SELF-RATED HEALTH, HAPPINESS, & DEPRESSION: THE ROLE OF EXPERIENCING FINANCIAL HARDSHIP ON PARENT'S WELL-BEING

By

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ABSTRACT

Studies about child outcomes tend to look at parents as a primary variable of interest. Partially influenced by Conger's Family Stress Model (FSM), the present study examines the relationship between experiencing financial hardship and parent's well-being (i.e., physical health, happiness, and depression). FSM suggests that negative financial events will increase economic pressure which will have a negative effect on parents' well-being (i.e., depression) and their relationships with their children and partner. Therefore, this paper explores (1) whether the relationship between financial hardship and parent's depression could be moderated by public assistance services ;(2) whether experiencing financial hardship would have a negative effect on parent's self-rated (physical health) and happiness. Utilizing waves 1,3,4, and 5 of The National Longitudinal Study of Adolescent to Adult Health, the results indicated that financial hardship impacted parent's physical health, happiness, and depression differently.

KEYWORDS: Family Stress Model, Parent's Happiness, Parent's Depression, Parent's Physical Health, Financial Hardship, Child Outcomes

This thesis is dedicated to
My sister, Mayra Alejandra Cortes & mi abuelito, Papá Lacki.

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INTRODUCTION

In countries like the United States, there is a legal and social expectation of parents to provide care (e.g., emotional, financial support) for their child(ren) up until the age of 18. This may not be possible and/or true for all families, as research finds that many live below the poverty line or in inadequate housing, are affected by food insecurity and/or water conditions, and others have separated as a result of legal sanctions (Warren & Font, 2015; Alaimo et al., 2020; Turney & Halpern-Meekin,2020). Parents continue to be of interest and are criticized when they fail to provide for their children. When children behave in unpleasant or unexpected ways, parents may be the first to be blamed for said behaviors.

However, research has found a relationship between psychological distress, such as depression, frustration, and anxiety, among parents that consistently experience poverty and/or economic loss, associated with less responsive parenting (McLeod & Shanahan, 1993; McLoyd, 1990). Additionally, children of food insecure homes may experience behavioral problems and it may impact their academic achievements. Children experiencing food insecurity have higher rates of externalizing and internalizing behaviors such as aggression, depression, and anxiety (Tolbert Kimbro & Denney, 2015). The U.S Department of Agriculture (USDA) reported that in 2020, 14 million households did not have enough food. During the month of June 2020, 11.6 million households with children under the age of 18 reported not having enough food to eat during the week.

Research related to children's well-being and/or outcomes often looks at parent's socioeconomic status, parent education level, history of drug use in the family (i.e., the influence of parent and sibling's drug use), and race and ethnicity (Scholte et al., 2008;

Kothari et al., 2014). Although all the aforementioned variables are important, they all fail to examine a crucial factor that is relatable to all parents – *their* well-being[1]. A parent's well-being is important, not only for themselves but those around them, as they are expected to provide care for their children or others, such as their own parents. Parents' well-being may affect how they interact on a daily basis with their children – resulting in different parenting styles and parenting behaviors (e.g., depressive moods) (Conger, 2002).[2] Parentification[3] is an example of how the parent-child relationship is impacted due to the parent's well-being. Similarly, child-centrism[4] impacts parent's well-being. However, it is a result of the parent's motivation to maximize their child's well-being even at the cost of their own well-being, as opposed to parentification in which parents do not prioritize the child (Ashton-James et al., 2013).

Parents play a significant role in their child's development as their well-being can impact the overall upbringing of the child. Research suggests that parentified children often come from "unbalanced family systems" and/or "dysfunctional homes" in which there is a history of drug use, abuse, food deficiencies, divorced and/or there is a single

[1] Emotional, mental, and physical well-being.

[2] By parent-child relationships I refer to parenting behaviors (e.g., control, monitoring, warmth, discipline) and parenting styles (e.g., authoritative, permissive, authoritarian, neglectful).

[3] Boszormenyi-Nagy & Spark (1973) introduced the term parentification in which the parent-child relationship may consist of the child adopting adult-like responsibilities (Rana & Das, 2021). Research suggests that parentification is common among families with a history of sexual abuse, low-socioeconomic status, illness, addiction, separation, divorce, and single-parent households (Barnett & Parker, 1998; Earley & Cushway, 2002; Macfie, McElwain et al., 2005; as cited in Rana & Das, 2021). There are mixed findings of the effects of parentification on children's development, however, scholars have distinguished the impact of parentification depends on the *extent* to which it consumes the child's life. Some research has found that parentification can contribute to children's ability to recover from adversity and develop functional coping as result but only if parentification occurs short-term. In contrast, when parentification becomes a *stable* aspect of families it may hinder children's development.

[4] Ashton-James et al., (2013) describes child-centrism as parents that prioritize their child's well-being over their own. Parents will place their children at the center of their lives, including emotional, temporal, financial, and attentional resources. As a result, parents may sacrifice their own pleasures and pursuits.

parent (Engelhard, 2012). It is important that parents are capable and able to care and provide for their children (i.e., emotionally, financially, physically, etc).

In addition, parent outcomes also differ across communities and/or groups (i.e., race and ethnicity, economic status, employment status). Parents may not always have immediate access to financial means to provide for their children (*or themselves*). This can have additional short-term and long-term consequences such as parentification, parent's working long hours, accumulating debt, and/or lacking everyday basic necessities such as housing and food (Nepomnyaschy et al., 2012; Warren & Font, 2015; Alaimo et al., 2020). Therefore, as parents continue to be a primary of point of interest in child development, parents' well-being should also be taken into consideration.

The present study examines the relationship between financial hardship and parent's well-being, specifically, physical health (i.e., self-rated), happiness, and depression. Additionally, public assistance is included to measure whether it moderates the relationship between financial hardship and parent's being diagnosed with depression. Although, the present study does not focus on child or adolescent outcomes, through the use of longitudinal data – the study illustrates how experiencing financial hardship in wave 3 (ages 18-26) may or may not have detrimental effects on parent's physical health, happiness, and depression in wave 5 (ages 33-43).

Generally, studies about parent's well-being focuses on parental depression and stress (Nomaguichi & Milkie, 2020). Parental depression has shown to impact children's academic, social, physical, and psychological outcomes (Gladstone et al., 2015; as cited in Reupert et al., 2015). Children of depressed parents are likely to become depressed themselves (Gladstone et al., 2015). Parental depression can affect a whole family's functioning that can dramatically affect parent-child relationships and marriages. For

example, there may be changes in caregiving, family cohesion, and increased marital conflict (Smith, 2004; Cummings et al., 2005; Fendrich et al., 1990; as cited in Gladstone et al., 2015). Although parental stress and depression are significant in understanding parent's well-being, the present study also examines parent's happiness and physical health (i.e., self-rated), which has not as often been studied.

