

The Relationship between Vehicle Ownership and Quality of Life for Low Income Households

Shiloh Herrem

Undergraduate Student, Human Development and Family Studies

Abstract

Transportation difficulties are consistently cited by low-income individuals as an obstacle to achieving financial sustainability (Anderson & Van Hoy, 2006; Brabo, Kilde, Pesek-Herriges, Quinn, & Sanderud-Nordquist, 2003; Fletcher, Garasky, Jensen, & Nielsen, 2010; Garasky, Fletcher, & Jensen, 2006; Lichtenwalter, Koeske, & Sales, 2006). This non-random pilot study investigated whether reliable, private vehicle ownership improved the quality of life for low-income households by surveying participants of a program in West Central Wisconsin that assists low-income individuals with purchasing reliable vehicles. It was hypothesized that reliable, private vehicle ownership would improve the quality of life for low-income households. Survey data was analyzed using frequencies. Results indicate quality of life was improved by owning a reliable vehicle. Future research would benefit from a larger sample that generalizes based on immediate environment, takes into account the psychological effects of barriers on quality of life, and utilizes qualitative and/or longitudinal studies.

Keywords: poverty, low-income, transportation, policy, employment barriers

Since the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996, the work search has become a requirement for low-income families to receive Temporary Assistance for Needy Families (TANF), food stamps, and other welfare benefits (Fletcher et al., 2010). While studies conducted following the passage of PRWORA found an increase in employment for former welfare recipients, a high proportion of these individuals continue to work for poverty-

level wages and few benefits (Lichtenwalter et al., 2006). As attention shifts from investigating welfare-to-work experiences to investigating pathways to financial sustainability, it is important to examine why families that are seemingly doing everything right continue to live in poverty and dependent upon public assistance.

The need to address this issue has resulted in extensive research on the barriers low-income families face in their move from poverty post “welfare-to-work” (Fletcher et al., 2010). While several barriers have been identified, transportation difficulties are consistently cited by low-income individuals as an obstacle to achieving financial sustainability (Anderson & Van Hoy, 2006; Brabo et al., 2003; Fletcher et al., 2010; Garasky et al., 2006; Lichtenwalter et al., 2006). However, the transportation issue extends beyond the need to get to work. In “An Escape Route from Poverty,” Friedmann and Sandercock (1995) assert, “the poor are defined according to their ability to consume” (para. 6) in the larger market—a definition that is not only the basis for current poverty measures, but also the catalyst for programs that assist the poor. They argue this conventional wisdom ignores the work performed “inside the household economy” (para. 9). That is, the mundane tasks of everyday life: running errands, grocery shopping, pursuing an education, finding adequate child care, being an active member of the community, socializing with family and friends—tasks made difficult or even impossible without reliable transportation. Therefore, it is important to explore transportation not only as a barrier for families in poverty, but also as a pathway to empowerment. The current study investigated the quality of life for low-income individuals who purchased reliable vehicles with assistance from a West Central Wisconsin community-based organization.

Literature Review

A review of the literature was conducted to explore the relationship between transportation and poverty outcomes. There was a consistent finding within the literature that suggested access to transportation alone did not move families out of poverty, but those who had access to reliable, private vehicles had improved employment outcomes. However, there was little found on the relationship between

transportation and quality of life, especially in areas other than those related to employment (Anderson & Van Hoy, 2006; Brabo et al., 2003; Fletcher et al., 2010; Garasky et al., 2006; Lichtenwalter et al., 2006).

Fletcher et al. (2010) analyzed findings from three studies of rural, low-income households in Iowa to investigate the transportation experiences of these individuals. The first study found several transportation barriers. Nearly half of the participants did not own a vehicle. Of those who did, old and unreliable vehicles were typical, but the respondents were unable to afford repairs. They found the lack of transportation was a barrier, not only to employment, but also to child care, education, and healthcare. The second study included both county workers and welfare recipients. They found both county workers and welfare recipients cited transportation as a barrier to employment, education, and child care for low-income households. The welfare recipients reported the high costs of insuring, repairing, and maintaining older vehicles as a barrier to employment. The third study was informed by the previous two studies and focused on transportation access and barriers as a predictor of employment. They found nearly 50% of respondents reported transportation issues that resulted in financial difficulty.

