who viewed religion as providing meaning to their lives, had lower depression scores than did less religious adolescents. Additional work focused on links between youth religiosity and lower levels of negative behaviors, such as drug use, smoking, drinking, gambling, and risky sexual activity (Evans, et al., 1996; Donahue & Benson, 1995; Brownfield & Sorenson, 1991; Jang & Johnson, 2001).

Fostering Pro-social Behavior. Other research has focused on how religious congregations can foster connections between families and the broader society, as in the examples cited for youth above, as well as provide opportunities for families to participate in civic life and volunteerism that may not otherwise be readily available (Becker & Dinhgra, 2001). For example, Wuthnow (2002) found that membership in a religious congregation and holding a congregational leadership position were associated with having friendships which bridge social status, while frequency of religious attendance was largely unrelated. Other research by the Independent Sector on volunteering and giving in the United States has found that religious households with volunteers give substantially more to charity per year ($2,704) than secular households with volunteers ($1,000) and religious households without volunteers ($1,410) (Toppe, et al., 2002). Additional analyses from the National Educational Longitudinal Survey of 1988 (NELS) suggest that adolescents who attend religious services are more likely to volunteer than those who never attend religious services (Zaff, et al., 2001).

Parental, family, and youth religiosity, then, has been linked by substantial research to many of the domains of the social context of families, including family functioning, civic engagement, youth outcomes, and social connections.

II. Existing Measures

Measures of religiosity include formal religious service attendance, personal practices, beliefs and views on the importance of religion, religious identity, and family communication or community connections. Existing national surveys include some items on religiosity and spirituality, however there is significant overlap in the questions asked in these surveys and the aspects of religiosity that they tend to capture.

Service attendance. Questions about the frequency of attendance at religious services are asked in the National Survey of America's Families (NSAF), the National Longitudinal Survey of Youth –1997 (NLSY97), the National Educational Longitudinal Survey of 1988 (NELS), the National Longitudinal Study of Adolescent Health (Add Health), Monitoring the Future, the National Survey of Children (NSC), the National Survey of Families and Households (NSFH), and the Independent Sector Survey of Giving and Volunteering, among others.

A good example of a measure of parental attendance can be found in the NSAF, which asks parents of children ages 0 to 17, " In the past 12 months, how often have you attended a religious service?" Data from the NSAF show that among children under 18, 40 percent have a parent who attends religious services once a week or more, 19 percent have a parent who attends a few times a month, and 41 percent have a parent who never attends or only attends a few times a year (Moore, et al., 2002). An indicator based upon this NSAF measure was created for the chartbook for this project. Similar results have been found in analyses of the NLSY97 (Moore, et al., 2002). On the NLSY97, parents were asked, "In the past 12 months, how often have you attended worship service (like church or synagogue service or mass)?"

A measure of frequency of family religious attendance as well as other family religious activities can be found in the NLSY. Adolescents aged 12 to 14 are asked, "In a typical week, how many days from 0 to 7 do you do something religious as a family such as go to church, pray or read the scriptures together?" Longitudinal analyses from the first three waves of the NLSY97 have found that this measure of family religiosity predicts positive adolescents outcomes. This measure was also developed into an indicator for the chartbook for this project.

Measures of youth religious service attendance (without respect to whether or not attendance is with their families) can be found in several data sets. The NELS asked 10th and 12th graders in 1990 and 1992, respectively, "In the past year, about how often have you attended religious services?" Analyses of NELS showed that almost half (46%) of high school students attended religious services at least weekly, over a third (36%) attended occasionally, and the rest (18%) did not attend at all (Moore, et al, 2002).

Importance of religion. Less widespread are measures of the importance of religion in one's life. Questions on importance are found in several surveys, including Monitoring the Future (MTF), Add Health, and the NSC. For instance, MTF asks high school

seniors, "How important is religion in your life?" In 2002, thirty-three percent of twelfth graders said that religion was very important in their lives, 30% said that religion was pretty important, 23% said that religion had little importance in their lives, and 14% said that religion was not important to them. The NELS asks questions about the importance of friends participating in religious services, and the importance of one's school or college providing a religious environment.

Data on adults (not necessarily parents) from a 2001 Gallup Poll found that 55% said religion was "very important" in their lives, while another 30% reported it as "fairly important" (Gallup Organization, 2002). The NSLY also contains a measure for parental beliefs about the importance of religion for having desired values.

Family religious and spiritual practices. In several national studies of Protestant Christians, Search Institute measured a number of basic dimensions of family religious practices or socialization (Benson & Eklin, 1990; Benson, Roehlkepartain, & Andress, 1995). These measures included talking to mother or father about faith, participating in family devotions, prayer, or reading of sacred texts, and engaging in family projects together to serve others. The NLSY contains measures about prayer among parents. Parents report on the frequency of prayer and how often they ask God for help with decisions.

Religious identity. NELS: 88 has a measure on the degree to which twelfth graders in 1992 identified themselves as religious (i.e., "Do you think of yourself as a religious person?"). Thirteen percent considered themselves to be very religious, 61% said that they are somewhat religious, and 26% said that they were not at all religious (Moore, et al., 2002). A measure of religious affiliation can be found in NELS:88 as well as in Monitoring the Future. The Monitoring the Future Survey finds that, in 2000, most (83.7%) high school seniors reported affiliation with a religious denomination or tradition (Bachman, et al, 2000).

Recent Expansion of Available Measures

While we have identified numerous measures in several surveys on religiosity, none of those mentioned above contain detailed information on religious activities, beliefs, and attitudes across the spectrum of religious traditions. However, a recently fielded survey by researchers at the University of North Carolina, Chapel Hill, titled the National Study of Youth and Religion (NSYR), represents a comprehensive effort to assess all of these facets of religiosity for youth and their parents in meticulous depth.[1] Data from the NSYR are expected to be available for analysis in the fall of 2004, and it will be a rich source of new data on the religiosity of youth and their parents. Since it also contains outcome measures and attitudinal measures, including those about marriage, sex, substance use, schooling, etc., it will be possible to relate religiosity to outcomes through cross-sectional and longitudinal analyses.

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[1] The National Study of Youth and Religion instrument can be found at: http://www.youthandreligion.org/

The National Study of Youth and Religion is designed to "research the shape and influence of religion and spirituality in the lives of American adolescents; to identify effective practices in the religious, moral, and social formation of the lives of youth; to describe the extent and perceived effectiveness of the programs and opportunities that religious communities are offering to their youth; and to foster an informed national discussion about the influence of religion in youth's lives, in order to encourage sustained reflection about and rethinking of our cultural and institutional practices with regard to youth and religion." Data from the NSYR were collected in 2002 via telephone survey from 3,200 American youth, ages 13 to 17, and parents, and a sub-sample of 250 youth were administered personal, in-depth interviews in 2003. The NSYR also will include a longitudinal component, following up with the original subjects in 2005, three years after the first wave of the survey. The NSYR contains many unique measures that are not found in other surveys, and some examples that are germane to this project on the social context of families are described below.

Specific religious practices across religions and spiritual practices. Among the broad areas of religiosity assessed by the survey are extensively detailed questions on religious affiliation, as well as detailed follow-ups tailored to the subject's religious affiliation pertaining to the practice of Christianity (e.g., having been baptized), Hinduism (e.g., observing cleansing rituals before prayer), Islam (e.g., fasting during Ramadan), Judaism (e.g., observing the Sabbath), and Buddhism (e.g., the presence of religious altars in the home). In addition, the survey asks about spiritual practices such as meditation, burning candles, listening to religious radio, CDs or tapes, and whether the youth prays alone or with parents other than at mealtimes or religious services.

Multiple affiliations. The NSYR contains items on religious service attendance for primary, secondary, and tertiary affiliations, and asks the extent that respondents may be involved in attending religious services for more than one religion or denomination (e.g., "Do you attend religious services at any OTHER religious congregation?" The list of affiliations includes 67 possible responses.

Religious development over the life course. Several questions are asked about the extent to which individuals were raised in a particular religion and their religious development. Additional life course questions regarding attendance at religious services and reflections on being religious/non-religious (e.g., "Since you were 6 years old, were there any years when you were NOT regularly attending religious services, and if so, how many?" "When you are 25, do you think you will be attending religious services?") are also included.

The nature and influence of religious beliefs. The NSYR explores specific aspects of religious beliefs (e.g., life after death, existence of angels, miracles, beliefs about God, moving spiritual experiences, personal commitment to live one's life for God), as well as whether the individual is or is not "spiritual but not religious." In addition, the survey explores the extent to which these beliefs shape the youth's life and major life decisions.

Similarity of religious beliefs to one's parents and one's partner. The questionnaire explores whether youth feel that their beliefs are similar to their mother's and father's. Among those youth who have dated, questions are asked about whether their partner's religious beliefs were different from their own.

Religious communication in the home. An important question to the study of religiosity in the home is the frequency with which the family talks about God, the Scriptures, prayer, or other religious or spiritual topics.

Freedom to express religious beliefs in school. Several questions address behaviors and attitudes about the expression of religion in school.

Learning more about religion, and attitudes about one's house of worship. The survey asks about one's interest in learning more about religion, and the role of one's house of worship and religious groups in facilitating one's beliefs. In addition, the survey explores attitudes about the house of worship and the services attended there.

Involvement in youth groups or activities, clubs, or camps sponsored by a religious organization. Youth group membership is an important expression of religious affiliation among youth that is captured in the NSYR. In addition, the survey asks about donations to, and participation in volunteer and other activities with religious organizations, including participation in religious camps, retreats, choirs, etc.

Religious rites of passage. The survey asks about the youth's participation in rites of passage across various religions.

III. Gaps and Limitations

This section addresses shortfalls in existing measures that limit our ability to portray the religiosity and spirituality of the American family.

Existing measures define religiosity narrowly. The most common measure of religiosity in surveys, the frequency of attending religious services, captures only a limited aspect of religiosity. The NSYR is the only survey that probes the many religious observances and spiritual practices that take place in the home and are less public, such as Jewish observation of the Sabbath and religious holidays such as Passover in the home, and Hindu and Buddhist use of shrines for prayer in their homes. Other examples include the frequency with which families pray together informally, read a sacred text, or say grace before dinner in a Christian home or the blessings after meals in a Jewish home. These activities are important for the transmission of religion, yet only the NSFR captures them. Other religious or spiritual activities, besides prayer, such as meditation, yoga, or spiritual singing that families can either engage in together or individually are not even captured with specificity in the NSYR.

In addition, Dollahite, Marks, & Goodman (2004) argue that religiosity (and family religiosity) is a multi-dimensional construct involving religious beliefs, religious

practices, and religious community. Yet most studies overlook the interactions among these dimensions by focusing on one at a time. Understanding each dimension both individually and in interaction with the others is vital for accurately assessing the role of religion in family life.

Current measures do not clarify the relationship between religion and spirituality. Virtually all the available research on families focuses on traditional religious variables. A growing network of scholars is suggesting that spirituality is a related, but distinct, domain that merits careful measurement, including a range of spiritual experiences and practices that may or may not be embedded within religious traditions. These measures would explore domains of meaning, purpose, connectedness, and transcendence, which are generally believed to be elements of the spiritual life (see Benson, Roehlkepartain, & Rude, 2003; Hill & Pargament, 2003). Making this distinction may be vital for gaining widespread acceptance of these measures in national studies.

Measures need to include a wider diversity of practices and beliefs. Most of the existing surveys, particularly the Add Health and the NLSY, ask specific questions about beliefs and practices that are only relevant to Christians. As non-Christian religions continue to be more broadly represented in the general population of the United States, it is important that large-scale surveys take into account the practices and traditions of Judaism, Islam, Hinduism, Buddhism, and other religious groups, as the NSYR has done. Additionally, current measures focus on public religious practices. Informal and personal religious practices that take place outside the confines of conventional religious activity, such as those surrounding one's own personal relationship with a deity or deities, are currently lacking in surveys.

Measures of family practices in the home are lacking. The extent to which both formal and informal religious practices occur in the context of family is critical to the measurement of family religiosity and spirituality. Examining the prevalence of praying together as a family in the home, or as individual members engaging in prayer, praying at meals, meditation, engaging in discussions about religion, the nature of specific communication about religion and spirituality, family attitudes toward religion, religious observance in the home (e.g., Sabbath), celebration of religious holidays and rites of passage, the presence of religious or sacred artifacts or places within the home, reading from sacred texts, religious story-telling, family pilgrimages to sacred places, participating in prayer circles, or volunteering through religious groups with one's family, for example, may underlie the development of religiosity and spirituality among family members.

Measures are needed that reflect the complexity of the formation of religious and spiritual identity. Many current measures of religiosity and spirituality in the family presume that religion is primarily transmitted through formal education and in one-way communication from parent to child. In addition, most measures focus only on the religious beliefs or practices of one person rather than religious compatibility and interaction within the family unit (Mahoney, Pargament, Tarakeshwar, & Swank, 2001). In reality, the process is much more complex, involving informal modeling, indirect

influences, and a dynamic relationship between the parent(s), child, siblings, extended family, and other socializing influences.

Longitudinal measures are needed. One of the foremost weaknesses of the existing data is the absence of detailed, longitudinal data on the spirituality and religious practices and beliefs of youth and their parents. Some data sources, such as the NLSY97 and the National Survey of Families and Households (NSFH), do have some of these measures, but there are limitations in the questions asked and the populations surveyed. This detailed, long term trend data is a prerequisite for both achieving a better sense of the relationships between religiosity and various outcomes, as well as creating a more accurate description of the changes in religious attitudes and practices across the life course of families, from the first birth through the transition of children into adulthood. It is also important to look at the effect of life course events (e.g., birth, marriage, health crises, death) on individual and family religiosity and spirituality.

Religion and spirituality as resources for coping. A growing body of research highlights the role of religion and spirituality in parental coping with sick or emotionally or behaviorally disturbed children (Pargament, 1997). Spirituality is also associated with coping with illness, crisis, or trauma for children and adolescents (e.g. Pendleton, Cavalli, Pargament, & Nasr, 2002). Additional work is needed to understand the relationships between serious family or personal problems and religiosity and spirituality. Little has been done to examine the role of family religiousness in coping with the daily stressors of parenting and family life. This area would likely include measures of spiritual support from God or a higher power, spiritual support within the family, support from religious or spiritual community, religious rituals as sources of hope and healing, and related issues for both parents and children (see Mahoney, Pargament, Tarakeshwar, & Swank, 2001).

Religion through media. Another area where measurement could be expanded is in the use of media to gather information about religion or to meet with others and discuss religion and/or spirituality. For instance, to what extent are people increasingly using the Internet or web-based chatrooms to explore their religion? To what extent do they watch religious programming on television or listen to it on their radio with their families, and how do those who do differ or not from those who only attend services? Are social connections lost from not participating with a congregation?

Measures for young children. While there are numerous measures for adolescents, there are no measures in national surveys on the religiosity or spirituality of younger children. Clearly, there are methodological obstacles to creating and fielding such measures, but they could be overcome with parent reports, and creative strategies such as drawing or choosing pictures, etc.

IV. Measurement Development

New measures must be concise enough for practical use in an array of instruments, and brief versions must be available (Moore, Halle, Vandivere, & Mariner, 2002). In addition, we must take into account that the placement of religiosity items in national

surveys may be controversial and therefore, considerable work may need to be done before attention to religiosity and spirituality measures can receive full public support (e.g., active parental consent, and dealing with concerns about the separation of church and state).

In trying to create indicators that take into account the constraints above, it is important to keep in mind the body of literature that examines how and to what degree religiosity causes individuals to be engaged in the world. This research conceives of religious experiences as honoring/listening to/affirming/accepting the sacred in one's own experience, but also as the extent to which individuals are compelled by their belief towards a compassionate engagement in the world (Benson, et al., 2003). A number of research studies have shown that, among American adolescents, measures which tap both of these two dimensions are stronger predictors of risk and thriving than are measures of the importance of religion or religious service attendance alone (Benson, Donahue, & Erickson, 1993; Benson, Williams, & Johnson, 1987). Here the important distinction is discerning, for a given individual, whether one's spiritual/religious engagement is more of an individual exercise or a collective, community-focused one, or both? Measures that are able to assess the degree to which one focuses spirituality inward or outward could help illuminate this dichotomy.

In addition, it is important to include within a given study measures of multiple dimensions of family religiosity, in order to avoid the comparison of different dimensions from different studies. As Dollahite, Marks, & Goodman (2004) note, the interaction between affiliation, beliefs, practices, and community engagement add depth of understanding to complexity of how various dimensions of religiousness and spirituality interact. For example, they report that some dimensions of congregational involvement may moderate family stressors (by, for example, providing social support), whereas others might exacerbate family stress (by, for example, increasing demands on the family).

Measures must take into account that the influence of parent and family religiosity on child and adolescent outcomes is, at least in part, indirect (Erickson, 1992; Regenerus, Smith, & Smith, 2004). Thus, it is important to include measures that will take into account the broader ecological or social context, including relationships with extended family, peers, and other adults, and engagement in the places they spend time, their involvement in personal and communal spiritual practices and activities, and their use of media. Across all of these potential influences, the issue of alignment or consistency and mutual reinforcement of spiritual values would yield important insights into the interactions among the multiple systems that shape young people's spiritual lives.

Finally, it is important not only that the proper religiosity and spirituality inputs are measured, but also that outcomes for individuals and families be queried in national surveys. Additionally, when possible, items should be placed in longitudinal, rather than cross-sectional surveys to allow more detailed life course analyses of the data.

V. Recommendations

The range of survey items with which to measure religiosity has grown substantially in recent years. In addition, it would be possible to develop survey items in each of the areas under gaps and limitations above. While it would benefit the field to include as many items as possible with which tap the dimensions listed above, the space limitations of national surveys make that unlikely. Therefore, a selected set of measures is recommended below which highlight the aspects of religiosity that are particularly germane to the study of the social context of families.

Proven existing measures. Research cited above demonstrates that measures of religious attendance, religious activities as a family (such as the question in the NLSY) and questions on the importance of religion predict important positive outcomes for parents as well as youth, controlling for demographic variables, and therefore, these measures should be retained in national surveys.

Promising new key measures. There are several promising new measures of family religiosity and spirituality that may be adaptable to national surveys, with the caveat that these recommended measures are from the National Study of Youth and Religion (NSYR), which has not yet released its data. Therefore the psychometric reliability and the concurrent validity of these items will not be known until the data can be analyzed. Predictive validity cannot be addressed until the longitudinal data are collected and analyzed.

"Family Functioning" is one of the six domains of the Indicators of Child, Family and Community Connections Project. Family communication is a key part of how a family functions, and as cited in the research review above, it is important in the transmission of religiosity and values from parents to children. It also would add contextual information on one way in which religiosity is expressed in the family, which is lacking from most existing surveys. A question measuring family communication about religion is therefore recommended. Below is one example from the NSYR:

> "How often, if ever, does your family talk about God, the scriptures, prayer, or other religious or spiritual things together?"

In the above example, we would recommend changing the word "scripture", which also appears in the NLSY97, to a term that is less laden with explicitly Jewish or Christian meaning (e.g., "religious texts"). In addition, it would be preferable to ask about each individual activity separately, (talking, studying texts, praying, or other) rather than just ascertaining the frequency of doing any of the above activities. This item would directly address specific groups of religious activities within the family context in which religious engagement is or is not occurring. Where space is available, asking follow-up questions to identify specific spiritual or religious practices that are not mentioned in the question and about personal involvement in those specific practices, whether they are from traditional religious practice or non-traditional practices, would enrich our current knowledge of individual and family practices. In addition, in order to understand religion

in the family context, it is crucial to know the extent to which activities and behaviors involve some or all family members together.

