Social Support as a Means to Well-Being for Rural Low-Income Mothers[1]

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Abstract

Objective measures of well-being are not strongly linked to the reported satisfaction of respondents, and most researchers studying the well-being of poor families have concentrated on the objective components of well-being. In order to gain a more complete picture, family well-being of low-income rural mothers is measured multi-dimensionally, using objective measures and subjective assessments. Cluster analysis identified relatively homogeneous combinations of well-being outcomes. Well-being antecedents of mothers' personal and family attributes, support network characteristics, and types and amount of support are described for each cluster. Differences between the well-being clusters were found for objective measures.

Introduction

Over the last decade public policy makers have reformulated government support for low-income families. The changes in welfare policy were brought about by a reassessment of not only the costs to taxpayers, but also of the bases of well-being for the mothers and children who were program participants. This re-examination of well-being led to the requirement of employment for able-bodied parents and the concomitant withdrawal of government provided cash benefits, health care coverage, and food stamp support (Haskins, & Blank, 2001; Lichter, & Jensen, 2000; Weber, Duncan, & Whitener, 2002). It was assumed that mothers could get a job that would supply enough income and benefits to meet the needs of the family and would increase engagement in their communities, increase their self-esteem and overall competence, and provide valuable role models for their children. In the years since the new regulations were established, numerous studies have tried to assess whether low-income mothers and their children have been better off (Coulton, Bania, Martin, Laliach, & Polousky, 2000; Hao, 1994; Seccombe, 1999; Weber, Duncan, & Whitener, 2002). Because well-being is an elusive condition, most researchers have approached the question by measuring objective factors such as income, income-to-needs ratio, ability to stay employed, earnings, job benefits, etc. (Duncan, 1999; Lichter, & Jensen, 2000; Rogers, & Dagata, 2000). Neither *objective* measures nor *subjective* measures using more global concepts as perceived by respondents can give the complete picture of the well-being of mothers and their families (Kahn & Juster, 2002). Choosing one over the other domain as an exclusive measure is problematic, because most studies have shown very weak links between objective measures and the respondents' expressed satisfaction with their lives (Schwartz & Strack, 1999). The purpose of this pilot study, therefore, is to explore low-income rural women's overall well-being by using cluster analysis to group participants by level of well-being, using both objective and subjective measures. Contributing antecedent factors of personal/family attributes of family structure and human capital, network characteristics, and network support also are established.

Review of Literature

The basis for an examination of the relationship between family well-being and its antecedents is found in diverse fields (Haines, Hurlbert & Beggs, 1996; House, Umberson & Lambert, 1988; Kahneman, Diener, & Schwarz, 1999; Wellman & Wortley, 1990). Personal characteristics, including level of human capital, affect family well-being directly and indirectly through their effects on social support. Teachman, Paasch and Carver (1997) suggested that both financial and human capital must be accompanied by social relationships to enhance well-being. Edin and Lein (1996) found social support from family, friends, and non-profit community agencies played an important role in the well-being of welfare recipients and other poor mothers. Employed mothers had stronger support networks that provided both cash and non-cash resources. Nelson and Smith (1999) found that the ability and proclivity to engage in inter-household exchanges and the pay off for the exchange differed by whether the family had at least one earner with a good job. Households in which someone had a good job had the ability to gain from exchanges both economically and socially; they could repay the resources contributed and did not tap the family for help too frequently, which could lead to resentment and loss of support (Edin & Lein, 1997; Nelson & Smith, 1999).

Other personal attributes have been linked to support received. In one study, unmarried mothers were likely to have a greater need for, and more often receive, kin support than were married mothers (Hogan, Eggebeen, & Clogg, 1993).   Better general health and lower depression were associated with higher levels of support (Israel, Farquhar, Scholz, James, & Parker, 2002; Robertson, Elder, Skinner, & Conger, 1991).

Other studies have shown associations between personal attributes and both network characteristics and social support (Danzinger, Kalil &Anderson, 2000; Erickson, 1996; Lin & Dumin, 1986; Lin & Ensel, 1989; Stoloff, Glanville & Bienenstock, 1999; Umberson, 1992).   Women were more likely to give and receive ongoing help without expectation of return. Women valued highly emotional support; job contacts and other information support were related to higher education, age and father's job status; and receipt of practical services and financial assistance was associated with lower socio-economic status.

