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Puerto Rican Retired Teachers' Perceptions About Their Financial Sufficiency

Rossana López León
Walden University

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Walden University

College of Health Sciences and Public Policy

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Rossana López León

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Dr. Lori Salgado, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Raj Singh, Committee Member,
Public Policy and Administration Faculty

Dr. Olivia Yu, University Reviewer,
Public Policy and Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2023

Abstract

Puerto Rican Retired Teachers' Perceptions About Their Financial Sufficiency

by

Rossana López León

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

May 2023

Abstract

In Puerto Rico, the Teachers' Retirement System, which has a membership of around 36,000 retired public-school teachers, is currently facing major restructuring and budget cuts, as part of a larger restructuring of all government agencies to meet the economic emergency they were facing. The recent retirement system reforms were focused mainly on cutting benefits, such as medications, Christmas and summer bonuses, and the cost-of-living adjustment. The purpose of this study was to explore the perceptions of retired teachers regarding their financial sufficiency, and to identify their attitudes, beliefs, and opinions/feelings in light of their socioeconomic profile. The research question focused on understanding the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency. The conceptual framework for this study used Merton's unintended consequences theory to explore teacher retirees' perceptions, and evidence-based policy making to provide high-quality information to inform decisions that are made about government policies. A qualitative study design used semistructured interviews of 12 participants who were teacher retirees. Data from the interviews were coded and categorized for thematic analysis. Results indicated that the teacher retirement pension was considered insufficient to cover basic expenses and avoid future government dependence. The implications for positive social change include providing information for scholars and policymakers on today's retirement realities regarding teacher retirees' financial sufficiency, to assist in the development of new policies that could improve the quality of life of the present teachers and the teacher retirees in Puerto Rico.

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Dedication

To my parents—Norberto López Meléndez and Carmen Delia León Ramos—who bring me their strength, spirituality, and sense of human dignity.

To my brothers, and sister—Ricardo N. López León, Axel I. López León, Rolando A. López León, and Vilmarie del Carmen López León—who supported and encouraged me in so many ways throughout this long process.

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Chapter 1: Introduction of the Study

In the 1910s, the Teachers' Retirement System (TRS) started its evolution as the most robust retirement legal structure in Puerto Rico. According to the teachers' economic structure, they had never made contributions to the Social Security System. Due to the economic deterioration and the pressure from the finance markets, the Teachers' Retirement System law was abolished in 2013, and it changed from a *defined benefit pension plan* to a *defined contribution pension plan* for new teachers.

In the first decades of the 20th century, the government of Puerto Rico structured the retirement systems to manage the critical economic condition of public employees. The Puerto Rico retirement systems had a balance of \$5.23 billion (Puerto Rico Office of Management and Budget [PROMB], 2016). The teacher retirees contributed to the general economy in Puerto Rico because they spent their income in the everyday economic process of the Island. However, a crisis emerged. Brown (2016) expressed,

When Puerto Rico attempted to shore up its chronically underfunded public-employee pensions in 2013, Francisco del Castillo “knew grown men and women who wept.” Under the reform package, retirement ages rose. So did employee contributions. Current and future participants were transferred to less-generous defined-contribution accounts, similar to 401(k) retirement savings plans. Del Castillo, then the deputy chief of the island's largest government-employee pension system, said members of his staff who were on the verge of retirement suddenly faced the prospect of working seven or eight more years for reduced benefits. (para 1)

Furthermore, Walsh (2017) referred to the situation, stating that “[u]nder the crushing weight of \$123 billion in debt and pensions obligations, the Island sought what is essentially bankruptcy relief in federal court” (para. 1). These circumstances prompted this study.

Background of the Study

The only studies conducted in Puerto Rico (Castro, 2012; Mattei & Sanchez, 2007) about retirement systems showed evidence about the differences in the types of pensions administered by Puerto Rico’s government. Puerto Rico had four main groups of employees (central government employees, teachers, judiciary, and the University of Puerto Rico) targeted separately under the retirement system (Castro, 2012). The problem was twofold, in that they did not pay Social Security as a safety net and the pension was not enough to support their standard of living. In 2013, all pensions’ acts were abolished, and a new defined contribution pension law that mandated a reduction in benefits and age increase was passed.

The TRS was a pension plan created by law to provide pension and other benefits mainly to retired teachers of the Puerto Rico Department of Education. Since its creation in 1917, this system had been carrying liabilities from a previous unfunded plan. In 2013, the government implemented Act 160 to the TRS and amended pension benefits. The Teachers’ Association went to court due to the unconstitutionality of the new law to maintain the already-appointed teachers under the defined benefit distribution and won the Puerto Rico Supreme Court case (*Teachers’ Association vs. TRS*, 2014 TSPR 58).

The importance of the socioeconomic circumstances of the Puerto Rico public elderly teacher retirees who were not required to pay Social Security income remained uncertain and without any research that assessed the sufficiency of retirement. Hansen (2008) evaluated the lack of research to understand the realities of public teachers in the United States. Previous research in the United States described significant data concerning teachers and the retirement system and their retirees' income insufficiency when compared with the system in other countries. Qualitative research on North Carolina teachers, as described by Griffin (2014), evaluated the understanding of the retirees about retirement and their income sufficiency. The research sample of about 230 teachers demonstrated that 2.4% perceived that their income could be insufficient to meet their long-term needs (Griffin, 2014, p. 115).

Burns' empirical research (2014) on improving retirement security in the United States explained and evaluated the understanding of the aging population, their life expectancy, the limitations of the welfare state, and the capacity of the state to provide support to the elderly population. The researcher described the obligation of the United States to guarantee a minimal standard of living (basic level of food, shelter, clothes, and other necessities for material well-being to avoid economic deprivation) for its aged population (Burns, 2014, p. 22). The income insufficiency in retirees demonstrated that the system had to be strengthened. The research compared four national retirement systems, which included those of Sweden, Japan, France, and the United States, and the levels of poverty within the retirement population (Burns, 2014, p. 269). The study also described poverty reduction within the retiree population and access to basic benefits in

the four countries' public pension systems as evidencing disproportion in the United States and Japanese systems serving the higher income cohorts. The inadequacy to meet the reality of workers with higher life expectancy was a concern (Burns, 2014, p. 270). Additionally, Smith's (2012) study explained how sparse the teachers' retirement in the literature was. His research focused on the teachers' perception about understanding retirement, the sufficiency of retirement, preference for defined benefits, and the sense of satisfaction with their career. The findings described the understanding of the sufficiency of retirement and preference for personal retirement (Smith, 2012, p. 128). The literature described a clear scarcity of knowledge on this retirement topic and a real need for research. The study of retirement income for public-school teachers as well as their sufficiency remained unclear.

Problem Statement

Puerto Rico, a U.S. territory, has been facing a financial crisis during the last decade (Walsh, 2017). The government used funds from different agencies to meet the economic emergency it was facing. The economic situation had demanded a restructuring of all government agencies, and the TRS was one of them. The government stopped contributing \$372 million matching funds to the TRS (PROMB, 2016). This posed a difficulty to the retired teachers because they did not receive a monthly income from the Social Security System. The recent retirement system reforms were focused mainly on cutting benefits, such as medication, Christmas, and summer bonuses, as well as cost of living adjustments (COLAs). On the other hand, the cost of living had increased. The Puerto Rico Department of Labor (PRDOL) registered an increase in the index of prices

in the following indicators: transportation, entertainment, food, and medical expenses (PRDOL Consumers' Report, 2020).

Policy makers needed evidence in order to make sound decisions, and there was a scarcity of studies that addressed the needs of teacher retirees regarding their financial sufficiency. Most of the Puerto Rico Government retirement systems research was based on description of the benefits and their consequences in the government financial situation (Romero, 2010). There was just one study done in Puerto Rico that presented evidence of the pension systems and the lack of knowledge of 300 government employees on retirement planning (Castro, 2012). The research showed that fewer than 50% of the respondents had tried to develop a plan for retirement (Castro, 2012, p. 16). Because there was a scarcity of studies that addressed the needs of teacher retirees, it was necessary to hear the voices of this population. Scholars and policy makers may benefit from understanding the perceptions of retired teachers regarding their financial sufficiency.

Purpose of the Study

Information on the financial sufficiency of teacher retirees facilitates understanding of today's retirement realities affecting the living standards of this population. This research followed a qualitative methodology and aimed to determine the perceptions of retired teachers on how their financial sufficiency helped them meet the present cost of living. The main purpose of this study was then to explore the perceptions of retired teachers regarding their financial sufficiency, following the restructuring of the TRS.

Significance

This study contributes to the body of knowledge needed by social support agencies as well as lawmakers to address the needs of teacher retirees. Retirement signifies a period of life transition and change in retirees' lifestyle and use of time and finances. Recognizing how these changes had consequences on the financial security of the teachers provided insights about the type of education and training needed for future retirees to understand financial planning for retirement and retirement-related risk burdens (health, housing, food, medications, social services, safety net programs, pension funds, pension education, and assets). In 2014, Burns demonstrated the inadequacy of the U.S. retirement systems to meet the reality of workers with higher life expectancy, insufficient retirement income, and higher poverty rates. Smith's (2012) research investigated the perception of their income and evidenced that teachers perceived a risk that their retirement would be insufficient to meet their long-term needs (p. 115). Knowing teacher retirees' situation in Puerto Rico provides insights to the government, policy makers, social workers, teachers' system administrators, unions, communities, and their families. The results of this study add knowledge to the field of public administration and contribute to public policy and a more efficient government by enlightening the government of Puerto Rico regarding how teacher retirees' financial sufficiency would help them meet the present cost of living.

Framework

Merton's (1936, as cited by Crothers, 2020) unintended consequences theory is based on a situation that demands action but involves a lack of knowledge of certain

specific aspects. Crucial actions become automatic because of the necessity of certain circumstances. In a time in which the economic crisis equals a social crisis, public policy is tied to complexities. Merton anticipated that a consequence of the lack of knowledge at the time of action and their functions becomes part of the future social needs. The unintended consequences theory was reflected in the problem studied in this work. The decisions taken by those who restructured the retirement system of Puerto Rico were statistically based on the government's financial situation. There was no evidence that whoever made these decisions thought or took into consideration teacher retirees' attitudes, beliefs, and opinions/feelings. Thus, Merton's unintended consequences theory was used to explore teacher retirees' perceptions. In addition, evidence-based policy making provided high-quality information to inform decisions that were made about government policies.

Research Question

The following research question guided this study: What are the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency?

Nature of the Study

This study was qualitative. This methodological approach enabled me to answer the proposed question. According to Hernández Sampieri, Fernández Collado, and Baptista Lucio (2014), as cited by Sosa Cardona (2020), qualitative research is one in which the approach is to understand phenomena. Moreover, Creswell and Creswell (2018) argued that “qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (p. 4).

Assessment of teachers' perceptions provided an opportunity that contributed to learning about best practices in how to develop and implement a retirement plan and policies that were effective in achieving outcomes of cost and life quality. Maintaining the focus on how retirees perceive retirement sufficiency was consistent with Merton's unintended consequences theory.

A convenience sample was selected from the Puerto Rican teacher retirees' population. A pre-interview questionnaire and a semistructured interview were used to explore participants' perceptions about their financial sufficiency. Once the data were collected, they were transcribed and assigned into categories, they were compared to each other, and relationships were established using Wolcott's (1994) method.

Definitions

The following terms were defined according to their use in this study:

Attitudes: "Provide summary evaluations of a target person and are often assumed to be derived from specific beliefs, emotions, and past behaviors associated with those objects" (American Psychological Association [APA], n.d.-a).

Belief: The acceptance of the truth, reality, or validity of something (e.g., a phenomenon, a person's veracity), particularly in the absence of substantiation (APA, n.d.-b).

Feeling: A self-contained phenomenal experience, which is subject, evaluative, and independent of the sensations, thoughts, or images evoking it (APA, n.d.-c).

Financial sufficiency: Condition on how the needs of the retirees are met (income vs. expenditures attributable to inflation; Gabriel, 2017).

Opinion: An attitude, belief, or judgment (APA, n.d.-d).

Perception: The process or result of becoming aware of objects, relationships, and events using the senses, which includes such activities as recognizing, observing, and discriminating (APA, n.d.-e).

Scope

This study confined itself to a group of public-school teacher retirees from the Department of Education in Puerto Rico. This was so because teachers from the private schools were not bound to be part of the Puerto Rico Retirement System and did not receive income from Social Security.

Assumptions

There were some assumptions described in this study. The overriding assumption was that the teacher retirees had received less pension income, and that the retiree was going through a financial sufficiency process of recognizing this situation. In selecting the qualitative method, I assumed that this framework was the one that would address the specific description and interpretation of the teacher retiree financial problem, and that the use of inductive reasoning would allow me to examine the teacher retirees' meaning of financial sufficiency. The philosophical assumption in this qualitative study was that the process was shaped by me as a researcher with experience collecting and analyzing data, and therefore was more subjective in nature (Creswell, 2013). Holloway and Biley (2011) argued that researchers cannot distance themselves from the participants, and they emphasized that if researchers are aware and sensitive, rather than overemotional or self-absorbed, qualitative research can be enlightening, person-centered, and humanistic.

Finally, because I used the interviews as the primary data collection tool, I assumed that teacher retirees would be telling the truth as they understood it. Because individuals have their own vision and perception of life, the researcher should look for multiple forms of evidence from different perspectives and experiences (Holloway & Biley, 2011). By gathering teacher retirees' interpretations, I developed a general understanding of their realities.

Creswell (2018) described qualitative research methodology as an approach wherein the researcher sometimes makes claims based on constructivist perspectives. Merriam (2016) described some assumptions for qualitative research. Among these assumptions was that qualitative researchers were concerned primarily with the process rather than outcomes or products. Moreover, they were interested in meaning; that is, how people made sense of their lives, their experiences, and their structure of the world. In addition, qualitative research involves fieldwork (Merriam, 2016). Qualitative researchers physically go to the people, setting, site, or institution to observe or record behavior in its natural setting (Merriam, 2016). Likewise, because qualitative research is descriptive, the researcher is interested in the process, meaning, and understanding gained through words or pictures (Merriam, 2016). Qualitative research is inductive because the researcher builds abstractions, concepts, hypotheses, and details (Merriam, 2016).

Limitations of the Study

It must be recognized that all research has limitations, and that the researcher simply must admit them (Vivar et al., 2013). This study was limited to a number of retired teachers. And the data collected was self-reported by participants. Another

limitation was lack of objectivity as a researcher. To maintain objectivity, I had participants review my results, because one way to ensure the credibility of data is to give the findings to the participants to validate the results (Vivar et al., 2013).

Delimitations

The population and sample decisions to be made in this work constituted the delimitations of the study. Qualitative research is centered on a sample and context and should not be generalized to other populations or different contexts (Vivar et al., 2013). Out of 36,000 teacher retirees from the TRS, 10 made up the sample for this qualitative research. Thus, the results cannot be generalized or transferable to the whole population due to the nature of the sample of participants. However, it is possible to identify trends that may also apply to similar situations and that can be considered in future research.

Summary and Conclusions

Chapter 1 provided information relative to the problem, the purpose and the significance of the study, the background of the study framework, the research questions of the study, and definitions. It also included the nature of the study using the qualitative method. Finally, the assumptions as well as the limitations and delimitations of the study were presented. Chapter 2 includes an introduction and theoretical framework, as well as a literature review, which presents an overview of the pension's structures, world research on retirement sufficiency, retirement risk burdens, and government program dependence. An overview of attitudes, beliefs, feelings, opinions, and perceptions and a literature review summary are also included. Chapter 3 contains a description of the research methodology used for this study.

Chapter 2: Literature Review

Introduction

In all government retirement systems, retirees face multiple social and economic challenges. One of the main economic difficulties of this group was Puerto Rico's government retirement system, which was supposed to provide retirees with social and financial well-being. Considering that many retirees' finances depended solely on their government pension and Social Security, any reduction or budget cut to their already limited income could threaten their individual financial sufficiency.

In a study done in Pennsylvania in relation to retirees, their economic situation was even more fragile because their monthly earnings came solely from their government pension (Econsult Solutions, 2018). To illustrate the current financial situation of the retirees from Puerto Rico's TRS, this literature review focused on retirement pension structures, retirement sufficiency, and risk burdens. In addition, the literature review integrated literature about financial literacy, retirement planning, and perceptions.

