

## Financial Empowerment and Health Related Quality of Life in Family Scholar House Participants

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*Research demonstrates an association between poverty and health. Populations in poverty suffer from poor mental and physical health, and thus, poor health-related quality of life. Research also indicates people living in the lower socio-economic categories experience higher levels of stress that are associated with these health declines. Family Scholar House, a local community intervention designed to alleviate poverty and improve socio-economic status by providing college education and support to single parents, combats these health outcomes by addressing the five social determinants of health (economic stability, education, social and community context, health care, and neighborhood and built environment). Quantitative analysis indicates an improvement in mental health among Family Scholar House participants: 0-12 month participants reported significantly more mentally unhealthy days than a control group; however, this difference is no longer significant at the end of participant's time in the program. Qualitative analysis suggests this improvement may be due to stress reduction related to increased economic stability and financial security gained through an intentional implementation of a financial empowerment curriculum within the Family Scholar House program. Implementation of financial empowerment into community programs designed to alleviate poverty may improve mental health and thus health-related quality of life.*

*Keywords: quality of life; financial empowerment; mental health; poverty; community support*

In the United States, one of the wealthiest countries in the world, an alarming 50 million Americans are living below the federal poverty line; sixteen million are children (United States Census Bureau, 2012). The Family Scholar House (FSH) in Louisville, Kentucky, works to alleviate poverty with an aim “to end the cycle of poverty and transform our community by empowering families and youth to succeed in education and achieve life-long self-sufficiency” (Family Scholar House, 2014, para. 1). Established in 1995 as Project Women, the organization was formed with the purpose of assisting single mothers in breaking their cycle of poverty. Initially providing housing and educational assistance to one single mother, the program has grown considerably over the past 20 years and now serves hundreds of families each year. The intent of the program is to assist clients with achieving a Bachelor's degree. With this degree and the education, support, and empowerment provided by Family Scholar House, the participants hope to secure self-

sufficiency and reduce reliance on public assistance. Since the program began, 347 families, including 528 children, have lived in the Family Scholar House residential program. The participants have completed 93% of the college credits attempted and 75% have exited the program to stable employment. In addition, 100% of the participants exited the program into stable housing, a key factor of success, considering 100% of the participants entered the program homeless or with unstable housing (Family Scholar House, 2014).

The Family Scholar House is one of several community interventions designed to reduce poverty. People living in poverty situations face several barriers to achieving optimal health-related quality of life (HRQoL), which includes mental, physical, and emotion well-being (Adler et al., 1994; Backlund et al., 2007; Baker, Sudano, Albert, Borawski, & Dor, 2001). For example, an individual living in poverty more often lacks money to pay for physical therapy services, lives in an area where physical therapy clinics are few, and lacks the opportunity to drive or take public transportation to an alternative form of therapy, such as an outdoor walking trail. Resources, access, and opportunities that improve health-related quality of life are afforded to some members of society, but not to all (Wilson, 2009). When examining poverty and socio-economic status and the role they play in health outcomes, researchers have conducted studies on the disparities related to these specific factors. However, only within the last decade has an effort been made to collaborate among professionals from multiple disciplines to design, implement, and evaluate interventions through a lens that considers the complexity of the social determinants of health and how these factors influence health-related quality of life.

The social determinants of health include “the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness” (World Health Organization, 2008, para. 11). Specifically, Healthy People 2020 describes social determinants of health as economic stability, education, social and community context, health and health care, and neighborhood and built environment. These five determinants affect a person’s health-related quality of life in a variety of different, and often intersecting, ways (U.S. Department of Health & Human Services, 2014a). For example, research indicates that in the U.S., individuals in lower SES categories live in neighborhoods with higher crime rates (neighborhood and built environment) and are provided sub-par schooling (education). These components lead to a life trajectory commonly ending in either the prison system (social and community context) or a lower paying job (economic stability). The combination of these determinants ultimately creates poor health-related quality of life (Alexander, 2012; Guggenheim, 2010). Thus, in an effort to alleviate poverty and improve health-related quality of life, community programs, clinicians, and state agencies working with populations in poverty must address each of the social determinants of health. Support systems often focus on housing or health care, yet long-term economic stability, attained through financial empowerment, is still a new concept within the state and local agencies and community programs designed to assist populations in poverty. Thus, the specific aim of this article is to explore the relationship between financial empowerment and health-related quality of life in a community program designed to alleviate poverty by addressing the various social determinants of health, which includes economic stability.