Network Characteristics

Pearlin (1985, p. 44) defines a network as "the outer boundaries of supports upon which an individual can draw."   Characteristics of the network refer to the size of the network and the types of relationships among members, the characteristics of members, and the resources embedded within the network (Lin & Dumin, 1986; Wellman & Wortley, 1990).

Network characteristics influence the types and amount of social support that members receive from one another. In fact, research has shown network characteristics to be stronger determinants of social support than personal characteristics (Wellman, 1982). Some systems of support may be used for all exigencies, while other systems are specialized for the type of problem for which support is needed (Pearlin, 1985). Wellman and Wortley (1990) found that parent-child ties and ties that are strong (i.e., are intimate, voluntary and mutual) provide a broad range of support. They highlight the characteristics of *relationships* as a key determinant of the types of support provided. In contrast, other researchers have emphasized the characteristics of network *members* as a key determinant of the types of support provided. These researchers argue that the similarity or dissimilarity of network members (e.g. employment, education and occupational status) influences the social resources available within the network that can be mobilized in support of members' well-being (Erickson, 1996; Lin & Dumin, 1986). Networks with a larger proportion of kin, given kinship norms of mutual assistance and the proximity of kin, are expected to provide greater support to members (Ahluwalia, Dodds, & Baligh, 1998; Hao, 1996; Miller & Darlington, 2002; Wellman & Wortley, 1990). Edin and Lein (1997) found that, for both welfare-reliant and wage-reliant mothers, their own mothers were their biggest source of support.

For low-income families, these social networks often respond to economic hardship by increasing the flow of social support to meet immediate needs (Lin & Dumin, 1986; Stack, 1974). These social networks are thought to serve a "coping" function, meeting immediate, day-to-day needs, providing things that they don't have the money to buy (Briggs, 1998), and providing a sense of satisfaction not attributed to support from non-kin (Wan, Jaccard, & Ramey, 1996). The importance of kin in the network is increased through household extension, an adaptive response to economic hardship that involves sharing a residence with at least one person who is not part of the nuclear family. Household extension may improve social support and family well-being through resource pooling (Cohen 2002).

As helpful as strong ties among kin can be, however, they cannot provide the amount and diversity of information that relationships with non-related individuals can supply (Erickson, 1996; Hofferth & Iceland, 1998). In her study of social class and personal networks, Erickson (1996) found that all classes had a similar range of kin ties; it was the non-kin ties that provided the larger and richer networks for the higher classes.   It is social networks that include members who have few connections to each other, share few characteristics and are spatially dispersed that are most effective in improving families' well-being (Beggs, Haines & Hurlbert, 1996b). Diverse networks provide access to new information not readily available from close kin and neighbors (Green, Tigges & Browne, 1995). Networks containing nonkin, particularly for low-income individuals, are better suited to serve a leveraging function (Briggs, 1998) than are strong-tie, kin-dominated networks.

Where people live affects who they know and with whom they interact and, therefore, the resources to which they have access (Hogan, Eggebeen, & Clogg, 1993; Lee, Netzer, & Coward, 1994; Tigges, Browne & Green, 1998). Beggs, Haines and Hurlbert (1996a) argue that personal networks in rural areas, in contrast to urban ones, are composed of stronger ties. Members of rural networks tend to exchange more than one type of resource and are tied to each other through multiple roles. Further, personal networks in rural areas are more homogeneous and are more likely to be kin-dominated.

Formal and Informal Support

Formal sources of support, provided by government social service agencies and community non-profit organizations, may be considered a resource of "last resort," and a preference for informal sources of support, specifically family, may hold, regardless of the availability of and knowledge of formal sources. For example, dense, kinship-based networks may, through social control, direct mothers to seek support within the network, rather than from formal service providers (Unger & Powell 1980).

