PREDICTING AND CULTIVATING PUBLIC SERVICE MOTIVATION: A LONGITUDINAL STUDY MEASURING THE EFFECT OF PARTICIPATION IN AMERICORPS PROGRAMS

by

Kevin Dykeman Ward

B.A., University of Illinois, 2002

M.P.A., University of Colorado Denver, 2006

A thesis submitted to the

University of Colorado Denver

in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

Public Affairs

2011

This thesis for the Doctor of Philosophy

degree by

Kevin Dykeman Ward

has been approved

by

Peter deLeon

Mary E. Guy

Nancy L. Leech

James L. Perry

Danielle M. Varda

26 July 2011

Date

Ward, Kevin D. (Ph.D., Public Affairs)

Predicting and Cultivating Public Service Motivation: A Longitudinal Study Measuring the Effect of Participation in AmeriCorps Programs

Thesis directed by Professor Peter deLeon

ABSTRACT

Public service motivation theory argues that people in the public sector hold different values than their private sector counterparts. However, little is understood about how public service motivation may be affected over time and as the result of organizational experiences. Similarly, the validity of the public service motivation scale using secondary data has largely been unexamined. This research uses longitudinal data to track the effect of participation in the national service program AmeriCorps on participants and compares these results to a similar comparison group. It is posited that public service motivation may be cultivated through participation in service-oriented activity in the nonprofit sector. Findings revealed that antecedent conditions of PSM, including prevalence of seeing family members and mentors help others as well as participation in student government weakly (but significantly) predict whether someone joins AmeriCorps programs. Additionally, Perry's original public service motivation construct appears to hold when using secondary data among people who are interested in national service. Longitudinal analysis of an adapted public service motivation construct reveals that participation in AmeriCorps programs positively affects participants' levels of commitment to public interest and their knowledge of their communities. Participation also positively affects participants' levels of attraction to public policymaking; however a comparison group demonstrates a similar jump in these measures. Finally, members' levels of openness to new ideas appear to be negatively related to service in AmeriCorps. Additionally, it is found that nonparticipants experienced significant declines in their levels of commitment to public interest, openness to new ideas, and knowledge of their communities over an eight year period.

This abstract accurately represents the content of the candidate's thesis. I recommend its publication.

Signed_____

Peter deLeon

DEDICATION

This dissertation is dedicated to my parents, Mike and Sue Ward, who have been there every step of the way and have always encouraged me to strive for excellence and reach for the stars – I feel very fortunate to have come from such a supporting and encouraging family. Additionally, I dedicate this dissertation to my beautiful and magnificent bride-to-be, Jennifer, as we look forward to our next exciting chapters in our lives and starting a family of our own.

ACKNOWLEDGEMENTS

I would like to express my deep gratitude to the many people who were responsible in some form for me starting, and ultimately finishing this degree and dissertation. First, this accomplishment would not have been possible without the encouragement from Dean Paul Teske and Associate Dean Linda deLeon to pursue a doctorate.

I would also like to thank my cohort for creating an encouraging academic environment. In particular, I will always feel a close bond with Katrina Miller-Stevens who helped me to stay balanced, have fun, and always blazed the trail for the rest of us.

Next, I would like to thank my committee for the role each played in my personal and academic development. Prof. Perry for taking a chance on a relative stranger and his willingness to share his unmatched wisdom relating to the public service motivation theory; Prof. Guy for providing numerous opportunities to get in front of a classroom and get my feet wet teaching at the graduate level; Prof. Leech for helping me to understand the elegance in asking and answering simple questions; Prof. Varda for serving as role model and an inspiration for what an academic career can be – in addition to her willingness to open doors at RAND and include me on her cutting edge research,; and finally, to my advisor Prof. deLeon. Prof. deLeon

has provided a steady hand and sage guidance through nearly every phase of my graduate studies, and has been critical in my development as a scholar and job candidate. Whether it was providing detailed comments on term papers, turning around drafts of my dissertation quickly, writing incredible letters of recommendation, providing advice that I do not always understand at first, but is almost always validated, there is not a more important person to my development than Prof. deLeon – I thank you.

In addition to my advisors in the academy, I would like to acknowledge the role that Jon Roman at the Urban Institute and Lois Davis at the RAND Corporation played in exposing me to large-scale, well-designed research. My experiences at Urban and RAND were incredibly formative experiences in my development as a researcher.

Next, this dissertation and my relative successes would not be possible without the loving support of my parents, Mike and Sue Ward, who have always been there for me every step of the way. Whether it was helping me to understand the incredibly frustrating concept of subtraction in elementary school, or helping me to maintain forward progress as a young adult, I will forever appreciate their genuine interest in seeing me succeed. Additionally, my brother, Matt, has always kept me on my toes. His track record of following in my footsteps, but outdoing all of my performances has always forced me think critically about my choices.

Finally, and perhaps most importantly, I want to thank my incredibly beautiful, ever-patient, and wonderfully self-less bride-to-be, Jennifer for being by my side during two of the most important times of my life to date. During our trip around the world, I knew I had found a keeper. But it was her steadiness, loyalty, and willingness to sacrifice during a time when I was trying to find a job in a dismal market, finishing a dissertation, and planning a wedding, that leaves no doubt in mind that we will have a long and joyous marriage. I am confident that I am the most fortunate man in the universe.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

"Each of us, at some point in our lives, experiences something that forever changes us. It is the point that divides everything that has happened in the past from anything and everything that will happen in the future."

-Kate Amana, AmeriCorps*NCCC American Red Cross in New York City

"At some point over those ten months, I realized something of great importance. I was loving every minute of it. I was waking up every day excited about what I was doing. And believe me, it wasn't the actual physical work that was motivating me...So now I'm hooked. Now I need to do something with my life that makes a difference. No, my career path will never again require me to know the difference between a Chop-Saw and a Skill-Saw (which, incidentally, has to do with the degree of scar tissue they produce). And I will never have another job that requires me to perform morning exercises—unless you count running to catch the No.6 train with a bagel and coffee in my hands. Yes, I turned down that banking job and traded in my calculator for a legal pad. I know, I know, becoming a lawyer doesn't exactly sound like I've chosen to serve humanity. Lawyers are evil, right? But as it turns out-and trust me, I've done extensive research on this—there are a few lawyer mensches out there, people with integrity and honor. The field of public-interest law is an area where I can be challenged, make a difference, and love what I'm doing."

-Adam Herzog, AmeriCorps*NCCC Habitat for Humanity and others, Charleston, SC

1: Introduction

1.1. National Service in the United States

National and community service in the United States can be traced back to civic, social, professional, military (i e militias) and religious associations in the earliest days of the republic Attempts to organize federal national service programs include the development of the Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) during the Great Depression, the Volunteers in Service to America (VISTA) program during President Lyndon Johnson's War on Poverty, and the development of the Peace Corps by President John F Kennedy However, the community service movement has recently seen resurgence in political and popular support In the early 1990s, a large-scale government backed domestic service initiative was developed under President Bill Clinton's AmeriCorps program Under his administration, the AmeriCorps program grew to support 50,000 members per year The program was then expanded after 9/11 by then-President George W Bush to support 75,000 members per year in 2004

While the national service program has taken root over the past two decades and seen steady improvements under the Bush administration, the AmeriCorps program was recently authorized for a dramatic expansion with the passage of the Edward M Kennedy Serve America Act On April 21, 2009, President Barack Obama signed the legislation, which among other things, nearly triples the size of the AmeriCorps program [1] The legislation, co-sponsored by Senators Orrin Hatch (R-UT) and the late

[1] For a list of highlights of the Serve America legislation, see Appendix A

Edward Kennedy (D-MA), expands the AmeriCorps program from 75,000 to 250,000 positions by 2017.[2] In line with James Perry's (2004) argument that civic service in North America has endured a relatively cyclical existence, national service again appears to be ascendant on the American policy agenda.

Though the AmeriCorps program was initially met with resistance by Republican leadership in the early 1990s and painted as "paid volunteerism" that crowded out unpaid volunteers who had been the backbone of American civic engagement for centuries (Waldman 1995), today the AmeriCorps expansion legislation enjoys wide bipartisan support. Proponents of the government sponsored national service programs have marketed the program as having many purposes and serving many target populations. In addition to positive impacts on program participants and the communities they serve, the national service program AmeriCorps is also being viewed as a potentially cost-effective approach to providing services through nonprofit organizations during difficult economic times. Richard Stengel of TIME magazine writes,

> National service often feels like motherhood and apple pie--who's not for it? Indeed, the [Serve America] bill had overwhelming bipartisan support. But at a time of economic distress and dislocation, service has come to seem like a silver bullet that can help address some of our most intractable problems. Applications for AmeriCorps, the Peace Corps and Teach for America are pouring in--there are many more applicants than spots. Is that due to the economy? Perhaps. The bill authorizes $5.7 billion for national service over the next five years, which can jump-start a range of programs to help schools, health care and the environment.
> (Stengel 2007, p. 48)

Advocates of the AmeriCorps program, including Stengel, generally use a "Swiss army knife" metaphor to describe the purpose of the program, in that it serves as a tool with many functions (Waldman 1995; Perry, Thomson et al. 1999). Objectives of

[2] For an overview of the Serve America legislation, see Appendix B

the program include producing valuable outcomes in communities, an opportunity to affect positively the program participants, an opportunity for Americans to serve their country in a non-military manner, leveraging volunteers in the nonprofit sector in a cost-effective manner, bridging social classes, cultivating a civic ethic in young people and developing the next generation of civic leaders (Waldman 1995; Perry, Thomson et al. 1999; Perry and Katula 2001; Tschirhart, et al. 2001; Perry 2004; Perry and Thomson 2004).[3] Most people, however, view the program as a combination of these and other goals. To prepare for this potential large-scale expansion of the AmeriCorps program, more research should be conducted to more thoroughly examine the outcomes of the program, particularly in terms of national service. This research helps to further national service scholars' understanding of the affects that the program has on individuals.

In addition to the positive benefits of the program to individuals, communities, and society, the impact of the program may have an additional and unanticipated practical function of preparing and training the next generation of public servants. The Government Accountability Office reports that 33% of the federal workforce will be eligible to retire in the year 2012. While some research has been conducted by the Corporation for National and Community Service to determine where AmeriCorps alumni are likely to work after completion of the program, little is understood about their motivations behind these decisions. Next, it is necessary to introduce some terms, concepts, and a timeline related to the AmeriCorps program.

[3] For a cost-benefit analysis of outcomes related to AmeriCorps, see Appendix C

1.2. AmeriCorps – A Brief Introduction

The AmeriCorps program was introduced in 1993 as a presidential campaign promise by then-candidate Bill Clinton to create opportunities for young people to engage in community service projects for one year in exchange for a modest living stipend and education award for higher education tuition or student loans.

Upon Clinton's election in 1992, his proposal was quickly met with resistance from a wide coalition of interest groups and legislative blocs including conservative Republicans opposed to Clinton's overall agenda and veterans advocacy groups who were concerned that the AmeriCorps education award may undermine the similar GI bill awarded to soldiers who have served in the military. Through a series of political accommodations, Clinton's program quickly became a distant version of his original ambitious plan (Waldman 1995). Despite Clinton's clear initial program goals (providing inexpensive, qualified labor to high-need American communities as well as the secondary benefit of providing higher education opportunities to the disadvantaged), the end-product was a program with an ambiguous problem definition and unclear programmatic goals (Lenkowsky and Perry 2000). While AmeriCorps continued to survive a contentious existence, even through the indifferent G.W. Bush Administration, there have been efforts to clarify some of the implications the program has on American society.

From a programmatic goals perspective, the umbrella Corporation for National and Community Service (CNCS) identifies its mission as "to improve lives, strengthen communities, and foster civic engagement through service and volunteering" (Anonymous, 2006). The CNCS is an independent federal agency that

encompasses several responsibilities; first, the Corporation is responsible for awarding grants to non-profit organizations and local governments to promote service and voluntarism in the United States and abroad. Some of these grants are administered directly; however, most of the CNCS monies go through state commissions that are established to review grant applications and prioritize state service directives. Second, the CNCS also serves as an overarching umbrella organization to the service programs AmeriCorps, Senior Corps, and Learn and Serve. AmeriCorps itself is a national service program that is currently funded to offer 75,000 Americans the opportunity to serve their country through domestic community service; however, it is scheduled to accommodate 250,000 members by 2017 (see Appendix A). AmeriCorps positions vary in length and commitment, but typically AmeriCorps members agree to perform 1,700 hours of service in exchange for a modest living stipend and a $4,725 education award. In 2005, there were 74,689 AmeriCorps members who performed 62.4 million hours of service and recruited/managed 1,376,194 volunteers through the program (2006).

As a result of the AmeriCorps program's wide reaching goals, including outcomes in the communities being served, impacts on the individuals being served, and increased capacity of nonprofit organizations and local government agencies, scholars have a relatively modest understanding of the measureable effects of the program on program participants and the communities they serve, as well as societal implications (Perry and Thomson 2004). However, research related to volunteering, service learning, and community service help to inform potential impact of service on participants and communities. In line with a new and expansive national commitment to participatory public service, it is necessary to understand better the results

generated by the AmeriCorps program. One potentially useful way of explaining the effects of participation in the AmeriCorps program on individuals lies in public service motivation literature. This dissertation examines the effect of participation in national service programs on individuals' public service motivations.

1.3. Management in Sectors – Public Sector Motivation

One potentially useful way of explaining worker's propensities to seek public sector employment lies in the public service motivation body of theories. Over the past several decades, a debate about the fundamental characteristics of management in the public and private sectors has emerged (Buchanan 1974; Rainey 1982; Perry and Rainey 1988; Simon 1995; Simon 1998; Rainey 2003; Rainey and Chun 2005). The public service motivation literature was born out of this debate within the public management literature and generally argues that public sector employees hold a unique set of values that distinguish them from their private sector counterparts. While some scholars argue that structural, legal, and market differences fundamentally alter management structures, techniques, and practices between the sectors (Rainey 2003), others counter that the sectors have more commonalities than differences (i.e., POSDCORB) (Perry and Rainey 1988; Simon 1998; Rainey and Chun 2005). These latter scholars argue that managing employees in the different sectors is relatively constant and that the structural, legal and market-driven differences are nominal in the larger scheme. Since most management scholars today generally agree that employees in the public sector hold unique values, public sector motivation literature has grown considerably recently in an effort to help both

scholars and practitioners better understand the motives and values of public and private sector employees [4]

Among the leading and most promising research veins in public administration and management literature, public service motivation (PSM) theories, which were largely developed and fostered by James L Perry, posits that workers attracted to public service are likely intrinsically motivated to serve the public At its most basic definition, public service motivation refers to "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, p 368) Perry and Wise (1990) suggest that interests such as attraction to public policy making, sense of civic duty, compassion, and self-sacrifice are all associated with public service motivation

Several scholars (Behn 1995, Perry, Mesch et al 2006, Perry and Hondeghem 2008) have identified motivation as a "big question" in public management that requires additional scholarly attention to create a more effective public sector This renewed focus on employee motivation is likely in response to the push toward creating more efficient and effective public sector organizations that occurred in the early-to-mid-1990s, the so-called "New Public Management" movement Private sector reward schemes, such as pay-for-performance and bonus incentives were promoted in the public sector in an effort to promote more effective performance Similarly, the emergence of the nonprofit sector has contributed to a "blurring of the lines" between sectors (Dahl and Lindblom 1953, Allison 1984, Weisbrod 1997, Haque 2001) These unclear boundaries between the sectors result in the need for a

[4]Coincidentally, the public service motivation literature has developed along a similar timeline to the national service program AmeriCorps This is not entirely (or perhaps even primarily) coincidental See Perry and Wise (1990) discussion of national service as a reason for developing public service motivation research

better understanding of the motivations of employees in their respective sectors to achieve desired outcomes in public affairs. Today it still remains unclear if private sector reward structures and incentives are effective in public sector and nonprofit organizations implementing public policy (Denhardt 2007).

While these calls for the public sector to operate in a more business-like manner have largely subsided, the PSM construct has emerged as a promising alternative theory to help explain why these reform efforts were not as successful as originally hoped. Rather than responding to extrinsic rewards and incentives, PSM posits that public sector employees are intrinsically motivated to make an impact on their communities and societies.

Recent advancements in public service motivation literature have helped to define PSM as a distinct subfield within the public management literature. A high-water mark of the mounting interest in PSM research can be found as recently as 2008 and 2010. In 2008, an edited book dedicated to PSM was published (Perry and Hondeghem 2008) and three PSM symposia were held in 2010 in the academic journals *Public Administration Review* (PAR), *International Public Management Journal* (IPMJ), and *Review of Public Personnel Administration* (ROPPA). Indiana University School of Public and Environmental Affairs also recently hosted the International Public Service Motivation Research Conference where PSM scholars gathered to discuss their current work.[5] These recent and future explorations have also helped to develop more clear research agendas for PSM, including looking at PSM longitudinally and the role service plays in developing PSM.

[5] See http://www.indiana.edu/~ipsm2009/index.html

While PSM research has made dramatic strides over the past decade, surprisingly little is known about the origins and drivers of public service motivation. Of particular interest to this dissertation, it is not understood if public service motivation is a dynamic or static trait in individuals. Specifically, is PSM a value that may be cultivated through programmatic or service participation? Or more simply, do levels of PSM change over time? Perry and Hondeghem (2008, p. 303) call for scholars to examine the stability or changeability of PSM:

> Public service motivation may be relatively stable individual traits that remain more or less the same during one's lifetime. If public service motives are conceived in this way, an inference is that work experience will have little impact on the degree of public service motivation. Another prospect is that public service motivation is a dynamic train, which can change over time and be influenced by work experience. To sort out how dynamic or stable public service motivation is, we need longitudinal research to assess the evolution of public service motivation during one's lifetime, including pre-entry, entry, and post-entry work experiences (p. 302-303).

Similarly, while some research has begun to examine the role of organizations in affecting public service motivation (Cerase and Farinella 2006; Moynihan and Pandey 2007), relatively little is understood about this relationship. Perry and Hondeghem (2008, p. 303) identify the importance of these studies and call for more research examining organizational influences on individual levels of PSM:

> Early research has found a negative relationship between public service motivation and tenure (Moynihan & Pandey, 2007)...Moynihan and Pandey (2007) found that the perception that an organization is actively implementing reforms, such as quality management, decentralization, and empowerment, is positively associated with public service motivation. So an important question is: what factors in organizations can account for an increase or a decrease of public service motivation?

These calls for research suggest that institutional considerations may be in part responsible for changing individuals' levels of public service motivation. Even though it is unknown if PSM remains constant or changes in individuals over time, it is likely that changes may be prompted by organizational environments, cultures, and

experiences (Perry and Hondeghem 2008). While this dissertation does not directly address the role of the organization in affecting public service motivation, it does provide an understanding of the effect of national service experience experiences on individual levels of PSM.

1.4. Personnel and Hiring in the US Government

This is a watershed moment in the field of American public service and human resources, in that in 2012, over 33% of the public sector workforce will be eligible for retirement, largely due to aging of the "baby boomer" cohort (GAO 2009). As a result, the public sector will have to compete with the private and nonprofit sectors for personnel to fill these vacancies. Filling public sector positions with qualified applicants will present significant problems for public managers in the coming decade. A recent report by the Government Accountability Office highlights these concerns:

> The proportion of federal employees eligible to retire is growing. While this proportion varies across agencies, in four agencies—the Agency for International Development (USAID), the Department of Housing and Urban Development (HUD), the Small Business Administration, and the Department of Transportation—46 percent of the workforce will be eligible to retire by 2012, well above the government-wide average of 33 percent.
> (U.S. Government Accountability Office, 2009, p. 2)

To address these personnel issues, a more complete understanding of what motivates young people (generally, 18 to mid-twenties) to serve in the public sector is necessary for public sector personnel directors. Rainey (2003, p. 221) argues:

> Many federal managers and professionals at all levels of government will be eligible for retirement within a short period of years, and surveys have indicated that many young people do not see government as an attractive place to work. Technological advancements and other trends have been creating the need for government personnel with more and different types of advanced education and skills. Government has to

compete with the private sector for such people, and private organizations often have more flexibility in compensating for them and paying them more.

Other scholars agree that an important step for government recruiters facing a massive wave of retirement is to better understand who they should be targeting for recruitment, what motivates these people and how this information can be translated in to cost-effective labor (Light 1999; Lewis and Frank 2002). In particular, Lewis and Frank (2002, p. 395) argue that "this impending wave of hiring increases the need to investigate what kinds of people are attracted to government jobs and what characteristics make those jobs appealing." They go on to highlight the challenges ahead for government recruiters:

> Our findings confirm that governments face an enormous challenge in attracting the best and brightest of the younger generation into public service. The public sector cannot recruit form as large a pool of Americans who *prefer* government jobs as even one decade ago, and the pool seems to be shrinking with each succeeding cohort. The problem of drawing college graduates into government may already be surfacing among new public employees. The Merit Systems Protection Board (2000, 4-5) finds declining educational levels among federal new hires – only 40 percent had four-year college degrees in FY 1998, down from 50 percent in FY 1994...Today, with nearly 40 percent of the federal civil service born during the first 10 years after World War II and fast approaching retirement, hiring needs are likely to escalate (Lewis and Frank 2002) p 401.

Since the public sector is posed with these relatively new challenges (the private and nonprofit sectors are facing a similarly challenging human resources environment), it is necessary for public and private sector human resources personnel to better understand how to attract the right people to their respective sectors.

1.5. Practical and Theoretical Implications of Research

In addition to providing theoretic contributions to the public service motivation field, this dissertation potentially provides several practical contributions for public managers related to recruitment and retention, public sector incentives, and

optimizing national service experiences. First, by understanding what motivates potential public sector employees, public sector managers may be better able to attract quality, more dedicated employees. Assuming well-suited employees are recruited to the public sector, a better understanding of PSM also allows managers to possibly increase worker effectiveness, efficiency, and maximize outputs by matching rewards to worker motivations (Cherniss and Kane 1987).

Second, related to recruitment and retention in public service, this thesis has two potential implications. First, due to the generally younger demographic captured in the sample, it proposes to provide a general understanding of public service motivations among those attracted to national service. Second, it examines the capacity of a government-run national service program to cultivate the next generation of public servants.

Finally, this study could help guide national service programming to ensure participants a public service experience in AmeriCorps that responds directly to the values identified in the PSM construct. By understanding the theoretic underpinnings behind the PSM construct, managers may provide AmeriCorps members and other civic-service program participants with an improved service experience, as well as recruit committed individuals to man the public sector. These and other issues have been the focus of considerable media attention to national service programs (Stengel 2007; Stengel 2008; Stengel 2008; Stengel 2008; Alter 2009; Alter 2009; 2009). TIME magazine has dedicated two entire editions (the first and second "annual" edition) of the magazine to national service in 2007 and 2008 (Stengel 2007; Stengel 2008).

Though relatively sparse, scholarly research designed to understand programmatic outcomes related to service have started to emerge in the last several years. The Corporation for National and Community Service (CNCS) has commissioned several studies examining the impact of the program; however, most of the research on national service is exploratory and not theory driven, or the theoretical underpinnings are not clearly defined. Considering the upcoming period of projected rapid CNCS program expansion, understanding the impacts of program participation on participants are necessary to ensure successful implementation and evaluation of the AmeriCorps expansion policy.

Lastly, while the practical implications of this dissertation seem timely and relevant, this thesis's main purpose is to contribute to the growing body of theoretical research related to public service motivation. Over the past decade, progress in developing and testing the PSM construct has been made; however, there is still considerable work to be done.

Perry (1997, p. 192) explicitly suggested that national service and AmeriCorps may get to the heart of the public service motivation when he wrote "it is conceivable that innovations such as schools dedicated to public service themes and national service programs such as AmeriCorps*USA will fill gaps not adequately served by the family and other traditional institutions." It is in this overt call for research examining the impact of national service programs on public service motivation that this dissertation is rooted.

Perhaps the most important contribution of this research however, are the longitudinal data used to examine how individual behavior and attitudes related to PSM changes over time and how it may be effected by a service experience. While

some studies have shown changes in individual behavior after participation in service programs (Simon and Wang 2002; Brower and Berry 2006; Corporation for National and Community Service 2007), there has not been sufficient research examining whether these identified changes are temporary or sustained over time.

Finally, by examining a matched population, it might be possible to determine how levels of public service motivation change in individuals over time, which is not currently addressed in the PSM literature. The longitudinal nature of this dataset may create an opportunity for an important contribution to the PSM body of theory.

1.6. Research Questions

The recent flurry of scholarly attention to PSM coupled with the looming retirement of many public sector employees and demonstrated interest in expanding national service opportunities have created a unique opportunity for studying and advancing the field of PSM. Here, it is proposed to conduct a longitudinal study of PSM to answer several questions related to public service motivation. Research questions were developed to guide the generation of more specific hypotheses, which are presented in chapter 2. These research questions include:

- Are the PSM antecedent conditions of PSM good predictors of whether a person joins AmeriCorps?
- Can the PSM construct be accurately tested using secondary data?
- Does participation in service effect levels of PSM in individuals?
- Are observed changes in levels of PSM sustained over time?

1.7. Thesis Preview

The following literature review section examines the development of the public service motivation construct, empirical tests using this theory, and research

investigating the capacity of other similar programs to generate institutional change. A methods section outlines statistical techniques used for analysis, provides an overview of the dataset, and discusses potential limitations of this study. Next, analytic results are presented. Finally, a discussion relating the findings to the literature is presented, and areas for future research are identified.

2: Literature Review

While the public service motivation (PSM) concept was introduced nearly two decades ago, it was not until recently that scholars began to more thoroughly test, apply, and reorganize the PSM construct. This literature review begins with an overview of a major argument in public management literature that suggests that management in the public and private sectors are similar on most important dimensions. From here, PSM is defined and the development of the PSM framework is discussed to help explain some of the potential differences between public and private sector management related to motives and values of public sector employees. Next, competing theories to PSM are discussed, followed by an examination of research that tests, applies, and reorganizes the PSM framework. Finally, research related to public service and AmeriCorps is examined.

2.1. Public vs. Private Management

Within the fields of administration and management, there has been a long-standing debate regarding the uniqueness of management among the private, public, and more recently the nonprofit sectors. Despite several decades of empirical research, the degree of similarities and differences between management in the public, private, and nonprofit sectors remains somewhat unclear. Several scholars (Scott and Falcone 1998; Boyne 2002) have attempted to conduct meta-analyses of research relating to this fundamental question in public management and public affairs, which serve as a

good starting off point for a discussion about how management in the public and private sectors relate to one another.

In their exploratory analysis of three frameworks that attempts to categorize the similarities and differences between the sectors, Scott and Falcone (1998) identify three underlying conceptual frameworks: the generic approach, the core approach, and the dimensional approach. The *generic* framework argues that that management functions, organizational processes, and managerial values are essentially the same among sectors (Murray 1975; Gold 1982; Baldwin 1987). While this approach is not generally accepted by many contemporary public management scholars, it played an important role in prompting research related to the similarities and differences among management in the public and private sectors. The *core* approach, rather, suggests that while comparisons to organizational processes and management strategies may be made between public and private firms, the economic, formal, and legal differences in status create too great of a fundamental difference to really compare. The main argument in this approach is that these fundamental differences make the transmission of management practices from the private sector to the public sector impractical (Allison 1984). Finally, the most contemporary perspective, the *dimensional* approach, argues that all organizations can be evaluated on their degree of "publicness" (i.e. how public or private are they) along several dimensions (e.g., resource acquisition, composition of output, diversity of mission, and environmental transactions (Bozeman and Bretschneider 1994). This framework represents a settling of the pendulum shift from "public and private management are the same" to "public and private management too different to compare" and settles somewhere in the

middle by stating that "public and private organization today fall somewhere on a continuum of 'publicness' and adapt their management strategies accordingly."

Similarly, a synthesis of findings from empirical research by George A. Boyne (2002) identified 13 hypotheses relating to the differences between private firms and public agencies by examining the impact of "publicness" on organizational environments, goals, structures and managerial values. Most relevant to this study are Boyne's hypotheses regarding managerial values. He posits that the distinctive set of values outline in "public service ethos" (Pratchett and Wingfield 1996) indicate that public sector employees are less likely to be motivated by financial rewards and that policies such as pay-for-performance and financial bonuses will be largely ineffective in the public sector, as many New Public Management scholars would argue. Secondly, Boyne argues that public managers are professionals driven by a desire to serve the public and promote public welfare in a relatively self-regulating environment. Finally, he indicates that public employees may have a lower organizational commitment due rigid personnel procedures and a disconnect between performance and rewards. Perry and Porter (1982) addressed this argument earlier by suggesting that it is difficult for public organizations to create a connection between individual effort and organizational outcomes. They credited this weak linkage to factors including the large size of governments, the pluralistic nature of policy implementation networks, and the absence of clear performance indicators and norms in many government operations. These public sector managerial values result in the hypotheses: "1.) Public sector managers are less materialistic; 2.) motivation to serve the public interest is higher in the public sector; and 3.) public managers have weaker organizational commitment" (Boyne 2002, p. 103).

Through critically analyzing 34 empirical studies whose aim was to illuminate this debate on the differences between public and private agencies, Boyne finds that only three of his original hypotheses are supported by the research. Boyne's findings include: public organizations are more bureaucratic, public managers are less materialistic, and public managers have weaker organizational commitment than their private sector counterparts. Somewhat surprisingly, Boyne was unable to accept his hypothesis relating to values.