Literature Search Strategies

To organize the literature review, I divided it into five main sections: an overview on pension structures, world research on retirement systems' sufficiency, retirement risk burdens, financial literacy and planning, and perceptions about retirement. All the sources cited in this study came from peer-reviewed articles, online journals, and online databases in English and Spanish. This intensive literature review was conducted electronically with the use of the Walden University Library databases. Some terms were combined to obtain pertinent journals and retirement-related reports from different electronic engines.

The library databases used for the research were the following: Education Source, ERIC, SAGE Journals, SAGE Knowledge, Thoreau multi-database search, National Center for Health Statistics, Social Work Abstracts, and AARP State Data Center. Some of the search engines used with the key search terms and combinations put together terms such as *education, public policy and administration, social work, and health professions*. The search process combined the terms *retirement, pensions public policy, public teacher retirees, elderly poverty and needs, living cost, public pensions, retirees' health, Puerto Rico pensions, aged pensions, income and retirement, and financial literacy* through the databases identified.

Theoretical Framework

This qualitative study was framed by Merton's (1936) unintended consequences theory, which stated that any given event or action could have an unexpected or unforeseen consequence, which could either be an unexpected benefit, an unexpected consequence, or a perverse return (Leslie, 2019). Unintended consequences were related to many controversial and politically sensitive issues in Puerto Rico. In 2019, Oliver et al. studied the application of the unintended consequences theory on the development, implementation, or evaluation of social and public health policies by policy makers. The study evidenced that the reasons for negative consequences of a public policy were based on poor policy design, unclear articulation of policy mechanisms or goals, or unclear or inappropriate evidence use (Oliver et al., 2019). On the other hand, Fernandez's (2012) research evidenced that the unintended consequences theory was used by policy makers as an empirical basis to legitimate pension retrenchments on public policy.

In this study, this theory served as a framework to evaluate the unintended consequences that Puerto Rico's economic decay and the policy changes of the TRS had had on the public-school teachers' financial crisis, the insolvency of the system, and the future termination of the public teachers' benefits as confirmed by the Board of Trustees of the Puerto Rico System of Annuities and Pensions for Teachers in 2016. This helped shed light on how the lack of knowledge and research about the possible consequences of policy changes could have devastating consequences in certain groups and deepen the economic and social crisis (Oliver et al., 2019). The use of this theory also facilitated the creation and implementation of new public policies without imputing blame or getting into painful discussions about responsibility.

Some of the topics for this investigation were the future of the elderly and aging population in Puerto Rico, the retirees' economic crisis, the retired public-school teachers' financial crisis, and its effect on their debt, housing, and health. I also paid special attention to the perception of retired teachers regarding their lack of financial sufficiency, their government programs dependency, and the correlation between retired teachers' lack of financial sufficiency and government programs dependence. Unintended consequences theory helped in investigating the economic situation of the public-school teachers and the implementation of new public policies.

Conceptual Framework

To achieve evidence-based policy making, it was necessary to use high-quality information regarding government policies. This required the securing of high-quality information and analysis of data collected rigorously, which in turn presented evidence

on which decisions could be made (Bipartisan Policy Center, 2018). Government policy makers develop budgets and plans every day to provide a better quality of life to their citizens. The evidence-based policy process serves as a guide for all decisions and stages in the public policy process (Urban Institute, 2016). The core ideas of this process include the compilation of important evidence, monitoring of policy effectiveness, use of evidence to improve policies, and development of new policy approaches (Urban Institute, 2016).

Using evidence-based policy making as the conceptual framework was crucial to this study because these research findings could guide the development of new policies that would improve the effectiveness of pension programs. The results of this study may help policymakers understand the financial sufficiency of teacher retirees and today's retirement realities affecting the living standards of this population as they debate potential changes to the current TRS policies.

Policy making has been described by some authors as a process of gathering evidence, describing solutions, assessing the rationality of decisions, and decision making (Bacchi, 2000; Elliott & Popay, 2000; Greenhalgh & Russell, 2009; Lindblom, 1959; Singer, 2000), and evidence-based policy making is a rigorous process that will help in decision making and the selection of specific approaches (Parsons, 2002). The process has five key components, each with multiple steps that enable governments to make better choices through evidence-based policymaking: assessment, budget development, implementation, monitoring, and evaluation (Pew-MacArthur Foundations, 2015).

Evidence-based policy making emphasizes finding solutions for current and future problems, and the process includes the evaluation of present conditions, perceptions about the problem, and the forecast of future situations. The empirical analysis of the evidence-based policy making concept involves current policies, their background, and what has been done to resolve the problem (Littlechild & Hirani, 2010). Cairney and Oliver (2017) concluded that policymakers have to be persuaded through the translation of complex evidence into simple stories that generate attention for problems (p. 4).

Evidence-based policymaking is an alternative to deal with the political divide and encourages research-based debates. It provides the opportunity to deal with transparency and accountability of evidence-based policymaking goals to be achieved. Bipartisan agreement increases the probability of terminating ineffective policies and continuing with better approaches (Urban Institute, 2016).

Littlechild and Hirani (2010) made a report about evidence-based policy making and the pensions commission. Their report described the attitudes of retirees toward a pension reform, and they also described the importance of understanding this perception in relation to pensions reform in the United Kingdom. As a result, this new policy reform has given the retirees the opportunity to transfer working income to increase their retirement benefits, where “many individuals are likely to enjoy increased well-being over their lifetime by smoothing their income between work and retirement” (Littlechild & Hirani, 2010, p. 3).

The data collected in this study from the teacher retirees would facilitate the decision-making process of policymakers in Puerto Rico. This was emphasized by the Bipartisan Policy Center (2018) when they,

presented key findings about the ongoing challenges for evidence-based policymaking in the U.S. government, finding that improvements could be made to secure data access, privacy, and confidentiality practices, as well as the capacity to generate the amount of high-quality evidence needed to support policy decisions. (p. 6)

Therefore, according to the Bipartisan Policy Center, policy makers may use evidence that can influence views on a policy to modify it to create new policies, or for numerous other uses. Using evidence in day-to-day decision-making about policy implementation and in support of evidence-based practices would better enable the alignment of the supply of evidence with the real demands of policymakers.

Research Literature Review

Because the sufficiency of the TRS in Puerto Rico was a key component of this research, it was important to understand other retirement systems and pension structures. This literature review begins with an overview and comparison of these systems and structures worldwide and presents current research on the sufficiency of these systems. For context on retirees' perceptions of the sufficiency of the various systems and policies, I discuss the scholarly literature on retirement risk burdens, financial literacy and planning, and retirees' perceptions about retirement.

Overview of Pension Structures Worldwide

As described in the study background, due to economic deterioration and pressure from the finance markets, the Puerto Rico Teachers' Retirement System law was abolished in 2013. The change from a defined benefit pension plan to a defined contribution pension plan mandated a reduction in benefits and had a direct impact on the income sufficiency of retirees. Because there was a lack of research in Puerto Rico concerning teachers' defined contribution pension plan related to their income insufficiency, it was useful to compare their pension system with the pension systems in other countries.

Pension reform is a growing movement based on economic crisis discourse to maximize financial sustainability (Hassel et al., 2019). World research on retirement systems in terms of pension adequacy, sufficiency, and financial sustainability was evaluated based on the impact on retirees and their pension plans (Cumbie et al., 2018). Government employees in Puerto Rico had a defined benefit pension plan to which the employee and the employer made contributions (Rivera, 2018). This defined benefit pension plan established a specified monthly benefit at retirement. Due to the economic crisis in Puerto Rico and the pressure from the finance markets, the TRS law was abolished in 2013, and it changed from a defined benefit pension plan to a defined contribution pension plan for new teachers (Rivera, 2018). This defined contribution plan did not promise a specific number of benefits at retirement (Rivera, 2018).

Defined Benefit Plans and Defined Contribution Plans

The monthly funds given to retirees from the accumulated contributions after their working years are over are referred to as a pension and are managed by a pension system (Akpanibah et al., 2020). In the pension system, two main structures have been developed based on the number of contributions made by the workers—these are the defined benefits plans and the defined contribution plans (Romero, 2010). The defined benefit plans provide longevity pensions and eliminate the perceived risk (Romero, 2010). The defined contribution plans are based on an accumulation of a contribution, and the pension will be provided until the accumulation of the contributions ends (Cumbie et al., 2018).

This global shift from a defined-benefit to a defined-contribution plans system has transferred the economic risks from the corporate sector to the workers and pensioners, primarily via the investment and withdrawal choice for their pension assets (Andréasson et al., 2016; Bruns & Frank, 2019; Feng, 2018; Forsyth & Vetzal, 2019). The defined contribution pension plans offer no guaranteed income to the retirees for life and increase the insecurity pension income factor (Goldhaber & Grout, 2016). Goldhaber and Grout (2016) explained that in this type of pension system, rather than receiving a monthly income benefit for life, the retiree receives a saving contribution through the working years and earns a lump sum upon retirement.

Workers' contributions to defined benefits plans fell from 44% in 1992 to only 20% in 2010, while the defined contribution plan grew to 43%, which increased the risk of losing income because of market risk and retiree longevity (Munnell et al., 2017). The

risk factor in the defined contribution structure grows exponentially with the longevity circumstances of the retirees and how their lives will be impacted after all their savings or assets are gone (Forsyth & Vetzal, 2019). Most public teachers in the United States are under a defined benefits plan, and a lot of them depend economically on this pension to meet their basic needs (Backes et al., 2016).

Anenson et al. (2014) did a mixed-method study in which they analyzed the pension plans from 50 public school teachers from 2003 to 2009. Some of the teachers' pensions funded their Social Security while others did not. According to this study, in 2014, most of the states modified and reduced the teachers' contribution benefit pension to deal with Great-Depression-era consequences and actuarial deficits; this did not resolve the deficit problem. In addition, the study also described how the states that changed the benefits laws for their teachers by reducing benefits and increasing the years required for retirement resulted in lower economic benefits for the state. In some of those states that changed the teachers' retirement benefits, the courts ordered a reversal, based on the violation of their legal protections, to reincorporate a defined benefit system only for the existing teachers (Anenson et al., 2014).

Rhee and Forna (2016) compared the defined benefit plan and the 401k alternatives for public California teachers. The data in the study came from 421,000 active members in the California Teachers' Retirement System. The majority of the teachers were under the contribution benefit pension, and most of them had served 20 to 30 years with no Social Security coverage for their retirement. The findings of this study established a more secure and beneficial teachers' retirement income under the defined

benefits plan, rather than with the 401k plans. The authors claimed that the 401k plans were found to be arbitrary in their financial benefits for teachers with the same number of years of service because the working markets constantly change, and that can lead to retirees' financial insecurity. According to the study, the defined benefit plans, which were designed to reward teachers who had at least 30 years of service and were at least 60 years of age with 40% of their preretirement income, were replaced.

Powell and Khan (2014) described the defined contribution plans as a growing movement employed by the government to demoralize people who believe that the benefit contribution pension plans are no longer economically sustainable. This shift from the defined benefit to the defined contribution plan relays all the responsibility in the decisions about what kind of plan product to choose onto the retiree. The investigators explained that this is a strategic move made by governments that take advantage of economic crisis discourse to transfer pension risk to workers. They concluded that the reality of the retirees' income today not only is an individual's responsibility, but also is shared by the government.

Helman et al. (2015) found that 60% of American workers own less than \$25,000 in financial assets, excluding their residence and defined benefit pension plans, which represents a high risk regarding their quality of life and the standard of living for their retirement years. Data from the Health and Retirement Survey conducted in 1992, 1998, and 2010 certified that the shift in the pension system from defined-benefits to defined-contribution plans will require an increase in replacement rates on behalf of the employer as a policy in order not to impact higher dependency on the Social Security System in the

United States. This is a problem, given the new rules of increasing age and the lack of funds in the long-term programs (Munnell et al., 2017). The question that arises is the following: How will the government deal with those employees who are currently not paying Social Security and whose only income when they retire will be their pension?

As part of this concern, Munnell et al. (2015) described the defined benefit plan as a pension structure that integrates the benefit factor, the numbers of years of service, and the workers' average earnings, which are regularly compensated with a postretirement cost of living adjustment (COLA) as a guarantee to workers who are not covered by Social Security. However, some countries have eliminated COLA adjustment benefits for their retirees. The authors explained that considering the elimination of the 2% inflation protection, the retirees' benefits will be reduced by 15% to 18%; this is critical for workers who will depend solely on Social Security for their retirement.

Pension Reforms

General opinion has described pension reforms as something that primarily satisfies the government's fiscal deficit and modifies the sociological effects of the old-age dependency ratio (OADR) (Meneu-Gaya et al., 2018). Meneu-Gaya et al. (2018) explained that the OADR is a measure which shows the ratio of the number of dependents 65 years and older over the working population. This indicator helps the governments to know the number of elderly people who economically depend on those of working age (15 to 64 in most countries). It is important to consider the OADR and other life cycle deficit measures because they raise awareness of the heterogeneity of economic characteristics in different age groups. It also helps governments to create pension

reforms which will hopefully diminish the number of retirees who depend on welfare programs (Denny & Polkan, 2015; Hammer et al., 2015).

Using the OADR, many countries have begun the process of restructuring their pension plans to maximize their financial sustainability. This process has revealed that there is a substantial lack of information regarding the retirees' income sufficiency and deficiency. An example of this lack of information was noted by Meneu-Gaya et al. (2018), who mentioned that Spain's pension assessment only kept track of retired individuals receiving annuities but did not consider their lack of money (income deficiency) or pension adequacy. The researchers commented that the undesirable effects of pension deficiency, sustainability, and inadequacy must be mitigated with policies that reinforce the retirees' income to guarantee their quality of life and sufficiency.

As explained, benefit reduction in pensions will have significant effects on the living standards of current and future retirees worldwide. Current data describe retirees' rate of savings at historically low levels (Kingson et al., 2014), which means that without significant changes in pension plans, future generations of retirees will probably have the same or even worse economic outlooks than present retirees. The implications of pension insufficiency are vast and can affect the retirees' standard of living. This retirement income crisis will no longer enable retirees to meet their basic needs. It will have consequences on their standard of living, health, and overall quality of life (Kingson et al., 2014). In the next section, I will present a more detailed literature review of the retirement systems sufficiency in multiple countries and contexts.

Western Hemisphere Research on Retirement Systems Sufficiency

In aging societies, the low income of retirees and their sufficiency is a debate generally defined in terms of pension adequacy, sufficiency, and financial sustainability. Gabriel (2017) explains that pension adequacy refers to the income over the life cycle or consumption level of spending among retirees or their households. Sufficiency, the author added, explains how retirees' needs are met. Finally, financial sustainability includes income, but also provides the alternative to evaluate poverty measure among retirees. These three definitions have been adopted by some organizations to guarantee a minimal standard of living amongst retirees and include a basic level of food, shelter, clothes, and other necessities for material well-being to avoid economic deprivation (Burns, 2014).

Europe

In Europe, there is a lot of debate in various pension reforms on how to balance the demographic aging, the shortening of the retirement period, and the extension of the working lives. However, all the proposed reforms differ in how they plan to mitigate or balance the adequacy of income consequences; this introduces a higher cost and a broader impact on the retirees' standards of living and sufficiency. In 2015, the pension adequacy reports (PAR) of older Europeans described elements such as their private assets, public benefits, employment, survivor pensions, gender gaps, and main problems in pension reforms over the last 20 years (Nordheim, 2016). It also offered an analysis of their non-contributory periods such as education, military service, maternity, caring, unemployment, and sickness.

Nordheim (2016) noted that many European government policies regarding pension reforms have been affected by judicial court decisions. In many instances, those decisions affected the reforms projected to guarantee pension benefits, negatively impacting the working-class projections for their retirement. The negative effects included prolonging working lives which complicated the working rules of retention, migration, short work experiences, life expectancy, gender gaps, age discrimination, appropriate age work environments, lowest hiring rates within the oldest workers (55- 64 years old), and a decline in the labor supply (Nordheim, 2016). PAR sustained those 21 European Union countries still have a serious limited working market for people 55 and older; making it evident that pension reforms are not guaranteeing adequacy, neither stimulating longer working lives, appropriate working markets, nor promoting better working schemes (Nordheim, 2016). PAR's findings help us understand why the number of future European retirees with low incomes is projected to be higher than those with higher incomes (Poterba, 2014). It is important to note that the European Commission (2012) defined pension adequacy as a preventive matter from poverty among the elderly to guarantee a suitable living standard with no discrimination between genders.

In the case of financial sustainability, the Elder Security Standard Index is also considered in the latest report which includes measurement factors such as housing, food, transportation, medical care, miscellaneous, and geographical adjustments (Mutchler et al., 2015; Mutchler et al., 2018). According to Mutchler et al. (2015, 2018) the most vulnerable elderlies, the ones with none or few economic resources, often fall in poverty

thresholds and are limited to being eligible for other programs and services provided exclusively by the government.