Families typically comprise the environment in which children develop, and a component of that development is the development of religiosity. It seems critical to assess the extent to which children have the same religious affiliation, identity, and beliefs as their parents in order to address the importance of the family in religious development. This area of inquiry holds promise for expanding our understanding of family religiosity as well as individual religious development. Items from the NSYR could be adapted to capture these measures. For example,

> "Would you say that your religious beliefs are very similar to your (mother, father); somewhat similar; somewhat different; or very different from your (mother, father)."

The direct measurement of spirituality, or a belief in a transcendent being or spirit, in contrast to religiosity, is often lacking in surveys, and this is an important distinction increasingly recognized by researchers that is often missed. When both types of items are asked, spirituality is typically more prevalent than participation in religious practices. To assess spirituality, it would be valuable to include an item such as one or two of the following questions from the National Study of Youth and Religion:

> "Do you believe in God or not, or are you unsure?", or
> "Have you ever, or not:
> A. had an experience of spiritual worship that was very moving and powerful
> B. experienced a definite answer to prayer or specific guidance from God
> C. witnessed or experienced what you believe was a miracle from God
> D. made a personal commitment to live your life for God?"

These items capture belief in a transcendent being as well as the salience of spirituality in one's life. Additionally, the existence of a personal relationship with God and attitudes about the influence of that relationship on events in one's life are important to capture, and again NSYR items could be adapted for this purpose. If questions similar to these were included along with measures of other independent variables which act as influences on outcomes, such as those typically found in surveys at the individual, family, school, and community levels, researchers might be able to isolate how spiritual and religious beliefs stack up against, or work in combination with other influences in predicting outcomes.

"Youth connections" is another of the key domains of interest in this exploration of the social context of families. To assess the role of religious institutions in youth development, as the literature cited above suggests, it would also be valuable to include items such as this one from the NYSR,

> "Are there adults in your [house of worship], other than family members, who you enjoy talking with who give you lots of encouragement, or not?"

This question can provide additional insight into the direct mechanisms through which religious involvement provides social connections and community assets to youth. By extension, a similar item could be developed for parents to capture the extent to which parents receive help and support from other adults at their house of worship. In addition, we would recommend including items on participation in religious youth groups, camps, organizations, and activities, since these activities provide important socialization into religious groups and beliefs, particularly in adolescence, when religious service attendance tends to decline. Items on participation in these activities are available from several surveys.

Together, these recommended items, if added to existing surveys, would substantially expand our ability to measure family processes around religiosity, diversity in family religious practices and spiritual beliefs, youth and adult connections to religious communities, and how families reach beyond their communities to connect to God or other spiritual forces in their own family context.

Further measure development research needed. Although promising measures are on the horizon, it is clear that further measurement work is needed. Much of this work can be grounded in the analyses of the recently fielded National Study on Youth and Religion, which contains both a wide range of religiosity questions, as well as questions about youth outcomes, and a longitudinal design. Once the data and preliminary analyses from the NSYR become publicly available in fall of 2004, the research community will have a much broader matrix of religiosity inputs and well-being outcomes to analyze, providing a unique opportunity to examine many of these relationships for the first time. Psychometric analyses on the new items can be conducted as well. The NYSR also includes items about parents, but there is still a significant need to collect more detailed information on the religiosity of parents generally and their outcomes as well. In addition, there is a need to develop items on religiosity and spirituality that are suitable for young children, who are not included in the NYSR.

This paper has reviewed a rich research literature that suggests that measures of religiosity have important linkages to family well-being, and provides a basis for their inclusion in a portrait of the social context of families. Existing sources for indicators have been suggested which potentially could be included in any future work on family-related indicators that aims to portray the vast religious and spiritual diversity that exists in the contemporary United States. If placed in longitudinal research databases, these measures could provide opportunities to further understand the linkages between religiosity and individual and family outcomes.

References

Amoateng, A., & Bahr, S. (1986). Religion, family, and adolescent drug abuse. *Sociological Perspective, 29*, 53-76.

Bachman, J., Johnston, L., & O'Malley, P. (2001). *Monitoring the future: Questionnaire responses from the nation's high school seniors: 2000.* Ann Arbor, MI: Univ. of Michigan.

Bao, W. N., Whitebeck, L. B., Hoyt, D. R., & Conger, R. D. (1999). Perceived parental acceptance as a moderator of religious transmission among adolescent boys and girls. *Journal of Marriage and the Family, 61,* 362-374.

Bearman, P., & Bruckner, H. (2001). Promising the future: Virginity pledges and first intercourse. *American Journal of Sociology, 4*, 233-239.

Becker, P., & Dinhgra, P. (2001). Religious involvement and volunteering: implications for civil society. *Sociology of Religion, 62*, 315-335.

Becker, P., & Hofmeister, H. (2001). Work, Family, and Religious Involvement for Men and Women. *Journal for the Scientific Study of Religion, 40*, 707-722.

Benson, P. Donahue, M., & Erickson, J. (1993). The faith maturity scale: Conceptualization, measurement, and empirical validation. *Research in the Social Scientific Study of Religion, 5*, 1-26.

Benson, P. L., & Eklin, C. E. (1990). *Effective Christian education: A national study of Protestant congregations: Summary report.* Minneapolis: Search Institute.

Benson, P. L., Donahue, M., & Erickson, J. (1989). Adolescence and religion: A review of the literature from 1970 to 1986. *Research in the Social Scientific Study of Religion, 1, 153-181.*

Benson, P. L., Roehlkepartain, E. C., & Andress, I. S. (1995). C*ongregations at crossroads: A national study of youth and adults in the Lutheran Church–Missouri Synod.* Minneapolis: Search Institute.

Benson, P. L., Roehlkepartain, E. C., & Rude, S. P. (2003). Spiritual development in childhood and adolescence: Toward a field of inquiry. *Applied Developmental Science, 7*(3), 204-212.

Benson, P., Scales, P., Sesma, A., & Roehlkepartain, E. (in press). Adolescent spirituality. In, *Conceptualizing and Measuring Indicators of Positive Development:*

What Do Children Need to Flourish? (Kristin A. Moore and Laura Lippman, Eds.) Kluwer Academic/Plenum Publishers.

Benson, P., Williams, D., & Johnson, A. (1987). *The quicksilver years: The hopes and fears of early adolescence*. San Francisco: Harper and Row.

Berger, P. (1999). *The desecularization of the world: Resurgent religion and world politics*. Grand Rapids, MI: Eerdmans.

Booth, A., Johnson, D., Branaman, A., & Sica, A. (1995). Belief and behavior: Does religion matter in today's marriage. *Journal of Marriage and the Family, 57*, 661-671.

Bridges, L. & Moore, K. (2002). *Religion and spirituality in childhood and adolescence*. Washington, DC: Child Trends

Brody, G., Stoneman, Z., and Flor, D. (1996). Parental religiosity, family processes, and youth competence in rural, two-parent African American families. *Developmental Psychology, 32*, 696-706.

Brownfield, D., & Sorenson, A. (1991). Religion and drug use among adolescents: A social support conceptualization and interpretation. *Deviant Behavior: An Interdisciplinary Journal, 12*, 259-276.

Call, V., & Wheaton, T. (1997). Religious influence on marital stability. *Journal for the Scientific Study of Religion, 36*, 382-392.

Cooksey, E., Rindfuss, R., & Guilkey, D. (1996). The initiation of adolescent sexual and contraceptive behavior during changing times. *Journal of Health and Social Behavior, 37*, 59-74.

Dai, Y. (1996). Educational plans after high school: A national survey of high school seniors. *Journal of Research and Development in Education, 30*, 22-30.

Dollahite, D. C., Marks, L. D., & Goodman, M. (2004). Families and religious beliefs, practices, and communities: Linkages in a diverse and dynamic cultural context. In M. J. Coleman & L. H. Ganong (Eds.), *The handbook of contemporary families: Considering the past, contemplating the future* (pp. 411-431). Thousand Oaks, CA: Sage.

Donahue, M., & Benson, P. (1995). Religion and the well-being of adolescents. *Journal of Social Issues, 51*, 145-160.

Durant, R., Pendergrast, R., & Seymore, C. (1990). Sexual behavior among Hispanic female adolescents in the United States. *Pediatrics, 85*, 1051-1058.

Eck, D. (2001). *A new religious America: How a "Christian country" has become the world's most religiously diverse nation.* San Francisco: Harper.

Erickson, J. A., (1992). Adolescent religious development and commitment: A structural equation model of the role of family, peer group, and educational influence. *Journal for the Scientific Study of Religion 31* (2), 131-152.

Evans, T., Cullen, F., Burton, V., Dunaway, R., Payne, G., & Kethineni, S. (1996). Religion, social bonds, and delinquency. *Deviant Behavior: An Interdisciplinary Journal, 17*, 43-70.

Gallup International Association. (2002). *Gallup international millennium survey.* (http://www.gallup-international.com/)

Gunnoe, M., Hetherington, M., & Reiss, D. (1999). Parental religiosity, parenting style, and adolescent social responsibility. *Journal of Early Adolescence, 19*, 199-225.

Hair, E., Moore, K., Hunter, D., Kaye, J. (2001). *Edna McConnell Clark Foundation: Youth development outcomes compendium.* Washington, DC: Child Trends.

Halpern, C., Udry, R., Campbell, B., Suchindran, C., & Mason, G. (1994). Testosterone and religiosity as predictors of sexual attitudes and activity among adolescent males: A biosocial model. *Journal of Biosocial Science, 26*, 217-234.

Hill, P. C. & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist, 58,* 64-74.

Hirshi, T., & Stark, R. (1969). Hellfire and delinquency. *Social Problems, 17*, 202-213.

Hundleby, J., & Mercer, G. (1987). Family and friends as social environment and their relationship to young adolescents' use of alcohol, tobacco, and marijuana. *Journal of Marriage and the Family, 49*, 615-620.

Jang, S., & Johnson, B. (2001). Neighborhood disorder, individual religiosity, and adolescent use of illicit drugs: A test of multilevel hypotheses. *Criminology, 39*, 109-143.

Johnson, C., Stanley, S., Glenn, N., Amato, P., Nock, S., Markman, H., & Dion, M. (2002). *Marriage in Oklahoma: 2001 baseline statewide survey on marriage and divorce* (S02096 OKDHS). Oklahoma City, OK: Oklahoma Department of Human Services.

Kedem, P., & Cohen, D. (1987). The effects of religious education on moral judgment. *Journal of Psychology and Judaism, 11*, 4-14.

King, P., & Furrow, J. (April, 2001). Developmental resources, moral behaviors, and faith communities: Adolescent religiousness and social capital. *Paper presented at the Biennial Meeting of the Society for Research in Child Development, Minneapolis.*

King, P. E., Furrow, J. L., & Roth, N. H. (2002). The influence of family and peers on adolescent religiousness. *The Journal for Psychology and Christianity, 21*(2), 109-120.

King, V. (2003). The influence of religion on fathers' relationships with their children. *Journal of Marriage & the Family, 65*, p382-395.

Mahoney, A., Pargament, K. I., Tarakeshwar, N., & Swank, A. B. (2001). Religion in the home in the 1980s and 1990s: A meta-analytic review and conceptual analysis of links between religion, marriage, and parenting. *Journal of Family Psychology, 15* (3), 539-596.

Markstrom, C. (1999). Religious involvement and adolescent psychosocial development. *Journal of Adolescence, 22*, 205-221.

Martin, T. F., White, J. M., & Perlman, D. (2003). Religious socialization: A test of the channeling hypothesis of parental influence on adolescent faith maturity. *Journal of Adolescent Research, 18* (2), 169-187.

Miller, L., Warner, V., Wickramaratne, P., & Weissman, M. (1997). Religiosity and depression: Ten-year follow-up of depressed mothers and offspring. *Journal of the American Academy of Child & Adolescent Psychiatry, 36*, 1416-1425.

Moore, K., Chalk, R., Scarpa, J., & Vandivere, S. (2002). *Family strengths*. Washington, DC: Child Trends.

Moore, K., Halle, T., Vandivere, S., & Mariner, C. (2002). Scaling back survey scales: How short is too short? *Sociological Methods and Research, 30*, 530-567

Moore, K., Hair, E., Bridges, L., & Garrett, S. (2004). *Parent religious beliefs and adolescent outcomes*. Washington, DC: Child Trends

Myers, S. (1996). An interactive model of religiosity inheritance: The importance of family context. *American Sociological Review, 61*, 858-866.

Pargament, K. I, (1997). *The psychology of religion and coping: Theory, research, and practice.* New York: Guilford Press.

Pearce, L. D., & Axinn, W. G. (1998). The impact of family religious life on the quality of mother-child relations. *American Sociological Review, 63,* 810-828.

Pendleton, S. M., Cavalli, K. S., Pargament, K. I., & Nasr, S. Z. (2002). Spirituality in children with cystic fibrosis: A qualitative analysis. *Pediatrics, 109,* 1-11.

Regnerus, M. D., Smith, C., & Smith, B. (2004). Social context in the development of adolescent religiosity. *Applied Developmental Science, 8* (1), 27-38.

Scales, P., Benson, P., & Mannes, M. (2003). The impact of adolescents' prosocial orientation on reported engagement with unrelated adults (submitted for publication).

Sherkat, D., & Ellison, C. (1999). Recent developments and current controversies in the sociology of religion. *Annual Review of Sociology, 25*, 363-394.

Smith, C. (2003). Theorizing Religious Effects Among American Adolescents. *Journal for the Scientific Study of Religion 42:1(2003) 17-30.*

Smith, C., Denton, M., Faris, R., & Regnerus, M. (2002). Mapping American adolescent religious participation. *Journal for the Scientific Study of Religion, 41*, 597-612.

Sullivan, K. (2001). Understanding the relationship between religiosity and marriage: An investigation of the immediate and longitudinal effects of religiosity on newlywed couples. *Journal of Family Psychology, 15*, 610-626.

Thornton, A., Axinn, W., & Hill, D. (1992). Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology, 98*, 628-651.

Toppe, C., Kirsch, A., Michel, J., Wiener, S., & Jaladoni, N. (2002). *Faith & philanthropy: The connection between charitable behavior and giving to religion.* Washington, DC: Independent Sector.

U.S. Census Bureau. (2001). *Statistical abstract of the United States, 2000.* Washington, DC: U.S. Census Bureau.

Wagener, L. M., Furrow, J. L., King, P. E., Leffert, N., & Benson, P. L. (2003). Religious involvement and developmental resources in youth. *Review of Religious Research, 44* (3), 271-284.

Wright, L., Frost, C., & Wisecarver, S. (1993). Church attendance, meaningfulness of religion, and depressive symptomatology among adolescents. *Journal of Youth and Adolescence, 22*, 559-568.

Wuthnow, R. (2002). Religious involvement and status-bridging social capital. *Journal for the Scientific Study of Religion, 41*, 669-684.

Wuthnow, R. (2000). How religious groups promote forgiving: A National study. *Journal for the Scientific Study of Religion, 39*, 125-139.

Zaff, J., Moore, K., Papillo, A., & Williams, S. (2001). The longitudinal effects of extracurricular activities on academic achievement and civic involvement. Paper presented at the biennial conference of the Society for Research in Child Development, Minneapolis, Minnesota.

Indicators of Child, Family and Community Connections:

Family Time

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I. Introduction

Family time is a critical family and child resource. Both the amount and the quality of family time are associated with child outcomes (S. Hofferth & Sandberg, 2001) and the amount of couple interaction is linked to marital stability (Presser, 2000). Moreover, the regularity of family activities helps to structure family routine and forge family identity (Fiese et al., 2002). With the rise of women's employment (Bianchi & Spain, 1996), changes in family structure (Federal Interagency Forum on Child and Family Statistics, 2003), the emergence of the 24-hour economy (Presser, 1999), longer workdays (Jacobs, 2003) and increased commute times (Hoffmeister & Edgell, 2003), family time has become the focus of considerable public discussion. Of particular concern, is the "time squeeze" faced by many American families (Jacobs, 2003). While the average workweek for the dual-earner couples and single-parents has not changed much, there are more dual earner couples and single-parent families today than in the past (Jacobs, 2003, p. 6). Moreover, work schedules have become more varied. With the expansion of the service industry, parents today are more likely to be working nights, weekends, and rotating shifts—schedules that are likely to encroach on family time and the regularity of family routines (Presser, 1999). In fact, a quarter of married couples contain at least one spouse working non-standard hours (Presser, 1999).

This topic is of concern because family time matters. By spending time with their children, parents build the bonds that are necessary for the transmission of human capital (Coleman, 1988). Children are better off in terms of academic and emotional well-being from time spent with parents, and from parenting that is characterized by warmth as well as rule-setting (Barber & Erickson, 2001; Baumrind, 1967; Herman, Dornbusch, Herron, &Herting, 1997; Maccoby & Martin, 1983). Finally, a lifecourse perspective would suggest that family routines and rituals experienced in childhood help set the course for how one will organize their own family life in adulthood (Elder, 1999).

Given the importance of family time for family, adult, and child well-being and evidence that new threats to family time are emerging, the need for current and valid measures of family time is increasing. While measures of family time, in particular the amount of time spent together by family members, are available, current measures often fall short in fully capturing the diversity of family activities. Moreover, few measures are available that assess the quality or meaning behind family activities and time. The unit of analysis is often at the individual level, without regard to interactions with other family members or attempts to measure activities with the entire family. Indeed, less is known about how to measure family routines and rituals and about how engaging in activities with family members helps to forge family identity.

II. Existing Measures and Limitations

In recent years, there has been an increase in the availability of data sources that measure family time, including the 1997 Child Development Supplement to the Panel Study of Income Dynamics (PSID-CDS), the National Survey of Families and Households, and the American's Use of Time Project. Examples of smaller scale studies include the

Annual Meaningful Time Check-Up and California's Children Activity Pattern Survey. Concomitant with this rise has been an increase in the number of studies that focus on family time (see Bianchi, 2000; Bianchi & Robinson, 1997; Bryant & Zick, 1996; Budig & Folbre, 2002; S. Hofferth & Sandberg, 2001; Yeung, Sandberg, Davis-Kean, &Hofferth, 2001). The field has been further aided by qualitative studies that delve into the quality, meaning, and nature of family time and interactions (Blum-Kulka, 1994). The Changing Workforce Study (Bond, Galinsky, &Swanberg, 1998) tracks the subjective experience of employment and family demands on workers, and is unique in collecting this information over time. Both the American Community Survey and the Current Population Survey collect data on commute time to work; however, neither of these surveys has made estimates of commute time for parents publicly available.

Together these surveys, and subsequent studies based on these data, have provided national estimates of the *amount* of time that families, parents and children in particular, spend together. However, outside of a few key activities, less is known about *how* families spend their time together or the nature of the family interactions. Moreover, while important advances have been made in the measurement of family time and in data collection methods, most notably in area of time use diaries, the field as a whole is still "underdeveloped" (Smeeding & Marchand, 2003). Future studies designed to measure family time will have to balance the need to improve the reliability and accuracy of estimates (Robinson, 1997) with the costs associated with collecting data from multiple perspectives (i.e., parents versus children) and for a wider range of activities.

Review of studies and data on family time

Despite the entrance of mothers into the labor force and concerns about longer commute times and work days, analyses of available time use data indicate that the amount of family time, in particular, mother-child time, has remained stable since the 1920's (Bianchi, 2000; Bryant & Zick, 1996). This stability is partly due to the fact that in the earlier part of the century large segments of the population were rural and engaged in agriculture—work that left little time for direct parent-child interaction (Bryant, 1996). Moreover, the gap between employed and non-employed mothers in mother-child time is relatively small. Including time spent directly engaged with children, as well as time spent in their presence, children of employed mothers spend approximately five and half hours less per week with their mothers than children of non-employed mothers (Sandberg & Hofferth, 1999). The gap in time spent with children between employed and non-employed mothers is minimized because non-employed mothers tend to allocate their "non-labor hours" to household tasks, volunteer and leisure activities, and not to direct child care (see (Bianchi, 2000). In addition, employed mothers appear to take steps to protect their time with their children by minimizing time spent in household tasks, personal leisure activities and sleep (Bianchi, 2000).