2.1.1 Evolution of the Public vs. Private Distinction

It is widely thought that Woodrow Wilson, in his 1887 essay, "The Study of Administration,"was the first scholar to establish a complete separation of "politics" and "administration" in the study of public administration and management (Wilson 1887; Allison 1984). As a result of this essay, for the next century, scholars largely treated management in the private and public sectors as their own distinct disciplines, reflecting little cognitive overlap.

Early observers of public administration saw clear (and sometimes more muddled) theoretical differences in the structures, institutions, and response to markets between the sectors (Wilson 1887; Dahl and Lindblom 1953; Downs 1967; Lindblom 1977; Perry and Kraemer 1983; Allison 1984). Hal Rainey refers to this posited distinction:

> A distinguished intellectual tradition bolsters the generic perspective on organizations – that is, the position that organization and management theorists should emphasize the commonalities among organizations in order to develop knowledge that will be applicable to all organizations, avoiding such popular distinctions as public versus private and profit versus nonprofit. As serious analysis of organizations and management burgeoned early in the twentieth century, leading figures argued that their insights applied across commonly differentiated types of organizations. Many of them pointedly referred to the distinction between public and private organizations as the sort of crude oversimplification that theorists must overcome. From their point of

view, such distinctions pose intellectual dangers: they oversimplify, confuse, mislead, and impede sound theory and research. (Rainey 2003, p. 56)

Research has shown that other taxonomies and typologies, such as the size of an organization, serve as better predictors of organizational outcomes (i.e., how bureaucratic is an organization? How many rules or procedures do they have?) than does the public/private distinction (Haas, Hall et al. 1966; Pugh, Hickson et al. 1969). Studies that claim the validity of the public/private distinction seem to consistently conclude that this distinction is an inadequate taxonomy for explaining differences between public and private sector organizations (McKelvey 1982; Perry and Rainey 1988; Rainey and Bozeman 2000; Boyne 2002).

As the field of public management matured, this distinction became even more complicated. While many scholars today agree that management in the different sectors have more commonalities than differences, they also acknowledge that managers must still adapt to the rules and influences in their particular sectors and settings. One of these sectoral differences that has garnered considerable recent attention is public service motivation.

There has been a trend toward the argument that there are differences in intrinsic and extrinsic motivations in employees in the public and private sectors (Buchanan 1974; Perry and Porter 1982; Rainey 1982; Perry and Wise 1990; Gabris and Simo 1995; Brewer, Selden et al. 2000). PSM theorists believe where private sector employees are more likely to place a higher value on extrinsic rewards such as higher income and shorter work hours, public sector employees place a higher value on work that is perceived as important and provides a feeling of accomplishment (Houston 2000). Additionally, private-sector workers are more likely to place a higher value on such extrinsic reward motivators as high income and short work hours. Public and

nonprofit sector managers, however, hold similar intrinsic and extrinsic reward values (Park and Word 2009).

Scholars refer to these unique motives and values held by public sector employees as public service motivation (PSM). In addition to the earlier definition of public service motivation offered by Perry and Wise (1990), it may be useful to explore other scholarly definitions.

2.2. Defining Public Service Motivation

While Perry and Wise's original definition of PSM[6] is generally widely cited, other scholars have made attempts to define PSM as well (Perry and Porter 1982; Rainey and Steinbauer 1999; Brewer, Selden et al. 2000; Vandenabeele 2007; Perry and Hondeghem 2008; Pinder 2008). Despite similarities in these definitions, a review is useful to understanding of PSM.

Perry and Porter (1982, p. 89) offer an early definition of motivation specific to public service: "that which 'energizes, directs, and sustains behavior.' In shorthand terms, it is the degree and type of effort that an individual exhibits in a behavioral situation." Pinder (1998) offers a similar description suggesting motivation is a combination of internal and external forces "that initiate work-related behavior, determining its form, direction, intensity and duration" (Perry and Hondeghem 2008, p. 3). In the same vein, Rainey and Steinbauer offer a perhaps more comprehensive definition of PSM as a "general, altruistic motivation to serve the interests of a community of people, a state, a nation or humankind" (Rainey and Steinbauer 1999,

[6] PSM as defined by Perry and Wise and previously presented: "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (1990, p. 368).

p. 20). Brewer and Selden define PSM as "the motivational force that induces individuals to perform meaningful...public, community, and social service" (Brewer, Selden et al. 2000, p. 417). Finally, Vandenabeele (2007) argues that PSM is "the belief, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate" (Vandenabeele 2007, p. 547). Vandenabeele (2008) also focuses on the role of institutions and adds a fifth dimension to Perry's PSM construct: democratic governance.

While there are many differing definitions and interpretations of PSM, Perry and Hondeghem (2008) argue that most definitions share an underlying similarity.

> We believe the commonalities among the research traditions identified [here] are far more important than disciplinary differences. Common among these traditions is the importance accorded to other-regarding orientations. The scope of who the "other" is varies from individuals, to organizations, to society at large. Aside from these differences in units of analysis, however, we know that the scientific foundations for public service motivation run deep throughout many of the social and behavioral sciences (Koehler and Rainey 2008).
> (Perry and Hondeghem 2008, p. 5)

Rather than choosing one definition, it is important to examine the underlying theory related to all of these definitions. While many offer their own conceptions of PSM, it should be noted that a few argue that the actual definition of the PSM may not be as be important as the "other-regarding" underpinnings common to these ideas, such as altruism and pro-social behavior (Perry and Hondeghem 2008; Perry and Hondeghem 2008).

2.3. Public Service Motivation – Initial Development of a Theory

Within the public sector literature, motivation research has developed into an independent field of study, i.e., public service motivation. In 1982, Hal Rainey

created the concept of public service motivation when he conducted a study measuring PSM among public and private sector managers. Rainey (1982) found that middle managers in state agencies rank opportunity to engage in "meaningful public service" much higher than middle managers in business firms when asked about rewards of their work. Rainey (1982, p. 243) characterized public sector employees as placing "a high value on work that helps others and benefits society as a whole, involves self-sacrifice, and provides a sense of responsibility and integrity."

Around the same time, James L. Perry and Lyman W. Porter (1982) conducted comparative public-private research on individual, job, work environment, and external variables affecting motivation. They also discussed motivational techniques, including monetary incentives, goal setting, job design, and participation. Ultimately, they called for more research to examine the relationship between individuals and the organizations for whom they work (i.e., how do individuals choose their employers?), improved measures of individual performance, and better understandings of goal clarity, job security, and moderators of motivational techniques in the sectors.

In 1990, James Perry and Lois Wise developed their initial framework to study PSM, which they defined as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990, p. 368). Largely, in response to the dominant rational choice paradigm being promoted in motivation literature, they incorporate other values into their theoretic framework. Here, they developed a typology that categorizes public service motives as rational, norm-based, or affective. Where many motivation scholars argued that individuals hold a rational, self-interested values and should respond to incentives that improve their personal position, Perry and Wise incorporated both

normative values (i.e., a desire to serve the public interest) and affective values (i.e., commitment to a program from a genuine conviction about its social importance; a patriotism of benevolence) into their framework (Perry and Wise 1990; Perry 2000). Within this framework, they identified eight PSM dimensions, including:

- Rational
  - Participation in the process of policy formulation.
  - Commitment to a public program because of personal identification.
  - Advocacy for a special or private interest.
- Norm-Based
  - A desire to serve the public interest.
  - Loyalty to duty and to the government as a whole.
  - Social equity.
- Affective
  - Commitment to a program from a genuine conviction about its social importance.
  - Patriotism of benevolence.

(Perry and Wise 1990)[7]

Perhaps their greater contribution in their seminal article, however, was the inclusion of three propositions that make more bold claims regarding the nature of public service motivation, including:

- Proposition 1 (Attraction-Selection-Attrition): The greater an individual's public service motivation, the more likely the individual will seek membership in a public organization.
- Proposition 2 (Performance): In public organizations, PSM is positively related to individual performance.
- Proposition 3 (Organizational Incentive Structures): Public organizations that attract members with high levels of public service motivation are likely to be less dependent on utilitarian incentives to manage individual performance effectively (Perry and Wise 1990)

Perry later (1996) used confirmatory factor analysis to test the construct validity and reliability of the original public service motivation framework. His sample consisted of 376 managers, public managers, public employees as well as graduate and

[7] For a full version of the original tool, see Appendix D

undergraduate students studying public affairs. From survey results, Perry reduced the typology of motives empirically to four dimensions:

- Attraction to public policymaking.
- Commitment to the public interest and civic duty
- Compassion
- Self-sacrifice
(Perry 1996)

Perry (1996, p. 21) argued "based on the developmental process and statistical analysis, the PSM scale presented here has good overall face and construct validity, discriminant validity among four component dimensions, and high reliability."

Kim and Vandeenabeele (2010, p. 702) summarize these dimensions as:

> Attraction to policy making is a public service motive that is based on the desire to satisfy personal needs while serving the public interest. Compassion is a public service motive that entails love and concern for others and a desire that others be protected. Commitment to the public interest or civic duty is based on one's desire to fulfill a societal obligation or standard, and thus it is categorized as a norm-based motive. The self-sacrifice dimension was retained as an independent dimension because of its historical connection with the perception of the public service.

In 1997, Perry further tested his PSM construct for validity as well as to identify antecedent conditions that predicted PSM. Using correlates such as parental socialization, religious socialization, professional identification, political ideology, and individual demographic characteristics, he found many significant relationships, such as a negative relationship between professional identifications and public policy making, but a positive relationship between professional identification and civic duty and self-sacrifice. He also uncovered a positive relationship among those who identify as liberals (on a liberal-conservative continuum) and attraction to public policy making, while conservatives have a positive relationship with values of self-sacrifice. This research helped to broaden the scope of the PSM construct.

Perry spent the next several years honing and refining his conceptual model In 2000, he developed a theoretic framework to explain the differences between public and private sector employees (see Figure 2 1) Here, Perry considered sociohistorical context, motivational context, individual characteristics, and behavior as highly influential considerations in determining the individual's PSM (2000)

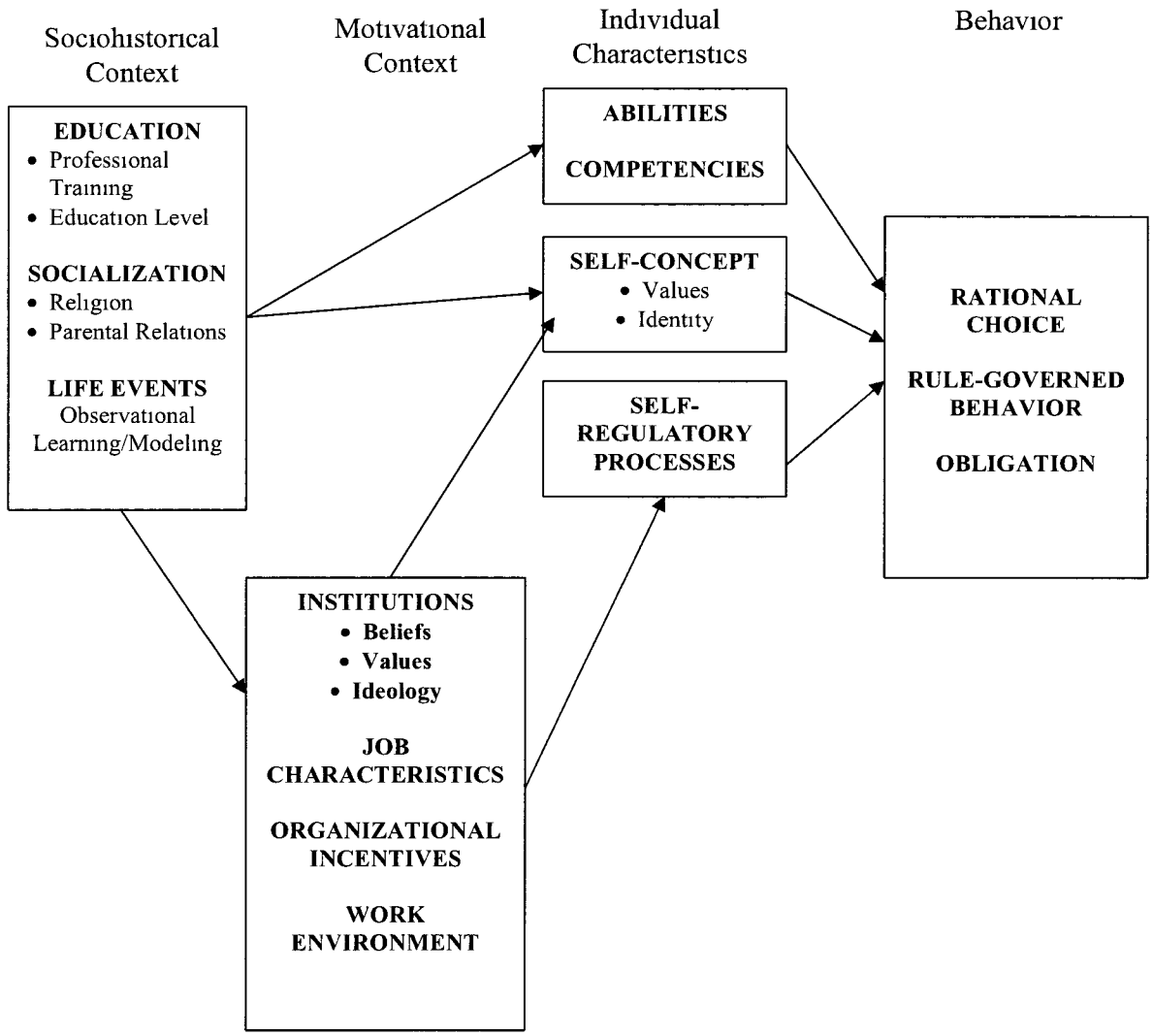


Figure 2 1 A Process Theory of Public Service Motivation (Perry 2000)

While Perry's macro-level public service motivation framework is helpful for identifying potentially influential variables on an individual's level of public service motivation, the complexity of this framework makes measurement difficult. A large-scale study to develop a survey instrument to measure antecedent variables (sociohistorical context, motivational context, individual characteristics, and behavior) in individuals would be an enormous undertaking. Some of Perry's identified sociohistorical context variables are also included (professional training, education level, religious activity, and parental relations) and motivational context variables (beliefs, values, ideology; see Figure 2.2 for a complete list of these antecedent conditions), to better understand whether PSM is inherent in individuals or changes as a result of experience. Some of these antecedent variables are to be included in the model as control variables; however, this thesis primarily focuses on the original construct developed by Perry examining the public service motivation construct (see Appendix B for the original 1999 survey). Additionally, subsequent versions of the PSM survey were shortened as a result of more intensive factor analyses (Coursey and Pandey 2007; Coursey, Perry et al. 2008).[8] While these shortened instruments may be useful for researchers who are distributing surveys and using primary data collection methods, this thesis is utilizing existing, secondary data rendering these shortened instrutments unrelated to this analysis. However, these revised PSM tools do highlight the possibility of new avenues for testing and measuring public service motivation and highlight the evolution of the theory over the past two decades.

[8] See Appendix E for a shortened survey and PSM construct.

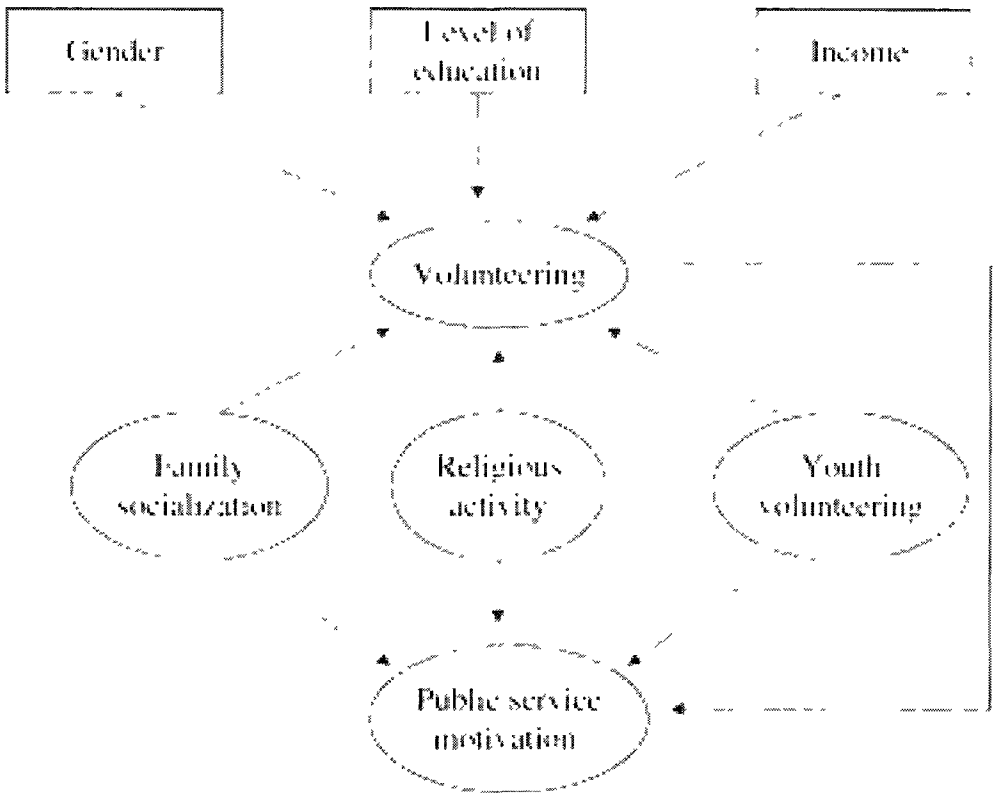


Figure 2.2: ANTECEDENTS of Public Service Motivation Theoretic Model (Perry, Brudney et al. 2008)

More recently, Perry and Hondeghem (2008) have suggested that studying PSM may have both practical benefits (to public managers, citizens, and politicians) as well as theoretical relevance. They argue that studying PSM could help illuminate three "intellectual divides" in organizational management, including:

- "the nature of 'human nature': rational versus other-regarding actors;
- appropriate organizational incentive systems; individualized versus collective incentive structures; and
- responsive institutional designs; new public management versus collective designs" (Perry and Hondeghem 2008, p. 7).

2.4. Competing Theories to PSM

While the PSM construct has emerged as the dominant theoretic framework for understanding motivational differences between private and public sector employees, other theories have been developed to examine the same or similar questions. These competing theories tend to focus on values, organization behavior, and institutions. While many researchers have struggled in determining effective ways of measuring motivation (Pinder 2008), several methods have emerged. Alternative tools to the PSM construct have been developed to measure motivation in organizations, including:

- Extrinsic reward expectancies
  - Principal – Agent
  - Rational choice
  - Public choice
- Job Motivation Scale (Patchen 1965)
- Work Motivation Scale (Wright 2004)
- Intrinsic Motivation Scale (Hall and Lawler 1970)
- Reward Expectancies (Rainey 1983)
- Peer Evaluations of an Individual's Work Motivation (Landy and Guion 1970; Guion and Landy 1972)

While each of these theories and studies have made important contributions to explaining the behaviors and motivation of individuals, Perry's PSM construct has emerged as one of the most tested public sector motivation theory.

Perhaps the most obvious and formidable competing theory to the public service motivation are those theories related to rational choice theory (RCT) and principal-agent theory, which generally suggest that all humans are self-interested entities and societies are best served by individuals pursuing their individual interests. To accommodate these self-interested inclinations, principals (i.e. managers, directors, elected officials) should utilize incentives (often monetary) to encourage certain

behavior in agents (i.e. subordinated, employee) (Arrow 1951; Von Neumann and Morgenstern 1953; Kyburg and Smokler 1964; Coleman 1990; Laffont and Martimort 2002; Laffont 2003; Bolton, Dewatripont et al. 2005). These ideas are the foundation for the new public management (NPM) movement, which promotes a more business-like approach to public sector management. This public sector reform effort was founded on the basic tenets of rational choice theory; that individuals are self-interested, utility maximizers who respond to well-structured incentives (Osborne and Gaebler 1993; Perry and Hondeghem 2008). Subscribers to the NPM view of maximizing efficiency in the public sector during the late 1980s and early 1990s argued that governments should take a page from the private sector model of maximizing returns and outsourcing, by taking a more entrepreneurial approach to management (Osborne and Gaebler 1993). In particular, NPM proponents argue that to improve efficiency in government operations, successful management techniques and practices should be taken from the private sector and employed in public sector environments (Hood 1991; Osborne and Gaebler 1993; Ferlie 1996; Antonsen and Jørgensen 1997; Gore, National Performance Review (U.S.) et al. 1997; Barzelay 2001; Boyne 2002; Denhardt and Denhardt 2007).

In addition to arguing for governments to employ more principal-agent structured relationships, Osborne and Gaebler (1993) called for the governments to reshape the practice of governance by outlining numerous guiding principles, conditions they identified as part of governmental reforms:

- governments shifting from "rowing" to "steering"
- governments focusing more on outcomes and less on operations
- empowering communities through ownership
- decentralized governmental structures
- anticipatory, enterprising governments

- meeting the needs of the community instead of the bureaucracy (Osborne and Gaebler 1993)

Recently, however, the NPM model has been subject to scrutiny. Essentially, since NPM promotes using private sector management strategies in public organizations, proponents are tacitly implying the "generic" approach that Scott and Falcone (1998) dismiss as obsolete. Additionally, "motivational schemes like performance-related pay (Ingraham, 1993; Marsden & Richardson, 1994; Perry, 1986) that were imported from the private sector beginning in the late 1970s have frequently failed when transplanted in the public sector" (Perry and Hondeghem 2008, p. 2). DeLeon and Denhardt (2000, p. 96) argued that by promoting a market-driven public sector, administrators may be rejecting some aspects of democratic governance including, "democratic citizenship, civic engagement, and the public interest (more broadly conceived)". Similarly, there has been a renewed focus on the role of governments to provide fair and equitable processes to assure adequate representation is heard (Denhardt 2007). Denhardt (2007) suggests that the primary focus of governments should have less to do with private sector-like efficiency and more to do with representation, participation and democratic processes.

Another competing view suggests that there is a distinction between "public service motivation" and "public sector motivation." Perry and Hondeghem (2008) argue that "public sector motivation" refers to extrinsic motivations that draw people to the public sector such as job security, career opportunities, and pension packages. These motivations for employment in the public sector are couched in rational choice theory (RCT), which is primarily used for studying individual behavior. Drawing on neoclassical economic literature developed largely during the early-to-mid 20th century (although these roots can be traced back to Adam Smith and the mid-18th

century), rational choice suggests that individuals are extrinsically motivated, self-interested utility-maximizers RCT's *homo economicus* acts in self-interested ways to maximize his personal utility

The development of rational choice theories has generated many variations, each with its own set of assumptions Most variations, however, have one constant, all rational choice theory views the individual as the central unit of analysis Presented here are some additional assumptions of the rational choice model [9] Rational choice theories assume that individuals

- Are self-interested
- Have access to complete information
- Have the ability to assign utility to expected outcomes and rank preferences
- Maximize expected utility (Ostrom and Ostrom 1971, Ostrom 2007, p 1102)

Economists argue that since individuals have the best understanding of what brings them utility, we can assume that individuals seek to maximize their own utility By assuming that humans are generally prone to the same self-interested motivations, RCT helps develop a model that behavioral and social scientists have built upon to better understand individual choices in societies

While rational choice arguments were developed by influential economists such as Friedrich Hayek, Karl Popper and James Buchanan, some public affairs theorists have found RCT to be a useful jumping-in point for explaining public administration and policy activity, while others see problems with satisfying the strict assumptions related to self-interest (deLeon and Denhardt 2000, Denhardt and Denhardt 2007) Rational choice proponents would posit that workers in the public sector are drawn to

[9] These assumptions are considered as one of the more extreme interpretations, however are fairly representative of what is found in most literature

material motivations related to financial security and benefits. "Public service motivation," however, refers to the intrinsic motivations (i.e. prosocial and altruistic inclinations) that draw people to serve the public good. Perry and Hondeghem (2008, p. 3) thus conceive of public service motivation "as a type of motivation in the public sector, but it does not cover all motives in the public sector. Public service motivation may also transcend the public sector, that is, characterize motivations in other arenas of society that involve pursuit of public good." Similarly, Perry and colleagues (2010, p. 687) indicate that PSM rejects the assumptions of RCT and principal-agency:

> At the heart of the construct is the idea that individuals are oriented to act in the public domain for the purpose of doing good for others and society. Differences are evident across disciplines, particularly with respect to the drivers for the other orientation. The commonality, however, is that human behavior is driven by other-regarding motives, not only by self-concern and self-interest. Rational choice theories, grounded in assumptions of self-interested behavior, have had an important influence on public management theory and practice in recent decades. PSM offers an alternative perspective for public management research and practice.

Life cycle and age considerations may also explain how motivations changes throughout a life time. In reviewing the socio-demographic factors and antecedents of public service motivation, Pandey and Stayzk (2008, p. 102) find "on balance, age has a modest positive association with public service motivation." However, there has not been any longitudinal research conducted examining how PSM changes over time in individuals. Carol Jurkeiwicz and Roger Brown (1998) found that while there are many perceived differences between generational cohorts in public sector employment, these differences, upon close inspection, were almost nonexistent. Okun and Schultz (2003) indicate that age has an effect on motivation in volunteers. Older adults volunteer to strengthen social relationships, but (not surprisingly) indicate that they do not volunteer to enhance career participation (Okun and Schultz 2003).

Finally, one last consideration in using the PSM theory of intrinsic reward is the somewhat unclear distinction between the individual and institutional streams of PSM literature. As described earlier in this section, the PSM literature developed by first indentifying the individual characteristics that form the PSM construct (i.e. attraction to policy making, self-sacrifice, compassion, commitment to the public interest) (Perry, 1996). Later the antecedent conditions of PSM were identified (Perry, 1997) and incorporated into a larger "process theory" of PSM (Perry, 2000). However, it still remains unclear how PSM is developed in individuals and how interventions and public service experiences can shape or affect PSM throughout a lifetime. Perry and Hondeghem (2008, p. 297) ask: "Do people enter the public sector because of their attraction to public service, or do public organizations increase public service motivation through mechanisms of socialization, social identification, and social learning...?" To date, little research has been conducted to determine whether organizations can positively affect levels of public service motivation in individuals.

2.5. Public Service Motivation Research

2.5.1. Refining the Construct

Since there have been changes proposed to the PSM construct (as discussed below), it is important to review some of the empirical research that has helped to guide the research agenda related to the construct. While the Perry and Wise (1990) model is used in this thesis, it should be noted that there has been considerable work over the past decade to both test and refine the model using sophisticated statistical analyses.

Brewer, et al. (2000) employ a Q-methodology approach on a sample of 69 employees from federal agencies, state agencies, local government, and students of

public administration and government to study the motives of government employees. Using Q-methodology, which is an intensive research method more closely aligned with qualitative techniques but is related to factor analysis (Brewer, et al. 2000) identified four conceptions of PSM:

- Samaritans, who are motivated by a strong desire to help others, see themselves as guardians of the underprivileged, and are emotionally moved when they see others in distress;
- Communitarians, who are motivated by civic duty, consider their service as part of their citizenship, and want to do meaningful work for their communities;
- Patriots, who are motivated by causes, put duty before self, and want to work for the good of the public; and
- Humanitarians, who are motivated by social justice, act out of responsibility, and are driven by a desire to make a difference in society (Brewer, Selden et al. 2000; Alonso and Lewis 2001; Coursey and Pandey 2007; Wright 2007).

In addition to employing Q-methodology and qualitative methods, some critics of the Perry construct argue that the instrument is too long, has not been subjected to follow-up confirmatory analysis, and has not been subjected to more appropriate and sophisticated statistical methods that have been developed since the original exploratory analysis (Coursey and Pandey 2007, p. 562).

To address these issues, Coursey and Pandey (2007) use confirmatory factor analysis with both diagonally weighted least squares and a modified version of maximum likelihood estimation to test Perry's original exploratory 24-item scale. In their more refined model, they suggest three contributing public service motivation sub-constructs, including:

- Attraction to public policymaking
- Commitment to public interest/civic duty
- Compassion

By omitting the "self-sacrifice" dimension from the original scale, they argued their findings "provide strong support for a three-dimension solution and the 10-item scale"

(Coursey and Pandey 2007, p. 563; Coursey, Perry et al. 2008). However, they also admitted that there are circumstances in which both scales may be useful, concluding that a major overhaul of the original tool may not be necessary.

In 2008, Coursey and his colleagues conducted another confirmatory factor analysis among a sample of exemplary volunteers using three of Perry's original PSM dimensions, including: self-sacrifice, commitment to public interest and compassion (Coursey, Perry et al. 2008). They found strong support for Perry's original exploratory research. Most notably, their results showed an improvement on the self-sacrifice dimension from the original model (2008).

Generally, Perry's 1996 scale has held up well in research testing the construct. While some studies have indicated weak relationships with one or more of the dimensions (Castaing 2006; DeHart-Davis, Marlowe et al. 2006; Coursey and Pandey 2007; Moynihan and Pandey 2007; Vandenabeele 2008), research has generally found solid evidence for the utility of the PSM tool. Still, Kim and Vandenabeele (2010, p. 706) argue for the need to continue to refine and tune the construct:

> Perry (1996) identified the four empirical dimensions of the PSM construct as attraction to public policy making, commitment to the public interest/civic duty, compassion, and self-sacrifice. We propose that the dimensions of the PSM construct be redefined along the lines of attraction to public participation, commitment to public values, compassion, and self-sacrifice. We also suggest that developing more appropriate items for better discriminant validity of each dimension is essential for future research.