If we focus on Germany, the employment policies have been impacted by the lack of planning and the increase of the aged population. Buchholz et al. (2013) commented that German pension policies in the 1970s relied on early retirement through unemployment insurance payments replacing about 60% to 67% of the net income, as a strategy to regulate the labor market. However, Buchholz et al. (2013) added, that Germany's 2001 pension policy increased retirement age, increased pension reductions, reduced public pensions benefits, and promoted private pension savings, which resulted in social inequalities. As a result, their pension reforms led to a decrease in the replacement rates, an increase in retirees' poverty for the future projections, and a delay in retirement (Seeleib-Kaiser, 2013). Seeleib-Kaiser (2013) stated that the German Federal Constitution Court's response to their lack of planning, significant financial cutbacks, and pension losses was to establish an assistance scheme called "social state," which entitled a minimum level of assistance.

Meneu-Gaya et al. (2018) investigated how the 2011 Spanish pension reform implied risks of pension inadequacy and sustainability for their retirees. Their results of the investigation described a lack of fiscal sustainability of the public pension system in Spain, which led to the development of other policies against the retirement income for future retirees. These investigators found a decrease in pension reform adequacy, mostly in certain groups with low earnings and short careers which could easily fall into poverty lines as they age.

Similarly, Peinado (2014) described the importance of taking into account the Spanish poverty rates of women (21%) when considering pension policies. Peinado (2014) explained that after the 2011 pension reform, gender analysis conducted in Spain demonstrated that the main causes of the gender gap are the lower earnings of women and the number of years in the workforce, which have resulted in more years in poverty because of the higher life expectancy. Monserrat (2018) added,

Spain is the ninth country in the European Union where the gender gap in retirement pensions is more accentuated. The gender gap in pensions of people aged 65-74 is high (37%) and it is even higher for those aged 75 years or over--about 40 percent. (p. 169)

The European Commission (2012) also mentioned that female retirees are more likely to experience lower economic status and poverty because of lower lifetime earnings, shorter job tenure, and lower Social Security benefits. Peeters et al. (2013) confirmed this gender-based gap in Belgium, where they found that institutionalized female retirees have lower pensions than institutionalized male retirees. Peeters et al. (2013) explained that for the year 2007 the average equivalent pension income for the institutionalized female retirees was 1,160 euros, whereas the average equivalent pension income for the institutionalized male retirees was 1,285 euros.

A recent study evidenced the effects of retirement systems reforms in five European countries: Sweden, Germany, Hungary, Austria, and Poland (Chłoń-Domińczak et al., 2018). The research considered different economic aspects such as labor market characteristics, employment rates, and wage levels. The change of those

aspects, Chłoń-Domińczak et al. (2018) explained, had consequences in citizens' working lives, leading to the postponement of retirement. Subsequently, this led to an adjustment of the total pension transfers to younger cohorts, which can result in greater pressure for more rapid reforms and higher variability of pension incomes between cohorts in the future.

Poland, one of the five countries mentioned above, had a pension reform in 1999 that resulted in the privatization of its pension system (defined benefit to defined contribution). As an effect of the reform, Poland reduced its replacement rate from 49% to 19%; this incited the lowest assets in their pension system because people started retiring earlier (Żuk & Żuk, 2018). Another study conducted in Poland informs that by 2014, the number of retirees receiving benefits from the Social Insurance Institution (ZUS) in Poland amounted to almost five million (Huterska, 2016). Huterska (2016) explained that demographic changes, such as a lower fertility rate and migration of young people, caused a significant decrease in the number of working people in comparison to the number of people receiving retirement benefits. Despite knowing that there was an economic crisis because of those demographic changes, the government failed to create a plan to prevent poverty for its retirees. Consequently, 48% of retirees receive pension benefits smaller than the minimum wage.

To evaluate the relationship between pension reforms (defined benefit to defined contribution) and the lack of poverty prevention of the elderly, Huterska's (2016) study also assessed the retirees' consumer basket expenses, living wages, and living needs. The study concluded that the modifications of Poland's pension plan structure and the

retirees' subsequent economic limitations, increased the possibility of the retirees depending on social assistance benefits and becoming an economic burden to the government. This factor forced the introduction of reform in the pension system (Huterska, 2016).

Latin America

Shifting our focus from European pension systems towards other causes of income insufficiency, Helman et al. (2015) found governments generally conclude that the workers' incapacity to save money and guarantee a decent retirement is the main consequence of elderly income insufficiency. An example of this generalization was established by Chile's government, where workers were unable to save for their retirement because employers offered low salaries and unstable employment (Centro de Estudios de las Finanzas Públicas de la Cámara de Diputados, 2015). Another example is when employers stopped contributing to their employees' retirement funds because of the excessive commissions charged by the pension private administrators. This is a concern for the Chilean social security systems.

In Colombia, the government's approach towards retirees' financial sustainability employed a different perspective that considered the Colombian Constitutional Rights of 1993 and treated pension protection as a right (Botero, 2016). The Colombian constitutional law protected the pensions of individuals who contributed during their labor years and of those who did not contribute enough money. These latter have a right to obtain a social protection extension which could guarantee enough social assistance to afford housing, food, and basic needs. Botero (2016) argued that the Colombian

government defined the right of pension protection as something against poverty in the elderly population and individuals with disabilities.

Focusing on other issues concerning pensions, Amarante et al. (2017) examined the gender gap in pensions in Latin America—Argentina, Brazil, Chile, and Uruguay—between the years 2000 and 2013. Amarante et al. (2017) found evidence that confirmed a significant gender-based inequality in pensions (access and income), especially in the defined contribution pension structure. Amarante et al.'s (2017) study affirmed that there are gender-based discrepancies in the pension system because women are more likely to suffer employment discrimination, occupational segregation, and human depreciation. Arza (2017) expressed that this gender gap in pensions occurs because women tend to participate in the labor market at lower rates, earn less money per hour, and have more disruptions in their careers. The author added, that because women dedicate a considerable amount of their working time to performing unpaid household work and taking care of the family when pension entitlements are linked to contributory history, many older women receive little or no pension benefit at all.

North America

Similar to Australia, Canada implemented the Guaranteed Annual Income (GAI), which is a pension reform created to reduce poverty in retirees (Koebel & Pohler, 2019). This strategy originated after results from the Canadian Community Health Survey showed Canadians over age 65 have half the prevalence of food insecurity of low-income Canadians under 65 (Bush & General, 2007). Seniors' public pensions, such as GAI, are

effective because after being implemented, only 6% of the population lived below the income threshold (Mcintyre, 2016).

If we go a little South, the United States Center for American Progress officially reported that poverty, as established by the federal standards, is not adequately capturing and measuring the reality of economic hardship in the elderly (Odum et al., 2016). With around 10,000 Americans turning age 65 each day, rising levels of economic vulnerability among American retirees not only threaten their well-being but also pose significant challenges for families, communities, and the entire national economy (Cohn & Taylor, 2010).

Odum et al. (2016) affirmed that instead of measuring poverty and hardship among older Americans, the federal government manages exclusively the income poverty and the non-income poverty facts. Odum et al. (2016) explained that income poverty measures, such as the Elder Economic Security Index, include the official poverty measure and the retirees' family income level. National conversations about the economic status of elderly Americans have largely revolved around the official poverty measure and its use to economically quantify seniors' basic needs. According to this metric, poverty levels among senior citizens and retirees fell by two-thirds between 1966 and 2013 (U.S. Census Bureau, 2015). Odum et al.'s (2016) position was that by using this outdated federal measure of poverty, the dominant narrative hides and obscures the reality of poverty and economic hardship amongst senior citizens and retirees in the United States. Besides income poverty, the federal government also employs the non-

income poverty standards to examine poverty and economic hardship among older Americans (e.g., material, shelter, housing, health care, and food hardship).

Even though every senior citizen in the United States could be at risk for poverty during their senior years, Latinos and African American senior citizens were more than twice as likely as White senior citizens to live under 150 % of the federal poverty line (Blanco et al., 2017; Choi et al., 2017; Odum et al., 2016). Blanco et al. (2015), citing the 2008 Health and Retirement Study, explained that around 41% of Latinos and 30% of African Americans 65 years and above do not participate in the formal financial sector, while this percentage rises to only around 7% for the White sector. Blanco et al. (2015) added that participation in the formal financial sector refers to the person owning a checking, savings, or money market account.

In 2015, male African American seniors reported poverty rates of 34.9% while male Latino seniors described poverty rates of 33.2%, compared with just 16.2 % of male White seniors aged 65 or older. In the case of female White seniors, their percentage was 19.2 (U.S. Department of Commerce, 2016). Like their male counterparts, older Latinas and African American women also faced significantly higher poverty rates than white female senior citizens. Among older Latinas, 35.7% live with incomes below 150% of the federal poverty line, and for older African American women the percentage was 37.6.

Unsurprisingly, older women in America rely more heavily on Social Security and public assistance for income than older men (Diebold, 2017; Jacobs et al., 2017). In 2014, more than 50% of all women 65 and over-relied on Social Security to cover at least half of their family income, versus just about 33% of men in the same age group (Social

Security Administration, 2016). Additionally, 27.4% of women 65 and over relied on Social Security to cover at least 90% of their family income, compared with 21.3% of men. Reed (2020) explains that because women tend to provide informal care outside of the labor market and usually live longer than men, they are especially likely to experience poverty in their old age, regardless of their race or nationality.

Puerto Rico

In Puerto Rico, teachers' financial literacy knowledge is very different than in the mainland. For the year 2012, TRS had about 30,370 pensioners; each receiving an average monthly base pension of \$1,371, or an annual average pension of \$16,455 (Sistema de Retiro de Maestros, 2012). The report also stated that 26,041 of the pensioners were 60 years or older, and women made up 77.3% of the group. In 2014, the TRS had about 36,210 retirees, with an average monthly base pension of \$1,476. Of these retirees, 30,150 were 60 years old and over, and women made up 78% of the group (Sistema de Retiro de Maestros, 2014).

The accelerated aging of the population in Puerto Rico, its income, education, and family factors post the challenge of reforming the social benefit of retirement (Rivera, 2018). For example, Puerto Rico's 2010 Census showed that over 67,000 elderly households had some kind of housing burden; during the next five years, this amount may increase to 78,000 (Marxuach & Lamba, 2014). In 2014, employees 60 years old and over composed 7% of the Puerto Rican workforce; most of them were men (Puerto Rico Department of Labor, 2015). The 2016 Puerto Rico Census Community Survey showed an increase of 4.6% of 60 years old and older in the workforce (11.6%). In that same age

group, approximately 40%, were living under the poverty level, 44% men and 56% women. The survey also revealed that the principal income of elderly people 60 years or older was Social Security (80.3%), followed by the Nutritional Assistance Program (40%), and pensions (30.1%). Additionally, regarding elderly women, the survey mentioned that 16.1% of elderly households were composed of an elderly woman without a spouse and 36.2% of these households consisted of a woman living by herself.

In 2017, the United States Census Bureau reported that Puerto Rico's elderly population (65 years or older) comprised around 19.5% of the Puerto Rican population, the elderly dependency ratio for the same year was 21.7%, and life expectancy was in average 81 years (78 years for males vs. 84 for years females). The projections for the elderly population in Puerto Rico predicted that by 2020, adults 60 years and older would represent 21.3% of the population, by 2025 the number is expected to be about 22.7%, and by 2030 about 24.2% (Pesante, 2018). This noticeable growth of the elderly population on the Island, along with an increased life expectancy and economic insufficiency, poses a challenging scenario for present and future government, administration, and public policies.

Puerto Rico's demographics for its older population are similar to the demographics found in the United States. Researchers agree that, unlike previous decades, today's changes in retirement income and living conditions are taking place in a rapidly aging society. Even though the percentage of the population aged 65 and older remained relatively constant between 1990 (12.6%) and 2010 (13.0%), in the last decade

this percentage has increased to about 15% and is projected to approach around 20% by 2030 (Ortman et al., 2014; Werner, 2011).

Retirement Risk Burdens

Low rates of retirement benefits force retirees down the poverty line and increase their dependence on public services (Pak & Kim, 2020). Pension reforms will not only impact retirees, but also the youngest population, working-aged people, and the individuals who support or care for them (Higo & Khan, 2015). The state of Pennsylvania assessed the impact of retirement insufficiency savings on elderly households, the effect on the state's economic growth health, and the consequences on the aged public assistance programs (Econsult Solutions, 2018). The results of the study showed that of the state's 12.8 million residents, around 2.7 million residents (21%) were in the near-retiree age group (50-64 years), and 2.2 million (17%) were between the ages 65 or older.

Econsult Solutions' (2018) projections, derived from the Pennsylvania Independent Fiscal Office predicted that by the year 2030, the population of residents aged 65 and older will ascend to 3.1 million, representing 23% of Pennsylvania's population. The report also estimated that state assistance costs for residents 65 and older during the 2015-2016 Fiscal Year were around \$4.2 billion and that Pennsylvania's elderly residents accounted for around \$50 billion in household spending during that same period. All the above-mentioned figures are predicted to increase significantly by 2030, due to the expected 42% increase in the state's elderly population. The report added,

It's important to highlight that State assistance costs would have been an estimated \$3.5 billion in 2015 if elderly households had sufficient savings, a net difference of \$700 million from the \$4.2 billion spent by the state. The net difference in state assistance costs due to insufficient savings is projected to grow from \$700 million in 2015 to \$1.1 billion in 2030, totaling a cumulative \$14.3 billion over the 2015-2030 period. (p. 3)

An assessment conducted in Maine regarding retirees' finances for retirement years found that their lack of savings increased their reliance on public assistance, and therefore fiscal costs, because of the cost of public assistance benefits, such as Medicaid, Supplemental Security Income, Supplemental Nutrition Assistance Program, and Housing Assistance (Trostel, 2017). After analyzing the effects of that trend, it is projected that the national cost of public assistance on the retirement-age population will be \$86 billion by 2032. Trostel (2017) added that by that by 2032, Maine's fiscal cost of public assistance on the retirement-age population is projected to increase to \$362 million, with the state's share growing to \$61 million. Similarly, an evaluation of the fiscal cost of public assistance on the retirement-age population in Utah estimated that by 2030, about 93% of their retirees will obtain government benefits such as Supplemental Nutrition Assistance Program, Supplemental Security Income, Medicare Cost-Sharing Program, Utah Home Energy Assistance Target Program, Utah Retirement Income tax credit, and Property Tax Abatement (Goodliffe et al., 2015).

As shown above, retirees' income risk and insufficiency increased the demand for formal government resources to help cover basic needs like subsidies for long-term care,

groceries, and community services (Pak & Kim, 2020; Ziliak & Gundersen, 2019). Higo and Khan (2015) explained that to deal with the retirees' dependence on government services, many states and countries have increased out of pocket payments for basic health services, reduced home care services, limited access to programs such as Meals on Wheels, and made it more difficult to qualify for long-term care services. In the long run, this privatization and marketization of elderly care affect caregivers and families the most because they must pay for services that were previously covered by the government (Harris, 2016; Waldausen, 2014; Xu & Halsall, 2017). With these new and increasing expenses, retirees who are unable to economically provide for themselves or who do not have a close family member who can sustain them financially will face some serious difficulties meeting their basic needs.

The topic of elderly impoverishment has been thoroughly discussed in literature. Many authors have concurred that the determinant factors associated with impoverishment in the older cohorts are related to working earnings, sickness, lack of activity, disability, medical and long-term care expenses, nursing home expenses, as well as marital status (Blanco et al., 2015; Braun et al., 2017; Kopecky & Koreshkova, 2014; Poterba, 2014). Likewise in 2010, Rzhantsyna (2014) mentioned that Russian retirees who lived by themselves or as the head of a family spent more money on prescriptions, medical supplies, food, and transportation than younger individuals or families. Rzhantsyna (2014) added that the first group received more state-funded services than the latter, this is an indicator of the difficulties faced by this specific group to meet an adequate standard of living.

Deepening in the effects of elderly impoverishment in health care access, Nishiyama and Smetters (2014) argued that retirees have to use a significant percentage of their pensions or savings to cover out-of-pocket health care expenditures such as insurance coverage, co-payments, and direct costs. Ironically, even though today's retirees are paying a lot of extra money for health services, most plans are offering limited coverage. For example, Medicare only covers about 60% of retirees' health care costs and does not have a cap on the out-of-pocket expenditure, which accounts for around 16% of the average retirees' pension (Hoffman & Jackson, 2013). Another measure taken by health care providers in the United States is downgrading elderly patients with highly compromised health to less expensive coverage plans and even changing existing eligibility standards to make them unqualified to be insured (Clark et al., 2014). Lutz and Sheiner (2014) explained that the increase in elderly health care premiums, as well as the changes in the eligibility standards and the elimination of benefits, will cause a higher economic burden on the younger population.