Anderson and Van Hoy (2006) examined the welfare-to-work experience of seventeen women in rural and urban Oregon after the passage of PRWORA. While both the urban and rural group of women shared many of the same concerns regarding moving from welfare to work, the rural group expressed concerns with reliable transportation, the lack of education and training opportunities, and limited job availability in their community. These concerns were not shared with the urban group as they had the opportunity to utilize public transportation to access those opportunities.

Garasky et al. (2006) examined the transportation barriers low-income households experienced and how the availability of reliable, private transportation influenced employment. They found that access to a private vehicle was an “important determinant” (p. 83) of the employment outcomes for low-income individuals. Eleven per cent of the low-income households examined did not own or have access to a private vehicle. Of those that did, 48%

had difficulty making repairs, staying up to date with insurance, paying for gasoline, and making car payments. In addition, 57% of the unemployed respondents did not always have access to a reliable vehicle while almost 75% of those who were employed did.

Lichtenwalter et al. (2006) investigated whether travel supports for low-income women in an urban setting connected them to better jobs, and if reliable vehicle ownership improved employment outcomes beyond alternative forms of transportation. They found reliable vehicle ownership had a positive relationship with overall employment, positive employment characteristics (such as benefits), and higher wages, while those using public transportation had lower wages and fewer employee benefits. They also found that 44% of the participants had difficulty reaching important destinations like the grocery store, medical appointments, parent-teacher meetings, and visitation opportunities for non-custodial parents.

Brabo et al. (2003) evaluated the success of JumpStart, a program that assists low-income households with purchasing reliable vehicles. They found 100% of respondents reported an improved quality of life since purchasing their vehicles. In addition, respondents credited the vehicles with an increase in wages, the ability to acquire better jobs, more involvement with extended family, and the ability to find better child care.

Although current literature has established transportation difficulties as a barrier to moving out of poverty and an overall decreased quality of life in both urban and rural settings (Anderson & Van Hoy, 2006; Brabo et al., 2003; Fletcher et al., 2010; Garasky et al., 2006; Lichtenwalter et al., 2006), the current literature does not directly address how reliable, private vehicle ownership enhances the quality of life for low-income households from the perspective of family members, which was the purpose of this study.

Theoretical Framework

The theoretical framework applied to this study was the family ecology theory. This theory assumes a family's development is influenced by the surrounding environment which is comprised of four spheres: the microsystem, which is the immediate environment; the mesosystem, which is comprised of the interactions between the

elements in the family's microsystem; the exosystem, which are the indirect influences on the family; and the macrosystem, which is the culture, values, expectations, and lifestyles of society at large.

The application of family ecology theory to this study would predict that the availability of transportation alone does not aid families in moving out of poverty, as there are several influences working for and against the family at any one time depending upon the family's environment. However, reliable and private vehicle ownership empowers individual family members to access employment opportunities and services and reach destinations in all levels of the environment, something low-income families without reliable, private vehicles have difficulty or inability to access.

Purpose Statement

The purpose of this study was, first, to examine the relationship between quality of life and reliable, private vehicle ownership as perceived by low-income individuals who purchased vehicles with the assistance of a community-based organization; a second goal was to develop a reliable survey instrument which measures low-income individuals' attitudes toward various quality of life markers. And the study's final purpose was to increase policymakers' awareness of poverty issues and the need for policy that addresses the barriers faced by low-income individuals in their path to meaningful employment. The question "How does reliable, private vehicle ownership affect the quality of life for low-income households?" was central to this study. Based upon both literature and theory, it was hypothesized that reliable, private vehicle ownership would improve the quality of life for low-income households.

Method

Participants

This study was conducted at a community-based organization in West Central Wisconsin. The participants were two male and eight female participants of a program that assists low-income individuals with purchasing reliable vehicles at reduced cost. Three of the participants were 18-24 years of age, five were 35-54 years of age, and two were 55-64 years of age. Eight of the participants were

employed at least part-time, while two were recently laid off and collecting unemployment compensation. Two of the participants had an annual household income less than \$10,000, two between \$10,000 and \$14,999, four between \$15,000 and \$24,999, and two had annual household incomes over \$40,000. Finally, seven of the participants had at least one child living in the home and three lived alone.