## LITERATURE REVIEW

### Poverty, socio-economic status, and health

Health-related quality of life (HRQoL) is defined by the CDC as “an individual’s or group’s perceived physical and mental health over time” (Centers for Disease Control and Prevention, 2000, p. 5). Health-related quality of life is affected by both mental and physical health outcomes. Although a newer measurement of an individual’s health, studies indicating poor physical and mental health outcomes would also indicate poor health-related quality of life. Thus, studies examining health outcomes are also indicative of health-related quality of life. For the purpose of this article, physical and mental health outcomes are viewed as health-related quality of life outcomes.

Research has long shown the relationship between poverty, socio-economic status (SES), and physical and mental health (Adler et al., 1994; Backlund et al., 2007; Centers for Disease Control and Prevention, 2010; Nesbitt, Harris, Hall, & Pallam, 2012; Nobles, Ritterman Weintraub, & Adler, 2013; U.S. Department of Health & Human Services, 2014b; Wilson, 2009). The most commonly cited systematic review on socio-economic status and physical and mental health, by Alder et al., indicates a graded association of health at all levels of SES. Examining multiple variables associated with socio-economic status and health including psychological effects (hostility, depression), social ordering effects (one’s position in the SES hierarchy), and health behaviors (alcohol, smoking, physical activity) the authors found that as one’s SES improves, so does one’s health; as one’s SES declines, so does one’s health (Adler et al., 1994). Research also supports indirect associates between socio-economic status and health. Gallo and Matthews (2003) examined the role of low SES, negative emotions and cognitions, and physical health related outcomes providing evidence for an association between low socio-economic status and hostility, hopelessness, anxiety, and depression.

A complementary way to examine the role of socio-economic status in health is to consider income inequality (Lynch et al., 2005; Pickett & Wilkinson, 2007, 2015). Building on several previous studies that found that higher inequality relates to poorer population health (Lynch et al., 2000, 2004, 2005; Wilkinson & Pickett, 2006, 2007, 2008, 2009), researchers provided evidence to support a causal relationship between income inequality and poor physical and mental health outcomes (Pickett & Wilkinson, 2015). They utilized an epidemiological causal framework that considers evidence as a whole, rather than identifying individual study findings, to determine if exposure (income inequality) caused an outcome (poor health and well-being). The researchers found that 94% of the studies showed at least one association between income inequality and poor health, citing an inverse relationship between inequality and health and direct relationship between inequality and violence (Pickett & Wilkinson, 2015). Furthermore, they cited multiple studies that supported the role of chronic stress and poor health outcomes to demonstrate the effect of income inequality on health. The authors found evidence to suggest a causal connection between income inequality and physical and mental health (Pickett & Wilkinson, 2015).

## **Interventions**

With substantial evidence citing disparities in health among those in poverty situations, governmental programs to improve health-related quality of life of those in poverty have been in effect for several years. The supplemental nutrition assistance program (SNAP) and women, infant, and children program (WIC) were designed to improve physical health outcomes for U.S. citizens (United States Department of Agriculture, 2012, 2014). Other interventions, including housing assistance, tax relief, job training, and income assistance have also been implemented at both the state and federal levels (The White House, 2014). Brooks and Wiedrich (2012) used a ranking system to compare states based on policies designed to financially assist individuals and families living below 150% of the federal poverty level (e.g., providing funding for individual development accounts, protection from payday lenders, removal of asset limits on TANF and SNAP). The authors demonstrated that states with multiple and strong policies have individuals and families who are better suited to handle financial crises (e.g., The Great Recession) which may carry over into improved health-related quality of life (Brooks & Wiedrich, 2012).

## **Financial Empowerment Interventions**

Another intervention to alleviate poverty is through financial empowerment. Financial empowerment increases economic stability, which may reduce stress and improve health. Studies suggest that long-term economic stability may be achieved by providing the necessary knowledge for one to make sound financial decisions (Clark, Morrill, & Allen, 2012; Collins & O'Rourke, 2010; Danes, 2012; Gale, Harris, & Levine, 2012; Letkiewicz & Fox, 2014; van Rooij, Lusardi, & Alessie, 2012).

