

**CONCEPTUAL FRAMEWORKS FOR
CHILD CARE DECISION-MAKING**



**White Paper
October 2010**



Conceptual Frameworks for Child Care Decision-Making

Submitted to:

Ivelisse Martinez-Beck, PhD., Project Officer
Susan Jekielek, Ph.D.
Office of Planning, Research and Evaluation
Administration for Children and Families
U.S. Department of Health and Human Services

Submitted by:

Ajay Chaudry, The Urban Institute
Julia Henly, University of Chicago
Marcia Meyers, University of Washington

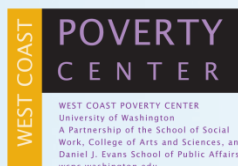
Contract Number: GS10F0030R

CONTRACTOR

Project Directors: Kathryn Tout and Nicole Forry, Child Trends
4301 Connecticut Ave NW
Washington DC, 20008

Suggested Citation:

Chaudry, A., Henly, J., & Meyers, M. (2010). ACF-OPRE White Paper. *Conceptual Frameworks for Child Care Decision-Making*. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Washington, DC.



Disclaimer

This paper was prepared under OPRE's **Child Care and Early Education Policy and Research Analysis and Technical Expertise Project** with Child Trends (contract #GS10F0030R). The opinions and any factual errors expressed in the paper are those of the authors, and not of the Urban Institute, University of Chicago, University of Washington, Child Trends, nor does the content of this publication necessarily reflect the views or policies of the U.S. Department of Health and Human Services.

Acknowledgments

The authors thank Greg Acs, Elizabeth Davis, Bobbie Weber, Kathryn Tout, Nicole Forry, Tabitha Isner, and Susan Jekielek for their thorough and thoughtful reviews on drafts of this paper. The authors also extend thanks to the OPRE Child Care Decision-Making Workgroup, as well as to the participants in the Working Meeting on Child Care Decision-Making convened by OPRE in December 2008.

I. Introduction

There is widespread and growing interest in how parents make decisions about their children's care. Over 60 percent of children spend time in non-parental care settings (U.S. Census, 2006, Table 1b). These settings are important contexts of child development and critical employment supports for working parents. Moreover, considerable public policy resources have been directed at assisting parents, especially low-income parents, with their child care needs. In particular, the Child Care Development Fund (CCDF) aims to help low-income families secure child care in order to improve education, training, and work outcomes and improve the quality of child care. CCDF was designed to increase parental choice of care by reducing the cost of child care across settings, thereby increasing parental access to affordable care options that fit their needs and preferences. CCDF also supports parental choice of care by investing in activities that improve the quality and availability of child care. Similarly, with the goal of improving school readiness, Head Start and other early education programs recognize that high quality early childhood programs have been shown to "pay off" in the short and long terms both for individual children and society (Heckman, 2006; Karoly, 2001). Despite these significant advances in public infrastructure supporting non-parental care, child care arrangements are too often of mediocre or poor quality for children (Helburn, 1995; NICHD, 2000), unstable (Scott, London, & Hurst, 2005; Meyers et. al., 2001; Chaudry, 2004), a considerable out-of-pocket expense for families (Gianerelli & Barsimontov, 2000; Smith, 2000; U.S. Census, 2006, Table 6), and inconvenient for parents in terms of location and/or hours of operation (Johansen, Leibowitz, & Waite, 1996; Scott et al., 2005; Chaudry, 2004). Although the child care market is quite diverse, including a wide range of arrangements that vary considerably in terms of structure, cost, provider characteristics, quality, location, and so on, the options available to any particular family are constrained and may not match family needs.

The task of choosing care arrangements for a child or multiple children is complicated. Parents may be considering multiple work, care, and family factors simultaneously, and feasible options may be highly constrained. In addition, parents often make choices with limited information about the actual quality, convenience, or even cost of alternatives. Child care searches are often short (Kontos, Howes, Shinn, & Galinsky, 1995), conducted under significant time constraints as parents respond to the demands of a new job, a change in work schedule, family changes, or the various requirements of a welfare, child care subsidy, or other government programs (Chaudry, 2004). In addition, rather than being singular, static, one-time-only decisions, parents often make multiple child care decisions at any point in time. At least

one-fourth of preschool children whose mothers are employed are in multiple arrangements (U.S. Census, 2006, Table 1b) and parents of two or more children may maintain several child care arrangements simultaneously. Moreover, child care needs routinely fluctuate with changing family, work, and school schedules, with shifting policy and program expectations, and with children's developmental needs, resulting in a wide array of diverse combinations of care (Scott et al., 2005; Chaudry, 2004; Shonkoff & Phillips, 2000). Parents of children with special needs face additional constraints and require particularly complex caregiving needs (Parish & Cloud, 2006; Zigler & Lang, 1991). The child care decision making process, then, is a dynamic one that is subject to frequent reconsideration and renegotiation involving multiple actors with varying levels of input and influence over parental decisions. In fact, as we discuss further below, some argue that child care choices are not choices at all, but rather accommodations to this complex set of circumstances that confront parents – especially low-income parents – who are managing the multiple demands of paid work and caregiving within highly constrained environments and limited economic means.

Child care researchers and policy makers continue to struggle with identifying and understanding the decision making process parents go through when making care choices. There is widespread agreement that child care decisions are complex, and the result of some interaction among parental preferences, opportunities and constraints. The research community has amassed considerable evidence about the factors and processes associated with child care decisions, and these studies are furthering knowledge and informing policy (Weber, forthcoming). Still, knowledge remains limited and there is a critical need for new research and greater reflection on and synthesis of existing research. Critical needs include a greater understanding of (1) parental preferences for particular kinds and qualities of care and the social and personal factors that inform their preferences and direct child care searches; (2) parents' knowledge and beliefs about the range of viable choices to which they have access to and how knowledge and beliefs vary across parents in different circumstances; (3) variation in the opportunities and constraints that shape parental decisions across different contexts, family circumstances, and child needs; and (4) the processes parents use to select care arrangements given multiple role demands, and the multiplicity and simultaneity of decisions being negotiated at any point in time.

This working paper is one in a series of projects initiated by the Administration for Children and Families (ACF) to improve knowledge for child care researchers and policy makers about parental child care decision making. In this paper, we identify three distinct conceptual

frameworks for understanding child care decisions – a *rational consumer choice* framework, a *heuristics and biases* framework, and a *social network* framework – and review the major assumptions, contributions, and possible limitations of each of these frameworks. We then discuss an integrated conceptual model, the *accommodation model* that draws from each of these frameworks. The first three frameworks come primarily from the fields of economics, psychology, and sociology, respectively. It is our sense that most research about child care decision making has been informed by the theories, assumptions, and empirical methods of one or more of these frameworks, either explicitly or implicitly, and we provide some examples and elaborate the basic tenets of each framework. The integrative *accommodation model* was first presented by Marcia Meyers and Lucy Jordan (2006). We develop and elaborate this model more fully here with explicit attention to its relation to the rational consumer choice framework, the heuristics and biases framework, and the social network frameworks. These frameworks are presented as complementary, rather than mutually exclusive. For a process as complex as parental child care decisions, each can provide a different and useful lens through which to understand unique aspects of the factors, processes and outcomes of parental child care decisions. When considered together, we believe they may inform one another and the development of more integrative models, such as the accommodation model presented here. It is our hope that researchers working primarily within one of the conceptual frameworks discussed here will benefit from learning about other frameworks. In some cases, this may simply suggest additional or new variables to consider when specifying a particular model, while still working from the same conceptual framework. In other cases, it may result in integrative approaches that address multiple dimensions of the decision making process – dimensions that may not be as obvious when working within a single framework. In the concluding section we discuss some of the issues and the implications for future research.

A goal of this paper is to advance knowledge that can inform public policy efforts. Given that CCDF has an explicit goal of supporting parental choice for child care, it is critical that we expand and deepen our knowledge about the processes through which parents make decisions and the consequences for the choices they make (Zaslow, Halle, Guzman, Lavelle, Keith, Berry, & Dent, 2006). The different perspectives offered by each of the three frameworks and the integrative accommodation model may help policy makers identify the policy and program levers that can prove important at different stages of the decision making process.

II. Conceptual Frameworks for Child Care Decision-Making

A. An Economic Consumer Choice Framework of Decision Making

The traditional economic model of consumer choice is a well-known conceptual framework for individual decision-making that has been frequently applied to child care use. According to the basic economic model of consumer choice, individuals make a decision that maximizes their satisfaction by considering the tradeoffs among the alternatives they face relative to their preferences. The consumer choice framework recognizes that individuals' choices are subject to *constraints*, such as budget or time constraints (e.g. that one has a limited amount of money to spend on an alternative or time to spend on considering alternatives). Individuals consider tradeoffs in making decisions about the type, quality, and quantity of a good or service to use based on a theory of *constrained optimization*.

The economic model of consumer choice has several appealing aspects for studying decision-making in child care, as well as other consumption choices:

- (1) It is *well-structured* to examine the associations between, and the weight of, the individual and family factors that inform parent's preferences and, therefore, the tradeoffs that go into making child care decisions. If a parent has established existing preferences related to price, quality, convenience, and a host of other factors, in a choice model one could observe how parents' choices varied as one or another variable shifts.
- (2) It builds on individual-level care choices as a unit for analysis so that *choices are easily aggregated* for analysis.
- (3) It can be used to make *empirically testable* hypotheses about how child care decisions may vary with individual, family, market, and policy factors. And,
- (4) Empirical results can offer *predictive capacity* to model or simulate how particular market and policy changes might alter child care choices.

For these reasons, and the familiarity and widespread use of the consumption choice framework, this approach provides a foundation for starting to think about the lenses through which child care decisions are understood.

Empirical research based in the consumption choice framework has demonstrated that a number of child and family factors explain some of the observed variation found in child care choices. These models have been particularly effective in explaining and predicting changes in

the type of care families use as a result of changes in the price of care or changes in family income (Michapolous & Robins, 2002; Blau, 2001; Blau & Hagy, 1998). So, for example, a choice framework would predict that price affects the type of care that families use in much the way it has been empirically observed: (a) higher-income families make greater use of a more expensive type of care, such as formal center-based care (Blau, 2001; Kimmel, 2006); (b) price effects operate so that with a decrease in prices (for example, due to a child care subsidy that reduces the cost parents pay) there would be a greater substitution towards center-based care (Chaudry, 2004; Tekin, 2004), and (c) income effects operate so that as families' incomes rise, more families move into center care (Michapolous & Robins, 2002).