The stability of parent-child time has also been made possible by the increased involvement of married fathers in childcare, in particular among families with employed mothers (Bianchi 2000; Sandberg & Hofferth 1999, 2001). For example, the amount of time fathers spent in direct child care more than doubled between 1965 and 1998

(Bianchi, 2000). Further, Bryant and Zick (1996) find that as mother's employment hours increase, the amount of time parents (i.e., mothers and fathers) spend with their children doing household tasks and engaging in leisure activities *together* increases. Last, reduction in family size has resulted in small increases in parental time per child from the perspective of children (Bianchi, 2000).

While trend data and population estimates of parent-child time are useful, they often mask variations by family-structure, family stage, gender, socioeconomic status, and race/ethnicity. In general, children in single-parent families spend less time with their parents than children in two-parent families (Child Trends, 2002). Data collected from the PSID-CDS indicate that children in two-parent families spend approximately 2.21 hours with their mothers and 1.45 hours with their fathers on a daily basis compared to 1.16 hours with mothers and .25 hours with fathers among children in single-parent families (Child Trends 2002). In addition, the data also suggest differences in how parents and children distribute their time across activities by family structure. For example, children from single-mother families spend less time in educational activities but more time in organized sports (S. Hofferth & Sandberg, 2001). Other studies, however, indicate that family structure differences in the types of activities that children engage in are small and non-significant (Bianchi & Robinson, 1997). Additionally, recent studies suggest that children in stable single-parent families may fare better than children whose parents remarry since a new spouse often results in a reallocation of parent's time (Thomson, Mosley, Hanson, & McLanahan, 2001).

The amount of time that children spend with their parents also varies by developmental stage. Young children, who require extensive direct care, spend more time with their parents than older children who require less direct supervision and who as a result of school, homework, and part-time jobs have less discretionary time (S. Hofferth & Sandberg, 2001; Robinson & Bianchi, 1997). Bryant and Zick (1996) find that mothers share a wider range of household and family maintenance tasks with their children, but the sharing of tasks is somewhat gendered. For example, mothers are more likely to share preparing meals and cleaning with their daughters than with their sons. The authors argue that by engaging in household tasks together, mothers are transmitting and teaching nurturing behavior (Bryant & Zick 1996).

Important differences by race/ethnicity and socioeconomic status have also been found in both the amount of family time and the types of activities in which families engage. Hofferth and Sandberg, for example, find that black children spend more time in church, Asian children spend more time studying, and Hispanic children spend more time engaged in eating meals together and in household tasks.

The body of research reviewed thus far points to several important aspects for the measurement of family time. First, the studies reviewed indicate that, in addition to measuring the amount of family time, it is also important to measure the kinds of activities that family members engage in. For example, Bryant and Zick's research suggests that, while the amount of family time does not vary greatly by maternal employment status, the type and distribution of family activities do. In addition, it may

be that what family members are doing together is as important for family and child well-being as the amount of time families spend together. Second, these studies suggest that it is important to collect data from multiple family members and from multiple perspectives. For example, measuring only mother-child time underestimates the amount of time that children spend with parents and ignores the important contributions that men make to family life. Third, the research of Hofferth and others speaks to the importance of including items that capture the meaning of and the impetus behind family activities. For example, the salience of the family unit among Hispanics may result in Hispanic children and parents sharing household tasks to a greater extent than other racial groups (see (Taylor, 1994).

Strengths and limitations of existing measures

Time use diaries: One of the most common sources of data on family time has been time use diaries. Time use diaries ask respondents to report how much time they have spent in last 24 hours in various activities, such as in child care, reading or playing, talking, eating meals together, etc. Time use diaries, while popular, have several limitations. Most notably are the costs associated with collecting extensive and detailed information (S. L. Hofferth & Sandberg 2001). Researchers have attempted to curtail costs by asking about activities for a randomly selected weekday or weekend[1] rather than for extended periods of time (e.g., a whole week or month).

Also of concern are issues surrounding recall (Bianchi & Robinson, 1997; Hill & Stafford, 1985; Robinson, 1985). Attempts to improve recall include providing respondents with beepers or timers that alert respondents to record the activities they are currently engaging in. Nevertheless, tasks and activities that occur less frequently have produced less reliable estimates (Hill & Stafford, 1985; Robinson, 1985). Consequently, studies that use time diaries for estimates of the amount of family time often limit their estimates to frequently occurring activities (see Hofferth & Sandberg 2001a). Unfortunately, while this step helps to improve the reliability of estimates, the diversity of family activities that are captured is limited. This may be especially problematic when studying family time among minority groups and non-middle class families whose activities may differ from white middle class families.

Also problematic, although more easily corrected, is the way in which time is allocated to tasks (see (Folbre, 2001). For example, most time diaries ask respondents to report the primary task in which they were engaged during that time. Thus, secondary and tertiary tasks are underestimated. This is particularly problematic for the study of parent-child time since child-related tasks "…tend to spill over into many indirect as well as direct responsibilities" (Folbre, 2002, p.5). Moreover, only time that is spent directly interacting with children is counted as parent-child time (also known as direct-time). For example, time that fathers spend doing their children's laundry is counted as time spent on laundry. Similarly, time spent doing laundry while supervising their children's homework is not counted as time spent with children. Recent estimates of direct parent-

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[1] It is important to collect information for both weekday and weekend activities because the type of and amount of time spent in activities varies by weekday and weekend.

child time are just under two hours for mother-child and one hour for father-child (Bianchi, 2000).

Clearly, measures of direct parent-child time paint an incomplete picture of parent-child time. Fortunately, recent time use diaries have collected data on secondary and tertiary activities; thereby, providing measures of *indirect parent-child time.* When secondary activities are included, estimates increase to 2.8 hours per day for mothers and 1.3 for fathers (Bianchi, 2000). Including all time spent with children in any activity, parent-child time increased to 5.5 hours per day for mothers and 3.8 hours for fathers (Bianchi, 2000). Including time spent in an activity, as well as time that parents are accessible to children, though not directly engaged in an activity with them, children are estimated to spend 29 hours with their mothers and 19 hours with their fathers on a weekly basis (Sandberg & Hofferth 2001). The importance of including indirect measures of family time may be particularly relevant for working and single-parents for whom time is more limited and, as noted above, for certain minority group members who are more likely to undertake households tasks together.

Moreover, measures that are based on direct and indirect family time miss the importance of parental accessibility (Bianchi, 2000; Budig & Folbre, 2002). Parental presence regardless of whether parents and children are engaging in activities together may be important for child well-being.

Finally, because time use diaries record data at the individual or dyad level, estimates of time spent together as a *family unit* are largely missing. That is, less is known about the amount of time that all family members spend talking together, engaging in leisure activities, or interacting as a family unit than is known about parent-child or couple time.

The Home Observation for the Measurement of the Environment (HOME): The HOME scale was developed as a tool for assessing children's home environments (Caldwell & Bradley, 1984). The intent of the scale is to identify children whose home environments place them at risk for *unhealthy* development. The scale is made up of both parental report items and interviewer observations, and is designed to be child-specific and age appropriate (e.g., items vary by age of the child). The scale has been used in a variety of ways from following the development of low-weight infants over time (Bradley, Caldwell, Rock, &Casey, 1987; Bradley et al., 1994), to researching the influence of work circumstances on children's home environments and their outcomes (Cooksey, Menaghan, &Jekielek, 1997; Parcel & Meneghan, 1994), to assessing the well-being of children who live in poverty (Moore, Glei, Driscoll, Zaslow, &Redd, 2002). Many large-scale studies include measures of the home environment, such as the National Longitudinal Survey of Youth 1979, the Panel Study of Income Dynamics, and the Early Childhood Longitudinal Study.

While the HOME scale was not developed to measure time use specifically, it does contain items that might be helpful in this regard. Several of the items tap into aspects of children's time use, such as how often parents read to their children, how often children perform chores, how often parents take their child to the grocery store or how often the

parents take their child to a museum; the response options are typically in Likert-scale format, and do not capture actual time spent in each activity. Other items tap into the quality of interactions: Affective items tap into the quality of parent-child interactions by reflecting pleasant conversations, parental responsiveness to children's questions, kissing, hugging and caressing of the child by the parent (as observed by the interviewer). Questions about cognitive stimulation often probe the frequency of activities with a child, such as reading with the child, or helping the child with tasks, going to museums, etc. Questions from the scale also probe aspects of overall family time spent together, and not just parent-child time, although these questions are very limited. They tap into the frequency with which the child gets together with other family and friends, and the frequency with which the child eats dinner together with the family.

The HOME scale is useful but also too limited to address current critiques of family time use measures. While some items provide a sense of quality and others of quantity of time spent together, the items do not offer a way to judge whether quality time is spent within specific activities. In addition, although quantity of time in activities is reported, it is difficult to get an idea of the make-up of the family day: this would be a limitation of most any measure that is not collected with a time use diary. The items in this scale do not provide information on the interactions that other family members have with each other. While this scale has proven an important tool for understanding child development, it is limited in addressing current issues related to family time use.

Other measures: The most common survey research method for collecting time use information is to directly ask parents how much time they spend in specific activities with their children. While seemingly more simple than time use diaries, or more accurate in terms of actual time than items from measures like the HOME scale, this method is known to be biased: Parents will report more time spent on desirable activities than on less desirable ones, the reports are difficult to validate, and some research shows that times have been inaccurately reported with this method (S. L. Hofferth & Sandberg 2001).

Routines and rituals: We have suggested that current measures of time use are better at capturing activities between parents and children than they are at capturing interactions at the family level. We view family-level activities as important from the standpoint that one's experience in their family of origin has implications throughout the lifecourse, influencing the manner in which offspring form and interact with their own families. Additionally, Howe (2002) asserts that family-level activities shape a unique family identity, a sense of commitment to others in one's family that fosters networks of social support. Toward this end, there has been a resurgence in attention to the notion of family routines and family rituals as separate but important constructs.

The term 'routine' is used to identify habits of daily living – instrumental, brief, observable behavior that is repeated over time (Fiese et al., 2002). To a limited degree, data on some key family 'routines' are already collected (eating dinner together, going shopping together). Rituals are contrasted from routines as having an affective component, a symbolic meaning that conveys a sense of family identity that leaves an

individual with a sense of belonging (Fiese et al., 2002, page 382). Distinctions between the two have rarely been made in empirical studies.

Fiese and Kline (1993) developed an instrument that actually distinguishes between the two concepts (Fiese et al., 2002, page 384). Their questions on routines go beyond typical measures that capture 'frequency of eating dinner together.' For example, they probe whether family members are expected to contribute to the chore of getting the dinner on the table. They identify rituals by collecting responses dealing with the "affect, symbolic significance, and commitment to continue the activity across generations" related to routines. These appear to be open-ended questions. They find that the distinction makes a difference in their research – family rituals were associated with adolescent identity and marital satisfaction, whereas family routines were not (Fiese, Hooker, Kotary, &Schwagler, 1993). While these instruments help identify family routines that are meaningful family activities, they have only been used on small samples. It would likely be costly to code responses on the meaningfulness of family routines in large scale surveys. Alternatively, Larson suggests that one way to identify meaningful family interactions (or in his conceptualization, activities that involve an emotional component) is to include a survey question probing the most significant and least significant activities of the day (Larson, 1997).

III. Measurement Gaps

In this review, we have identified existing measures of family time and discussed each of their strengths and limitations. We summarize these important issues here, as well as highlight additional measurement gaps.

Quantity, quality and regularity. This review has revealed that many dimensions of family time exist. Describing the quantity of time that parents and children spend in activities is one way to identify whether parents are investing instrumentally, emotionally and cognitively into their families. While time diaries and surveys have been fairly adequate at capturing adult time spent in routine activities (although respondents tend to over-report time in housework (Robinson, 1997)), some uses of time are difficult to capture but are nonetheless important. For example, it is possible to accomplish two activities at once, such as cooking dinner while handling tasks on the phone or talking to one's child about her day. The *management* of household tasks, such as taking responsibility for making sure household functions get addressed and assigning the tasks to be completed, is also an important chore that is not typically captured by items that tap into time spent in specific chores (Hoffmeister & Edgell, 2003).

Researchers have also emphasized the need to better measure and probe the *quality* of time spent in interactions. As explained earlier, the HOME inventory identifies parent-child activities that are associated with positive child development. From a child development perspective, however, the effect of time spent in activities with family members might also depend upon the interactions taking place within the activity. For example, simply watching television with one's child might signal to a child that a parent cares, but interactions and communication between parents and their children regarding

the content of television shows or daily activities may strengthen this signal, while also allowing parents to convey important family values. This is not to suggest that all time spent together as a family needs to be maximized to fulfill both child development and other purposes; however, along with others, we are suggesting that attention to the absolute amount of time in certain activities may not reveal interactions that may have a significant and positive influence on children.

It is also possible that there is value to children of their parents just "being there" (Bianchi 1999), but this remains an unanswered question. Time when mothers are available but not directly involved with their children is a main reason for a time differential between employed and non-employed mothers' time spent with their children. And yet, the availability of cellular phones and beepers might help reduce this differential. Research is just beginning to address these issues (see Bianchi 1999).

Finally, researchers would also like to know more about the regularity of activities. Fiese et al. (Fiese et al., 2002) suggest that identifying routines is important: routine or 'regular' interactions can foster adaptation in times of family crises, such that maintaining regular routines, such as dinner time or family gatherings, can help children cope with disruptive events (e.g. transitions in family structure). Also, rituals are distinct but important time use that influences family members' sense of belonging.

Unit of analysis. Most measures of family interaction are focused on whether families are fulfilling the task of childrearing successfully. The interactions are often from the perspective of the child or parent, and they can shed light on whether an individual child is receiving adequate parental attention. Accordingly, results reveal information on the happenings within that dyad but they cannot necessarily be generalized to other relationships within the family, or to interactions that include the whole family. Measuring what other family members are doing in the household would give us a more complex glimpse of how families spend time together (Bianchi, 1997). Measuring family time from the perspective of the whole family is also important. Time spent together helps families shape a unique identity, and helps individuals within the family unit feel a sense of belonging that is important for healthy development. Further, spending time with family members and extended family members helps to build individual access to lasting resources of social support. The importance of family rituals (differentiated from routines as having an affective component) such as holidays, birthdays, weddings or other significant events is under-studied.

Attention to cultural differences. Attention to cultural differences in the use of family time has been limited. This is an area that would likely benefit from qualitative and observational research. A very insightful example is present in the work of Martini (1996). Martini observes the communication exchange between family members in a typical, in fact, probably the most measured, family activity: eating meals together. The author found that Caucasian-American families held different types of conversations compared to Japanese-Americans – the former were more likely to focus on the individual experiences and the child, while the latter mainly discussed group activities and shared experiences. Observations of the content of communication of an otherwise

simply measured activity (eating dinner) yields information on how families transmit their values, and how this varies by culture. Similar analyses of other 'routine' activities necessary for family maintenance may also be fruitful.

Attention to developmental and lifecourse changes. Time use is not static across the lifecourse. The transition to parenthood remains an important event for the re-organization of couple time, often resulting in an unequal division of domestic labor. In terms of child development, young children are more demanding on parental time than are older children, although Bianchi makes the point that when the parental work day is over, children themselves may have limited time available to spend with their parents (2000). Adolescents, in particular, require fewer parental time investments for their upkeep (clothing, feeding, etc), but they do require other types of time investments by parents, such as monitoring of their activities and whereabouts (Furstenberg, Cook, Eccles, Elder, &Sameroff, 1999). The ratio of needed time to actual time may vary as children age, but, to our knowledge, empirical estimates have not been attempted.

Theoretical gaps. The collection of improved measures of time use has the potential to expand theoretical perspectives, and therefore also improve our understanding of patterns. In particular, closer examination of time in primary and secondary tasks may help inform gender theories on the division of labor. Measures of family time spent together will be useful toward the development of perspectives on family routines and rituals. Collecting time use information of multiple persons in the same household, simultaneously, will be helpful towards informing family systems theory. Understanding time use may help inform how healthy marriages are sustained and how strong families are maintained. Better data may also inform debates about the quality versus the quantity of family time.

The need to collect measures regularly. Although the availability of data on the amount of family time has increased, our most recent national estimates of family time are now more than five years old (for example, PSID time diaries were collected in 1998). Given the changing work schedules of parents, economic shifts, and changes in children's living arrangements, there is a need for more current and up-to-date information. Moreover, although researchers have been able to create a historical picture of family time by piecing together data from various surveys (see (Bianchi, 2000; Fiese et al., 2002), this historical picture is incomplete. Because of the lack of continuous data, researchers have been limited to comparing estimates of family time over a small number of years (e.g., 1965 to 1998). These comparisons may mask variations in patterns that occurred in between data collection efforts. Without the availability of regularly collected measures of family time, the ability of researchers and policy makers to track trends in family time will be limited to patching together data from multiple sources that may not use comparable definitions. Finally, trend data are important for evaluating the implications that changes in government assistance programs, federal laws (i.e., Family Leave Act), and work-place policies (i.e., flex-time, telecommuting, etc) may have on family time.

Designing longitudinal studies of family time. In addition to surveys that measure family time and activities at regular points in time, longitudinal studies of family time are

needed. Research using cross-sectional data suggests that children's educational achievement, risk behaviors and parental marital stability are associated with family time (S. Hofferth & Sandberg, 2001; Presser, 2000). However, longitudinal studies are needed to address issues of causality and to further investigate the processes by which family time is associated with child outcomes. It is important to note that longitudinal studies of family time need to include measures of family background characteristics, as well as measures of child outcomes measures. Care should be taken to ensure that the list of child outcomes variables is not limited to negative outcomes or risk behaviors, but also includes positive outcomes and behaviors. Longitudinal studies should include, whenever feasible, data from multiple family members and perspectives. Ideally, longitudinal studies should include items that measure both the amount of family time and the kinds of activities that parents and children engage in together. Lastly, special attention should also be given to include items that capture the quality, meaning and nature of family interactions.

IV. Recommendations

Promising measures adaptable for large scale surveys. Items used in qualitative and small-scale studies might serve as a good starting point when developing new items for large scale studies. In this section, we identify promising measures and constructs; the items we recommend are listed in Appendix A.

Capturing interactions between family members while engaged in activities, not just the activities themselves, is key to understanding the importance of the use of family time. Observational research on family interactions will be key to developing these measures in the future. An example mentioned above is that *observations* of parents and children watching television together reveal that important socialization activities can occur in this time. While observational measures are not adaptable to large-scale surveys, per se, we do offer suggested items that have been used in an international survey that can be fielded immediately in surveys on families to capture some of the content of social and cultural communication around activities and topics (see Appendix A, *Communication and interactions during activities*). Some of these items have been found to be related to higher levels of literacy among youth in the U.S. and other OECD (Organization for Economic Cooperation and Development) countries (Guzman, Hampden-Thompson, and Lippman, 2003).

Numerous studies indicate that children who eat meals with their parents regularly fare better, and thus such a measure is worth repeating in surveys (S. Hofferth & Sandberg, 2001). While information is available about the frequency and regularity with which families eat meals together, less is known about what goes on during family meals. Qualitative studies by Blum-Kulka (1994) indicate that the activities and content of conversations that take place at the dinner table vary by class. It is important not to restrict survey items to dinner because of variations if families' availability depending on work schedules. The items we recommend fielding then, ask about the frequency of eating any meal together, not just dinner, and about whether that time is used by families

to find out what and how other family members are doing (see Appendix A *Family routines and rituals*).