The American Psychological Association (2015, as cited in Cahill, 2016), related older populations' lower socioeconomic backgrounds with increased mortality rates, lower quality of life, chronic diseases, and lack of social networks. Segel-Karpas et al. (2013) concluded that economic precarity was related to higher levels of attachment avoidance, depression, and illness in general. Odum et al. (2016) added that retirees with lower socioeconomic backgrounds often face food insecurity and are 53% more likely to experience a heart attack than retirees with a more stable financial situation. In Puerto Rico, the financial struggles of retirees are even more difficult than the rest of the United

States because of the Island's economic constriction. Puerto Rican retirees' low incomes limit their diets, medical access (prescribed medications and health insurance), and housing; these restrictions can result in serious health and emotional consequences (Vera-Rodríguez et al., 2014).

The lack of income and financial stability has implications for citizens of every age, but it has a greater impact on older adults who have to deal with issues like the lack of social and economic resources, widowhood, and elevated health care costs (Kim & Waite, 2016). Another factor that could negatively influence retirees' economic stability is having to take care of other family members such as children, grandchildren, and siblings, amongst others. Elderly people take on a great amount of responsibility for social networks, civic life, babysitting, and the vulnerable people in the community (Powell & Khan, 2014).

Kim and Waite (2016) explained that the role of retirees as caretaker does not necessarily benefit them but could rather represent a new economic burden that could put them at risk of inadequate income or poverty. Certainly, caregiving burdens in the elderly, and the community's limited preparation to respond, also have to be a concern for the government. Multiple research studies conducted on the role of retirees as caregivers established that many female retirees have inadequate economic resources because of the caregiving responsibilities, that this role negatively affected the caregiver's well-being, and that by focusing on caring for another person, retirees often grow apart from friends and stop participating in social activities (Kalenkoski & Oumtrakool, 2017; Requena, 2013; Stoiko & Stroughe, 2018).

Financial Literacy and Planning

It is vital to realize that the retirees' work projections, impact on resources, retirement planning, and sufficiency of income during elderly years must be a crucial part of government public policies. Poterba (2014) emphasized the growing importance of considering life expectancy and retirement planning for aging populations. The concept of personal financial planning is defined as the process of managing one's money to achieve personal and economic satisfaction (Surendar & Sarma, 2018). Nishiyama and Smetters (2014) explained that retirement planning should focus primarily on income management instead of focusing on the fear of consumption patterns. Consumption patterns and spending routines after retirement are a concern because they can lead to income insufficiency, making it impossible for retirees to meet their basic needs, and reduce their quality of life (Guo et al., 2016).

Nishiyama and Smetters (2014) added that in the United States the low saving culture during retirement is caused by a lack of financial education in the workplace. In addition, the transition process of pension benefits and plans requires workers to deal with complex financial decisions for which they are not prepared. Kim and Hanna (2015) affirmed that in the United States, 45% of working households aged 35 to 60 were adequately prepared for retirement and 46% perceived they would have adequate retirement. Munnell et al. (2012) reported that more than half of American households remained at risk of lower standards of living during retirement.

Quinn and Cahill (2016) explained that for the year 2012, retirement income provided only 63% of the total cash income for older households in the United States, and

the Social Security provided 35% of their aggregate income. They added that American private savings rates reached their lowest levels by the mid-2000s. For the year 2014, in the United States, fewer than 4% of retired citizens received cash public assistance and housing services (Social Security Administration, 2014).

Government agencies must consider the workers' demographics and cultural groups' differences to adequately prepare them for retirement (Rudolph et al., 2017). To choose a retirement plan that can provide for them and their financial well-being during retirement years, aging workers need to have the financial literacy to understand all the benefits and disadvantages of the different pension plans (Ali, & Frank, 2019; Allgood & Walstad, 2016; Stolper & Walter, 2017). Surendar and Sarma (2018) explained,

Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime financial well-being. It is the process by which individuals gain an understanding of their financial situation and learn how to strengthen it over a period by inculcating the financial habits of savings, budgeting, planning, and hence making the right financial decisions. (p. 1628)

According to Huston (2010), to have financial literacy, retirees need to not only have financial knowledge but to be able to apply it and make better decisions regarding their economic preparation for retirement. Seay et al. (2016) commented that taking advantage of different financial products and services prior to retirement improves the ability of future retirees to make better financial decisions.

Financial literacy is a significant factor in the wealth development of future retirees, especially women. Multiple studies have shown that women have less

knowledge of basic financial concepts than men, resulting in higher levels of earnings insufficiency and poverty during retirement (Bannier & Neubert, 2016; Bucher-Koenen et al., 2017; Potrich et al., 2018; Stolper & Walter, 2017). Sabri et al. (2015) examined a sample of Malaysian women working in government agencies and found that financial literacy will encourage proper use of financial management practices and was an important factor to develop retirement self-confidence. It is acknowledged that women tend to live longer than men. According to the Department of Statistics in Malaysia (2013), women are estimated to live five years longer than men. The life expectancy of women is 77 years while for men it is 72 years. With the mandatory retirement age set at 60 years of age, women are expected to live for 17 years after their retirement. These years could be very economically distressing without proper retirement planning. Therefore, women in Malaysia and around the world have a crucial need for proper retirement planning to achieve a secure life after retirement.

With these unstable income characteristics and a higher demand for government assistance programs, the fiscal burden of the aging population will soon constitute a challenge (Poterba, 2014). Poterba (2014) added that these projected demands seem to indicate that the elderly population between 2010 and 2050 will demand more services from the public sector. Retirees' lack of economic resources, lower savings, income burden, the reduction in pension benefits, and longevity will force them to retire later or reenter the labor force after retirement (Carlstedt et al., 2018; Sullivan & Ariss, 2019). However, reemployment within the elderly population is scarce when compared with younger workers (Choi et al., 2017; Marcus & Fritzsche, 2016; Phillipson, 2019). This

issue is an example of the many ways that the economy is impacted by the instability of the retiree's economic resources.

The worldwide impact of the aging population and the consequences of the fiscal crisis in most of the countries is forcing governments to reform their pension systems (Rappaport, 2017; Rudolph et al., 2019). Sadly, most of these reforms are pushing to take away benefits from pensioners and improve the government's economic interests. To create pension reforms that benefit both parties, it is imperative to consider the interaction between the labor market and the social protection system in all government and public policies (Grech, 2015). It is also essential to create a constant definition and conceptualization for economic security to know how much income is enough for retirees. Teachers have been identified as a group with limited resources and with a lack of financial literacy; however, efforts to instruct educators have proven to be successful (Zulaihati et al., 2020). According to Lucey et al. (2017), implementing different types of intervention that focus on investing and teachers' retirement programs increased confidence in the knowledge about the information acquired. In 2013, the National Endowment for Financial Education conducted a content-based teacher professional development pilot project to examine personal finance concepts (Hensley, 2013). The qualitative study reported that after participating in finance courses, participants increased their confidence in financial education, took steps to improve their credit scores, evaluated their future retirement contributions, and admitted that they had the necessary knowledge to teach their students about personal finance.

Perceptions About Retirement

In terms of the perceptions about retirement, previous research demonstrated that public education is still under scrutiny. Some studies have been connected to teachers' motivation, retention, and effectiveness in their work (Bal & Visser, 2011, as cited in Smith et al., 2015; Weller, 2011, as cited in Smith et al., 2015). In 2015, Smith et al.'s study measured the perceptions of teacher respondents concerning retirement changes needs. The study found that concerns about retirement benefits need to be addressed and the greater the worries about retirement the lower the satisfaction with the retirement system and career commitment (Smith et al., 2015). Furthermore, perceptions influence satisfaction with retirement, and career commitment (Smith et al., 2015).

Uchechukwu's (2014) study also found that teachers who planned their retirement will experience positive feelings, sensations, and thoughts. The opposite to this premise evoked a sense of despair, and retirement would become frustrating (Uchechukwu, 2014). According to most teachers' beliefs, pension systems are inflexible and unfair because of the assumptions of low mobility and career stability (Doherty et al., 2015).

According to Sosa (2020), perceptions "emerge from a mixture of direct and indirect expressions" (p. 14). Sosa emphasized that perceptions are more than how people perceive things, and that "Perceivers' views depend on their specific point of perspective, depending on their previous experiences, their surroundings, their mood, their age, even the people who surround them and affect them" (p. 14).

In this study, I delve into the attitudes, beliefs, opinions, and feelings of teacher retirees to explore their perceptions. Sosa (2020) stated that the very nature of perceptions relies on an individual's worldview. Sosa (2020) also expressed,

An individual's perception of what is real is influenced by his or her experience, natural environment, and society. This understanding of reality affects people's attitudes, beliefs, views, and emotions. Therefore, given the significance of this present proposition, recognizing each of these individual elements in perception formation is essential. (p. 15)

Knowing teacher retirees' perceptions helped understand their views and expectations. This could contribute to the improvement of public policy.

Summary and Conclusions

The research presented in this literature review represented different economic aspects of retirees in multiple countries, changes in labor market characteristics, employment rates, wage levels, pension income of individual cohorts, pension reform privatization (defined benefit to defined contribution), policy reforms, and the burden on the well-being of the elderly. Various studies illustrated the implications of pension insufficiency during retirement years and the retirement income crisis. Others focused on explaining the relationship between the increasing cost of basic necessities -such as prescription drugs, housing, groceries, and health care- and poverty amongst retirees.

In the case of Puerto Rico, the new age demographics for 2016 showed that 40% of the elderly people 60 years and older were under the poverty level, and their principal income came from Social Security. In 2012, about 30,150 of the 60 years old and over

public-school retired teachers relied only on their pensions to cover their expenses.

According to the authors cited, the Great Depression of 1930 and the economic deficit in most of the United States and its territories changed the benefit laws for their teachers, excluding them from defined benefit pension plans. The exclusion of retired teachers from their previous pension plan would most likely aggravate income insufficiency, and therefore, would increase the demand for government resources and public assistance programs. In the following chapter, I introduced the qualitative methodology, described the techniques employed to collect the data, and explained how I analyzed the data, once gathered.

Chapter 3: Research Method

Introduction

The purpose of this study was to explore the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency following the restructuring of the TRS. It was also intended to identify their attitudes, beliefs, and opinions/feelings about their financial sufficiency. In this chapter, I describe how I studied the perceptions of a sample of retired teachers from the Puerto Rico Department of Education regarding their financial sufficiency. I address the research paradigm and design, role of the researcher, research methodology, research population and sample, procedures for recruitment and participation, instruments, data collection and analysis procedures, data analysis plan, trustworthiness, and summary and conclusions. I answered the following research question: What are the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency?

Because the purpose of this study was to explore the perceptions of retired teachers regarding their financial sufficiency, an appropriate method to gather teachers' perceptions was a qualitative research methodology. The value of studying people's thoughts or beliefs is that these can indicate what actions people take in circumstances involving them (Al Otaibi, 2012). Teachers' points of view imply that when people talk about their lives, they connect with experiences significant to themselves (Martinez, 2007).

Research Paradigm and Design

There are two distinct types of data collection: qualitative and quantitative. While both approaches provide an analysis of data, they differ in their procedures and the type of data collected. Awareness of these approaches can help researchers construct their study and data collection methods. Because this research relied on a narrative description of the individuals' experiences, and not the relationships shown through numbers, this eliminated the use of a quantitative research design.

According to Lucca and Berrios (2013), qualitative research is a narrative-oriented method that uses content analysis techniques such as inquiry, interview, and descriptions and can be worked from a humanistic point of view. A qualitative research design can enable the researcher to understand individuals' common experiences with a phenomenon and obtain a comprehensive description that allows reflection on the findings (Moustakas, 1994) and study the real meaning of an experience. According to Creswell (2018), qualitative investigations have the intention of raising an understanding of multiple individuals' common experiences.

Creswell and Creswell (2018) argued that “qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (p. 4), and Moustakas (1994) asserted that qualitative research enables researchers to focus “on the wholeness of experience, rather than solely on its objects or parts” (p. 21). Creswell and Creswell pointed out that this design gathers information by the direct approach that it has—the researcher can have a direct talk with the participants

who are part of the study. Moreover, the researcher works as a key instrument because the researcher is the one who gathers data.

Approaches used in qualitative research include phenomenology, grounded theory, case study, narrative, and ethnography. A grounded theory approach was not appropriate for this study. Rather than developing a theoretical model that explains a phenomenon of interest (Strauss & Corbin, 1990, 1998), this research involved looking for an understanding of the essential meaning of financial sufficiency expressed by the retired teachers.

This study did not focus on an individual experience or chronological narrations where one or more individuals talked about a story, so a narrative approach was not considered. Because case studies are used where the researcher explores processes or events that occur within a specific group (Creswell, 2009), this approach was also excluded. In ethnography, a researcher studies a cultural group or descriptions about cultural complexity within a group over an extended period (Creswell, 2018), so this approach was not a good match, in that the purpose of this study was to understand the depth of meaning of financial sufficiency for retired teachers.

According to Moustakas (1994), perception is considered the primary source of knowledge and confines itself to describing experiences, and not explaining them, which is consistent with a phenomenological approach. This aligned with the purpose of this research, so I chose a qualitative research design with elements of phenomenology because it gave the opportunity to understand the meaning or essence of a phenomenon

from the retired teachers' perceptions, in order to provide insight into their motivations and let their voices be heard.

Role of the Researcher

The role of the researcher in qualitative research, as expressed by Raheim (2016), is to try and access the feelings and thoughts of the participants, analyze them, and present them in an unbiased manner. My perspective in this study was as an external observer. As a past member of the Puerto Rico Government Senate, I was involved in decision-making policies, and I had to evaluate projects related to public service employees' retirement systems. At present, I am not a member of the Puerto Rican legislature anymore. There is no professional or personal relationship between me and the study participants, and there were no incentives offered to participants. I made efforts to mitigate any perceived power relationship issues involved in any part of this study, due to my role as researcher. Following Karnieli-Miller et al.'s (2009) position, from the beginning of this work, I let the participants feel an easiness to partake in this research process. I also facilitated their understanding of the importance of their contribution in this study. In addition, I enabled them to be aware of our partnership in this endeavor. Karnieli-Miller et al. emphasized that honesty about research and its purpose constructs a significant level of involvement. They added that the demonstration of partnership and loyalty to the participants' story from the beginning of the research process does not allow the participants to feel supremacy in any way. Karnieli-Miller et al. (2009) described a

welcoming a nonthreatening environment in which the interviewees are more open up to share personal experiences and beliefs. In order to maintain a high degree of trustworthiness and altruism perceived by the participants the researcher has to be honest about the motivations and professional interest of the study. (p. 280)

During an interview, according to Karnieli-Miller et al. (2009), the researcher must be aware of names and words that contain meanings of perceived power. Expressing equal partnership in the research process will help maintain a better researcher–subject relationship. The rapport-building process is a method to elicit participants’ stories, experiences, and knowledge on the research topic, which will build mutual trust (Ceglowski, 2000; Goodwin et al., 2003; Minichiello et al., 1995; Taylor & Bogdan, 1998).

Research Methodology

Evaluation of the Effectiveness of the Study Tool

In the absence of an instrument that fit the particular purpose and the research questions of this study, I created one that included a semistructured interview protocol. Creswell and Creswell (2018) noted that when there are no instruments available, or when no instruments have been developed to gather data to answer the research questions, it is the researcher's task to develop them. They added that the process of developing an instrument consists of identifying its purpose, reviewing recent academic literature, writing, and evaluating the items, and making sure that they will align with the purpose of the study and research questions (Creswell & Creswell, 2018). Some

qualitative researchers have described the effectiveness of semistructured interviews. In 2017, Guerrero-Castañeda et al. reflected on the characteristics of semistructured interviews in the field of nursing. The researchers observed that the semistructured interview format allowed nursing professionals to be empathetic with patients and their perceptions, allowing them to develop a treatment that went according to their needs. Silver (2021) also conducted qualitative research employing semistructured interviews to share information about aging perceptions and their influence on athletic retirement. Tuohy and Cooney (2019) used semistructured interviews to demonstrate the importance of older women's experiences about aging and the knowledge that needs to be considered when developing programs and services. Furthermore, Silva and Boemer (2009) attempted to understand the phenomenon related to aging using a semistructured interview.