Choice models have been less useful at explaining how other family factors – such as race and ethnicity – influence child care decisions, often attributing variation to underlying “tastes” (Liang, Fuller, & Singer 2000). Empirical choice models also leave a significant amount of individual and group variation in child care arrangements unexplained. For example, models based on the consumer choice framework have been less effective in establishing the role that quality of care differences play in child care decisions (Blau, 2001; Holloway, Rambaud, Fuller, & Eggers-Pierola, 1995; NICHD 2000, 2002) or how parents weight their perceptions of child care quality against other factors (Hofferth, Shauman, Henke, & West, 1998).

Some limitations of research based in the consumer choice framework can be traced to both theoretical and empirical sources. Here we discuss some of the theoretical limitations by examining underlying assumptions of the framework and how these assumptions may be challenged in the case of child care decision making. Importantly, economists have made many noteworthy advances in recent decades in the development of modeling techniques that allow researchers to relax and account for challenges to the assumptions of standard theory, thereby incorporating greater complexity into their models. Many of these advanced econometric techniques have not yet been widely applied in studies of child care choices, due in part to data limitations. We present the standard assumptions of the consumer choice framework here, recognizing they are not necessarily subscribed to by contemporary economists, because these assumptions continue to influence the way the consumer choice framework is understood and applied in much empirical research. By examining these assumptions, and the challenges raised by other conceptual frameworks, our goal is to elucidate the ways in which the use of multiple frameworks can further our understanding of complex child care decisions. In the final section of the paper we return to some of the empirical challenges and opportunities associated across the different conceptual approaches.

Assumptions of the Economic Consumer Choice Framework

The consumer choice framework is built on assumptions about individuals, about markets, and about the decision-making process itself. It is helpful to describe some of these assumptions both for what they offer to the understanding of child care decision making, as well as for what some of the other conceptual frameworks might build upon or contribute further towards this understanding. A behavioral assumption of consumption choice theory is that individuals are *rational decision makers* who primarily use a reasoned and informed assessment to choose a combination of goods and services that will best meet their preferences and maximize their *utility* subject to a budgetary constraint or how much money they have to spend. Therefore, to understand how child care decisions are made, one would most need to know the alternative care choices a parent considered as well as their preferences. The “choice” would be understood to result from a parent’s calculus of what option, or combination of options, is best given the set of alternatives considered and the various constraints on each. This type of calculus is an important part of the decision-making process for parents using child care.

The other frameworks discussed herein also assume that individuals try to make rational, purposive decisions much of the time. These frameworks try to reconcile this with how parents behave when it is difficult to effectively assemble and weigh a set of choices relative to multiple preferences – perhaps because of informational deficits and time constraints. Some decisions become “taken-for-granted” patterns of action based on the norms of social networks, as is discussed further in the discussion of the social network framework and the integrated accommodation model. Moreover, there are important cognitive factors (e.g., perceptual biases) that can interfere with a rational decision-making process, as delineated in the next section that discusses the heuristics and biases framework. Thus, taken together, the frameworks discussed in this paper offer a complementary understanding of human efforts to make reasoned, rational decisions and the limitations that can be encountered in doing so in the case of child care decision making.

A second, individual-level assumption in the consumer choice framework is that individuals have *preferences* for the type, quality, and other features of the goods and services they desire and consume. In the case of child care, parental preferences could be multiple and include aspects of what parents want for their child and what they want for themselves. Consumer choice theory allows for complex preferences, so that a great many factors could be included in a family’s care preferences, including quality, price, convenience, timing, and so on. It is assumed that this complex bundle of preferences can be incorporated into a *utility function*

that captures a person's complex mix of preferences and can be used to compare available options. According to the conventional consumer choice framework, the complex bundle of preferences is explicitly or implicitly understood by the decision-maker (and observable or revealed by their consumption choices).

In addition, the classical consumer choice framework assumes preferences are *static* and *exogenous*; that is, preferences are relatively fixed and they are not affected by the choice process itself.¹ The choice framework takes preferences as a given, and it does not indicate any judgment about preferences, i.e. whether they are legitimate or not, or good or bad, but just that they exist for the individual decision maker and that they lead to observable choices given the constraints faced by the decision maker. There is recent interest in understanding the origin of preferences (see for example, Bénabou & Tirole, 2007), and some researchers who apply a consumer choice framework recognize that preferences are shaped by prior experiences, cultural norms, or other factors. The purpose of the empirical work from this framework, however, is seldom to examine how preferences are formed; nor would a consumer choice framework provide guidance for studying how preferences are influenced by individual or contextual factors. Research that draws on different conceptual frameworks that address the nature of parents' preferences for child care indicate that preferences may not be exogenous, but rather, they can change in response to experiences, i.e. that parents may learn and shape their preferences through experiences with child care settings, interactions with providers, and employment experiences (Chaudry, 2004; Coley, Li-Grining, & Chase-Lansdale, 2006; Li-Grining & Coley, 2006). Studying how and why parents form their preferences is a useful area of inquiry, but is typically not the focus of studies based on the consumer choice framework. The source of preferences is something that the heuristics and biases, and social network frameworks (to be discussed) may be better prepared to investigate.

Full Information is an assumption of the classical consumer choice framework. The classical framework of consumer choice begins with an assumption of full information, although child care decision making studies from this framework often recognize that parents lack full information when making child care decisions. Parents often operate with very incomplete and imperfect information when considering child care options. There are often significant *information asymmetries* that exist between the parent-consumer and the care provider because

¹ While the conventional economic model is built on these assumptions, there are economic models that do account for dynamic preferences (Akerlof 2005; Akerlof & Kranton, 2000, 2005; Rabin 2000). Many of these advanced forms of economic modeling have not been widely applied to empirical studies of child care choices where data limitations constrain what can be included in the model.

it is difficult to observe many of the features of child care or anticipate the consequences for children and for parents. The child care provider knows much more about the service they are providing than the parent who is purchasing it. Child care decisions are unlike many other consumption choices where the consumer can see what they are buying, or they have some market indicators of the qualities of the product that matter to them, or the quality does not range very widely among competing products. Child care consumption choices can be among the most important decisions parents make, but for which they confront considerable opacity about the characteristics of their options and have few market indicators that might inform them. Given the challenges in obtaining full information for parents seeking care, a version of the consumer choice framework that could account for information asymmetries would be useful in the study of child care decision making.² Moreover, as discussed below, the social network framework may help researchers identify the social sources of information parents have about various child care options and some of the influences that shape how they value that information, and the heuristics and biases framework sheds light on how information asymmetries can influence decision making and the kinds of decisional biases that may be present under different information conditions.

The consumer choice framework also makes assumptions about the *individual and the discrete nature of choices*. Many economic models of decision making adopt a *methodological individualism* framework, whereby market transactions are seen as individual decisions based on one's own stable preferences and specific set of constraints. There are empirical models of consumption choice that do explicitly frame decisions at the family or household level, and these may be of particular value to research on child care decision making. As discussed below, the social network framework draws from literature that addresses this issue directly by highlighting the group and social structural influences of actions. In doing so, it focuses more directly on the processes through which social factors influence individual-level decisions.³

Conventional consumer choice models also assume that choice decisions are *discrete choices*, i.e. that one's behavior in making a particular consumption choice maximizes one's utility for that choice, but that it is largely separate from other choices. Importantly, some

² Some notable economists such as George Akerlof and Joseph Stiglitz have developed and applied economic models that try to account for informational asymmetries, and these models have proved to be a great advance in empirical economics, with Nobel prizes in economics awarded for the work. These models that account for sharp information asymmetries have not yet been applied to child care consumption choices, as far as we know, which could make it a ripe avenue for further exploration.

³ Regardless of whether decision-making is conceptualized at an individual or family/household level, empirical estimation strategies are often limited to individual-level tests because of the limitations of available data and because multi-party decisions are very difficult to model empirically, using standard econometric methods.

empirical studies of child care choices have jointly modeled the simultaneity and interdependence of work and child care decisions (e.g., Davis & Connelly, 2005; Baum, 2002; Powell, 2002). This is particularly noteworthy in child care research where parental child care decisions are modeled jointly with labor supply decisions about whether and how much to work (as well as other decisions such as decisions about arrangements for siblings care). As discussed further below, other approaches to understanding this complexity are suggested by conceptual frameworks that assume simultaneity and interdependence in decision-making in various contexts. These frameworks may further offer some understanding of the conditions under which choices are most likely to have this character.

Finally, a fundamental assumption of the consumer choice framework is that choices are subject to *constraints*. There are many notable and significant constraints on choices for child care, especially for low-income families. Cost, supply, job schedule, and information constraints represent a complex multi-dimensional web of constraints that can especially limit care options for many low-income parents. Some studies have demonstrated how the high cost of many care options (relative to the incomes of low-income families) interacts with the limited access to care supply in areas where low-income families reside, to either effectively limit access to many care options for families or to steer them to other more available choices. Low-wage working parents who are constrained by non-standard work schedules may face challenges finding care consistent with preferences (Scott et al., 2005; Chaudry, 2004; Henly & Lambert, 2005; Han, 2004; Presser, 2003). As discussed further below, the accommodation model provides a model for studying the process by which families make care decisions in these circumstances, and may be both an extension and a complement to the economic choice model. The consumer choice framework is well-suited to model the choice *outcome* given a particular constraint or even some set of constraints. The accommodation model, on the other hand, can help us understand how families navigate to make care choices within a broad range of constraints and it can account for how decisions are made when all care is low quality, or when a child care decision is so immediate that the constraints can imply taking an available option over a preferred one as an incremental choice.