At the community level, a successful financial empowerment program to note is in New York (NYC Department of Consumer Affairs Office of Financial Empowerment, 2013). In 2006, with the creation of the Office of Financial Empowerment (OFE), New York City started a program to improve the financial health of its residents. The OFE set three overarching goals: "Empower individuals with low incomes by ensuring that they have sufficient knowledge to make financial decisions in their own best interest; increase financial stability in low income households by increasing assets, decreasing debts, and boosting incomes to help families meet their present and future needs; make NYC's financial marketplace safer by diminishing predatory practices and increasing access to appropriate and affordable products and services" (NYC Department of Consumer Affairs Office of Financial Empowerment, 2013, p. 10). Recognizing the need to make financial empowerment part of the many services available to low-income populations, OFE dictated financial empowerment be integrated into the existing social services. The Office of Financial Empowerment fostered strong partnerships with city agencies to ensure an understanding of the importance of financial empowerment of low-income families and individuals and then utilized pilot studies to demonstrate the positive impact of financial empowerment across the levels of social services. Data were collected via social service providers from client meetings and verified through bank statements, loan statements, and credit score print outs. Outcomes included, among others, debt reduction, increased

savings, and improved credit scores (NYC Department of Consumer Affairs Office of Financial Empowerment, 2013).

Following the lead of NYC, Louisville, KY, joined the Cities for Financial Empowerment (CFE) Coalition and began implementing financial empowerment training at the social service provider level across multiple city government agencies and local community partnerships, including the Family Scholar House. The Family Scholar House training included educating the case managers on approaches to working with their clients on budgets and cash-flow analyses. In addition, the case managers received training on behaviors of people in poverty, banking practices, lending institutions, and investment opportunities. Pre- and post-surveys given at financial empowerment trainings noted improvements in social service provider's financial knowledge, as well as confidence in discussing finances with their clients, both common barriers to assisting clients with financial empowerment (T. Lentz, personal communication, January 12, 2014).

At the Family Scholar House, this training was added to an existing curriculum designed to provide various support systems to the single parents as they work towards completion of a Bachelor's degree. Support provided by the program includes safe, affordable housing in a community of like-minded families, assistance with academics, and education on health, wellness, parenting, and finances. Residents are provided Section 8 housing, which reduces their rent to 30% of their income. To assist with educational costs, the campuses provide internet, computers, printers, and resources for scholarships and grants. Moreover, at no cost, the residents have access to apartment furniture, clothing for themselves and their children, and food.

In addition, Future Funds, a savings program where residents are required to put \$10 per month into an FSH saving account, provide the residents with a "safety net" when leaving the program. This money is returned upon graduation and can be combined with the Family Scholar home ownership program. With this program, residents save money towards purchasing a new home; this money is matched (or more) upon graduation (Family Scholar House, 2014).

Family Scholar House addresses each of the social determinants of health in an effort to reduce poverty and improve health-related quality of life. Research indicates multiple factors influence both individual and population health-related quality of life, and social determinants demand consideration when developing interventions designed to improve health-related quality of life. Specifically, little information is available on the role of financial empowerment within the social determinants of health and the impact on poverty reduction. Therefore, this current study contributes to the research gap by evaluating the Family Scholar House program within the framework of the social determinants of health, and exploring the role of financial empowerment on health-related quality of life.

## **METHOD**

In an effort to understand the effects of financial empowerment on health-related quality of life in a program that addresses the social determinants of health, the current study utilized a cross-sectional survey and focus group discussions. By better understanding the role of financial empowerment concerning health-related quality of life, social service providers can design and implement programs and interventions to serve individuals and populations living in poverty situations.

### **Sampling Procedure**

The population for the current study consisted of six sub-groups: pre-residential, residential (year 1, year 2, year 3, and year 4), and graduate Family Scholar House participants in Louisville, Kentucky. The survey and focus group discussions were approved by the University of Louisville's Institutional Review Board and endorsed by the Family Scholar House Program. At the time of data collection, there were 28 families in the pre-residence stage, 215 families in the FSH residential program, and 132 graduates. Utilizing Survey Monkey, a Scholar House administrator sent out a health-related quality of life survey, via email, to all the members of the categories listed above. To be in the program, participants must have a high school diploma or GED, thus the researcher assumed all participants could read and understand the survey. The Scholar House administrator also gathered demographic information on all the above participants. This information allowed the researcher to determine if the sample was descriptive of the Family Scholar House population.

In addition, the researcher examined data from the Behavioral Risk Factor Surveillance System (BRFSS) for single female parents in Louisville, Kentucky to serve as a control. BRFSS is a national telephone-based health survey utilizing, among other questions, the health-related quality of life survey.

The population for the focus group discussions consisted of the same FSH participants. In the emails sent to the participants, volunteers were requested, on the email and on the survey, to attend a focus group. The researcher offered an incentive of a \$20 gift card, dinner, and free childcare for focus group participation. A Family Scholar House administrator chose the dates and times for the focus group discussions. A doctoral candidate trained in the implementation of iterative thematic of qualitative analysis put forth by Bradley, Curry, and Devers (2007) led the discussion.