Research Design

The purpose of this study was to investigate the relationship between reliable, private vehicle ownership and quality of life as perceived by participants of a program that assists low-income individuals with purchasing reliable vehicles at reduced cost. A cross-sectional research design was used in order to capture attitudes of the participants of the program at one point in time. Telephone surveys were used for data collection, as they were best suited for gathering data across the program's service area when quick return was necessary due to time constraints for gathering data; mailing surveys was cost-prohibited.

The population for this study was low-income individuals who access services from a community-based organization in West Central Wisconsin. The sample consisted of individuals who purchased a vehicle through a program that assists low-income individuals with purchasing reliable vehicles at reduced cost. The sample design for this study was non-random and purposive.

Data Collection Instrument

To identify family members' attitudes toward reliable, private vehicle ownership and its relationship to quality of life, a survey was designed with a brief description of the study, risks and benefits, time commitment, confidentiality, voluntary participation, contact information for counseling services and the supervisor, and instructions for completing the survey.

The survey consisted of seven demographic questions regarding the date of purchase of the vehicle and the participants' gender, age, household composition, employment status, annual income, and sources of income, as well as 13 closed-ended statements based on a 5-point Likert scale used to measure the intensity of the participants' attitudes ranging from one (strongly disagree) to five (strongly agree). Statements and questions were

informed by literature, theory, and program participants' feedback provided to me by the program manager at the community-based organization.

The survey instrument has both face validity and content validity as there is a logical correlation between the survey statements and the research question, and the statements address quality of life barriers commonly cited, but not investigated, in studies of the low-income population.

Procedure

The survey process began with a meeting with employees of the community-based organization to describe the purpose of this research and ask for permission to survey their clients. In addition, we discussed the need the program addressed in the community and what areas of life participants felt were improved by participating in the program. The program manager granted permission to survey their clients and provided a list of telephone numbers and first names of participants of the program. Surveys were administered via telephone, and calls lasted approximately 10 minutes. Of the participants that were reached, one chose not to participate in the survey due to time constraints.

Data Analysis Plan

The data was first cleaned and checked for missing data and then coded using acronyms for each variable. The first seven questions were demographic variables which included gender, age, employment status, annual household income, sources of income, household composition, and year of vehicle purchase. The following 13 closed-ended statements were given a three letter acronym: *Prior to purchasing my JumpStart vehicle, I had difficulty finding or maintaining reliable transportation* (BRT); *Prior to purchasing my JumpStart vehicle, I had difficulty getting to work* (BGW); *Prior to purchasing my JumpStart vehicle, I had difficulty making it to medical and other important appointments* (BMA); *Prior to purchasing my JumpStart vehicle, I had difficulty finding convenient child care* (BCC); *Prior to purchasing my JumpStart vehicle, I had difficulty visiting with extended family and friends* (BVF); *I have little to no difficulty maintaining my JumpStart vehicle* (CMT); *I have little to no difficulty making the loan and insurance payments for my JumpStart vehicle* (CLI); *Since purchasing my JumpStart*

vehicle, I have gained better employment (CBE); Since purchasing my JumpStart vehicle, I am better able to make it to medical and other important appointments (CMA); Since purchasing my JumpStart vehicle, I have more convenient child care for my child (CCC); Since purchasing my JumpStart vehicle, I am better able to visit with extended family and friends (CVF); Since purchasing my JumpStart vehicle, I need less public assistance (CPA); and Since purchasing my JumpStart vehicle, my quality of life has improved overall (CQL).

The computer program *Statistical Package for the Social Sciences* (SPSS) was used to analyze the data. Data analysis included frequencies. Correlations were not run due to the small study sample.