B. Heuristics and Biases Framework

The heuristics and biases framework contributes to understanding factors that interfere with *rational* decision-making; that is, with the ability of actors to engage in the kind of careful, reasoned decisions of the form suggested by an economic model of consumer choice. The heuristics and biases framework originates from psychological research addressing the question

of how judgment and behavior is shaped by basic psychological processes. Decades of psychological research has demonstrated the considerable influence that subjective construal plays in decision making, articulating several normal psychological processes that shape the ways in which individuals receive and process information and make decisions under uncertainty. Of particular consideration for a heuristics and biases framework is the role of heuristic processes, which can at times lead to systematic errors in judgment. Heuristic processes can be very helpful to decision makers in many circumstances (Simon, 1955; Gigerenzer & Brighton, 2009), especially in the face of complicated, ambiguous, and incomplete information, and especially when preferences are neither known nor fixed. Yet they also result in biased decisions (as well as inaction) on the part of the actor (Tversky & Kahneman, 1974; Thaler & Sunstein, 2008). Thus, according to a heuristics and biases framework, when making decisions, the calculus of tradeoffs between alternatives is not strictly an objective weighing of actual costs and benefits, but is shaped by cognitive biases that influence the calculus itself. As a result, judgments reflect deviations from what would otherwise be “rational,” from the perspective of a consumer choice framework (Hastie & Dawes, 2001). As noted by Reid Hastie and Robert Dawes (2001) in their book on the psychology of judgment and decision making, “We have a common set of cognitive skills that are reflected in similar decision habits. But we also bring with us a common set of limitations on our thinking skills that can make our choices far from optimal” (p.2, 2001). It is these cognitive skills and limitations that are of particular interest to psychologists and behavioral economists who study the ways in which individual choices violate the assumptions of expected utility that underlie the traditional consumer choice framework.

There has been increased interest especially among behavioral economists in the applicability of a heuristics and biases framework to economic decisions and public policy⁴; yet there has been no formal application of a heuristics and biases framework within the child care decision making literature, either at a conceptual level or empirically. Given the relative newness of this approach for understanding child care decisions, in this section we provide some elaboration of the basic tenets of the framework and offer several examples of how the approach might improve understanding of the child care decision-making process and inform child care policy.

⁴ The acceptance of the heuristics and biases framework in economics and public policy is evidenced by the growing subfield of behavioral economics. Behavioral economics applies basic psychological arguments to the economic realm to understand how psychological biases in decision making show themselves and when and under what conditions they matter.

The Role of Subjective Construal

A principle tenet of modern psychology concerns the notion of construal. Rather than responding directly to environmental stimuli, individuals construct mental representations of the environment (e.g., Bruner, 1957; e.g., Griffin & Ross, 1991; Nisbett, Caputo, Legant, & Maracek, 1973). We form subjective representations of the world around us, and these subjective appraisals are a basis for action. According to psychologists, it is these subjective representations or *construals*, and not the external stimuli that ultimately matter for our judgments (Ross & Nisbett, 1991). Thus, modern psychology has been concerned with investigating systematic features of this construal process and the underlying psychological processes by which construal takes place and by which judgments (or decisions) result.

Cognitive Biases

One basic argument with regard to construal is that construal processes often yield a simplified representation of the world. In translating objective circumstances to a subjective reality, we make use of simplifying strategies, or *heuristics*. Heuristics help us make sense of a complex environment, and allow us to arrive at reasonable or “satisficing” conclusions (Simon, 1955), even if these decisions are not “maximizing” in the economic sense. We rely on heuristics because our efforts to scrutinize a complex amount of information are compromised by cognitive capacity limitations as well as motivational considerations. Studies suggest that the quality of our decisions decline when we have too many choices to select from, because a great number of options can contribute to information overload and increase decisional conflict (Botti & Iyengar, 2006; Shafir, Simonson, & Tversky, 1993; Tversky & Shafir, 1992). We also face particular challenges making decisions when they concern issues that we are mostly unfamiliar with, when decisions are complex, when we have little practice in making the decision, and when the feedback is deferred or not particularly transparent. Additionally, in situations when the *best decision* is likely to result from consideration of a complex array of factors that might have unclear or competing values, cognitive capacity may be stretched and decision making compromised. In many instances, reliance on heuristic processes (or simplifying strategies) may produce reasonable decisions (Simon, 1955; Gigerenzer & Brighton, 2009), but in other cases, they may lead to suboptimal or undesirable outcomes (Tversky & Kahneman, 1974).

Laboratory research on heuristic processes has amassed a significant amount of data demonstrating that subjective reality deviates in systematic ways from objective reality, and that there are several different forms of heuristic processes that come into play as part of the construal process. For example, there is good evidence that people’s perceptions and

judgments are influenced by how readily and easily examples of a topic come to mind (Kahneman & Tversky, 1973; Schwarz et al., 1991). According to this *availability heuristic*, individuals are more likely to use information in making decisions when that information is more familiar, salient, or recent.

Applied to child care decisions, parents are likely to attend more to readily available information such as what they know about different child care arrangements and providers based on their own experiences, what friends tell them about the kinds of child care they use, or what is salient in their community (perhaps because they drive by a particular center every day on the way to work). For example, if many of a parent's friends and relatives enroll their children in a particular local Boys and Girls Club for after school care, the mere accessibility of that choice (in terms of where to go and who to talk with about it) compared to other choices such as a privately-run after school program or a city-run tutoring program, may increase the likelihood that the parent chooses the Boys and Girls Club when presented with the three options. This may be true even if there is good information available (but less easily accessible) that the city-run tutoring program offers high quality programming. Moreover, and especially if the parent is under significant time pressure or is facing multiple other demands, she may not seek out information about other options at all; using the information that is available about the Boys and Girls Club as sufficient for making her judgment. Similarly, the availability heuristic may come into play when parents assess various risks of different arrangements. A parent may judge the risk of center care to be particularly great after being exposed to a highly publicized story about a contagious illness that spread through a center or news of a child care center-related fatality. The availability of information about that one story may lead to an assessment of risk that is far higher than is actually the case, and parents' decisions to seek out center care in the wake of such salient and recent news stories may be dampened. Thus, the availability heuristic suggests that one way we simplify the decision making process is by giving greater consideration to information that is readily available – that is, information that we can easily access mentally, perhaps because we experience it frequently, it is highly salient, or we have recently encountered it.

The consumer choice framework can also account for some of the greater weighting of available information since the costs to the individual in time or other resources to learn this information and incorporate it into their choice decision (i.e., the transaction costs) may be lower for the more readily available option. But the two frameworks differ in their explanation: the heuristics and biases framework assumes the effect is driven by *what information comes to*

mind whereas the consumer choice framework assumes that the *cost of information acquisition* drives the effect. The two accounts are both possible and not mutually exclusive.

Our tendency to use category-based judgments (Bruner, 1957) is another example of a simplified heuristic strategy that has been consistently demonstrated to operate as part of normal construal processes. Briefly, one way in which individuals simplify their understanding of their environment is by relying on knowledge of particular class or category information to arrive at a judgment about a particular case (Kahneman & Tversky, 1973). For example, classifying a given object as a “chair” makes available a host of knowledge about the object (e.g., its intended use, shape, material, etc.). A large literature on categorization in psychology demonstrates that judgments are influenced by how representative (or similar) the target of judgment is presumed to be of a particular class or category (see for example, Rosch, 1978). Thus, a parent may judge the quality of a family child care provider on relatively undiagnostic information, such as whether the house is organized and tidy, under the assumption that orderliness is a characteristic of responsible caretakers. This information may provide some evidence about the quality of the family child care setting but probably has only a limited relationship to many dimensions of quality, such as how much knowledge the provider has about child development, how attentive the provider is to children’s needs, or how skilled the provider is at relating with children. Category-based inferences may have particular relevance for understanding parents’ judgments of child care assistance programs. For example, when given information about a government child care subsidy program, a parent may be disinterested in the program if they judge it to be a *welfare program*, and if they believe that welfare programs, as a category, are typically not worth their while because they provide limited benefits, involve significant transaction costs, or are stigmatizing and demoralizing. On the other hand, this same parent may have a much more positive view of the child care subsidy program if she understands it as a program that is designed to facilitate access to preschool, and if she considers preschool programs as a separate category from welfare programs (e.g., programs that focus on child development and school readiness). Thus, rather than seeking out information and evaluating the various positives and negatives of different alternatives, parents may disproportionately rely on category-based judgments about the value of a particular setting or program.

Psychological research has identified several other types of heuristics, in addition to the availability biases and category-based judgments, which help us to understand how the translation of environmental stimuli to subjective reality influences judgments. Of related interest

is the result of these translation processes; that is, how subjective assessments actually differ from objective circumstances. In a program of research on heuristics and biases in decision making, Daniel Kahneman and Amos Tversky have argued that key assumptions of economic utility theory are routinely violated when individuals make judgments under uncertainty. In particular, they demonstrated that individuals make decisions that are often inconsistent and incoherent with an otherwise objective or rational analysis, and they provided several empirical examples of decisions that are easily reversed simply by changing the manner in which information relevant to the decision is presented (or framed) (see for example, Tversky & Kahneman, 1974; Tversky & Kahneman, 1981; Kahneman, Slovic, & Tversky, 1982).

Kahneman and Tversky's (1979) *prospect theory* explains the way in which judgments under uncertainty deviate from the expectations of economic utility theory. Specifically, prospect theory predicts that (1) assessments about how much something is valued are always made relative to some subjective reference point (which may not be stable) and (2) responses to loss are more extreme than responses to gains (that is, we tend to focus more on what we will lose in giving up a good than on what we might gain in taking up a good. For example, in determining the value of a particular preschool option, a parent will consider it relative to some subjective reference point (another child care setting), and in determining whether or not to change from her current arrangement to the preschool, she may give greater consideration to what she is likely to miss about her current arrangement than on what she might gain from the switch to the preschool. A third prediction from prospect theory is (3) that we value gains and losses as greater when they are closer to our reference point (Kahneman & Tversky, 1979, 1981). So, for example, the difference between leaving a child at one's sister's home just down the street compared to a center that is 10 minutes away may be judged as a greater difference (or more significant time cost) than the difference between two centers that are respectively 10 minutes and 20 minutes away from one's home.