### **Respondent Characteristics**

Ninety-two single female parents responded to part or all of the online survey. Of these respondents, nearly 90% were in the residential program. The average age of the respondent was 27, with ages ranging from 18-45 years. The average number of children in each household was just under two. The majority of participants were in the Family Scholar House program for 13-24 months. Thirty-eight single female parents took part in the focus group discussions. Residents from each of the Louisville campuses were represented.

Based on demographics of the full Family Scholar House population, the sample populations were representative of the full FSH population.

## Instrumentation

For the online survey, the researcher utilized four core questions from the Centers for Disease Control and Prevention's health-related quality of life survey. The CDC and partners developed an assessment tool to measure HRQoL (Centers for Disease Control and Prevention, 2000; Moriarty, Zach, & Kobau, 2003). Criterion validity testing shows the HRQoL to be valid when compared to the "gold standard" of quality of life scales: the SF-36 (Moriarty & Zach, 1999). Test-retest reliability scored moderately to excellently reliable (i.e., 0.58-0.75; Andresen, Catlin, Wyrich, & Jackson-Thompson, 2003).

Anonymity of survey respondents was preserved through utilization of an online survey tool. Responses were anonymous. Confidentiality was preserved as no identifying information was given to the researcher. The Family Scholar House administrators emailed to FSH participants a link to the online survey.

Focus group discussions consisted of 10-15 participants for each group. These groups were held in a community room on a Family Scholar House campus and were recorded by the researcher. At the beginning of the discussions, the researcher explained the goal of hearing any and all viewpoints, re-assuring that there was no right or wrong answers to the questions posed, and that no identifying information would be utilized in the research study. To ensure representation from all campuses for the focus groups, discussions were held at three different Family Scholar House locations.

## Measurements

**Health-related quality of life questions.** The HRQoL measure consisted of the following four questions:

1. Would you say that in general your health is *excellent, very good, good, fair, or poor*?
2. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health *not* good?
3. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health *not* good?
4. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

**Financial empowerment questions.** The following questions were asked in the focus group discussions: From your perspective, what are some of the more important parts of the Family Scholar House program? What is different about your life after entering the Scholar House program? What do you do differently than you did before entering the Family Scholar House program? Has the program affected your ability to take care of

yourself financially? How? Have the financial success classes changed how you deal with your money? How? When you think about your health, what would you consider to be “good health”? Has your health changed since you’ve entered the program? How?

## **Analysis**

The data were positively skewed and therefore non-normal (failing an assumption of the tests used in this study). Thus, the data were transformed utilizing a log + 1 transformation (Howell, 2013). Analyses were computed with SPSS 21.0 (2012).

The researcher used a one-way analysis of variance (ANOVA) to test for statistical differences between the means of multiple groups. Participants were divided into five groups according to time in the Family Scholar House program (0-12 months, 13-24 months, 25-36 months, 37+ months, graduate) and a sixth matched Behavioral Risk Factor Surveillance System (BRFSS) group. Marital status (single), number of children in the household ( $\geq 1$ ), gender (female), age (18-49 years) and location (Jefferson Co. Kentucky) matched the BRFSS group. There were only two participants from the pre-resident group; no quantitative analyses were conducted with this sub-sample. The analysis tested for differences between the means of the six groups regarding the core four HRQoL questions.

The researcher transcribed, verbatim, the focus group discussions. Following the iterative thematic analysis methods put forth by Bradley et al. (2007), these transcripts were reviewed, coded, and organized into groups based on the support systems in place at the Family Scholar House (i.e., housing, academics, finances, community, health and wellness). Within these groups, the researcher organized specific quotes from the discussion group transcription into related themes. After this initial coding, a secondary coding process occurred. During the secondary coding process, the researcher looked for common themes among the data already present on the table. This process moved from a micro to a macro look at the data. A final thematic coding was presented to a Family Scholar House administrator for clarity and understanding, thus affirming and validating the data analysis (Bradley et al., 2007).