Impact of Family Support

The impact of social support on family well-being may be manifested in a number of ways, some concrete and objective and others intangible and subjective. Much social support by friends and family is offered in times of need. Tangible support may provide food, clothing, shelter, transportation, and childcare – the goods and services needed for everyday survival of the family. Levitan and Feldman (1991) suggest that inter-household exchanges can enable a family to avoid a crisis. Social and economic aspects of well-being are often interwoven in social networks (Levitan & Feldman, 1991; Nelson & Smith, 1999). Pearlin (1985, p. 51) suggests that ". . . support systems, whatever else they provide in time of crises and need, impart to people a general and abiding sense of security and well-being." The impact on well-being may be different for support coming from different sources. Wan, Jacard, and Ramey (1996) found that support provided by kin had a stronger correlation with life satisfaction for married mothers than support from nonkin. The relationship was less clear for married fathers and single mothers. Rural low-income mothers often depend on informal support, most of which comes from family members, to help them manage in difficult circumstances. This support may also enhance their general well-being. This pilot study provides an opportunity look at the antecedents of well-being, including the types of social support they receive and the composition of the social networks from whom they received the support.

Study Population and Sample

For this pilot study, researchers chose a sample of 29 rural low-income mothers from one county in Ohio who participated in the first wave of a multi-state project, NC223, for which in-depth qualitative coding of social support could be done. The Ohio sample was part of the larger study involving 24 counties in 14 states from all regions of the country. Willow County (a pseudonym) was chosen because of its rural character, workplace characteristics, and demographic factors. It is a nonmetropolitan county adjacent to a metropolitan area with an urban population of 2,500 to 19,000. Total population of the county in 2000 was just over 31,000. Using a single county allowed the researchers to control for the community resources and the set of agencies available to all participants.

Participants were recruited through programs that serve low-income families, including the Food Stamp Program, the Supplemental Nutrition Program for Women, Infants, and Children (WIC), welfare-to-work programs, and Extension programs. In Willow County the Ohio State University Extension educator assisted in recruiting study participants. To be eligible for participation, families had to have annual household incomes at or below 200% of the federal poverty line and at least one child aged 12 years younger. Families were selected purposively to represent the types of families with children who would be affected by welfare reform, i.e., they would be using similar services, living in similar locations, and/or competing in the local job market with welfare recipients and leavers.

Design and Data Collection

The NC223 project is based on a post-positivist paradigm that emphasizes collection of rich qualitative data that include the meanings participants attribute to their circumstances (Guba & Lincoln, 1994). The qualitative data were collected from the mothers in the households by a trained interviewer, using a semi-structured interview protocol. In-person interviews were conducted in the year 2000 in the participants' homes or in neutral places such as a private room in the community library. Quantitative data also were collected, including household size and composition; knowledge of community resources; employment; life skills; education; income and benefits received; food security; health; and social support. Interviews lasted from one and one-half to two and one-half hours and were tape-recorded. Quantitative data were coded by a team at one university using participants' responses to instruments and additional variables from the transcripts.

As with the quantitative data, the transcripts were coded by a single team of trained project personnel using agreed upon protocols. For this study, targeted analysis of qualitative data began with coding the interview transcripts according to the social support typology proposed by Miller and Darlington (2002). Using analysis

methodology prescribed by Miles and Huberman (1994), three of the authors independently coded separate sets of interviews for material support, practical support, informational support, and emotional support. A chart was created for each case to display: 1) each unique type of support within the broader four categories (e.g. transportation to work); 2) the source of the support, specific person or social service agency (e.g., mother-in-law or Food Stamps); 3) and the proximity of the source of support to the interviewee. After initial analysis of the transcripts and discussion among the researchers, four categories of proximity were defined: 1) in the same house or within walking distance; 2) within an hour; 3) 1-3 hours away; and 4) more than 3 hours away. Geographic location names and other expressions of location mentioned by the interviewees were used to identify the proximity of the source of support in relation to the mother whenever possible. Support received through social service agencies was coded as being located in the county seat regardless of specific agency involved or method of disbursement of the resource, based on the rationale that the location of the office with which the recipient must interact in order to access and maintain support benefits was most likely in the center of county government. The location was then assigned by residence of the mother in relation to the county seat.