Studies about parents' happiness tend to look at marital happiness and parental happiness in comparison to non-parents, as opposed to a parent's happiness in general. Studies report that parenthood in Western societies is negatively associated with happiness or provides no additional happiness in relation to non-parents (Connids & McMullin, 1993; Dykstra & Wagner, 2007; Hansen et al., 2009; Korpeckyj-Cox et al., 2007; McLanahan & Adams, 1987; as cited in Chao & Glass, 2020). Parents in Western societies are more likely to report depression, marital dissatisfaction, financial burdens, and work-family conflict. Theories of stress and mental health suggest that the emotional and financial costs associated with parenthood outweigh the emotional rewards of having children (Pearlin, 1989; Nomaguchi et al., 2005; Pollmann-Schult, 2014). Additionally, research related to parents' physical health tend to focus on specific health conditions such as diabetes, parents influence on the physical activity of their children, and the health of caregiving parents of disabled children (Helgeson et al., 2008; Welk, Wood, And Morss, 2003; Berge et al., 2011; Beresford et al., 2007). In contrast, the present paper includes a parent self-rated health measure of their general physical health[5]. The purpose in including a measure for parent's self-rated health is (1) to gain a general understanding of how parents perceive and measure their own health

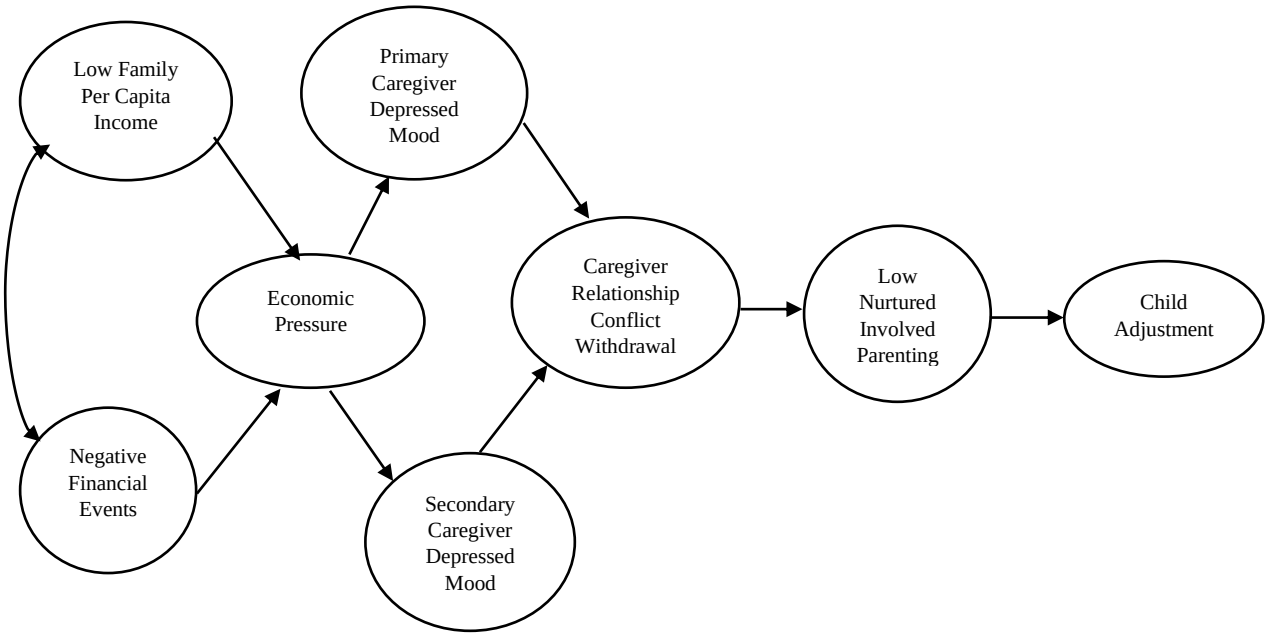
[5] I utilize self-rated health and physical health interchangeably.

(especially those that experience financial hardship) and (2) to address the gap in the literature that has generally focused on specific health or familial conditions.

As various aspects of a parent's well-being can affect their children's development, the present study is partially influenced by Conger's Family Stress model (FIGURE 1), which takes into consideration economic pressure, financial hardship, parent's depressive mood, parent's relationship/conflict, and child outcomes. However, the present study does not include parent's relationship/conflict or child outcomes in the analyses. Although I do not include specific child outcomes, the longitudinal data utilized is based on participants that were once adolescents (wave 1), young adults (wave 3), and adults themselves (i.e., wave 4-5). Utilizing the National Longitudinal Study of Adolescent to Adult Heath (Add Health), I aim to focus solely on parent's, specifically, to examine how financial hardship impacts parent's own well-being (i.e., physical health, happiness, and depression). Additionally, I aim to explore whether receiving welfare moderates the relationship between experiencing financial hardship and being diagnosed with depression later on.

THEORETICAL FRAMEWORK

Figure 1. Conger's Family Stress Model.



The development of FSM was influenced by the farm crisis in Iowa in the 1930s and the Berkowitz frustration-aggression hypothesis. The Berkowitz frustration-aggression hypothesis suggests "many stressful, frustrating, punishing, or painful events and conditions are lawfully related to increased emotional arousal that varies from despondency to anger in humans and other animal species" (as cited in Conger et al., 2000). Studies were also finding that among families from rural areas there was an increase in both health and behavioral problems which were known to be associated with economic hardship (Conger et al., 2000).

Drawing from Berkowitz hypothesis and the outcomes of rural families, Conger et al., (2000) developed the Family Stress Model (FSM) which aims to "identify pathways in which detrimental outcomes may occur, as well as biological, psychological, and social resources or vulnerabilities that may reduce or intensify the economic stress process" (p. 204). FSM suggests that economic hardship (e.g., severe income loss,

increase in resource demands, and chronic disadvantage) will increase economic pressure (i.e., handling stressful economic conditions such as being unable to meet basic needs or pay bills) that will have a negative effect on parents' well-being and the relationships with their children and partner) (Landers-Potts et al., 2015). Ultimately, the model aims to explore whether experiencing economic hardship leads to economic pressure, and whether it affects parent's emotional distress, marital conflict and stability, contributing to parents' ability to parent (i.e., parenting becoming disrupted), and impacting adolescent maladjustment outcomes.

A primary focus of the model is to explore whether experiencing economic hardship and pressure disrupts the marital relationship. Common themes among the Iowa participants were time pressures, demoralization, and conflict among the couples that were economically distressed (Conger et al. 2000). To further understand how financial hardship impacts the marital relationship, Conger includes this as primary pathway. At the time of the model's development, findings related to marital relationship were inconsistent. Some scholars found no significant correlations between economic strain and marital happiness, while others found that income loss was positively associated with marital tension later on (Perrucci & Targ, 1988; Liker & Elder, 1983; as cited in Conger et al., 2000). Consequently, FSM found that couples with serious financial challenges experienced more marital dissatisfaction and instability.