## **RESULTS**

### **Health-related quality of life**

A statistically significant difference was found in the number of mentally unhealthy days per month for the six groups,  $F(5, 137) = 3.4, p = .006, \eta^2 = .11$  (see Table 1). Pair-wise post-hoc comparisons using the Bonferroni test indicated that the log transformation of mean days of mental health score for the 0-12 month group ( $M = .84, SD = .53$ ) was significantly different from the mean days of mental health score for the BRFSS group,  $M = .43, SD = .51, t(5) = 1.77, p = .003$  (see Table 2). A second statistical difference was found in health ranking, *Excellent* (5) to *Poor* (1), for the six groups,  $F(5, 137) = 2.36, p = .04, \eta^2 = .08$  (Table 1). Pair-wise post-hoc comparisons using the Bonferroni test failed to find significant differences between the means. The mean health ranking score for the 13-24

month group ( $M = .66$ ,  $SD = .11$ ) was not significantly different from the mean health ranking score for the BRFS group,  $M = .57$ ,  $SD = .13$ ,  $t(5) = 1.54$ ,  $p = .067$  (see Table 3).

Table 1

*One-way Analysis of Variance for Differences in Group Means*

		df	Sum of Squares	F	Sig.
<i>Physical Health</i>	Between Groups	5	0.321 (0.064)	0.274	0.926
	Within Groups	136	31.864 (0.234)		
	Total	141	32.185		
<i>Mental Health</i>	Between Groups	5	4.564 (0.913)	3.41	0.006*
	Within Groups	137	36.669 (0.268)		
	Total	142	41.233		
<i>Activity Restriction</i>	Between Groups	5	1.634 (0.327)	1.505	0.193
	Within Groups	116	25.18 (0.217)		
	Total	121	26.814		
<i>Overall Health</i>	Between Groups	4	0.054 (0.011)	0.247	0.941
	Within Groups	136	5.952 (0.044)		
	Total	141	6.006		
<i>Health Rating</i>	Between Groups	5	0.184 (0.037)	2.364	0.043*
	Within Groups	137	2.132 (0.016)		
	Total	142	2.316		

Note. Sig. at  $p < .05$  level.