Results

All variables were subjected to frequency distribution analysis. Results indicated that there was no missing data. For variables BRT, BGW, and BMA, the majority of respondents agreed or strongly agreed they had difficulty finding or maintaining reliable transportation, difficulty getting to work, and making it to medical or other important appointments prior to purchasing their vehicles. For variable BCC, the majority of respondents neither agreed nor disagreed they had difficulty finding convenient child care prior to purchasing their vehicle. For variable BVF, respondents were mixed on whether they had difficulty visiting with extended family and friends prior to purchasing their vehicle. For variables CMT and CLI, the majority of respondents agreed or strongly agreed they had little to no difficulty maintaining and paying the loan and insurance payments on their vehicles. For variables CBE and CMA, the majority of respondents agreed or strongly agreed they were able to secure better employment and make it to medical and other important appointments since purchasing their vehicles. For variable CCC, the majority of respondents neither agreed nor disagreed that they were able to find more convenient child care since purchasing their vehicle. For variable CVF, the majority of respondents agreed or strongly agreed that they were better able to visit with extended family and friends since purchasing their vehicle. For variable CPA, respondents were mixed on whether they needed

less public assistance since purchasing the vehicle. For variable CQL, the majority of respondents agreed or strongly agreed that the purchase of the vehicle improved their quality of life overall.

Table 1
Frequency Distribution

Variable	SD	D	U	A	SA	Total
BRT	10.0%	20.0%	10.0%	40.0%	20.0%	100.0%
BGW	10.0%	20.0%	10.0%	40.0%	20.0%	100.0%
BMA	20.0%	20.0%	0.0%	50.0%	10.0%	100.0%
BCC	30.0%	0.0%	60.0%	10.0%	0.0%	100.0%
BVF	20.0%	20.0%	20.0%	0.0%	40.0%	100.0%
CMT	0.0%	10.0%	10.0%	40.0%	40.0%	100.0%
CLI	10.0%	0.0%	0.0%	40.0%	50.0%	100.0%
CBE	0.0%	10.0%	30.0%	50.0%	10.0%	100.0%
CMA	0.0%	20.0%	30.0%	20.0%	30.0%	100.0%
CCC	0.0%	10.0%	70.0%	20.0%	0.0%	100.0%
CVF	0.0%	20.0%	20.0%	10.0%	50.0%	100.0%
CPA	10.0%	20.0%	40.0%	20.0%	10.0%	100.0%
CQL	0.0%	10.0%	10.0%	60.0%	20.0%	100.0%

Note. BRT = Prior to purchasing my JumpStart vehicle, I had difficulty finding or maintaining reliable transportation; BGW = Prior to purchasing my JumpStart vehicle, I had difficulty getting to work; BMA = Prior to purchasing my JumpStart vehicle, I had difficulty making it to medical and other important appointments; BCC = Prior to purchasing my JumpStart vehicle, I had difficulty finding convenient childcare; BVF = Prior to purchasing my JumpStart vehicle, I had difficulty visiting with extended family and friends; CMT = I have little to no difficulty maintaining my JumpStart vehicle; CLI = I have little to no difficulty making the loan and insurance payments for my JumpStart vehicle; CBE = Since purchasing my JumpStart vehicle, I have gained better employment; CMA = Since purchasing my JumpStart vehicle, I am better able to make it to medical and other important appointments; CCC = Since purchasing my JumpStart vehicle, I have more convenient childcare for my child; CVF = Since purchasing my JumpStart vehicle, I am better able to visit with extended family and friends; CPA = Since purchasing my JumpStart vehicle, I need less public assistance; CQL = Since purchasing my JumpStart vehicle, my quality of life has improved overall.

In addition, qualitative comments were received at the end of several surveys and will be discussed.

Discussion

Support was found for the hypothesis that reliable, private vehicle ownership improves the quality of life for low-income households. The frequency distribution demonstrated support for this study’s hypothesis. Indeed, the majority of respondents agreed or strongly agreed their quality of life was improved by the purchase of a low-mileage, high efficiency vehicle through the organization’s program, a result also found in Brabo et al. (2003), where 100% of respondents reported an overall improvement in their quality of life.