Given the recent emphasis on the "squeeze" of family time, we also suggest adapting such a measure to on-the-go activities. Hofferth and Sandberg (2001a) indicate that parents often bring their children shopping with them. For busy or cash-strapped parents, this may provide an opportunity to spend time together while at the same stocking the cupboards. Traveling together in the car to get to school and work is another opportunity for such interaction. We therefore suggest adding an item to existing measures of commuting time to explore how families are using this time (see Appendix A: *Family routines and rituals).*

In addition to regular routines and communication, time to relax together as a family is important for family well-being. Research on stepfamilies (Braithwaite, Olson, Golish, Soukup, &Turman, 2001) suggests that taking family vacations is an important symbolic step in forging family identity for newly formed families. Identifying whether families spend weekends and vacations together is largely uncaptured in existing large-scale surveys, but can be found in a small-scale survey (Fiese and Kline, 1991), which we recommend (see Appendix A, *Family routines and rituals*).

Given that family identity appears to be created through shared family time, history and events, and meaning is created through family celebrations, fielding measures that capture cultural traditions, annual celebrations, the presence of family stories, the retelling of family events and the recording of family history may also be worthwhile (see Appendix A, *Family routines and rituals*).

Conclusions

In this paper we have provided an overview of existing measures of family time use, as well as suggestions for new measures. Given the importance of family time for the well-being of families and their individual members, and evidence that new threats to family time are emerging, the development and implementation of family time measures in large-scale surveys will yield a deeper understanding of contemporary families and how they adapt to their social context.

1. Communication and interactions during activities
 Source: Program for International Student Assessment (PISA), conducted by the OECD.

Cultural Communication.

In general, how often do your parents:
       Circle only one number in each row.

	Never	A few times a year	About once a month	Several times a month	Several times a week	Every Day
Discuss political or social issues with you?	1	2	3	4	5	6
Discuss books, films or television programs with you?	1	2	3	4	5	6
Listen to classical music with you?	1	2	3	4	5	6

Social Communication.

In general, how often do your parents:
       Circle only one number in each row.

	Never	A few times a year	About once a month	Several times a month	Several times a week	Every Day
Discuss how well you are doing at school?	1	2	3	4	5	6
Eat dinner with you around a table?	1	2	3	4	5	6
Spend time just talking to you?	1	2	3	4	5	6

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2. Family routines and rituals

Meal and car time (Developed by Child Trends)

We have one meal together as a family.
Everyday   Almost everyday   A couple of times a week Once a week Less than once a week.

Dinner time is an opportunity for each of us to talk about our day and find out how we are doing.
Strongly agree   Agree   Disagree   Strongly Disagree

Time in the car together is an opportunity to talk things over with each other.
Strongly agree   Agree   Disagree   Strongly Disagree

Several items developed by Fiese and Kline are worth considering (Fiese and Kline 1991). A sample of such items include:

Think of how your family typically acts or participates during these events. Read the two statements and choose the one that is <u>most like your family.</u> After choosing the statement that is most like your family, decide if the statement is <u>really true</u> or <u>sort of true</u> for your family. <u>Circle the letter that best describes your current family.</u>

For our family Really true	Sort of true				For our family Really True	Sort of true
A	B	1. Some families rarely spend weekends together	BUT	Other families regularly spend weekends together	C	D
A	B	2. Some families regularly spend vacations together	BUT	Other families rarely spend vacations together	C	D
A	B	3. In some families everyone has a job or task to do	BUT	In other families people do what needs to be done and take turns	C	D
A	B	4. Some families have regular and several annual celebrations	BUT	For other families there are few annual celebrations or they are rarely observed	C	D
A	B	5. Some families observe cultural traditions	BUT	Other families rarely observe cultural traditions	C	D

Family traditions and history (Developed by Child Trends)

In our family, there are traditions associated with how we celebrate the holidays.
    Strongly agree   Agree   Disagree   Strongly disagree

My family and I get together and look through family albums and watch family videos.
    Often   Seldom   Never   Only on special occasions

Please tell me whether this is true or false:
        In my family, we celebrate birthdays together as a family every year.
        In my family, the adults share stories about their childhood.
        In my family, children and adults talk about their family history.

References

Barber, B. K. & Erickson, L. D. (2001). Adolescent social initiative: Antecedents in the ecology of social connections. *Journal of Adolescent Research, 16*(4), 326-354.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*, 43-88.

Bianchi, S. M. (1997). Remember Parkinson's law: Work expands to fill the time available (Discussant Remarks), *Time use, non-market work, and family well-being*: Washington, DC.

Bianchi, S. M. (2000). Maternal employment and time with children: Dramatic change or surprising continuity? *Demography, 37*(4), 401-414.

Bianchi, S. M. & Robinson, J. P. (1997). What did you do today? Children's use of time, family composition, and the acquisition of social capital. *Journal of Marriage and the Family, 59*(2), 332-344.

Bianchi, S. M. & Spain, D. (1996). Women, Work, and Family in America. *Population Bulletin*.

Blum-Kulka, S. (1994). The dynamics of family dinner talk: Cultural contexts to children's passages to adult discourse. *Research on language and social interaction, 27*(1), 1-50.

Bond, J. T., Galinsky, E., & Swanberg, J. E. (1998). *The 1997 National Study of the Changing Workforce*. New York: Families and Work Institute.

Bradley, R. H., Caldwell, B., Rock, S. L., & Casey, P. M. (1987). The early development of low-birthweight infants: Relationship to health, family status, family

context, family processes, and parenting. *International Journal of Behavioral Development, 10*(3), 301-318.

Bradley, R. H., Whiteside, L., Mundfrom, D., Casey, P., Kelleher, & Pope, S. (1994). Early Indications of Resilience and Their Relations to Experiences in the Home Environments of Low Birthweight Premature Children Living in Poverty. *Child Development, 65*(2), 346-360.

Braithwaite, D. O., Olson, L. N., Golish, T. D., Soukup, C., & Turman, P. (2001). "Becoming a family": Developmental processes represented in blended family discourse. *Journal of Applied Communication Research, 29*(3), 221-247.

Bryant, W. K. (1996). A comparison of the household work of married females: The mid 1920s and the late 1960s. *Family and Consumer Sciences Research Journal, 24*(4), 358-384.

Bryant, W. K. & Zick, C. D. (1996). An examination of parent-child shared time. *Journal of Marriage and the Family, 58*, 227-237.

Budig, M. J. & Folbre, N. (2002). *Has parental time devoted to children remained unchanged?* Amherst: University of Massachusetts.

Caldwell, B. & Bradley, R. H. (1984). *Home observation for measurement of the environment*. Little Rock: University of Arkansas at Little Rock.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 96*, S95-S120.

Cooksey, E. C., Menaghan, E. G., & Jekielek, S. M. (1997). Life-course effects of work and family circumstances on children. *Social Forces, 76*(2), 637-667.

Elder, G. (1999). *Children of the Great Depression*. Boulder, CO: Westview Press.

Federal Interagency Forum on Child and Family Statistics. (2003). *American's Children: Key National of Well-being, 2003.* Washington DC: US Government Printing Office: Federal Intergancy Forum on Child and Family Statistics.

Fiese, B. H., Hooker, K. A., Kotary, L., & Schwagler, J. (1993). Family rituals in the early stages of parenthood. *Journal of Marriage and the Family, 57*, 633-642.

Fiese, B. H. & Kline, C. A. (1993). Development of the family ritual questionnaire: Initial reliability and validation studies. *Journal of Family Psychology, 6*, 290-299.

Fiese, B. H., Tomcho, T. J., Douglas, M., Josephs, K., Poltrock, S., & Baker, T. (2002). A review of 50 years of research on naturally occurring family routines and rituals: Cause for celebration? *Journal of Family Psychology, 16*(4), 381-390.

Folbre, N. (2001). *The invisible heart*. New York: The New Press.

Folbre, N. (2002). *Valuing parental time: New estimates of expenditures on children in the United States.* Paper presented at the Allied Social Science Association, Atlanta, GA.

Furstenberg, F. F., Cook, T. D., Eccles, J., Elder, G. H., & Sameroff, A. (1999). *Managing to make it, Urban families and adolescent success*. Chicago: University of Chicago Press.

Herman, M. R., Dornbusch, S. M., Herron, M. C., & Herting, J. R. (1997). The influence of family regulation, connection, and psychological autonomy on six measures of adolescent functioning. *Journal of Adolescent Research, 12*(1), 34-67.

Hill, C. R. & Stafford, F. P. (1985). Parental care of children: Time diary estimates of quantity, predictability, and variety. In F. T. Juster & F. P. Stafford (Eds.), *Time, goods, and well-being* (pp. 415-437). Ann Arbor, MI: Institute for Social Research.

Hofferth, S. & Sandberg, J. F. (2001). How American children spend their time. *Journal of Marriage and Family, 63*, 295-308.

Hofferth, S. L. & Sandberg , J. F. (2001). Changes in American Children's Use of Time, 1981-1997. In T. Owens & S. Hofferth (Eds.), *Children at the Millennium: Where Have We Come From, Where are we Going?* (pp. 193-229). New York: Elsevier Science.

Hoffmeister, H. & Edgell, P. (2003). Sunday morning rush hour. In P. Moen (Ed.), *It's about time, Couples and careers*. Ithaca: Cornell University Press.

Howe, G. W. (2002). Integrating family routines and rituals with other family research paradigms: Comment on the special section. *Journal of Family Psychology, 16*(4), 437-440.

Jacobs, J. A. (2003, June 16-18). *Changing hours of employment in American families.* Paper presented at the Workforce/Workplace Mismatch? Work, Family, Health, and Well-Being, Washington, D.C.

Larson, R. W. (1997). *How children and adolescents spend time across the world.* Paper presented at the Time use, non-market work, and family well-being, Washington, DC.

Maccoby, E. E. & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In M. A. Hetherington (Ed.), *Handbook of Child Psychology: Volume 4. Socialization, Personality, and Social Development* (4 ed., pp. 1-101). New York: Wiley.

Martini, M. (1996). "What's new?" at the dinner table: Family dynamics during mealtimes in two cultural groups in Hawaii. *Early Development and Parenting, 5*, 23-24.

Moore, K. A., Glei, D. A., Driscoll, A. K., Zaslow, M. J., & Redd, Z. (2002). Poverty and Welfare Patterns: Implications for Children. *Journal of Social Policy, 31*(2), 207-227.

Parcel, T. & Meneghan, E. (1994). *Parents' jobs and children's lives*. New York: Aldine De Gruyter.

Presser, H. B. (1999). Towards a 24-hour economy. *Science, 284*, 1778-1779.

Presser, H. B. (2000). Nonstandard work schedules and marital instability. *Journal of Marriage and the Family, 62*(1), 93-110.

Robinson, J. P. (1985). The validity and reliability of diaries versus alternative time use measures. In F. T. Juster & F. P. Stafford (Eds.), *Time, goods, and well-being* (pp. 33-62). Ann Arbor, MI: Institute for Social Research.

Robinson, J. P. (1997). *Remember Parkinson's law: Work expands to fill the time available.* Paper presented at the Time use, non-market work, and family well-being, Washington, DC.

Robinson, J. P. & Bianchi, S. M. (1997). The children's hours. *American Demographics, 19*(12), 20-24.

Sandberg, J. F. & Hofferth, S. (1999, October 6-8). *Changes in parental time with children, U.S. 1981-1987.* Paper presented at the International Association of Time Use Research, University of Essex, Colchester.

Smeeding, T. M. & Marchand, J. T. (2003). Family time and public policy in the United States. (Unpublished Manuscript). Syracuse, NY: Center for Policy Research.

Taylor, R. L. (1994). Minority families and social change. In R. L. Taylor (Ed.), *Minority families in the United States: A multicultural perspective* (pp. 204-248). Englewood Cliffs, NJ: Prentice Hall.

Thomson, E., Mosley, J., Hanson, T. L., & McLanahan, S. S. (2001). Remarriage, Cohabitation and Changes in Mothering. *Journal of Marriage and the Family, 63*, 370-380.

Yeung, W. J., Sandberg, J. F., Davis-Kean, P., & Hofferth, S. (2001). Children's time with fathers in intact families. *Journal of Marriage and Family, 63*, 136-154.

Indicators of Child, Family and Community Connections:

Longitudinal Indicators of the Social Context of Families: Beyond the Snapshot

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**Longitudinal Indicators of the Social Context of Families:
Beyond the Snapshot**

I. Introduction

Purpose of paper. The purpose of this paper is to describe the concept of a longitudinal indicator and to present a conceptual framework for developing such indicators. The paper provides examples of existing longitudinal indicators, such as long-term poverty and welfare dependency. In addition, opportunities for creating new longitudinal measures for families are described. In some cases, it would be possible to develop new longitudinal indicators if just a few variables were added to existing data bases, and several opportunities for making such additions are presented as well.

Definition and importance. A longitudinal indicator is a measure of a family or individual behavior, interaction, attitude, or value that is measured consistently or comparably across multiple points in time and cumulated to provide a portrait over time of an important aspect of family life. Thus, a longitudinal indicator is one type of cumulative indicator. However, unlike cumulative indicators that tally experiences or characteristics at a single point in time, longitudinal indicators cumulate the presence (or the degree of the presence) of behaviors, interactions, attitudes, or values across time.

The key to a longitudinal indicator is not the way in which the data are collected; the data for such an indicator can be collected either retrospectively from a single survey or by combining data from longitudinal surveys across waves. Rather, the key feature is that it assesses a longitudinal construct. For example, instead of, or in addition to, assessing current family structure, a longitudinal indicator might assess the percentage of a child's life that the child has lived with both of his or her biological parents. As noted by Moore (1997), researchers can develop longitudinal indicators that reflect the duration of various family circumstances that children experience, including poverty or family structure, or the presence of chronic health conditions.

Longitudinal indicators can also sum non-consecutive spells in a particular status, for example, the amount of time that a family spends on welfare over a period of years. In addition, longitudinal indicators can be directional. For example, relationships between family members might be tracked over time and found to deteriorate or to improve in quality over time.

Because, by definition, longitudinal indicators assess aspects of families over time rather than at single points in time, they can be used to gain a more comprehensive understanding of how families are faring. Although we have not identified many studies that systematically compare longitudinal and cross-sectional indicators, we hypothesize that longitudinal indicators are likely to be more strongly related to family outcomes than are cross-sectional, or point-in-time, indicators. The reason for anticipating a stronger association for longitudinal measures is the greater exposure of children and families to a given influence over time, as well as the greater reliability of an indicator based on

repeated measurements. Because family behaviors, interactions, attitudes, and values change over time, or may be present or absent for only brief periods of time, a cross-sectional indicator may "miss" detecting the characteristics that are most typical for a particular family by assessing that family at only one point in time. For example, a family may normally attend religious services, but a cross-sectional measure assessing attendance in the last month may miss their long-term attendance pattern, if the reference period happened to be an unusual month in which the family was not able to attend services. Furthermore, since family outcomes develop over time, characteristics that are consistent across the stages of the family's life cycle can be expected to have stronger effects on outcomes than would characteristics that are short-term or anomalous for a family.

Longitudinal measures can be particularly useful for learning about the strengths that families maintain across developmental periods of family life, because strengths tend to be enduring characteristics. For example, involvement in school activities tends to vary in frequency and type from elementary school through high school; but involvement over the years may be particularly supportive of children's school success. Additionally, they can assess over time both the qualities of relationships among family members (such as warmth), as well as family behaviors (such as religious attendance), both of which are aspects of family strengths.

On a different note, another advantage of longitudinal indicators is that, under some circumstances, they may be more cost-effective than cross-sectional indicators (Moore et al., 2002). Specifically, by spreading out the cost of assessing a family characteristic over time, rather than investing the resources necessary to gather detailed data for a cross-sectional indicator in each administration of a survey, costs may be minimized. For example, five or six items can be repeated over time and cumulated, in lieu of a 20-item scale assessed at multiple points in time. Indeed, Moore and her colleagues (2002) found that the reliability of varied shortened versions of the NLSY79 HOME-Short Form was comparable across a scale comprised of 6 items assessed 3 times and a scale comprised of 24 or 27 items assessed 3 times. Also, the strength of the association of the shorter scale with adolescent outcomes measured two years later was generally equivalent to the strength of the association of the long scale, even after controlling for social, demographic, and economic factors. Additionally, if longitudinal indicators have stronger predictive validity than cross-sectional indicators, the overall number of questions needed to assess a construct can be reduced. Thus, Moore and her colleagues found that the scale comprised of 6 items assessed at 3 points in time (cumulated for a total of 18 items) predicted delinquency and PIAT test scores (though not parent-child activities) better than a 27-item scale measured at one point in time.

Of course, there are some topics for which longitudinal indicators would not be useful. For example, we would not consider major dramatic events such as a hurricane or serious car accident to be in the same conceptual category as a longitudinal indicator. Such events represent important occurrences that may have significant consequences for children and families, so assessing them in other cumulative indicators, such as a measure of turbulence, would be informative. However, longitudinal indicators represent a

particular sub-group of cumulative indicators that track ongoing involvement in a line of behavior, interactions, values, or attitudes to ascertain whether it represents a consistent aspect of family life over time.

II. Framework for Longitudinal Measures

Theoretical perspectives

The project on indicators of the social context of families is organized around two complementary perspectives: the ecological model (Bronfenbrenner, 1979) and a lifecourse framework (Elder, 1998). The ecological model notes that families are nested within and are affected by a number of influences, which range from quite distal factors at the societal level (macrosystems) to factors at the community level (exosystems) and then to more proximal factors in the immediate neighborhood or family (microsystems) (Coatsworth, 2002). The ecological model has recently been updated to include not only a consideration of the characteristics of persons, processes, and contexts, but also the consistency of these over time (Bronfenbrenner and Morris, 1998).

Proceeding from an ecological perspective, longitudinal indicators might be developed to reflect the stability of multiple ecological contexts of family life, ranging from distal factors such as the community, labor force, and media to more proximal factors such as the neighborhood, extended family, religious institutions and schools, to very proximal factors such as the family's interaction patterns and parenting.

Overlaying the ecological perspective is a lifecourse perspective, which emphasizes how the lives of families and individuals evolve and change over time and with development. Thus, a family with several preschool children is in a quite different situation than a family with several adolescents who are finishing secondary school and moving toward independence.

Social contexts for which indicators could be developed

Based on these complementary conceptual frameworks, a number of longitudinal indicators could be developed across the social contexts of families, including family structure; family functioning; family, work, and child care; school involvement and civic engagement; religiosity; youth development; and social connections.

Family Structure. Research indicates that events such as marital disruption can have negative implications for children (Moore, Morrison, and Glei, 1995). Moreover, research indicates that status distinctions such as whether biological parents are married or cohabiting are related to children's development (Seltzer, 2000). However, duration can provide important additional information. For example, children who live with both of their biological parents for a longer proportion of childhood enjoy numerous economic, social and psychological advantages. A measure of the number of years that parents remain together from the time that their first child is born provides this

information. Such a measure could assess either the number of years of marriage or years of co-residence. Measuring the actual number of years is most successful for families in the same or similar life cycle stage, such as families with teenagers. If couples from different life cycle stages are combined, a measure of the proportion of time that parents remain together might be preferred.

A measure of consistent father involvement represents another aspect of family structure. A measure of the number of years that a father either resides with his child(ren) or remains in regular contact with his child(ren) if he does not reside in the household picks up a different construct than the duration of marriage or co-residence. Given the large number of children who do not continuously live with their biological father, it would be useful to understand how many fathers never live with their children, how many always do, and how families are distributed between these poles. Alternatively, assessing the proportion of time that fathers live with their children would yield a measure that is comparable across families in different life cycle states.