Samuelson and Zekhauser (1988) consider the implications of prospect theory for understanding what they call the "status quo" bias. The status quo bias reflects our general tendency to prefer what we already have (or to accept default options) rather than actively pursue an alternative option that may appear objectively superior. Prospect theory provides an explanation for this tendency. That is, we are generally "loss averse"--we weigh more heavily the possibility of losing what we have than we do the potential to gain something we do not have. Regarding child care decisions, we may subjectively value keeping a particular child care arrangement, despite problems with reliability or concerns about quality, more than we value

taking the risk of gaining a better child care arrangement by switching caregivers. Such a perspective is inconsistent with conventional choice frameworks that assume that preference rankings are independent of one's current assets (or "endowment independent", see Kahneman, Knetsch, & Thaler, 1991). Applied to public policy concerns, behavioral economists have argued that defaults should be viewed as critical drivers of program take-up (Bertrand, Mullainathan & Shafir, 2006; Thaler & Sunstein, 2008). That is, because of the status quo bias, we should expect the take-up rate to be lower for programs and services for which individuals must actively apply than might otherwise be expected given the benefits of the program or service. This has resulted in recommendations to design policy with defaults in mind, for example, by providing all eligible individuals with the program or service automatically and requiring recipients who do not want the benefit to "opt-out" of it (rather than the more conventional default of non-enrollment and requiring interested individuals to "opt-in" through standard application procedures). A well-cited example is the increased employee use of 401K plans when an automatic enrollment versus an active application process is used. All else being equal, there is greater participation in the 401K plan when enrollment occurs by default, presumably due to the status quo bias (Madrian & Shea, 2001; Thaler & Sunstein, 2008). In the case of child care, the status quo bias may reduce the likelihood of enrolling in a new child care program or may help explain low take-up rates for child care subsidy programs.⁵

The Malleability of Decisions

Prospect theory also highlights the importance of *decisional frames* on judgments under uncertainty. Research from this perspective demonstrates that "seemingly inconsequential changes in the formulation of choice problems caused significant shifts of preference" (p.457, Tversky & Kahneman, 1981). Numerous laboratory studies demonstrate how presenting information in systematically different ways can influence judgments and result in predictable decision reversals. Importantly, often decision makers are not aware of the particular frame that is being used to present information to them, nor are they sensitive to the potential

⁵ Insights from social psychology suggest other factors that contribute to the status quo bias, in addition to loss aversion. Specifically, whether or not a person takes the initiative to access a policy will depend on motivational considerations, their level of knowledge about the program, and socio-normative influences that shape choice (see section on social networks and accommodation). Moreover, research suggests that we are more likely to take advantage of an opportunity when we are provided with a clear path for executing the choice. Although persuasive appeals and information campaigns can change attitudes and beliefs, moving from intention to behavior proves considerably more difficult (Leventhal, Singer, & Jones, 1965; Koehler & Poon, 2006; Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980).

consequences of different decision frames on their choices or preferences.⁶ Applied to child care choices, this suggests that there may be value in considering the implicit decisional frames that parents are presented with, and the role that child care policies and other related policies (such as TANF) may play in shaping the framing of the choices parents confront. If there is an explicit policy goal to encourage certain kinds of child care choices over others – for example, encouraging eligible parents to enroll in Head Start or a state’s universal pre-K program – there may be ways to “nudge” parents toward those choices, through careful consideration of how the programs are presented. This attention to policy design choices is the basis of much work in behavioral economics, for example, as summarized by Richard Thaler and Cass Sunstein in their popular book, *Nudge* (2008).

In fact, one reason for the policy appeal of a heuristics and biases framework is its central claim that individual decisions are highly sensitive to the environment (and therefore responsive to intervention). Relatively minor changes in the presentation of alternative choice options can significantly affect the actual choice an actor makes (Thaler & Sunstein, 2008). Applying this reasoning to program and policy design questions, behavioral economists have urged policy makers to design policies keeping in mind the psychological biases and heuristics that influence choice. For example, Thaler and Sunstein (2008) argue that if we want individuals to take advantage of policies, we should make preferred options the default (as discussed above), design policies to have easy to understand eligibility criteria that make the policy’s incentives salient, facilitate access to minimize hassles around application and recertification, and allow clients to make errors and provide regular feedback in order to improve client understanding. These recommendations all stem from the principles underlying the heuristics and biases framework.

The next two approaches – the social network framework and accommodation model – emphasize the role of structural factors, social interactions, and local contexts in shaping resources, norms, and information. They direct our attention to the qualities of the social environment that help us understand the nature and size of environmental constraints and opportunities, whereas the heuristics and biases framework provides significant guidance in our

⁶ The relevance of message framing has received considerable attention in social psychology and political science, both fields have contributed extensively to the body of knowledge about how and why framing effects can be so powerful. The application of framing to advertising and politics is obvious, and marketers and politicians are very aware of the benefits of presenting information in a way that is designed to draw attention toward positive qualities and away from negative qualities of a particular candidate or product.

understanding of how those environmental inputs are perceived, understood, and acted upon by decision makers.

C. A Social Network Framework for Decision Making

A social network framework of decision making considers how individual decisions are shaped by social interactions and the resources embedded within them. Network approaches have been developed, primarily by sociologists, as a means of understanding the interaction of *social structure* and *agency* on individual choices, actions, and outcomes. Barry Wellman, a leading network scholar, writes that, “Network analysts want to know how structural properties affect behavior beyond the effects of normative prescriptions, personal attributes, and dyadic relationships. They concentrate on studying how the pattern of ties in a network provides significant opportunities and constraints because it affects the access of people and institutions to such resources as information, wealth, and power” (p.157, Wellman, 1983). According to social network theorists, personal networks – comprised of relationships (or “social ties”) between and among relatives, friends, neighbors, coworkers, and other individuals of varied intimacy, serve at least four important functions for their members – they provide (1) information, (2) offer support, (3) confer social status and impart social recognition, and (4) exert influence over their members (Lin, 2001).

In this section, we review these four functions and consider their relevance for child care decisions in particular. (1) Social networks are an important source of *information*. People turn to their social networks for information about any number of issues, from job opportunities (Granovetter, 1974) to health care (Pescosolido, 1992) to piano teachers (Brown & Reingen, 1987). Research demonstrates that child care information is no exception. Parents report that word-of-mouth is the most common method of finding a child care provider, and it is through personal networks that parents often learn about child care subsidies and other forms of financial assistance (Chaudry et al., 2010; Pungello & Kurtz-Costes, 1999; Kontos et al., 1995). Of note, child care programs themselves (and other contexts where parents interact with one another, such as schools) prove to be important contexts for parents to share information with one another about child care-related information (Small, 2009). Thus, because *information* is a critical component of all decision models, and because social networks are an important source of child care information for parents, the social network framework proves quite useful for understanding the child care decision making process.

(2) In addition to information, social networks provide their members with a range of *supports*. People turn to network members for emotional support and companionship, instrumental support (or tangible services) such as help with errands, transportation, and caregiving, as well as financial support. Research demonstrates that (compared to more distant ties) close, intimate ties are more likely to be called upon to help with everyday needs, and are more likely to be tapped for support that involves significant emotional valence and that requires a considerable investment of time or resources (Briggs, 1998; Wellman & Wortley, 1990; Henly, 2002).⁷ In the case of child care support, close social ties, especially relatives, are frequent child care providers--about 40% of children under 5 whose mothers are employed are regularly cared for by non-parental relatives (U.S. Census, 2006, Table 1b). In addition to relatives, many parents rely on friends, neighbors, and home-based child care providers to help care for their children (U.S. Census, 2006, Table 1b). Thus, the social network framework provide a useful lens for studying parental child care decision making, not only because network members prove to be important sources of information about child care opportunities, but also because they may be direct providers of care and facilitate parental use of other modes of care through the provision of financial support and transportation. In these ways, network members are directly contributing to the supply of child care options available to parents.

(3) Social networks *confer social status and impart social credentials* on their members. Actors use both reputation and status to make judgments about the riskiness of social interactions with other network members. As such, reputation acts as a signal about what to expect from another person, especially under conditions of uncertainty. Reputation can facilitate action, for example, if an actor believes his or her own reputation may benefit from association with or by helping another; or reputation can inhibit action, for example, if an actor is concerned that his or her own reputation would get sullied through engagement with another person of questionable repute. The extent to which individuals are able to leverage their social networks effectively – that is, use them to broaden and/or deepen their knowledge of opportunities and access necessary supports – will depend in part on these status and reputational concerns (Lin, 2001). One’s own reputation and the reputation of a network tie in need of help may influence one’s willingness, for example, to provide or to accept child care from a neighbor, to offer information to a coworker about the local child care subsidy program,

⁷ Despite the importance of close ties for significant investments of support, people benefit from casual and distant acquaintances as well and rely on neighbors, co-workers, and other acquaintances for a range of lower-investment instrumental supports (Wellman & Wortley, 1991). And, these weaker ties may be more effective than close-knit ties at providing new information and opening up opportunities that facilitate the achievement of status attainment goals (Granovetter, 1974; 1983).

or to put in a “good word” with one’s child care provider for a friend who is seeking care but has considerable financial difficulties. The social network framework, then, provides insight into how the child care information and options available to a parent may be shaped by her standing and reputation within a social milieu and the willingness of others to risk their own social position within and outside of the network.

(4) Finally, social networks *exert normative pressure* on their members, teaching them to value certain things and behave in a particular manner. It is through a history of repeated social interactions that socially shared norms are created, transmitted, maintained, and internalized (Coleman, 1988) and that “enforceable trust” – the capacity of a social network or community to control behavior and sanction members for behaving outside of accepted community norms – develops (Lin, Ensel, & Vaughn, 1981; Portes & Sensenbrenner, 1993; Portes, 1998). Portes (1998) discusses how high enforceable trust encourages conformity to community norms, thereby limiting individual freedom of choice (Simmel, 1902, 1964). In the case of child care, social networks may influence child care-related choices and behavior by signaling to network members about the kinds of care arrangements that are deemed acceptable or appropriate. (i.e., “in this community, we put our preschoolers in Head Start not child care because Head Start gets you ready for kindergarten”, or alternatively, “in this community, we take care of our own kids and avoid organized child care altogether”, etc.). As a result, social networks – through the normative influence they exert on members – may operate to shape the set of alternatives viewed as reasonable by parents, and may be therefore highly relevant for understanding how parents perceive and value the different child care options they confront.

