

**Understanding Parental Decisions
About Children's Care:
Theoretical, Methodological,
and Practical Insights**

Elizabeth Davis

Department of Applied Economics

University of Minnesota

**2009 Annual Meeting of the Child Care Policy
Research Consortium**

Why are we interested in decisions parents make about child care?

- Increasing use of non parental care arrangements for young children;
- Increased knowledge of the importance of the early years for child development and child's future outcomes;
- Connection between child care and employment important for families and the economy;
- **BOTTOM LINE:** To improve outcomes for children and families by better understanding families' decision-making about child care

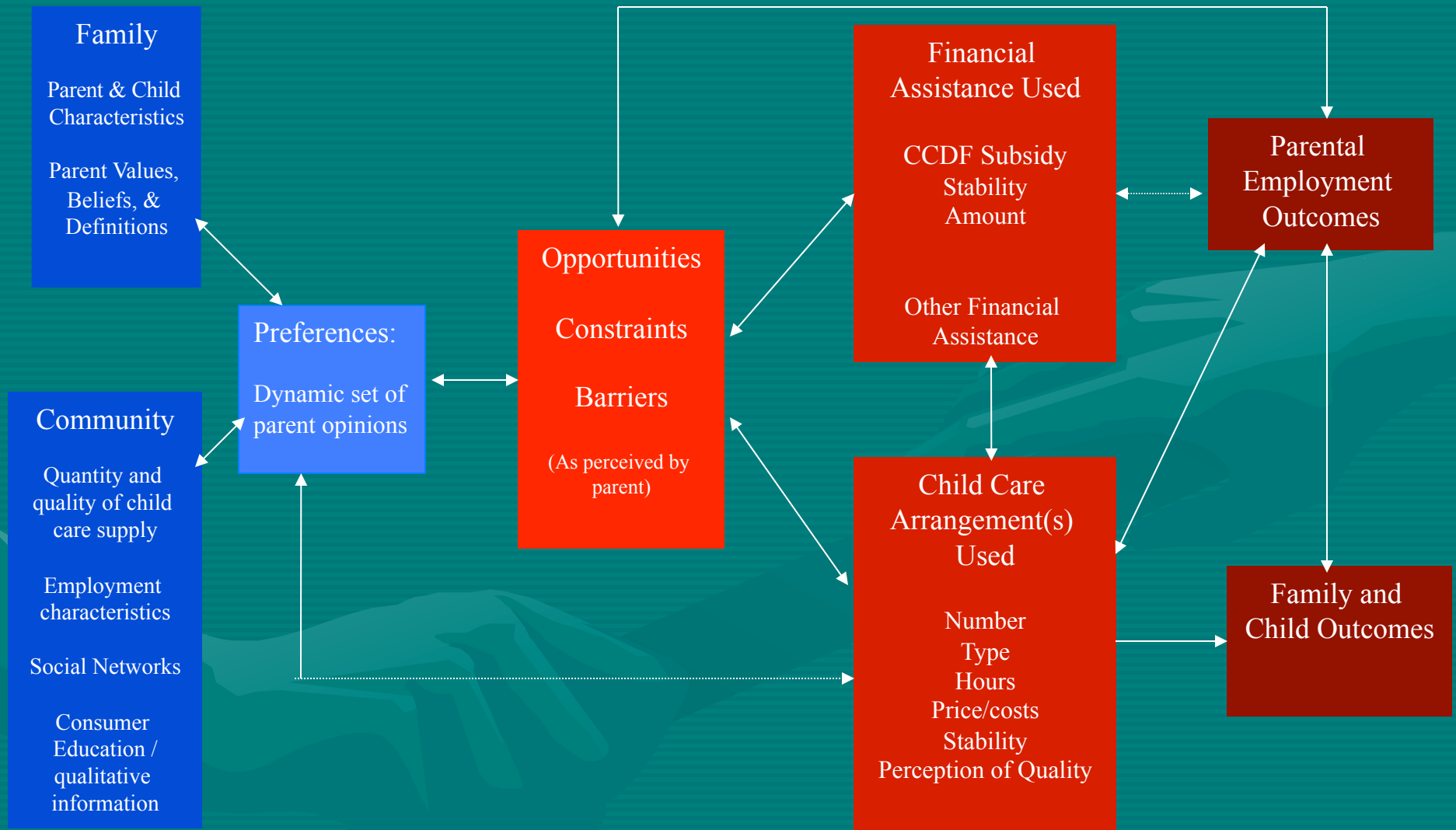
Moving from
a theoretical framework to
an empirical model

“All models are wrong,
but some are useful.”