Family Functioning. Numerous aspects of family functioning have been found to be related to the well-being of the adults and children in a family, including family routines, the quality of the parents' marital relationship, the quality of the parent-child relationship, monitoring and supervision of children, and family communication. From a lifecourse perspective, it is important that these aspects of family functioning be ongoing in age-appropriate ways over time. For example, maintaining family routines consistently over time, sustaining family communication over time, being aware of and monitoring children's activities and friends as they grow older, and maintaining positive parent-child relationships as children age represent important aspects of family functioning that are not "one-shot" efforts but ongoing commitments.

Family, Work and Child Care. Secure parental employment provides an important base for family life. The absolute level of income is to be distinguished from the stability and dependability of that income. Not only is poverty associated with poorer child outcomes (Duncan and Brooks-Gunn, 1997; McLoyd, 1998), but so too is inconsistent income. For example, fluctuations in income have been linked with out-of-wedlock childbearing (Wu, 1996), as well as with lower reading and math achievement and higher behavioral problems among elementary school-age children (Moore et al., 2002).

Stable parental employment status can also be important. Some research has found that instability in maternal work status (a change between more, fewer, or no hours at all) is negatively linked with children's achievement and behavior in school (Moorehouse, 1986, as cited in Bronfenbrenner and Morris, 1998). While the largest effects were for children of mothers moving into full employment, the study also found negative effects of reductions in work hours or leaving the work force.

Consistent, dependable child care arrangements represent another longitudinal construct that affects adults, children and the family as a whole. Poorer development among young children has been linked with having a large number of child care providers or frequent changes in providers (Hayes et al., 1990). When child care arrangements fall through,

parents may miss work and children may be cared for in a patchwork set of arrangements or even left in self-care.

As part of the Project on Child Well-being at the State Level, the construct of "turbulence" was developed. Turbulence assesses multiple changes in various domains of a child's life, such as changes in family structure, residence, school or child care arrangements, or fluctuations in family income (Child Trends, 1999). It has proven to be difficult to measure this construct with cross-sectional data, but it could be measured with longitudinal data that track family changes over time.

School Involvement and Civic Engagement. Attendance at signal moments such as graduation and pageants represents a different level of family involvement in the school than ongoing attendance at parent-teacher association meetings, volunteering in the classroom, and regular meetings with teachers. Continuous involvement in school keeps parents in touch with a central socializing institution in their child's life. Rather than coding involvement as high, medium or low at a particular time, such involvement might be coded over a period of years. Also, given the tendency for many parents to become less involved when their children are adolescents (Zill and Nord, 1994), sustained family involvement through the adolescent years may foster stronger academic ambitions and better school performance.

Similar contrasts in levels of involvement can occur with civic engagement, with some adults voting only in presidential elections, for example, and other adults voting consistently in off-year elections as well. Similarly, sustained volunteering or community work over a period of years is quite different than participating in a one-time event, such as a morning walkathon (desirable as that may be). Obviously, even occasional involvement is good for the community, but sustained involvement has more potential to influence family processes and overall life style. That is, sustained engagement in civic life and community activities is not just a positive contribution to the community but represents a role model for children. However, the value of sustained engagement outside the family might vary depending upon the level of activity and the age of children in the home. We are not aware of research that explores this issue, but we speculate that, when children are young, modest levels of family engagement outside the home might be reasonable, while, when children are older, greater levels of engagement and activities that involve the family as a whole might be very positive.

Religiosity. Occasional attendance on special occasions and holidays represents a very different level of religious involvement than fidelity over time. Families that attend services or classes together, say grace or blessing or read religious texts together, watch religiously-oriented television or videos together, and engage together in activities sponsored by a religious organization over a period of years demonstrate an interest and commitment. Some research suggests that parental importance of religion translates into greater religious involvement by their children (Gunnoe and Moore, 2002), and numerous studies link family religious involvement with lower levels of risky behavior on the part of children (Bridges and Moore, 2002).

Youth Connections. Consistent engagement in positive activities during the high school years has been found to predict better outcomes in early adulthood (Zaff et al., 2003). Many activities require an ongoing investment before proficiency is achieved. For example, playing a musical instrument, singing, playing a sport, debate and dance all require ongoing training, practice and performance. Hence, a longitudinal measure of sustained involvement in some kind of youth development activity should theoretically represent a stronger measure than involvement at a moment in time.

Social Connections. Inherent to the notion of being connected to friends, neighbors, and social institutions is the presumption that this relationship is sustained over time. Indeed, social capital is conceptualized as a sense of trust and mutuality that is built up over time and sustained by means of ongoing interaction (Coleman, 1988). Similarly, friends and neighbors on whom families can rely are generally those who have built up the relationship over time. Of course, in disorganized and violent neighborhoods, such potentially harmful associations may be avoided (Mekos, forthcoming). Moreover, even in a stable neighborhood or voluntary association, there is turnover, so it cannot be assumed that social connections are absolutely static. In addition, long-term residence or membership does not necessarily mean that social connections exist. Rather, time may be a necessary but not a sufficient circumstance to create the conditions in which such social connections may develop. One aspect of this construct that has been assessed, though typically only at a point in time, is the presence of social support, which is generally associated with better outcomes for individuals (Sampson, 1991), though we have not yet identified studies of family-level outcomes.

Long-term residence in a low-income neighborhood or in a high-crime neighborhood would be valuable indicators of a difficult context for family life. On the positive side, long-term residence in a moderate to higher-income community with low residential mobility might suggest less distress and greater social connections (Ross, Reynolds, and Geis, 2000).

Appropriate time period

In addition to considering how various social contexts of families might lend themselves to longitudinal measures, researchers must also consider the appropriate time period over which these indicators should be assessed. In the absence of an empirical literature, such choices must be driven by theory and common sense. In general, the notion of a longitudinal indicator implies that it is measured over at least two or three years or longer, if possible. Many survey questions currently ask about activities in the past year, so this rather limited version of a longitudinal indicator is available now for some constructs. (For example, attendance at religious services in the National Survey of America's Families is assessed over the past year.) However, cumulating such a variable across two or three years or longer would be more informative. Long-term poverty and welfare receipt, for example, can be measured across four years in Survey of Income and Program Participation (SIPP) and even longer in the Panel Study of Income Dynamics (PSID) (U.S. Department of Health and Human Services, 2003). Lifetime measures

represent a special case of longitudinal variables. One example would be the proportion of a child's life that his or her biological parents were married.

In general, it seems that measures should be assessed for at least two or three years and up to four or five years, or even longer when appropriate and feasible. Longer time frames are helpful for statuses that can be reported retrospectively, e.g., using an event history calendar. However, people's ability to recall distant events accurately argues against going back more than a decade, except for highly salient events, such as births and marriages. If data are taken from multiple waves of a longitudinal survey, the value of a longer time frame has to be balanced against the cost of collecting data for many years and the attrition that is likely to occur over a period of years and the extent to which the sample would be biased by that attrition. Fortunately, a number of longitudinal surveys (such as the Panel Study of Income Dynamics) have collected annual data on work, income, family structure, and other topics for many years and could readily support construction of longitudinal indicators.

Types of measures that could be assessed longitudinally

Our discussion of potential longitudinal indicators for each of the social contexts of families that we have considered for this project indicates that many cross-sectional indicators have a corresponding longitudinal indicator that provides a useful perspective on the stability or duration of that indicator across families. Nevertheless, not every construct lends itself to longitudinal measurement or is of sufficient importance to warrant an ongoing investment in data collection. Families can experience discrete events occurring at one point in time that change the course of their lives. Such discrete experiences are not appropriately assessed using longitudinal indicators, and can instead be assessed in a cross-sectional survey by asking families if they have ever experienced a particular event. In contrast, the strength of longitudinal indicators lies in their ability to assess the consistency of family characteristics, interactions, attitudes, values, or behaviors over time.

To decide which constructs warrant development of longitudinal indicators, we suggest identifying several potential measures in each of the major ecological domains and focusing on those constructs found to be related to family, adult and child well-being, and self-sufficiency. Examples of such constructs are provided in the next section.

III. Examples of existing longitudinal indicators and their importance

Longitudinal measures are more often used in basic research studies than as social indicators. Indeed, the set of available longitudinal indicators is very small, and many domains have only cross-sectional indicators. Nevertheless, although longitudinal indicators are not common at present, a few examples are available. For example, in the social context of family, work, and child care, the annual report to Congress on Indicators of Welfare Dependence contains a measure of long-term poverty and long-term welfare receipt (U.S. Department of Health and Human Services, 2003). These indicators go beyond reports of poverty or welfare receipt at the time of the interview or during the

previous month to assess the number or proportion of the past several years that a family has received welfare or been in poverty.

Long-term poverty is probably the most widely-known longitudinal indicator relevant to families, and long-term poverty has been found to be associated with particularly negative outcomes for children (Duncan et al, 1994; Corcoran et al., 1992), especially young children (Duncan and Brooks-Gunn, 1997).

Another existing longitudinal indicator falls under the realm of youth connections. Consistent participation in extracurricular activities has not been operationalized in a standard way that could be used as an indicator. However, analyses of the National Education Longitudinal Survey (NELS:88) indicate that high school students who consistently reported across three survey interviews in eighth, tenth, and twelfth grades that they participated in an extracurricular activity during their high school years were more likely to attend college, vote, and volunteer for a community or religious organization two years after high school (Zaff, Moore, Papillo and Williams, 2003).

To support a child's learning, achievement and development, their home environment needs to be supportive as they grow up. Despite this, the quality of the home environment is more often assessed at a point in time than over time. However, Moore et al. (2002) examined a number of different ways to measure the cognitive stimulation and warmth available to a child, using data from the National Longitudinal Survey of Youth, 1979 cohort, specifically, the HOME short scale. This measure could be considered an indicator of family functioning. They found that brief scales assessing aspects of the home environment collected regularly over time predict delinquency and PIAT test scores (but not parent-child activities) similarly to or better than a longer cross-sectional measure in multivariate regression analyses. (They also found that a shortened, longitudinal measure of the Behavior Problems Index predict delinquency, PIAT test scores and smoking as well as or better than cross-sectional versions.) Unfortunately, this is the only study we have found that explicitly compared short-term versus long-term duration or exposure, apart from poverty and welfare (Zill et al., 1991).

Another aspect of family functioning that has been studied is long-term maternal depression. Studies have found that long-term depression has more negative implications for child development than shorter-term depression (review by Coiro, 1998, as cited in Ahluwalia et al. 2001).

The presence of other health problems, which could also affect family functioning, is frequently studied in public health research studies. For example, the National Center for Health Statistics tracks the incidence among children of asthma, allergies, learning disabilities, attention deficit hyperactivity disorder (Bloom et al., 2003) and, in the National Health Interview Survey, the incidence among the entire population of limitations in usual activities and limitations in work activities (Schoenborn et al., 2003). Although previous research has typically assessed the incidence of such conditions at single points in time, many of these health problems tend to be chronic, and it would be helpful to know the proportion of a child's life during which a health problem has been

experienced. Caring for a disabled or chronically ill child is stressful for families (Smith et al., 2001). And while research is mixed on the academic effects of chronic illness on children, it has been linked with social adjustment problems and depression among children (Sinnema, 1991; Boekaerts and Röder, 1999). Therefore, using longitudinal indicators to assess the presence of health problems over time could be useful.

Another longitudinal measure that taps families' social connections is mobility. Mobility is often assessed with retrospective data. For example, the Census long form questionnaire asks about mobility, assessing whether each person in the household "live[d] in this house or apartment five years ago" as well as the year in which the householder moved to the present address. Mobility affects people directly, as well as geographic areas. For example, some families may move in order to improve their economic well-being or to live in a better home or neighborhood (Schachter, Franklin, and Perry, 2003). However, stability (that is, residence in the same location over a long period of time) can be positive as well, improving residents' social connections with each other, particularly in non-poor neighborhoods (Ross, Reynolds, and Geis, 2000). Residential moves that include school changes have also been linked with school problems for children (Scanlon and Devine, 2001).

While this is not an exhaustive review of longitudinal measures and indicators, it is clear that there are indicators from many domains and that, when they have been measured and studied, long-term and ongoing behavior, attitudes or circumstances are related to family and child well-being. Indeed, cross-sectional measures are in some sense taking advantage of the well-known tendency for long-term behaviors (such as welfare receipt) to be over-represented in cross-sectional data (Bane and Ellwood, 1994). Hence, if a person has a chronic illness or an unhappy marriage, they are quite likely to have that characteristic the day that they participate in a survey or study. Accordingly, many cross-sectional indicators provide a signal of the underlying longer-term condition. While it might be preferable to assess the duration of a behavior, attitude or circumstance directly, doing so needs to be considered relative to the feasibility and cost of obtaining longitudinal data in a given instance.

IV. Potential New Measures

Based on the ecological model and a lifespan perspective, a number of critical constructs can be identified and assessed using this longitudinal perspective. In some cases, as described above, previous research has established an association between a longitudinal measure and family or child outcomes. In other cases, it would be valuable to conduct such research.

Surveys that could provide longitudinal indicators

A number of longitudinal surveys are being conducted. Most focus on individuals rather than families; however, many of these contain considerable information about the family. For example, the National Longitudinal Survey of Youth, 1997 Cohort includes information about the parent's religiosity and marital quality, and the Early Childhood

Longitudinal Study cohorts provide information on family involvement in cognitively stimulating activities. In addition, several surveys have specifically collected some kinds of information for all family members over time, for example, the Panel Study of Income Dynamics.

- The National Longitudinal Survey of Youth, 1997 Cohort, for adolescents 12-16 in 1997 (NLSY97)
- The Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K) and Birth Cohort (ECLS-B)
- The Panel Study of Income Dynamics (PSID) and the embedded Child Development Study conducted in 1995 and 2002 (PSID-CDS)
- The Survey of Income and Program Participation (SIPP) and the Survey of Program Dynamics (SPD)
- The National Educational Longitudinal Survey for students who were in eighth grade in 1988 (NELS)
- The National Survey of Families and Households (NSFH)
- The National Longitudinal Survey of Adolescent Health (Add Health)
- The Education Longitudinal Study of 2002 (ELS:2002)

Family Structure

Proportion of a child's life spent with both biological parents. Data from the PSID are available since the 1960s, enabling researchers to develop a truly long-term measure of family composition.

Proportion of an adult's life since first marriage spent in that first marriage. Data from the PSID could be analyzed to create this longitudinal measure. The *Chartbook* includes a point-in-time indicator based on data from the PSID that also taps the concept of stability in family structure: the percentage of families that experienced a change in family structure during the past two years. This indicator could be assessed over a longer period of time, as well, either by measuring the length of time in which families do not experience a change in family structure or by assessing the number of family structure changes over a longer period of time than two years. In addition, retrospective life history information from the National Survey of Family Growth could also be used to construct such a history for women in the 1995 survey.

Father involvement over time. The *Chartbook* includes a point-in-time indicator assessing children's contact with non-residential parents based on data from the April Supplement of the Current Population Survey (specifically, among children who have an absent parent, the percentage with any contact with nonresident parent in the previous year). This indicator could be expanded with a focus on fathers so that, from the time a child is born, the number of months or years that the biological father lives with his child could be calculated. A broader measure of involvement could include both co-residence and regular contact with the child (e.g., at least weekly). Both longitudinal measures could be created for short periods of time using SIPP, and a longer-term measure could be created using the PSID.

A richer measure of father involvement would describe the extent to which fathers are engaged in activities with their child and help care for their child. Data on fathering activities for representative national samples of fathers are very scarce at present; however, a set of variables has been included in the NLSY97. As the young men in that study have children, it will be possible to develop a longitudinal measure of father interaction and engagement with his child. In addition, involvement of fathers who are residential can be assessed in the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), which will be available for analysis in early 2004. (Data are also available for non-residential fathers, with the caveat that the response rate for non-residential fathers was lower than for residential fathers.)

Non-residential father involvement could also be examined using data from the Education Longitudinal Study of 2002 (ELS:2002), which includes a brief question on contact with non-residential parents, as well as a series of questions on the non-residential parent's involvement in the child's school. One drawback of the ELS:2002 is that, although it is a longitudinal survey, data collection begins when adolescents are in tenth grade. However, questions in the ELS:2002 could be added to other surveys that track families with children over longer periods of time.

Turbulence. Multiple changes across domains of life can result in substantial turbulence for families. These kinds of changes can include family composition changes, residential mobility, changes in school or child care arrangements for the children, and periods of unemployment for the parent(s). (Turbulence can affect any area of the social context of families, depending on what type of turbulence is assessed.) A retrospective history was obtained from the parent in the first year of the NLSY97, from which a cumulative measure could be created, and updates can be created using the annual survey data. A more short-term measure can be created using SIPP data. A measure focusing on school changes could be created based on the ELS:2002, which asks retrospectively about school changes since the first grade.

Family Functioning

Marital quality. Identifying couples who not only remain together but who avoid high levels of conflict and sustain high levels of satisfaction would represent a valuable indicator. Research indicates that outcomes are better for children raised by couples in a low-conflict marriage (Seltzer, 2000). Research indicates that this association would be even stronger if it were measured over time (Peterson and Zill, 1986). At present, this construct is not assessed regularly in an ongoing longitudinal survey.

Consistently positive parent-child relationships. Strong parent-child relationships are regularly found to predict positive outcomes for children (Resnick et al., 1997), and this association holds even when numerous background factors are statistically controlled (Hair et al., forthcoming 2004). The *Chartbook* includes two point-in-time indicators assessing positive parent-child relationships: the percentage of adolescents with positive relationships with their parent, and the percentage of parents of children under age 13

who expressed various forms of warmth and affection to their child every day in the past month. These indicators could be extended so that the consistency of such positive relationships over a number of years is assessed. However, one challenge with assessing these indicators is that, at present, there is no single dataset that assesses positive parent-child relationships for children of all ages. Rather, the *Chartbook* used two data sources: the PSID for younger children, and the NLSY97 for older children. In the NLSY97, data provided by adolescents are available in every wave on their relationship with their residential mother, residential father, and their non-residential mother and father (if any), which could be cumulated to produce a measure of a consistently positive relationship, e.g., a relationship that is consistently in the top third or that is consistently rated as a 3 or a 4 on a scale of 0 to 4.

Consistent parental monitoring. In addition to supportive parent-child relationships, another parenting behavior that has been linked with positive outcomes for children is parental awareness of adolescents' friends and activities (Child Trends and the Ohio State University Center for Human Resource Research, 1999). This measure is included as point-in-time indicator in the *Chartbook*, and could be assessed longitudinally as well.

Consistent authoritative parenting. Authoritative parenting is measured by a compound variable that includes warm and supportive parenting combined with firm and consistent discipline (Baumrind, 1966). A number of studies have found that children whose parents engage in authoritative parenting develop better (Baumrind, 1966; Maccoby and Martin, 1983), though a few authors have cautioned that more controlling parenting, combined with warmth, is more common and could be more beneficial in some low-income families (Brody and Flor, 1998). A brief measure of authoritative parenting was included in the NLSY97 and repeated each year for adolescents who were 12 to 14 in 1997. These items could be cumulated to produce a measure of consistent authoritative parenting. (Analyses could also explore the possibility that consistent firm but not necessarily warm parenting is associated with positive outcomes for adolescents in lower-income families.) Authoritative parenting could be measured longitudinally, assessing the consistency of parents' supportiveness and strictness over time. Such a measure could be created from the NLSY97.

Communication and family routines. Communication and family routines are two additional aspects of family functioning that could be assessed longitudinally, using questions from the National Longitudinal Survey of Adolescent Health (Add Health) and ELS:2002.

Family, Work and Child Care

Child Care. Child care arrangements vary over the life of a child and family, so a longitudinal measure in this case would involve stable arrangements over a period of several years. Accordingly, data from SIPP (or ECLS-B, in several years) could be explored as a source of such information.

Consistent employment and a steady income. Downward dips in income and periods of unemployment pose challenges to any family. Examining whether and how many months such negative experiences occur could be explored with SIPP or PSID data.