In his initial development of the PSM measurement scale, Perry (1996) argues to include a dimension related to social justice. This dimension builds on Mosher's (1968) *Democracy and Public Service*, to represent minority individuals into the policymaking and service administration process. Perry (1996) extends this argument to include Frederickson's (1971) argument that public administrators should

obligations are threefold: "to provide service efficiently and economically while enhancing social equality" (Perry 1996).

While this is a valid argument, Perry (1996) does not find support for this dimension in his PSM construct, among the sample he identifies. While ideas of social equality are not necessarily tested directly in this dissertation, it is possible that values related to awareness of one's community may help to better get at ideas of social equality. As a first step in righting any perceived social injustices is an awareness of these injustices. So, rather than testing for the presence of social equity motives in individuals, it is possible that awareness, or knowledge of community affairs maybe important as a normative motive to serve the public.

In this spirit of social equity, Vandenabeele (2007) finds support for a dimension of PSM that he calls "democratic governance." He uses confirmatory factor analysis techniques to test for the presence of three additional potential dimensions of PSM, including, "equality," "bureaucratic values," and "customer orientation." Rather than finding direct support for any of these three dimensions, he finds support for a fourth, hybrid dimension. He argues that these three dimensions have a common thread, something that he calls "democratic governance." In particular, he suggests that items from the "equality" dimension such as the neutrality and objectivity of governments ' interactions with citizens (Crozier 1964; Hattenhauer 1994; Greenaway 1995) and from "bureaucratic values", which are defined by permanence (Pisier 1989), accountability (O'Toole 2000) and law (Konig 1997) come together to form these measures of "democratic governance."

While these ideas appear, on the surface, to be important values that may be related to the public service motivation body of literature, the link to American democratic

values is less defined. Democratic values of deliberative policymaking (deLeon 1997; Hajer and Wagenaar 2003) , discursive politics (Fischer 2003), and bottom-up implementation (deLeon and deLeon 2002; Denhardt and Denhardt 2007) should be considered. A major tenet of these democratic governance values is the willingness to consider the points of view of the various stakeholders who are affected by policies. Therefore, it is important to extend Vandenabeeles' (2007) conceptions of "democratic governance" to include these values.

Similar to Vandeneeble's findings, Brewer urged researchers to examine the role of ethics in PSM by posing the question "do ethical judgments influence behavior; and if so, how?" (Brewer 2009). In particular, Brewer argued for PSM researchers to include the following questions to future administrations of PSM surveys:

1.) I have very high ethical standards regarding my work.

2.) I believe that ethical behavior is as important as competence.

2.5.2. Linking PSM to Performance

While PSM research has grown considerably and has helped to illuminate the debate regarding the transferability of management ideas between the private and public sectors, concerns regarding the impact of PSM research on individual and organizational performance must be addressed. In particular, we must examine Perry and Wise's (1990) claim that public service motivation is positively related to individual performance.

From a theoretic standpoint, as presented in the introduction section, public service motivation research could impact government efficiency and effectiveness by leveraging non-monetary individual reward expectancies as a cost-effective way of

increasing productivity. For example, if the PSM theories hold (as they appear to be), it would make more sense for managers to tap into intrinsic reward needs of employees than to offer them pay-for-performance bonus structures, and all at a potentially lower fiscal cost to governments. Perry et al. (2010, p. 687) echo this argument:

> Scholarship in economics (Delfgaauw and Dur 2008a, 2008b; Georgellis, Iossa, and Tabvuma 2008) puts forward the notion that PSM advances the interest of a cost-minimizing government because it provides an argument for an employer to offer weaker financial incentives than private firms do...[P]ublic service organizations could offset costs for financial rewards by relying on nonutilitarian incentives if they are populated by employees with strong PSM. Whether public service organizations should offer lower financial rewards, however, is a normative question.

However, difficulties remain in empirically making this link. Lewis (2010, p. 50) acknowledges the difficulty of this task: "empirically demonstrating a connection between PSM and performance has been challenging, particularly at the organizational level (Brewer 2008; Crewson 1997, 506; Perry and Wise 1990). One difficulty is translating self-reported performance in surveys into conclusions about organizational performance. Another has been defining good organizational performance objectively.

Despite these difficulties, there have recently been some strides made tying PSM to performance. Alonso and Lewis (2001) tested for a link between PSM and job performance among 35,000 federal service employees. They found mixed evidence that PSM is linked to employee grade, but did report that employees who expect a material reward for excellent performance receive higher performance ratings and attain higher grade appointments, thus suggesting that monetary compensation may be more important than measures of PSM. However, Bright (2005) indicated that when examining the relationship between PSM and the personal characteristics,

management level, and monetary preferences of public employees, PSM is significantly related to gender, education level, management level, and monetary preferences of public employees.

Crewson (1997) used secondary data to find that there are significant in reward differences among public and private sector employees. Additionally, he found that PSM may be linked to organizational commitment and lower turnover. Similarly, Naff and Crum (1999) also used a subset of Perry's scale on secondary data from the Merit Principles Survey and revealed a "significant relationship between public service motivation and federal employees' job satisfaction, performance, intention to remain with the government, and support for the governments' reinvention efforts" (1999, p. 5). Steijn (2008), using a person-organization-fit framework, indicated that Dutch workers with a PSM fit were less inclined to leave their jobs and were generally more satisfied in their work than individuals not possessing a good organization fit.

One of the major difficulties linking PSM to performance, however, has been identifying ways to measure and report performance. The most common way of getting around this dilemma is by examining self-reported measures of performance. Several studies have used these self-reported performance appraisals and found support for a positive link between PSM and performance (Naff and Crum 1999; Alonso and Lewis 2001; Bright 2007; Leisink and Steijn 2009; Vandenabeele 2009). However, Lewis (2010, p. 50) points out problems with self-reporting performance:

> There have been a number of studies that connect PSM to self-reported performance or evaluations. The difficulty with self-reports, however, is that we do not know whether people reliably report their evaluations since respondents may inflate their own ratings (Brewer 2008). We also do not know whether positive evaluations of individuals actually aggregate into high organizational performance. Individuals can perform individual jobs well, but the organization can falter if the organization does

not have the proper structure, rules, processes, or job definitions that connect good individual performance to organizational goals.

While these studies have shown a link, research still needs to be done in better teasing out the nuances of this relationship. Perry and colleagues (2010, p. 684) agree: "At this juncture, the research points to the conclusion that PSM matters for performance, but a good many questions remain unanswered about the degree to which it matters and whether its effects are collective rather than individual."

2.5.3. Antecedent Conditions

Another major question remains relating to the origins and formulation of public service motivations in individuals. Where does PSM come from? Is it inherent in individuals or is it something that may be developed? While work still needs to be done to understand how PSM is developed, who is predisposed to these values, and how it changes over time, some research has begun to identify some of the antecedent and mediating variables that appear to drivers of PSM in individuals.

PSM, Perry (1997) argued, develops throughout a lifetime as the result of a variety of experiences often related to the individual's childhood, religious association, and professional life. Generally, four antecedent conditions, in addition to four demographic correlates are included into models to help predict whether someone may be predisposed to values associated with public service motivation (Perry 1997). The four most common antecedent variables include: parental socialization, religious socialization, professional identification, and political ideology, all of which are posited to be positively related to public service motivation.

Parental socialization may be considered one of the most appropriate predictors of PSM. It has been shown that positive relationships with parents accounts for higher

levels of altruism (Rosenhan 1970; Clary and Miller 1986). Similarly, religious socialization is thought to have positive associations with underlying values of the PSM construct. Another institution that is thought to hold a positive relationship PSM is professionalism. Mosher and Stillman (1982) believed that workers who were attracted to professional type careers (i.e. doctors, lawyers, clergy) also sought a higher calling and were more likely to address issues related to social justice and the common good. Finally, using political ideology (on a conservativism-liberalism scale), liberalism is thought to be positively associated with PSM. Additionally, education, age, and income are often thought to be positively correlated with PSM (Perry 1997).

To formalize his theory of public service motivation, Perry developed "A Process Theory of Public Service Motivation" (2000, p. 480) which organizes some of the previously identified antecedent variables to public service motivation (see Figure 2.1). This theoretic framework helps explain how PSM may be developed in individuals. Perry's process theory accounts for sociohistorical context, motivational context, individual characteristics, and behavior within the PSM construct. While the process theory is a useful tool for determining many of the most important influential variables in the PSM construct, perhaps the most useful contributions in the model are the posited sociohistorical variables that help researchers understand how PSM may develop in individuals. These mediating variables include education, socialization, and life events. Perry (2000, p. 480) argues that:

> A critical step in developing a theory of public-service motivation, as the theoretical premises emphasize, is to identify the sources and nature of the influences that motivate individuals. The first places to look include socialization from various institutions such as the family, churches, and schools...Another facet of individuals' sociohistorical context is the nature of their life events in prework and nonwork settings. Observational learning and modeling (Bandura 1986) are processes through

which values and patterns of behavior are transmitted. They are part of a range of social learning that influences individual behavior in organizations.

Despite the utility of the process theory in understanding how PSM may develop and evolve, it paints an incomplete picture of control variables that should also be included into models relating to PSM. In addition to common antecedents such as family socialization, religious socialization, professional identification, and political ideology (which are addressed by the process theory), common control variables that are often incorporated into PSM models include age, level of education, gender, income and religious participation (Coursey and Brudney 2009). More recently, a search for moderating variables has turned up additional considerations for PSM models. Lewis and Frank (2002) "find that the PSM/sector relationship might be stronger for college graduates, employees under 30 and for specific employment classifications (i.e., education, postal, and sanitary)" (Wright and Christensen 2010, p. 170).

To test his process theory of PSM, Perry et al. (2008) have recently reexamined the antecedent conditions of public service motivation using a dataset of volunteer award winners (Daily Point of Light Award and the President's Community Volunteer Award). Here, Perry and his colleagues develop a second set of antecedent conditions including, youth volunteer experience, religious activity and parental socialization to predict levels of public service motivation. Among other findings, they report that religious activity is positively related to formal and informal volunteering. More relevant to this dissertation, however, is the component in Perry's theoretic model (see Figure 2.2) related to "youth volunteering." The authors suggest that "although high levels of PSM are not necessary to engage volunteers, individuals who have participated versus those who have not are more likely in post volunteering surveys to

express values consonant with PSM, such as broader exposure and awareness, as well as caring and regard for other people (e.g., Toppe, Kirsch, and Michel 2002)" (Perry, Brudney et al. 2008, p. 447).

The authors also hypothesize that as people volunteer at younger ages, they will likely volunteer in the future and have higher levels of PSM as they mature.

> We anticipate that volunteering as a youth will result in more volunteering and higher PSM as individuals mature. A major study by the Independent Sector (2002) illustrates the strong impact of youth service on the habits of adults. *Engaging Youth in Lifelong Service* found that adults who participated in volunteering in their youth give more money and volunteer more time than adults who began their philanthropy later in life. The report showed that two-thirds of adult volunteers began volunteering their time when they were young. Adults who began volunteering as youth are twice as likely to volunteer as those who did not volunteer when they were younger. In every income and age group, those who volunteered as a youth give and volunteer more than those who did not. The report also supported the family socialization hypothesis by showing that those who volunteered as a youth and whose parents volunteered became the most generous adults in giving time. (Perry, Brudney et al. 2008, p. 447)

Ultimately, the "youth volunteering" dimension is not found to have a significant correlation with the PSM construct; however, they suggest this relationships might warrant further investigation (Perry, Brudney et al. 2008). They also find that religious activity is positively related to formal and informal volunteering.

Bright (2005) built on Perry's (1997) work related to antecedent conditions of public service motivation by testing the relationship of PSM to personal characteristics, management level, and monetary preferences of public employees. Bright posited and confirmed that PSM is significantly related to gender, education level, management level, and monetary preferences among public employees (2007). Similarly, Moynihan and Pandey (2008) proposed that PSM is strongly and positively related to level of education and membership in professional organizations.

In their review of approximately 50 empirical studies related to public service motivation, Pandey and Stayzk (2008) offered some insight into patterns of socio-demographic factors and antecedents of public service motivation. They found that age, education, and gender offered some of the most robust predictors of developing PSM. They find that age (Perry 1997; Houston 2000) and education (Perry 1997; Naff and Crum 1999; Bright 2005; Steijn and Leisink 2006; Moynihan and Pandey 2007) both have positive relationships with PSM and that women tend to score higher on measures of compassion (Bright 2005; DeHart-Davis, Marlowe et al. 2006).

Finally, Clerkin, et al. (2008) surveyed undergraduate students at North Carolina State University using Perry's PSM scale, antecedent conditions and adding their own dimensions on volunteering and donating. The authors posit "that students with higher levels of PSM are more likely to choose to engage in charitable activity"(Clerkin, Paynter et al. 2008, p. 1). Related to the antecedent conditions, they report that "individual characteristics such as family income, political identity, sex, religiosity, family socialization, and high school volunteering experiences are also significantly related to the choices students make about engaging in charitable activities" (Clerkin, Paynter et al. 2008, p. 1).

While this antecedent research has grown considerably over the past decade, there are still relationships that warrant further investigation including broader range of professions, use of more comprehensive measures and assesses these values prior to individuals make employment decisions (Wright and Christensen 2010). Additionally, Wright and Christensen (2010, p. 170-1) urge researchers to further explore the role of external influences on the development of PSM:

In order to better understand the extent to which PSM is inherent and to what extent PSM is socialized, some effort should also be made to expand our assessment of

external influences that potentially bear on PSM over time. These influences might include factors that affect job selection, such as school debt, initial salary, job market conditions (such as competition for available jobs within and across sectors), as well as factors that affect job attrition such as job satisfaction and, ultimately, person–organization fit.

In their 1997 book, Youniss and Yates posit that "youth participation in solving social problems has the potential to promote the development of personal and collective identity. Through community service, youth can acquire a sense that they can make a difference and a concern for society's welfare" (Youniss and Yates 1997, p. 1).

Youniss and Yates follow a cohort of inner city Washington, D.C. high school students who were required to participate in service-learning at a local soup kitchen. They find that "volunteer work can be a key building block of self-development in youth; the youth learned much about homelessness and society and the political processes involved; and they changed their values and became more mature and caring people" (Youniss and Yates 1997, p. 1).

Similar to the antecedent conditions to PSM reported by Perry, these findings are important because they demonstrate the ability of service experiences to positively affect youth civic engagement, awareness and values.

2.5.4. Organizational Influences on PSM

To better understand how PSM may change as a result of environmental circumstances, research should examine the role of the organization on the individual (Perry 1997). As Perry (1997, p. 193) specifically observes in the case of PSM,

> Recent and past organizational experiences may be powerful influences on PSM. Investigation of organizational influences should seek to assess the effects of organizational experiences and policies on the public service motivation of members

over time...A distinct direction for future research entails the effects of PSM rather than its antecedents... Future research should seek to identify and investigate a range of behaviors that might be associated with PSM.

In particular, Perry wants to know "to what extent do an individual's motivation upon entry into an organization and subsequent experience influence PSM?" (Perry 1997, p. 193).

So, in addition to antecedent conditions (i.e. sociohistorical factors), organizational experience and participation may also affect individuals' levels of public service motivation. An example might explore how employees in the public sector (or even in a particular organization) motivations change as a result of their employment. If an employee switches from a job in the private sector to a job in the public sector, what effect would the public sector job have on his/her individual levels of PSM? Similarly, what are the effects of public sector employment over time?

Moynihan and Pandey (2007) have investigated the role that organizational factors play in developing public service motivation in individuals. Using a national survey of state-level health and human services managers, Moynihan and Pandey made two important contributions. First, the study supported Perry's (1997) early observation that antecedent conditions, particularly those related to sociohistorical context, can serve as good predictors of public service motivation. Second, and of particular relevance here, they found that organizations influence public service motivation. They indicated negatively correlated relationships between "red tape" and, somewhat surprisingly, discovered a negative relationship between tenure and public service motivation. Wright and Grant (2010, p. 693) discuss implications of this finding:

This important finding can be interpreted in two very different ways. On one hand, it might suggest that government organizations have become increasingly successful in their efforts to recruit employees with public service values. On the other hand, it might also suggest that these organizations are doing a poor job of cultivating and

supporting these values over time.1 In fact, consistent with this latter interpretation, several studies suggest that employees with high PSM may be less satisfied with, and more likely to leave, public sector jobs because they feel unable to make public service contributions at work (Buchanan 1974; Buchanan 1975; Vinzant 1998).

Moynihan and Pandey (2007) also suggested a positive relationship between hierarchical authority and reform efforts. They discussed the role and responsibility of public organizations to cultivate feelings of public service motivation in public sector employees. However, they did not address the effect of participation (or non-participation) in a particular government-sponsored program at cultivating dimensions of public service motivation. In other words, they cannot address the role of a civic participation program, such as AmeriCorps, can have on PSM. Wright and Grant (2010, p. 697) indicate that "researchers have demonstrated that relatively small interventions can change the behavior and performance of individuals who hold PSM-related values by making these values more salient (Verplanken and Holland 2002) and by signaling that the job provides opportunities to express these values (Grant 2008b)."

Additionally, goal theory has been used to determine the effect of organizational mission and extrinsic rewards. Goal theory in psychological concept that suggests that goals are important and often necessary components in motivation. When applying goal theory to workers in a New York State agency Wright (2007, p. 60) finds that "the intrinsic rewards provided by the nature or function of the organization may be more important to public sector employees than—or compensate for the limited availability of—performance-related extrinsic rewards." Perry has encouraged this effort and urges scholars to continue to investigate the role of the organization on individual levels of PSM. "Wright's approach using goal theory and

similar theoretical efforts to study incentives in more integrated ways merits attention in future research"(Perry, Hondeghem et al. 2010, p. 686).

One problem, however, with studying the effects of organizational influences on employee's motivations are the general experiences that affect each employee.

> A...serious concern is that employees who are having a good experience in their agency likely will report more public service motivation, not because it exists exogenously but because of their good experience in the agency. When people feel satisfied in their agency, their general level of contentment increases and this influences not only the way they answer questions about their work happiness but also their answers to questions about their interest in policymaking, their commitment to the public interest, and selflessness. Correlations between PSM and measures of performance may exist not because of a causal relationship but because they are measuring the same thing" (Lewis 2010, pp. 50-1).

A final issue related to the influence of an organization on individuals relates to how organizations affect PSM and performance over time. Perry et al . (2010, p. 685) assert that "another interesting question is how PSM and performance interact over time. Research to date views PSM as a driver of performance, but we also need research that investigates how effective organizations might stimulate or inculcate public service motives among their employees (Rainey and Steinbauer 1999; Moynihan and Pandey 2007) and whether PSM is a static or dynamic attribute (Wise 2004)".

2.5.5. Public Service Motivation over Time

"[I]f we assume that the extant PSM research is sufficient to support the existence of PSM (Wright 2008), the next step is to conduct research that can inform our understanding of its emergence and effects, as well as the strategies that managers can use to cultivate PSM and enhance its impact" (Wright and Grant 2010, p. 692).

Perhaps the public service motivation literature most closely related to this thesis are

those studies relating to how PSM values of attraction to public policy making, commitment to the public interest/civic duty, and compassion, over time. Unfortunately, very little empirical work has been done to understand the evolution of the effect of PSM in individuals. In fact, one of the common critiques of PSM-related work cites the reliance on cross-sectional data and the general lack of longitudinal research designs (Wright and Christensen 2010). Studies have tried to demonstrate that PSM influences the sector that people choose to work in (Rainey 1982; Wittmer 1991; Posner and Schmidt 1996; Crewson 1997; Brewer 2003; Houston 2006), and while they "provide strong evidence that PSM and employment sector are related, but they do not isolate the source or direction of this relationship" (Wright and Christensen 2010, p. 157).

In their recent assessment of research designs commonly used to study public service motivation, Wright and Grant argue that while cross-section survey analyses are helpful for identifying differences between the public and private sector employees' motivations, quasi-experimental designs should be employed to understand how PSM may be affected over time. Additionally, more work should be done to understand the origins of PSM and what can be done to cultivate or harness these values (Wright and Grant 2010). To address these holes in the literature, Wright and Grant (2010, p. 691) suggest moving away from cross-sectional research designs:

> Given that our current knowledge of PSM has been derived primarily from cross-sectional survey research, our understanding remains limited in critical ways. In particular, such research has not answered important causal questions about the emergence and effects of PSM. This may be attributable to the fact that studies addressing these questions can be difficult to design and conduct.

One of the difficulties in designing longitudinal research, however, is in identifying a population that has yet to fully enter the workforce and has not yet been affected by organizational or sectoral influences.

> The cross-sectional studies linking PSM and public sector employment choice, for example, have confounded the effects of attraction, selection, attrition, and socialization and adaptation processes (Wright 2008). As a result, it remains unclear to what degree public sector jobs (1) attract, select, and retain employees who already possess high levels of PSM, and/or (2) cultivate, increase, and encourage the expression of PSM among employees (Wright and Grant 2010, p. 692).

Another problem with employing a quasi-experimental design for studying public service motivation is identifying or designating a similar control group, which can be difficult without introducing selection bias. Since research has shown that organizational socialization and professional identification may affect PSM (Moynihan and Pandey 2007), it is important to have a similar control group against which to compare any perceived or observed changes in PSM.

So, a next important step in the study of PSM is determining how and when these values associated with public service motivation change over a lifetime. In particular, Wright and Grant (2010, p. 693) suggest that research related to understanding whether PSM is a stable or dynamic trait in individuals could have practical implications on public managers by determining if higher levels of PSM "found among public employees are attributable to attraction- selection-attrition or socialization and adaptation mechanisms."

While there does not seem to be any shortage of PSM experts suggesting for future research to explore the longitudinal characteristics of PSM, there have been very few attempts to measure PSM longitudinally. Wright and Christensen provide one of the few longitudinal examinations of PSM. In their panel study of 1,292 (at baseline)

private and public lawyers - data collected by the American Bar Association (ABA) to study employment trends among lawyers – they gather employment information at two time – points: pre-employment in 1984 and again six years later in 1990. They find that PSM does not necessarily predict the sector in which the lawyers find their first job, but they do find that higher levels of an interest in helping others does predict current or future public sector employment. and that both public and private sector lawyers value financial rewards at similar rates (Wright and Christensen 2010). These findings indicate that PSM may affect employment decisions throughout an individual's career. However, Wright and Grant also note the difficulty in using secondary data for measuring PSM.

While this study provides clear evidence that PSM can play a role in employment decisions, it also illustrates how secondary data are often collected in ways that do not maximize our ability to make strong causal inferences about PSM. In particular, the design of this study produced data that tell us little about the origins of PSM, as they were only measured after participants selected a sector of employment and were exposed to organizational socialization processes.6 Confidence in the study's conclusions is also limited by its use of a limited single-item measure of PSM that fails to capture the different dimensions suggested by other scholars (Perry 1996)" (Wright and Grant 2010, p. 694).

Wright and Grant (2010, p. 694) go on: if "previous studies of work-related values are any indication of the origins of PSM, then PSM may be a relatively stable disposition, but one that still can change over time and be influenced by the organization (see Fleeson 2001). This has important implications for the study of PSM. To the extent that PSM can be influenced by environmental conditions, research is needed to test the ways in which managers can cultivate PSM".

In addition to the Wright and Grant study of lawyers, they also identify two studies from which PSM scholars should model their longitudinal designs. First, using a sample of 512 college seniors, Mortimer and Lorence (1979) measure the importance

of extrinsic, intrinsic, and service related work values. Ten years later, they found that respondents who valued people/service upon graduating from college were more likely to choose professions that stressed social welfare, teaching or service. They also find, however, that intrinsic rewards values decrease over time and extrinsic values increase over time. While these findings provide a useful contribution to the literature due to their pre-workforce measurement and longitudinal design, "such designs rarely provide definitive evidence as to whether values are best defined as stable traits or dynamic traits" (Wright and Grant 2010, p. 693).

Second, Wright and Grant identify Cable and Parsons' (2001) longitudinal design examining the socialization tactics of firms and person-organization fit as one that might be emulated in PSM research. Similar to the Mortimer and Lorence study, they administer a survey estimating fit and socialization activities prior to entry into the firm, then again 12 to 18 months after joining the firm. While they find that socialization matters, they find that value-congruence prior to joining the organization explains far more of the variance. Wright and Grant (2010, p. 694) suggest that "similar studies could be performed with regard to PSM by measuring the PSM of newly hired employees at several stages of their career within an agency and assessing the degree to which PSM changes as a result of specific organizational experiences, or even more broadly as a result of the degree to which their PSM values seem to match the mission, culture, or activities of the agency in which they work." Finally, and of particular relevance to this thesis, Wright and Grant suggest that "given the difficulty of (and time required for) collecting longitudinal data, an alternative research strategy would be for PSM scholars to identify existing panel

studies that measure PSM and track employment over time" (Wright and Grant 2010, p. 694).

2.5.6. Participation in AmeriCorps

Perry (1997) has alluded to the importance of public institutions to cultivate and propagate civic-oriented behavior. He suggested that to build PSM, we must alter our institutions to demonstrate that we value civic-mindedness as a societal priority. Here, studies examining the impact of participation in AmeriCorps programs on participants are examined.

It should be acknowledged that government programs can sometimes have multiple goals, resulting in programmatic ambiguity (Rochefort and Cobb 1994; Kingdon 2003; Zahariadis 2003). These unclear or overlapping priorities make it difficult to evaluate programs as a whole. Since longitudinal attitudinal and behavioral data from AmeriCorps members will be used in this thesis, it is important to understand the programmatic goals of AmeriCorps. Waldman (1995) and Perry et al. (1999) have identified five goals of AmeriCorps programs:

- satisfying unmet social needs
- developing transferable skills in corps members
- enhancing the civic ethic
- reinvigorating lethargic bureaucracies
- bridging race and class

(Waldman 1995; Perry, Thomson et al. 1999)

This dissertation directly focuses on the second and third programmatic goals of developing the skill levels of corps members and enhancing the civic ethic, but may also be related to the first and fifth goals of satisfying unmet social needs and bridging race and class.

Democratic citizenship theorists suggest that creating a compulsory civic service program in the United States could create a more engaged and active youth (see Barber 1984; Buckley 1990; Dionne and Drogosz 2003; Dionne, Drogosz et al. 2003; Macedo 2005; Enclerico 2006). However, studies exploring the link between participation in AmeriCorps and measures of civic engagement reveal mixed results. Using a two-year pre-service/post-service comparison, Simon and Wang (2002) found that program participants become more involved in community groups and that participation in AmeriCorps may strengthen social capital because of a significant shift in values among members. While Simon and Wang analyze some similar questions to those being raised presently, the two-year time period of their study leaves questions of sustainability unanswered. Does their evidence prove lasting, or are they ephemeral residual feelings from an intensive community service experience? Additionally, their sample includes members from AmeriCorps programs in four Western states, thus limiting the generalizability and external validity of the study. However, the results of research studying the effect of participation in AmeriCorps are mixed. Perry and Katula (2001) similarly argue that program participation does not necessarily lead to increased measures of civic engagement.

Other studies explore the impact of the presence of AmeriCorps members on their capacity to strengthen the communities in which they serve (Brower and Berry 2006). Brower and Berry report weak and somewhat inconclusive relationship between AmeriCorps and capacity to strengthen communities. However, their research is useful because they take a different perspective on the central question; rather than asking what the effect of service is on the server, they hypothesize that participation

in AmeriCorps will make them more active in community affairs, thus resulting in stronger communities.

Another study has used the same dataset used in this dissertation, the "*Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni*", to assess the broader impacts of participation in AmeriCorps on participants (Frumkin, Jastrzab et al. 2009). Frumkin, Jastrzab, et. al (2009, p. 394) find that:

> ...participation in AmeriCorps led to positive impacts on members, especially in the area of civic engagement, members' connection to community, knowledge about problems facing their community, and participation in community-based activities. AmeriCorps had some positive impacts on its members' employment-related outcomes. Few statistically significant impacts were found for measures of participants' attitude toward education or educational attainment, or for selected life skills measures. Within in a subset of community service programs that incorporate a residential component for members, the study also uncovered a short-term negative impact of participation on members' appreciation for ethnic and cultural diversity which disappeared over time. The implications of these findings for future research on national service are discussed.