The guide for my semistructured interviews used open-ended questions. The questions for this interview emerged from the literature consulted, as discussed in the previous chapter. I also took into consideration the characteristics of the population.

After receiving authorization from the Walden University Institutional Review Board (IRB), I began the data collection phase. It was anticipated that participants would not face any significant risks during the data collection phase.

Population and Sample

In a qualitative study, participants must be purposefully selected, and clear criteria and a rationale must be provided for their selection (Creswell, 2018). A convenience sample was selected from the Puerto Rican teacher retirees' population under the defined

contribution plan structure. Hernández-Sampieri et al. (2014) stated that a phenomenological design study can have a minimum of 10 cases, but this number can vary to more or even fewer participants. Considering this, I began with a target of approximately 10 subjects for this qualitative research study. The criteria for participation included being retired from the TRS and at least 60 years old because the Puerto Rico Act 121 of 2019 (as amended), known as The Bill of Rights of the Elderly, establishes the age of 60 or older as the age of an older adult. These participants were selected based on their availability and willingness to participate in the research. The final determination on sample size was made based on saturation, in which I considered redundancy of information, shortage of time or money, similar description of data, or paucity of willing participants (Patton, 2002).

Participation was voluntary, and each participant was informed of the purpose of the study through a consent form to be signed. Each participant was free to leave the study for any reason, and their personal data were not revealed at any time. To assure their confidentiality, each participant was assigned a number. This number was known only by me, and when quoting or referring to the subject in the analysis, this number was used.

Procedures for Recruitment and Participation

Teacher retirees, bona fide residents of Puerto Rico, were invited to participate in this study through the Puerto Rico Teachers' Association and the Association of Pensioners of the Government of Puerto Rico. A letter indicating the purpose of the study and the request for authorization to advertise to their members was sent by mail and

email to the executive directors of these organizations (Appendix A). Once permission was granted, I posted a hard copy of the advertisement inviting members to participate in the study at the front desk, on bulletin boards, and in services spaces of the associations (Appendix B). Participants were comprised of individuals responding to the advertisement. The advertisement invited persons who were retired from the Puerto Rico Department of Education and who were interested in participating in the study. They were asked to contact me by phone or email. Once contacted, I asked the participants if I should bring, send, or email the recruitment document, which included the consent form (Appendix C). I asked those interested to complete, sign, and return the form. The consent form assured that prospective participants met the qualifications for the study, confirmed their initial desire to participate, and established initial contact with the me. In coordination with the participants, a convenient site to conduct the interview was selected.

I interviewed 12 qualified participants as soon as they contacted me. I expected that because of the relevance of this topic, which was continuously discussed in the media due to the financial crisis in Puerto Rico, more than 30 teacher retirees would be willing to participate. All the preinterviews and interviews were done individually to have privacy. All the participants asked me to do both interviews together to take advantage of the time and site set. Additionally, if they had any questions in the preinterview questionnaire, I would be available. I arrived 30 minutes earlier than the time set with the participants to be sure that the location minimized the potential for the

interview to be overheard. Both interviews took 45 to 60 minutes using the instrument guide.

Protocol and Data Collection

Several methods can be used to secure data in a qualitative study. In the accomplishment of the structured procedure and data collection, I used an interview protocol. Castillo-Montoya (2016) stated that an interview protocol that aligns with the overall methodology and purpose of a study must be crafted. The interview protocol that I used had two parts, a pre-interview questionnaire, and an interview guide.

The pre-interview questionnaire (Appendix D) described the consent form steps, the duration of the study, the benefits of participation, and the minimal risks involved. I also included demographic questions about participants' gender, age, residential zone, income, government aid, and personal expenses. This information shed light regarding the retirees' socioeconomic profile and helped me more thoroughly understand the data obtained through the interviews regarding financial sufficiency. Through the pre-interview questionnaire, I obtained participant contact information, advised participants of their rights, and included a statement concerning the protection of their confidentiality. This document followed the guidelines of Walden University. The pre-interview questions gathered demographic information for the study, which allowed the participants and me to concentrate on the value of the interview questions (Roberts, 2020). According to Allen (2017), having pre-interview questions provides the opportunity to take the focus away from the interview section. These easier questions permit the participant to warm up and enter personal information correctly. Furthermore, the demographic questions in a

survey allow the researcher to collect background information, which is essential to the study, to gather information sensitive to the analysis, and crucial for the findings of the research process.

For the second component of data gathering, participants were interviewed using semistructured questions in an interview guide that was designed and conducted by me (Appendix E). Open-ended questions were used in this research because of Singleton's and Strait's (1999) observations concerning the volume of information, including participants' feelings, often resulting from the answers received (p. 281). The interviews were used to explore participants' perceptions about their financial sufficiency regarding their socioeconomic profile. As emphasized by Creswell and Creswell (2018), open-ended interviews facilitate the elicitation of participants' views and opinions.

Furthermore, Trigueros and Hidalgo-Sandoval (2017) agreed with Creswell and Creswell when they stated that participants should express their ideas, feelings, and motivations about the topic being researched. The open-ended-questions format facilitates participants expressing themselves freely. According to Adams (2015), a semistructured interview presents a greater degree of flexibility than a structured interview, because it starts with planned questions, which can be adjusted to the interviewees. The semistructured questions offer the interviewee the opportunity to focus on the interview. As a researcher, I found that the interview guide structure helped me explore the participant's experience and make sure that the questions were covered.

I conducted face-to-face interviews because most retirees did not have access to or know how to use virtual platforms. Face-to-face interviews provide structure and

focus, and they facilitate more in-depth sharing (Brinkman & Kvale, 2015; Yin, 2018). The interviews were conducted in Spanish, and I began each interview with an introduction of myself, followed by an overview of the study that included the purpose, duration, assurances of confidentiality, and an opportunity to ask questions and sign the informed consent form. Interviews were informal and held with the participants in individual conversations with each of them. As Moustakas (1994) explained, data are obtained through “descriptions of experience through first-person accounts in informal and formal conversations and interviews” (p. 21).

All interviews took less than 1 hour and were held in spaces that provided the necessary elements for assuring confidentiality and trustworthiness. Interviews were audio recorded with the authorization of the participants. The importance of recording the interviews was to ensure accuracy and to aid in transcription. During interviews of those who did not agree to be recorded, I used cross-checking to confirm their answers to each of the interview questions. In the event that a specific aspect of the collected data needed to be clarified, follow-up interviews were carried out with the participants.

Cross checking with the participants by adding questions throughout the interview process promoted a better understanding of how they perceived their financial sufficiency after retirement and was used as a means to enhance the credibility and confirmability of the research (Harper & Cole, 2012; Tomm, 1988). At the end of the interview, I gave the participants the opportunity to ask any questions and express any comments, worries, or concerns regarding the session. For closure, I included a component where I asked for the participants' authorization to call them if necessary. I also asked the participants if they

wanted a copy of their results or the final document. Finally, I expressed my appreciation for their participation in the interview.

Asking individual participants to corroborate the accuracy of the transcript and the researcher's interpretation enhances trustworthiness (Audet & Pare, 2017). Phone calls were used as a necessary follow-up procedure to gather any input from the participants. The data collected were kept in a password-protected encrypted format during the study to protect the rights and privacy of the participants, and all data will be destroyed 5 years after the publication of the research findings. The data was stored in my personal computer.

Data Analysis Plan

In keeping with Moerer-Urdhal and Creswell (2004) and Moustakas (1994), there are five steps that underly qualitative analysis: (a) prepare and organize the data, (b) review and explore the data, (c) create a precoding, (d) review the codes and revise or combine them into themes, and (e) present themes in a cohesive manner. In this section, I describe the specific procedures I used for each of these steps.

In order to prepare and organize the data, I transcribed the interviews. I read my notes and observations. I reviewed and explored the data collected to verify whether the research question had been addressed. To create the precoding, a list of significant statements related to perceptions about financial sufficiency was made. Miles and Huberman (1994) argued that "while initial categorizations are shaped by pre-established study questions, the qualitative analyst should remain open to inducing new meanings from the data available" (para. 9). They added that "apart from exploring the specific

content of the respondents' views, it is also a good idea to take note of the relative frequency with which different issues are raised, as well as the intensity with which they are expressed” (para. 13). According to Yang et al. (2018), researchers consider what questions they are trying to answer to develop a preliminary coding system. Creswell (2013) recommended using a short list of tentative codes and encouraged researchers to be open to emerging codes during the analysis. I pre-coded the data by using some of the key search terms and combinations identified during the literature review, such as *education, public policy and administration, social work, and health professions*. Additionally, I combined the terms *retirement, pensions public policy, public teacher retirees, elderly poverty and needs, living cost, public pensions, retirees' health, Puerto Rico pensions, aged pensions, income and retirement, and financial literacy*.

In the next step, which involved reviewing and exploring the data, I engaged in the process of open or inductive coding. As per Williams and Moser (2019), “central to the efficacy of open or inductive coding is approaching the thematic fragments and coalescing concepts identified during data collection in an organized and systematic way” (p. 48). Inductive coding, according to Saldaña (2009), is an approach wherein the researcher derives codes from the data. Saldaña argued that researchers do not start with preconceived notions of what the codes should be but should allow the narrative or theory to emerge from the raw data themselves. Thus, in addition to the precoding, I used inductive coding in this study. Additionally, the data collected from the pre-interview questionnaire were coded using a nominal scale and transferred to an Excel database to

aid me in understanding the participants' sociodemographic characteristics and their understanding of financial sufficiency.

Next, I revised the codes and combined them into categories and themes, in order to obtain a narrative picture. Classifying the qualitative data by breaking down the information gathered helped to establish the coding pieces of data from the key questions in the questionnaire. Trochim (2006) established that coding involves both creating categories for the data and describing the implications and details of those categories. I expected that significant statements from the interview would be used to create and identify meanings, which in turn became theme clusters. According to Moustakas (1994), reflective interpretations of the data gathered are necessary to gain a fuller, more meaningful understanding of what participants express. Creswell (1998) also stated that the list of meaningful statements must be compiled by the researcher in a clear, concise manner, and in labeled units. The researcher must reflect on each of the interviews for possible meanings and perceptions using "imaginative variation" (Moustakas, 1994, p. 31). Then a description of the units of meaning must be constructed. Finally, I expressed the essence of the meaning of financial sufficiency under the TRS as experienced by these retirees (Moustakas, 1994).

Throughout the data analysis, I used the NVivo 10 software program, which stored and provided a secure database of files, in addition to analyzing, managing, and shaping the qualitative data for the data analysis. As part of the process, I developed a template to convert the grouping of meanings into themes, and I colored code themes that emerged out of the participants' perceptions regarding financial sufficiency. Each of the

research questions was entered into the NVivo software program by categories using codes and storing them, which helped in discovering the themes associated with the perceptions of the retirees' financial sufficiency during their retirement. The final step was the writing of the compilation of all retirees' experiences.

Trustworthiness

Trustworthiness in qualitative research is all about collecting data in a manner that demonstrates transferability, dependability, confirmability, and credibility (Lincoln & Guba, 1985; Shenton, 2004). These elements contribute to the operationalization of data gathering reported details, and to the description of the research process which allows to repeat the work.

The transferability of the research will provide for the application of findings to other populations (Merriam, 2016). Merriam stated that the demonstration of the research results helps to enhance transferability, so the detailed description of this study will help readers determine whether the results could be applied to other situations.

Tobin and Begley (2004) argued that dependability will be evidenced by a well-documented logical research process that will permit its replication. The dependability of this research will be captured by the consistency of the data collected, and the design will be considered as a "prototype model" (Creswell, 2013, p. 184). Furthermore, Russel (1999) indicated that interviews with older persons demand more time, and the participants' age can play an important role in dependability because the participants' and researcher's age differences can change the kind of information produced. In order to promote the dependability of the research study, every result must be reported in detail.

The credibility and confirmability of the study were enhanced by the utilization of member checking as a tool to guarantee the findings are true and accurate (Creswell, 2013). I used the member checking of transcription by using two approaches: strategic questioning or cross checking during the interview, and follow-up with participants to confirm accuracy of data collected during the interview (Creswell, 2013). A narrative and interpretative report was shared with the participants in the follow-up research component (Creswell, 2013). To control bias, Maxwell (1996) recommends a meticulous transcription of the interviews, which allows the participant to reveal their own perceptions and validate them with the researcher.

Summary and Conclusions

In this chapter, I presented the research methodology and design, as well as the research questions for this study. I also included the research paradigm, an evaluation method for the effectiveness of the study tool, and I discussed the participants' characteristics and the sampling techniques. In the last sections, I outlined all the research procedures that I followed to collect and analyze the data, and how I planned to minimize possible ethical issues. Finally, I covered the measures I employed to ensure the trustworthiness of the results. Chapter 4 included an analysis and interpretations of the findings as proposed.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to explore the perceptions of retired teachers regarding their financial sufficiency following the restructuring of the TRS. The research question that guided this study was the following: What are the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency? This chapter will provide the demographics, data collection and analysis, evidence of trustworthiness, and study results.

Setting of the Study

The collection of all data for this qualitative study took place in January 2023 after approval from the Walden IRB. Participants for the study resided along the island of Puerto Rico, and the interviews were conducted in the settings described in Chapter 3. No cancellations took place during the interview phase.

Demographics

The recruitment efforts took place as described in Chapter 3, which resulted in a fairly homogenous research sample. All 12 of the participants were retired from the Puerto Rico TRS, were 60 years or older, and resided in Puerto Rico.

Table 1*Demographic Characteristics of the Participants*

#	Gender	Age	Geographical zone	Annual household income	Social Security /pension
1	F	87	Rural	\$8,063	
2	F	81	Rural	\$10,692	Yes–Spouse
3	F	76	Urban	\$18,000	Yes–Work
4	F	68	Rural	\$24,000	Yes–Spouse
5	F	68	Urban	\$20,000	
6	M	70	Urban	\$20,000	Yes–Work
7	F	61	Rural	\$59,600	
8	F	60	Urban	\$33,600	
9	F	76	Urban	\$34,000	Yes–Spouse
10	M	74	Urban	\$16,632	
11	F	81	Urban	\$15,552	Yes–Spouse
12	M	82	Urban	\$54,000	

Most of the participants were women (66.6%). The reported ages were representative of all categories from 60 to 87 years old, as follows: 60 to 64 (16.6%), 65 to 69 (16.6%), 70 to 74 (25.0%), 75 to 79 (8.33%), 80 to 84 (25.0%), and 85 and over (8.33%). The majority of participants lived in an urban area (66.6%), and of those, most were women (comprising 41.6% of the total participants). Regarding participants' income, 58.3% reported an annual household income below \$20,000; again, a majority of these were women (comprising 33.3% of the total participants). The other participants (41.6%) all reported incomes from \$21,000–\$60,000, and no participants reported incomes levels above \$60,000. All the participants received a teacher's retirement pension, and their pension range monthly was from \$1 to \$499.00 (25.0%), \$500 to \$999 (8.33%), \$1,000 to \$1,499 (25.0%), \$1,500 to \$1,999 (8.3%), \$2,500 to \$2,999 (16.6%), and \$3,000 to \$3,999 (16.6%). Additionally, 58.3% of the participants received Social

Security pensions because they worked in other jobs besides their teacher full-time work after hours (25.0%), and others received Social Security as a spouse benefit (33.3%). The majority of the teachers with a Social Security pension received less than \$500.00 monthly from that source.

Data Collection

After IRB approval, I personally delivered the letter to the executive directors of the Puerto Rico Teachers' Association and the Association of Pensioners of the Government of Puerto Rico indicating the purpose of the study and the request for authorization to inform their members about the study. Once permission was granted, I posted a recruitment flyer (Appendix B) in their facilities in order to recruit teacher pensioners who would participate in the study voluntarily and without any compensation. In addition to responding directly to the flyers, prospective participants were recruited via snowball sampling from other retirees who had seen the flyer. Each prospective participant contacted me by phone or email, and I explained the purpose of the study. All 12 people who contacted me met the qualifications for participation in the study and confirmed their initial desire to participate. We agreed upon a mutually convenient site and time to conduct the interview and sign the consent form (Appendix C). All the participants preferred to hand deliver their pre-interview questionnaire (Appendix D) and conduct the face-to-face interviews immediately following. Furthermore, each of the participants also chose to conduct the interview at the location and time that I delivered the pre-interview questionnaire.