Another important pathway of FSM is whether or not the marital conflict negatively affects adolescent adjustment. Their findings concluded that there were gender differences among boys and girls. Specifically, parent's depressed mood had a negative effect on girls' competence, self-confidence, relations with friends, and academic competence (p. 211). In contrast, mothers or fathers' emotional distress did

not have a direct effect on boys' competence. Ultimately, the findings indicate that parent's emotional distress is a significant link between economic challenges and adolescent maladjustment (p. 211).

Since Conger's development of the model, scholars have adapted the model to focus on specific groups or traits. Most studies that adapt FSM focus on the child or adolescent outcomes. Additionally, most studies have used cross-sectional data (Neppl et al., 2016). In contrast, the present study utilizes longitudinal data and does not focus on a specific group, child, or adolescent outcomes. The primary focus of the present study is to explore whether receiving public assistance moderates the relationship between economic hardship and parent's well-being (i.e., physical health, happiness, and depression). Thus far, there are a few studies that have examined the role of public assistance. However, these studies aim to explore whether public assistance moderates the relationship between economic pressure and child or adolescent outcomes. For example, Holmes et al., (2020) evaluated FSM among Black women receiving Temporary Assistance for Needy Families (TANF). The study focused on parents' depression and how it impacts parenting quality and child outcomes. They assessed whether public assistance support (i.e., TANF) served as a potential protective factor. The study found that receiving TANF did not significantly moderate the relationships between economic pressure and maternal depression, but it did have a direct effect on maternal depression (p. 2667). Similarly, Munger et al., (2016) found that SNAP benefits did not reduce the probability of depression. Losing SNAP was associated with an increased probability of depression, and obtaining SNAP was associated with a reduced probability of depression. Even though, Conger's model influenced the present study, the secondary caregiver and child outcomes were not measured in this paper.

Instead, the primary focus are parent's outcomes when experiencing economic hardship, and whether receiving government assistance can moderate parent's well-being (i.e., depression).

LITERATURE REVIEW

Research about parenting and economic disadvantage has focused on parental depression (Newland et al., 2013). Literature discusses parents' well-being in terms of their emotional distress, depression and conflict, efficacy, and life dissatisfaction (Neppl, Senia, Donnellan, 2016; Neppl, Jeon, Schofield, & Donnellan, 2015; Landers-Potts, et al., 2015). Stanca (2011) investigated the negative effect of parenthood on well-being which may be explained by the negative impact of having children on financial satisfaction. Herbst et al., (2016) found evidence that parents' happiness increases over time as opposed to non-parents' happiness which decreases.

Literature about parent's happiness has focused on comparing their happiness to non-parent's and/or their child's happiness as an outcome, as opposed to the parents' own happiness. Examples of studies that describe "parent's happiness" examine whether being a parent provides or deteriorates happiness. Specifically, whether parents are more or less happy after having children; or whether parents are happy in their marriages and/or with their partners; or whether their child is happy with the parents' parenting, and/or examining the happiness of parents that have a child with Autism (Herbst et al. 2016, ; Finke et al., 2019). Current research on "parent's happiness," has found that parents are less happy compared to non-parents, however, it depends on the social context (i.e., types and level of support that the country provided to help raise children) (e.g., Glass, Simon, & Anderson, 2016; as cited in Nomaguchi & Milkie, 2020). Therefore, the present study examines parent's happiness not in comparison to non-parents and/or their child outcomes, or life before becoming a parent, but rather how parents perceive their own happiness (especially when experiencing financial hardship).

Studies focused on physical health tend to focus on specific type of chronic conditions as opposed to parent's physical health in general. Aaskoven et al., (2022) suggests that negative health shock[6] can pose challenges for the parent but also the child, partner, and extended family. The effects can have a result on child outcomes. Aaskoven et al., (2022) investigated whether parental health had an impact on children's final grades at three points, end of basic school, commencement and completion of secondary school. The study found that students grades decreased when there was a parent with cancer. Additionally, the more severe cancer the more adverse effects among those children when the parents' prognosis is poor. Lykke Kristiansen (2021) found that parental health events (i.e., cancer diagnoses and acute cardiovascular disease, and all causes of death) in childhood had a significant effect on children's mental health and educational outcomes. Their results indicate that children who experience any of the aforementioned during childhood are more likely to have parents that have lower incomes, lower levels of education, and are older at the time of child birth. Additionally, these children are less likely to enroll in school after ninth grade and have a higher probability of getting into therapy than children whose parents do not experience a parental health shock. It is evident that parent's physical health can have detrimental effects on not only their well-being but also their children's, both short-term and long-term. Although the aforementioned studies did not explore parents' health in general, they illustrate how parent's health should be included in studies about children's outcomes, as well as the parenting literature.

[6] Aaskoven et al., (2022) defines parental health shock as the first occurrence of a cancer.

According to Nelson et al., (2014) the association between parenthood and well-being has been of interest among sociologist, psychologists, and economists. However, research about parenthood and well-being has been inconsistent. In a comprehensive review of parenthood and well-being, Nelson et al., (2014) describes the *when* and *why* parenthood has been associated with high or low well-being. They distinguish between three types of studies that have aimed to further explore parenthood and well-being; (1) compares parents and nonparents, (2) parent's well-being across the transition to parenthood and (3) comparing parent experiences when they are with their children (p. 2). Among the three types of studies, results are conflicting. Some studies suggest that parents are happier than non-parents, other studies suggest the opposite (Glenn & Weaver, 1979; Nelson et al., 2013; as cited in Nelson et al., 2014).

THE IMPACT OF ECONOMIC HARDSHIP ON PARENT'S WELLBEING

Wealth inequality can contribute to parents overall socioeconomic status. Nepomnyaschy et al., (2021) describes wealth inequality as a result of factors such as steady wages, increased cost of housing, child care, education and healthcare, and easier access to credit (Mishel, Gould, and Bivens, 2015; Rona-Tas & Guseva, 2018; as cited in Nepomnyaschy, 2012). To compensate for the lack of wealth, families may seek outside resources such as credit cards or loans to make up for the absence of basic necessities. However, not all families have access to the aforementioned resources as economically disadvantaged groups may not meet eligibility requirements.