Network theorists view individual choices as embedded in a set of constrained, structured alternatives that are both constructed by and mediated by interpersonal ties (Lin, 2001; Wellman, 1983). The broader environmental context and the status characteristics of network members are understood in the social network framework as facilitating or constraining network resources (Lin, 2001; Burt, 1992; Granovetter, 1973, 1974). As such, network theorists do not see the individual as “the starting point for action” (Pescosolido, 1992), nor do they consider all network ties to be of equal value (Lin, 2001; Small, 2009). Nevertheless, sociological network theories accept individual agency as critical to understanding actions and outcomes, and do not “ignore individuals, their self-interest, their purposive action, or their rationality; [the sociological network model] simply assigns them a different priority in action” (Pescosolido, 1992, p. 1099). Indeed, consistent with consumer choice theorists, most network theorists assume that peoples’ investments in networks are purposive and rational (Coleman, 1988; Lin, 2001),

motivated by primarily utilitarian (Cook & Whitmeyer, 1992; Coleman 1988) and expressive (Lin, 2001; Briggs, 1998) goals. Some network theorists are also interested in non-utilitarian sources of action, for example, considering actions as the result of “bounded solidarity” (Portes, 1998; a collective identity emerging from a sense of common fate) or altruism (Small, 2009).

A critical question for network theory concerns the factors that *mobilize networks into action*. In the case of parental child care decisions, under what conditions are network members likely to be motivated to supply useful information about care alternatives to parents or to offer support to a parent seeking care? When might a parent refer another parent to a particular provider, potentially risking or gaining reputational or status rewards in so doing? Or, what factors lead an individual to encourage her neighbor to use a particular child care provider (who is possibly another member of their shared network), to seek out a particular kind of care or alternatively reproach or otherwise exert pressure on her for making what is viewed to be a poor child care decision? Existing findings from network research can provide useful answers to these kinds of questions. For example, research demonstrates that networks of strong, dense ties, whose members interact frequently with one another, provide increased opportunities to develop deep emotional bonds, and create the conditions necessary for the development of obligation, trust, and mutual dependence (Wellman & Potter, 1999). These closely knit networks are easier to mobilize into action than weaker, more differentiated networks. The child care literature demonstrates that close ties are often the primary providers of care and parents rely on their close friends and relatives for information about the quality, convenience, and cost of local child care alternatives (Briggs, 1998; Chaudry, 2004; Dominquez & Watkins, 2003; Henly, Danziger, & Offer, 2005). However, because the members of closely knit networks are likely to be more similar than different from one another (McPherson, Smith-Lovin, & Cook, 2001), they may provide a constricted range of information about child care opportunities (Granovetter, 1974, 1983; Lin, 2001; Portes, 1998). That is, close ties share many of the same experiences, friends, cultural backgrounds, etc. with one another as compared to the ties of more distal acquaintances. As a result, the information they pass back and forth with one another is likely to be more redundant than information communicated across weaker ties (Granovetter, 1974, 1983). Even so, although heterogeneous networks are likely to include a richer and more diverse amount of information about the child care market, such differentiated ties may be less motivated to help parents with a child care referral, with direct child care support, or with information about other available options in the community. In addition, weak ties may also be more hesitant to openly judge or rebuke a parental decision deemed to be a poor child care choice, because the enforceable trust within such a network is limited.

The basic tenets of a social network framework provide several insights to researchers and policy makers interested in child care decision making. Perhaps most important is the attention the framework pays to network members as sources of information about child care and as key providers of care. The power of information and support exchanged through network ties suggests that any information related to child care policies or programs will be most effective when it is consistent with the beliefs and norms of network members and when network members are used as primary communicators of those messages. As discussed further in the next section, the accommodation model draws heavily from several of the basic claims underlying a network framework of decision making.

III. The Accommodation Model: An Integrative Perspective

In a 2006 review of empirical research on the factors influencing parental decisions about care arrangements, Marcia K. Meyers and Lucy Jordan proposed that these decisions might better be described as “accommodations” rather than “choices”. Their paper compared research that had been produced within two broadly defined traditions: those based on traditional economic theory, and those drawing from other social and behavioral science theories of “contextualized pattern of action” (Meyers & Jordan, 2006, p. 64). As Meyers and Jordan suggested, these theoretical traditions are not contradictory. Rather, as discussed in more detail in this paper, they differ in their starting assumptions, emphasize different aspects of decision making, and foreground different psychological, social and structural factors that influence decision-making processes and outcomes. As such, they have the potential to expand our understanding of child care decisions. In this section, we review and extend observations from the 2006 paper and elaborate more fully their consistency with the assumptions, theoretical predictions and empirical findings from the economic consumer choice, social network, and heuristics and biases frameworks discussed above. We extend the model further by drawing from the life course perspectives in the field of human development.

Meyers and Jordan (2006) first proposed the “accommodation model” as one way to integrate across theoretical frameworks and, in doing so, to emphasize the complexity, multiple determinants, and fluidity of child care decisions. They argued that although child care choices share many characteristics with other consumer choices, they are unusual in several respects. They are often highly constrained on multiple dimensions that include, but are not limited to, family budgets. They reflect efforts to optimize outcomes, not only for parents as individual

consumers, but also for themselves as workers and for their children, families and other members of their social networks; as such, their decisions “serve as accommodations to market, family, and social realities” (Meyers & Jordan, 2006, p.64), and to their efforts to balance caregiving and employment roles. The accommodation model, with its attention to the contextual realities confronting parents as providers and as caregivers, also views a particular child care choice not as discrete and isolated decision but as one in a series of inter-dependent decisions about work and family life that unfold over time. Given the resulting complexities and uncertainties, parents are assumed to make decisions under conditions of imperfect and incomplete information – about their own preferences, as well as about the characteristics and potential consequences of child care alternatives. Given limited information, this model suggests that parents’ care preferences may not be fixed at any point in time, but rather, dynamic and dependent upon the information, search strategies, choices, and experiences associated with each of multiple care decisions.

With its focus on detailing the contextual and social processes of decision making and its attention to the dynamic nature of decisions, it is perhaps not surprising that many research studies consistent with an accommodation framework are qualitative in nature. By way of example, Ajay Chaudry’s (2004) longitudinal, qualitative study of the child care choices and experiences, conducted with a sample of 42 low-income mothers in New York, is consistent with aspects of the accommodation model. Chaudry described the strategic and purposive behaviors of mothers as they accommodate their preferences to a host of constraining factors including job demands, restricted child care supply, individual child characteristics, demands of the child care assistance system, and social network demands, many of which are frequently shifting. In keeping with hypotheses from an accommodation framework, Chaudry found that, rather than expressing singular preferences, many study participants reported advantages and disadvantages of different child care types (indicating they understood the tradeoffs that mattered to them) and their preferences changed over time as children aged, as alternative arrangements became available, and as changes occurred in their jobs, families, economic situations, and networks. Moreover, consistent with the accommodation model, the child care accommodations these mothers made were interconnected with the other accommodations they were making about employment, interpersonal relationships, and housing.

In the following sections, we consider in greater depth some of insights that the accommodation model may provide for understanding several dimensions of the child care decision process, including contexts of action and social networks; social norms, preferences

and information; the role of purposive action; and development over the life course.

Contexts of Action and Social Networks

Consistent with the consumer choice framework, the accommodation model assumes that parental choices about child care are limited by - or are *accommodations to* – multiple constraints. The model draws our attention to constraints at both the individual and structural levels and allows for the possibility that even when individual parent-consumers “optimize” their choices within these constraints, these choices may result in suboptimal outcomes for themselves, their children or society.

An accommodation model emphasizes the scope and type of constraints shaping parental decisions, and the variation in these constraints across individuals. It draws attention to specific *social and institutional contexts* in which parents make child care decisions, including workplaces, schools, households, child care centers, and neighborhoods. These decision-making sites are understood as relevant contexts of action because they create specific opportunities and constraints that families must negotiate when arranging care. The accommodation model considers the way in which individuals interact with context and suggests that it is through these interactions that the specific context influences the process of decision making and the decisions themselves. Thus, the focus of the accommodation model is on the everyday, contextualized experiences of families because it is assumed that child care decisions are the product of accommodations to these experiences.

The accommodation model also focuses on the primacy of *social interactions* as sources and as mediators of opportunity and constraint. As such, the accommodation model is quite complementary to the social network framework; it takes as central to the decision-making process the assumption that social relationships function as critical sources of information and support as well as mechanisms of social influence and control. Network properties and processes, as described in the social network framework, suggest the social mechanisms through which structural constraints impact individual decisions.

Drawing on these concepts of *context* and *social networks*, the accommodation model emphasizes the importance of analyzing variation in social context (the sites of action discussed above) and the operation and content of social networks: individual parent decision makers are embedded in different *social networks*, with different characteristics and operations, and otherwise similar social networks are also embedded in different *social and institutional contexts*. The importance of contextual variation has been highlighted by Bernice Pescosolido,

a sociologist and health services scholar whose “Network-Episode Model” of health care-related decisions has received considerable attention and empirical support (see for example, Pescosolido 1992; Pescosolido, Wright, & Vera, 1998; Pescosolido, 2006, forthcoming). Consistent with traditional network frameworks, the Network-Episode Model views networks as important “engines of action” and draws attention to the properties of networks that shape decisions. But additionally, Pescosolido demonstrates that the same network properties may have different influences depending on the particulars of context. For example, she demonstrates the importance of *geographic context* in her analysis of Taiwanese health care choices. She states, “What is different about rural and urban contexts in Taiwan is not the structure or operation of migrants’ networks regarding medical care choices, instead it is geographic context that taps *variable network content* regarding proper or ideal medical care, guiding migrants who are embedded in similar network structures in different geographic spaces to make dissimilar choices for either traditional or modern healers” (Pescosolido, 1992, p. 1109, emphasis added). Extending this approach to child care decisions, the accommodation model suggests not only the importance of understanding the role of social networks in informing and shaping parental decisions, but also the ways in which these network processes are likely to produce different results in different contexts. As such, the accommodation model draws from the social network framework approach to understanding the social dynamics of child care decision making. However, more so than traditional network perspectives, it also emphasizes variation in the context, or “sites of action,” in which these networks are embedded.

There is recent research that organizational context is also important for understanding how networks operate in the child care domain. Specifically, Mario Small (2009) demonstrates that without attention to organizational context (including how work gets structured within an organization and how organizations are networked with one another), we cannot fully understand the ways in which organizations impact opportunities for social interaction and, hence, the development of social ties. Small (2009) shows how child care organizations that are structured differently --for example, whether they post information about community resources on bulletin boards, whether they hold formal in-services and information sessions, whether they involve parents in direct care programming --result in dissimilar patterns of network formation among parents using the centers. Small (2009) also shows how the organization --and its connection to other organizations-- serves as a critical source of information and provides resources to parents independently of the impact they may have through their influence on personal networks.