Interviews

I arrived 30 minutes earlier to the location than the time set with the participant to ensure that the spaces minimized the potential for the interview to be overheard. Using the interview guide in Appendix E, the interviews were conducted in Spanish, and I began with an introduction of myself. Then I provided participants with an overview of the study, which included the purpose, the duration, assurances of confidentiality, and an opportunity to ask questions and to sign the informed consent form. Interviews were informal and held with the participants in individual conversations with each one of them. Each participant was advised about their rights and provided a statement concerning the protection of their privacy and confidentiality.

Before beginning the interview, I reconfirmed the consent that was previously obtained via the consent form, their wish to volunteer, and asked the participant to consent verbally. The participants were advised to not talk about anything they did not want to and were assured that they could ask me questions or end the interview at any time without repercussions. An audio recording was completed for nine of the 12 interviews; the other three participants declined to be recorded for transcription and content-accuracy purposes. After each of the questions in the interview, I rechecked with the participants in case any aspect of the collected data needed to be clarified. That maintained the accuracy and the interpretation regarding the research question and enhanced trustworthiness. Subsequently, I followed up with phone calls for a second clarification of the participants' answers where necessary.

At the end of the interview, I gave the participants the opportunity to ask any questions and express any comments, worries, or concerns regarding the session. None of the participants expressed discomfort during the interviews. For closure, I included a component where I asked for the participants' authorization to call them if necessary, and finally, I expressed my appreciation for their participation in the interview. The pre-interview and the interview combined took less than 1 hour. I informed the participants to contact me if they wanted a copy of the results, which would be sent in an audience-appropriate format.

The interviews were recorded on an "Easy Voice Recorder" app for Android and IOS by Digipom Development or Rev by digipom.com. Participants' identities were protected by using numbers from 1 to 12 and in the order each interview was completed. Each interview was marked with the date and specific time, was password protected, and was transcribed into Word documents identified only by participants' numbers (1 through 12). Additionally, the pre-interview questionnaires were protected by using the same numbers from 1 to 12 and in the order each interview was completed. All transcripts, Word files, and field notes for this study were composed by me, were organized utilizing NVivo 10 software and were stored as described in Chapter 3.

Data Analysis

The data analysis process for this research used Moerer-Urdhal and Creswell's (2004) and Moustakas's (1994) five steps as outlined in Chapter 3, which underscored the need to prepare and organize the data, review and explore the data, create a precoding, and present themes in a cohesive manner.

After rereading my notes and observations, I created a transcript in Spanish for each of the interviews, and then I reviewed and explored the data collected in each transcript. After completing the precoding, I then reviewed and explored the transcript data, engaging in the process of inductive coding. As part of the process, I created codes and used the NVivo 10 software program to store, analyze, manage, and shape the qualitative data. This helped me to combine all the narrative from the retirees' experiences of each of the interview questions and obtain the themes on each of them. When coding was completed, I converted the codes into categories, beginning with each of the interview questions as the category head. Themes emerged upon further reflection and consideration of the codes and themes using the plan presented in Chapter 3, to obtain a narrative picture. After the themes emerged, all the narratives and themes were translated into English. There were no discrepant cases. Finally, the sociodemographic data collected from the pre-interview questionnaires were categorized using a nominal scale and transferred to an Excel database.

Table 2

Example of Key Participants' Statements, Codes, Categories, and Themes

Participant	Key participant statement	Codes	Categories	Themes
4	"It means having enough income to be able to live on and pay for basic expenses. Have a decent and secure income."	Economic sufficiency and enough income	Economic sufficiency	Pension sufficiency as a matter of prevent poverty
2	"The Teacher Retirement System is insufficient for the retired teacher to cover basic monthly expenses. Many retirees have had to return to work because it does not give them enough income to live. Puerto Rico teachers are paid such a low pension."	Teachers, pension, and Teachers Retirement System	Teachers' current pension	Pension insufficiency
8	"My pension is not enough to live. I have a pension that does not guarantee a quality of life. I'm surviving each day. I don't know what to pay first and what to pay later."	Opinion, actual pension, and teacher retiree	Perception of my pension	Pension insufficiency
8	"A typical week for me is having to budget to survive. I don't do much because I don't even have money for an emergency. I spend a lot of time at home."	Pension, having money, personal activities, and weekly life	Typical week under the TRS	Social deprivation
1	"Increase teachers' pensions according to the cost of living. Increase contributions to buy medical insurance that covers the prescription drugs."	Teachers Retirement System, pension, and recommendations	Recommendations to TRS pensions	Guarantee of health care coverage

Note. This table presents examples of the progression from statements to codes to categories to themes.

Evidence of Trustworthiness

Trustworthiness in this qualitative research was all about collecting data in a manner that demonstrated transferability, dependability, confirmability, and credibility (Lincoln & Guba, 1985; Shenton, 2004). These elements contribute to the operationalization of data gathering, reported details, and the description of the research process, which allows other researchers to repeat the work.

Transferability

The transferability of the research, shown by a detailed description of this study, will help readers determine whether the results could be applied to other situations. A clear process was created for readers to follow within Moerer-Urdhal and Creswell's (2004) and Moustakas's (1994) five-step data analysis. The results cannot be generalized or transferred to the whole population due to the nature of the sample of participants. However, it was possible to identify trends that may also apply to similar situations, and that can be considered in future research.

Dependability

The dependability in this research was evidenced by a well-documented logical research process for replication, and the consistency of the data collected based on Tobin and Begley's (2004) recommendations. Creswell (2013) described the dependability process as one that will capture the consistency of the data collected. This data collection process enhances the dependability by reporting in detail every result, because interviews with older persons demand more time, and participants' age can play an important role in

dependability. Additionally, the repeatability of the data collection and analysis process in the study was ensured by using the NVivo 10 program for underscore analysis.

Credibility and Confirmability

The credibility and confirmability of the study were enhanced by the utilization of member checking as a tool to guarantee that the findings were true and accurate (Creswell, 2013). Furthermore, member checking the transcription by cross-checking was used during the interview, and follow-up with participants was performed to confirm the accuracy of data collected during the interview (Creswell, 2013). Meticulous transcription and validation of the information during the interviews allowed me to obtain the participants' own perceptions (Creswell, 2013).

Results of the Study

The information contained in each interview transcript was initially divided by linking each interview question to the participant narrative, resulting in codes, categories, and finally themes. To recap the results of this study, I will present a narrative summary organized by each interview question.

The research question was the following: What are the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency? From the five interview questions relating to the research question, I found criteria to present categories, a progression of four themes with examples of the participants' narrative, and a summary of findings outline, as follows.

Four themes emerged from the data analysis: (a) pension insufficiency as a matter of preventing poverty, (b) pension insufficiency as matter of social deprivation and the

guarantee of health, (c) avoiding dependence on government, and (d) financial literacy and planning. This section will be organized by these themes.

Theme 1: Pension Insufficiency as a Matter of Preventing Poverty

Participants' statements resulted in this first theme, "pension insufficiency as a matter of prevent poverty." Participant 1 described this as "receiving income according to the cost of living and my needs. Having enough to pay for housing, medicine, and being able to cope with my illnesses." Participant 2 echoed this by saying, "Enough income to survive. Enough to cover my expenses and life with dignity." Participant 4 included details about "enough to cover my medical, food, clothing, and household utilities," and Participant 10 added, "having enough income to be able to live on and pay for basic expenses. Have a decent and secure income." A summary of responses to the first interview question revealed that financial sufficiency for retired teachers means not having enough money to cover basic monthly expenses related to health, housing, utilities, clothing, food, fun, cleaning, and maintenance of the home, as well having to save in order to have money to face illnesses.

Theme 2: Pension Insufficiency as a Matter of Social Deprivation and the Guarantee of Health

The retirees who participated in this study did not feel economically safe and expressed that the TRS did not prepare them for retirement. All the interviewees reported that the TRS income was insufficient to cover expenses, and that the pensions need to increase. Nearly half of the participants (41.6%) perceived that teachers' pensions were not enough for the cost of living. Poverty living and returning to work were both reported

by 25% of the participants, and limited benefits and not having been prepared for retirement were reported by 16.6% of those interviewed.

This theme emerged from the responses to Interview Questions 2, 3, and 4, and from three categories: (a) teachers' current pension, (b) perceptions of pensions, and (c) typical week under the TRS. For example, the category "teachers' current pension" was the result of descriptions by Participants 1, 3, and 6 as "pensions are not according to cost of living," "not prepared for retirement," "the TRS does not prepare people for retirement," and "need to work returning." The "perceptions of pensions" category also contributed to this theme, with Participant 7 reporting, "not enough money to cover basics monthly expenses," and Participant 1 saying, "I do not receive a pension that covers my monthly expenses. I want to live with dignity." Mental health was a concern expressed by several people. For example, Participant 5 described "Constant anxiety, loss of health, and not quality of life guarantees." Participant 7 shared, "I feel very anxious, I do not have money to cover my medical expenses," and Participant 8 expressed, "I feel depressed every day."

Under the "typical week under the TRS" category, Participant 1 described their week: "I do not have money for entertainment, I just walk, and read all the time. Also, I do some volunteer work at church." Participant 3 reported engaging in "Part time work and hand craft activities" and then said, "I do not go anywhere, I do not have any money for transportation. I do wood handcraft to sell it and obtain some money." Participant 4 chronicled a typical week with pension insufficiency, social deprivation, and loss of health by saying, "Because I am receiving a low pension, I can't go out much to have fun.

I dedicate myself to doing crafts to entertain myself and not give myself depression.” A majority of those interviewed (66.6%) outlined limited entertainment because of lack of money, with 25% of these retirees reporting returning to work part time (mostly women, and mostly between the ages of 70 and 75). In addition, 25% of the retirees revealed that they did exercise (mostly male and between ages of 75 and 84). Additionally, 16.6% of these retirees reported that they worked part time, did handcrafts, and did housework.

Theme 3: Avoiding Dependence on Government

For these participants, the lack of money provoked in them a constant anxiety and loss of health, and 50% of these teacher retirees revealed that they did not have enough money to cover monthly expenses. However, they did not want to be government dependent. Participant 4 confided, “I'm going to the bankruptcy, we'll have to live on the government sooner or later because they did not think about it,” and Participant 5 reported, “I do not know what to do first, when I need to pay my expenses.” Some participants expressed that most of the retired teachers live with limited benefits and in poverty and stated that after retirement, a lot of retired teachers return to work ($n = 3$) or need to depend on government services ($n = 4$).

About 25% of participants ($n = 3$) regretted not paying Social Security. Participant 11 observed that “what is needed to maintain quality of life, is paying Social Security.” Participant 9 advised that “the first thing I would do is get teachers to pay Social Security. They must pay you a fair wage so they can afford Social Security and not suffer in retirement.” A quarter of the participants ($n = 3$) reported that paying for Social Security resulted in a guaranteed pension and better health coverage, and half of these

retirees stressed that an increase of pensions and benefits must occur because, according to Participant 4, they do not want to be “government dependable.” Despite this, 83.3% of the participants ($n = 10$) reported that even if they wanted to, they could not receive any aid from the government for services to meet their basic needs because they did not meet the income level requirement.

Theme 4: Financial Literacy and Planning

Nearly half of the participants (41.6%) stated that pensions should increase according to the cost of living. An increase of benefits is something that needs to be considered by policymakers, as outlined by 33.3% of these retirees. In addition, 33.3% of the retirees reported that they wanted quality of life, and an increase in pensions and benefits would facilitate this.

Of these retirees, 16.6% also recommended financial literacy and planning. Participant 1 illustrated a strong need for “retirement education,” and Participant 8 noted that the “Teachers’ Retirement System has to financially educate the teachers about how to live when they retire.”

Summary

The purpose of this qualitative study was to explore the perceptions of teacher retirees about their financial sufficiency. Multiple categories and four themes emerged as a result of the data analysis. The participants received teachers’ retirement pensions, and their pension range monthly was considered to be not enough money to cover basic expenses. The lack of money provoked a loss of health, and because of the lack of money to cover their basic expenses, they also reported limited entertainment. They regretted not

paying Social Security, and although many described not wanting to be dependent on government services, they often were not able to utilize the government services because they did not qualify. The need to return to work was a reality for some of the participants. As a recommendation to the TRS, the participants considered pensions according to the cost of living, increasing health care and benefits coverage, and educating teachers about financial literacy and planning. In Chapter 5, I present the interpretation of these findings, along with the study limitations, recommendations, implications, and conclusions.

Chapter 5: Discussion and Recommendations

Introduction

The purpose of this qualitative study was to explore the perceptions of retired teachers regarding their financial sufficiency, following the restructuring of the TRS. Four themes emerged as a result of answering the research question: What are the perceptions of retired teachers in Puerto Rico regarding their financial sufficiency? In this chapter, I will interpret the findings using the themes, aspects, and correlational patterns presented in Chapter 4. After the analysis of data, conclusions, and implications, I will offer recommendations for future action and research and conclude with some implications for positive social change.

Interpretation of the Findings

The results of this study confirmed many of those in the literature about pensions' limitations in supporting the standard of living of retirees, as well as their income insufficiency. Further, because this study was the first research in Puerto Rico to analyze the perceptions of teacher retirees and their income insufficiency, the results contribute to the body of knowledge needed by social support agencies as well as lawmakers to address the needs of teacher retirees. I interpreted the findings of this study using the four themes as a framework, although the themes, aspects, and correlations intertwine throughout the discussion.

Theme 1: Pension Insufficiency as a Matter of Preventing Poverty

This theme confirmed and augmented findings in the literature. All the participants acknowledged that financial insufficiency meant not having enough money

to cover basic monthly expenses. This clear understanding about the meaning of financial insufficiency was described by all the teacher retirees in this study. However, the literature showed a current debate in terms of defined pension adequacy, sufficiency, and financial sustainability. Gabriel (2017) explained pension adequacy in terms of a life cycle or consumption level of spending among retirees and their households. The author added the term *sufficiency* in terms of how retirees' needs are met and noted that sustainability includes not only income, but also the alternative to evaluate poverty levels among retirees. These definitions have been adopted by some organizations to guarantee a minimal standard of living amongst retirees (Burns, 2014). In the case of financial sustainability, the Elder Security Standard Index also considered measurement factors such as housing, food, transportation, medical care, miscellaneous, and geographical adjustments (Mutchler et al., 2015; Mutchler et al., 2018). The literature described a clear scarcity of knowledge in this retirement topic.

All the participants received a teacher's retirement pension monthly, and the pension of the majority ranged from \$1 to \$499.00 (25.0%) and \$1,000 to \$1,499 (25.0%). Half of the participants also received Social Security pensions—four of them less than \$500.00 monthly—and most of them were women.

The results of this study extend what has been reported. In 2014, TRS reported about 36,210 retired teachers with an average monthly base pension of \$1,476 (Actuarial Valuation Report, 2014). Of these retirees, 30,150 were 60 years old and over, and women made up 78% of the group (Sistema de Retiro de Maestros, 2014). The report

added that public-school retired teachers relied only on their pensions to cover their expenses (Sistema de Retiro de Maestros, 2014).

This finding showed the highest unanimity in responses among all participants. All the interviewees reported that the TRS income was insufficient to cover expenses. The participants perceived that teachers' pensions were not enough for the cost of living and that the pensions needed to be increased. Poverty living was one of the participants' concerns, along with returning to work as a consequence of lack of income. Furthermore, other pension benefits were limited, according to them. A statement from Participant 5 showed a perception about pension sufficiency: "The teachers did not pay Social Security and now we are paying the consequences. Teachers live in poverty."

As stated by Rivera (2018), the accelerated aging of the population in Puerto Rico, its income, education, and family factors present the challenge of reforming the social benefit of retirement. Marxuach and Lamba (2014) explained that Puerto Rico's 2010 census showed that over 67,000 elderly households had some kind of housing burden; during the next 5 years, this amount may increase to 78,000. Parallel to those studies, the only literature about research on Puerto Rico's retirement was done by Castro (2012) and Mattei and Sánchez (2007). Their research showed evidence about the differences in the types of pensions, including the TRS, which was twofold, as teacher retirees did not pay Social Security as a safety net, and the pension was not enough to support their standard of living. In addition, in 2013, the TRS was abolished, and a new defined contribution pension law mandated a reduction in benefits and an age increase was passed. A study by Forsyth and Vetzal (2019) described the risk factor in the defined

contribution structure and its relationship with the longevity circumstances of the retirees and how their lives were impacted. Huterska's (2016) study concluded that the modifications of Poland's pension plan to a defined contribution structure and the retirees' subsequent economic limitations increased the possibility of the retirees depending on social assistance benefits and becoming an economic burden to the government. Buchholz et al. (2013) also described that Germany's 2001 pension policy changes as increased retirement age, increased pension reductions, reduced public pensions benefit, and promoted private pension savings, which resulted in social inequalities. Sonya's (2019) study described old-age poverty with a lean German public pension. Meneu-Gaya et al. (2018) revealed that in many countries, there is a substantial lack of information regarding the retirees' income sufficiency, as well as deficiency, which pushes them to a process of restructuring their pension plans to maximize their financial sustainability to guarantee quality of life.