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Table 2

*Mean Scores, by Group, of Mental Health Days*

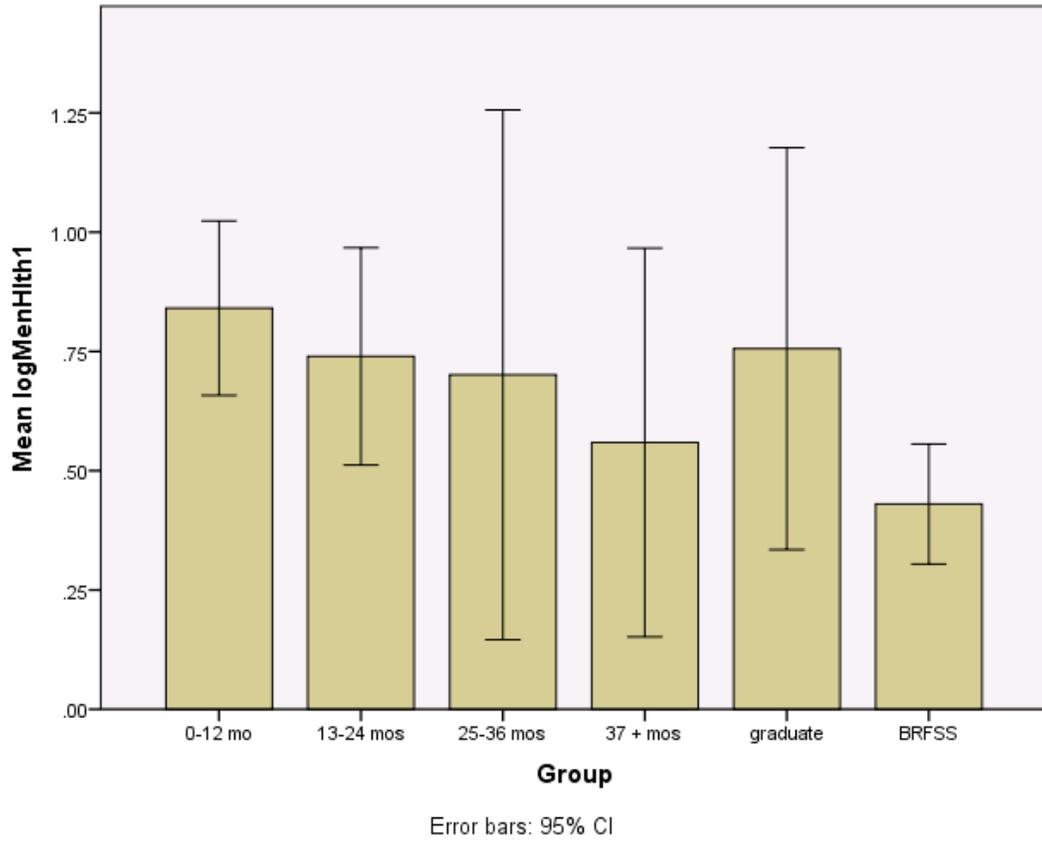
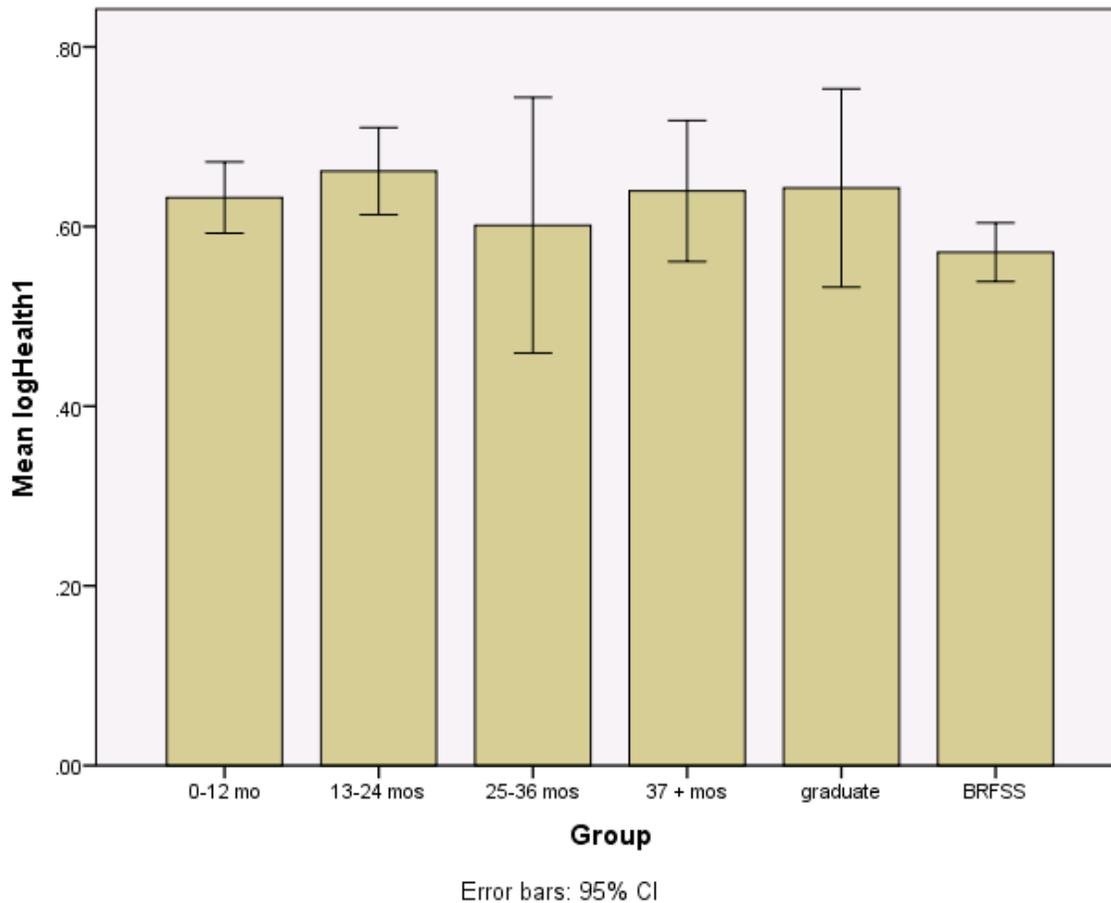


Table 3

*Mean Scores, by Group, of Health Rating*



### **Financial Empowerment and health-related quality of life**

Utilization of the Cumulative Inequality Theory (CIT; DiPrete & Eirich, 2005) assisted with understanding the resulting themes from the focus group discussions. Primarily, the main ideas of inequality leading to risk exposure and cumulative inequality leading to higher mortality rates provided a theoretical framework to explore the relationship between financial empowerment and the themes found in the discussion.

The primary theme to arise from the focus group discussions was stress reduction. The different components of the Family Scholar House program reduced stress in the participants' lives in a variety of ways. The following individual participation quotations (noted by italics) were a sample of the responses given for each question. Quotes were chosen based on their representativeness of the average responses of the participants.