An accommodation model provides particularly useful insights for understanding persistent disparities in the type, quality, and cost of child care across populations. As Meyers and Jordan argue, child care opportunities and constraints are distributed unevenly across parents with different financial and other resources. Even among parents with similar economic resources, feasible options vary depending on the expectations and opportunities provided through social networks and the resources --such as local supply of formal, regulated care-- to which they have access. As such, “accommodations serve as powerful engines for continued socio-economic stratification of child care arrangements in the United States” (Meyers & Jordan, 2006, p. 64).

Social Norms, Preferences, and Information

Drawing from literature on social norms, the accommodation model suggests that it is through interactions with social networks, and with broader social and economic institutions that individuals are taught --both explicitly and tacitly-- the agreed upon social meaning of objective experiences. Consistent with a consumer choice framework, the accommodation approach assumes that parents vary in their preferences regarding different features of child care, from perceived quality to convenience and cost. Drawing from the social network framework, the model also recognizes that “individual” preferences are informed and shaped by normative messages from social networks. And reflecting findings from research within the heuristics and biases framework, the accommodation model emphasizes the extent to which individual preferences are not fully fixed or exogenous to the child care decision-making process itself.

Empirical research on child care decisions provides numerous examples how social norms may produce what appear to be paradoxical decisions or reasoning by parents. For example, in some communities parents report strongly positive associations with programs called “Head Start” and equally strong negative perceptions of otherwise similar programs with different names. Other parents make subjective attributions that are inconsistent with the “objective” characteristics of care arrangements, for example deeming programs in largely African-American neighborhoods as “unsafe” and of poor quality when the programs are rated as higher quality by objective measures such as resources and teacher training. Similarly, some parents who want to use relative care report that they do not seek child care subsidies because they believe that subsidized care is for “child care providers” and they do not consider family members as “providers.” Others report that they do not apply for child care subsidies because of lessons that they have “learned” through their communities about public service agencies: that local social service agencies are “out of subsidies” or that caseworkers in child care subsidy programs are likely to report them to the child welfare system.

As suggested by theory and research on social networks and on the psychological processes underlying complex decision processes, beliefs that appear to be incorrect or paradoxical in the face of “objective” circumstances are often meaningful social interpretations and *accommodations* to economic and social realities. Through repetition, over time within social networks, these accommodations take on objective reality; they “crystallize into taken-for-granted patterns of action” (Meyers and Jordan, 2006, p. 59).

The power of social normative information varies, depending, in part, on the density of social networks that perpetuate norms. Even when normative pressure is strong, individuals do not always go along with normative rules and individuals vary in their willingness to break norms (Sunstein, 1996). Returning to the issue of context, the social meanings attached to norms are also likely to vary in strength and in content across communities (or institutional sites of action). As parents make child care decisions they are negotiating among –and accommodating to-- various and sometimes competing norms as they manage the various contexts of everyday life.

The accommodation model suggests that social norms are likely to be particularly influential on both preferences and decisions. When parents make child care decisions they are seeking to satisfy – or satisfice – on numerous preferences: for the use of any non-parental care and for various features of that care from the physical accommodations to the location, cost, flexibility of hours, and style of adult interactions with children. The accommodation model does not assume that parents’ preferences in these regards are fixed in advance or stable. Instead, preferences are considered to be dynamic, context-dependent orientations that emerge from negotiated interactions at home, with family, at the workplace, and in other sites of action. They are informed by lessons learned through past experiences and through cultural traditions and norms communicated through social networks. From such a perspective, parents *may* have relatively stable preferences about care but they need not.

Because of the attention that the accommodation model plays to contextual considerations and normative influences, research from this model may more often emphasize the flexibility and variability of preferences than their stability. As a result, an accommodation model can prove quite useful for researchers interested in understanding the process by which preferences are formed and changed and the situational and normative influences that shape preferences at any point in time.

Structure vs. Agency: The Place of Purposive Action

The significant degree to which the accommodation model foregrounds structural and normative constraints on behavior and its relative skepticism about the adequacy of the information parents hold about child care alternatives, raises a question regarding the place of purposive, strategic action. Consistent with the consumer choice framework and the social network framework, the accommodation model does assume that actors are purposive decision makers seeking to make the *best decision*, given a set of alternatives. The model suggests two important modifications or extensions to this assumption.

First, the accommodation model recognizes that purposive decisions are not always fully informed, comprehensively reasoned, or deeply reflective. In reality, decisions are often made quickly employing cognitive shortcuts and habits. The accommodation model, with its attention to the role of social norms in shaping perceptions of feasible alternatives, suggests that many day-to-day behaviors express “taken-for-granted” assumptions about ways of life, rather than reflective, purposive choices.

In the second case, the accommodation model suggests that the child care decisions made by an individual parent are not fully “individual” or isolated from the social and institutional context. Decisions are influenced by multiple and difficult to observe environmental, social, cultural, and psychological factors. The accommodation model deviates from traditional economic choice models by emphasizing that the definition of the “best outcome” is based on imperfect information, subjective interpretation of objective stimuli, and the multiple, sometimes competing preferences of parents and their social networks regarding work, family, and care for children. The accommodation model argues that although “utility maximization” is a useful assumption for empirical modeling of decisions, the concept of satisficing –or the “best possible given the situation”– is a more accurate portrayal of the actual process.

Consistent with the heuristics and biases framework, the accommodation model integrates notions of purposive action with theories of bounded rationality (Simon, 1955), where individuals rely on cognitive shortcuts “to simplify and rationalize their choices” (Meyers & Jordan, 2006, p.59). Drawing from the heuristics and biases framework, individuals are understood to rely on cognitive shortcuts when faced with unfamiliar decisions, or when experience is limited, or when the decisions themselves are complex and feedback regarding the quality of the decision is deferred or not transparent (Thaler & Sunstein, 2008). The accommodation model recognizes that heuristic processes and psychological tendencies interfere with decision making and that norms are factored into assessments of costs and benefits of different alternatives (Sunstein,

1996). In particular, knowledge about social norms (of a relevant reference group) becomes pieces of information that implicitly enter an actor's calculus of costs and benefits of different alternatives. That is, as part of the calculus, individuals may consider the costs of breaking a social norm against a benefit of going along with accepted social norms together with the other positive and negative aspects of the alternatives (Sunstein, 1996). Evidence that we use heuristics to simplify decisions does not contradict notions of individuals as capable, purposive actors; it simply recognizes that not all decisions are of this character, and that even purposive decision making is complicated by a range of external and psychological factors that influence the particular decision-making calculus.

Given its integrative foundation, the accommodation model views decision making as *more or less purposive*, depending on the situation. Mario Small suggests a similar characterization, when he writes that actions are both purposive and non-purposive and people's objectives are "rational or irrational, self-interested or altruistic, individual or collective, psychological or cultural" (Small, 2009, p.11).

Life Course Model

Although not referenced by Meyers and Jordan in their 2006 paper, an accommodation model might also integrate tenets from life course models of "family adaptive strategies" (Moen & Wethington, 1992). Life course models provide an account of strategic action that gives significant weight to structural forces, social interactional contexts, normative influences, and human agency. Cultural values are understood as socially shared properties, the result of a common historical experience. Like the accommodation model, a life course perspective does not view preferences as fixed, but rather as dynamic, maintaining that past experiences shape expectations and strategies for future actions (Moen & Wethington, 1992).

We briefly note here some aspects of the life course model that may prove to be useful to further efforts at elaboration the accommodation model. First, rather than treating the individual as the unit of analysis, the life course model of family adaptive strategies views the family or household as the strategic unit of action. Although there are some conceptual and methodological challenges to considering families as agents of choice, this approach may still have appeal to the accommodation model, especially given its effort to move away from child care decisions as discrete choices of individuals. As Moen and Wethington explain, "Families as collective entities send their members out to work, assign household tasks, share wages and resources, move from country to country or from city to city, buy farms, homes, televisions. Depicting families and households as role allocating, income pooling, and income spending

units is both intuitively compelling and empirically valid” (Moen & Wethington, 1992, p.235). Thus, conceptualizing the family or household as the strategic unit of action, may provide an alternative to studying child care decisions as discrete choices, thereby offering the accommodation model a way to capture the interacting processes by which families *do the accommodation* that is so central to the framework.

Another potentially helpful aspect of the life course perspective for the accommodation model is its consideration of the *temporal dimension* of decisions. The strategies that families develop are understood to be dependent on the “timing, duration, and sequence within the family cycle and life course of the individual” (Moen & Wethington, 1992, p.245). As such, the life course model provides a guide to understanding how decisions are influenced by factors such as one’s stage in the life cycle and the corresponding expectations, norms, and activities that it portends. For example, a life course model would consider how a family’s decisions (or *accommodations*) are influenced by factors such as a child’s age or the different ages of multiple children, the trajectory of a mother or father’s schooling or employment. Different child care alternatives may be more or less acceptable to a family; for example, if both of two children are able to attend the arrangement, if the arrangement continues throughout the summer when a parent is planning to take college courses to supplement her education, or if a grandparent is available to pick up a child at the time when the care arrangement ends. The life course model of family adaptive strategies considers these temporal factors, together with the other factors central to an accommodation model such as the relevance of past experience, social and cultural norms, and economic and other contextual constraints on decisions.

With its focus on *describing* the many contextual features and social processes that shape family decision making and its attention to the *dynamic* nature of decisions, it is perhaps not surprising that most research studies consistent with an accommodation model are qualitative in nature with limited samples. The rich description and attention to context-specificity of the accommodation model may not lend itself easily to large scale survey work and may require multiple sources of data collected at individual, organizational, and community levels. Existing national surveys are unlikely to include the full range of variables that would be important to include in an accommodation model of decision making (for example, indicators of context-specific resources and constraints as well as normative beliefs about care). Moreover, qualitative studies are especially good at providing rich description of context and process and revealing factors that may be specific to a population or context (Miles & Huberman, 1994). As a result, findings from research that come out of an accommodation model may prove particularly

useful in helping researchers and policy makers understand the forces that shape child care decisions in a given community or for families with particular needs or challenges. Research findings emanating from an accommodation perspective may also serve to guide researchers working from other frameworks (such as the consumer choice, social network, or heuristics and biases frameworks discussed here) in the selection of key variables for inclusion in their own quantitative studies.