Findings from this study are very similar to those reported by the Corporation for National and Community Service, since many of the researchers involved in this article were also involved the original project and analysis. Additionally, these analyses were converted into book format (Frumkin and Jastrzab 2010)

Finally, former CEO of the CNCS, David Eisner, outlines some of the important findings from the "*Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni*" study, including:

> ...sixty percent of AmeriCorps State and National alumni work in a nonprofit or governmental organization, continuing to solve their communities' most pressing needs. Nearly half (46 percent) pursue careers in specific fields such as education, social work, public safety, government or military service. These results are significant as our nation attempts to fill millions of nonprofit and public sector jobs, and counter critical shortages in areas like education and nursing. Nonprofit employers also look to alumni as a valuable source for employees, hiring many alumni who first served in their programs as AmeriCorps members. And AmeriCorps is a clear entrée to public service for minority alumni and alumni from disadvantaged

circumstances, as both groups are significantly more likely to choose public service careers than their non-AmeriCorps peers. (2008, p. iii)

2.6. Hypotheses

As has been argued in this literature review, a recent flurry of research activity related to public service motivation makes it a relevant and timely topic for study. Similarly, recent activity related to the expansion of the national service program AmeriCorps, make it ripe for examination as well. This section has reviewed critically and discussed PSM literature in terms of institutions, antecedent conditions, and organizational behavior. It has identified four potential contributions to the PSM literature including; 1) whether PSM can be cultivated through national service intervention experiences; 2) if PSM is a good predictor of whether a person joins AmeriCorps; 3) whether PSM changes as a result of participation in AmeriCorps; 4) whether observed changes in levels of PSM are sustained over time.

In conclusion, given the evidence gleaned from the literature review, the following hypotheses are presented:

H_1: *AmeriCorps participants will identify public service motivation values as important reasons for joining the program.*

This hypothesis is grounded on the notion that individuals who are attracted to public service programs such as AmeriCorps, will indicate that they joined the program for reasons that are consistent with the values associated with PSM, such as commitment to public interest, self-sacrifice, and compassion (Perry and Wise 1990; Perry 1996; Perry 2000). Research regarding AmeriCorps participants supports this hypothesis (*Still Serving*, 2008)

H_2: *Participants in AmeriCorps programs will express satisfaction with their service experience.*

Hypothesis two is grounded in the assumption that AmeriCorps experiences affect the individuals who participate in the program. This assumption is supported both anecdotally (Waldman 1995; Perry, Thomson et al. 1999) and empirically (Still Serving Brower and Berry 2006; 2008). This hypothesis allows for comparison between self-reported changes as a result of AmeriCorps and measured changes using confirmatory techniques.

H_3: *Antecedent conditions of PSM will accurately predict participation in AmeriCorps programs.*

Perry suggests that family socialization, religious activity, youth volunteering, parental education, level of education, family income, and gender affect whether individuals develop values consistent with public service motivation (Perry 1997; Perry, Brudney et al. 2008). Here, it is posited that these conditions will significantly predict whether an individual joins AmeriCorps.

H_4: *A public service motivation construct similar to the one identified by Perry will be identified among those who expressed interest in participating in an AmeriCorps program.*

While the public service motivation definition is still evolving (Perry and Hondeghem 2008), limited research has been conducted determining how well the dimensions of PSM hold when using secondary data among a population likely to hold values consistent with the theoretic framework (Wright 2008; Wright and Grant

2010). The purpose of this hypothesis is to determine how well the PSM construct holds when using secondary data among a publicly-oriented population.

H_5: *There will not be any significant differences in levels of PSM between the treatment and comparison groups at baseline.*

When Abt Associates and the CNCS went about designing this study, they took great effort to ensure that the treatment and comparison groups were appropriately representative and well matched to one another (*Still Serving*, 2008). While it is posited that these populations differ in regard to antecedent conditions of PSM, here is hypothesized that the groups will not have significant differences in regard to the actual dimensions of PSM.

H_6: *There will be significant positive differences in levels of PSM between the treatment and comparison groups immediately after the program.*

Limited work has been done assessing the effect that service experiences may have on individuals. Moynihan and Pandey (2007) have found evidence to support the idea that organizations may positively affect individual's PSM, but little research has been conducted to determine if participation in service may affect PSM. It is proposed that participation in AmeriCorps will result in a positive change in PSM, when compared to a similar comparison group.

H_7: *There will be significant positive differences in levels of PSM between the treatment and comparison groups after eight years.*

Similar to Hypothesis six, it is proposed that participation in AmeriCorps will not only result in higher levels of PSM when compared to a groups that did not do AmeriCorps, but these changes will be sustained over a seven year period after

completion of the program. While Moynihan and Pandey (2007) show that organizational experiences may affect levels of PSM in individuals, there is currently no research examining whether these changes are sustained over time.

H_8: *There will be significant positive differences in levels of PSM among the treatment group between the first and second phases of the study.*

Currently, there is little research examining how PSM changes longitudinally in individuals. Wright and Christensen (2010) conduct a study examining the sector of employment among lawyers, but do not report strong findings about how PSM changes over time. This hypothesis builds on the assumption that AmeriCorps will have a significant positive effect on measures of PSM and will be demonstrated by increases in levels of PSM among the treatment group after participation in AmeriCorps.

H_9: *There will be no differences in levels of PSM among the comparison group between the first and second phases of the study.*

Conversely, hypothesis nine posits that PSM among members of comparison group will not experience changes in their levels of PSM. Since there is only one year between the baseline and post-AmeriCorps program phases of the study, there is little reason to believe that levels of PSM will have changed much.

H_{10}: *There will be significant negative differences in levels of PSM among the treatment group between the second and third phases of the study.*

As mentioned, little research has been conducted examining how PSM changes over time. Since there is little research around how PSM changes over time in individuals, or around life-cycles of PSM (Perry and Hondeghem 2008; Perry and Hondeghem

2008; Wright 2008; Wright and Grant 2010), it is posited here that levels of PSM will fall seven years after completion of an AmeriCorps program. Since a spike in PSM is expected as a result of an intense service experience, it is posited that these increased levels of PSM will not be sustained over time, thus decreasing between post-AmeriCorps program and wave III (2007) of the study.

H_{11}: *There will be no differences in levels of PSM among the comparison group between the second and third phases of the study.*

Finally, a lack of evidence regarding how PSM changes over time in individuals results in a hypothesis 11, which suggests that levels of PSM will not change over the seven year period between post-AmeriCorps program and wave III (2007). These hypotheses will be revisited in the Analysis and Discussion chapters.

3: Methodology

3.1. Overview of the Methodology Chapter

Next, methods for inquiry will be discussed. This chapter begins with an overview of the research design and sample. The population used in the dataset, the sampling procedures and the instrumentation are then discussed. Next, the statistical analytic methods used are presented including binary logistic regression, exploratory factor analysis, confirmatory factor analysis, and structural equation modeling. Finally, strengths and limitations of the research design are examined.

3.1.1. Overview of the Research Design

This study uses a longitudinal, quasi-experimental design to determine whether participation in the national service program AmeriCorps significantly affects individual's values relating specifically to public service motivation. Additionally, antecedent variables to public service motivation are used to predict participation in the AmeriCorps program.

Using logistic regression techniques, independent variables related to education, income, age, education, religious activity, family socialization, and volunteering activity are used to predict participation in AmeriCorps programs. Participation is used here as the binary dependent variable. While this logistic regression is useful for helping to determine the adequacy for using antecedent variables to predict participation in AmeriCorps programs, the main focus of this study is to examine how participation in AmeriCorps affects participants' public service motivation.

To determine whether it is possible to measure public service motivation using this secondary dataset, exploratory and confirmatory factor analysis methods are used. Once an adapted public service motivation model is identified from the data, longitudinal confirmatory factor analysis techniques are used to track changes in levels of PSM. In this phase of the analysis, public service motivation values serve as the dependent variables, and participation in AmeriCorps serves as an independent variable.

In this chapter, four sections are dedicated to discuss the data, instrumentation, procedures, and statistical analysis for this dissertation. In the data section, the sample and populations are discussed. In the instrumentation section, specific measures are presented and described. Next, in the procedures section, data collection methods and timelines are discussed. Finally, the statistical analysis methods used in this dissertation are introduced and reviewed.

3.2. Data

3.2.1. Population

Data used in this study include longitudinal panel data from participants in AmeriCorps service programs as well from a similar comparison group. These data address questions related to measures of participants' levels of public service motivation.

The data for this thesis have been previously collected by the Corporation for National and Community Service (CNCS) and a database has been compiled. The dataset is extracted from the CNCS-commissioned study *Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni.* It is a longitudinal, interrupted time-

series design (with treatment and comparison groups)to assess the outcomes and impact of national community service on individuals who serve in AmeriCorps State and National and AmeriCorps National Civilian Community Corps (NCCC) programs.

The treatment group consists of people who participated in and completed a year of AmeriCorps service in 1999-2000. At the beginning of the 1999-2000 service year, there were the over 36,000 members enrolled in AmeriCorps. Of this population, the complied dataset used in this study includes a nationally representative sample of 1,717 AmeriCorps members who served in 108 AmeriCorps State and National programs across the country and 475 AmeriCorps members in three (of five) NCCC regional campuses (2008, p. 1). [10].

The CNCS study employs a quasi-experimental research design, which requires both a treatment and a matched comparison group. The matched comparison group includes individuals who contacted the CNCS and expressed interest in an AmeriCorps leading up to the 1999-2000 class, but, chose not to join the program. This comparison group consists of 1,524 individuals who expressed interest in but did not join State and National programs, as well as 401 individuals who expressed interest in but did not join the NCCC program.[11]

In selecting comparison groups for this study, the goal was to identify individuals who demonstrated both an awareness of AmeriCorps and an interest in service. The State and National comparison groups is composed of individual who had indicated knowledge of, and interest in, AmeriCorps by contacting the Corporations' toll-free information line and requesting information about the program, but who did not actually enroll during the study period. For reasons of comparability, the comparison groups was limited to this contacting the information line during roughly the same period as did individuals in the program group – summer to fall of 1999. The NCCC comparison groups was selected from the pool of individuals who applied for entry

[10] For a description of the survey sample, see Figure 3.2
[11] For descriptive statistics related to ethnicity, race and gender, see Tables 4.1-6

into the NCCC during the spring 1999 recruitment selection process, met the program's eligibility requirements, and either did not enroll because of a limited number of slots in the program or declined an invitation to enroll. (2008, p. 1).

The public service motivation body of literature, in general, treats the individual as the preferred unit of analysis. Public service motivation is considered a form of intrinsic motivation, which varies among individuals. In this dissertation, individual motivations are tracked over time to determine the impact of participation in AmeriCorps on individuals' motivations.

3.2.2. Sampling Procedures

Survey data were collected at four time points throughout the first eight years of this study (for a timeline and overview of data collection, see Figure 3.1).

A baseline survey was administered in 1999, after application for entry, but prior to program participation for AmeriCorps participants. A post-AmeriCorps program survey was administered a year later in 2000 when AmeriCorps participants completed or were near completion of their program. A third survey was administered in 2004 to obtain supplemental information. The fourth wave collected survey data in 2007. (*Still Serving:*...2008, p. 1)

The dataset includes responses from a series of in-depth surveys with nearly 400 variables. Surveys were primarily administered over the telephone, however most AmeriCorps participants were issued hard copies of the survey at their project sites both at the baseline and post-AmeriCorps program time-points.

Since many of these variables address questions outside the realm of public service motivation, only the appropriate variables are included. Generally, these questions address the participant's behavior and attitudes in regard to the four dimensions of PSM (see Figure 3.2). Sociohistorical and demographic variables are also included to account for antecedent conditions to PSM.

Table 3.1: TIMELINE AND OVERVIEW OF DATA COLLECTION

	State and National	NCCC
Enrollment	36,00	1,000
Location	700 grantees[1]	5 regional campuses
Age range of members	17+	18-24
Operated by:	Local, state, and national nonprofits, government agencies	The Corporation for National and Community Service
Recruitment	Local[11]	National
Type	Primarily non-residential	Residential
Participation	Both full-time and part-time	Full-time only
Number of service projects per member	Generally one primary project, often with smaller short-term project	4-6

[1] Some grantees operate in more than one location.

[11] During the 1999-2000 program year, some applicants to AmeriCorps State and National were identified through a national recruitment effort implemented by the Corporation. Thos applicants were referred to local programs based on their geographic and service interests for consideration as part of those programs' standard selection and enrollment process.

Source: Corporation for Source: Corporation for National and Community Service, (2008). *Still Serving*:... Washington, DC: 6.

Table 3.2: DESCRIPTION OF THE AMERICORPS POPULATION BY PROGRAM TYPE IN 1999-2000

Instrument	Timing[a]	Focus
Baseline Survey (1999-2000)	**Members:** Within days of enrolling **Comparison Group:** 3-4 months after inquiring about AmeriCorps (roughly when they might have enrolled)	Prior service experience Other background characteristics Attitudinal information related to outcomes
Post-AmeriCorps Program Survey (2000-2001)	**State and National Members:** 1-2 months after completing service (approximately 1 year after baseline survey) **NCCC Members:** During final 1-2 weeks of service (approximately 10 months after baseline survey) **Comparison Group:** 12-15 months after baseline survey	Attitudinal information related to outcomes Information on AmeriCorps program experience (members only)
Post-AmeriCorps program Supplemental Survey (PPSS) (2003-2004)[b]	**Members:** 3 years after baseline survey (approximately 2 years after most members completed their service) **Comparison Group:** 3 years after baseline survey	Additional background information to model probability of program participation Social networking behavior Additional information on program experience (members only) Limited data on post-AmeriCorps program activities
Wave III Survey (2007)	**Members:** 8 years after baseline survey (approximately 7 years after most members completed their service) **Comparison Group:** 8 years after baseline survey	Attitudinal information related to outcomes Limited data on post-AmeriCorps program activities Information about the Segal AmeriCorps Education Award usage (members only)

[a] A note on survey timing: The duration of AmeriCorps programs was generally between 10 and 12 months. Cases were released for the post-AmeriCorps program and post-AmeriCorps program supplemental interviews at 21 and 36 months after baseline interview. Most respondents were interviewed within a few weeks of survey release. In some instances, it took longer (up to five months) to locate and interview respondents.

[b] These data were not used in this current research

Source: Corporation for National and Sour SSource: Corporation for National and Community Service, (2008). *Still Serving:...* Washington, DC: 10.

3.2.3. Instrumentation

Using secondary data to test theoretical latent constructs can be challenging in psychometric verification research. Questions asked on the CNCS survey instrument were not specifically designed to address participants' public service motivation values. Rather, the survey instrument was screened for items that that appeared to get at similar motivations and values described in the PSM literature. These items were selected for inclusion in preliminary exploratory factor analyses. While it may be preferred to test the exact items created by Perry (1996), it should be noted that research testing the PSM construct has been performed in a similar fashion (Brewer and Selden 1998; Naff and Crum 1999; Wright and Christensen 2010).

Even though the Perry construct is the most developed in the PSM literature, other interpretations offer an opportunity to employ more exploratory means of studying PSM. This may be due in part to the relatively dynamic definition of public service motivation. While Perry and his colleagues (1996, 2007, 2010) have made important strides in developing and refining the PSM measurement tool, as well as the overall PSM construct, as mentioned earlier, there are numerous definitions to what PSM actually means. Perry acknowledges these different conceptions of PSM:

> At least four different approaches have been used to measure PSM. They include (1) single survey items about public service (e.g., Rainey 1982), (2) unidimensional scales (e.g., Naff and Crum 1999), (3) multidimensional scales (e.g., Perry 1996), and (4) behavioral proxies, such as whistle-blowing (e.g., Brewer and Selden 1998). With respect to divergence, the conceptions of PSM are more particular regarding objects of motivation than are altruism and prosocial motivation, which are cast in general terms. Rainey's (1982) initial effort to measure PSM singled out one reward

preference item, "engaging in meaningful public service, "as an indication of PSM." (Perry, Hondeghem et al. 2010, p. 682).

Similarly, scholars such as Houston (2000) and Brewer et al. (2000) have used alternative means to Perry's 24 variable scale to study PSM. While this variety of measures have created difficulty in comparing findings across studies using different measures and conceptions of PSM (Wright 2008; Perry, Hondeghem et al. 2010), they are common in the literature. In a recent survey of the PSM literature, Wright (2008) presented a wide range of measures used to determine levels of PSM. In particular, he discussed that

[a]lthough the more comprehensive conceptualization of PSM suggested by Perry and Wise (1990) is widely referred to, only approximately 60 percent of the studies published in the last ten years use a multiple item measure based on Perry's (1996) four dimensional operationalization of PSM. Even with these studies, however, the vast majority failed to measure (or distinguish between) Perry's (1996) four conceptualized dimensions (Wright and Grant 2010, pp. 163-4).

While many operationalizations and measures of PSM do not fully address Perry's original scale (1996), many studies use measures relating to "other-regarding" dispositions and motivations in individuals, which are largely accepted in the literature. To support these points, Wright and Grant (2010, p. 164-5) recently provided support for their use of a PSM measure using secondary data in a longitudinal study of lawyers' public service motivations by indicating that:

"... the measure of PSM used in this study reflects a series of tradeoffs. While it may fail to capture the full range or dimensions of PSM, it is consistent with one of the more dominant approaches to measuring PSM and in some ways even improves on existing studies by measuring PSM's effect over multiple time periods."

Similarly, two years earlier Wright (2008, p. 82) found that:

Of the 16 published studies using measures based on the Perry and Wise (1990) conceptualization and operationalization (Perry 1996), only three use the measure in its validated form (Perry 1997; Camilleri 2006; Camilleri 2007). Of the remaining studies, 11 have not incorporated all four of the validated dimensions, with four

studies measuring only three dimensions (Naff and Crum 1999; Scott and Pandey 2005; DeHart-Davis, Marlowe et al. 2006; Moynihan and Pandey 2007) six studies measuring only two (Brewer and Selden 1998; Naff and Crum 1999; Brewer, Selden et al. 2000; Alonso and Lewis 2001; Karl and Peat 2004; Kim 2005; Kim 2006), and even one study measuring just a single dimension (Castaing 2006).

Despite some of the measurement problems in using secondary data, this dissertation takes a macro view on defining public service motivation as an "other-regarding" orientation. While it would be desirable to have longitudinal data that uses Perry's (1996) measurement tool, the length of time required for such a study is beyond the scope of this dissertation. Rather, closely aligned secondary data are used to address important questions relating to both how PSM changes over time and of the impact of national service on individuals and their PSM. Therefore, this dissertation uses a less literal interpretation of Perry's (1996) definition of PSM and employs a definition more closely aligned with "other-regarding" orientations of PSM.

Characteristics of the Instrument

The *Still Serving* study encompassed nearly 400 variables for measurement. However since many of these variables are outside of the scope of the current study, most have been excluded from this analysis. In addition to demographic information relating to gender, age, race, income, and educational attainment, additional socio-historical data relating to religious socialization, professional training, familial relations, and youth volunteering are retained. These socio-historical variables relate to Perry's posited antecedent conditions that are requisite for individuals to develop PSM were included in this dissertation. Appendix G includes a copy of the survey administered to the treatment group at wave III (2007) of the study – this

version of the survey instrument closely resembles the instrument used during first two waves of data collection.

Additionally, data relating to measures of motivation and attitude are included in this study. Question used from the survey that appear to be associated with "other-regarding" values: the importance of making a difference in one's community; the importance of working in direct service to people; attachment to the community; encouraging participation in community affairs; and knowledge/awareness of community. Available responses to these questions are in typical three or five-item Likert scale format, which were subsequently standardized to address these differences.

3.2.4. Validity and Reliability

Measures of validity are designed to assess how well a proposed measure is portraying a hypothesized phenomenon. One of the reasons confirmatory factor analysis (CFA) techniques were chosen in this dissertation are due to the inherent attention paid to construct, convergent, and discriminant validity in these statistical methods (Brown 2006; Tabachnick and Fidell 2007). Since a main focus of CFA is to determine how well hypothesized constructs are being measured, CFA techniques generate numerous scores to address these statistical considerations. Here, the question is – how well is the proposed model capturing levels of public service motivation? While using secondary data poses a problem for construct validity, this concern is mitigated in part by the CFA methods used. Brown (2006, pp. 2-3) addresses some of the strengths in using CFA to address issues of validity:

> CFA is an indispensable analytic tool for construct validation in the social and behavioral sciences. The results of CFA can provide compelling evidence of the

convergent and *discriminant* validity of the theoretical constructs. Convergent validity is indicated by evidence that different indicators of theoretically similar or overlapping constructs are strongly interrelated; for example symptoms purported to be manifestations of a single mental disorder load on the same factor. Discriminant validity is indicated by results showing that indicators of theoretically distinct constructs are not highly intercorrelated; for example, behaviors purported to be manifestations of different types of delinquency load on separate factors, and the factors are not so highly correlated as to indicate that broader construct has been erroneously separated into two or more factors.

While measures of validity and reliability are included for latent items in this study, this dataset was tested for validity and reliability by Abt Associates.

To the extent possible, the study relied on outcome measures that have been previously used and validated on other studies—for example, the General Social Survey, the Independent Sector Surveys on Giving and Volunteering in the U.S., and the Teach for America survey. (See Appendices L and M for a full list of documents and references consulted for this study.)
During the period of instrument development in 1998, however, existing measures were not available for many of the complex attitudes and behaviors examined in the study. The design phase of the study included an instrument development process that included a review of existing measures, adaptation and development of new measures, and field testing and content validation. (*Still Serving,* 2006, p. 17)

Additionally, items relating to self-efficacy were tested for reliability and validity. In particular self-efficacy scales from Alexander, et. al (1990), Sherer et, al (1982), and Reeb, et. al (1998) were tested for validity and reliability.

In addition to validity, measures of reliability are also addressed in this dissertation. When using latent factor analysis, it is necessary to test for reliability among grouped variables that contribute to the identified dimensions. Reliability assumes that there is internal consistency among measures used in a survey. That is, if numerous questions on a survey are designed to approximate an unobservable latent variable, respondents should answer these questions in a similar manner. Often, Cronbach's Alpha is reported as a measure to determine if measures are internally reliable. Measures of Cronbach's Alpha are reported in the Analysis chapter.

3.3. Statistical Analysis

3.3.1. Binary Logistic Regression

The first major research question; do antecedent variables to PSM predict program participation?, is addressed using a binary logistic regression analysis. Binary logistic regression techniques are useful in panel data scenarios where there is a dichotomous dependent variable. Multinomial logistic regression may be used if the dependent variable is categorical and has more than two categories. Continuous or categorical independent variables are used to predict participation or group inclusion on the dichotomous dependent variable. In this analysis, program participation in AmeriCorps will serve as the dependent variable (did or did not participate) with socio-historical and demographic items (i.e. age, gender, education, family income, family socialization, religious socialization, youth volunteering) serving as independent variables.

Binary logistic regression analysis requires very few assumptions to be met – there are no distributional assumptions, however, observations should be independent and independent variables must be linearly related to the logit of the dependent variable (Leech, Barrett et al. 2008). Conditions of binary logistic regression include the presence of a dichotomous, mutually exclusive dependent variable, large sample (20 cases per predictor, with a minimum of 60 total cases), and the absence of multicollinearity among the independent variables (Leech, Barrett et al. 2008). These assumptions and conditions are checked in the "Results" chapter of this dissertation.

3.3.2. Exploratory Factor Analysis (Principal-axis Factoring)

Next, to determine whether values similar to those identified in the PSM literature are prevalent among the sample used in this dataset, exploratory factor analysis (EFA) dimension reduction techniques are conducted. Items that were repeatedly measured throughout the three-wave study are identified and separated from non-repeated questions – 60 questions are identified as repeated measures. Similarly, these survey questions are then sorted into PSM related and non-PSM related categories. Here, approximately 35 questions are identified as potentially relevant to PSM. To determine whether the PSM related latent factors are present in these data, extensive exploratory factor analyses are conducted to determine whether there may be latent constructs similar to those identified by Perry (1996).

Principal-axis factor analysis (PAF) using both varimax (orthogonal) rotation and promax (oblique) rotation techniques are employed. Principal-axis factor analysis is the preferred method when attempting to detect structure and latent variables, where principal components analysis is preferred in cases on pure data reduction (Tabachnick and Fidell 2007; Leech, Barrett et al. 2008).

Where varimax and other forms of orthogonal rotation assume that there is no correlation among factors (a somewhat unrealistic assumption in this analysis) promax rotations employ oblique rotation techniques and assume correlation among reduced factors (Tabachnick and Fidell 2007). Both the exploratory factor analysis and logistic regression are performed using the SPSS statistical software package, marketed by the IBM Corporation.

Principal-axis factor analysis requires several assumptions to be met prior to analysis. First, normality of the distributions are checked for skewness. In this

dissertation, skewness values are used to check distributions. Second, assumptions of linearity can be checked using scatter plots, which are examined in the next chapter. Third, when using factor analysis, it is necessary to check for multicollinearity, which can be done using the determinant of R. If this value approaches zero and eigenvalues of factor loadings approach zero, multicollinearity may be present.

There are only two conditions required to be met when conducting PAF: there must be a relationship among the variables, and there should be a large sample size (it is important to have more respondents than questions) (Leech, Barrett et al. 2008). To empirically test for a relationship between the variables, the Kaiser-Meyer-Olkin (KMO) measure should be greater than .70, and is inadequate if less than .50 (Leech, Barrett et al. 2008). Additionally, Bartlett's test of sphericity is checked. "Bartlett test should be significant (i.e., a significance value of less than .05); this means that variables are correlated highly enough to provide a reasonable basis for factor analysis (Leech, Barrett et al. 2008, p. 63)." These assumptions and conditions are checked in the "Results" chapter of this dissertation.

When conducting principal factor analysis, factor loadings lower than .30 are generally considered low and are often suppressed below this threshold. However, loadings of .40 or greater are considered high. This suppression threshold is usually set between the .30 and .40 levels (Leech, Barrett et al. 2008). Tabachnick and Fidell (2007) identify .32 as an appropriate minimum loading, so long as they do not cross-load above the .32 level on another factor. Similarly, it is desirable to have at least three items load on each factor to avoid weak and unstable factors.

While EFA provides a useful first step in determining factor structures, confirmatory techniques are more rigorous and should be employed to confirm model fit. Tabachnik and Fidell discuss the differences between EFA and CFA:

> There are two major types of FA: exploratory and confirmatory. In exploratory FA, one seeks to describe and summarize data by grouping together variables that are correlated. The variables themselves may or may not have been chosen with potential underlying processes in mind. Exploratory FA is usually performed in the early stages of research, when it provide s a tool for consolidating variables and for generating hypotheses about underlying processes. Confirmatory FA is a much more sophisticated technique used in the advanced stages of the research process to test a theory about latent processes. Variables are carefully and specifically chosen to reveal underlying processes. Confirmatory FA is often performed through structural equation modeling (Tabachnik and Fidell, 2007, p. 609).

Next, these confirmatory techniques are discussed.

3.3.3. Confirmatory Factor Analysis and Structural Equation Modeling

After exploratory factor analysis methods are used to reduce dimensions, confirmatory factor analyses (CFA) are conducted on both the treatment and comparison groups using data from corresponding waves of the study. Where EFA is purely exploratory, CFA is theory driven and requires a hypothesized factor model or construct.

The model used in this phase of this dissertation includes the adapted measures/dimensions of PSM that were identified using exploratory factor analysis techniques. While the name confirmatory factor analysis implies the method may be similar in concept to exploratory factor analysis, there are some rather distinct differences. Where EFA uses data to empirically identify factors or constructs, CFA requires a pre-identified theoretic model to test for the presence of hypothesized latent factors. Here, CFAs are employed at the three waves of survey

administration: baseline (prior to program participation), post-AmeriCorps program (immediately following completion of the program), and wave III (2007 – seven years after completion of the program). The structural equation modeling software, Amos (Analysis of Moment Structures), developed by the IBM Corporation, is used to conduct CFA and SEM analyses.

Finally, Structural Equation Modeling (SEM) techniques are used to determine whether the latent variables defined in the EFA and CFA phases of analysis help to explain a larger, second-order latent factor relating to public service motivation.

Tabachnick and Fidell (2007, p. 680) describe this analytic method:

> Structural equation modeling (SEM) is a collection of statistical techniques that allow a set of relationships between one or more IVs, either continuous or discrete, and one or more DVs, either continuous or discrete, to be examined. Both IVs and DVs can be either factors or measured variables. Structural equation modeling is also referred to as...confirmatory factor analysis. SEM allows questions to be answered that involve multiple regression analyses of factors. When exploratory factor analysis is combined with multiple regression analyses, you have SEM. The major question asked by SEM is, 'Does the model produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?' After the adequacy of the model is assessed, various other questions about specific aspects of the model are addressed.

While CFA and SEM are inherently similar techniques, SEM helps to explain somewhat more complicated, higher-order models necessary for this analysis. Amos will also be used to run structural equation models.

Within the SEM and CFA techniques, there are several related sub-techniques. First, while latent growth curve analysis or modeling can be particularly useful for longitudinal structural equation modeling, latent growth curves are best suited for data with more four or more time points.

To ensure a properly identified and stable solution, your analysis should have four or more time points, though it is possible to fit some growth models with as few as

three time points. If you have a three time point database, you may want to meet with a consultant to discuss the particulars of your model (Anderson 2011).

Since this dataset only provides three time points, latent growth curve analysis will not be employed.

Perhaps more appropriate are MIMIC modeling techniques. Multiple-Indicator, Multiple Cause Modeling (MIMIC), which is similar to ANOVA techniques, allows analysts to compare population differences on a construct of interest (Hancock 2004). In this dissertation, MIMIC modeling will allow for comparison of latent structures between the comparison and treatment groups at different time points to determine the effect of participation in AmeriCorps. Similarly, MIMIC modeling will allow for comparison within groups between different time points (e.g. is there a difference between baseline and post-AmeriCorps program among members of the treatment group?). This technique will allow for inferences to be drawn about dimensions of PSM change as a result of participation in AmeriCorps (in the treatment groups) and how dimensions of PSM change over time without exposure to AmeriCorps (among the comparison group). MIMIC modeling is analogous to simple regression modeling to determine differences between populations, where all groups are pooled into the same dataset and group membership serves as an independent variable.