*“Just being in this program alone has lifted a lot of stress. I mean, I still have my daily stress, everyone does. But I feel like this program has just lifted a lot off of my plate so I don’t have to worry about stuff all the time. Because of their support, I don’t have to worry.”*

*“Being in Family Scholar House kind of takes the edge off. You’re not so angry all the time, or bitter or frustrated with being in a situation you are.”*

The above quotations explained the stress reduction and subsequent mental health benefits provided by the Family Scholar House program. As stress of housing, finances, and money for school were relieved, participants noted mental health improvements in themselves. This finding follows the CIT model, demonstrating that the disadvantages faced by people in poverty situations may contribute to poor health-related quality of life. With the reduction of stress, mental health, a contributor to health-related quality of life, improved.

In addition, as the focus group questions became more directed towards finances, a secondary theme of being able to save money emerged. This contributed towards the reduction in stress and improved mental health of the participants.

*“I’ve been saving money and making better choices with my money. Family Scholar House has helped me with that a lot.”*

*“I’ve been able to save money for when I move out.”*

Several residents also cited the future funds program. With this program, participants were required to give Family Scholar House ten dollars per month that is placed into a fund for the resident. Upon leaving the program, this money is returned to the resident. Knowing that this money will be available upon graduation, residents commented on feeling secure and less apprehensive (noted as advantages in the CIT) about leaving the program, again improving the mental health of the participants.

Besides the future funds, residents had the ability to increase short and long-term savings within their overall budget due to lower rent and bills. With the monthly savings, residents paid cash for vehicles, saved money for homes, paid off debt and were able to stop living on credit cards.

*“They pay our internet and show you that you don’t have to have cable. That’s \$40 a month. You can do Netflix for \$8. They always make sure you know your options so you don’t put a financial strain on yourself.”*

*“Instead of always struggling, Family Scholar House showed me how to manage my money so I can pay for stuff that I need, like LG&E. I can get caught up and not be behind all the time or in debt.”*

Residents felt empowered by paying for big purchases (car) in full and noted security in having money set aside for unexpected bills such as car repairs or medical bills. These factors contributed to improved mental health afforded to populations with financial security. According to the cumulative inequality theory, advantages (seen in FSH as debt elimination, increased savings and financial security) improve opportunities for events that contribute to positive mental health and health-related quality of life. Residents were able to save money (advantage) and thus no longer faced significant financial risk with purchases or bills (opportunity). As a result, their mental and emotional stress decreased and their mental health improved.

In addition, several residents mentioned the support of Family Scholar House through “the basement” and holiday support. The basement contains food, clothing and furniture that are available to all participants. Some residents were able to get full living room sets, desks, and dressers as well as clothing for themselves and their children. The food pantry provided essentials towards the end of the month when money was scarce. Family Scholar House sponsors provide holiday family meals and gifts, alleviating the stress of proving extras and reducing debt accumulation commonly seen during the holiday season.

*“The food pantry is a very nice program. If I am low on food, I can go get cereal, canned goods, and things like that. It all helps a lot. Saves you money if you need to go grocery shopping.”*

*“At Thanksgiving, they will have free turkeys and free meals that you can come and pick up. And Christmas is one of the biggest things for people who celebrate Christmas and they can’t afford to get their kids anything. Somebody else provides everything for them. Just about anything you want.”*

The inability to provide necessities or holiday extras for themselves or their children was stressful. The Family Scholar House program provided these items (noted in the CIT as an advantage), improving the resident’s financial security, reducing stress, and improving mental health. Though residents did not improve their socio-economic status, the advantages provided by the Family Scholar House did allow them opportunities (holiday celebrations with minimalized financial stress) afforded to higher SES populations.

Finally, discussion arose regarding how the financial classes may have changed participant’s money management knowledge and skills. The ability to understand finances, including credit, banking, budgeting, and taxes was a common theme that surfaced.

*“They point out a lot of expenses that you don’t realize how much you’re spending until it’s pointed out to you. Like how much I spend on coffee. It adds up.”*

*“They have classes that teach you how to manage your finances which help you balance your rent and the utilities you have. These are things that maybe your parents didn’t teach you.”*

Residents, many for the first time, learned how to live on a budget, the difference between needs (LG&E bills) and wants (cable TV), and the different banking and credit card options. Being knowledgeable regarding their finances improved their financial empowerment, as they felt confident in their financial decisions. This, again, reduced stress due to unpaid bills or unexpected fees. As the participants better understood their options, they made wise financial choices. Thus, their financial struggles were better controlled, empowering the residents and improving their mental health.