In an effort to get a more comprehensive view of quality of life, the 12 remaining statements dealt with transportation barriers and other quality of life markers, and whether those barriers had been alleviated after purchasing the vehicle. The baseline for this study is whether or not respondents had difficulty finding reliable transportation prior to their vehicle purchase. Sixty percent of respondents agreed or strongly agreed they experienced this difficulty, while a fairly significant number responded they disagreed or strongly disagreed (30%). This coincides with the literature. Fletcher et al. (2010) found the majority of low-income households did not have access to reliable transportation, even though a significant number of low-income households did own or had access to a vehicle. In addition, Garasky et al. (2006) found that although only 11% of respondents did not own or have access to a vehicle, of those who did, 62% described their vehicles as “reliable,” while 48% reported financial difficulties related to the maintenance and ownership costs of the vehicle.

The literature illustrates reliable transportation for low-income households is an important factor in quality of life, and extends beyond owning a vehicle to maintaining, insuring, and making payments on the vehicle. The majority of respondents in this study indicated they agreed or strongly agreed they had little to no difficulty maintaining, insuring, and making car payments on the vehicles purchased through the organization’s program. This reiterates the importance of access to reliable vehicles for low-income households, as the financial burden of owning a vehicle is cited as a transportation barrier. Indeed, Fletcher et al. (2010) found nearly 50% of low-income individuals had transportation issues that resulted in financial difficulty.

With regard to employment, the majority of respondents agreed or strongly agreed they had difficulty getting to work prior to the purchase of the vehicle and found better employment since the purchase of the vehicle. This coincides with research that suggests the lack of transportation is a barrier to employment and the lack of reliable transportation is a barrier to better employment (Anderson & Van Hoy, 2006; Fletcher et al., 2010; Garasky et al., 2006; Lichtenwalter et al., 2006). Furthermore, Lichtenwalter et al. (2006) found reliable transportation not only had a positive

relationship with employment, but also corresponded to better benefits and higher wages, presumably because more employment opportunities arise as one has the ability to travel further from one's immediate environment. In addition, Brabo et al. (2003) found the majority of respondents who purchased reliable vehicles saw an increase in wages and the ability to acquire better employment.

Fletcher et al. (2010) found that the lack of reliable transportation was a barrier to child care, while Brabo et al. (2003) found that the purchase of a reliable vehicle allowed the majority of respondents to find better child care. However, the respondents of this study were mixed in their response for these two points. The majority of respondents neither agreed nor disagreed that they had difficulty finding convenient child care, or that they were able to find more convenient child care since the purchase of their vehicle. In regard to having difficulty prior to the purchase of the vehicle, 30% strongly disagreed while 10% agreed. Since the purchase of the vehicle, however, 10% disagreed they were able to find more convenient child care, while 20% agreed they were able to since purchasing the vehicle. While these responses are not consistent with the literature, few of the respondents to this study had child care-aged children.

Respondents were also mixed on whether there was difficulty visiting extended family and friends prior to the purchase of the vehicle. Forty percent of respondents strongly agreed they had difficulty visiting with extended family and friends prior to purchasing the vehicle, while 40% strongly disagreed or disagreed. However, when asked if they were better able to visit with extended family and friends since the purchase of the vehicle, the majority of respondents either agreed or strongly agreed this was the case. Brabo et al. (2003) found the majority of respondents credited their vehicle with the ability to have more involvement with extended family and friends, supporting this finding. However, with such a small majority of respondents expressing difficulty visiting with family and friends prior to the purchase of the vehicle, it is important to consider that visiting with family and friends was not of great concern to the respondents of this study.

The goal of the PRWORA of 1996 was to move welfare recipients off the rolls and into jobs (Anderson & Van Hoy, 2006).

The assumption guiding this inquiry was that low-income workers without reliable transportation to and from work would need more public assistance to compensate for decreased earnings. However, the majority of respondents of this study neither agreed nor disagreed that they needed less public assistance since purchasing their vehicle, while 30% strongly disagreed or disagreed, and 30% strongly agreed or agreed. Brabo et al. (2003) found that while 74% of respondents of their study received some form of public assistance, 36% reported a decrease in benefits since the purchase of their vehicle.