After a number of cases were initially coded independently, the researchers refined the coding scheme through discussion leading to "intersubjective consensus" (Miles & Huberman, 1994, p. 11). Three cases were then selected for all three researchers to code in order to test the confirmability of the coding scheme. Discrepancies between coders were discussed until consensus was reached; definitions were further refined as necessary. Each researcher then independently applied the revised coding scheme to the remaining cases in her original set. The qualitative codes were transformed also into a quantitative data set to enter into the cluster analysis.

Measures of Personal Attributes

Personal attributes included human capital, family structure and family background. Measures of human capital included respondents' work effort, age, education, knowledge of community resources, and physical and emotional health. Respondents' work effort was measured by their number of hours worked for pay in an average week. Age of respondents was coded in actual years, but education was coded in categories based upon level of education completed. Community-specific knowledge also was measured. Respondents were asked whether they knew how to obtain a list of eighteen community services (Richards, 1998). The responses to this set of questions were summed and the sum was treated as an index of knowledge of the community and its resources. Further, respondents were asked whether they had a set of nine useful certifications/licenses and knew how to do a list of sixteen functional tasks for daily living. The responses to the twenty-five items were summed to create a life skills score, with higher scores indicating higher levels of function for daily living (Richards, 1998). The indicator of mental health was the CES-D, a well-known measure of risk for clinical depression (Radloff, 1977). The higher the score, the higher was the risk of depression. The indicator of physical health was a chronic health index created by summing responses to a set of questions about chronic diseases and conditions taken from work by Sturm and Wells (2001). The sixteen chronic conditions available in this data set are arthritis, asthma, back problems, cancer, chronic pain, diabetes, digestive problems, eye or vision problems, heart problems, hepatitis, high blood pressure, kidney problems, liver problems, migraines/headaches, permanent disability, reproductive problems. These chronic conditions can interfere with the ability to perform everyday routines. The higher this score, the greater likelihood that health interfered with daily living, including the ability to get and keep a job.

Measures of family structure included number of preschool aged children (i.e. those less than six years old) and partner status. In these analyses the only distinction made was whether the respondent was living with a partner, referred to as partnered in this paper, or not living with a partner, referred to as single in this paper. No distinction was made between being married and living together because the focus was on social relationships and access to resources rather than legal status of the relationship.

Measures of Social Network Characteristics

The characteristics of the respondent's social network analyzed in this paper were size, composition, and proximity of the network. Size of the network was measured by a simple count of the number of relationship roles mentioned by the respondent.   The exception was people mentioned as doing nothing for the respondent. For example, if the respondent said one parent would do nothing for her, even if asked, that parent was not counted.

Three aspects of network composition were included, the roles of the people in the social network, the likelihood of a particular role providing resources, and the density of the network. Roles of the people in the network were defined in relationship to the respondent. If a person had more than one role, e.g., mother and co-worker, the family relationship (mother) was the one coded. People in the network were initially coded by the respondent's term of reference. That set of codes was then reduced to a set of five categories: parents, family, relatives, friends, and agencies. Parents consisted of mothers and fathers of the respondents. The family category

consisted of immediate family members other than the respondent's own parents. The roles were respondent's partner, siblings, parents- and siblings-in-law, and parents and grandparents of the respondent's children. The number of times any person in one of the five role categories was mentioned was counted and the category mentioned most often was recorded. Network density was measured as average number of resources per role in the network.

Measures of Social Support

Social support refers to resources flowing to the respondent from the people in the network. Classification of social support types was based primarily on the earlier work of Miller and Darlington (2002). Material resources were defined as money and objects. Services, such as babysitting or car repair (income in-kind), were defined as acts performed by a person in the network for the benefit of the respondent for which there was a paid alternative. Information was defined as facts, for example job availability, provided by someone. Emotional support was defined as acts performed by a person in the respondent's network for which there was not an acceptable paid substitute. These acts could be as vague as "being there when needed" or as specific as "can always be relied on to give me good advice about disciplining the children." The measures of network support used were frequency counts of each mention in the respondent's interview of the receipt of the four types of social support.