3.3.4. Assumptions of CFA

Confirmatory factor analysis is closely related to structural equation modeling, however is often used to theoretically test latent factor models. Structural equation modeling, on the other hand, is a complex regression, or path analysis technique that allows numerous relationships among observed or unobserved variables to be tested

simultaneously. CFA is a relatively flexible method of analysis, but does carry some assumptions. In particular, the three major assumptions of SEM assume that variables are normally distributed, that variables are of the interval or scale variety, and that the model is correctly specified (Klem 2000). Among this dataset, assumptions of normal distribution are met for most variables. Assumptions of interval variables are also met. Finally, since proper model specification is critical to generating usable parameter estimates, considerable attention was paid to model fit and specification.

Additionally, assumptions relating to sample size (i.e., should be large), and rates of missing data (in this dataset they are low – often less than one percent for most variables) are considered. Missing data in Amos can create estimation errors and should be dealt with accordingly. While listwise deletion, pairwise deletion, and mean substitution may be used for addressing missing data, full information maximum likelihood (FIML) is likely the best option for estimating means, which was used in a portion of this analysis. For Bayesian estimation, data imputation is used for missing data.

To assess model fit, maximum likelihood (ML) goodness-of-fit indices (GFI) are the most common in the literature (Brown 2006; Byrne 2010). Assumptions of ML are (a) a large, asymptotic sample size (b) indicators are measured on continuous scales (i.e. approximate interval-level data); and (c) normal distribution of indicators (Brown 2006). There are three different classes of ML fit indices: absolute, parsimony, and comparative. It is common practice to include one fit index from each fit class (Brown, 2006). The most common absolute measure of maximum likelihood fit is the chi-square statistic. To adjust for degrees of freedom, the chi-

square is divided by the degrees of freedom to produce the normed chi-square. A normed chi-square between 1.0 and 5.0 indicates an acceptable model fit (Schumacker and Lomax 1996). However, chi-squares can be inflated by sample size, so several other statistics are considered.

For the parsimony correction class of goodness-of-fit indices, the root mean square error of approximation (RMSEA) is often included (Kline 1998; Hu and Bentler 1999; Brown 2006; Byrne 2010). While the upper end of the RMSEA range is unbounded, scores often fall between 0.0 and 1.0. A value of zero indicates perfect fit and values close to 0 suggest acceptable fit. Generally, values below .1 are considered good fit and values below .06 are considered very good fit (Hu and Bentler 1999). Often, when RMSEA is reported, RMSEA 90% confidence interval is also included (Brown, 2006).

Another often reported comparative measure is the comparative fit index (CFI). Similar to RMSEA, CFI has a range of 0.0 to 1.0, however, values approaching 1.0 (over 0.90) are considered to indicate good model fit (Hu and Bentler 1999).

Finally, the Tucker-Lewis index (TLI) is frequently included as a comparative measure of goodness-of-fit and behaves similar to the CFI index with a range of 0.0 to 1.0; higher numbers indicate better fit (Hu and Bentler 1999).

Often in CFA, models are not correctly specified on the first iteration of the analysis. Goodness-of-fit measures are used to determine whether the model should be re-specified to better fit the data. Two common sources of poor-fitting CFA solutions include the number of factors or the number of indicators and how they load onto the factors (Brown 2006). However, if changing the number of factors in the proposed model significantly improves model fit, this could indicate that

improper attention was paid at the review of theoretic literature and exploratory data analysis phases of research.

3.3.5. Ordinal and Likert Scale Data – Bayesian CFA and SEM

Additionally, the ordinal nature of the data was addressed. For relatively large samples, when using Likert scales with four or more items with normal distribution, maximum likelihood estimates is an acceptable method of evaluation (Byrne 2001; Brown 2006). Often, however, weighted least squares (WLS) techniques are used with ordinal or non-normal data (Byrne 2001; Brown 2006). While WLS is somewhat common in psychometric verification literature, Zhang et. al points out, "even when WLS is theoretically called for, empirical studies suggest WLS typically leads to similar fit statistics as maximum likelihood estimation and to no differences in interpretation" (Zhang, Hamagami et al. 2007, p. 374).

However, Amos does not offer a WLS option. Previous versions of Amos suggested using asymptotic distribution-free (ADF) methods; however these techniques are rarely used in research. Rather, newer versions of Amos use Bayesian estimation by employing Markov chain Monte Carlo methods (see Arbuckle 2010). That is,"... in addition to being an alternative to the maximum likelihood estimation (MLE) method, Bayesian methods also have unique strengths, such as the systematic incorporation of prior information from previous studies. These methods are more plausible ways to analyze small sample data compared with the MLE method" (Zhang, Hamagami et al. 2007, p. 374).

However, Byrne (2010) argues that the difference in results between these methods is often minimal. Specifically, she suggests "...the researcher always has

the freedom to conduct analyses based on both methodological approaches and then follow up with a comparison of the parameter estimates. In most cases, where the hypothesized model is well specified and the scaling based on more than three categories, it seems unlikely that there will be much difference between the findings" (Byrne 2010, p. 160). Therefore, in this research, both ML and Bayesian parameter estimates will be reported and compared.

While Bayesian estimates may be preferred when using Likert scale survey data, there are not options for multiple group analysis (e.g. MIMIC models) when using the Amos software while employing Bayesian estimation. So, both traditional maximum likelihood measures of goodness-of-fit as well as Bayesian measures of goodness-of-fit are reported. Similar to maximum likelihood estimation, Bayesian estimates produce a goodness-of-fit index called the posterior predictive *p*. Generally, a posterior predictive *p* value near .50 indicates good model fit.

3.4. Limitations and Strengths

3.4.1. Limitations

The sample used for the treatment group in the study was limited to participants in the AmeriCorps program during the 1999-2000 program years. Similarly, the sample used for the comparison group consisted of individuals who expressed interest in AmeriCorps, but did not join. While this design is useful for only identifying people who are believed to have a predisposition to service (this allows us to more easily attribute any changes that may have occurred in individuals as a result of participation in AmeriCorps), it does pose some potential selection bias problems. Since the members of the comparison group ultimately did not join the program, it is possible that they may not have shared the same predisposition to

service as the treatment group. While a pure random assignment is almost always preferable, an inherent flaw in quasi-experimental research design relating to selection bias can threaten internal validity (Shadish, Cook et al. 2001).

To mitigate the threat of selection bias, Abt Associates used propensity score analysis in the third wave of the original analysis of this dataset for CNCS. They advised, "PSA [propensity score analysis] estimates treatment effects by comparing treatment cases with comparison group cases that are about as likely to be selected into the treatment groups based on their observable characteristics" (*Still Serving:*...2008, p. B-4). While these propensity scores may be useful for addressing selection bias, they do present a problem. Since the propensity scores were not collected until after the first two phases of analysis, they can only be applied to survey participants who responded to both the supplemental phase as well as the third phase. Longitudinal studies have natural response rate attrition associated with difficulty in getting participants to continue to participate in the study, as well as maintaining current contact information for participants. Therefore, if propensity scores are incorporated when analyzing the baseline and post-AmeriCorps program data, these samples must be limited to those who responded to all four survey time-points.

The PSAs used by the CNCS included questions regarding values to create survey strata. We felt the questions used to determine the PSA strata were too closely aligned with public service motives and, therefore, would confound the analysis. Since a major objective of this dissertation is to determine whether public service motivation values are helpful in explaining who joins AmeriCorps programs,

conducting propensity score analyses may have compromised the underlying questions relating to PSM.

Further, techniques employed to control for selection bias are inherent in structural equation modeling when using a quasi-experimental research designs. These considerations are highlighted by Shadish, Cook and Campbell (2001, p. 398), who suggest that:

> When [latent variable structural equation modeling] techniques were applied to data from quasi-experiments, the hope was to make causal inferences more accurate by adjusting for predictors of outcome that might be correlated with receipt of treatment and by adjusting for unreliability of measurement in predictors. If these two goals could be accomplished, an unbiased estimate of treatment effect could be obtained. In fact, adjustment of measurement error is feasible using latent variable models. Doing so requires using multiple observed measures of a construct that are, in essence, factor analyzed to yield latent variables shorn of random measurement error (multiple measurement can take place on a subsample to save costs; Allison & Hauser, 1991). Those latent variables can be used to meld treatment outcome and may improve estimation of treatment effects.

Rather, since propensity score analysis is uncommon in CFA and SEM work, this dissertation employs a series of MIMIC and multiple group models where latent means are derived for factors and compared to other groups. The standardized mean differences between groups generated through MIMIC modeling signify direct effects – MIMIC models will be conducted to compare the treatment and comparison groups at the different waves of the study, and will also be used to compare the adapted measures of PSM within groups at the different time points to assess how PSM changes within the same group over time (e.g., is there a difference between the treatment and comparison groups at wave III (2007)?; is there a significant difference within the treatment group at baseline and post-AmeriCorps program?). (See Figure 3.1 for an overview of the timing of the waves of administration of the survey. These standardized differences are then diagramed in

longitudinal graph form. This longitudinal design make propensity score analysis unnecessary, since standardized latent mean difference techniques will allow for determining if there were changes in levels of PSM as a direct result of participation in AmeriCorps. Further, the treatment and comparison groups will be compared at baseline to reveal if there are any significant differences in the adapted dimensions of PSM prior to participation in AmeriCorps to determine if these groups suffer from any perceived selection bias on these dimensions.

Since the sample was limited to people who expressed interest in joining an AmeriCorps program, this study may only be generalizable to people who were aware of the program. There may be people with similar "other-regarding" orientations who choose to join programs such as the Peace Corps or seek employment with nonprofit organizations instead of choosing to inquire about AmeriCorps programs. These people may have a similar experience to service in AmeriCorps and may experience similar effects, however are not included due to the limited scope of the comparison groups in this study. Further research should be conducted to examine the impact of participation in similar service-oriented programs or employment in the nonprofit sector.

While these data are helpful for understanding how the AmeriCorps program affects participants, it should be noted that the program has, and will continue to, grow and evolve. Therefore, given the changing face of the program, it may be difficult to generalize these findings to current and future program participants. For example, the primary focus of the AmeriCorps programs during the treatment year was education; however the mission of the program has since expanded to promote public safety and respond to natural and manmade disasters such as the aftermath related to the events

of September 11, 2001 and Hurricane Katrina (*Still Serving:...*2008). Since these limitations are unavoidable in this type of longitudinal design, they have not been controlled for in this analysis.

In the original analysis of this dataset, researchers considered using instrumental variables and non-equivalent dependent variables to improve validity and address selection bias, but were unable to indentify appropriate measures. Taking a different approach than this dissertation, the CNCS and Abt Associates employed principal components analysis (PCA) data reduction methods to generate latent variables. They argue that these steps help to address the validity of the constructs tested during subsequent phases of analysis:

> This method of analysis was chosen originally because it allows us both to verify the strength and coherence of the baseline constructs and to further explore more complicated relationships among the variables of which they are composed (Thompson, 2004). The purposes of PCA include informing evaluations of score validity, developing theory regarding the nature of the constructs, and summarizing relationships between survey items in a more efficient manner (Thompson, 2004). (Still Serving:...2008, p. G-3).

Despite these attempts to address the validity of the dataset, one potential weakness identified of these data is the lack of appropriate tests of validity. Validity measures should be tested in subsequent analyses of these data.

An additional confounding variable is the manner in which the surveys were administered. Members of the comparison group were given the survey over the telephone and members of the treatment group were given the survey at the first two waves of the study in paper format. Additionally, the treatment group was given the final survey in paper format, further compromising the validity of the responses (DeVellis 2003).

Finally, it may be difficult to assess the impact of participation in AmeriCorps programs over time since some of the observed changes may have been impacted by other significant life-events not considered in this analysis, which is a common problem in longitudinal, quasi-experimental research design. However, inclusion of a comparison group should mitigate many of these concerns.

3.4.2. Strengths

While no study goes without limitations, this study has some particularly encouraging strengths worth discussing such as the large sample size, the representativeness of the sample and the longitudinal design of the dataset. The relatively large sample for this study is encouraging. There have been few studies of public service motivation that utilize a similarly sized dataset. Large samples are beneficial for reducing sampling error in estimates. Additionally, large samples provide greater opportunity for segmentation of the population, if desired by the researcher. Another strength of this research is the representativeness of the sample. In conducting this analysis, the CNCS chose to generate a sample that was nationally representative of both AmeriCorps programs as well as demographic characteristics of the United States. These considerations improve the generalizeability of this research.

Finally, perhaps the most important strength of this research is the longitudinal nature of the data. Very little research regarding public service motivation has been conducted using longitudinal data and this study could help to inform the literature on how PSM changes over time (Wright and Christensen 2010; Wright and Grant 2010).

4: Analysis

4.1. Overview of Results Section

In this chapter, the results of data analysis are presented. First, descriptive statistics of the sample and population are reported. Basic demographic information, including gender, race, level of education, and family income are reported for both the treatment and comparison groups. Additionally, cross-tabulations of self-reported motivations for joining, or not joining, the AmeriCorps program are also included.

Next, the role of antecedent conditions of public service motivation are examined as predictors of participation in AmeriCorps programs. Using binary logistic regression, variables that are often considered as antecedents to PSM, such as age, gender, income, family socialization, participation in religious activities, and youth volunteering are all used to predict program participation. Results of this logistic regression are reported.

The third section of this chapter reports the results of several exploratory factor analyses (EFA) using the Corporation for National and Community Service dataset. Numerous EFAs are conducted by group type at the different time points (i.e. treatment only, comparison only, both groups combined) to confirm that any identified latent constructs are consistent among groups and over time and warrant further exploration using more appropriate and rigorous techniques.

The next section employs confirmatory factor analysis and structural equation modeling techniques to test whether theoretical constructs identified by the PSM literature and empirically using the EFAs conducted in the prior phase, explain

motivation among the sample. Using multiple-group analysis and multiple indicator, multiple causes (MIMIC) modeling, the treatment and comparison groups are compared at the three time points to determine whether the model proposed in this research provides a good fit. Group differences are described.

Finally, to examine how PSM changes longitudinally, and to examine the impact of participation in AmeriCorps, MIMIC models are applied to each group at different time points to determine longitudinal changes within groups on the latent variables.

4.2. Description of the Sample

4.2.1. Demographic Information

Analysis of descriptive statistics at baseline revealed that 54 percent of participants in the study (N=4,153) were part of the treatment group (did AmeriCorps, n=2,228). Seventy-four percent of the sample reported themselves as female (n=3,058) and 63 percent as white (n=2,611), while only four percent reported being Asian (n=168) and five percent Native American (n=209). The mean age of the group at baseline was 26.70 years old. Levels of education were relatively normally distributed with five percent having not completed high school (n=206), 20 percent having received a high school diploma (n=810), 32 percent having completed some college (n=1,337), 32 percent having completed an undergraduate degree (n=1,327), and four percent having completed a graduate degree (n=161). Family income of participants in 1999 was normally distributed with the median income range being $30,000 - $40,000 (n=3,056). Tabular presentations of descriptive statistics can be found in Tables 4.1-4.7.

Table 4.1: RACE AND ETHNICITY AT BASELINE FOR BOTH GROUPS

Demographic	Did Not Join AmeriCorps (comparison group) (n = 1,908)		Joined AmeriCorps (treatment group) (n = 2,210)		Total n = (4,118) missing = (35)	
	n	%	n	%	n	%
Race/Ethnicity						
Hispanic	163	4.0%	307	7.5%	470	11.4%
Multiracial	114	2.8%	66	1.6%	180	4.4%
American Indian/ Alaska Native	10	.2%	48	1.2%	58	1.4%
Asian	68	1.7%	58	1.4%	126	3.1%
Black/African American	399	9.7%	541	13.1%	940	22.8%
Native Hawaiian/ Pacific Islander	4	.1%	17	.4%	21	.5%
White	1,150	27.9%	1,173	28.5%	2,323	56.4%
Total Race/Ethnicity	1,908	46.3%	2,210	53.7%	4,118	100

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

As mentioned in the Methods section, the comparison sample was selected in an effort to provide a well-matched population for the treatment group. As a result of this matching process, populations are relatively similar relating to ethnicity and race. In both groups, there were more white members than any other group (around 28 percent in both the comparison and treatment groups) representing over half (56 percent) of the entire sample. The next largest group was Black/African-American, which represent nearly a quarter of the total observations. Finally, the groups American Indian/Alaska Native and Native Hawaiian/Pacific Islander represented the smallest groups in the sample, accounting for less than two percent (combined) of the entire sample.

Table 4.2: GENDER AT BASELINE FOR BOTH GROUPS

Demographic	Did Not Join AmeriCorps (comparison) (n = 1,925)		Joined AmeriCorps (treatment) (n = 2,223)		Total n = (4148) missing = (5)	
	n	%	n	%	n	%
Gender						
Male	432	10.4%	658	15.9%	1,090	26.3%
Female	1493	36.0%	1565	37.7%	3,058	73.7%
Total Gender	1,925	46.4%	2,223	53.6%	4,148	100%

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

One of the more surprising findings in the descriptive statistic analysis was that the overwhelming majority of program participants are female. As indicated in Table 4.2, in 1999, there were roughly three times as many women as men in the programs – 29 percent male and 71 percent female. While there are fewer men in the comparison group (n=432) than in the treatment group (n=658), the genders of the treatment and comparison group are well-matched.

Table 4.3: AGE AT BASELINE FOR BOTH GROUPS

Demographic	Did Not Join AmeriCorps (comparison) (n = 1,912)		Joined AmeriCorps (treatment) (n = 2,204)		Total n = (4,116) missing = (37)	
	n	%	n	%	n	%
Age						
0-20	359	8.7%	405	9.8%	764	18.6%
<20-25	860	20.9%	1,022	24.8%	1,882	45.7%
>25-30	277	6.7%	232	5.6%	509	12.4%
>30-35	141	3.4%	163	4.0%	304	7.4%
>35-Above	275	6.7%	382	9.3%	657	16%
Total Age	1,912	46.5%	2,204	53.5%	4,116	100%

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

As expected, the age distributions reported in Table 4.3 indicate a large presence of young adults; roughly 75 percent of the treatment group was under 30 years of age. Additional descriptive analysis of means revealed that the average age among the treatment group was 26.95 years (SD=9.54) and the mean age among the comparison groups was 26.41 years (SD=8.91).

Next, the membership in the test and comparison group were analyzed by program type. Data are presented in Table 4.4. In particular, the AmeriCorps National Civilian Community Corps program and State and National programs were analyzed. Here, it is revealed that approximately 21 percent of the members of the treatment group were members of the NCCC program, while the comparison group similarly had 21 percent of individuals matched to the NCCC sample.

Table 4.4: PARTICIPATION BY PROGRAM TYPE AT BASELINE

Demographic	Did Not Join AmeriCorps (comparison group) (n = 1,925)		Joined AmeriCorps (treatment group) (n = 2,228)		Total n = (4,153) missing = (0)	
	n	%	n	%	n	%
Program Type						
NCCC	401	9.7%	476	11.5%	877	21.1%
State and National	1,524	36.7%	1,752	42.2%	3,276	78.9%
Total Program Type	1,925	46.4%	2,228	53.6%	4,153	100%

Note: the comparison group consists of members matched to the treatment group, by program type. For example, the NCCC sample was used to identify a similar NCCC comparison group. Data analyzed are from the Still Serving dataset acquired from the CNCS.

Next, the highest level of education achieved among survey respondents was examined next and the results are reported in Table 4.5. Since the original survey

instrument had been coded for ten levels of education, several items were collapsed to create fewer, but larger groups. Five categories of education are examined ranging from "less than a high school graduate" to those who have earned a "graduate or professional degree." Here, we see a relatively normal distribution with five percent of the entire population earning a less than a less than a high school degree and four percent earning a graduate or professional degree. The largest percentage of the population has attended some college or earned an Associate's degree (39.5 percent), while the second largest group has earned a bachelor's degree (32 percent) and the third largest group having only earned a high school diploma (20 percent).

Table 4.5: LEVEL OF EDUCATION ACHIEVED BY PROGRAM TYPE AT BASELINE

Demographic	Did Not Join AmeriCorps (comparison group) (n = 1,924)		Joined AmeriCorps (treatment group) (n = 2,212)		Total n = (4,136) missing = (17)	
	n	%	n	%	n	%
Level of Education						
Less than high school grad	84	2.0%	122	2.9%	2.6	5.0%
High School Grad	287	6.9%	523	12.6%	810	19.6%
Some College or Assoc. Degree	834	20.2%	798	19.3%	1,632	39.5%
Bachelor's Degree	604	14.6%	723	17.5%	1,327	32.1%
Graduate/Prof. Degree	115	2.8%	46	1.1%	161	3.9%
Total Level of Education	1,924	46.5%	2,212	53.5%	4,136	100%

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

Finally, incomes of the sample were examined and reported in Table 4.6, both by personal income and by household income. Household incomes were not skewed in distribution; however, they displayed negative kurtosis (relatively wide distribution of scores), making the distribution platykurtic. The largest percent of the sample

identified as having lived in a household that earned $30,000-$40,000 (12.4 percent), and the smallest number was represented by household earning $90,000-$100,000 (2.6 percent). The treatment and comparison groups were similar; however, the comparison group appeared to reveal a more normal kurtosis with slightly larger percentages of incomes present toward the middle of the distribution.

Table 4.6: HOUSEHOLD INCOME BY PROGRAM TYPE AT BASELINE

Demographic	Did Not Join AmeriCorps (comparison) (n = 1,758)		Joined AmeriCorps (treatment) (n = 1,298)		Total n = (3,056) missing = 1,097	
	n	%	n	%	n	%
Household Income						
Under $5,000	71	2.3%	108	3.5%	179	5.9%
$5,000-<$10,000	135	4.4%	155	5. 1%	290	9.5%
$10,000-<$15,000	159	5.2%	91	3.0%	250	8.2%
$15,000-<$20,000	144	4.7%	91	3.0%	235	7.7%
$20,000-<$25,000	143	4.7%	75	2.5%	218	7.1%
$25,000-<$30,000	146	4.8%	83	2.7%	229	7.5%
$30,000-<$40,000	223	7.3%	157	5.1%	380	12.4%
$40,000-<$50,000	162	5.3%	118	3.9%	280	9.2%
$50,000-<$60,000	148	4.8%	99	3.2%	247	8.1%
$60,000-<$70,000	119	6.8%	67	2.2%	186	6.1%
$70,000-<$80,000	100	3.3%	54	1.8%	154	5.0%
$80,000-<$90,000	46	1.5%	43	1.4%	89	2.9%
$90,000-<$100,000	44	1.4%	36	1.2%	80	2.6%
$100,000 or more	118	3.9%	121	4.0%	239	7.8%
Total Household Income	1,758	57.5%	1,298	42.5%	3,056	100%

Note: Data analyzed are from the "*Still Serving*" dataset acquired from the CNCS.

While household incomes are useful for understanding the type of socio-economic background that members of the sample were part of prior to joining AmeriCorps, perhaps more explanatory of their reasons for joining the program are their personal incomes. Table 4.7 reveals that the kurtosis of personal income appears more normal,

this sample is positively skewed. Nearly 75 percent of the respondents indentified with the first three groups, indicating that they earned less than $15,000. Conversely, only 3.3 percent indicated that they made more than $40,000 prior to joining (or inquiring about) the program.

Table 4.7: PERSONAL INCOME BY PROGRAM TYPE AT BASELINE

Demographic	Did Not Join AmeriCorps (comparison) (n = 1,888)		Joined AmeriCorps (treatment) (n = 1,880)		Total n = (3,768) missing = 385	
	n	%	n	%	n	%
Personal Income						
Under $5,000	656	17.4%	679	18%	1,335	35.4%
$5,000-<$10,000	403	10.7%	526	14%	929	24.7%
$10,000-<$15,000	272	7.2%	282	7.5%	554	14.7%
$15,000-<$20,000	170	4.5%	146	3.9%	316	8.4%
$20,000-<$25,000	125	3.3%	94	2.5%	219	5.8%
$25,000-<$30,000	94	2.5%	54	1.4%	148	3.9%
$30,000-<$40,000	102	2.7%	42	1.1%	144	3.8%
$40,000-<$50,000	43	1.1%	22	0.6%	65	1.7%
$50,000-<$60,000	13	0.3%	18	0.5%	31	0.8%
$60,000-<$70,000	4	0.1%	7	0.2%	11	0.3%
$70,000-<$80,000	2	0.1%	4	0.1%	6	0.2%
$80,000-<$90,000	0	0.0%	3	0.1%	3	0.1%
$90,000-<$100,000	0	0.0%	1	0.0%	1	0.0%
$100,000 or more	4	0.1%	2	0.1%	6	0.2%
Total Household Income	1,888	50.1%	1,880	49.9%	3,768	100%

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

Next, some additional descriptive statistics that address issues that may be related to motivation for joining (or not) the AmeriCorps program are explored.

4.2.2. Important Factors for Joining/Inquiring about AmeriCorps

In addition to descriptive statistics relating to demographic and socio-economic information, questions relating to self-reported motivations are examined. The following descriptive statistics address the first hypothesis:

H_1: *AmeriCorps participants will identify public service motivation values as important reasons for joining the program.*

To get a better idea of the types of the members of the sample's activity prior to joining AmeriCorps, they were asked what they had been doing for the year prior to the baseline survey. As reported in Table 4.8, over two-thirds of the comparison group indicated that they were either working or attending school, while approximately 63 percent of the treatment group had been engaging in similar activities. Only around 10 percent of each group had been looking for a job, suggesting that most of the sample was not unemployed prior to joining or inquiring about the program. According to the US Bureau of Labor Statistics, the unemployment rate in 1999 was 4.2 percent (2011) indicating that inquiring about AmeriCorps was likely not prompted by rational, monetary needs to find work. Given the strong economy, the low rate of individuals indicating that they were recently seeking work, and given that the majority of the sample had been working or attending school, we can posit that those individuals inquiring about AmeriCorps entertained public-oriented, perhaps altruistic motivations.

Table 4.8: MEMBER ACTIVITY PRIOR TO PROGRAM START AT BASELINE

Experience Prior to AmeriCorps	Did Not Join AmeriCorps (comparison group) (n = 1,925)		Joined AmeriCorps (treatment group) (n = 2,228)		Total n = (4153)	
	n	%	n	%	n	%
In the past 12 months, what were you doing?:						
Working outside the home	1,533	36.9%	1,372	33.0%	2,905	69.9%
Attending school	1,316	31.7%	1,231	29.6%	2,547	61.3%
Taking care of my children at home	258	6.2%	310	7.5%	568	13.7%
Looking for a job	426	10.3%	437	10.5%	863	20.8%
Volunteering or community service	720	17.3%	594	14.3%	1,314	31.6%
Other	167	4.0%	184	4.4%	351	8.5%

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

Next, information about the most important factor for enrolling in AmeriCorps among the treatment group was examined to provide insight to the members values prior to joining the program. The modal response of program participants suggested that people joined the AmeriCorps program to perform community service (32.7 percent listed this as the most important reason for enrolling). An additional 452 members listed the opportunity to have new experiences as the most important factor (27.4 percent). Of participants, around 19 percent listed extrinsic, monetary reasons as the most important for joining AmeriCorps; 13.4 percent indicated that the education benefit was the most influential factor, while an additional 5.4 percent indicated that they signed up for the program because they needed income or a job.

Table 4.9: MOST IMPORTANT FACTORS FOR ENROLLING IN AMERICORPS AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (TREATMENT ONLY)

	Joined AmeriCorps (treatment group only) (n = 1,649)	
What factor was most important in your decision to enroll in AmeriCorps?:	n	%
Wanted to perform community service/help others	540	32.7%
Interested in the educational benefit	221	13.4%
Meeting new people and ethnic groups	30	1.8%
New experiences	452	27.4%
Needed a job, income	89	5.4%
Drawn to the location of the program	16	1.0%
Working with children and youth	60	3.6%
Specific work to be done while in AmeriCorps	62	3.8%
Friends and family recommended that they join AmeriCorps	26	1.6%
Other	153	9.3%
Total	1,649	100%

Note: Data analyzed are from the *Still Serving* dataset acquired from the CNCS.

Conversely, members of the comparison group were asked about their most important reasons for not joining the program. Table 4.9 indicates that among this group, the most common response was "Other" (25 percent), followed by "needed more money" with nearly 21 percent of respondents choosing this as the most important factor. While the (relatively) high percentage of respondents selecting this as their most important reason for not joining could be interpreted as a potential sign that they were more motivated by money or meeting external needs, members of the treatment group listed monetary motivations for joining at a similar rate (18.4 percent), suggesting a relatively well-matched sample in regards to monetary motivations.

Table 4.10: MOST IMPORTANT FACTORS FOR PURSUING OPTIONS OTHER THAN AMERICORPS AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (COMPARISON GROUP ONLY)

	Did Not Join AmeriCorps (comparison group only) (n = 1261)	
What factor was most important in your decision to *not* enroll in AmeriCorps?:	n	%
Found better opportunity elsewhere	137	10.9%
Did not get selected into program	106	8.4%
Accepted into college	234	18.6%
Needed more money	263	20.9%
Time constraints	42	3.3%
Personal reasons (having a baby, family did not support decision, etc.)	56	4.4%
Did not want to leave family or home	84	6.7%
Never heard back from AmeriCorps or could not contact AmeriCorps	29	2.3%
Other	310	24.6%
Total	1,261	100%

Source: Corporation for National and Community Service, (2008). *Still Serving.* Washington, DC: 25.