School Involvement and Civic Engagement

Parental involvement in their child's school. Data from NELS and ELS:2002 provide information about parental attendance at meetings and other forms of involvement over several years and could be cumulated to indicate the proportion of parents who remain involved in their child's education over time. For younger children, data from the ECLS-B Kindergarten Cohort could be analyzed to create a similar type of measure for elementary school children.

Religiosity

Attendance at religious services. Annual data from the NLSY97 can provide insight into consistent attendance for adolescents aged 12 to 16 in 1997. Patterns of involvement during the teen years have never been examined to our knowledge, despite strong correlations between religious involvement and positive outcomes for children (Bridges and Moore, 2002) and adults (Sherkat and Ellison, 1999). The ELS:2002 also includes a question on the frequency of religious attendance of a parent together with his or her child.

Youth Connections

Participation in activities. As noted above, a measure of consistent participation in activities during the high school years has been created using data from NELS (Zaff et al., 2003). While it might be desirable to track consistent exercise and healthy habits (Harris et al., forthcoming, 2004), data availability poses a barrier. Some information has been collected in the National Longitudinal Survey of Adolescent Health, but the first two waves are just a year apart, and the third wave is about five years later.

Additionally, the ELS:2002 includes questions on involvement in a variety of activities, such as sports, hobbies, clubs, and band or orchestra. Questions from the ELS:2002 could also be used to assess civic engagement and volunteering.

Disconnected youth. For a longitudinal measure of disconnected youth, an indicator could asses the proportion of youth who, over time, are neither working nor in school, nor married to someone who is. The NLSY97 could serve as a data source for such an indicator.

Methodological issues

While it would be possible to create a number of longitudinal measures, several methodological issues need to be acknowledged. One important issue is the periodicity of data collection. Many longitudinal surveys are not conducted annually, and even when

they are, an annual survey still does not provide a continuous record of family experience. For example, family activity patterns may vary across the seasons or across the school year, making it hard for respondents to count up or provide an overall average. Also, respondents may have trouble remembering the dates of events over the course of a year, or, they may recall only the major events or changes. In addition, attitudes and values may not be recalled accurately. Thus, the quality of relationships between family members is one example of a construct that cannot be recalled with precision and that might benefit from being assessed quarterly or even more often.

On the other hand, respondents can probably report changes in many constructs, such as employment, fairly accurately, particularly when respondents are provided with a calendar to aid their reporting. Unfortunately, while respondent recall has been studied extensively for income, leading to the fielding of the Survey of Income and Program Participation every four months, no knowledge base exists that enables us to identify the degree to which the quality of non-economic data is affected by using longer versus shorter recall periods, so it is impossible to recommend minimum acceptable periodicities for assessing various constructs. We note, however, that the use of calendars may aid respondents in reporting on constructs that are liable to change throughout the course of a year. Additionally, while more frequent assessment can certainly improve data accuracy, we acknowledge that the huge expense of increasing the periodicity of surveys will typically outweigh the benefits of marginal improvements in data quality.

Also, some constructs are difficult to measure across the life cycle. In particular, constructs that need to change as children become older are difficult to measure as longitudinal indicators. For example, a measure of parental awareness and monitoring has been included in the NLSY97; however, at present we lack the knowledge base to develop an age-adjusted indicator of appropriate monitoring across ages 12 through 17. A cross sectional indicator, or a short-term indicator, could be developed for such constructs; but truly longitudinal indicators would require some development.

Another concern is posed by attrition from longitudinal surveys. If surveys experience high levels of attrition, then indicators developed from such surveys may not be representative of the society. Fortunately, most federally sponsored surveys have fairly high response rates; but it is nevertheless necessary to be alert to this possibility.

Assessing the way longitudinal indicators change in the population over time also represents a challenge. Other population changes (for example, immigration), in addition to sample attrition, render the remaining sample less representative of the general population with similar characteristics. While longitudinal surveys are the ideal source for longitudinal indicators, repeated cross-sectional surveys are the most appropriate for trend analyses. This is because longitudinal surveys typically follow one cohort over time (an exception is the Panel Study of Income Dynamics), but trend analyses compare *different* cohorts across time. For example, longitudinal measures could be created using consecutive waves of the National Longitudinal Survey of Youth, 1997, which collects data every year on adolescents who were ages 12 to 16 in 1997. However, analogous data sources do not exist to compare longitudinal indicators for 12- to 16-year-olds in

1997 to longitudinal indicators for 12- to 16-year-olds in 2000 or 2003. For trend analyses, one possible solution could be to collect retrospective data in repeated cross-sectional surveys. The quality of data from repeated cross-sectional surveys using retrospective measures would not be as high as with longitudinal data, for the same reason that data quality is not as high as would be ideal even with longitudinal surveys that are conducted annually or less frequently. Specifically, the longer the recall period, the greater the opportunity for recall bias or simply for respondent errors in reporting.

V. Recommendations

In summary, a number of studies have found that long-term exposure to a positive or negative experience has important implications children and families, and we hypothesize that, in many cases, the effects of long-term experiences may be stronger than the effects of short-term experiences. Nevertheless, the potential of a longitudinal perspective for social indicators is not widely recognized, and little research has systematically compared point-in-time measures with longitudinal indicators. Moreover, although we have been able to identify a broad and interesting set of possible new longitudinal indicators, the set of available measures is very small. Other longitudinal indicators that could theoretically be of substantial interest cannot be tabulated because the data needed to create a rich set of longitudinal indicators are not readily available. For example, most constructs would need to be measured identically over time, so that they could be cumulated. In some cases, age appropriate measures would need to be developed so that, even though identical questions were not asked in each survey, the same construct would be measured on a comparable metric, so that a cumulative measure could be created. This has been done, for example, with parent involvement questions in the NLSY97. Every two years, parents are asked four questions about their involvement with each of their children in age-appropriate ways that change as the child gets older. Where such data exist, exemplary longitudinal indicators could be developed.

Moreover, this review suggests that a number of longitudinal indicators can be created from data currently available on important domains of the social context of families. In fact, a number of measures can be created for families with young children as well as families with older children. Examples include parent involvement in children's schools, religious attendance, civic engagement, turbulence, father involvement in childrearing, and parent-child relationships.

For other constructs where data are not currently available appropriate items could be inserted into ongoing surveys. Examples include marital quality and participation in activities such as sports teams or service clubs. In addition, some measures of behavior (not attitudes, perceptions, or values, which could more readily be distorted over time) could be created with retrospective data, but the accuracy of such retrospective data needs to be examined empirically. Examples include residence with both biological parents since birth, stability in child-care arrangements, and residential mobility. The cost of adding items to existing surveys is modest, compared to developing and fielding new surveys. However, we acknowledge that virtually all existing surveys are cash-strapped and some are already quite lengthy. Each additional item in a survey increases the cost of

its administration. And even when budgets allow for adding items to surveys, increasing the length further could threaten surveys' response rates, since respondents may drop out when surveys becomes too burdensome. Nevertheless, many surveys welcome additional financial supporters, and respondents generally enjoy talking about their families and children, so both sponsors and respondents may welcome some new questions.

Most important, several longitudinal measures could be created by analyzing existing data and thus could be included in indicator reports rather readily. For example, an indicator of a consistently positive parent-child relationship and an indicator of consistent attendance at religious services could be created from the NLSY97. Analyses are needed to confirm that these long-term variables are associated with positive outcomes for families and children; however, prior correlational research and studies using point-in-time measures provide a strong basis for hypothesizing such associations. Assuming that these expectations are confirmed in multivariate prospective analyses that use longitudinal variables to predict child and family outcomes over time, the indicator portfolio could be greatly enriched by the addition of longitudinal measures of the social context of families.

References

Ahluwalia, S. K., S. M. McGroder, M.J. Zaslow, and E.C. Hair. (2001). "Symptoms of depression among welfare recipients: A concern for two generations." *Child Trends Research Brief*. Washington, DC, Child Trends.

Bane, M.J. and D. Ellwood. 1994. *Welfare Realities: From Rhetoric to Reform.* Cambridge, Mass.: Harvard university Press.

Baumrind, D. 1966. "Effects of authoritative parental control on child behavior." *Child Development* 37(4): 887-907.

Bloom, B., R. A. Cohen, J. L. Vickerie, & E. A. Wondimu. (2003). "Summary Health Statistics for U.S. Children: National Health Interview Survey, 2001." *National Center for Health Statistics: Vital Health Statistics* 10(216). Washington, DC: Government Printing Office. Available online at http://www.cdc.gov/nchs/data/series/sr_10/sr10_216.pdf.

Boekaerts, M., and I. Röder. (1999). "Review: Stress, coping, and adjustment in children with a chronic disease: A review of the literature." *Disability and Rehabilitation*, 21(7): 311-337.

Bridges, Lisa and K. Moore. 2002. "Religious Involvement and Children's Well-Being: What Research Tells Us (and What It Doesn't)" *Child Trends Research Brief*, Washington D.C., Child Trends.

Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Boston: Harvard University Press.

Bronfenbrenner, U., & P. A. Morris. (1998). "The ecology of developmental processes." In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology: Fifth Edition, Volume One* (pp. 993-1028). New York: John Wiley and Sons, Inc.

Brody, G. H., and D. L. Flor. (1998). "Maternal resources, parenting practices, and child competence in rural, single-parent African American Families." *Child Development* 69(3): 803-816.

Brooks-Gunn, J., and G. J. Duncan. (1997). "The effects of poverty on children." *The Future of Children*, 7(2): 55-71.

Child Trends. (1999). *Children and welfare reform: A guide to evaluating the effects of state welfare policies on children*. Washington, D.C.: Author.

Child Trends and the Ohio State University Center for Human Resource Research. (1999). NLSY97 Codebook Supplement, Main File Round 1. Appendix 9: Family Process and Adolescent Outcome Measures. Washington, DC: U.S. Department of Labor. Available online at http://www.nlsinfo.org/preview.php?filename=appendix9.pdf.

Coatsworth, 2002. "Promoting resilience in children of poverty through effective prevention interventions." Presentation to the Annual Meetings of the National Council on Family Relations, State College, PA.

Coleman, J. S. (1988). "Social capital in the creation of human capital." *American Journal of Sociology* 94: 95-120.

Corcoran, M., R. Gordon, and D. Laren. (1992). "The associations between men's economic status and their family and community origins." *Journal of Human Resoures* 27: 575-601.

Duncan, G., and J. Brooks-Gunn, eds. 1997. *Consequences of Growing up Poor*. New York: Russell Sage Foundation.

Duncan, G. J., J. Brooks-Gunn, and P. K. Klebanov. (1994). "Economic deprivation and early childhood development." *Child Development* 65(2): 296-318.

Elder, G. H., Jr. (1998). "The life course and human development." In W. Damon & R.M. Lerner (Eds.), *Handbook of child psychology: Fifth Edition, Volume One* (pp. 939-991). New York: John Wiley and Sons, Inc.

Gunnoe, M. and K. Moore. 2002. "Predictors of Religiosity among Youth Aged 17-22: A Longitudinal Study of the National Survey of Children." *Journal for the Scientific Study of Religion* 41:4: 613-622.

Harris, K. M., R. B. King, & P. Gordon-Larsen. (forthcoming). Healthy habits among adolescents: Sleep, exercise, diet, and body image. In *Conceptualizing and measuring indicators of positive development: What do children need to flourish?* K. A. Moore and L. Lippman, eds. New York, NY, Kluwer Academic/Plenum.

Hayes, C. D., J. L. Palmer, and M. J. Zaslow, eds. 1990. *Who Cares for America's Children?* Washington, DC: National Academy Press.

Maccoby, E.E., and J.A. Martin. (1983). "Socialization in the context of the family: Parent-child interaction." Pp. 1-101 in P.H. Mussen (series ed.) and E.M. Hetherington (vol. Ed.), *Handbook of Child Psychology: Volume Four*. New York: John Wiley and Sons.

McLoyd, Vonnie C. 1998. "Socioeconomic disadvantage and child development." *American Psychologist,* 53(2): 185-204.

Mekos, D. (forthcoming). "Parenting as a community enterprise among low income families." In *Working poor families: Coping as parents and workers*. L. Aber and F. Wulczyn, eds. Washington, DC, U.S. Department of Health and Human Services.

Moore, K. A. (1997). "Criteria for indicators of child well-being." Pp. 36-44. *Indicators of Child Well-being*. R. M. Hauser, B. B. Brown and W. R. Prosser. New York, Russell Sage Foundation.

Moore, K. A., T. G. Halle, S. Vandivere, and C. L. Mariner. (2002). "Scaling back survey scales: How short is too short?" *Sociological Methods & Research* 30(4): 530-567.

Moore, K., D. Glei, A. Driscoll, M. J. Zaslow, & Z. Redd. (2002). "Welfare and poverty patterns: Implications for children." *Journal of Social Policy,* 31(2), 207-227.

Moore, K. A., D. R. Morrison, and D. A. Glei. (1995). "Welfare and adolescent sex: The effects of family history, benefit levels, and community context." *Journal of Family and Economic Issues (Theme issue--Family economic policy: The intergenerational effects of welfare)* 16(2-3): 207-237.

Peterson, J., and N. Zill (1986). "Marital disruption, parent-child relationships, and behavior problems in children." *Journal of Marriage and the Family* 48: 295-307.

Resnick, M.D., P.S. Bearman, R.W. Blum, K.E. Bauman, K.M. Harris, J. Jones, J. Tabor, T. Beauhring, R.E. Sieving, M. Shew, M. Ireland, L. Bearinger, and J.R. Udry. (1997). "Protecting adolescents from harm." *Journal of the American Medical Association* 278(10): 823-832.

Ross, C. E., J. R. Reynolds, and K. J. Geis. 2003. "The contingent meaning of neighborhood stability for residents' psychological well-being." *American Sociological Review* 65(August): 581-597.

Sampson, Robert J. 1991. "Family management and child development: Insights from social disorganization theory." Pp. 63-93 in *Facts, Frameworks, and Forecasts: Advances in Criminological Theory, Vol. 3* (Joan McCord, ed.) New Brunswick, NJ: Transaction Publishers.

Scanlon, E., and K. Devine. 2001. "Residential mobility and youth well-being: Research, policy, and practical issues." *Journal of Sociology and Social Welfare*, 28(1): 119-138.

Schachter, J. P., R. S. Franklin, & M. J. Perry. 2003. "Migration and geographic mobility in metropolitan and nonmetropolitan America: 1995 to 2000." Census 2000 Special Reports, No. CENSR-9. Washington, DC: U.S. Census Bureau. Available online at http://www.census.gov/population/www/cen2000/migration.html.

Schoenborn, C. A., P. F. Adams, & J. S. Schiller. (2003). "Summary health statistics for the U.S. population: National Health Interview Survey, 2000." *National Center for Health Statistics: Vital Health Statistics* 10(214). Washington, DC: U.S. Government Printing Office. Available online at http://www.cdc.gov/nchs/data/series/sr_10/sr10_214.pdf.

Seltzer, J. A. (2000). "Families formed outside of marriage." *Journal of Marriage and the Family* 62(4): 1247-1268.

Sherkat, D.E., and C.G. Ellsion. (1999). "Recent developments and current controversies in the sociology of religion." *Annual Review of Sociology*. 25(1): 363-394.

Sinnema, Gerben. 1991. "Resilience among children with special health-care needs and among their families." *Pediatric Annals* 20(9): 483-486.

U.S. Department of Health and Human Services (2003). Indicators of Welfare Dependence: Annual Report to Congress 2003. Washington, DC, U.S. Department of Health and Human Services.

Wu, L. L. (1996). "Effects of family instability, income, and income instability on the risk of a premarital birth." *American Sociological Review* 61: 386-406.

Zaff, J. F., K. A. Moore, A. R. Papillo, and S. Williams. (2003). "Implications of extracurricular activity participation during adolescence on positive outcomes." *Journal of Adolescent Research* 18(6): 599-630.

Zill, N. and C. W. Nord. (1994). *Running in Place: How American Families are Faring in a Changing Economy and an Individualistic Society.* Washington, DC, Child Trends.

Zill, N., K.A. Moore, E.W. Smith, T. Stief, and M.J. Coiro. (1991). The Life Circumstance and Development of Children in Welfare Families: A Profile Based on National Survey Data. Washington, D.C., Child Trends.

APPENDIX: Examples of Items from Existing Surveys

National Longitudinal Survey of Youth, 1997 Cohort

Family functioning: Consistently positive parent-child relationships.

Now we are going to list some things that might describe your [mother or mother figure / father or father figure]. Please tell us how often she/he does these things. That is does she/he never, rarely, sometimes, usually, or always do these things?
- How often does she/he praise you for doing well?
- How often does she/he criticize your ideas?
- How often does she/he help you do things that are important to you?
- How often does she/he blame you for her/his problems?
- How often does she/he make plans with you and cancel for no good reason?

Family functioning: Consistent parental monitoring
(Responses are knows nothing, knows just a little, knows some things, knows most things, or knows everything)
- How much does he/she know about your close friends, that is, who they are?
- How much does he/she know about your close friends' parents, that is, who they are?
- How much does he/she know about how you are with when you are not at home?
- How much does he/she know about who your teachers are and what you are doing in school?

Family Functioning Consistent authoritative parenting

- When you were growing up, in general, was she/he very supportive, somewhat supportive, or not supportive of you?
- Was she/he permissive or strict about making sure you did what you were supposed to do?

Religiosity: Attendance at religious services

- In a typical week, how many days from 0 to 7 do you do something religious as a family such as go to church, pray, or read the scriptures together?

Family structure: Father involvement (or non-residential parental involvement) over time – school involvement

Parent questionnaire
- Does your tenth grader currently have any contact with his/her non-resident parent? (yes, no, or never)
- To what extent does this other parent living outside your home participate in decisions about your tenth grader's education (for example, about where your tenth grader goes to school or what courses your tenth grader will take? (never, seldom, often, usually)
- Since the beginning of the school year, has your tenth grader's non-resident parent…
    - Attended an open-house or back-to-school night?
    - Attended a meeting of the parent-teacher organization?
    - Gone to a regularly-scheduled parent-teacher conference with your tenth grader's teacher?
    - Attended a school or class event, such as a play or sports event or science fair because of your tenth grader?

Family functioning: Shared parent-child activities

Parent questionnaire
- In a typical week, how many days do you eat at least one meal with your tenth grader?

Family functioning: Parent-child communication

Parent questionnaire
- In the first semester or term of this school year, how often have you discussed the following with either or both of your parents or guardians? (never, sometimes, often)
    - Selecting courses or programs at school
    - School activities or events of particular interest to you
    - Things you've studied in class
    - Your grades
    - Transferring to another school
    - Plans and preparation for ACT or SAT tests
    - Going to college
    - Community, national, and world events
    - Things that are troubling you

Family, work, and child care: Turbulence

Parent questionnaire
- How many times has your tenth grader changed schools since he or she entered first grade? Do not count changes that occurred as a result of promotion to the next grade or level (for instance, a move from elementary school to a middle school or from a middle school to a high school in the same district).