Measures of Family Well-being

Family well-being was defined as the ability of the respondent and her children to remain together and meet their basic needs. Objective indicators of family well-being were the family's income and the family's food security. Subjective indicators of family well-being were the respondent's overall satisfaction with her life, and the respondent's perception of the adequacy of the family's income. All four measures of family well-being were rescaled into percentage indexes, giving each of the outcome variables equal weight in the cluster analysis.

The family's income was measured by the family's total monthly income divided by the federal poverty threshold for a family of the same composition. Food security is the ability to acquire nutritionally adequate and safe food in a socially acceptable way (Anderson, 1990; Hamilton, Cook, Thompson, Buron, Frongillo, & Olson; 1997). Food security was indicated by the number of items checked in the eighteen-item U.S. Household Food Security Survey Module (Olson, Anderson, Kiss, Lawrence & Seiling, 2004). Food insecurity rises as the number of items checked increases. For use in the cluster analysis, a standard food security index was calculated by multiplying the food security score by 100 and dividing by 18 (number of items).

The subjective measures were based on the respondent's replies to direct interview questions. Respondents were asked how satisfied they were with their life overall, and responses were recorded on a five point scale. For use in the cluster analysis, the responses to the interview question were multiplied by 20 to yield a "standard satisfaction score." Respondents also were asked how adequate they thought their income was, and responses were recorded on a five point scale from 1 meaning "not at all adequate" to 5 meaning "very adequate." The wording of the perceived income adequacy question did not consider respondents' ability to pay for their needs. For use in the cluster analysis, the income adequacy response was recoded in the same manner as satisfaction.

Analytical Procedure

The richness of the data presented a major challenge for analysis. The data contained multiple measures for each of the concepts. The small number of observations was the primary consideration in the selection of K-means cluster analysis as a statistical method. Researchers could identify groups of respondents with relatively homogeneous outcomes (or well-being) by using this method. The four rescaled or "standardized" indicators of family well-being were used in the cluster analysis. The well-being measures were standardized so the differences in scale among the measures would not drive the clustering. The standardization method chosen (see above for more detailed explanation) rescaled the variables to a base of 100 rather than using standard deviations to rescale the variables. Standard deviations were less suitable for standardization in this analysis because the sample was very small and the variables were not normally distributed. In the cluster analysis procedure the number of clusters was set at three. The three clusters were analyzed, and they highlighted some nonlinearities among the well-being measures that are of interest.

Once identified, the clusters were tested for differences in medians and variances of the well-being measures, network support, network characteristics, and human capital and family structure. Nonparametric tests were used because of the small number of observations in the clusters. The Kruskal-Wallis test is a nonparametric alternative to one-way analysis of variance used to test differences in means of more than two groups. Both it and the median test were used to test for differences in central tendency among the three clusters.

Results

  This study included four measures of family well-being, two each of subjective and objective. The clearest and largest difference among the clusters was the income level of the families, measured by percent of the poverty threshold, and the researchers chose that characteristic to label the clusters. Initially two clusters were specified. The two clusters contained 19 cases and seven cases, with the centers differing significantly by poverty level.

Table 1
Cluster Centers and Analysis of Variance

Variables	Very Poor N = 14	Poor N = 8	Not Poor N = 4	F	Significance
Percent of Poverty Level	43.74	101.69	186.17	43.72	.000
Food Security	11.54	38.46	13.46	3.90	.035
Income Adequacy Self Assessment	55.71	47.50	55.00	1.49	.247
Satisfaction with Life	77.14	80.00	70.00	0.89	.426

  Subsequently three clusters were specified, and the cluster centers differed significantly by poverty level and food security (See Table 1). The "Poor" cluster in the initial results contained all of the cases in the reported "Very Poor" cluster and five cases in the reported "Poor" cluster. The other cluster in the initial results contained all of the cases in the "Not Poor" cluster and three cases in the "Poor" cluster. The three cluster results were reported because they better illuminated nonlinear relationships between poverty level and the other variables. The largest cluster, labeled "Very Poor," had a household income well below its federal poverty threshold. The second cluster, labeled "Poor," had a household income approximately equal to its federal poverty threshold. The smallest group, labeled "Not Poor," had a household income above its federal poverty threshold. The differences in income as measured by percent of the poverty threshold were significant at the .05 level between all pairs of groups.