Other important factors that were identified by respondents shed some light on why they decided to join the program. The format of this question allowed respondents to select multiple reasons, which helps generate a more nuanced picture of these motivations. State and National members indicated a mix of affective (77 percent identified helping the community, while 69 percent said serving a particular field was important) and rational, extrinsic motivations (over 70 percent identified that acquiring a skill or earning an education award were important). NCCC members, on the other hand, listed mainly affective rewards as the most important factors for joining (helping the community, reduce social or economic inequalities) and norm-based rewards (doing something outside of the mainstream and working with people who share your ideals), while rational, extrinsic motivators are omitted from their list of important factors for joining the program.

Table 4.11: OTHER IMPORTANT FACTORS FOR ENROLLING IN AMERICORPS AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (TREATMENT GROUP ONLY)

Percent answering "quite relevant" or "very relevant"	
State and National	NCCC
You wanted to...	You wanted to...
• Help the community (77%)	• Help the community (88%)
• Acquire skills useful for school or job (75%)	• Do something outside the mainstream (83%)
• Earn the education awards benefit (70%)	• Work with people who share your ideals (67%)
• Serve in this field (69%)	• Reduce social or economic inequality (67%)

Source: Corporation for National and Community Service, (2008). *Still Serving.* Washington, DC: 25.

Relating to the antecedent conditions of public service motivation (Perry 2000), Table 4.12 suggests that AmeriCorps members self-reported that the role of socialization in joining the program were among the least important motivators. Where Perry suggests that public service motivations are developed in part as a result of family socialization, these are among the least important motivators according to service members. In the NCCC sample, having been affected by the program or its participants and the extrinsic need for a job were among the least important factors for joining.

Table 4.12: LEAST IMPORTANT FACTORS FOR ENROLLING IN AMERICORPS AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (TREATMENT GROUP ONLY)

Percent answering "quite relevant" or "very relevant"	
State and National	NCCC
You wanted to...	You wanted to...
• Volunteering was an important tradition in your family and among friends (33%)	• You had a friend or family member who was applying or participating (23%)
• You had a friend or family member who was applying or participating (33%)	• You needed a job (14%)
• An AmeriCorps organization or one like it helped you (or a loved one) in the past (23%)	• An AmeriCorps organization or one like it helped you (or a loved one) in the past (6%)

Source: Corporation for National and Community Service, (2008). *Still Serving.* Washington, DC: 26.

4.2.3. Program Experience and Satisfaction

To gain a better understanding of the types of activities that members of the treatment group engaged in, Table 4.13 presents the top self-reported service activities during their service enrollment. The most common type of service activity reported by State and National participants were those relating working with children (82 percent) and environmental work (62.4 percent). The NCCC group reported extremely high rates of engaging in environmental work (97.3 percent) as well as high rates of working with children (88.4 percent) and working to improve office/building for needy people (86.8 percent). Only 29.5 percent of NCCC members reported working on disaster relief efforts, but this number has likely increased dramatically since the September 11, 2001, and Hurricane Katrina events.

Table 4.13: SERVICE ACTIVITIES WHILE IN AMERICORPS AS REPORTED AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (TREATMENT GROUP ONLY)

Did you do any of the following while you were in AmeriCorps:	Percent Participating	
	State and National	NCCC
Tutor, mentor, or take care of children, teenagers or adults?	82.3%	88.4%
Clean trails or do other environmental work?	62.4	97.3
Organize or do an administrative work for programs that help needy individuals?	59.1	55.1
Help renovate, construct, or clean offices or buildings for needy people?	49.4	86.8
Help to take care of sick, elderly, or homeless people?	42.6	66.8
Work involving disaster relief[1]	--	29.5

[1] Asked of NCCC members only. Disaster relief was not a priority for AmeriCorps State and National until after the tragedy of September 11, 2001

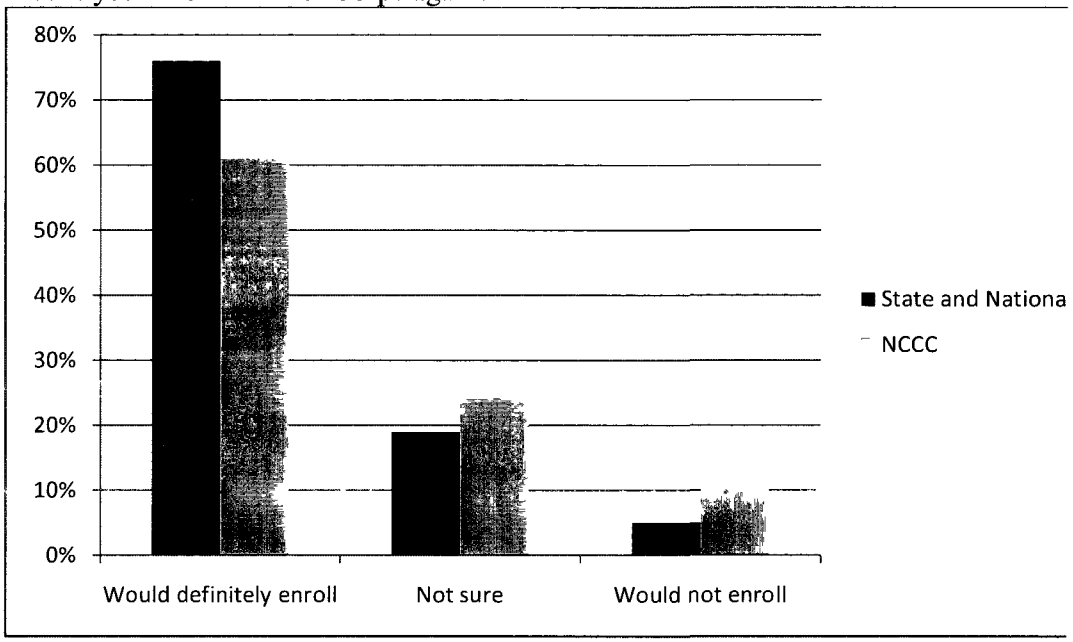
As indicated in Table 4.14, a relatively large percentage of AmeriCorps participants would enroll in the program again, 76 percent of State and National and 61 percent of NCCC members. Program satisfaction appears higher in the State and National programs with only 5 percent indicating that they would not enroll again, compared to 11 percent of NCCC members.

Finally, AmeriCorps members were asked about their perceived accomplishments while enrolled in the program. These statistics were included to help provide a frame for how members perceived the benefits produced by their service experience. These questions help to address the third hypothesis identified earlier in this dissertation:

H_2: *Participants in AmeriCorps programs will express satisfaction with their service experience.*

Table 4.14: PROGRAM SATISFACTION AS REPORTED AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (TREATMENT GROUP ONLY)

Would you enroll in AmeriCorps again?



Note: There were 666 missing observations for NCCC

Source: Corporation for National and Community Service, (2008 *Still Serving.* Washington, DC: 28.

Nearly all members of both groups felt they made a difference in the life of at least one person (96.5 percent average between the groups). More State and National members felt they made a contribution to the community (94 percent), while 92 percent of NCCC participant felt the same way. Both groups also indicated that they were exposed to new ideas and ways of seeing the world (87 percent of State and National members; 89 percent of NCCC members) which is an important tenet of this dissertation. Similarly, 79 percent of State and National members and 77 percent of NCCC member indicated that their service experience changed some of their beliefs and attitudes.

Table 4.15: PERCEPTIONS OF ACCOMPLISHMENTS WHILE IN AMERICORPS AT POST-AMERICORPS PROGRAM, SUPPLEMENTAL SURVEY (TREATMENT GROUP ONLY)

	State and National		NCCC	
Perceived Accomplishment	Strongly Agree	Agree	Strongly Agree	Agree
You felt you made a difference in the life of at least one person	68%	29%	68%	28%
You felt you made a contribution to the community	62	32	43	49
You were exposed to a new ideas and ways of seeing the world	42	45	48	41
You re-examined your beliefs and attitudes about yourself	40	44	42	43
You felt like part of the community	47	43	29	47
You changed some of your beliefs and attitudes	31	48	33	44
You did things you never thought you could do	42	35	50	28
You learned more about the "real world"	39	38	29	36

Note: Percentages have been rounded.

Source: Corporation for National and Community Service, (2008). *Still Serving.* Washington, DC: 30.

Preliminary descriptive analysis of attitudes, perceived accomplishments and satisfaction with the program suggest that the initial hypotheses proposed in this research warrant further investigation. While these self-reported attitudinal indicators lay a strong foundation for supporting these two research hypotheses, further investigation using more appropriate and rigorous statistical methods is required to make causal inferences about the effect of service in AmeriCorps on individuals. Before addressing the PSM construct, however, some of the antecedent variables are examined more thoroughly.

4.3. Predicting Participation in AmeriCorps using Antecedents Conditions of PSM

As described in the review of literature section, Perry identifies and tests several conditions that he posits are related to the development of public service motivation. However, little research has addressed the utility of using these conditions to predict whether people develop public service motivation. Despite the many similarities between the treatment and comparison groups, it is posited that slight variations between the groups can be traced to the presence of antecedent conditions to PSM. Therefore, variables that are related to the PSM antecedent conditions are identified and used to predict whether or not someone joins AmeriCorps. In particular, H_3 is addressed:

> H_3: *Antecedent conditions of PSM will accurately predict participation in AmeriCorps programs.*

A binary logistic regression was conducted to determine whether the nine independent variables of gender, age (at baseline), ethnicity, income (at baseline), education, seeing family helping others, seeing mentor helping others, activity in student government, and activity in religious or community organizations serve as predictors of joining AmeriCorps program. These variables were chosen based on antecedent conditions to public service motivation literature. Participation in AmeriCorps (treatment and comparison groups) was used as the dependent variable. Assumptions of mutually exclusive, dichotomous dependent variable are met. Similarly, the independent variables were found to be linearly related to the logit of the dependent variable. Problems of multicollinearity and outliers in the solution were not present. Finally, conditions requiring a large sample are met.

When all nine predictor variables are considered together, they significantly predict whether or not a person joined AmeriCorps. Table 4.16 presents the odds ratios, which suggest that the odds of joining AmeriCorps are increasingly greater as the prevalence of seeing family members and mentors help others as well as participation in student government, church groups, and community organizations goes up; i.e., these indicate that the odds of joining AmeriCorps improve by 1.45 for each unit increase in *seeing someone in your family help others* and by about 1.4 for every unit increase in *participation in student government.* Age was negatively related to participation in AmeriCorps.

Table 4.16: LOGISTIC REGRESSION ANALYSIS PREDICTING PARTICIPATION IN AMERICORPS (N=3,579)

Variable	*B*	*SE*	*Odds ratio*	*p*
Gender	.34	.08	1.40	.000
Age (1998)	-.17	.01	1.40	.000
Ethnicity	.04	.02	1.00	.030
Income (1998)	.10	.02	1.11	.000
Highest level of education completed	.04	.02	1.04	.057
Saw someone in family help others	.37	.11	1.45	.000
Saw someone you admire help others	.36	.10	1.44	.000
Active in student government	.34	.07	1.4	.000
Active in church group, religious organization, or community group	-.07	.08	.93	.357

Note: $R^2 = .20$; $F(4, 467) = 28.98$, $p<.001$

A logistic regression was also conducted to determine whether the thirteen independent variables relating to motivation for inquiring about AmeriCorps predicted program participation. Respondents were asked how relevant each of the following factors were in influencing them to inquire about AmeriCorps: had a friend or family who was applying to or participating in AmeriCorps; had a desire to

participate in service as a means to reduce social or economic inequality; was interested in the education award benefits; wanted the chance to work with people who share your ideals; an AC organization, or one like it, helped you (or a loved one) in the past; Volunteering always was an important tradition in your family and among your friends; wanted to fulfill your duty as a citizen; needed a job; wanted to make friends and meet people; wanted to help the community; wanted to serve in this field; and wanted to serve a target population and these predictors were included in a model to predict program participation. These variables were chosen due to their underlying motivational characteristics. Participation in AmeriCorps (treatment and comparison groups) was used as the dependent variable.

Table 4.17: LOGISTIC REGRESSION ANALYSIS PREDICTING PARTICIPATION IN AMERICORPS AT POST-AMERICORPS PROGRAM SUPPLEMENTAL SURVEY (N=2,974)

Variable	*B*	*SE*	*Odds ratio*	*p*
How relevant was each of the following factors in influencing you to inquire about AmeriCorps?				
Had a friend or family who was applying to or participating in AC	-.12	.03	.89	***.000***
Had a desire to participate in service as a means to reduce social or economic inequality	.16	.04	1.17	***.000***
Wanted to spend time doing something outside the mainstream – something different	-.10	.04	.91	.010
Though that the AC experience would give you skills useful in school or in a job	-.05	.04	.95	.175
Were interested in the education award benefits	-.06	.03	.94	***.050***
Wanted the chance to work with people who share your ideals	.01	.04	1.01	.720
An AC organization, or one like it, helped you (or a loved one) in the past	-.15	.03	.86	***.000***
Volunteering always was an important tradition in your family and among your friends	-.003	.03	.997	.926
You wanted to fulfill your duty as a citizen	.10	.03	1.11	***.002***
You needed a job	-.15	.03	.87	***.000***
You wanted to make friends and meet people	.07	.03	1.07	***.045***
You wanted to help the community	-.15	.05	.86	***.003***
You wanted to serve in this field	-.04	.04	.96	.329
You wanted to serve this target population	-.11	.04	.89	***.003***

$\chi^2 = 196.98$, $df = 14$, $N = 2{,}947$, $p < .001$

When all thirteen predictor variables are considered together, they significantly predict whether or not a person joined AmeriCorps. Table 4.17 presents the odds ratios, which suggest that the odds of joining AmeriCorps are increasingly greater as the desire to participate in service, and fulfilling one's duty as a citizen goes up (i.e.

these indicate that the odds of joining AmeriCorps improve by 1.17 for each unit increase in *had a desire to participate in service as a means to reduce social or economic inequality* and by about 1.11 for every unit increase in *wanted to fulfill your duty as a citizen).* Several items, such as *needed a job, helping the community,* and *interest in an education award* were negatively related to participation in AmeriCorps.

4.4. Using Secondary Data to Test PSM

Given some of the criticism relating to the public service motivation measurement instrument, this section explores the possibility of using secondary data to measure PSM. Since Perry's (1996) original scale was not included in the CNCS survey instrument, it is impossible to test whether program participants in the sample possess the exact driving latent factors outlined in the PSM body of theory. Rather, since respondents were asked questions that aim to measure similar values as those used in the public service motivation literature, many of these questions were included into a multiple-phase exploratory factor analysis to examine whether program participants contain similar values to those identified in PSM. Often, when conducting a confirmatory factor analysis to test theoretic constructs using secondary data (or when developing a theoretic construct), researchers employ exploratory factor analysis (EFA) to develop an initial measurement model. Here, the findings of several EFAs are examined to help determine whether the prevalence of PSM related values warrants future investigation using more rigorous, theory-driven statistical methods. In this section, H_4 is addressed:

H_4: *A public service motivation construct similar to the one identified by Perry will be identified among those who expressed interest in participating in an AmeriCorps program.*

To determine whether the public service motivation latent variables, or similar latent constructs, are prevalent among the sample, an exploratory factor analysis was run in several iterations. Originally, around 60 of the available 400 variables were included in the data reduction, and ultimately, 28 variables were used to identify four adapted dimensions of public service motivation. Analysis revealed a similar construct to that identified by Perry's PSM scale. While these variables do not directly assess the validity of the PSM dimensions in this dataset, this is an important first step to running more rigorous measures of validity. These dimensions are discussed below.

Principal-axis factor analysis with promax, oblique rotation was conducted to assess the underlying structure for 28 items of the *Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni* questionnaire. Varimax, orthogonal rotation was also conducted and yielded both similar factors and explanations of variance. The assumption of independent sampling was met using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (Leech, Barrett et al. 2008). The assumptions of normality, linear relationships between pairs of variable, and the variables being correlated at a moderate level were achieved. Several factor loadings were requested (using both three and four factors), based on Perry's work developing the original public service motivation scale (Perry, 1996). After rotation on the four factor loading, the first factor accounted for 21.31 percent of the variance, the second factor accounted for 8.49 percent of the variance, the third factor accounted for 7.07 percent of the variance, and the fourth factor accounted for 6.23 percent of the variance. Table 4.18

displays the loadings for the rotated factors, with loadings less than .33 omitted to improve clarity.

The first factor, which seemed to index *commitment to public interest*, had moderate loading on the first thirteen items. Next, six items loaded on the second factor that represented *openness to new ideas*, or an emphasis on the *democratic ideal of participation*. All of the measures of *openness to new ideas* had strong loadings. The third factor appeared to represent the participants' *knowledge of their communities* and had five items load relatively highly. The final factor appears to index *attraction to public policymaking* and had four factors load above the .32 level. Only one of the items in this principal analysis factor loading cross-loaded onto another factor: "Think about political issues that affect you community" loaded relatively weakly on both the Commitment to Public Interest (.34) and Knowledge of Community (.33). None of the items had negative loadings. The four newly identified sub-constructs include:

- Commitment to public interest
- Openness to new ideas
- Knowledge of community
- Attraction to public policymaking

Additional EFAs were conducted with the groups separated by treatment type. As anticipated, these analyses revealed similar factors, variables loadings, eigenvalues, and explanation of variance. See Appendix H for principal-axis factor loadings at post-AmeriCorps Program for the treatment and comparison groups. Similarly, see Appendices I for principal-axis factor loadings wave III (2007) for the treatment and comparison groups.

Table 4.18: FACTOR LOADINGS FOR ROTATION OF FACTORS AT BASELINE FOR TREATMENT AND COMPARISON GROUPS – PAF, PROMAX (N=4,153)

Item	Factor Loading			
	1	2	3	4
Make positive diff in comm. (PSM 5)	.60			
Participate in comm. orgs (PSM 6)	.50			
Feel I have the ability to make a difference (PSM 4)	.50			
Strong attachment to community (PSM 1)	.49			
Aware of community needs (PSM 3)	.46			
Participate in comm. meetings (PSM 11)	.42			
Help those who are less fortunate (PSM 10)	.42			
Keep neighborhood safe (PSM 8)	.41			
Keep neighborhood clean (PSM 9)	.37			
Join organizations that support issues important to me (PSM 12)	.37			
Work to correct social and economic inequalities (PSM 21)	.36			
Think about political issues that affect comm. (PSM 2)	.34		.33	
Working in a job in direct service to people (PSM 22)	.32			
Encourage participation – support right to be heard (PSM 27)		.67		
Consider all points of view before deciding (PSM 26)		.65		
Present my ideas without criticizing others (PSM 24)		.63		
Understand others ideas before stating my own opinion (PSM 23)		.61		
Encourage different points of view without worrying about agreement (PSM 25)		.57		
Help find solutions when unexpected problems arise (PSM 28)		.55		
Know about public health (PSM 17)			.67	
Know about literacy problems (PSM 18)			.67	
Know about crime (PSM 19)			.66	
Know about civic involvement (PSM 20)			.56	
Know about environment (PSM 16)			.49	
Learn about candidates (PSM 14)				.81
Vote in local elections (PSM 13)				.79
Vote in elections (PSM 7)				.50
Keep informed about news (PSM 15)				.37
Eigenvalues	5.97	2.34	1.98	1.74
% of variance	21.31	8.49	7.07	6.23

Note. Loadings < .32 omitted. The abbreviated variable labels in parentheses are used in future analyses and were included here to serve as a reference for these additional analyses.

In addition to using exploratory and confirmatory factor analysis techniques, reliability measures for the four newly identified dimensions of PSM in the adapted model used in this dissertation are reported. All of the reported Cronbach's Alpha in Table 4.19 are above the .70, threshold, which indicates reliable constructs (Leech, Barrett et al. 2008).

Table 4.19: RELIABILITY OF MEASURES OF THE LATENT VARIABLES: CRONBACH'S ALPHA

Dimension of PSM (Adapted Scale)	Cronbach's Alpha
Commitment to Public Interest	.717
Openness to New Ideas	.800
Knowledge of Community	.785
Attraction to Public Policymaking	.723

4.5. Confirming Model Fit

The next phase of this dissertation uses confirmatory factor analysis to confirm the fit of the adapted model generated using EFA techniques. This term "adapted [PSM] model" will be used in the remainder of this dissertation. This term refers to the dimensions that were identified in exploratory section of this thesis and include values relating to: *commitment to public interest*, *openness to new ideas*, *knowledge of community*, and *attraction to public policymaking*. To assess model fit on all three waves of the data, Amos 18 is used to conduct a series of confirmatory factor analyses. When conducting confirmatory factor analyses, a preconceived, theoretically-driven model is required to test how well the model fits the data. Results

from the exploratory factor analysis described in the previous section are used as an empirical starting point for assessing how well this model fit the data.

4.5.1. First Order CFA – Two, Three and Four Factor Models

The first step in determining the utility of the EFAs generated in the previous phase of this dissertation is to conduct preliminary CFAs to assess how well the adapted PSM model fits the data. Since substantial theoretic research went into the public service motivation framework, as well as empirical exploration using exploratory factor analysis to identify the correct number of factors, the number of factors is only briefly explored as a potential explanation for poor initial model fit.

Initial goodness-of-fit indices indicated improper model fit (see Table 4.21), which is common in CFA. To assess whether poor model fit might be attributed to improper specification of the number of factors in the adapted model, the model was re-specified to reflect both three- and two-factor versions (omitting the Knowledge of Communities factor in the three-factor model and both the Knowledge of Communities and Openness to New Ideas factors in the two-factor model – see Figure 4.1). Omission of factors was based on theoretical research and decisions were made in an effort to keep the re-specified model close to Perry's original, empirically tested and validated PSM model.

As is demonstrated in several of the tables comparing the two-, three-, and four-factor models (see Table 4.20), this method of re-specification did not improve overall model fit at any of the time-points to an acceptable level. Rather, a more likely explanation of poor initial model fit likely relates to the relatively large number of

indicators that were identified in the original exploratory factor analyses and included in the initial confirmatory factor analysis.

Model 1: Two-Factor Model

Model 2: Three-Factor Model

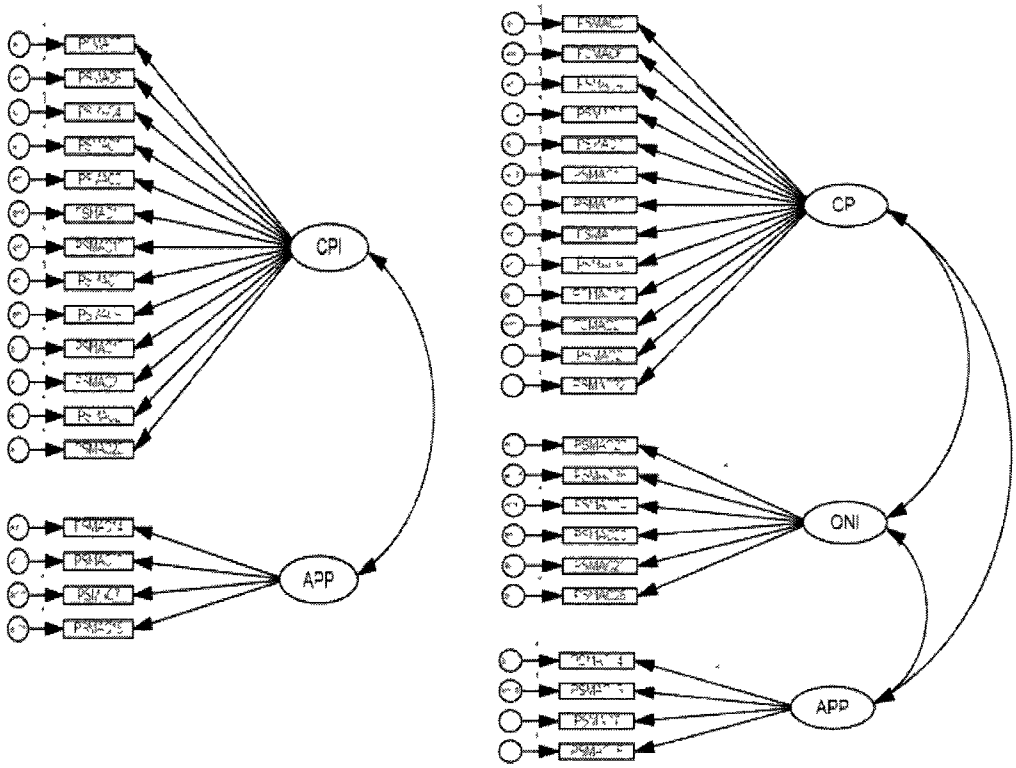


Figure 4.1: FIRST-Order Models Tested at Baseline

Model 3: Four-Factor Model

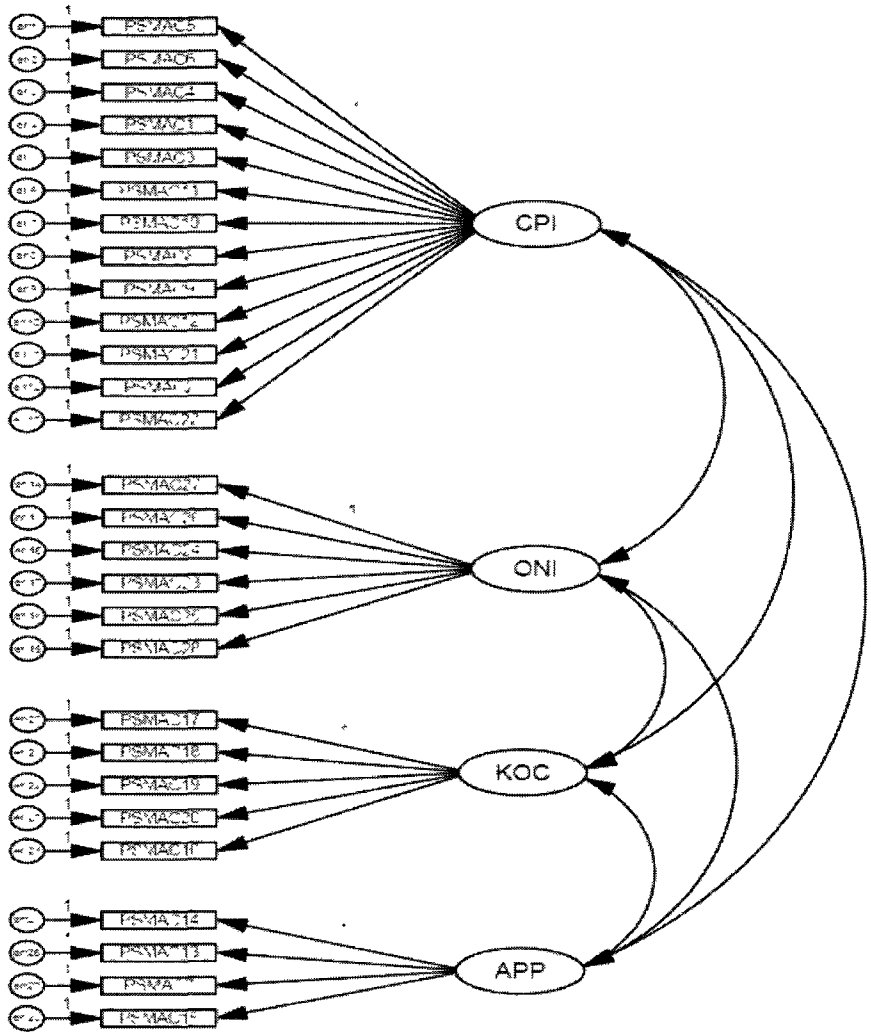


Figure 4.1: FIRST-Order Models Tested at Baseline (Continued)

Table 4.20 reports the maximum likelihood goodness-of-fit indices (GFI) for the original indicators included in the analysis. GFIs are reported for two-, three-, and four-factor models. While none of the models demonstrate good fit, the two-factor model GFIs report the worst model fit of the three with none of the statistics within the acceptable range. The second worst fit was with the three-factor model. With this model, the RMSEA statistic was near the acceptable range, however none of the other statistics were close to indicating a good-fitting model. Finally, the four-factor model provided the best fit. Similar to the three-factor model, the four-factor model was acceptable according to the RMSEA statistic (.043; < .50 indicates good fit), but did not fare well with the other GFI statistics.