School involvement

Parent questionnaire
- In this school year, do you or your spouse/partner do any of the following?
    - Belong to the school's parent-teacher organization
    - Attend meetings of the parent-teacher organization
    - Take part in the activities of the parent-teacher organization
    - Act as a volunteer at the school
    - Belong to any other organization with several parents from your tenth-grader's school (for example, neighborhood or religious organizations)
- Looking back over the past year, how frequently did you and your tenth grader participate in the following activities together? (never, rarely, sometimes, frequently)
    - Attending school activities (sports, plays, concerts, etc.)
    - Working on homework or school projects

Civic engagement

Student questionnaire
- Have you participated in the following school-sponsored activities in this school year?
    - Student government
    - Service club
- How often do you spend time on the following activities outside of school? (rarely or never, less than once a week, once or twice a week, every day or almost every day)
    - Volunteering or performing community service

Religiosity: Attendance at religious services

Parent questionnaire
- Looking back over the past year, how frequently did you and your tenth grader participate in the following activities together? (never, rarely, sometimes, frequently)
    - Attending religious services

Youth connections: Engagement in positive youth activities

Student questionnaire
- For each sport listed below, indicate whether you have participated on an intramural team in this sport during this school year. (8 different sports are listed)
- For each sport listed below, indicate whether you have participated in an interscholastic team during this school year. (8 different sports are listed)
- Have you participated in the following school-sponsored activities in this school year?
    - Band, orchestra, chorus, choir
    - School play or musical
    - Student government
    - National Honor Society (NHS) or other academic honor society
    - School yearbook, newspaper, literary magazine
    - Service club
    - Academic club
    - Hobby club
    - Vocational education club, vocational student organization
- How often do you spend time on the following activities outside of school? (rarely or never, less than once a week, once or twice a week, every day or almost every day)
    - Working on hobbies, arts, crafts
    - Volunteering or performing community service
    - Taking classes: music, art, language, dance
    - Taking sports lessons
    - Playing non-school sports

Social connections: long term residence in a low-crime neighborhood

Parent questionnaire
- How many years have you lived in your current neighborhood?
- Do you feel as though you are a part of your neighborhood or community, or do you think of it more as just a place to live?
- How would you describe the level of crime in your neighborhood? Would you say your neighborhood has a high level of crime, moderate level of crime, low level of crime?
- How would you rate your neighborhood in terms of safety for yourself and your family? Would you say very safe, somewhat safe, somewhat unsafe, very unsafe?

The New Chronology of Union Formation: Strategies for Measuring Changing Pathways

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Abstract
In the short span of half a century, the pathways to union formation in America have become much less predictable. And a greater variety of intimate unions now exists than in the past. It is currently impossible to understand the wide range of intimate relationships because we lack appropriate data. Nor is it possible to measure the customary expectations associated with different types of relationships. The development of mutual commitment is the most crucial dynamic dimension in the pathway to stable unions. Therefore it is now essential to have additional information about how commitment develops in the new landscape of union formation options. This paper outlines a strategy to answer three questions. 1) What types of relationships now exist in America? 2) How do these relationships resemble, and differ from traditional monogamous heterosexual marriages? and 3) How do these relationships foster or impede the development of commitment sufficient to sustain the couple?

The New Chronology of Union Formation:
Strategies for Measuring Changing Pathways

I. Introduction: The Changing Chronology of Union Formation

How do adults meet and form intimate relationships? And what unites them as a couple? Whether these processes are driven by love, sex, money, status, biology, or fate, the end result is enormously important for those who are united. But it is also vitally important for a society because intimate unions are the engines of reproduction, social control, and social order. Over time, the pathways into unions have become more varied, particularly given an increasing period of time during which young adults are not typically married. Union dissolution is also more commonplace, making the measurement of commitment and the pathways following union formation more salient. Measuring couple formation has become more challenging, not only due to these more varied pathways, but also due to an ever-changing vocabulary used to describe them. In this paper I discuss my views on how the path to union formation has changed, and the implications of this for measuring relationships.

In any healthy and stable union, each partner accrues benefits that create dependence on the other. Dependencies unite couples by creating exit costs. That is, dependency is a measure of commitment.[1] While there are many important aspects of a *healthy marriage or relationship, one critical element is a sufficient degree of commitment to unite the couple in those inevitable times when love and affection cannot.*

The way unions are formed influences their development and stability, which in turn influence society as much, if not more, than any other single force. A dramatic change in the ways intimate unions are formed will therefore have significant implications, not just for individuals, but also for the entire society. At the personal level, the way couples come together influences whether, when, and how many children they have. It influences decisions about participation in the labor force and affects the standard of living. It influences how long people remain together as well as their health and longevity.[2] Collectively, the aggregate consequences of union formations are crucial for the economy and the social fabric. Therefore, it is not surprising that extensive formal and informal rules, laws, and customs have traditionally governed mate-selection. And almost all such

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[1] See Nock, Steven "Commitment and Dependency in Marriage." *Journal of Marriage and the Family.* Vol 57:503-514. See also, generally, Steven L. Nock. 1998. *Marriage in Men's Lives*. New York: Oxford University Press.

[2] The foregoing assertions are, themselves, the subject of debate. The current concern over marriage, for example, is driven by the conviction that marriage changes men and women. Many believe it does. Some believe it does not. More generally, the debate is between those who believe that varying types of relationships affect individuals, and those who believe that different types of relationships are simply the consequence of self-selection. I believe both are true. See Steven L. Nock. 1998. *Marriage in Men's Lives*. NY: Oxford University Press; "A Comparison of Marriages and Cohabiting Relationships." *Journal of Family Issues*. Vol. 16 (Jan): 53-76.

regulation through history was related to marriage because there were few, if any, acceptable alternative forms of intimate unions.[3]

This paper presents an historical perspective on pathways to unions and outlines one possible strategy to gather the new data that would be needed to assess recent transformations in union formation. The proposed strategy has three primary objectives. First, it would allow researchers to describe and *catalogue the variety of contemporary relationships in America*. Second, it would *explore and describe the content and nature of those relationships*. Third, it would chart the *development of commitment* among relationship types and over time. The resulting information would allow researchers to understand the pathways to marriages or other intimate relationships as they differ by ethnicity, age, or stage in life. This is not currently possible.

This last point needs to be emphasized. Existing secondary sources (e.g., Census products such as the Current Population Survey, national longitudinal surveys such as the National Survey of Families and Households, National Longitudinal Surveys, or National Longitudinal Study of Adolescent Health, or national cross-section surveys such as the General Social Surveys) typically provide only limited evidence germane to the issue of pathways to union formation. These limitations spring primarily from the designs of the studies which usually focus on co-residential unions (cohabiting or married partners) specific age-groups (especially youths) or restricted cohorts. I will elaborate on one design (National Longitudinal Study of Adolescent Health) that provides a model of how the pathways to union formation might be studied. Generally, understanding the pathways to unions requires that we move beyond a focus on co-residential unions to include the vast complexity that leads to such unions. This will require the development of new measures and data. These are described in the final section of this paper.

II. Changing Patterns of Courtship and Dating

The pathways to stable intimate unions are best understood as developmental trajectories in which a series of steps, or stages, lead to a marriage or other intimate relationship. There are typical, or customary patterns of mate-selection found in all societies, ranging from arranged marriages by parents to virtually unfettered individual free choice by the couple themselves. At the same time, these cultural patterns change, often quickly, in response to larger social conditions. To put the current situation in perspective, I offer an abbreviated history of American courtship and dating customs.

Largely as a result of their ethnic composition, mate-selection of the early American settlers closely resembled the European customs of **courtship**. Parents were heavily involved in courtship because the consequences of marriage had implications for them (in the form of offspring, property, or social alliances.) At least until the middle 19th century,

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[3] Historical accounts of the role of formal and informal law in regulating marriage may be found in Mary Ann Glendon, 1989. *The Transformation of Family Law: State, Law, and Family in the United States and Western Europe*. Chicago: University of Chicago Press. For an understanding of the role of marriage in social order and the operation of democratic government, see Nancy F. Cott. 2000. *Public Vows: A History of Marriage and the Nation*. Cambridge: Harvard University Press.

couples met and associated mainly in public, at church, dances, picnics, or other communal gatherings. As things progressed, young men would *call* on young women at their homes where parents would supervise. Not until the couple was betrothed were they allowed much privacy or sexual intimacy (which meant kissing and petting.)[4] But the barriers to privacy were ended by the early 20th century as youths began to enjoy greater financial and social independence. Parents became less involved in courtship as the primary consequences of marriage shifted from the older generation to the younger couple themselves. Mass, mandatory public education meant that all youths were segregated among other single youths for most of a new phase of life that came to be called adolescence.[5] Increasing numbers of young adults (including women) in newly developing urban centers had their own ability to earn incomes. And changing technologies such as movie theaters and automobiles (and back seats) allowed much greater privacy.

Courtship was replaced by ***dating*** in the first two or three decades of the 20th century.[6] Dating stressed physical attractiveness, some sexual intimacy, and competition rather than the more traditional concerns over family name and homogamous economic position. More importantly, dating, unlike courtship, was peer supervised. A date took place away from home and was not chaperoned by parents. *Not the occurrence of emotional or physical intimacy but the question of whose advice guided young people in developing heterosexual ties was the critical difference between dating and the practice of "calling" and "keeping company" (i.e., courtship) that is was rapidly supplanting in the 1920's.* [7]

Dating, though much less subject to parental (and community) scrutiny, was still highly organized and regulated. The regulation, however, was mainly by peers rather than parents. Dating was a competitive form of recreation in which boys and girls attempted to be both good dates, and maintain good reputations. Especially for girls, this meant avoiding the label of being "easy." Youths segregated themselves into cliques based on their attractiveness and restrictiveness. High school dating cultures developed to enforce conformity. The involvement of parents was more indirect than it had been in earlier times. Parents sought to influence their children's choice of dates, though there was less overt attempt to control such decisions. Pairings were strongly regulated by one's status in the dating market in a pattern that was described as "rating and dating."[8] Strong norms, in short, were quite evident. *Beyond visible symbols, word of mouth was powerful when everybody was likely to know everybody…Gossip, of course, regulated behavior, and chiding served to educate boys to the proper ways of behaving toward girls so that*

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[4] Ellen K. Rothman. 1984. *Hands and Hearts: A history of courtship in America.* Cambridge, MA: Harvard University Press.

[5] see Joseph Kett. 1977 Rites of Passage: Adolescence in America, 1790 to the Present. New York: Basic Books.

[6] Steven L. Nock. 1993. The Costs of Privacy: Surveillance and Reputation in America. NY: Aldine de Gruyter.

[7] John Modell. 1989. Into One's Own: From Youth to Adulthood in the United States, 1920-1975. Berkeley, CA: University of California Press.

[8] Willard Waller. 1937. "The rating and dating complex." American Sociological Review 2 (October): 727-34.

the rules of the dating system might be learned even by those more backward among them.[9]

Engagement intervened between dating and marriage for most of the 20th century, as had betrothal during courtship. The relationship during an engagement period was a more serious stage in the family-formation process lasting, on average, six months to a year. Engaged couples were held to much less restricted sexual standards. But most importantly, once couples were engaged, they became more immune from monitoring and control from peers *or* parents.

The children of the Baby Boom (children who were in high school in the latter 1960s and 1970s) continued to date, as their parents had. But a new pattern in dating emerged, **going steady**. Already evident by the latter 1950s, the more serious monogamous relationship of a dating couple was associated with greater individual freedom and, accordingly, less competition.

Until the middle of the 20th century, however, couples moving toward marriage lived at home until they were, in fact, married.[10] In the mid and late 20th century, a new pattern emerged for growing numbers of youths, the establishment of an independent household prior to marriage. Lengthened educational preparation and later ages at marriage meant that youthful dating in high school assumed much less importance as a pathway to a serious intimate union.

The custom of dating ended during the 1970s and 1980s. Challenges to gender roles were part of the reason. Dating had been an asymmetrical form of male-female relationship. It required a rather formal type of reciprocity, initiated (and paid for) by the male. The formality and competition of dating, as well as the rigid structures it imposed on relationships were rejected by the youths of the 1970s and 1980s. Instead of dating, more casual, mixed sex group activities became popular. **Hanging out** replaced dating. Girls could initiate a pairing up, as could boys. But the freedom and variety associated with these casual types of associations meant that there was less structure imposed on relationships by youthful peers. The control of heterosexual relationships among youths, in short, had moved from parents (courtship,) to peers (dating,) to partners (casual groups and hanging out) in the course of a century. As noted earlier, pathways to unions are typically organized, but often change quickly. We are now in such a period of rapid change.

Unions are now formed through a variety of ways, and marriage, if it occurs at all, occurs much later. By comparison with the early and mid 20th century, *there is now much greater variety in how people meet and in the relationships they form.* Demographers

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[9] Modell, op cit. at 102.
[10] Frances K. Goldscheider and Julie DaVanzo. 1980. Pathways to independent living in early adulthood: marriage, semi-autonomy, and premarital residential independence." Demography, 26 (4): 597-614. The historical record shows that many youths moved to and from their parent's home prior to marriage, largely in pursuit of training or apprenticeship (see Joseph Kett 1977 Rites of Passage: Adolescence in America, 1790 to the Present. New York: Basic Books.

Lynne Casper and Suzanne Bianchi summarize the extensive demography of union formation with these vignettes:

> *Consider the life of a young woman reaching adulthood in the 1950s or early 1960s. Such a woman was likely to marry straight out of high school or to take a clerical or retail sales job until she married. She would have moved out of her parents' home only after she married, to form a new household with her husband. This young woman was likely to marry by age 20 and begin a family soon after. If she was working when she became pregnant, she would probably have quit her job and stayed home to care for her children while her husband had a steady job that paid enough to support the entire family.*
>
> *Fast forward to the last few years of the 20th century. A young woman reaching adulthood in the late 1990s is not likely to marry before her 25th birthday. She will probably attend college and is likely to live by herself, with a boyfriend, or with roommates before marrying. She may move in and out of her parents' house several times before she gets married. Like her counterpart reaching adulthood in the 1950s, she is likely to marry and have at least one child, but the sequence of those events may well be reversed. She probably will not drop out of the labor force after she has children, although she may curtail the number of hours she is employed to balance work and family. She is also much more likely to divorce and possibly even to remarry compared with a young woman in the 1950s or 1960s[11]*

An historically abrupt change occurred when a sequence of events lost its chronological predictability (*viz.*, dating, going steady, leaving home, an engagement, marriage, and childbearing.) Union formation is no longer so strongly associated with nest leaving. Rather, it occurs much later in life, after several possible routes that could include college attendance, occupational training, moving back into the parent's home, one or more unmarried cohabitating arrangements, and even childbearing. A uniform and rather predictable set of events (variously referred to as courtship, dating, or going steady) has been replaced by a diverse set of vaguely defined options including casual groups ("hanging out,") informal and occasional sexual encounters ("hooking up,") more serious boyfriend/girlfriend arrangements of varying types ("friends,") or co-residential cohabitation ("partners.")[12]

Demographic changes have produced an entirely new stage of life. Intervening between late adolescence and mature adulthood is a stage of life that lasts almost ten years. Legal emancipation occurs at age 18, though many youths continue to receive substantial support from parents after that. The median age at marriage in 2003 was 26.9 for men and 25.3 for women. Between leaving home somewhere around age 18, and marrying in the mid to late 20s, an entirely new stage of life has emerged. Never before in our history

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[11] Lynne M. Casper and Suzanne M. Bianchi. 2002. Continuity and Change in the American Family . Thousand Oaks: Sage Publications (at p3).

[12] Whether these are the terms used by most young adults is debatable. Part of the task outlined in this paper is to identify the types of relationships that currently exist, and learn what they are called.

has such a period existed. It is during this uncharted stage of life that the pathway to marriage or some alternative arrangement now typically occurs[13]. It is also after marriages end, much later in life, that union formation increasingly occurs. These are the uncharted times and processes for which we must develop measures.

It is currently impossible to understand the wide range of relationship types found among adults looking for intimate unions. Nor is it currently possible to measure the customary expectations associated with each type of union. Relationships are governed by fewer social norms and expectations. When a college student tells her roommate that she and a man "hooked up" last night, this may mean that they kissed, had oral sex, had intercourse, or any combination. The term is intentionally vague to permit students to use it without implying any degree of commitment or emotional engagement. When a young person describes another as her "friend," this may imply a sexual relationship, or not. It may imply a serious degree of commitment, or not. It may imply an exclusive sexual arrangement, or it may not. Quite simply, we do not know the types of relationships that currently define the pathways to marriage (or cohabitation). Nor do we know the behaviors and values associated with each.

The most crucial dynamic dimension in the pathway to a stable union is the development of mutual commitment. Commitment varies to the extent that an individual perceives costs to terminating a relationship. And those costs are the consequence of extensive inter-dependencies. The anticipated costs of ending a relationship are central for understanding why it persists. Knowing such perceived "exit costs" would reveal a great deal about the degree of commitment to a relationship. Were an individual to perceive absolutely no costs to terminating a relationship, we could describe that person as having virtually no commitment to it. It is crucial that we collect data to provide an understanding of the development of commitment in the new landscape of union formation options.

Commitment can be viewed as the imagined costs of ending a relationship. Not until each partner sees large negative consequences of ending a relationship is it possible to describe the couple as mutually committed to one another and to their relationship. The development of commitment is thus the single most important issue to chart as people navigate the pathways to marriage or other intimate relationships.

III. Factors Contributing to Changes in Union Formation

The pathways to union formation are affected by the religious and cultural backgrounds of Americans, which have changed notably due to shifts in immigration streams. They are also influenced by changes in the economy that altered both the significance of women's earnings, and young adults' routes to self-sufficiency. Other influences include medical advances in birth control, high rates of divorce, high rates of unmarried cohabitation, and changed social and legal norms. Each of the following is an important factor that affects the formation of relationships, their trajectories, and their type. Many may limit the appeal of marriage. Others complicate the pathways to marriage.

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[13] Steven L. Nock. 1993. *The Costs of Privacy*. NY: Walter de Gruyter, Inc.

Religious and cultural factors. Intimate relationships are viewed as sacred in this, as in most cultures, and are governed by strong religious and cultural norms. Patterns of mate-selection vary greatly among the world's cultures. Therefore, as the composition of the U.S. population shifts due to immigration, so will the patterns of mate-selection. The cultural and religious patterns brought by immigrants to this country have always been important forces influencing mate selection patterns. In some cultures, marriages are arranged for the benefit of large lineages. In others, marriages are viewed as choices made strictly by the two individuals involved. Between these two extremes, societies differ in degree and emphasis.

Immigration to the U.S. has increased dramatically for the past five decades and the countries of origin have changed compared with a century ago. Throughout the 19th century until the early 1950s, immigrants came mainly from Europe and Canada. Today, immigration is mainly from Asia, Mexico, and other parts of Latin America including the Caribbean. "The *new immigration* from Asia, Mexico, and other parts of Latin America is having a profound effect that perhaps rivals the effects on the United States of the *new immigrants* of a century ago, who were from Southern and Eastern Europe."[14] As more and more Latin Americans and Asians arrive, a corresponding change in the way couples meet and form relationships has occurred. Increasing numbers of Americans have cultural backgrounds that include informal marriages (e.g., Caribbean traditions of consensual union), arranged marriages or strong family involvements in union formation (e.g., Asian and Mexican traditions). Undoubtedly, the ethnic composition of our nation has fostered many changes in the pathways to partnerships, though we know little about this topic. The methods outlined below would address this void.