  The other discriminating outcome among the three groups was the food security score for the household. The differences between the clusters for this indicator of well-being best illustrate the reason for reporting the three clusters in this pilot study. Ironically, the Very Poor cluster was the most food secure. Their median standardized food security score was 7.7. Over two thirds of the very poor were food secure or marginally food secure. About one-fifth was food insecure. The Poor cluster was the most food insecure. The median standardized food security score was 34.6. Only one-fourth of this group was food secure. One-half were food insecure, but not hungry, and the remaining one-fourth were food insecure and hungry (the most severe condition). The Not Poor cluster was more food insecure than the Very Poor cluster. The median standardized food security score was 15.4. Half of the Not Poor households experienced food insecurity. On the other hand, the range of scores on the food security index was zero to five for the Very Poor and only zero to three for the Not Poor cluster (figures not included here).

  Satisfaction with life and perceived adequacy of income were not significantly different between the cluster centers. Neither were the medians for the clusters significantly different on the attributes. See Table 3 (below) for well-being clusters for the larger, multistate sample (n = 381). The subjective indicators were significant in the formation of clusters; however, not all antecedent variables were available so the other tests were not run.

Profile of the Very Poor Cluster
  The mothers in the largest cluster were very poor (see Table 2). The typical family in the Very Poor cluster had an income that was less than half of the appropriate federal poverty threshold. The family was marginally food secure. The mother believed her family could afford to buy some wants, beyond just necessities, and she reported being satisfied with life overall.

Table 2
Medians and Proportions of Well-Being Outcomes and Antecedents by Cluster

Variables	Very Poor N = 14	Poor N = 8	Not Poor N = 4
Standardized Outcomes			
Percent of Poverty Level[M,K]	47.2	101	179.5
Food Security[M]	7.7	34.6	15.4
Income Adequacy Self Assessment	60	40	60
Satisfaction with Life	80	80	70
Social Support			
Total Number of Resources[M,K]	12.5	11	8
Number of Material Resources[K]	5.5	5.5	3.5
Number of Practical Services	3.0	3.0	2.5
Number of Emotional Support[M,K]	3.0	2.0	2.0
Number of Information	0	0.5	0
Network Characteristics			
Number of Roles in the Network	6	6	5
Resources from Parents	2.5	2.0	1.5
Resources from Other Family	2.0	3.0	3.0
Resources from Agencies[K]	3.5	2.0	1.5
Personal and Family Attributes			
Participant's Age	23.5	29.5	25.5
Partner Present	.25	.75	.83
Number of Children[K]	2	2.5	1
Had Child < Age 6	.25	.63	.33
Number of Chronic Health Conditions	1	1	2
Depression Score	11.5	13	15.5
Participant's Education	< H. S.	H. S.	H. S.
Life Skills Score	18	17.5	18
Knowledge of Community Score	15	15.5	10
Participant's Employment Experience[M]	7.5	15.5	13
Participant's Weekly Employment Hours	17.9	24	22
Parents Received Welfare When Child	.83	.29	.40

[M] Significant at the .10 level using the Median test; [K] Significant at the .10 level using the Kruskal-Wallis test

The mothers in the Very Poor cluster mentioned receiving resources from their social network more times than did the other mothers. They reported a median number of resources of 12.5. Most of those resources were material: cluster median was 5.5. The other resources they received were split almost equally between practical services and emotional support. The median number of information resources received was zero.

Their social networks had a median number of 6 persons who were in different relationships to the participants. Social agencies contributed the most resources (median of 3.5), followed by parents (2.5) and other family members (2.0).

The mothers in the Very Poor cluster were in their early twenties (median=23.5), had two children and no partner present. Only 25% of them had a preschool aged child. Their health was good; their median number of chronic health conditions was only 1. Their median depression score was 11.5, the lowest of the three clusters. Their lack of human capital was notable. More than half of them had not completed high school. They had 7.5 years of employment experience and were employed less than half time (median = 17.9 hrs. per wk.). They fared better than those in the other clusters on informal knowledge scores; their median scores for life skills and knowledge of the community were 18 and 15 respectively. Parents' receipt of welfare during participants' childhood was used as an indicator of parents' income and social class. The great majority of these mothers had been reared in welfare receiving households (83%).