In the U.S many families have benefited from public assistance programs such as food stamps, welfare, and public housing. Generally, the aim of public assistance services has been to provide public *relief* through cash assistance or in-kind benefits to individuals and families. According to the U.S Census, there are two types of public assistance programs, social welfare, and social insurance. There are eligibility requirements, as well as sanctions when individuals do not keep up with their end of the agreement when they signed up for the program. Social welfare programs are usually based on low income while social insurance programs are based on criteria such as age, employment status, or being a veteran (U.S Census Bureau, 2022). [7]

The Add Health dataset includes variables regarding public assistance services. Conger's Family Stress Model (p. 4) suggests that negative financial events (e.g.,

[7] Examples of social welfare programs are the Supplemental Security Income (SSI), Supplemental Nutrition Assistance Program (SNAP), Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and General Assistance (GA). Major, federal, state, and local social insurance programs are Social Security, Department of Veteran's Affairs benefits, Unemployment Insurance Compensation, and Workers' compensation.

unemployment) and/or low family per capita income can result in economic pressure which may then impact parents' depressed mood and familial relationships. Influenced by this model, I aim to examine whether receiving public assistance services (wave 4) moderates the relationship between experiencing financial hardship (wave 3) and well-being (wave 5). Although the aim of public assistance is to provide relief, I hypothesize that it will not moderate the relationship.

PRESENT STUDY & DATA

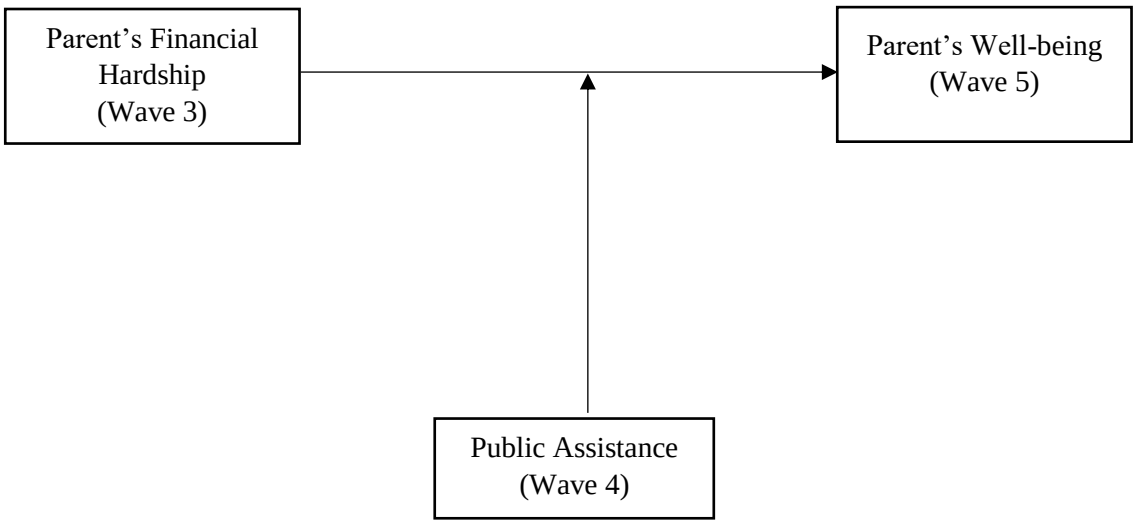
As a majority of research has focused on parental depression, cross-sectional data, and focus on child outcomes, the present study utilizes longitudinal data to explore parents' well-being in terms of happiness, physical health, and depression. Add Health has collected five waves of data since 1994. This study utilizes the public data, specifically, variables from waves 1, 3, 4, and 5. In the first collection of data, the participants were adolescents, in grades 7-12. Wave 3 data collection took place during 2001-2002 in which the participants were young adults, ages 18-26. Wave 4 data collection took place 2008-2009 in which the participants are adults, ages 24-32. Wave 5 data collection is the most recent which took place in 2016-2019, participants are ages 33-43 (Harris et al., 2019). Specifically, by looking at how the 'young adults now as parent's themselves, describe and/or rank their physical health (i.e., self-rated), happiness, and depression. Additionally, the Family Stress Model partially influences the present study. I include public assistance measures to see whether it can moderate the relationship between depression and financial hardship (FIGURE 2). The number of cases in the present study varied by the analysis.

HYPOTHESES

1. Experiencing more financial hardship will negatively affect parent's physical health (i.e., self-rated health).
2. Experiencing more financial hardship will negatively affect parent's happiness.
3. Parents that experience financial hardship are more likely to depressed than parents that do not experience financial hardship.
4. Receiving any public assistance, welfare payments, or food stamps will have little to no effect between financial hardship and parent's depression (FIGURE 3).

Based on previous studies guided by FSM that examined the role of welfare services, I hypothesize that receiving public assistance services will have little to no effect between financial hardship and parent's depression (Holmes, 2020; Munger et al., 2016).

Figure 2. Present study model.



MEASURES

Control Variables

Race – Wave 1

Race and ethnicity is measured in wave 1, similar to the census, respondents were asked about their ethnicity and then asked about their race. People who said yes to the question *Are you of Hispanic or Latino origin?* Were coded 1 = yes and 0 = no coded (regardless of race). Following the ethnicity question, participants were asked *What is your race?* The racial groups include, Black, Native, Asian, and Other Race.

Generally, research that includes racial and/or ethnic variables utilize the White (n=3,720) variable as the reference and/or comparison point. However, the variables in the present study included Black, Native, Asian, Hispanic, and Other Race. Variables were coded 1 and 0, in which 1 = the respective racial group and 0 = all other race(s). White was omitted. There was a total of 6,504 responses. Among each group Black respondents made up 1,584; Native = 131, Asian = 246; Hispanic = 760; and Other Race = 55.

Sex – Wave 1

Respondents were asked about their sex. Sex was coded from wave 1, coded 0 = female, 1 = male.

Parental status – Wave 4

The parental status variable is calculated from the total number of live births parents had. That is, whether or not participants have had at least one child whether it was through cesarian and/or a natural birth. Before recoding the variable, responses range from 0-7 or more live births. I recoded the variable to be binary to determine whether individuals had ever been a parent to at least 1 or more child. I relabeled the

variable to ask *Ever been a parent?* 0 = No and 1 = Yes. Responses 1-7 made up 1 = Yes. Upon recoding the variable, a total of 2,602 responses made up 1 = Yes and 486 responses made up 0 = No. This measure only consists of biological children.

Bays (2016) suggests that the decision to not have children can differ among individuals. Specifically, some may choose to be child free and therefore rely on contraceptives. Bays also describes individuals that may want to have children but are unable to (e.g., infertility) as involuntarily childless. The present study does not make the distinction between childfree and involuntarily childless individuals, instead, parental status was determined by whether or not the individual has had at least one child (regardless of the method in which the child was birthed – cesarean, natural birth). Additionally, this study does not include non-biological children.

Moderator

Welfare – W4

Wohlenberg (1976) suggest that there are several criteria that can be used to measure public assistance programs effectiveness. For example, the total number of recipients, total number of recipients who are poor, percentage of poor who are recipients, the ratio of potential recipients, and the average payment per recipient. The present study includes public welfare to determine whether it can effectively moderate the relationship between financial hardship and parent's depression. Like Wohlenberg, the present study determined whether families received public assistance by utilizing a measure that focuses on those that are recipients. Additionally, the Add Health dataset does not have other measures for determining individuals use of public assistance, (e.g., the ratio of potential recipients or the average payment per recipient).