Half of the retirees in the study reported about not being economically safe in relation to lack of economic resources and the cost of living, "the pension does not meet present needs as it does not adjust to the cost of living" (Participant 12). In 2014, Burns demonstrated that the inadequacy of U.S. retirement systems to meet the reality of workers with higher life expectancy, insufficient retirement income, and higher poverty rates was a concern. In the case of Puerto Rico, recent retirement system reforms were focused mainly on cutting benefits, as well as COLAs. Parallel to this factor, the cost of living in Puerto Rico had increased the index of prices in the following indicators: transportation, entertainment, food, and medical expenses (Puerto Rico Department of

Labor, 2020). The study reported that 57% of the participants with a teacher pension and Social Security had a monthly income less than \$1,500.00. Additionally, the European Commission (2012) stated that pension adequacy was a preventive measure for poverty among the elderly to guarantee a suitable living standard with no discrimination between genders.

In this study, the TRS and poverty living relation was reported, mostly by women retirees, and this is consistent with other research. A study by Odum et al. (2016) on the federal poverty measure revealed the reality of poverty and economic hardship amongst senior citizens and retirees in the United States. The author also added that besides income poverty, the federal government employed no income poverty standards to examine poverty and economic hardship among older Americans. In the case of Puerto Rico, the Census Community Survey (2016) stated that 16.1% of elderly households were composed of an elderly woman without a spouse and 36.2% of these households consisted of a woman living by herself. In that same age group, approximately 40% were living under the poverty level, 44% men and 56% women. The results of this study showed that 83% of the participants did not receive any aid from the government services to meet their basic needs because they did not qualify. In addition, 83.3% of the participants reported that monthly expenditures on out-of-pocket prescription drugs were between \$1.00 and \$499.00. Half of the participants reported monthly out-of-pocket medical expenditures. When asked about other monthly expenditures, 100% of the participants described their actual higher cost of living and their basic monthly expenses on food (67% from \$100–\$300), electricity (50% from \$125–\$340), water (50% from

\$425–\$60), household telephone (8.3% from \$1–\$40), cable TV/internet (58.3% from \$95–\$150), car loan (16.6% from \$300–\$650) and other expenses (33.3% from \$25–\$400), personal loans (41.6% from \$60–\$300), and entertainment (8.33% from \$1–\$100). Participant 8 said, “With my pension I can't afford to live on. I do not have a pension that guarantees me a quality of life. I do not know what to pay first and what to pay later.” Similarly, Peinado (2014) described the importance of considering the Spanish poverty rates of women (21%) when considering that pension policies, lower earnings of women, and the number of years in the workforce resulted in more years in poverty because of higher life expectancy. A woman (Participant 2) expressed, “Women have more life expectancy, and we are the poorest. Our pension is really bad and living costs have tripled.”

In addition to not having money to cover their expenses, the participants in this study were concerned that their quality of life was not guaranteed. This was also found in the literature, which indicated that a minimal standard of living amongst retirees must include a basic level of food, shelter, clothes, and other necessities for material well-being to avoid economic deprivation (Burns, 2014). Benefit reduction in pensions will have significant effects on the living standards of current and future retirees worldwide. The literature also describes retirees' rate of savings at historically low levels, which means that future generations of retirees will probably have the same or even worse economic outlooks than present retirees (Kingson et al., 2014).

Pension insufficiency can affect retirees' standard of living. This retirement income crisis, with retirees no longer being able to meet their basic retirement needs, will

have consequences for their standard of living, health, and overall quality of life (Kingson et al., 2014). Meneu-Gaya et al. (2018) investigated how Spanish pension reform implied risks of pension inadequacy and sustainability for retirees and revealed a decrease in pension reform adequacy, mostly affecting certain groups with low earnings and short careers whose members could easily fall into poverty lines as they age. Likewise, Rzhanitsyna (2014) mentioned that Russian retirees who lived alone or as the head of a family spent more money on prescriptions, medical supplies, food, and transportation than younger individuals or families. Rzhanitsyna that this is an indicator of the difficulties faced by this specific group to meet an adequate standard of living. These worldwide trends are supported by the results of this research, as captured by Participant 8's statement, "You cannot live well unless the TRS ensure a benefit contribution that guarantees good health insurance."

Kin and Waite (2016) found a relation between lack of income and financial stability having implications for citizens of every age, but they noted that it has a greater impact on older adults who have to deal with issues such as lack of social and economic resources, widowhood, and elevated health care costs. Their study reported that of the women participants, half were widowed or single, and the other half were married. Both widowed and single retirees reported an annual household income below \$20,000 and were within the ages of 70 and 80 years. Furthermore, according to Kin and Waite (2016) the retirees who were single between the ages of 60 and 64 years reported an annual household income range from \$21,000 to \$60,000. This included both teacher retirees and retired school directors with higher salaries than teachers. Further, half of the married

teacher retirees reported an annual household income below \$20,000, within ages from 75 to 81 years old, and half of the married participants reported an annual household income range from \$21,000 to \$34,000, within ages from 68 to 76 years old (Kin & Waite, 2016).

Nishiyama and Smetters (2014) stated that because of the effects of elderly impoverishment on health care access, retirees are having to use a significant percentage of their pensions or savings to cover out-of-pocket health care expenditures such as insurance coverage, co-payments, and direct costs. More than half ($n = 10$) of the participants in this study reported out-of-pocket monthly prescription drug expenditures, and half of them reported additional out-of-pocket monthly medical expenditures. All participants also reported expenditures on other basic monthly expenses.

The participant-retirees expressed feelings about the need to return to work on a part-time basis after retirement. The teacher retirees in this study who reported currently working were between the ages of 70 and 75 years old, and two of them had an annual household income below \$20,000. Participant 6 detailed, “Pensions are very low, you have to work to be able to live,” and Participant 10 added, “I work part-time, the economic burden is very strong. That's why when you retire you have health and psychological problems.” This aspect confirmed findings in the literature. Carlstedt et al. (2018) and Sullivan and Ariss (2019) revealed that retirees with lack of economic resources, lower savings, income burden, reduction in pension benefits, and longevity are compelled to reenter the labor force after retirement. Extended results on this matter confirmed the elderly's challenges in Puerto Rico by showing an increase of 4.6% in

those 60 years of age and older in the workforce (11.6%); Puerto Rico Census Community Survey, 2016). However, parallel research also revealed the scarcity of reemployment within the elderly population when compared with younger workers (Choi et al., 2017; Marcus & Fritzsche, 2016; Phillipson, 2019). Buchholz et al. (2013) and Seeleib-Kaiser (2013) also reported that early retirement through unemployment insurance payments was a strategy from the German government in the 1970s to regulate the labor market that resulted in a decrease in replacement rates and increase in retirees' poverty for future projections.

Theme 2: Pension Insufficiency as a Matter of Social Deprivation and the Guarantee of Health

Half of the participants in this study reported that TRS pensions and health coverage must increase, and half of them also revealed that the pensions need to increase according to the cost of living. Furthermore, the increase in benefits was something to be considered, as they reported. The recommendation of paying Social Security for the present teachers in order to guarantee a pension and better health coverage was also revealed in the study.

A vast amount of literature supported this theme with findings that established that benefits for teachers' retirement income are part of many defined benefits plans, rather than 401k plans (Rhee & Forna, 2016). Rappaport (2017) and Rudolph et al. (2019) also described a worldwide impact of the aging population, and the consequences of the fiscal crisis moved some countries to reform their pension systems. Some reports have augmented the evolving understanding of the importance of Social Security

pensions and health coverage. In the case of Puerto Rico, about 30,150 of retired public-school teachers 60 years of age and over relied only on their pensions to cover their expenses (Sistema de Retiro de Maestros, 2012). In 2016, the Puerto Rico Community Survey stated that the principal income of elderly people 60 years or older was Social Security (80.3%), followed by the Nutritional Assistance Program (40%) and pensions (30.1%). Participant 5 communicated, “People say that retirees are a burden; however, without teachers there would be no professionals in our country. Teachers must pay Social Security so that it doesn't happen to them what it is happening to us.” Diebold (2017) and Jacobs et al. (2017) also revealed that older women in America rely more heavily on Social Security and public assistance for income than older men. In 2014, the Social Security Administration (2016) reported that more than 50% of all women 65 and over relied on Social Security to cover at least half of their family income, versus just about 33% of men in the same age group. Additionally, 27.4% of women 65 and over relied on Social Security to cover at least 90% of their family income, compared to 21.3% of men.

Constant anxiety and loss of health were revealed by half of the teacher retiree participants who had loss of health and constant anxiety because their lack of income to cover monthly expenses. Half of the participants in the study revealed a loss of health and feelings of sadness, desperation, frustration, upset, depression, and tension because of lack of money to cover expenses. A characterization of this matter was detailed by Participant 11, who said, “I am surviving each day.” Paralleled findings confirmed a correlation between older populations’ lower socioeconomic backgrounds and the

increased mortality rates, lower quality of life, chronic diseases, and lack of social networks (2015, as cited in Cahill, 2016). Similar findings were described by Segel-Karpas et al. (2013), who concluded that economic precarity was related to higher levels of attachment avoidance, depression, and illness in general. Odum et al. (2016) added that retirees with lower socioeconomic backgrounds often face food insecurity and are more likely to experience a heart attack than retirees with a more stable financial situation. Vera-Rodríguez et al. (2014) reported that in Puerto Rico, the financial struggles of retirees are even more difficult than in the rest of the United States because of the Island's economic constriction. The researcher added that Puerto Rican retirees' low incomes limit their diets, medical access (prescribed medications and health insurance), and housing; these restrictions can result in serious health and emotional consequences.

Social deprivation through limited entertainment, because of the lack of money, was reported by the majority of the participants in the study. This finding showed the highest unanimity in responses among participants ($n = 8$). Additionally, more than half of the participants revealed lowest activities in a typical week because of the lack of money from their pensions under the TRS. However, 42% of the participants reported doing some activity near their house during the week. Participant 5 described their limited activities, "All I do is go to church that I can go walking." This finding was supported by Blanco et al. (2015), Braun et al. (2017), Kopecky and Koreshkova (2014), and Poterba, (2014) the determinant factors associated with impoverishment in the older cohorts are related to working earnings, sickness, lack of activity, disability, medical and

long-term care expenses, nursing home expenses, as well as marital status. Burns (2014) established a need to improve retirement security in the United States to understand the aging population, life expectancy, the limitations of the welfare state, and the capacity of the state to provide support to them. Burns (2014) added that the obligation of the United States is to guarantee a minimal standard of living which includes basic level of food, shelter, clothes, and other necessities for material well-being to avoid economic and social deprivation to this aged population.

Theme 3: Avoiding Dependence on Government

Four of the 12 participants stressed that the increase in pensions and benefits must occur because they do not want to be government dependent. The results from other studies also cited the importance of government assistance programs, commenting that the aging population income characteristics will increase their demands between 2010 and 2050 (Poterba, 2014).

Trostel's (2017) research contains Pennsylvania Independent Fiscal Office report's projections for 2030. The report estimated that state assistance costs for residents 65 and older during the 2015-2016 Fiscal Year were around \$4.2 billion. Pennsylvania's elderly residents accounted for around \$50 billion in household spending during that same period, and it was predicted to increase significantly by 2030. The report added that comparably, an assessment conducted in Maine regarding retirees' finances for retirement years found that their lack of savings increased their reliance on public assistance (Trostel, 2017). After analyzing the effects of that trend, the report also

projected that the national cost of public assistance on the retirement-age population will be \$86 billion by 2032.

Pak and Kim (2020) and Ziliak and Gundersen (2019) showed that retirees' income risk and insufficiency increased the demand for formal government resources to help cover basic needs, such as subsidies for long-term care, groceries, and community services. Higo and Khan (2015) describe that to deal with the retirees' dependence on government services, many states and countries have to increase out of pocket payments for basic health services, home care services, meals on wheels, and long-term care services. However, research done on caregiver's burdens stated that privatization and marketization of elderly care affect caregivers and families the most because they must pay for services that were previously covered by the government (Harris, 2016, Waldausen, 2014; Xu & Halsall, 2017; Kim & Waite, 2016). These researchers confirmed that new and increasing expenses will develop serious difficulties for retirees to meet their basic needs. Additionally, the retirees will not be able to economically provide for themselves or if they do not have a close family member who can sustain them financially, they will face demanding services from their government.

Quinn and Cahill (2016) stated that retirement income provided only 63% of the total cash income for older households in the United States, and American private savings rates reached their lowest levels by the mid-2000s. Furthermore, the Social Security Administration (2014) added that for 2014, in the United States, fewer than 4% of retired citizens received cash public assistance and housing services. According to Mutchler et al. (2015) and Mutchler et al. (2018), the most vulnerable elderly, the ones with none or

few economic resources are limited to being eligible for other programs and services provided exclusively by the government. A majority of the participants in my study (83.3%) reported that they do not use government services to meet their basic needs. A clear expression regarding this matter was outlined by Participant 7, “Pensioners have a lack of health services at the primary, secondary, and tertiary levels. That will complicate their health more and will depend more on the government.”

Theme 4: Financial Literacy and Planning

Financial literacy and planning were described by retirees as something to be considered for future teacher retirees. The need to be prepared for retirement was reported by three of the participants of this study. For example, Participant 8 described, “The Teachers Retirement System has to educate future retirees on how to look for retirement savings alternatives.” Zulaihati et al. (2020) identified teachers as a group with limited resources and with a lack of financial literacy. Lucey et al. (2017) found that implementing different types of intervention focused on investing within the teachers' retirement programs increased confidence in the knowledge acquired. The only study done in Puerto Rico presented evidence of the pension systems and the lack of knowledge of government employees in retirement planning, showed that fewer than 50% of the respondents had tried to develop a plan for retirement (Castro, 2012, p. 16). Ali and Frank (2019), Allgood and Walstad (2016), Stolper and Walter (2017) stated the need for aging workers to choose a retirement plan to provide them with a financial well-being thru a financial literacy. Researchers described financial literacy as a significant factor in the wealth development of future women, resulting in higher levels of earnings

insufficiency and poverty during retirement (Bannier & Neubert, 2016; Bucher-Koenen et al., 2017; Potrich et al., 2018; Stolper & Walter, 2017). Sabri et al. (2015) examined a sample of Malaysian women working in government agencies and found that financial literacy will encourage proper use of financial management practices; this was an important factor to develop retirees' self-confidence.

Limitations of the Study

Because I used a qualitative research design, two limitations common to that design were present in my research, a small purposeful sample that limits transferability and self-reported data from participants (Vivar et al., 2013). Consistent with qualitative research, my sample size was determined by saturation. Once the information obtained from the participants became redundant, I constrained the sample to 12. Vivar et al. (2013) advised that the results should not be generalized to the whole population because this sample of participants in this context may not be representative of other teacher retirees. Future quantitative research should have a larger sample size to generalize findings.

The limitation of lack of objectivity as a researcher was also contemplated in this study. To maintain objectivity, I re-checked the answers with the participants in the event that a specific aspect of the collected data needed to be clarified because one way to ensure the credibility of the data is to give the findings to the participants to validate the results (Vivar et al., 2013). Additionally, because I was aware of the limitations of the study, the data gathering, and relevance of the results were essential to be successful.

Another limitation to this study may have been the bias developed by the participants retirees' reaction to an interviewer's gender. The chance for expectancy bias in this research was minimized by my being diligent while running the interviews. I made all efforts to mitigate any perceived power relationship issues involved in any part of this study. An unintentional influence through language or facial expressions may have occurred during the interviews.

Recommendations

This research was inspired by the need for policy makers to understand the financial sufficiency of teacher retirees and the retirement realities affecting their living standards. The recommendations in this section begin with broader suggestions extended to government, policy makers, social workers, teachers' system administrators, labor unions, communities, and their families. Then, recommendations to scholars for future research are provided.

Recommendations for Policy

The findings of this study reflected an understanding about the meaning of financial sufficiency by teacher retirees. However, the literature showed a current debate in terms of defined pension adequacy, sufficiency, and financial sustainability (Gabriel, 2017, Burns, 2014, Mutchler et al., 2015; Mutchler et al., 2018). I join these authors in calling for the government adoption of the term *sufficiency* as a measurement factor to guarantee a minimal standard of living amongst retirees and as an alternative to evaluate their poverty levels.