Profile of the Poor Cluster

The typical family in the Poor cluster had an income that was equal to the poverty threshold (median = 101). The typical family in this cluster also was food insecure; the median standardized food security score was 34.6, dramatically higher than the other clusters. These mothers reported being satisfied with life, but they believed their families' income was sufficient for necessities only.

The typical mother in the Poor cluster mentioned receiving 11 resources from her social network. Over half (5.5) were in the form of material resources. She received practical services (3.0) more often than emotional support (2.0). She did receive some information from her social network (0.5).The mothers in this cluster were more likely than the other mothers to distinguish between emotional support and information. The mothers in the Poor cluster had social networks (median = 6) that were similar in size to those of the Very Poor cluster. Other family members were prominent in their networks. Agencies and their parents supplied about equal numbers of resources (2.0) and less than those provided by other members of the family.

The mothers in the Poor cluster were about 30 (median = 29.5) years of age and had a partner present. They had 2.5 children. Most (63%) had a preschool-aged child. They were in reasonably good health; they had a median of one chronic health condition. Their median depression score was 13, meaning that they were not typically at risk for depression. Taken as a whole, their human capital was higher than that of the other clusters. Their median level of education was a high school diploma. Their life skills score was 17.5 and their community knowledge score was 15.5. They had the highest median years of employment experience (15.5) and were currently working 24 hours a week. Relatively few of them (29%) grew up in a household in which the mother received welfare.

Profile of the Not Poor Cluster

The typical family in the Not Poor cluster had an income that was almost twice the poverty threshold and was marginally food secure. The mothers reported having mixed feelings about their overall satisfaction with life. These women indicated that their family could afford to buy more than necessities and some of the things they wanted.

Although the mothers in the Not Poor cluster had the highest family incomes, they were less satisfied with life than the other mothers. They thought their income was sufficient to meet their needs and yet half were food insecure.

The Not Poor mothers reported the fewest incidences of receipt of resources from their social network (median = 8). Resources from their network were most likely to be material resources. The next most likely form of resource was practical services, followed by emotional support. Most did not report receiving information (median = 0).

Mothers in the Not Poor cluster had the smallest social networks (median = 5). Within their networks, other family members provided the largest number of resources, with parents and agencies giving only 1.5 resources typically.

The Not Poor mothers were in their mid twenties (median = 25.5). They had a partner present and one child. Most did not have a preschool-aged child. Their child was in school part of the day. These mothers had moderate levels of education and life skills. Their median education was high school completion. Their median life

skills score was 18. They had the lowest knowledge of community resources. Their median community knowledge score was 10. They had a median of 13 years of work experience and currently worked 22 hours a week. The mothers in the Not Poor cluster had the worst health. They had a median of 2 chronic health conditions and their median depression score was 15.5, putting many of them at risk for clinical depression.

The social support of the Poor and Not Poor mothers differed from those of the Very Poor mothers. There was very little difference among the social networks of the clusters. The Not Poor mothers received the fewest resources.   The Poor mothers received less emotional support and more information.   The only noteworthy difference among their networks was the larger role played by social agencies in the networks of the Very Poor.

The clusters had different family structures. The Very Poor mothers were the only ones who were likely to not have a partner present. The Poor mothers were the oldest and most likely to have a preschool-aged child. The Not Poor mothers had only one child. Having only one child may have made the difference between being in the Poor and Not Poor cluster for these families since income was measured by Percent of the Poverty Threshold.

The clusters had different amounts of human capital. The Very Poor mothers had the least education and experience and were working the fewest hours. They were most likely to have grown up in a family receiving welfare. The Not Poor mothers had the worst health and knew the least about the community.

Cluster analysis was used to identify groups of cases that were similar in their well-being profiles within a small sample, with nonparametric statistics of Kruskal-Wallis and median tests used to find whether there were differences among the well-being antecedents.   One of the foci for this study was social networks used by participants and the concomitant support provided by these networks. The data were available for the small sample, but they were not available for the larger data set. The four well-being measures were part of the larger data set, however, so the cluster analysis procedure was run on the larger data set (n = 381) to test whether the well-being measures would have a similar pattern. Table 3 contains the results of that analysis. Income (percent of the poverty line) remained strong, with a significance level of < .001 for the large sample, and the cluster center numbers were very much like those of the Ohio sub-sample. Surprisingly, food security was not significant in the larger data set. However, both subjective indicators were significant in the formation of the clusters in the large sample: Income Adequacy (< .05) and Overall Satisfaction with Life (<.001).