Therefore, to determine the use of public assistance services the measure was *between 1995-2002 and 2006,2007, and 2008; did you or others in your household receive any public assistance, welfare payments, or food stamps?* The variable was coded 1 = Yes, 0 = No. The variable indicates that of 5,102 responses; 3,860 did not receive any form of public assistance while 1,242 respondents did.

Independent Variable

Financial Hardship – W3

The financial hardship variable (wave 3) served as the independent variable of the present study. Financial hardship was determined by the following seven questions which were: (1) *In the past 12 months, was there a time when you were/your household was without telephone for any reason?* (2) *In the past 12 months, was there a time when you/your household didn't pay the full amount of rent or mortgage because you didn't have enough money?* (3) *In the past 12 months, was there a time when you were/your household was evicted from your house or apartments for not paying the rent or mortgage?* (4) *In the past 12 months, was there a time when you/your household didn't pay the full amount of a gas, electricity, or oil bill because you didn't have enough money?* (5) *In the past 12 months, was there a time when you/your household had the service turned off by the gas, electric company, or the oil company wouldn't deliver because payments were not made?* (6) *In the past 12 months, was there a time when you/someone in your household needed to see a doctor or go to the hospital but didn't cause because you/they could not afford it?* (7) *In the past 12 months, was there a time when you/someone in your household needed to see a dentist but didn't go because you/they could not afford it?* The variables were coded where 0 = No and 1 = Yes. The range of responses are 0-5 (due to low responses

observations for questions 5-7 were combined) for each variable and higher scores indicate more financial hardship.

Bradshaw & Ellison (2010) suggest that financial hardship has been measured using 'objective' variables such as monetary income and the presence or absence of material, social, and psychological resources. More recent studies, however, take a subjective approach in which subjective class identification is used to measure financial hardship. Similarly, the present study uses measures that focus on monetary income, specifically, whether parents have enough funds to support themselves and household needs.

It is important to note that most studies about economic hardship tend to emphasize the ways in which it impacts families, specifically, parents stress and/or involvement in parenting their child(ren). Such studies do not clearly describe how 'financial hardship' is being measured. Sobolewski & Amato (2005), describe economic hardship as "trying to make ends meet with insufficient income which leads to perceptions of hardship, including feelings of stress and general dissatisfaction with one's financial situation" (p. 142). Bronfenbrenner (1986) describes economic hardship as economic loss which then effects parents support, consistency, and involvement (as cited in McLoyd, 1990). Similarly, to Sobolewski & Amato, the measures in the present study illustrate whether parents are able to make ends meet, specifically, by asking questions such as whether they were able to pay bills on time, had services turned off, and/or whether they were unable to get services when necessary such as a dental or hospital visit. The range of questions examine different aspects that are essential to one's well-being such as having a functioning home and being able to get medical attention.

Dependent variables

Parent's well-being – Wave 5

Studies that examine health, whether that is mental, physical, and/or certain conditions suggest that the validity of questions and/or scales depends on factors such as who the participants are. Carvajal et al., (2010) suggest that health studies should aim to collaborate with the participants to assert that the questions and/or scales are cognitively appropriate. Furthermore, Stewart-Brown (2013) points out that among different groups there may be a mutual understanding of well-being, but there are also some differences. One of those agreements is that well-being consist of various factors such as the mental, social, and physical. However, among the social sciences, well-being may also entail happiness and/or questions about life satisfaction (ONS; 2011a; as cited in Stewart-Brown, 2013).

This study included three basic questions to measure parent's well-being. The parent well-being measures were from wave 5. To measure for parent's physical health, the question asked *How is your general physical health?* responses consisted of 1= excellent, 2 = very good, 3 = good, and 4 = fair or poor. To measure for parent's happiness, the question asked *During the past 7 days, I was happy*. Responses consisted of 1= never or sometimes, 2 = a lot of the time, and 3 = most or all of the time. Lastly, parent's depression was measured with a binary variable which asked, *Ever been diagnosed with depression?* In which 0 = No and 1 = Yes. The aforementioned questions were appropriate measure of well-being since these same questions were asked of the participants in prior waves of data collection. Additionally, the questions and scales were not overly complex.

DATA ANALYSIS

To complete the analyses, Stata/SE 17 software was utilized (Statacorp, 2021). The first two hypothesis were assessed by a series of ordinary least squares. First, the financial hardship measure was regressed on the control variables. Next, financial hardship and the control variables were regressed with the dependent variables, physical health (hypothesis 1) and happiness (hypothesis 2). To test the third hypothesis a logistic regression between financial hardship and the depression measure were completed. For the fourth hypothesis, a moderation analysis was completed, in which, welfare is the moderating variable between financial hardship and depression (FIGURE 2).

RESULTS

Table 1 shows descriptive statistics of the variables. Table 2 shows the correlations of the control, predictor, and outcome variables. Table 3 shows results of the OLS regression of physical health and happiness on financial hardship. Table 4 shows results for the OLS regression when other variables such as race, sex, and parental status are included. Table 5 illustrates the logistic regression of parent's depression on financial hardship and other variables.

Table 1. Descriptive statistics.

VARIABLES	MEAN OR %	RANGE
Black – W1	.216	0-1
Native	.024	0-1
Hispanic[8] - W1	.10	0-1
Asian – W1	.039	0-1
Other Race(s) – W1	.008	0-1
Sex (Male) – W1	.406	0-1
Parent status – W4	.852	0-1
Financial Hardship – W3	.615	0-5
Welfare – W4	.341	0-1
Parents Physical (Self-rated) health – W5	2.42	1-4
Parent Happiness – W5	3.10	1-3
Parent's Depression – W5	.226	0-1

Table 1 illustrates the mean and range of the variables in the present study. Responses for the race, sex, parental status, public assistance, and depression measures were coded 1= yes and 0 = no. The financial hardship consisted of seven questions that were combined into one variable to determine financial hardship. Higher scores indicating experiencing more financial hardship. Parent's happiness responses ranged from, never or sometimes, a lot of the time, and most or all of the time. Among the control variables, the Black group had the highest mean of .216, while Hispanics were at .100, Asians .039, and other races with a mean of .008. The mean of the sex variable was at .406. The independent variable, financial hardship, had a mean of .615. The

[8] Term used by Add Health.

moderator variable, welfare, had a mean of .341. Lastly, the dependent variables had a mean of 2.42 (physical health), 3.10 (happiness), and .226 (depression).

Table 2. Regression of self-rated health and happiness on financial hardship.