The legislature needs to embed a COLA within the TRS accelerated aging of the population in Puerto Rico. Income presents a challenge to reform the social benefit of retirement. The factors of not paying Social Security as a safety net identified by the participants of this study, and the risk factor of a new defined contribution structure should be a demand of actions to establish a better standard of living, according to the COLA adjustment for teacher retirees. These two factors along with the longevity circumstances of the retirees and how their lives will be impacted should also be considered (Forsyth & Vetzal, 2019). Furthermore, there is a need to seek out ways to foster dialogue about pension sufficiency as a matter of preventive poverty among the elderly to guarantee a better living standard.

Another recommendation driven by the results of this study is for TRS and the government to establish the term *quality of life guaranty*. Having a minimal standard of living amongst retirees will prevent economic deprivation, lack of health, and better overall quality of life (Burns, 2014; Kingson et al., 2014). The results of this study point to a correlation between not having money for expenses and the retirees' lack of mental health. This is supported by the literature that demonstrated lower socioeconomic backgrounds and the increased mortality rates, lower quality of life, chronic diseases, and lack of social networks, higher levels of attachment avoidance, depression, and illness in general (2015, as cited in Cahill, 2016; Segel-Karpas et al., 2013).

This study also indicates a need of sufficiency within the teacher' retirees avoiding government dependence. However, income risk and insufficiency factors correlate with literature with increasing the demand for formal government resources

(Pak & Kim, 2020; Ziliak & Gundersen, 2019). In addition, literature concurred that caregivers' burdens affect their families, who will face demanding services from the government as well (Kim & Waite, 2016). It is recommended that the government evaluate and facilitate the supply of subsequent services for the teacher retirees.

In addition to the recommendations previously presented, policy makers need to become aware of the levels of social deprivation teacher retirees have, and their need to reenter the labor force after retirement. The noticeable growth of the elderly population, along with an increased life expectancy and economic insufficiency, poses a need for actions on the present and future government, administrators, and public policy makers.

Lastly, the findings of this study indicate the need for public policy about financial literacy and planning before retirement, as a significant factor in the well-being of future retirees. Moreover, researchers described financial literacy as significant factor in the well-being development of future women, resulting in higher levels of earnings insufficiency and poverty during retirement (Bannier & Neubert, 2016; Bucher-Koenen et al., 2017; Potrich et al., 2018; Stolper & Walter, 2017). Participant 3 urged that "Teachers Retirement System should ensure that retirees are educated about how to prepare for retirement. I feel like I'm a burden to my family."

Recommendations for Further Research

This research about teacher retirees' perceptions of financial sufficiency, although limited, has contributed definitive criteria for future research of elderly teachers' financial sufficiency as a separate phenomenon. To increase the value for government and policy makers, this study should be expanded as quantitative research in order to include the

concept of sufficiency, in terms of how retirees' needs are met; including sustainability income, and evaluation of poverty levels among retirees. This would provide valuable understanding for public officials on how to develop effective policies and programs to guarantee a better quality of life for retirees. In addition, recommendations for future research include more studies that consider geographical zone, availability, acceptability, and accessibility of service perceptions of financial sufficiency within the elderly population. Continuous studies exploring gender differences, marital status, urban and rural differences, and financial sufficiency as a barrier to obtain government services are also recommended.

Expanded discussion and research should focus on what prevents elderly teachers' social and economic deprivation. Future studies should include how financial sufficiency affects mental health, risk burdens, and the government programs provisions in relation to financial sufficiency standards. Further research that evaluates the inclusion of evidence-based policy processes in the executive, judicial and legislative bodies of the government, should be conducted. Recommendations for Methodology

Recommendations for Methodology

During this study, I discovered different aspects of research methodology that are worth sharing. As presented in Chapter 4, all the participants preferred to deliver pre-interview and interview face to face. The face to face interviews provide structure, focus, and facilitate more in depth sharing (Brinkman & Kvale, 2015; Yin, 2018).

Not all the participants wanted to be audio-recorded for transcription and content-accuracy purposes. Instead, all the questions answered in the interviews were re-checked

with the participants in the event that a specific aspect of the collected data needed to be clarified. Cross checking with the participants by adding questions throughout the interview process promoted a better understanding and was used as a means to enhance the credibility and confirmability of the research (Harper & Cole, 2012; Tomm, 1988).

Implications for Positive Social Change

According to the TRS (2014), 36,210 teachers informed that public-school retired teachers relied only on their pensions to cover their expenses. This study will contribute to guide the development of new policies that would improve the quality of life of the present teachers and the teacher retirees in Puerto Rico. The results will help policymakers understand the financial sufficiency of teacher retirees and today's retirement realities affecting their living standards, as they debate potential changes to the current TRS policies.

As I disseminate the results of this research with different professionals and institutions and public policy makers, I expect to develop a greater awareness of the needs of present and future teacher retirees. Emphasis should be placed on the income sufficiency and the quality of living of teacher retirees. These results can also open a new window for future research on behalf of the retirees. Investing in research, programs, and policies will prevent teacher retirees economic, social, and health deprivation.

Conclusion

"We must use time creativity, in the knowledge that the time is always right to do right." Martin Luther King, Jr.

As government officials, policy makers, social workers, gerontologists, and teachers' system administrators, we are expected to do better for the retirees. The findings of this study provide the guidance to create economic sufficiency as a guarantee of a minimal standard of living for teacher retirees and an alternative to avoid poverty levels among them. Additionally, for the first time, this study revealed the challenges encountered by teacher retirees in Puerto Rico. A network of government, legislative bodies, and universities collaborating together, can help reciprocate what teachers have been doing for Puerto Rico. Considering the vast research literature studied, results, and findings of this study, we will engage in a journey of justice, recognition, and validation of what human dignity and education without boundaries mean.

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Appendix A: Letter to the Executive Director of the Organizations

Date: January 9, 2023

Name
Administrator
Puerto Rico Teachers Association

[REDACTED]

My name is Rossana López and I am carrying out my doctoral studies in Public Policy and Administration at Walden University. My doctoral dissertation is entitled "Puerto Rican Retired Teachers' Perceptions about Their Financial Sufficiency," which aims to study the socioeconomic needs of teachers retired from the government of Puerto Rico. As part of my doctoral dissertation, I plan to interview retired teachers.

I request your authorization to inform your members about the study and post a recruitment flyer in your facilities where the association offers services, in order to obtain teacher pensioners who, want to participate. I would be grateful if you could provide me with this authorization and that it be written in the English language in order to fully comply with the requirements established by the university.

Thank you in advance for all your help and willingness to this effect. You may contact me at [REDACTED] or rossana.lopez@[REDACTED] if you have any questions. Please send the letter via email to rossana.lopez@[REDACTED].

Sincerely,

Rossana López León, MSG

Appendix B: Advertisement

Participants Needed**Research about Teachers' Retirement**

I am a Walden University Ph.D. student conducting research about Puerto Rican teachers' retirement experiences to be included in my dissertation. I am seeking to interview teacher retirees from the public system with an interest in sharing their retirement perceptions. Confidentiality will be maintained for all participants. If you wish to be considered for participation in my research, please contact [REDACTED]@[REDACTED].com or ([REDACTED]) [REDACTED]-[REDACTED].

"Puerto Rican Retired Teachers' Perceptions
about Their Financial Sufficiency"



Contact me:

[REDACTED]@[REDACTED].com
([REDACTED]) [REDACTED]-[REDACTED]

Appendix C: Recruitment Letter

Date:

Dear _____

Thank you for expressing interest in being a possible participant in my dissertation study of public teacher retirees. I am interested in learning about your beliefs, opinions, attitudes, and experiences about your financial sufficiency as a retiree teacher in Puerto Rico.

Will you please answer the following questions to help me further qualify you as a possible participant in this study?

___ Are you retired from the Puerto Rico teacher retirement system?

___ Are you age 60 or older?

___ Do you currently live in Puerto Rico?

___ Are you willing to talk about your financial sufficiency and your experiences with the Puerto Rican teachers' retirement program in an audio tape-recorded interview with this researcher?

Interviews will be conducted by the researcher in my office, your home, or some other mutually agreed upon location. Interviews may require up to one hour to complete, depending on the amount of retirement perceptions you are willing to share. We will constantly review the information you share with the researcher, all of which is relevant for this research project. This will give you the opportunity to fully describe your experiences associated with retirement, including the meanings you attach to those

experiences. The member checking process will reconfirm responses in a real time and with a participant's time consideration.

I am excited about this study and hope you will choose to participate in it. If you believe you meet the criteria and you are interested in participating in this study, please complete the response slip at the bottom of this page, separate it, and return it in the stamped, addressed envelope provided or contact me at (████) █████-████.

I will contact you within one week from the date I receive your reply to schedule the date and time of your interview. Thank you for your time and consideration.

Sincerely,

Rossana López León

RESPONSE SLIP

Yes, I do wish to participate in your study.

Please contact me to arrange our interview.

Name: _____

Phone Number: _____

Email: _____

Signature: _____

Send this response slip to:

Rossana López



Appendix D: Preinterview Questionnaire

Puerto Rican Retired Teachers' Perceptions about Their Financial Sufficiency Regarding Their Socio-economic Profile

You are invited to take part in a research study about the **Puerto Rican Retired Teachers' Perceptions About their Financial Sufficiency Regarding their Socio-economic Profile**. I am Rossana López León, a Ph.D. student at Walden University, and as the researcher, I invite you to participate in the study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part in it through an interview.

Background Information:

The main purpose of this study is to explore, analyze, and reveal the perceptions of retired teachers regarding their financial sufficiency as per their socio-economic profile. It also has the intention of identifying their attitudes, beliefs, and opinions/feelings about their financial sufficiency.

Procedures:

- The interview will be done in a period of no more than one month after you consent to participate.
- The interviews will be done individually to have privacy.

Each interview will take 45 to 60 minutes

We will constantly review the information you share with the researcher, all of which is relevant for this research project.

This study involves the following steps:

- In coordination with you, we will select a convenient way to conduct the interview. (face to face). Interviews will be arranged according to your preferences.
- Each interview will be recorded.
- You are being informed of the purpose of the study through this consent form to be signed by you.

Voluntary Nature of the Study:

- Participation is voluntary. Everyone involved will respect your decision to join or not. If you decide to join the study now, you can still change your mind later. I seek approximately 10 volunteers for this study. There will be no compensation for participation. You will be free to leave the study for any reason and your personal data will not be revealed at any time.
- This consent form describes the steps involved, the duration of the study, the benefits, and the minimal risks involved. It also provides contact information to protect participants' confidentiality. This document follows the guidelines of Walden University.

Risks and Benefits of Being in the Study:

There might be certain minimum risks or discomforts that you may experience during the interview. These could be tiredness, irritability, hunger, thirst, cold, headaches, or other discomforts commonly encountered in daily life activities. However, if at any moment you are not in the full disposition to continue the interview, I will proceed to

stop and reschedule it at another agreed-upon time and date to eliminate any discomfort to you.

Privacy:

I am required to protect your privacy. To protect your privacy, I will not use your personal information for any purposes outside of this research project. Also, I will not include your name or anything else that could identify you in the study reports. If I were to share this dataset with another researcher in the future, I am required to remove all names and identifying details before sharing; this would not involve another round of obtaining informed consent. Data will be kept secure and will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

You can ask questions of me by email ([rossana.lopez@\[REDACTED\]](mailto:rossana.lopez@[REDACTED])) or telephone number ([REDACTED]-[REDACTED]-[REDACTED]). If you want to talk privately about your rights as a participant or any negative parts of the study, you can call Walden University's Research Participant Advocate at 612-312-1210. Walden University's approval number for this study is IRB will enter approval number here and it expires on IRB will enter the expiration date.

You might wish to retain this consent form for your records. You may ask me or Walden University for a copy at any time using the contact info above.

Obtaining Your Consent

If you feel you understand the study and wish to volunteer, please indicate your consent by checking ____.

Printed Name of Participant

Date of consent

Participant's Signature

Researcher's Signature

Puerto Rican Retired Teachers' Perceptions About their Financial Sufficiency

Regarding their Socio-economic Profile

Please check in the line next to the appropriate response.

Socio Demographic Data

1) What is your gender?

Female ____

Male ____

Non-binary ____

Prefer not to state ____

2) What is your age? ____

3) In which geographical zone do you live? Urban ____ Rural ____

4) Income

Annual Household Income

a. Below \$20,000 ____

b. \$21,000 - \$60,000 ____

c. \$61,000 - \$100,000 ____

d. Above \$100,00 ____

Do you receive a retirement pension?

Yes _____

No _____

Please mark the pension range monthly

a. \$1 - \$499 _____

b. \$500 - \$999 _____

c. \$1,000 - \$1,499 _____

d. \$1,500 - \$1,999 _____

e. \$2,500 - \$2,999 _____

f. \$3,000 - 3,999 _____

g. \$4,000 - 4,999 _____

Do you receive Social Security?

Yes _____

No _____

Please mark the pension range monthly

a. \$1 - \$499 _____

b. \$500 - \$999 _____

c. \$1,000 - \$1,499 _____

d. \$1,500 - \$1,999 _____

e. \$2,500 - \$2,999 _____

f. \$3,000 - 3,999 _____

g. \$4,000 - 4,999 _____

Government Services

Which of the following programs do you use to meet your basic needs? Select all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Public health insurance | <input type="checkbox"/> Nutritional assistance |
| <input type="checkbox"/> Medicare | <input type="checkbox"/> Social services coordination |
| <input type="checkbox"/> Home Care Assistance | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Housing Subsidy | <input type="checkbox"/> Other: _____ |

Expenses

Do you have out of pocket monthly prescription drug expenditure?

Please mark the out of pocket expenses monthly

- a. \$1 - \$499 _____
- b. \$500 - \$999 _____
- c. \$1,000 - \$1,499 _____
- d. \$1,500 - \$1,999 _____
- e. \$2,500 - \$2,999 _____
- f. \$3,000 – 3,999 _____
- g. \$4,000 – 4,999 _____

Do you have additional out of pocket monthly medical expenditure?

Please mark the out of pocket expenses monthly

- a. \$1 - \$499 _____
- b. \$500 - \$999 _____

- c. \$1,000 - \$1,499 ___
- d. \$1,500 - \$1,999 ___
- e. \$2,500 - \$2,999 ___
- f. \$3,000 - 3,999 ___
- g. \$4,000 - 4,999 ___

Appendix E: Interview Guide

Introduction:

Thank you for your help in this study. My name is Rossana López and before we begin the interview, I would like to talk to you about your participation in this research study. The purpose of this study is to explore, analyze, and reveal the perceptions of retired teachers regarding their financial sufficiency. It is also intended to identify their attitudes, beliefs, and opinions/feelings about their financial sufficiency.

I want to make sure you understand that participation in this study is voluntary, and you that may stop the interview at any time.

The interview should take about a 45 to 60 minutes, and we will be reviewing a lot of information, all of which is important for this research project. Since I don't want to miss any of your comments, would it be alright if our conversation was taped?

I will also be taking some notes during the session, but I can't possibly write fast enough to get it all down.

During this interview, you may feel tired, stressed, or emotional, but beyond that there should be no other risks to your safety or wellbeing.

All of your responses will be kept confidential. This means that your interview responses will only be shared with research team members, and we will ensure that any information we include in our report does not identify you. Remember, you don't have to talk about anything you don't want to and you may ask questions or end the interview at any time.

Are there any questions about what I have just explained?

Interview Questions:

Tell me a little about yourself, maybe about some of your hobbies or interests, or perhaps how long you taught.

Let's talk about financial sufficiency;

1. Describe what financial sufficiency means to you.

Let's talk about preparing for retirement;

2. Tell me about pensions and the Teacher Retirement System.

Tell me about the cost of life change.

3. What do you think about your teacher current pension type?

4. Tell me about what a typical week is like for you under the TRS.

-
-
-
-
5. If you could change anything about TRS pension income, what would that be?
-
-
-
-

I will use phrases to enhance credibility and confirmability such as:

- clarify a prior statement
- to explain further
- to be specific
- in other words

Conclusion:

This concludes the interview—thank you for sharing your experiences!

Do you have any questions for me?

As I review the tapes and my notes, I may need to clarify some things. May I contact you with questions? [confirm contact data ... phone, e-mail, address]

I will provide a copy of your individual transcript to check the information you provided during the interview. I will appreciate any comments or reactions you may have within a week. I will contact you by phone at the end of the week for your feedback.

Thank you again for your time.