## **DISCUSSION**

Using a health-related quality of life survey, the current study noted improvements in mental health days, a contributor to health-related quality of life outcomes, and the general health rating among Family Scholar House participants. Upon graduation from the Family Scholar House program, resident's mental health and general health rating were no longer significantly different from a comparison group. In focus group discussions, a common theme of stress reduction emerged. People living in the lower SES categories experience higher levels of stress that are associated with poor mental and general health (Backlund et al., 2007; Gallo & Matthews, 2003; Myers, 2009). More specifically, mothers report fatigue and chronic mental and physical health problems resulting from financial strain, parenting stress, and lack of support (Oyserman, Bybee, Mowbray, & Kahng, 2004; Schwartz, Bybee, Spang, Rueda-Reidl, & Oyserman, 2000). Following the Cumulative Inequality Theory, the Family Scholar House support alleviated several inequalities previously faced by the residents (i.e., housing, education, health and wellness, community support, economic stability). This reduction of inequality may have contributed to stress reduction, financial security, financial empowerment, and thus, an improved state of mental health.

Focusing primarily on the stress reduced due to economic stability (one of the social determinants of health), the residents were not as anxious about life during or after the program. The advantages provided by FSH reduced the stressors commonly noted among populations in poverty. First, the resident knew they had money put aside in their Future Funds account and trusted that these funds would support them as they transitioned out of the Family Scholar House apartments and into a new career and possibly a home of their own. Second, saving money outside of these funds also reduced stress by giving residents the opportunity to purchase larger items with cash, eliminating the monthly credit card bills. One resident paid cash for her first car; other residents commented on the ability to buy items for their apartment, their children and themselves without having the worry of debt accumulation. Third, residents noted the stress reduction that would normally arise from unexpected bills. Car repairs or medical bills were not as devastating. As one resident noted, "I didn't want to spend the money on getting my car fixed, but I had it to spend." Fourth, with money saved and debt paid off, residents could use tax returns for something other than bills; again, a first for many of the residents.

The saving of money came not only because of the financial support provided by the Family Scholar House, but also because the financial success classes enabled the residents to manage their money, ensuring that bills were paid on time and expenditures were

prioritized and stayed within the monthly budget. As one resident commented, “I had no idea how much money I was spending on buying coffee each morning. Now I own a travel mug and a coffee pot. And that saves me money each month.” Multiple components of the Family Scholar House program work to address the social determinants of health, including economic stability, and alleviate stress caused by limited finances. These findings support research on financial literacy where behavior changes, such as increased savings and decreased debt, are seen as positive financial health outcomes (Grimes, Rogers, & Smith, 2010; NYC Department of Consumer Affairs Office of Financial Empowerment, 2013; Phillips & Stuhldreher, 2011; Rothwell & Han, 2010; Willenbrink, 2015).

This study adds to the current literature regarding social determinants of health, as well as financial empowerment. Health improvements were found in a program that addressed each of the social determinants of health, with a specific curriculum related to economic stability. Due to improved financial stability, residents had reduced stress and anxiety levels related to their financial circumstances. Thus, at the clinical and programming level, education and guidance on financial security and the subsequent financial empowerment needs consideration. Social workers assisting clients with food stamps or housing vouchers need to provide education on budgeting, debt reduction and other concepts of financial security. In addition, programs designed to work with impoverished populations, such as the various city and state agency programs, must consider and address all the social determinants of health if true reform is expected. As demonstrated by the mental health improvements seen in the Family Scholar House participants, financial education, empowerment, and security are essential to improving the overall health of impoverished populations.

### **Limitations**

This study is not without limitations. Primarily, the design of the study limits the generalizability of the findings. As the participants were all from one intact group and voluntarily chose to be in the study, random selection was not utilized therefore the results cannot infer causation nor be expected in other populations. Resources may inhibit researchers’ abilities to address this limitation. Therefore, other programs designed to alleviate poverty should be examined to note similar findings.

A second limitation is due to cross-sectional data collection. This method may fail to give a true reflection of participants’ state of health. Future studies should address this limitation by tracking the participants from program entry to exit, collecting data at specified periods over the long-term to note possible trends and ensure results truly reflect the population.

### **Conclusion**

The Family Scholar House program, with a mission of alleviating poverty by increasing self-sufficiency, addresses each of the five social determinants of health, including a curriculum that focused on economic stability. Findings from this study suggest that the various supports put in place by the Family Scholar House program reduce stress,

which may improve the mental health of the residents. Specifically, data suggests that the increased financial knowledge, empowerment, and stability reduced stress levels and improved mental health among the Family Scholar House residents. State agency programs and social workers in clinical environments educating and guiding people in poverty need to address all the social determinants of health if poverty is to be reduced and health improvements noted. Minimally, community support programs, clinicians and caseworkers should include financial empowerment curriculum as a component within the resources currently being provided to populations in poverty.

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