Table 4.20: GOODNESS-OF-FIT INDICATORS FOR FIRST ORDER CFA FOR MODELS OF PUBLIC SERVICE MOTIVATION AMONG AMERICORPS PARTICIPANTS AND COMPARISON GROUPS AT BASELINE (N=4,153)

Model	χ^2 (*p*-value, *df*)	χ^2 /*df*	RMSEA	RMSEA 90% CI	CFI	TLI	AIC
			Multiple Group Analysis				
Two Factor Model (Unconstrained)	3811 743(***, 236)	16 151	060	062	772	705	4019 743
Three Factor Model (Unconstrained)	4636 653(***, 454)	10 213	047	048	819	780	4624 653
Four Factor Model(Unconstrained)	5897 400(***, 688)	8 572	043	044	829	812	6257 40

****p< 001 **p< 05 *p< 01*

Note χ^2 = chi square, *df* = degrees of freedom, RMSEA = root mean square error of approximation, CFI = comparative fit index, TLI = Tucker-Lewis coefficient, AIC = Akaike information criterion, PCFI = Parsimony comparative fit index

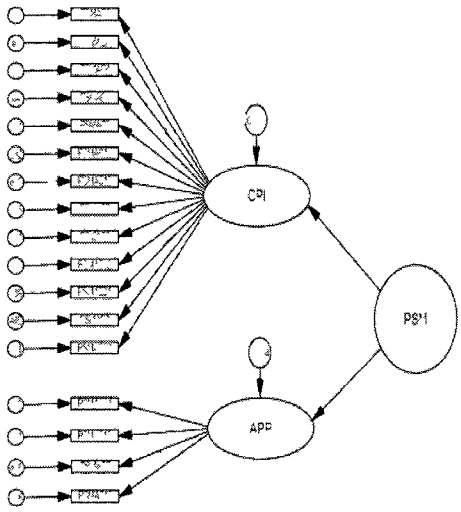
Since considerable research went into generating the adapted theoretic PSM model for this dissertation, these findings of GFI for the two, three, and four factor models

were not unexpected. Based on the PSM literature and this initial CFA using fewer latent factors, which demonstrated that the four factor model proved to be the most promising model, the four factor model will be examined in more depth. Since the three- and two-factor models did not improve the overall fit, they will not be used further in this dissertation. However, since the goodness-of-fit measures for the four-factor model are still not within the acceptable ranges, several other techniques common to producing better fitting CFA models will be used to attempt to improve the model fit of the four-factor model. In an effort to improve model fit, the latent factor construct is examined using second-order confirmatory factor analysis.

4.5.2. Second Order CFA – Two, Three, and Four Factor Models

The PSM literature indicates that in addition to the four factors identified (Commitment to the Public Interest, Knowledge of Communities, Openness to New Ideas, and Attraction to Public Policymaking) in this research, there may also be a larger, second-order latent variable driving these four factors: public service motivation. However, research testing PSM is often split between using first- and second-order confirmatory factor analyses. Since some of the PSM literature tests only the first-order CFA (Perry, 1996) and other research tests a second-order model (Kim 2006; Coursey and Pandey 2007; Coursey, Perry et al. 2008), this dissertation will consider a fifth latent factor – public service motivation. Figure 4.2 displays the second-order models.

Model 1: Two Factor Model, Second Order



Model 2: Three Factor Model, Second Order

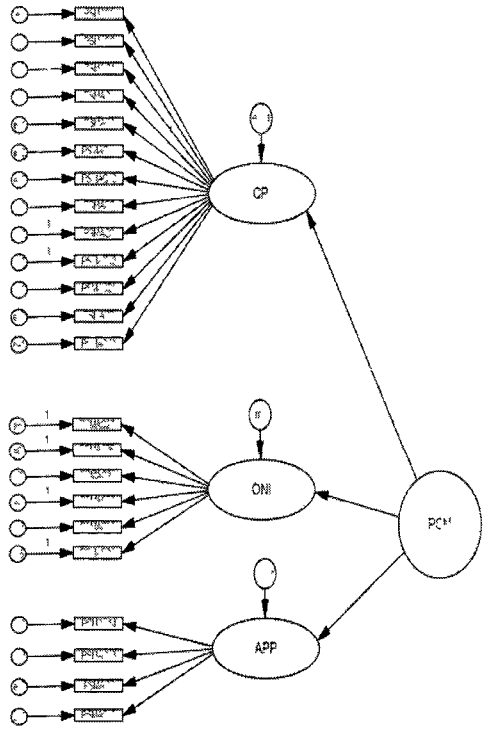


Figure 4.2: SECOND-Order Models Tested

Model 3: Four Factor Model, Second Order

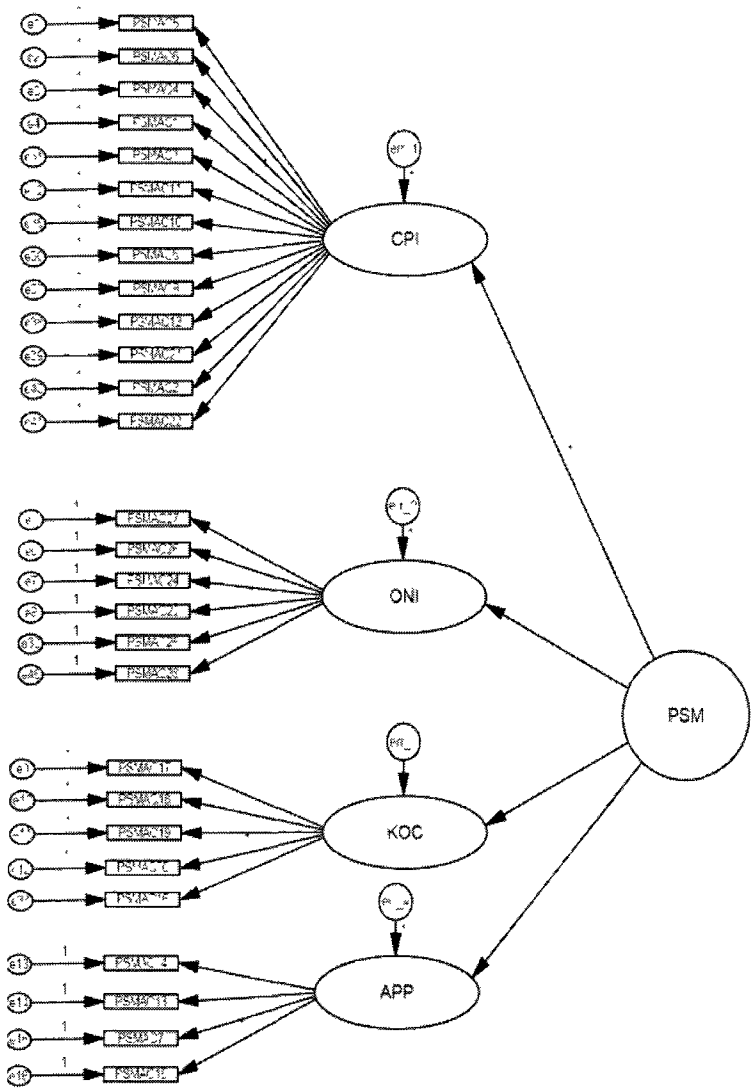


Figure 4.2: SECOND-Order Models Tested (Continued)

The second-order model provided worse-fitting goodness-of-fit measures, presented in Table 4.21. While the four-factor model provided the best fit, it was only approaching the acceptable range on the RMSEA statistic and was not within the acceptable ranges on the normed chi-square, CFI, and TLI measures. For now, the second-order model will not be used, however will be assessed again after the model-fit is improved.

Table 4.21: GOODNESS-OF-FIT INDICATORS FOR SECOND ORDER CFA FOR MODELS OF PUBLIC SERVICE MOTIVATION AMONG AMERICORPS PARTICIPANTS AND COMPARISON GROUPS AT BASELINE (N=4,153)

Model	χ^2 (p-value, df)	χ^2 /df	RMSEA	RMSEA 90% CI	CFI	TLI	AIC
			Multiple Group Analysis				
Two Factor Model (Unconstrained)	36986 802 (***, 274)	134 988	180	181	000	-1 611	37118 802
Three Factor Model (Unconstrained)	29502 304 (***, 500)	59 005	118	119	000	- 387	29689 304
Four Factor Model (Unconstrained)	30993 698 (***, 746)	41 547	099	100	005	- 083	31237 698

*** $p < 001$ ** $p < 05$ * $p < 01$

Note χ^2 = chi square, *df* = degrees of freedom, RMSEA = root mean square error of approximation, CFI = comparative fit index, TLI = Tucker-Lewis coefficient, AIC = Akaike information criterion, PCFI = Parsimony comparative fit index

4.5.3. Four Factor CFA – Reduced Indicators

Using both first and second-order CFA, goodness-of-fit indices were generated for the specified model using the baseline data. Since modifying the number of factors in the model did not improve the measures of fit to acceptable levels, the number of indicators included in the model is now addressed. After two- and three-factor

models were determined not to improve the overall model fit, modification indices, factor loadings, standardized parameter estimates, and R-square values were examined to determine which items were contributing the least to the overall fit of the model. Items were removed from the model in a gradual manner, reducing indicators one at a time. During this process the theoretic implications of removing specific variables and altering the model were considered.

In addition to factor loadings and parameter estimates, modification indices were used to determine whether observed variables are helpful in explaining the public service model factor model. Using modification indices, researchers can identify indicators that are problematic to the model and drop these variables from the analysis (Brown, 2006). Specifically, model misspecification can occur from the incorrect designation of relationships between indicators and latent variables, either by loading indicators onto the wrong factor or loading indicators that do not have a salient relationship with any factors (Brown, 2006).

The number of indicators included in the original model is likely a source of misspecification. Since 11 items were included in the latent factor Commitment to Public Interest, six factors were included on the Openness to New Ideas construct, five items were used to measure Knowledge of Community, and four for Attraction to Public Policymaking, the number of indicators used to measure this model will be examined as a likely source of potential model misspecification. Indicators were removed in a step-wise fashion. Table 4.22 reports a list of the variables that were retained in the adapted PSM model, as well as the variables that were omitted from this model. This re-specification process was guided by PSM theory as well as CFA theory. Figure 4.3 represents the final re-specified models in CFA/SEM format.

Table 4.22: RETAINED AND OMITTED VARIABLES USED IN THE RESPECIFIED, ADAPTED PSM MODEL

Retained Variables	Variable Short Name
Make positive diff in comm.	PSM 5
Participate in comm. orgs	PSM 6
Feel I have the ability to make a difference	PSM 4
Strong attachment to community	PSM 1
Aware of community needs	PSM 3
Encourage participation – support right to be heard	PSM 27
Consider all points of view before deciding	PSM 26
Present my ideas without criticizing others	PSM 24
Understand others ideas before stating my own opinion	PSM 23
Encourage different points of view without worrying about agreement	PSM 25
Help find solutions when unexpected problems arise	PSM 28
Know about public health	PSM 17
Know about literacy problems	PSM 18
Know about crime	PSM 19
Know about civic involvement	PSM 20
Know about environment	PSM 16
Learn about candidates	PSM 14
Vote in local elections	PSM 13
Vote in elections	PSM 7

Omitted Variables	Variable Short Name
Join organizations that support issues important to me	PSM 12
Help those who are less fortunate	PSM 10
Work to correct social and economic inequalities	PSM 21
Keep neighborhood safe	PSM 8
Keep neighborhood clean	PSM 9
Working in a job in direct service to people	PSM 22
Think about political issues that affect comm.	PSM 2
Keep informed about news	PSM 15

Model 1: Four Factor Model – First Order Reduced

Model 2: Four Factor Model – Second Order Reduced

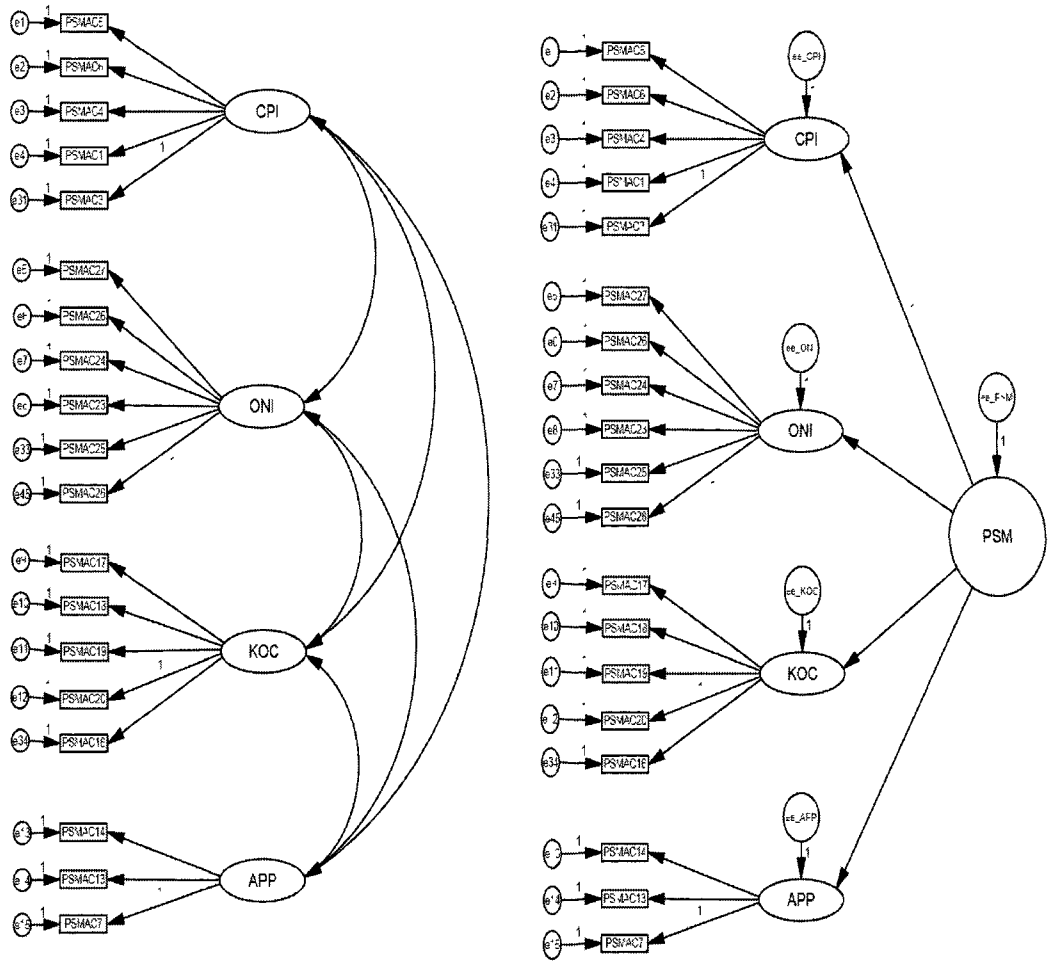


Figure 4.3: FIRST- and Second-Order Models Tested (Reduced Variables)

Confirmatory factor analysis and structural equation modeling are related and in many ways similar. Structural equation models generally consist of two different models: the measurement model and the structural model. Measurement models, as displayed as Model 1 in Figure 4.3, are commonly run prior to running structural models (Model 2 in Figure 4.3). Measurement models are often referred to as confirmatory factor analyses. Once model-fit is obtained, structural models are often

run in the phase of analysis. In this dissertation, after model fit is achieved with the measurement model (Model 1), a second-order factor analysis is hypothesized and tested for model fit. Results of goodness-of-fit indices are reported below in Table 4.23.

Table 4.23: GOODNESS-OF-FIT INDICATORS FOR FIRST ORDER CFA FOR FOUR FACTOR MODELS AMONG AMERICORPS PARTICIPANTS AND COMPARISON GROUPS AT BASELINE (N=4,153)

Model	χ^2 (p-value, df)	χ^2 /df	RMSEA	RMSEA 90% CI	CFI	TLI	AIC
			Multiple Group Analysis				
First-Order Baseline (Unconstrained)	1642 1 (***, 294)	5 585	033	035	937	927	1890 112
Second-Order Baseline (Unconstrained)	1652 585 (***, 298)	5 546	033	035	937	928	1892 585

***$p< 001$ **$p< 05$ *$p< 01$

Note χ^2 = chi square, df = degrees of freedom, RMSEA = root mean square error of approximation, CFI = comparative fit index, TLI = Tucker-Lewis coefficient, AIC = Akaike information criterion

The goodness-of-fit indicators reveal an overall good model fit for the first-order CFA at baseline, among both groups. The RMSEA, CFI, TLI statistics all fall within the acceptable range. The normed chi-square statistic is approaching acceptable, but as discussed earlier, is not always a reliable statistic for determining model fit when using large datasets. The second-order analysis (including PSM as a latent variable) yielded near identical results, regarding all of the goodness-of-fit indices.

Figure 4.4 displays the standardized factor scores for a first-order confirmatory factor analysis of public service motivation for the comparison group at baseline. The scores reported next to the unidirectional arrows from the latent variables to the

indicator variables represent the lambdas, or factor loadings. These scores may be interpreted similar to regression slopes or direct effects for predicting the indicator variables (variables in boxes) from latent variables (represented by ovals). For example, the APP (Attraction to Public Policy) latent variable has three arrows pointing to three indicator variables. This model suggests that as an individual's Attraction to Public Policy Making goes up by one unit, their responses to PSMAC14 go up by .75 units and PSMAC13 would go up .80 units.

Factor loadings indicate a strong relationship between indicators and the latent variables with R^2 ranging between .39 and .80. These relatively high loadings demonstrate strong support for the adapted public service motivation construct indentified using the *AmeriCorps: Still Serving* dataset.

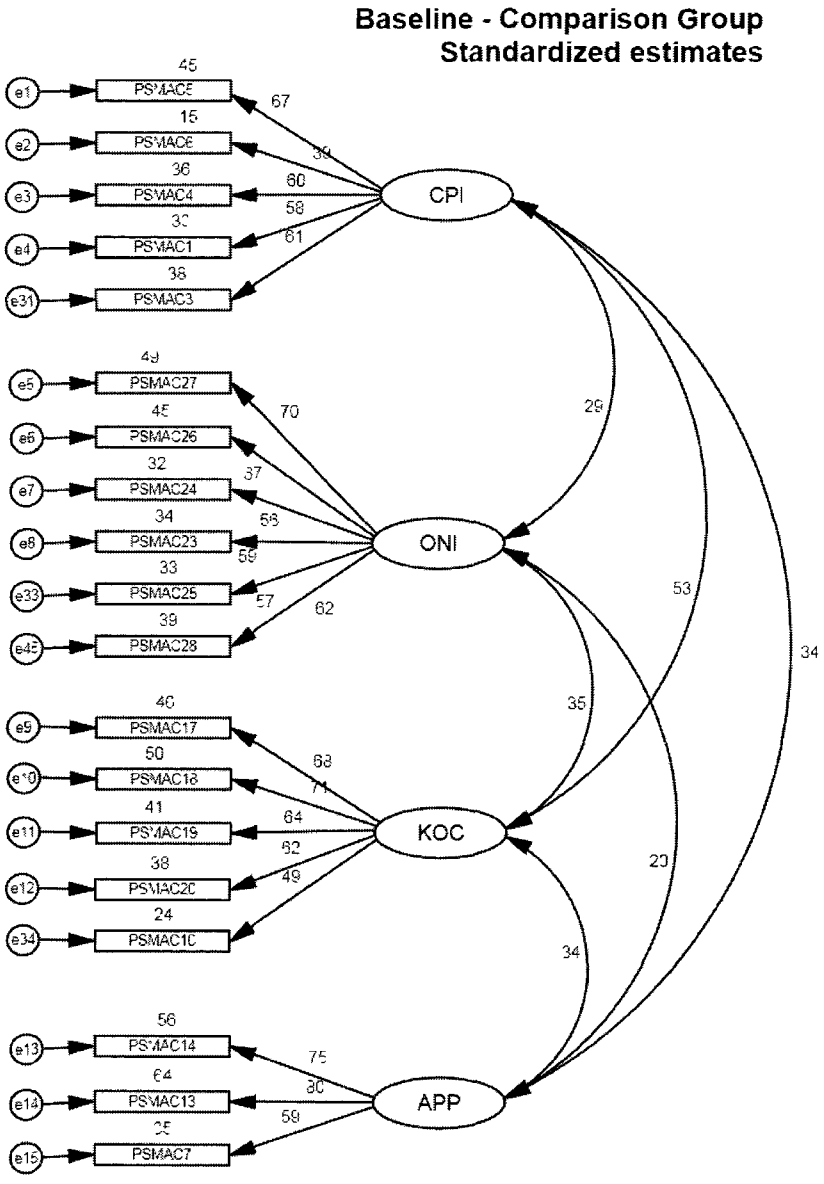


Figure 4.4: FIRST-Order Model (Reduced Variables) – Standardized Estimates for Comparison Group at Baseline

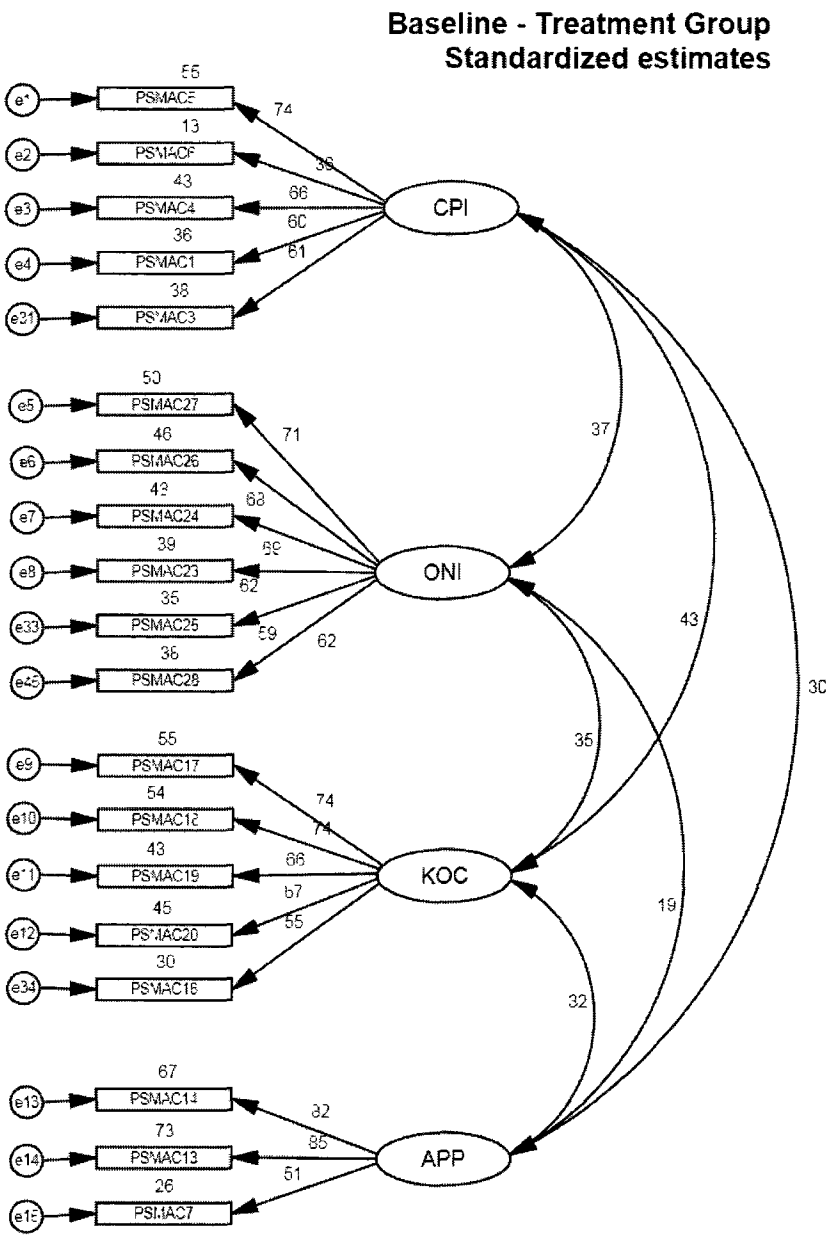


Figure 4.5: FIRST-Order Model (Reduced Variables) – Standardized Estimates for Treatment Group at Baseline

Comparison of lambdas generated through maximum likelihood and Bayesian estimation revealed similar parameter estimates. Since Bayesian estimation is not used in later analytic techniques due to limitations of the Amos software, and since

Bayesian estimates are not reported in structural diagrams, but rather in table format, Bayesian estimates and interpretations for the first order model will be included in Appendix J.

Finally, after confirming the model fit for measurement model, a higher-order structural model is examined for both groups at baseline. Here, the public service motivation latent variable is added to the model as a second-order factor. Figure 4.6 displays the results of a second order CFA which includes the fifth latent variable (denoted by ovals), PSM. In this figure, standardized estimates of the comparison group at baseline are presented.

Figure 4.7 displays the standardized factor scores for a second order confirmatory factor analysis of public service motivation. In this diagram, lambdas for the treatment group at baseline are reported. Bayesian estimates for the second order model report similar model fit and regression weights – these findings are reported in Appendix K.

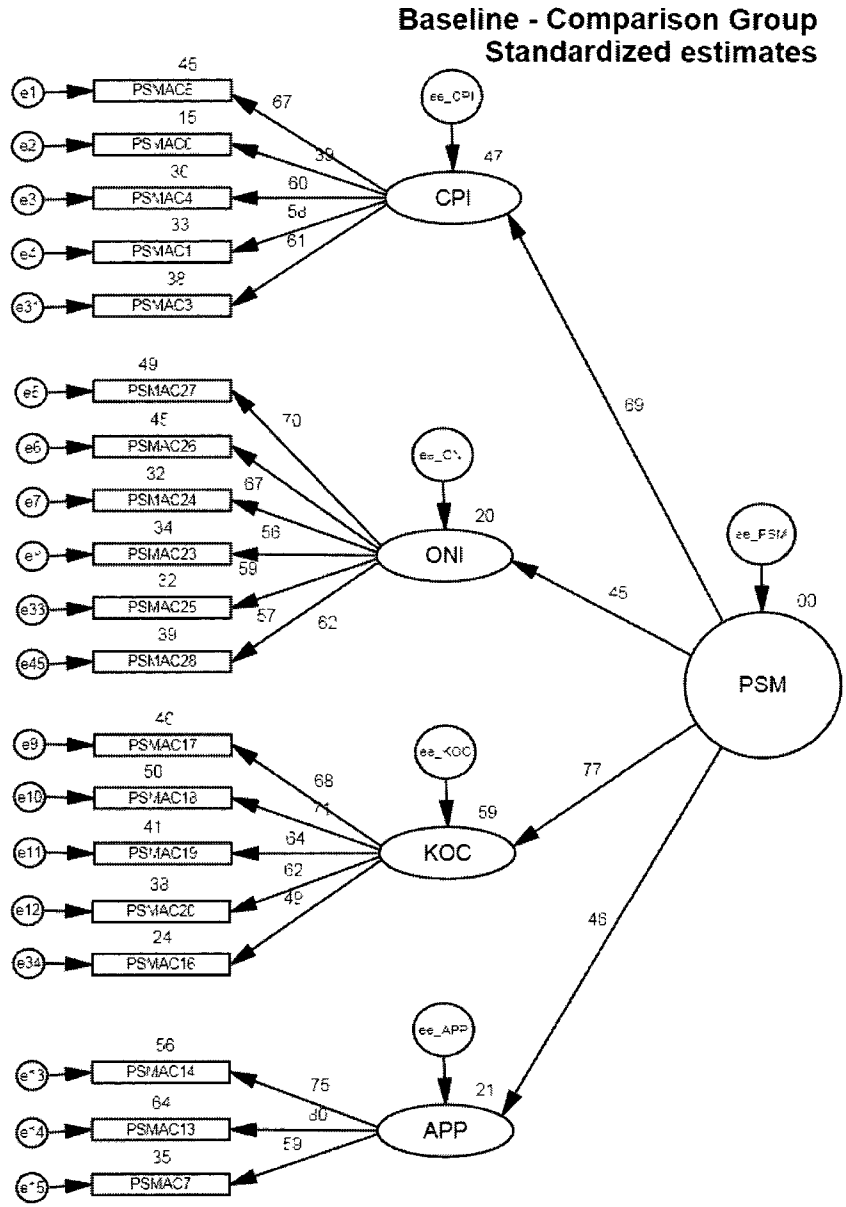


Figure 4.6: SECOND-Order Model (Reduced Variables) – Standard Estimates for Comparison Group at Baseline

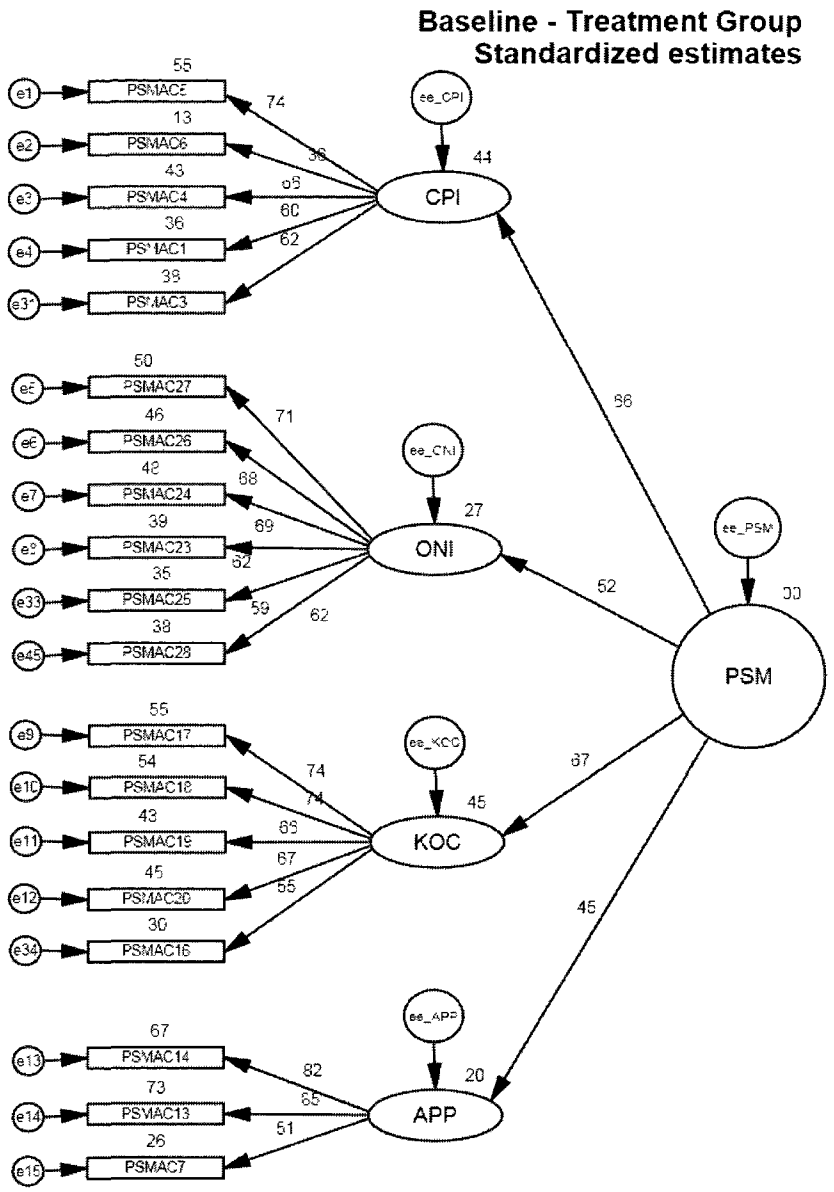


Figure 4.7: SECOND-Order Model (Reduced Variables) – Standard Estimates for Treatment Group at Baseline

4.6. Multiple Groups Factor Analysis – Comparing Latent Means

4.6.1. Comparing Means – Treatment and Comparison at Baseline

Next, the means of the latent factors were compared to determine whether the model works well for both groups at baseline. In this analysis, the latent variable means are constrained in one group in the model to zero (comparison group), while this constraint is lifted on the other group (treatment group). This allows for comparison between groups to determine if there are significant differences.