	(Self-Rated) Physical Health – W5	**Happiness – W5**
Financial Hardship – W3	.125 (.014)**[9]	-.083 (.011)**
N=	3, 434	3, 418
R-squared	0.0217	0.0148
Constant	2.36	3.13

(Coefficients) = std. error

The results suggest that the variables were not highly correlated. Table 2 illustrates the regression of physical health and happiness on financial hardship suggesting that both dependent variables were statistically significant. Before including all other variables, the r-squared of 0.0217 for physical health and 0.0148 for happiness. Based on the happiness literature, it can be expected that happiness will not be significant in comparison to physical health. I hypothesized that financial hardship would negatively affect parent's physical health (i.e., self-rated) and their happiness. The results indicate that among people who experience more financial hardship in wave 3 (ages 18-26), physical health (.125) was worse in comparison to happiness (-.083).

[9]** = significant p-value.

Table 3. Regression of self-rated health, happiness, and other variables.

	(Self-Rated) Physical Health – W5	**Happiness – W5**
Financial hardship – W3	.143 (.020)**	-.086 (.016) **
Black – W1	.153 (.057)**	-.023 (.046)
Native – W1	.048 (.146)	-.161 (.118)
Asian – W1	.134 (.118)	-.080 (.095)
Hispanic – W1	.086 (.077)	-.044 (.062)
Other Race(s) – W1	-.428 (.246)	-.138 (.197)
Sex (Male) – W1	.111 (.046) **	-.104 (.037) **
Parent Status – W4	.122 (.064)**	-.000 (.051)
N =	1,625	1,617
R-squared =	0.0426	0.0235
Constant	2.14	2.22

(Coefficients) = std. error

Table 3 shows the regression for the dependent variables, self-rated health and happiness, and includes all other variables. The results show that experiencing financial hardship in wave 3 (ages 18-26) was statistically significant in predicting self-rated health and happiness in wave 5 (ages 33-43). However, self-rated health as an outcome shows to be more affected by financial hardship in comparison to happiness. Among the racial and ethnic groups included, Black people were the only group to have statistically significant results, specifically, physical health. All other groups were not statistically significant in this regression. Being a parent was found to be statistically significant for physical health. Gender was found to be statistically significant of both physical health and happiness.

The variable representative of Black people, suggest that their physical health (i.e., self-rated) is worse with a coefficient of (.153) in wave 5. Being male was found to be significant for both physical health and happiness, however, physical health (.111) was found to be rated worse than happiness (.-104). Lastly, among individuals that identify as parents in wave 4, physical health in wave 5 was found to be statistically significant. Physical health was worse (.122) in comparison to happiness (-.000). These findings both reinforce and conflict with current literature. With regard to happiness, previous studies find that parenthood is negatively associated or provides no additional happiness than non-parents (Chao & Glass, 2020). Similarly, the present study did not find happiness to be statistically significant among parents and that physical health was worse among Black, males, and parents.

Table 4. Logistic regression of parent's depression on financial hardship.

Depression – W5			
	Odds Ratio	Std. Error	P-value
Financial Hardship – W3	1.31	.064	0.00**
Black – W1	.532	.086	0.000**
Native – W1	1.67	.571	0.133
Asian – W1	.389	.160	0.022**
Hispanic – W1	.522	.123	0.006**
Other Race(s) – W1	1.35	.826	0.615
Sex (Male) – W1	.520	.068	0.000**
Parent Status – W4	.926	.158	0.653
Welfare – W4	.740	.099	0.026**
N = 1, 619 **Pseudo R square** = 0.0526			

(Coefficients) = std. error

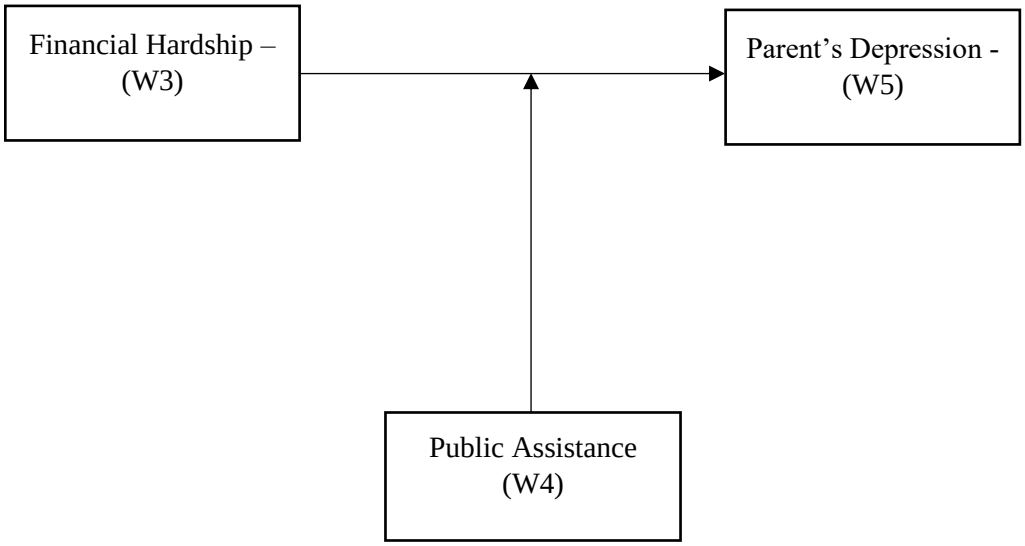
Table 4 illustrates the logistic regression predicting depression in wave 5, when the respondents are ages 33-43. Before including all variables in the analysis, the pseudo r-squared when only depression is included was 0.0127. When all variables are included the pseudo r-squared increased to 0.0526. However, like the previous analysis, there is a drop in the number of observations after all variables are included. Among the racial and ethnic groups, Black, Asian, and Hispanic were found to be statistically significant. Asians had an odds ratio of .389, Black people had an odds ratio of .532 and Hispanics (.522) of being diagnosed with depression in comparison to the White group. Similarly, males were also less likely to be diagnosed with depression with an odds ratio of .520. Lastly, the odds of public assistance recipients to report being diagnosed with depression was higher than the report of the racial and ethnic, and the gender variable

with an odds ratio of .740. The parent variable was not found to be statistically significant.

Lastly, I completed a moderation analysis (FIGURE 3). Table 5 illustrates the moderation analysis of receiving public assistance on parent's depression. The goal of moderation is to present the strength of a relationship between two variables, however, a third variable (the moderator) can either strengthen the relationship between the x and y variable (enhancing effect), reduce the effect of the predictor variable on the outcome variable (buffering effect), or it can reverse the effect of the independent variable on the outcome (antagonistic effect) (Wu, 2018).

Drawing from Holmes et al. (2020) and Munger et al. (2016) that found public assistance services had no significant effect on moderating the relationship between economic pressure and parent's depression. I hypothesize that receiving public assistance services will have a buffering effect on parent's depression, meaning that the services will have little to no effect on parents' depression in wave 5.

Figure 3. Moderation of public assistance on parent's depression.