The responses to this statement illustrate two things: First, either the majority of respondents did not receive public assistance of any kind, or their level of assistance had not changed since the purchase of their vehicle. Second, though literature has shown reliable transportation is a barrier to employment (Anderson & Van Hoy, 2006; Brabo et al., 2003; Fletcher et al., 2010; Garasky et al., 2006; Lichtenwalter et al., 2006) and that reliable, private vehicle ownership is a determinant of employment outcomes (Garasky et al., 2006; Lichtenwalter et al., 2006), having employment does not necessarily diminish one's need for public assistance. Indeed, though 85% of respondents in Brabo et al. (2006) were employed, 74% still needed some form of public assistance. In this study, 80% of respondents lived at or below the 2011 Federal Poverty Level for a family of 4 (United States Department of Health and Human Services, 2011), even though 70% were employed either full- or part-time.

Qualitative Analysis

The qualitative comments were analyzed and themed, and themes were evaluated according to frequency. The major theme that emerged was that the program was helpful (5 out of 10). Comments included "I couldn't get a loan anywhere else," "I'm glad [the program] was there when I needed help," "[the program] was what I needed to the max," and "I was dependent on an unhealthy person to get to work. [Buying the vehicle] gave me more independence and I have less stress."

Though the bulk of the qualitative comments did not expand on the survey statements, the last comment regarding independence and stress is something that warrants further

study. Unfortunately, the psychological aspects of owning a reliable vehicle did not emerge from the literature, and thus were not included in this study as a quality of life marker.

Limitations

There were several limitations to this study. First, the small sample size and the non-random design makes it difficult to generalize its data regionally. A second limitation was the use of the 1-through-5 Likert scale which did not allow for answers to statements that did not apply to particular respondents' circumstances. A study of this nature would lend itself well to a qualitative interview to allow for more in-depth answers on issues that concern the respondents. Third, the time constraint did not allow for continued attempts at contacting participants of the program which could have resulted in a larger sample.

Implications for Practitioners

The results of this study illustrate the effects of a successful program aimed at low-income individuals that improves the lives of its participants while underscoring that there is no one solution to poverty. Policies need to acknowledge employment alone is not a pathway out of poverty as this study and countless others suggest. Indeed, though the majority of the respondents of this study were employed, they remained at or below the poverty line despite transportation barriers being eliminated. Reliable transportation, suitable child care, and education are central to not only gaining employment, but securing employment with the wages and benefits necessary to move out of poverty. In addition, the impact of the environment on the family cannot be ignored; the needs of rural families are not necessarily the needs of urban families as suggested by previous research and informed by family ecology theory. Policy must address the needs of families within the context of the environment in which they live and develop programs, like the one studied, that empower individuals themselves to develop solutions to their problems rather than simply handing out aid that sustains them in their current situation.

Implications for Future Research

It is recommended that future research would include a large sample in order to generalize the findings regionally. However, it is important to note that research has illustrated the needs and experiences of low-income individuals vary just as the individuals themselves and the environments in which they live vary. As such, results of such research cannot be generalized nationally if solutions to poverty issues are to be successful. In addition, future studies on transportation and other barriers should take into account the psychological effects of those barriers on quality of life. Finally, it would be useful to conduct qualitative and/or longitudinal studies in an effort to gather information on issues that are important to the particular person being surveyed.

Conclusion

Research in the area of poverty generally investigates what is going wrong rather than what is going right. This study investigated how the quality of life of low-income individuals is affected through a successful program aimed at empowering its participants—creating partners in the process of moving out of poverty, rather than continuing to perpetuate their role as aid recipients.

There is a psychological aspect to poverty not addressed in the literature or this study. As a country, through policies and practice, we have moved from trying to eradicate poverty and its sources to blaming those in poverty for their lot in life. It is easy to tell another to pull themselves up by their own boot straps, but what do we do when that person has no boots? We blame them, tell them they are not working hard enough, and tell them to do more. What we do not do is empower them. We do not give them access to the tools necessary to pull themselves out of their situation. When one has been beaten down by one's circumstances, society, and policies, one loses the will to continue to fight.

This study aimed to humanize the low-income individual. Rather than deconstruct the population down to yet another list of needs and barriers, this study addressed situations and circumstances that take place regardless of socio-economic status and provided a glimpse into how one simple thing, having a reliable vehicle, can improve quality

of life. It is hoped that future research will adopt this tone, which in turn, may prompt policies that better the lives of individuals rather than reinforcing blame and causing guilt for needing assistance.

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