Routes to self-sufficiency. Both economic and educational forces relate to an individual's ability to achieve economic self-sufficiency, historically a necessity for marriage (at least for husbands.)[15] Between the end of World War II and the end of the 20th century, the American economy went through several long booms and busts. Shortly after the War, jobs were abundant, and wages high, allowing couples to marry young and live a comfortable middle-class life supported by one earner who had completed high school. Macroeconomic changes toward a service economy, and global events such as the oil crisis of 1973, ushered in poorer job prospects for those with less schooling, declining wages, and steep inflation. All encouraged longer educational preparation, later entry into stable occupations, later marriage, and heavier reliance on the earnings of both partners. The economic turnaround of the 1990s resulted in job and wage growth. However, economic prospects differed for those with and without higher education. For young people with only a high-school (or less) education, jobs were harder to find, and wages lower than had been true for their parents.[16] In short, large shifts in our economy

[14] Barry R. Chiswick and Teresa A. Sullivan. 1995. The New Immigrants. Pp 211-270 in Reynolds Farley (Ed.) State of the Union: America in the 1990s. New York: The Russell Sage Foundation, at 214.
[15] Steven L. Nock. Marriage in Men's Lives. 1998. New York: Oxford University Press.
[16] Reynolds Farley. 1996. *The New American Reality: Who we Are, How we got Here, Where we are Going.* New York: Russell Sage Foundation.

influence the age at which individuals may achieve economic independence, as well as the need for higher education.[17]

Changing economies of marriage. Changes in the economy are also responsible for a shift in the micro-economies of intimate relationships. Marriage has increasingly become a mutually dependent economic arrangement in which the financial contributions of both partners are involved. In 1999, 73% of marriages of working-age adults included two employed spouses. In 22% of marriages, husbands and wives earn roughly equal incomes.[18] Accordingly, both men's and women's potential earnings and economic position factor into decisions about relationships. Most Americans appear to believe that a certain standard of living is necessary before marriage is considered affordable. Sara McLanahan has found the same results among unmarried mothers.[19] National surveys reveal that unmarried individuals consider a lack of good job prospects the most undesirable trait of a potential spouse, for women *and* men (worse than having been previously married, having children from a prior relationship, being unattractive, etc.). We have learned that a lack of marriageable men (without sufficient earnings capacities) may be an obstacle to marriage among lower-income African Americans.[20] But it is just as likely that there is a growing *lack of marriageable women* due to high rates of unmarried fertility and associated problems with education and employment. Quite simply, both men and women appear unwilling to marry someone without good earnings prospects.

Effective birth control. Many aspects of mate selection changed markedly when effective birth control became available in the late 1960s. By 1970 over a third of all married women in America were using oral contraceptives. Laws and policies designed to limit the availability of birth control were declared unconstitutional. In 1965, The Supreme Court invalidated a Connecticut law that forbade the use of contraceptive devices by married couples. Seven years later, the U.S. Supreme Court extended *unmarried* women the same rights to contraception.[21] Writing for the Court majority in Griswald v Connecticut (1965), Justice Douglas explained that various guarantees of the Bill of Rights "create zones of privacy" and "the very idea of prohibiting the practice of birth control is repulsive to the notions of privacy surrounding the marriage relationship." Sexual relationships, that is, are increasingly viewed as private choices made by consenting adults, with little or no involvement by others. The right to individual privacy in sexual matters was extended to homosexuals earlier this year.[22]

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[17] Casper and Bianchi, 2002.

[18] Nock, Steven L. 2001. "The Marriages of Equally Dependent Spouses." *Journal of Family Issues* 22 (6):755-775

[19] The "Fragile Families" project under the direction of Sara McLanahan at Princeton has investigated pathways to marriage and cohabitation among unmarried women who have just given birth. See, especially, Marcia Carlson, Sara McLanahan, and Paula England "Union Formation and Dissolution in Fragile Families." http://crcw.princeton.edu/workingpapers/WP01-06-FF-Carlson.pdf. See, also, Megan M. Sweeney. 2002. "Two Decades of Family Change: The Shifting Economic Foundations of Marriage." American Sociological Review, 67:132-147 for a summary and review of related works.

[20] William Julius Wilson. 1987. *The Truly Disadvantaged: The Inner City, The Underclass, and Public Policy.* Chicago, IL: University of Chicago Press.

[21] *Griswold v. Connecticut*, 381 US 479 (1965). *Eisenstadt v. Baird*, 405 U.S. 438 (1972)

[22] See *Lawrence, et al. v Texas*. 200 US 321 (2003)

Birth control fostered a different view of sex in relationships and ushered in a more tolerant view of unmarried sexual encounters. Studies in the U.S. show that only a quarter of 19-year-old women had had intercourse in 1970. By 1991, nearly three fourths (72%) had. Among Americans born in the 1963-1972 cohort (who turned 20 between 1983 and 1992), only 10% of men and 9% of women were virgins at age 20.[23] Social norms changed with behaviors.   In 1972, about half (47%) of adult Americans thought that sex before marriage was wrong. By 1998, only a third (35%) felt that way.[24]

Divorce. Almost half (46%)of all marriages in America are remarriages for at least one spouse[25] Approximately 12% of all Americans over the age of 30 are currently divorced.[26] Many, if not most, are looking for some form of intimate relationship. The elderly have become a growing factor in the overall landscape of union formation. Increasingly, marriages and cohabiting unions are formed following the end of a marriage. The pathways to relationships *after* marriages end are thus increasingly important, and may be as significant as the pathways young adults follow into their first marriage or relationship.

Unmarried cohabitation. The possibility of sex outside of marriage, combined with longer delays in achieving independence, fostered a growing acceptance of unmarried cohabitation. In 1970, the U.S. Bureau of the Census estimated that there were 520,000 heterosexual unmarried couples living together in America. By 2000, there were 4.8 million such couples[27]. Cohabitation may be an alternative to marriage for some, but it is also a pathway to marriage for many. In other words, cohabitation is replacing marriage for growing numbers of Americans, and replacing courtship (or dating) for most Americans. Indeed, declines in marriage rates are almost completely explained by increases in rates of cohabitation. One form of co-residential relationship is replacing the other. Most Americans under age 30 have cohabited at least once. One in four unmarried women aged 25 to 29 now lives in a cohabiting union. The majority of first unions (54%) in America are now cohabiting unions. The majority of marriages (56%) in America are formed from cohabiting unions. Four in ten births to unmarried women are to cohabiting couples.[28]

Changing legal and social and norms. The social and legal stigma of having an illegitimate child has declined in recent years. The U.S. Supreme Court declared most legal limitations due to illegitimacy unconstitutional between 1968 and 1972 (e.g., limits on inheritance, eligibility for government transfer payments, and rights of interstate

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[23] Laumann, Edward O., John H. Gagnon, Robert T. Michael, and Stuart Michaels. 1994. *The Social Organization of Sexuality*. Chicago: The University of Chicago Press
[24] 1972-1998 General Social Surveys. http://www.icpsr.umich.edu:8080/GSS/homepage.htm
[25] U.S. National Center for Health Statistics, Vital Statistics of the United States, annual, National Vital Statistics Reports; see also Statistical Abstract of the United States, 1998, Table 157.
[26] U.S. Bureau of the Census. 1999. Marital Status and Living Arrangements: March 1998. CPS. Table 1.
[27] U.S. Bureau of the Census. 2002. http://www.census.gov/population/socdemo/hh-fam/cps2002/tabH3.pdf
[28] Larry Bumpass and Hsien-Hen Lu. 2000. "Trends in cohabitation and implications for children's family contexts in the United States." Population Studies, 54:29-41.

succession of private property.) Social norms and values marched in tandem with the large demographic and economic trends of the latter 20th century. As more women sought and obtained higher education, they also developed different expectations about relationships and partners. As women entered the labor force in higher numbers, they came to expect equal treatment by men, both at work and at home. As their earnings rose, their sense of independence (from men and marriage) increased apace. Growing numbers of women came to view the traditional model of marriage that dominated the American landscape for most of the 20th century as unacceptable. The power imbalances in marriage that placed men at the head of the household were increasingly challenged, and alternatives to marriage became more desirable, even if they had previously been viewed as deviant (e.g., living together without marriage).

IV. How Do We Currently Measure Pathways to Union Formation?

Household rosters, marital and fertility histories

Though it is not currently possible to map the full variety of relationships, nor the pathways to each, there are limited indicators that may give clues to both. There are two primary sources. First, abundant information about household relationships, marital, and fertility histories now exists in most large national surveys. These allow us to determine whether an individual is living with a romantic partner in a cohabiting or marital relationship. Related fertility histories permit an estimate of the relationship between mother and father in longitudinal surveys. Basic demographic household rosters and fertility histories, in short, have furthered our understanding of the role cohabitation and unmarried partnerships play as a pathways or alternative to marriage.

The availability of such information has made it possible to conduct extensive work on the pathways *out* of cohabiting unions, (into marriage or breaking up) and on fertility in cohabiting unions. Pathways *into* or *among* cohabitating unions are poorly understood, and information on this is typically gained from static comparisons of cohabiting and non-cohabiting individuals on basic demographic characteristics (education, race, age, etc.)[29].

The obvious limitation of any enumeration of household members, or fertility histories, is that they will almost always miss any relationship or person that is *not* co-residential[30]. Only those relationships that exist as cohabiting or married couple situations will be available for study based on this strategy. In the absence of new longitudinal evidence, this is a serious limitation because it prevents us from knowing the precursors to cohabitation or marriage, as they currently exist. In short, we cannot adequately study the pathways to co-residential unions in this fashion because there is little, if any, information about the other person *until* he or she is co-residing with the respondent.

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[29] See Judith A. Seltzer. 2000. "Families Formed Outside Marriage." *Journal of Marriage and the Family* 62: 1247-68 for a review of literature and findings in these areas.
[30] There are rare exceptions. In the National Longitudinal Surveys of Youth (original 1979 cohort and the current cohort) and the National Survey of Families and Households, for example, information about the non-resident parent is gathered, albeit with severe omissions.

The most valuable resource for studying union formation, at present, is probably the National Survey of Families and Households.[31] This longitudinal, national survey is now in its third wave, having been launched in 1987. The NSFH includes detailed information on union transitions (into and out of cohabiting and marital unions) as well as some attitudinal information about the advantages or disadvantages of cohabitation or marriage. The` longitudinal design permits an analysis of transitions into and out of relationships, and considerable work has already been done on transitions into and out of cohabiting unions.[32] Moreover, the broad range of respondents included would permit an analysis of union formation among middle aged and elderly individuals. NSFF, as with most surveys, gathers scant information about romantic partners who are not yet co-resident.

Studies of high school students, college females, and unmarried mothers

The other primary source of information comes from surveys and qualitative studies specifically designed to consider youthful attitudes and behaviors as they relate to relationships and marriage. Studies of high-school age students, for example, have shown how teenagers feel about marriage and divorce every year since 1975.[33] At least one national study of female college students has been conducted to assess the current dating customs on American college campuses.[34] And intensive research has focused on unmarried women who have just given birth.[35] Other national surveys of high school students exist, though they are limited in the information gathered about romantic and intimate relationships or the dynamics of such relationships with one obvious exception.[36]

The National Longitudinal Study of Adolescent Health (Add Health) focuses on an in-school cohort of 7th to 12th graders in 1994 studied through 2001-02.[37] Data were collected from adolescent respondents on best friends, romantic partners, and sexual partners. The sampling design generates many pairings for which both participants are respondents. This allows for the analysis of the process of pair formation and dissolution. Especially valuable is a list of relationship events or characteristics (e.g., where you met, age and race of partner, whether exchanged gifts, whether told others you were a couple,

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[31] http://www.ssc.wisc.edu/nsfh/home.htm

[32] See, for a review, Judith A. Seltzer. 2001. "Families formed outside of marriage." Journal of Marriage and the Family 62 (4): 1247-68.

[33] The primary source is Monitoring the Future. Each year since 1975, approximately 50,000 high school students have been surveyed on a range of issues, including attitudes and beliefs about marriage and related issues http://www.monitoringthefuture.org/. See also,, 1993. Robert Bella, Ed, *America's Youth in the 1990s* . Princeton, NJ: The George H. Gallup International Institute.

[34] Norval Glenn and Elizabeth Marquardt. 2001. Hooking up, hanging out, and Hoping for Mr. Right: College Women on Dating and Mating Today. Institute for American Values.

[35] See, for example, the "Fragile Families" project under the direction of Sara McLanahan at Princeton has investigated pathways to marriage and cohabitation among unmarried women who have just given birth. http://crcw.princeton.edu/

[36] See, for example, the National Educational Longitudinal Survey of 1988 (http://www.nces.ed.gov/surveys/nels88/) or the National Longitudinal Study of Adolescent Health (http://www.cpc.unc.edu/projects/addhealth/).

[37] http://www.cpc.unc.edu/addhealth/design.html

types of sexual expression, etc.) that can be sequenced (allowing one to determine the order of events in relationships). A sample of 1,507 partners of respondents were interviewed at Wave III. The sample consists of one-third married, one-third cohabiting, and one-third dating partners. The available data are for respondents seven or eight years after the first interview – age 18 to 26. As such, a growing number are now approaching the typical ages for transitions into serious romantic (cohabiting or married) relationships. The third wave of Add Health focuses primarily on the pattern of, attitudes about, and influences on transitions. Future waves will be especially valuable for understanding pathways to union formation among young adults.

The indicators included in Add Health serve as a model for how trajectories to union formation might be studied among youths and adults. To do so would require a different sampling design (to capture adults in all stages of the life course) and other significant modifications of administration and follow-up. Still, in my opinion, this is the best model we currently have for how to study pathways to union formation because it explicitly includes romantic and non-residential partners.

V. What Do We Need to Know?

In light of the extremely limited knowledge we possess about the types of relationships that lead to, or substitute for, marriage, the most pressing need at the moment is to document the variety and nature of such relationships. Having done that, we need to understand the ways various types of relationships develop.

In any attempt to measure and analyze union formation, specific attention must be given to ethnic and cultural differences as these increasingly define our population. Gender differences are of obvious importance. We must also be attentive to pathways to union formation among those in mid or later life. Most divorced people remarry. Many widowed individuals remarry[38]. Each group may have its own patterns of mate selection, and its own pattern of relationships.

In the following section, I propose the information that would be needed and a strategy for obtaining it. Three topical areas of information could be gathered through national data collection efforts, including longitudinal surveys (e.g., NLSY97, SIPP.) First, is information to learn what types of relationships exist and what they are called. Second, is information to characterize those relationships with respect to traits associated with traditional marriage, such as sexual fidelity and the sharing of resources. Third is a sequence of questions measuring the degree of commitment to the relationship. These items follow the logic of Add Health, though they would be suitable for individuals of any age.

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[38] National Center for Health Statistics. Centers for Disease Control. 2002. "Cohabitation, Marriage, Divorce, and Remarriage in the United States." Series Report 23, Number 22.

What types of relationships exist in America?

For classification purposes, we need to know the names used for contemporary relationships. This will require the use of an open-ended question. This is especially important in light of the ethnic and racial differences in America. It is also of growing interest to those concerned with gay and lesbian partnerships. The following information gathering efforts could identify the types of relationships that currently exist.[39]

- Asking whether the person is currently involved in a romantic relationship with another person, a man or woman thought of as a steady, a lover, a partner or a relationship by some other name (YES/NO).
- If yes, following with an open-ended inquiry into the nature of the relationship—what does the person call this relationship and how do they describe it.
- If no, asking what type of relationship would the person be interested in having at this point in his or her life.

What are the characteristics of these types of relationships?

Once we have identified the different types of relationships and the various ways they are referenced, we turn to gathering information designed to characterize those relationships. I suggest that we do this by focusing on those relationship traits associated with a traditional monogamous marriage. I use traditional monogamous marriage as the reference because it is the most common, and most conventionally regarded end of courtship. As such, these characteristics serve as a useful benchmark, especially when considering how other types of relationships may foster or hinder progression to marriage. It is important to realize that this strategy would permit a researcher to understand any type of intimate relationship, heterosexual or homosexual, marital or otherwise. The choice of marriage as a comparison reference is not meant to imply that all relationships should be compared with marriage. Rather, it is simply an analytic strategy.

While there is no official rulebook for what marriage implies, there are clear consistencies in domestic relations laws, western religious customs, and social convention. In the United States, marriage is a free choice, based upon love. It involves co-residence and sexual fidelity. It is the traditional venue for childbearing. It involves some mixing and sharing of finances. It involves some division of labor in regards the management of tasks. And it involves the adoption of a conspicuous marital identity[40]. The sequence of questions that follows would assess the degree to which each type of relationship resembles this model of marriage.

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[39] This sequence is adapted from the General Social Survey. The open-ended question might be administered once in a national survey. Once this has been done, subsequent research using the additional questions outlined (below) could offer respondents a list of relationship options from which they could select one.

[40] See Steven L. Nock. 1998. Marriage in Men's Lives. NY: Oxford University Press for a discussion of the agreed-upon dimensions of American marriage.

Below are examples of the types of information that could be gathered on a national panel study. The information could be used to characterize all forms of relationships, marital and non-marital, heterosexual as well as homosexual, in sufficient detail to understand their broad outlines as relationships formed, dissolved, and resolved into new types. Combined with standard demographic information (on most surveys) about the respondent's age, ethnic/racial identity, marital history, fertility history, and sex, it would be possible to locate each relationship type in the life course, and characterize it by its similarity to a traditional model of marriage. For each person having a romantic relationship, one could enquire:

- Whether person or partner has ever been married to someone else
- Age, gender and race or ethnic identify of person and partner
- Whether person's family and partner's family encouraged the relationship
- Whether person and partner live together
- Whether person and partner have sexual relations with one another
  If so, whether
    - person and partner have promised to be sexually faithful
    - person and partner are sexually faithful
    - whether person and partner had child together
    - if no then whether person and partner hope some day to have a child together
- Whether person or partner spends some of the other's money
- Whether person or partner does some of the other's chores every week
- Whether person or partner earns enough to live comfortably without the other's income.
- Whether person or partner have told friends or family about the relationship
- Whether person or partner hopes to be together for life

How much commitment exists in each type of relationship?

Here the goal is to understand how contemporary relationships differ in the level of commitment involved. More generally, the concern is to understand how different types of relationships may foster or hinder the type of commitment found in stable marriages or enduring relationships.

In this paper, I focus on the 'exit costs' or the losses anticipated if the relationship were to end as one way of measuring commitment in contemporary relationships. The measures required to capture commitment were developed for the National Survey of Families and Households.[41] The sequence requires the respondent to imagine the consequences of ending his or her relationship for a number of areas of life. The individual who sees absolutely no negative consequence of ending her relationship may be thought to have no commitment to it. Alternatively, that person is independent of the relationship. In either

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[41] http://www.ssc.wisc.edu/nsfh/home.htm. Alpha reliabilities vary depending on samples. However, the commitment measure routinely generates alphas in the range of .79 to .83.

case, the relationship is not likely to withstand the customary challenges faced by couples in the course of a long marriage.

Following efforts to gather information on the nature of the relationship, outlined above, people could be asked about the various areas of their lives that might be different if they separated from their partner, even if they think separation is very unlikely, and whether these areas are much worse, worse, same better, or much better. These areas might include, for example[42]

- standard of living
- social life
- job opportunities
- overall happiness
- sex life
- being a parent
- leisure time
- friendships

VI. Conclusion

The pathways to union formation are increasingly diverse and occur throughout life. Contemporary understanding of this diversity is limited, especially as it varies by ethnic identity, age, and stage in the life course. Though we know vastly more today about who cohabits, marries, or divorces than we did two or three decades ago, we lack basic information about the variety of relationships that currently exist in America. I recommend that three sequences of questions be developed as outlined above. Including these in nationally representative panel surveys and other national data gathering techniques to routinely collect basic demographic information about the respondent (including marital and fertility history) would allow researchers to a) catalogue the variety of contemporary relationships, b) explore the content of those relationships as they resemble traditional monogamous heterosexual marriage, and c) chart the development of commitment among relationship types and over time. Combined with other information typically gathered in large surveys, it would also be possible to analyze the individual and couple characteristics that are associated with each type of pairing (e.g., income, educational attainment, labor force involvement, etc.). In short, these three categories of information would allow us to chart the pathways to union formation in America.

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[42] This sequence is based on the National Survey of Families and Households, Wave 2. ftp://elaine.ssc.wisc.edu/pub/nsfh/crse1-5.002 for cohabiting partners, and ftp://elaine.ssc.wisc.edu/pub/nsfh/crse6-18.003 for married partners.

When children had diarrhoea, frequently it was the husband who came to the centre to collect medicine. Oral rehydration salts were provided, but apparently little information transfer was occurring from husband to wife. The CHW had no direct contact with the mother so as to be able to advise and help.