To avoid potential multicollinearity, the variables were standardized. The results suggest that welfare did not moderate the relationship between financial hardship and being diagnosed with depression in wave 5. The first model consisted of the independent, *financial hardship,* and dependent variable *depression;* the second model includes the moderator welfare*;* the third model includes the control variables and the interaction variable *welfare*.

Table 5. Welfare as a moderator between financial hardship and depression.

	Depression – W5		
	Model 1	Model 2	Model 3
Financial Hardship – W3	.124 (.017)**	.0124 (.023) **	.149 (.031)**
Black – W1	----	----	-.224 (.060) **
Native – W1	----	----	.242 (.154)
Asian – W1	----	----	-.307 (.125) **
Hispanic – W1	----	----	-.232 (.082) **
Other Race(s) – W1	----	----	.130 (.260)
Sex (Male) – W1	----	----	-.247 (.049) **
Parent Status – W4	----	----	-.032 (.068)
Welfare – W4	----	-.128 (.044)**	-.110 (.051) **
Financial Hardship x Welfare	----	.011 (.040)	-.014 (.048)
N=	3, 429	2, 693	1,619
R-squared	0.0149	0.0185	0.0561
Adjusted R-squared	0.0146	0.0174	0.0502
Constant	-.002	.022	.295

(Coefficients) = std. error

Table 5 shows that the constant increased across the models. The r-squared of model 1 (0.0149) increased when the interaction variable was included (0.0185) in model 2. When all variables were included in model 3 and the interaction, welfare, the r-squared further increased to 0.0561. Although there is an increase in r-squared and adjusted r-squared as variables are added to the models, welfare as a moderator was not significant. The results suggest that financial hardship, receiving welfare, race and ethnicity, and sex were all significant predictors of depression. The effect of financial

hardship in wave 3 on depression in wave 5 continued, even for those that received welfare in wave 4. Among Black, Hispanic, people of other races, and males the association with depression persisted even when welfare was included in the model.

The interaction between welfare and hardship was non-significant, meaning welfare did not moderate the effect of hardship on depression. Although welfare, reduced depression – financial hardship still predicts higher depression even after accounting for the effect of welfare, and the effect of hardship does not differ depending upon whether or not one received welfare. As predicted, welfare did not moderate the effect of hardship on depression.

DISCUSSION

A main purpose of this study was to examine parent's well-being, specifically, parent's self- rated health, happiness, and depression. Additionally, the present study looked at whether receiving welfare (wave 4) would moderate the relationship between experiencing financial hardship (wave 3) and being diagnosed with depression later on in wave 5. Partially influenced by Conger's Family Stress Model (FSM) which explores the ways in which economic disadvantage can affect familial relationships. FSM suggests that economic disadvantage may lead to feeling economic pressure, which then contributes to psychological distress among parents which then negatively impacts their child's development (Barnett, 2008).

Often, research about parent's physical health focuses on parents of children with disabilities or severe health issues (i.e., intellectual or developmental). These studies aim to explore challenges and/or their resiliency when providing care for their child as they may require additionally support in their daily lives. Although these studies fill important gaps in literature, future studies related to parent's well-being should include general questions about their physical health. Understanding the ways in which parents' physical health is influenced and/or influences their parenting could begin a conversation surrounding parent's perceptions of their physical health and the ways in which it influences their parenting style and/or behaviors. Add Health asks participants to rate their general physical health. However, this is the only question that explores their physical health. Future data should include questions such as, are you currently satisfied with your physical health; are you currently satisfied with the amount of time you spend towards your physical health? Often, when we think about parent's abilities

to provide proper care, their physical well-being isn't taken into account unless there is a disability.

In the present paper, I used longitudinal data in which financial hardship was measured at the time the participants were 18-24 but the outcome, health, was measured at wave 5 when participants are 33-43. My first hypothesis was:

Hypothesis 1: Experiencing more financial hardship in early adulthood would negatively affect parent's physical health (i.e., self-rated). The results indicate that among parents that reported experiencing financial hardship in wave 3 (ages 18-24) their self-rated health was worse in wave 5 (ages 33-43). Similarly, studies about health, generally, find that economic status negatively effects one's well-being (Conger et al., 2000). Lack of studies related to health and financial strain may be due to the complexity between the two. Wilson & Shuey (2016) describe the relationship between health and economic resources as being reciprocal, in which, health effects and contributes to socioeconomic status. As a result of this dynamic[10] process, research has produced conflicting results about the direction of this relationship. Shippee et al. (2012) suggests two ways for research to improve our understanding of the relationship between financial strain and health, (1) more studies that explicitly address life course variation in strain and (2) using other indicators of wealth other than income and occupational status, as these may not be relevant among retired people. Shippee et al., (2016) suggests that "financial strain, as a form of stress proliferation, may also affect health through multiple pathways… yet most, studies examining health status are cross-sectional in nature, relying on point estimates of income, financial strain, or subjective

[10] Wilson & Shuey (2016) describe two ways in which 'dynamic' is often used, (1) to acknowledge the complex temporal and changing nature of health associated with the changing influence of the social world and (2) in reference to more specific processes. The latter is described here.

social class" (p. 585). Additionally, Shippe et al., (2012) points out among the studies that are longitudinal, the timeframe of following up ranges from 6 months to 25 years.

Studies have found that children create new demands of parent's time, physical and emotional energy (Nomaguchi & Milkie, 2003). Parent's happiness in relation to their children is often described as a cost and reward (Nomaguchi & Milkie, 2003). Additionally, research about parent's happiness compares them to non-parents, married couples, and/or newly becoming a parent. Such studies aim to explore whether parent's happiness decreases and/or improves as a result of having children or support from their partners. Moreover, studies that examine the impact of financial hardship on parents tends to focus on child outcomes (e.g, behavioral problems, psychological well-being) (Sobolewski & Amato, 2005). Generally, these studies find that experiencing financial hardship has a significant impact on children's well-being (Conger et al., 2002; Conger et al., 2010). Taking a different approach, I aimed to see the role that experiencing financial hardship has on parent's own well-being, specifically, their happiness. I hypothesized that:

Hypothesis 2: Experiencing more financial hardship in early adulthood would negatively affect parent's happiness in wave 5 (ages 33-43). The results suggest that financial hardship (wave 3) did not have a negative effect on parent's happiness in wave 5.

Discussing parent's happiness has its limitations for various reasons, (1) happiness is subjective, (2) current studies explore parent's happiness in comparison to their counterparts (i.e., single parents, non-parents), and (3) there are little to no studies that ask parents about their own happiness. Questions such as '*what makes you happy?*; *when was the most recent time you felt happy;* and/or *on a scale from 1-5*

how would you rate your current happiness?' will allow parents to interpret happiness in their own terms, as opposed to framing happiness in relation to their children or non-parents.