Moving from a theoretical framework to an empirical model

- **Theoretical models...**
 - help to guide empirical research questions and provide testable hypotheses.
 - help to define what is included in the model and what is excluded.
 - may determine the type of empirical methods used.
- **Empirical studies** can be used to test theoretical models and to answer questions not resolved in the theoretical model., especially to understand the effects of policy
 - For example, theoretical models suggest a number of factors influence child care choices, but we need data to identify which are most important.

Parental Child Care Decision-Making



Model comes from merge of products created by Child Care Policy Research Consortium (2003) and the Minnesota Child Care Research Partnership (2008).

How do we study parents' child care decisions?

- What is the focus of study?
 - Studying what parents *do* versus what parents *say* about what they do;
 - Studying the decision-making *process* or focusing on the *outcomes* of the process.
- These different types of studies are all important and all can add to our understanding of child care decisions.
- Some of the differences in theoretical frameworks reflect an emphasis on different aspects of the decisions (e.g., the process versus the outcomes).

Social Networks Framework

- The social networks model of decision-making provides a useful framework for understanding the **process** of child care decision-making, and emphasizes questions such as where do parents get their information about child care, when do parents gather this information, how do they use it, and how are their preferences developed and influenced.
- This framework suggests (to me) an empirical methodology that would involve in-depth interviews that gather information about the person's networks and how these interact to influence the complex process of making child care decisions.

Consumer Choice Framework

- Economists typically use this theoretical approach to understand the **outcomes** of the decision-making process. They typically use a statistical modeling approach to study the types of child care used and the factors associated with those choices.
- Economists take preferences as given. That means that economists generally do not study how preferences form or how they change. But it is difficult to distinguish between a change in preferences and a change in information that then leads to a different “choice.”
- Incorporate insights from social network framework into consumer choice model if we can develop measures of networks or information availability.

Problems/issues in studying child care decision-making

- Child care decisions are intertwined with other decisions (most importantly, decisions about employment).
- Decisions are constrained by budget.
- Decision is on-going (dynamic process).
- Limited information and “agency problem” (child receives the care; parent is the “agent” who makes the decision).
- Decision is embedded in cultural and social context, which may not be observed by the researcher.
- Decision involves multiple dimensions, and our categories may not match what’s relevant to parents (e.g., type of care).

Two key problems or issues for estimating policy impacts and other parameters in quantitative analyses

- Exclusion of characteristics or factors that are important to the decision(s)
- Joint decision-making process between child care and employment

What's the problem and what do we do about it?

- Exclusion of characteristics or factors that are important to the decision
 - Leaving out explanatory variables biases the parameter estimates when there is a relationship between the unmeasured characteristics and the variables included in the equation.
 - But, of course, this is usually the case.
- Two options:
 - Include everything of importance (that may be correlated with what's in the model), or
 - Use statistical techniques to account for the correlation.

Can we put everything in the model?

- Parents' lack of information – how to measure access to and use of information.
 - Availability of information on quality may differ across locations (Minnesota Child Care Choices Study – Pilot QRS in some counties)
- Parents social networks – researchers are developing measures of networks
- Cost of including everything (data collection) – statistical techniques offer an alternative approach.

Simultaneous and interdependent decisions with child care

- Ignoring the joint nature of decisions about child care and employment may lead to biased findings and incorrect conclusions, yet it is difficult to estimate models of joint decisions.
- Use statistical methods to account for the joint nature of the decisions and for possible relationships between the unobserved variables in both equations
 - Example: Bayesian methods may be to account for and quantify the correlation between child care and employment decisions

Key Issue: What can we say about causality?

- Understanding causal relationships is important for making predictions about the effects of changing policies or circumstances.
- Random assignment or experimental design is the “gold standard” research design because it (usually) allows for identification of causal effects.
- “Without... random assignment, regression estimates may or may not have a causal interpretation.” With careful research design, non-experimental data may yield credible findings on causality.

Incorporate insights from different theoretical perspectives and multiple empirical methods

- What to include in the model –
 - What's important to the research question being studied?
 - What relationships exist between factors included in the model and those excluded?
- Interdependent decisions
 - Which decisions should be considered jointly?
 - What unobserved factors are likely to be important to both decisions?

Conclusion: Multiple perspectives and methods are needed

- Theoretical models provide the foundation for the empirical models, and multiple perspectives are important.
- Developing an empirical model for child care decision making is difficult because these decisions are complex and data are limited.
- Empirical estimation is crucial for policy, but we need to be careful to establish causality using credible research designs.
- Studies comparing findings using different methods on the same data would be very informative.