Table 3
Cluster Centers and Analysis of Variance for Multistate Data Set

Variables	Very Poor N = 178	Poor N = 157	Not Poor N = 46	F	Significance
Percent of Poverty Level	40.82	108.34	186.04	793.07	.000
Food Security	20.07	19.39	17.75	.23	.799
Income Adequacy Self Assessment	46.29	51.85	50.87	4.49	.012
Satisfaction with Life	69.21	77.83	70.00	9.82	.000

Looking at Table 3, one can see that there was great income disparity again among the clusters, with the centers having 41%, 108% and 186% percent of poverty. The other levels of well-being indicators were as expected for the Very Poor cluster: lowest level of food security (reverse scored) as well as income adequacy and overall satisfaction. The subjective measures were highest for the Poor cluster; however, so they didn't track with objective measures for the Poor and Not Poor clusters. Because the larger sample didn't have all of the antecedent variables of interest, we did not pursue the other analyses.

Discussion and Implications

This pilot study involved only 29 cases from one county in Ohio, and thus, the findings cannot be generalized beyond this group of low-income families. However, there are some interesting results from these rich data that can shed light on well-being of low-income rural families. The lack of correspondence between the objective and subjective well-being measures found in the analysis of the small sub-sample support findings of other studies that have shown weak or missing linkages between them. One interpretation of this finding is that these mothers "don't know what they are talking about" – in other words they don't know when they are better or worse off than others, using standard objective measures. Another interpretation is that the measuring stick against which

these mothers compare their current situation may not be other similar families, as it is for objective measures, but may be their own well-being at an earlier time or some other object of comparison. A third view is that well-being is a complex and multidimensional concept, one that is not easily identified by respondents or researchers and one that is not determined by income level alone. A sense of overall well-being may be based more on one's relationships with family and friends and one's sense of acceptance/support by those from whom acceptance/support is sought (Pearlin, 1985).

Another interesting finding of this study was the lack of correspondence between the two objective measures, those of income (poverty level) and food security, which is often linked to poverty in the literature and public policy. Much of the difference can be found in the formal and informal social support received by the mothers in the study. The Very Poor mothers, who were the most food secure as a whole, also had the highest number of total resources provided by the formal and informal support network, received the most resources from agencies and their parents and had a relatively high proportion of support in the form of material resources.

Overall, only two of the personal and family attributes were different for the clusters, number of children and employment experience. The only significant network characteristic was the support provided by agencies. Types of social support had the most variables significantly related to the well-being clusters. The total amount of support (number of resources) and the amount of emotional and material support were significantly different by well-being cluster. The role of social support in enhancing overall well-being is still unclear, however. The support coming from the informal social network may provide not only services and material resources that reduce the hardship of having low income, but relationships with family members and friends that may ameliorate the effects of a lack of good job opportunities, expensive and scarce child care facilities, and low income and thus affect the subjective measures indirectly.

The correspondence between the subjective measures and one of the objective measures (percent of the poverty threshold) found when the cluster procedure was run on the larger, multistate sample of 381 cases is intriguing. Further research is called for to determine whether social support will be found to be significantly related to well-being of a large sample of low-income mothers. The next step in this research is to sub-code the social support variables by types of resources and network membership for the full sample and run the supporting statistics for the antecedents.

One danger of this line of research is in providing comfort to policy makers and practitioners by supplying data that show that family well-being can be ensured for families without adequate provision being made for material and financial independence. Accepting one's condition when there appears to be no possibility of improvement in the situation is a coping response and can lead to a more favorable sense of well-being than one might otherwise have under those circumstances. It does not necessarily mean that the family is warm, well, and/or food secure. These results can be construed as supporting Teachman, et al.'s (1997) contention that human, financial, and social capital are inextricably connected.

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