IV. Discussion and Conclusion

How does this review of different conceptual frameworks for analyzing child care decisions contribute to research and policy related to child care decision-making? We consider the relationship between the different frameworks below, with attention to how they might be used together to further understanding and be useful to research and policy knowledge.

First, for the most part the ***different frameworks offer complementary lenses*** rather than competing ones. The child care decision-making process is complex, and can be quite different depending on the unique characteristics of families and for different sectors of the population and communities. Given this complexity, it is useful to apply multiple lenses to understanding the phenomenon. It could be argued that all of the frameworks offer some insights on both the process and outcomes of child care decisions. However, it seems to us that the consumer choice framework is most often focused on the “outcome” of child care decisions with relatively less attention to questions of process, whereas the heuristics and biases framework and the social network framework offer greater particular insights about the process of decision making. The accommodation model, which draws from multiple theoretical orientations, would seem to address a combination of both the process and outcome of decisions. Each framework offers valid, important, and complementary insights into parental decision making for child care. For example, decisions clearly do involve an individual family’s calculus of costs and benefits and the tradeoffs involved in selecting among options; as such, the economic choice framework has significant predictive power. Similarly, there is good reason to believe, as a heuristics and biases framework would suggest, that the calculus itself is subject to considerable subjective influences that contribute to the decisions people make. Also, there seems to be clear evidence that social networks play an enormous role in decisions by providing information about care, shaping preferences, and contributing to the supply of care available. Finally, research coming out of an accommodation perspective illustrates the dynamic nature of child care decisions and the importance of attending to the particulars of local context, social processes, and family roles and stages of development.

Second, it would seem that the ***different frameworks may be most useful for particular research questions and for different methodological approaches.*** The frameworks lend themselves to different empirical strategies. For example, a particular strength of the consumer choice framework is that it can be modeled and empirically tested with large, quantitative data sets, and offers predictive capacities. The ongoing challenge is finding data sets (or collecting new data sets) that include the variables that are important to model as detailed by the theory. The psychological biases that have been identified by experimental researchers coming out of a heuristics and biases framework have less frequently been tested outside of small-scale laboratory studies. However, there has been considerable recent attention among behavioral economists to applying what has been learned in small experimental studies to real-world policy contexts. As a result, larger more externally valid empirical studies are now coming out of a heuristics and biases framework. Much of the literature concerned with the role of social networks in decision making is qualitative and descriptive in nature. However, network analysis as a quantitative empirical strategy has been applied outside of the child care domain to understanding how the strength of ties and the position of individuals within the structure of a network influence individual outcomes. There may be real value for researchers to consider applying formal network analysis to questions related to child care decision-making. Finally, the accommodation model is probably most amenable to qualitative studies where contexts can be fleshed out more fully and the negotiation processes that are so important to understanding how parents accommodate circumstances to needs can be more easily revealed. By tackling different aspects of the child care decision-making process and using different research approaches to uncover knowledge, the frameworks taken together can be seen as complementary, and the field can take advantage of the corresponding benefits.

There will need to be further applications of the individual frameworks to address some of the continuing challenges in understanding child care decision complexity. Some examples are discussed earlier in paper, i.e. knowing more how parents operate in a context of overall poor information or where large informational asymmetries exist might suggest applying a qualitative study exploring the nature of parent biases and heuristics in this situation to see if this, for example, makes them more risk averse in making child care decisions. Following this same example, one could also conduct experiments where the amount of “objective” information parents have prior to making hypothetical child care decisions is systematically varied or decisions are framed differently. Finally, one could envision testing whether public information campaigns (about the availability of child care subsidies or about how to use quality rating

systems to evaluate care options) are more effective when they are developed in ways consonant with the social network framework or communicated in ways that take advantage of networks' diffusion of information.

Third, we think an important next step in exploring what the different frameworks might offer would be to ***identify how these different lenses might be used more complementarily to improve research on decision making***. While there are clearly circumstances in which one particular framework might be more or less applicable, an understanding of what the different frameworks offer could allow more research on the component questions of how and why parents make the child care decisions they do, especially if the *frameworks can speak to one another and inform the data collection process*. Thus, there are likely to be real benefits to considering what each offers the other. For example, studies conducted from an accommodation or network framework may reveal new types of constraints and opportunities that could be modeled in larger quantitative data sets if the variables were available. Knowing about the potential importance of these constraints and opportunities might lead new data collection efforts toward including additional variables in surveys or building multi-level data sets that include (and possibly link) individual, organizational, and community sources. This further implies considering the development of mixed methods studies in which structural aspects of decision making are analyzed using larger survey or administrative data set. Such an analysis could be then further paired with an in-depth study of (potentially randomized) nested sub-samples to understand process aspects that can help offer explanations for variations found in the larger structured analysis to “fill out” the picture on parental child care decisions.

In conclusion, this paper is an attempt to further understand the nature of child care decision making by identifying and examining several different conceptual frameworks that derive from different social science theoretical traditions that can help research and the policy communities understand the complexity of child care decisions. One of our primary conclusions, which we reiterate, is that we find no single framework alone should be seen as primary or complete, or as one we would prescribe using for all aspects of a fuller understanding of child care decision making. We recognize that each can and does offer useful insights, and have sought to describe what each broadly offers for understanding child care decisions, with each offering needed insights into different aspects of child care decision making. There is a great deal of existing research on child care decision making and applying these frameworks to a synthesis of the extant literature may serve as a useful starting point to organize the literature. Maybe more importantly, such a literature review could be used to identify and synthesize study

findings across the frameworks to identify what is well-known, and what new studies might offer, particularly if they are developed with an understanding of what the different frameworks suggests for how to approach investigating child care decision making.

There remains a real urgency to better answer questions about how parents decide what child care to use and what role local, state, and national policies can take in helping parents make informed choices about care. The multiple lenses discussed here highlight the complexity of child care decision making. Attention to these multiple perspectives could be seen as making the decision-making process unnecessarily complex, thereby limiting its usefulness to the policymaking process. To the contrary, we have presented these differing perspectives with the hope that attending to them may inform the consideration of a broader array of policy levers, some of which might make achieving policy simpler or more effective.

References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3), 715-753.
- Akerlof, G. A. (2005). The missing motivation in macroeconomics. *American Economic Review*, 97(1), 5–36.
- Akerlof, G. A., & Kranton, R. E. (2005). Identity and the economics of organizations. *Journal of Economic Perspectives*, 19(1), 9-32.
- Baum, C. L., II. (2002). A dynamic analysis of the effect of child care costs on the work decisions of low-income mothers with infants. *Demography*, 39(1), 139-164. Available at www.childcareresearch.org/location/ccrca228
- Bénabou, R., & Tirole, J. (2007). *Identity, dignity and taboos: Beliefs as assets*. IZA Discussion Paper No. 2583.
- Bertrand, M., Mullainathan, S., & Shafir, E. (2006). Behavioral economics and marketing in aid of decision-making among the poor. *Journal of Public Policy and Marketing*, 25(1), 8-23.
- Blau, D. M., & Hagy, A. P. (1998). The demand for quality in child care. *The Journal of Political Economy*, 106(1), 104-146.
- Blau, D. M. (2001). *The child care problem: An economic analysis*. New York: Russell Sage Foundation.
- Botti, S., & Iyengar, S. S. (2006). The dark side of choice: When choice impairs social welfare. *Journal of Public Policy and Marketing*, 25(1), 24-38.
- Briggs, X. S. (1998). Brown kids in white suburbs: Housing mobility and the many faces of social capital. *Housing Policy Debate*, 9, 177-221.
- Bruner, J. S. (1957). Going beyond the information given. In H. E. Gruber, K. R. Hammond, & R. Jessor (Eds.), *Contemporary approaches to cognition* (pp. 41-69). Cambridge, MA: Harvard University Press.
- Burt, R. S. (1992). *The social structure of competition*. Boston, MA: Harvard University Press.

- Chaudry, A. (2004). *Putting children first: How low-wage working mothers manage child care*. New York: Russell Sage Foundation.
- Chaudry, A., Pedroza, J., See, H., Danziger, A., Grosz, M., & Scott, M. (2010, forthcoming). *The child care decisions of low-income families*. Washington, DC: The Urban Institute.
- Coley, R. L., Li-Grining, C., & Chase-Lansdale, L. (2006). Low-income families' child care experiences: Meeting the needs of children and families. In N. Cabrera, R. Hutchins, & E. Peters (Eds.), *From welfare to child care: What happens to children when mothers exchange welfare for work*. Mahway, NJ: Lawrence Erlbaum Associates.
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.
- Cook, K.S., & Whitmeyer, J.M. (1992). Two approaches to social structure: Exchange theory and network analysis. *Annual Review of Sociology*, 18, 109-127.
- Davis, E. A., & Connelly, R. (2005 August). The influence of local price and availability on parents' choice of child care. *Population Research and Policy Review*, 24(4), 301-344.
- Dominquez, S., & Watkins, C. (2003). Creating networks for survival and mobility: Social capital among African American and Latin-American low-income mothers. *Social Problems*, 50(1), 111-135.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Giannarelli, L., & Barsimantov, J. (2000). *Child care expenses of America's families. Assessing the New Federalism*. Occasional Paper 40. Washington, DC: The Urban Institute.
- Gigerenzer, G., & Brighton, H. (2009). Homo heuristicus: Why biased minds make better inferences. *Topics in Cognitive Science*, 1, 107-143.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Granovetter, M. (1974). *Getting a job: A study of contracts and careers*. Chicago, IL: University of Chicago Press.
- Granovetter, M. S. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory*, 1, 201-233.