A key tenet of FSM is that economic hardship can influence the relationships between parents and their children and/or their partners. Although Conger's model generally focuses on parent's depressive mood; the present study extends on this literature by examining whether experiencing financial hardship influences parent's physical health (i.e., self-rated) and happiness. Moreover, the following two hypothesis also extend on the Family Stress Model. I hypothesized:

Hypothesis 3: Parents that experience more financial hardship are more likely to be depressed than parents that do not experience financial hardship. The findings suggest that there is a greater odds of reporting being diagnosed with depression in wave 5 among individuals those that report more financial hardship (wave 3). Among the racial and ethnic groups, Black, Asian, and Hispanic were found to be statistically significant. Asians had an odds ratio of .389, Black people had an odds ratio of .532 and Hispanics (.522) of being diagnosed with depression in comparison to the White group. Similarly, males were also less likely to be diagnosed with depression with an odds ratio of .520. Lastly, the odds of public assistance recipients to report being diagnosed with depression was higher than the report of the racial and ethnic, and the gender variable with an odds ratio of .740. The parent variable was not found to be statistically significant.

Lastly, I aimed to test whether the relationship between financial hardship and parent's being diagnosed with depression could be moderated by receiving public assistance. Similarly, Holmes et al., (2020) and Munger et al., (2016) were influenced by

the Family Stress Model. Their findings suggest that public assistance services can affect parent's, however, it depends on the type of assistance (i.e., food stamps, housing, etc). Holmes et al., (2020) found that social support such as TANF did not moderate the relationship between economic pressure and maternal depression. Homes et al., (2020) suggest that this may be as a result of increased economic pressure an insufficient social support especially among women. In contrast, Munger et al. (2016) found that among people who became food-insecure over a two-year period and lost Supplemental Nutrition Assistance Program (SNAP) they were more likely to be depressed, as opposed to those that gained benefits – depression reduced. Influenced by the aforementioned studies, I hypothesized:

Hypothesis 4: Receiving any public assistance, welfare payments, or food stamps will have little to no effect on parent's depression. The results indicate that welfare did not moderate the relationship between financial hardship and depression. Additionally, parental status was not statistically significant. Generally, studies about the role of social support have found that it can be beneficial, especially, for the mental health of low-income mothers (Radley, 2018). However, like Holmes et al., (2016) the present study found that receiving welfare did not moderate the relationship between economic pressure and depression.

LIMITATIONS

A limitation of the study is that not all parts of the Family Stress Model were included. Generally, studies influenced by FSM include variables that measure the parents' relationship with their partner (i.e., conflict) as well as the secondary caregivers depression. The Add Health Dataset does not include variables that would be representative of the secondary caregiver's own well-being. For example, there was a variable about whether parents discussed separating and whether they argue. Although both variables can measure an aspect of parental conflict, conceptually they do not determine whether partner's own-well-being is well. Therefore, measuring parents' partnership in this study was not included. Additionally, the study did not include variables about the parent and child relationship. Conger measures for the nature of parent involvement in the child's relationship. One of the main purposes of FSM is to look at childhood outcomes and how parent's influence those outcomes with the ways in which they nurture their child. The present study did not include such measures. Additionally, the public assistance services measure combined all types of welfare into one variable. As there are different types of welfare, it would be beneficial to measure each of them separately as type of supports differ. Another limitation of this study is the interchangeable use of economic pressure and financial hardship. While looking through literature related to the Family Stress Model and/or public assistance services; the terms were utilized interchangeably. Although both phenomena address challenges of being economically disadvantaged and/or of a low-socioeconomic status; studies should be clear about their word choice. As economic pressure implies that economic demands may exceed economic status. As opposed to financial hardship that could also imply experiencing pressure, however, severity is taken into account.

Although there were various limitations to the present study it can inform future studies in various ways. As opposed to previous studies that tend to focus on parent's depression, the present study took a different approach by including their happiness and physical health, as both can also have a significant impact on parent's and how they interact with their children. Additionally, given that children experience the challenges that come along with parents experiencing physical health issues, it can impact the child as well (both long term and short term as suggested by Skovrider Aaskoven et al., 2022 and Kristiansen 2021). Children often rely on their parents, so it is important that parent's health and happiness is also considered in parenting literature. Parents are often expected to physically be able to conduct activities with their children and/or find alternatives if they are unable to do so themselves. Literature suggests that when parents place roles onto others, such as their children (especially long-term), it may lead to parentified children. Future studies should consider including variables that take into account parent's physical health, happiness, and/or other aspect of their well-being other than depression.

Mainly, the present study looked at whether financial hardship influenced parent's physical health and happiness. Additionally, I explored whether public assistance services would serve as a moderator between economic pressure and parent's well-being. Literature suggests that parent's well-being can significantly affect the ways in which they parent as well as their children's outcomes. However, studies about parent's well-being rarely discuss factors or outcomes that focus solely on parent's well-being. As many parents experience economic pressure/financial hardship as well as use public assistance services it is important to see whether it can contribute to parent's

well-being as that affects other parts of their life, such as their parenting styles and parenting behaviors.

CONCLUSION

As parenting consists of raising, supporting, and socializing children, it is important that parent's well-being is taken into account in research about child outcomes (Nomaguchi and Milkie, 2020). Generally, parents parenting styles are categorized as authoritarian, permissive, authoritative, and neglectful, yet their living conditions and/or their parent's parenting practices are not taken into account. In a society, in which people face economic pressure and minimal wage increase – perhaps, people cannot keep up with the increased costs of living cause stress in other aspects of their lives (i.e., parenting). Additionally, conditions may impact some groups more than others as family income differs across race. White family's median income decreased from $70, 317 in 2000 to $70,070 in 2008, African American family's income decreased from $42,105 to $39,879 and Hispanic families decreased from $43,063 to $40,466 during the same years (in 2008 dollars; U.S Bureau of the Census, 2009; as cited in Conger, 2010). Perhaps, government assistance could positively contribute to parent's well-being whether or not they are in need of immediate assistance.

Unfortunately, individuals and families do not receive assistance until they are in need, even then they may not receive assistance immediately and/or at all. As previously mentioned, wealth inequality and parentification may be common among people from low-socioeconomic backgrounds, history of drug use, divorced or separated parents (Nepomnyaschy et al., 2021; Boszormenyi-Nagy & Spark, 1973). Therefore, as parenting research continues to look at parenting styles, parent-child relationships, and child outcomes, perhaps societal conditions should also be taken into account. Specifically, in U.S context, parents, teachers, and/or caregivers are often looked at when discussing child outcomes. Yet, their ability to navigate and/or provide care for children is in the

hands of the government. Whether it's the books allowed in schools (i.e., Critical Race Theory), guns killing children (in schools and public places) (i.e., Sandyhook 2012-Uvalde 2022), and/or children receiving food, the government has a significant influence on parent's ability to provide for their children. As many parents live in harsh conditions, whether that is below the median income or not having access to food, looking beyond parents as primary contributors of child outcomes to the role of the government is as important.

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