- Griffin, D.W., & Ross, L. (1991). Subjective construal, social inference, and human misunderstanding. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 319-356). New York: Academic Press.
- Han, W. J. (2004). Nonstandard work schedules and child care decisions: Evidence from the NICHD Study of Early Child Care. *Early Childhood Research Quarterly*, 19(2), 231–56.
- Hastie, R., & Dawes, R. (2001). *Rational choice in an uncertain world: The psychology of judgment and decision making*. Thousand Oaks, CA: Sage Publications, Inc.
- Heckman, J.J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900-1902.
- Helburn, S. W. (Ed.).(1995). *Cost, quality, and child outcomes in child care centers: Technical report*. Denver, Co: Department of Economics, Center for Research in Economic and Social Policy, University of Colorado at Denver.
- Henly, J. R. (2002). Informal support networks and the maintenance of low-wage jobs. In F. Munger (Ed.), *Laboring below the line: The new ethnography of poverty, low-wage Work, and survival in the global economy*. New York: Russell Sage Foundation.
- Henly, J. R., Danziger, S. K., & Offer, S.(2005). The contribution of social support to the material well-being of welfare recipients. *Journal of Marriage and Family*, 67, 122-140.
- Henly, J. R., & Lambert, S. (2005). Nonstandard work and child care needs of low income parents. In S.M. Bianchi, L.M. Casper, K.E. Christensen & R.B. King (Eds.), *In workforce/workplace Mismatch? Work, family, health and well-being*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Hofferth, S., Shauman, K., Henke, R., & West, J. (1998). *Characteristics of children's early care and education programs: Data from the 1995 National Household Education Survey*. NCES 98-128. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Holloway, S., Rambaud, M. F., Fuller, B., & Eggers-Pierola, C. (1995). What is 'appropriate practice' at home and in child care?: Low-income mothers' views on preparing their children for school. *Early Childhood Research Quarterly*, 10, 451-473.
- Johansen, A., Leibowitz, A., & Waite L. J. (1996). The importance of child care characteristics to choice of care. *Journal of Marriage and the Family*, 58(3), 759-772.

- Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. *Psychological Review*, 80, 237–251.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *Econometrica*, 47, 313–327.
- Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases*. Cambridge, England; Cambridge University Press.
- Kahneman, D., Knetsch, J.L., & Thaler, R.H. (1991 Winter). Anomalies: The endowment effect, loss aversion, and status quo bias. *The Journal of Economic Perspectives*, 5(1), 193-206.
- Karoly, L. A. (2001). Investing in the future: Reducing poverty through human capital investments. In S. H. Danziger & R. H. Haveman (Eds.), *Understanding Poverty*. New York, NY and Cambridge, Mass.: Russell Sage Foundation and Harvard University Press.
- Kimmel, J. (2006). Child care, female employment, and economic growth. *Community Development*, 37(2), 71-85.
- Koehler, D.J. & Poon, C. S. K. (2006). Self-predictions overweight strength of current intentions. *Journal of Experimental Social Psychology*, 42(4), 517-524.
- Kontos, S., Howes, C., Shinn, M., & Galinsky, E. (1995). *Quality in family child care and relative care*. New York: Teachers College Press.
- Leventhal, H., Singer, R., & Jones, S. (1965). Effects of fear and specificity or recommendation upon attitudes and behavior. *Journal of Personality and Social Psychology*, 2(1), 20-29.
- Liang, X., Fuller, B., & Singer, J. D. (2000). Ethnic differences in child-care center selection: The influence of family structure, parental practices, and home language. *Early Childhood Research Quarterly*, 15(3), 357-384.
- Li-Grining, C., & Coley, R. L. (2006). Child care experiences in low-income communities: Developmental quality and maternal views. *Early Childhood Research Quarterly*, 21, 125-141.
- Lin, N., Ensel, W.M., & Vaughn, J.C. (1981). Social resources and strength of ties: Structural factors in occupational status attainment. *American Sociological Review*, 46(4), 393-405. Available at <http://www.jstor.org/stable/2095260>

- Lin, N. (2001). Building a network theory of social capital. In N. Lin, K. Cook, & R. S. Burt (Eds.), *Social capital: Theory and research* (Chapter 1, pp. 3-30). New York: Aldine de Gruyter.
- Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401(k) participation and savings behavior. *Quarterly Journal of Economics*, 116(4), 1149–87.
- McPherson, M., Smith-Lovin, L., & Cook, J.M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444.
- Meyers, M., Peck, L. R., Collins, A., Kreader, J. L., Georges, A., Davis, E. E., ...Olson, J. A. (2001). *The dynamics of child care subsidy use: A collaborative study of five states*. New York: National Center for Children in Poverty.
- Meyers, M. K., & Jordan, L. P. (2006). Choice and accommodation in parental child care decisions. *Community Development*, 37(2), 53-70.
- Michapolous, C., & Robins, P. K.(2002). Employment and child care choices of single parent families in Canada and the United States. *Journal of Population Economics*, 15, 465-493.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. 2nd ed. Thousand Oaks, CA: Sage Publications, Inc.
- Moen, P., & Wethington, E. (1992). The concept of family adaptive strategies. *Annual Review of Sociology*, 18, 233-251.
- NICHD Early Child Care Research Network. (2000). Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Science*, 4, 116-135.
- NICHD Early Child Care Research Network. (2002). Child-care structure>process>outcome: Direct and indirect effects of child-care quality on young children's development. *Psychological Science*, 13, 199-206.
- Nisbett, R. E., Caputo, C., Legant, P., & Maracek, J. (1973). Behavior as seen by the actor and as seen by the observer. *Journal of Personality and Social Psychology*, 27(2), 154-164.
- Parish, S.L., & Cloud, J. M. (2006). Child care for low-income school-age children: Disability and family structure effects in a national sample. *Children & Youth Services Review*, 28, 927-940.
- Pescosolido, B.A. (1992). Beyond rational choice: The social dynamics of how people seek help. *American Journal of Sociology*, 97, 1096-1138.

- Pescosolido, B.A., Wright, E. R., Alegría, M., & Vera, M. (1998). Social networks and patterns of use among the poor with mental health problems in Puerto Rico. *Medical Care*, 36(7), 1057-1072.
- Pescosolido, B.A. (2006 September). Of pride and prejudice: The role of sociology and social networks in integrating the health sciences. *Journal of Health and Social Behavior*, 47, 189-208.
- Pescosolido, B.A. (Forthcoming). Organizing the sociological landscape for the next decades of health and health care research: The Network Episode Model –Phase III as cartographic subfield guide. In B.A. Pescosolido, J.K. Martin, J.D. McLeod, and A. Rogers (Eds.), *The handbook of health, illness & healing: Blueprint for the 21st Century*. New York, NY: Springer.
- Portes, A., & Sensenbrenner, J. (1993). Embeddedness and immigration: Notes on the social determinants of economic action. *American Journal of Sociology*, 98(6), 1320-1350.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.
- Powell, L. M. (2002). Joint labor supply and child care choice decisions of married mothers. *Journal of Human Resources*, 37(1), 106-128.
- Presser, H. B. (2003). *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage.
- Pungello, E. P., & Kurtz-Costes, B. (1999). Why and how working women choose child care: A review with a focus on infancy. *Developmental Review*, 79, 31-96.
- Rabin, M. (2000). Risk aversion and expected-utility theory: A calibration theorem. *Econometrica*, 68(5), 1281-92.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and categorization*. Hillsdale, NJ: Erlbaum. Reprinted in: Margolis, E. and Laurence, S. (Eds.) (1999). *Concepts: Core readings*. Cambridge, MA: MIT Press.
- Ross, L., & Nisbett, R.E. (1991). *The person and the situation: Perspectives of social psychology*. New York: McGraw-Hill.
- Samuelson, W., & Zeckhauser, R. (1988 March). Status quo bias in decision making. *Journal of Risk and Uncertainty*, 1(1), 7-59.

- Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. *Journal of Personality and Social Psychology*, 61(2), 195-202.
- Scott, E.K., London, A.S., & Hurst, A. (2005). Instability in patchworks of child care when moving from welfare to work. *Journal of Marriage and Family*, 67(2), 370-386.
- Shafir, E., Simonson, I., & Tversky, A. (1993). Reason-based choice. *Cognition*, 49(2), 11-36.
- Shonkoff, J., & Phillips, D. A. (Eds.). (2000). *From neurons to neighborhoods*. Washington, DC: National Academy of Sciences.
- Simmel, G. (1964). [1902]. The metropolis and mental life. In *The sociology of Georg Simmel*, ed./transl. KH Wolff, 409-24. New York: Free Press.
- Simon, H.A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics*, 69, 99-118.
- Smith, K. (2000). *Who's minding the kids? Child care arrangements: Fall 1995*. Current Population Reports P70-70. Washington, DC: U.S. Census Bureau.
- Sunstein, C. R. (1996). Social norms and social roles. *Columbia Law Review*, 96(4), 903-968.
- Small, M. L. (2009). *Unanticipated gains: Origins of network inequality in everyday life*. New York: Oxford University Press.
- Tekin, E. (2004). *Child care subsidy receipt, employment, and child care choices of single mothers*. NBER Working Paper 10459. Available at <http://www.nber.org/papers/w10459>
- Thaler, R. H., & Sunstein, C.R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press.
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5, 207-232.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453-458.
- Tversky, A., & Shafir, E. (1992). Choice under conflict: The dynamics of deferred decision. *Psychological Science*, 3(6), 358-361.

- U.S. Census (2006). Table 1B: Child care arrangements of preschoolers under 5 years old living with mother, by employment status of mother and selected characteristics, Spring 2005. Accessed on May 20, 2010: <http://www.census.gov/population/www/socdemo/child/ppl-2005.html>
- U.S. Census (2006). Table 6: Average weekly child care expenditures of families with employed mothers that make payments, by age groups and selected characteristics, Spring 2005. Accessed on May 20, 2010: <http://www.census.gov/population/www/socdemo/child/ppl-2005.html>
- Weber, R. (forthcoming). ACF-OPRE Policy Brief. *Understanding Parents' Child Care Decision Making: A Foundation for Child Care Policy Making*. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Washington, DC.
- Wellman, B. (1983). Network analysis: Some basic principles. *Sociological Theory* (1), 155-200.
- Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, 96(3), 558-588.
- Wellman, B., & Potter, S. (1999). The elements of personal communities. In B. Wellman (Ed.), *Networks in the global village: Life in contemporary communities* (pp.49-82). Boulder, Colorado: Westview Press.
- Zaslow, M., Halle, T., Guzman, L., Lavelle, B., Keith, J. D., Berry, D., & Dent, A. (2006). *Review and synthesis of selected research reports*. Prepared for the Child Care Bureau, Administration for Children and Families, U.S. Department of Health and Human Services. Washington, DC: Child Trends.
- Zigler, E. F., & Lang, M. E. (1991). *Child care choices: Balancing the needs of children, families and society*. New York: Free Press.