Table 4.24: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR GROUP DIFFERENCES AT BASELINE

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	1828.017	322	.000	5.677	.926	.034
Model Comparison							
Structural Means	-	119.041	4	.000	29.760	.005	-

Table 4.24 reports two measures used to determine if there are groups differences: the model fit of the measurement intercepts, and the structural means of the measurement intercepts. Here, it is important to determine whether to accept the hypothesis that groups have equal intercepts and regression weights in the measurement model. This can be done by examining the χ^2 (CMIN) of the measurement intercepts, which = 1828.02, along with the $df = 322$ for a normed χ^2 of 5.68. Since this statistic approaches acceptable, we can assume that the groups have equal intercepts and regression weights, which indicates that the factors have the same

meanings for the treatment and comparison group and therefore, can be compared. Next, it is necessary to compare the normed χ^2 of the structural means (29.76), which, since it is well outside of the acceptable range, leads us to reject the hypothesis that the treatment and comparison groups have the same factor means.

Since the factors in the comparison group were constrained to zero, we examine the means of the factor of the treatment groups. These means (measurement intercepts) indicate whether there are differences among the treatment and comparison groups relating to the latent factors.

Table 4.26: MEANS OF LATENT FACTORS FOR THE TREATMENT GROUP AT BASELINE (N=2,228)

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	.028	.018	-1.541	.0123	m1_1
ONI	.001	.016	-.045	.964	m2_1
KOC	-.012	.025	.485	.628	m3_1
APP	-.099	.010	9.803	***	m4_1

Table 4.26 suggests that CPI, ONI, and KOC are not significantly different from 0 (the constraint put on the comparison group) for the treatment group at baseline. A significant difference on the APP factor is reported; the treatment group has a factor mean on APP of nearly .10 units lower than the comparison group.

4.6.2. Comparing Means – Treatment and Comparison at Post-AmeriCorps program

Next, the means of the models are compared to determine whether the model works well for both groups at post-AmeriCorps program. Similar to the baseline analysis, the latent factor means are constrained in one group in the model to zero (comparison

group), while this constraint is lifted on the other group (treatment group). As mentioned, this technique allows for comparison of factor means to determine group differences.

Again, it is important to first determine whether to accept the hypothesis that groups have equal intercepts and regression weights in the measurement model. This can be done by examining the χ^2 (CMIN) of the measurement intercepts (= 1538.446) along with the $df = 322$ for a normed χ^2 of 4.778. Since this statistic is within the acceptable range, and since the RMSEA and TLI proved good model fit, we can assume that the groups have equal intercepts and regression weights, which suggests that the factors have the same meanings for the treatment and comparison group and therefore can be compared. Next, it is necessary to examine the normed χ^2 of the structural means (73.577), which, since it is well outside of the acceptable range, leads us to reject the hypothesis that the treatment and comparison groups have the same factor means and thus, warrants further analysis.

Table 4.27: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR GROUP DIFFERENCES AT POST-AMERICORPS PROGRAM

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	1538.446	322	.000	4.778	.918	.034
Model Comparison							
Structural Means	-	294.307	4	.000	73.577	.018	-

Next, since the factors in the comparison group were constrained to zero, we examine the means of the factor of the treatment groups. These means (measurement intercepts reported in Table 4.27) indicate whether there are differences among the treatment and comparison groups relating to the latent factors.

Table 4.28: MEANS OF LATENT FACTORS FOR THE TREATMENT GROUP AT POST-AMERICORPS PROGRAM (N= 1846)

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	.269	.022	12.214	***	m1_2
ONI	-.055	.019	-2.835	.005	m2_2
KOC	.195	.028	6.993	***	m3_2
APP	-.055	.008	-6.514	***	m4_2

Table 4.28 suggests that CPI, ONI, KOC, and APP are all significantly different from 0 (the constraint put on the comparison group) for the treatment group at post-AmeriCorps program. The treatment group has a factor mean on CPI of nearly .27 units higher than the comparison group. ONI is lower in the treatment group at post-AmeriCorps program than the comparison group by .06 units. The KOC latent variable is higher among the treatment group by .195 units, and APP is lower in the treatment group by .055 units.

4.6.3. Comparing Means – Treatment and Comparison at Wave III (2007)

Finally, the means of the models are compared to determine whether the model works well for both groups at wave III (2007). Similar to the baseline and post-AmeriCorps program analyses, the latent factor means are constrained in one group in

the model to zero (comparison group), while this constraint is lifted on the other group (treatment group), which allows for comparison between groups.

Table 4.29: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR GROUPS DIFFERENCES AT WAVE III (2007)

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	1018.49	322	.000	3.163	.936	.031
Model Comparison							
Structural Means	-	54.06	4	.000	13.515	.000	-

Table 4.29 reports statistics relating to whether the two groups have equal intercepts and regression weights in the measurement model. Here, we examine the χ^2 (CMIN) of the measurement intercepts, which = 1018.49, along with the *df* = 322 for a normed χ^2 of 3.163. Since this statistic is acceptable, and since other GFI fits reported good model fit, we can assume that the groups have equal intercepts and regression weights, which indicates that the factors have the same meanings for the treatment and comparison group and therefore can be compared. It is also necessary to compare the normed χ^2 of the structural means (13.515), which, since it is well outside of the acceptable range, leads us to reject the hypothesis that the treatment and comparison groups have the same factor means.

Since the factors in the comparison group were constrained to zero, we then examine the means of the factor of the treatment groups. These means (measurement

intercepts) indicate whether there are differences among the treatment and comparison groups relating to the latent factors and are reported in Table 4.30.

Table 4.30: MEANS OF LATENT FACTORS FOR THE TREATMENT GROUP AT WAVE III (2007) (N= 1350)

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	.125	.028	4.400	***	m1_1
ONI	.032	.022	1.466	.143	m2_1
KOC	.174	.037	4.712	***	m3_1
APP	-.032	.011	-2.817	.005	m4_1

Table 4.30 suggests that CPI, KOC, and APP are all significantly different from 0 (the constraint put on the comparison group) for the treatment group at wave III (2007). The treatment group has a factor mean on CPI of nearly .13 units higher than the comparison group. KOC is also higher in the treatment group at wave III (2007) than the comparison group by .17 units. The APP latent variable is lower among the treatment group by .03 units. ONI was not significantly different between groups at wave III (2007).

4.7. Examining Changes in PSM over Time

4.7.1. Changes in the Comparison Group between Baseline and Post-AmeriCorps program

Next, the means of the models are compared to determine whether the model works well for the comparison group at both baseline and at post-AmeriCorps program. This analysis allows us to track if there were any longitudinal changes within each cohort. Similar to the within-groups analysis, the latent factor means are constrained in one

group in the model to zero (baseline – Comparison Group), while this constraint is lifted on the other group (post-AmeriCorps program - Comparison group). This allows for comparison between groups to determine if there are significant differences.

Table 4.31 reports the measurement intercepts and structural means which aid in determining whether to accept the hypothesis that groups have equal intercepts and regression weights in the measurement model. This can be done by examining the χ^2 (CMIN) of the measurement intercepts, which = 1331.336, along with the df = 322 for a normed χ^2 of 4.135. Since this statistic is acceptable, along with the other GFI measure included, we can assume that the groups have equal intercepts and regression weights, which indicates that the factors have the same meanings for the treatment and comparison group and therefore can be compared. Next, it is necessary to compare the normed χ^2 of the structural means (35.979), which since it is well outside of the acceptable range, leads us to reject the hypothesis that the treatment groups has the same factor means at Baseline and post-AmeriCorps program.

Table 4.31: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR DIFFERENCES WITHIN COMPARISON GROUP BETWEEN BASELINE AND POST-AMERICORPS PROGRAM

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	1331.336	322	.000	4.135	.931	.030
Model Comparison							
Structural Means	-	143.917	4	.000	35.979	.009	-

By constraining the treatment group factor means to zero, we are able to examine the means of the factors of the comparison group. These means (measurement intercepts) indicate whether there are differences among the comparison group at baseline and post-AmeriCorps program relating to the latent factors.

Table 4.32: MEANS OF LATENT FACTORS FOR THE COMPARISON GROUP AT POST-AMERICORPS PROGRAM

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	-.050	.021	-2.385	.017	m1_2
ONI	-.037	.019	-1.941	.052	m2_2
KOC	.003	.026	.117	.907	m3_2
APP	.106	.010	103155	***	m4_2

Table 4.32 suggests that CPI, ONI, and APP are all significantly different from 0 (the constraint put on the comparison group at baseline) for the comparison group at post-AmeriCorps program. The comparison group at post-AmeriCorps program has a factor mean on CPI of.050 units lower than the comparison group at baseline. ONI is lower in the comparison group at post-AmeriCorps program than the comparison group at baseline by .037 units. The APP latent variable is higher among the comparison group at post-AmeriCorps program by .106 units than the comparison group at baseline. KOC was not significantly different between the comparison groups at baseline and post-AmeriCorps program.

4.7.2. Changes in the Treatment Group between Baseline and Post-AmeriCorps program

The means of the models at baseline and post-AmeriCorps program are then compared to determine whether the model works well for the treatment group at both

data points. Similar to the within-groups analysis, the latent factor means are constrained in one group in the model to zero (baseline – treatment group), while this constraint is lifted on the other group (post-AmeriCorps program – treatment group). This allows for comparison between groups to determine if there are significant differences. Here, the eighth hypothesis is considered:

Table 4.33: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR DIFFERENCES WITHIN TREATMENT GROUP BETWEEN BASELINE AND POST-AMERICORPS PROGRAM

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	2025.031	322	.000	6.289	.917	.036
Model Comparison							
Structural Means	-	344.969	4	.000	86.242	.015	-

It is important to determine whether accept the hypothesis that groups have equal intercepts and regression weights in the measurement model. Examination of the χ^2 (CMIN) of the measurement intercepts, which = 2025.031, along with the $df = 322$ for a normed χ^2 of 6.289 reveals that the statistic is approaching acceptable. The normed χ^2, along with acceptable RMSEA and TLI statistics, allow us to assume that the groups have equal intercepts and regression weights, which indicates that the factors have the same meanings for the treatment groups at baseline and post-AmeriCorps program and therefore can be compared. Next, it is necessary to compare the normed χ^2 of the structural means (86.242), which, since it is well outside of the acceptable

range, leads us to reject the hypothesis that the treatment group has the same factor means at baseline and post-AmeriCorps program.

Since the factors in the treatment group were constrained to zero, we examine the means of the factors of the treatment group. These means (measurement intercepts) indicate whether there are differences among the treatment group at baseline and post-AmeriCorps program relating to the latent factors.

Table 4.34: MEANS OF THE LATENT FACTORS FOR THE TREATMENT GROUP AT POST-AMERICORPS PROGRAM

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	.195	.020	9.932	***	m1_2
ONI	-.089	.017	-5.233	***	m2_2
KOC	.212	.026	8.074	***	m3_2
APP	.126	.009	13.341	***	m4_2

Table 4.34 suggests that all four latent variables – CPI, ONI, KOC and APP – are significantly different from 0 (the constraint put on the treatment group at baseline) for the treatment group at post-AmeriCorps program. The treatment group at post-AmeriCorps program has a factor mean on CPI of .195 units lower than the treatment group at baseline. The APP latent variable is higher among the treatment group at post-AmeriCorps program by .126 units than the treatment group at baseline. KOC is higher at post-AmeriCorps program by .212 and ONI is lower at post-AmeriCorps program by .089 units than at baseline.

4.7.3. Changes in the Comparison Group between Post-AmeriCorps program and Wave III (2007)

Next, the means of the models are compared to determine whether the model works well for the comparison group at both post-AmeriCorps program and at wave III (2007). This analysis allows us to track if there were any longitudinal changes among each cohort. Similar to the within-groups analysis, the latent factor means are constrained in one group in the model to zero (post-AmeriCorps program – Comparison Group), while this constraint is lifted on the other group (wave III (2007) - Comparison group). This allows for comparison between groups to determine if there are significant differences.

Table 4.35: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR DIFFERENCES WITHIN COMPARISON GROUP BETWEEN POST-AMERICORPS PROGRAM AND WAVE III (2007)

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	1268.022	322	.000	3.938	.908	.035
Model Comparison							
Structural Means	-	102.651	4	.000	25.663	.008	-

Table 4.35 reports the measurement intercepts and structural means which aid in determining whether to accept the hypothesis that groups have equal intercepts and regression weights in the measurement model. This can be done by examining the χ^2 (CMIN) of the measurement intercepts, which = 1345.679, along with the *df* = 322 for a normed χ^2 of 4.179. Since this statistic is acceptable, along with the other GFI measure included, we can assume that the groups have equal intercepts and regression weights, which indicates that the factors have the same meanings for the treatment

and comparison group and therefore can be compared. Next, it is necessary to compare the normed χ^2 of the structural means (65.910), which since it is well outside of the acceptable range, leads us to reject the hypothesis that the treatment groups has the same factor means at post-AmeriCorps program and wave III (2007).

By constraining the treatment group factor means to zero, we are able to examine the means of the factors of the comparison group. These means (measurement intercepts) indicate whether there are differences among the comparison group at post-AmeriCorps program and wave III (2007) relating to the latent factors.

Table 4.36: MEANS OF LATENT FACTORS FOR THE COMPARISON GROUP AT WAVE III (2007)

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	-.266	.029	-9.100	***	m1_2
ONI	.023	.022	1.051	.293	m2_2
KOC	-.221	.036	-6.201	***	m3_2
APP	-.024	.011	-2.150	.032	m4_2

Table 4.36 suggests that CPI, KOC, and APP are all significantly different from 0 (the constraint put on the comparison group at post-AmeriCorps program) for the comparison group at wave III (2007). The comparison group at wave III (2007) has a factor mean on CPI of.266 units lower than the comparison group at post-AmeriCorps program. The APP latent variable is lower in the comparison group at wave III (2007) than the comparison group at post-AmeriCorps program by .024 units. KOC is lower among the comparison group at wave III (2007) by .221 units than the comparison group at post-AmeriCorps program. ONI was not significantly different between the comparison groups at post-AmeriCorps program and wave III (2007).

4.7.4. Changes in the Treatment Group between Post-AmeriCorps program and Wave III (2007)

Last, the means of the models at post-AmeriCorps program and wave III (2007) are compared to determine whether the model works well for the treatment group at both data points. Similar to the within-groups analysis, the latent factor means are constrained in one group in the model to zero (post-AmeriCorps program – treatment group), while this constraint is lifted on the other group (wave III (2007) – treatment group). This allows for comparison between groups to determine if there are significant differences.

Table 4.37: MEASUREMENT INTERCEPTS AND STRUCTURAL MEANS FOR DIFFERENCES WITHIN TREATMENT GROUP BETWEEN POST-AMERICORPS PROGRAM AND WAVE III (2007)

Model	No. of Parameters	CMIN (χ^2)	*df*	*p*	CMIN/DF (Normed χ^2)	TLI	RMSEA
Model Fit							
Measurement Intercepts	96	1567.886	322	.000	4.869	.920	.035
Model Comparison							
Structural Means	-	355.135	4	.000	88.784	.021	-

It is important to determine whether accept the hypothesis that groups have equal intercepts and regression weights in the measurement model. Examination of the χ^2 (CMIN) of the measurement intercepts, which = 1567.886, along with the *df* = 322 for a normed χ^2 of 4.869 reveals that the statistic is approaching acceptable. The normed χ^2, along with acceptable RMSEA and TLI statistics, allow us to assume that the groups have equal intercepts and regression weights, which indicates that the factors

have the same meanings for the treatment groups at post-AmeriCorps program and wave III (2007) and therefore can be compared. Next, it is necessary to compare the normed χ^2 of the structural means (88.784), which since it is well outside of the acceptable range, leads us to reject the hypothesis that the treatment group has the same factor means at post-AmeriCorps program and wave III (2007).

Finally, since the factors in the treatment group were constrained to zero, we examine the means of the factors of the treatment group. These means (measurement intercepts) indicate whether there are differences among the treatment group at post-AmeriCorps program and wave III (2007) relating to the latent factors.

Table 4.38: MEANS OF THE LATENT FACTORS FOR THE TREATMENT GROUP AT WAVE III (2007)

Latent Factor	Estimate	*S.E.*	*C.R*	*p*	Label
CPI	-.378	.025	-15.422	***	m1_2
ONI	.111	.019	5.696	***	m2_2
KOC	-.239	.031	-7.716	***	m3_2
APP	.007	.009	.855	.393	m4_2

Table 4.38 suggests that CPI, ONI and KOC are significantly different from 0 (the constraint put on the treatment group at post-AmeriCorps program) for the treatment group at wave III (2007). The treatment group at wave III (2007) has a factor mean on CPI of .378 units lower than the treatment group at post-AmeriCorps program. The ONI latent variable is higher among the treatment group at wave III (2007) by .111 units than the treatment group at post-AmeriCorps program. Measures of KOC are .239 units lower in the treatment group at wave III (2007) than at baseline. APP was not significantly different between the treatment group at post-AmeriCorps program and wave III (2007).

4.8. Assessing the Impact of National Service on Public Service Motivation

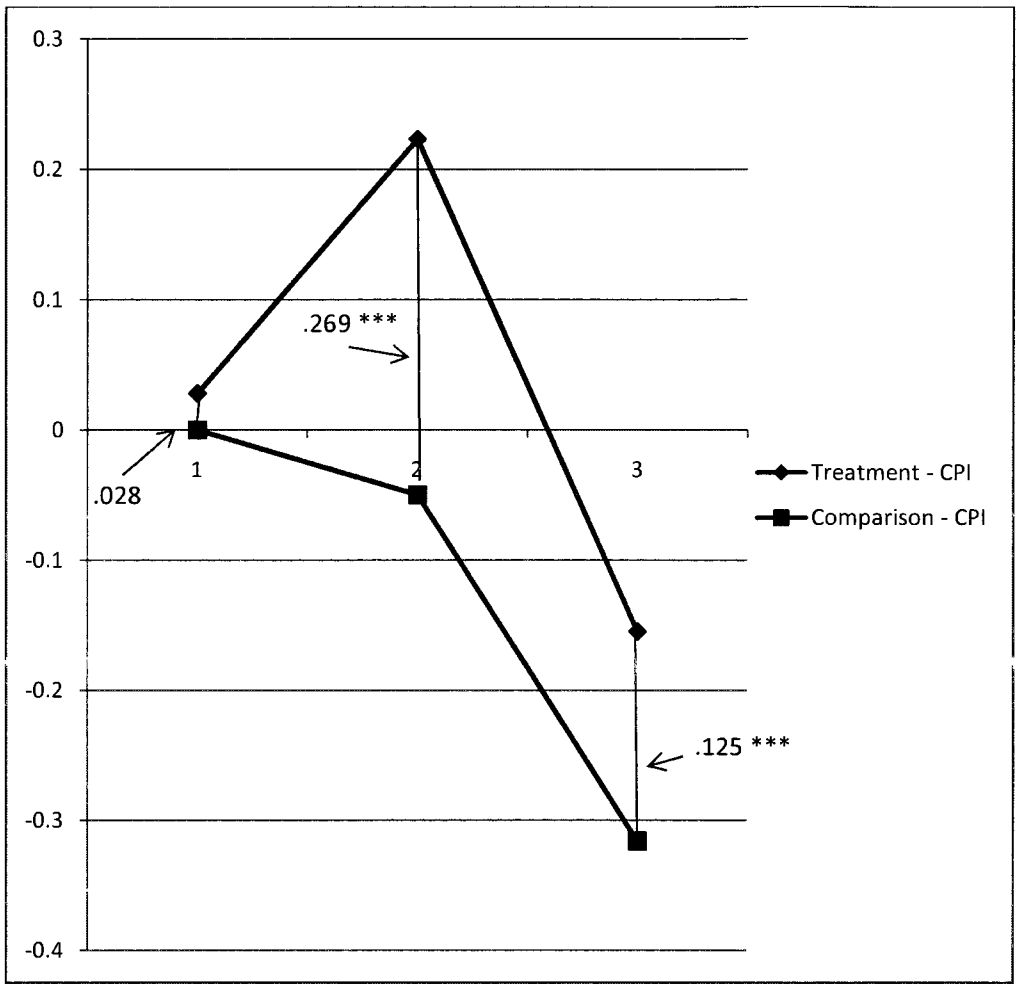
One of the more critical aspects of this research is comparing how AmeriCorps affects participants, particularly related to their measures of public service motivation. In this phase of the study, the newly identified public service motivation construct used in this research are compared between those who did AmeriCorps and the comparison group. This type of comparison, which imposes synchronous correlation equality constraints, was conducted at each time point – groups were compared at baseline, post-AmeriCorps program, and again at wave III (2007).

As mentioned in the previous section, confirmatory factor analysis techniques were used to respecify the proposed model (i.e. the PSM model generated using exploratory techniques). After an acceptable model fit was achieved, the groups were compared at baseline to determine if there were any significant differences in public service motivation prior to participation in AmeriCorps. Here, hypothesis five is addressed:

H_5: *There will not be any significant differences in levels of PSM between the treatment and comparison groups at baseline.*

An assumption of this dissertation relies on the comparability of the treatment and comparison groups prior to joining the AmeriCorps program. Since CNCS and Abt Associates matched the groups based on demographic information and service-orientation traits, the groups could be compared to assess whether participation in AmeriCorps affected program participants. This hypothesis draws on the research of Moynihan and Pandey (2007) who find that organizations can affect levels of PSM within individuals. This hypothesis serves an important function in establishing baseline differences between the treatment and comparison groups. These baseline differences are used to track any longitudinal changes as a result of participation in

AmeriCorps. Using multiple indicators, multiple causes (MIMIC) modeling techniques, it was determined that there were not any significant differences between the treatment and comparison groups on three of the four adapted dimensions of PSM at baseline. Groups did not demonstrate significant differences on measures of commitment to public interest, openness to new ideas, and knowledge of community at baseline. Only one of the dimensions was found to be significantly different – members of the comparison group were found to have slightly higher levels (small effect) of attraction to public policymaking than the treatment group. The lack of large differences between the groups at baseline confirms that sampling methods used to identify a similar comparison group were successful, in that the groups have similar compositions of PSM. While it is possible that there are unannounced or undetectable differences between the groups, this hypothesis is accepted on three of the four adapted measures of PSM. Finding only minor significant differences between the groups at baseline will facilitate the comparison of these groups at the different future time points. The differences between the groups at baseline are reported at Time 1on the left-hand sides in Figures 4.8-11.



Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.8: STANDARDIZED Group Differences in Commitment to Public Interest (CPI) at Baseline, Post-AmeriCorps program and Wave III (2007)

Differences in the commitment to public interest are displayed in Figure 5.1 for all three data collection points. Here, we see that there is no significant difference in CPI at the baseline wave of the survey (Time 1). Similarly, in Figures 4.9 and 4.10, it is reported that there are no significant difference between treatment and comparison groups on measures of knowledge of communities and openness to new idea, respectively. A small, but significant difference between the treatment and comparison groups is reported on measures of attraction to public policymaking,

however, as reported in Figure 4.11. These findings provide good baseline measures of PSM to track any longitudinal changes between the groups. Next, post-AmeriCorps program differences between the treatment and comparison group are examined in the sixth hypothesis:

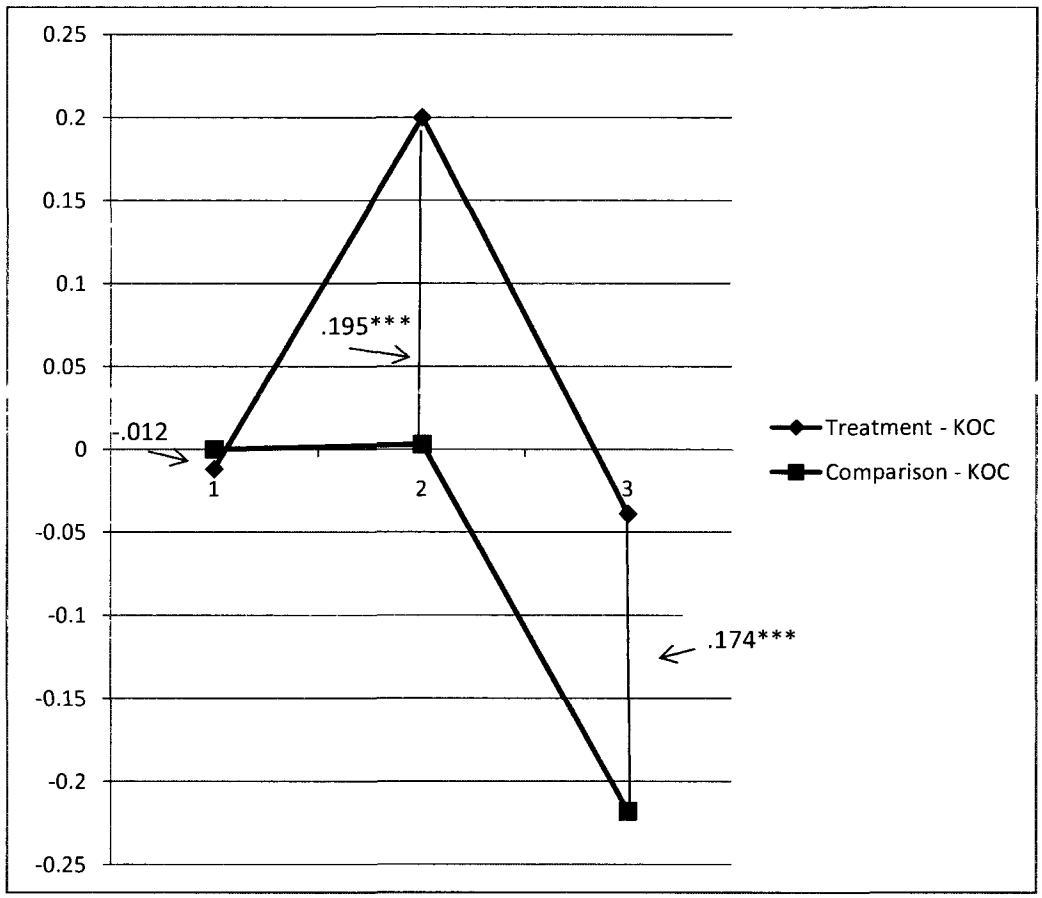
H_6: *There will be significant positive differences in levels of PSM between the treatment and comparison groups immediately after the program.*

All of the adapted dimensions of public service motivation used in this study were significantly different between the treatment and comparison groups after completion of the program. In the case of CPI, participants in AmeriCorps experienced a positive change of .27 standardized units over the comparison group at post-AmeriCorps program (see Figure 4.8), where the difference between groups relating to CPI at baseline was minimal and insignificant. This suggests that AmeriCorps members demonstrate values consistent with being committed to the public interest at a considerably higher rate than those in the comparison group.

Similarly, AmeriCorps members report a significant positive difference from the comparison group on measures of knowledge of communities after participation in the program (see Figure 4.9). This indicates that as a result of their service experience, AmeriCorps participants are likely to have a greater awareness of the issues affecting their communities.

Conversely, AmeriCorps members display significantly lower measures of openness to new ideas after completion of the program, albeit a small effect. Since there was no significant difference between the groups at baseline, but AmeriCorps participants report lower levels of ONI at the post-AmeriCorps program phase, these negative

changes can be attributed to program participation. This finding, coupled with the positive differences in knowledge of communities, suggests that members become more opinionated on how to resolve problems in the communities they serve after extended exposure to these problems.



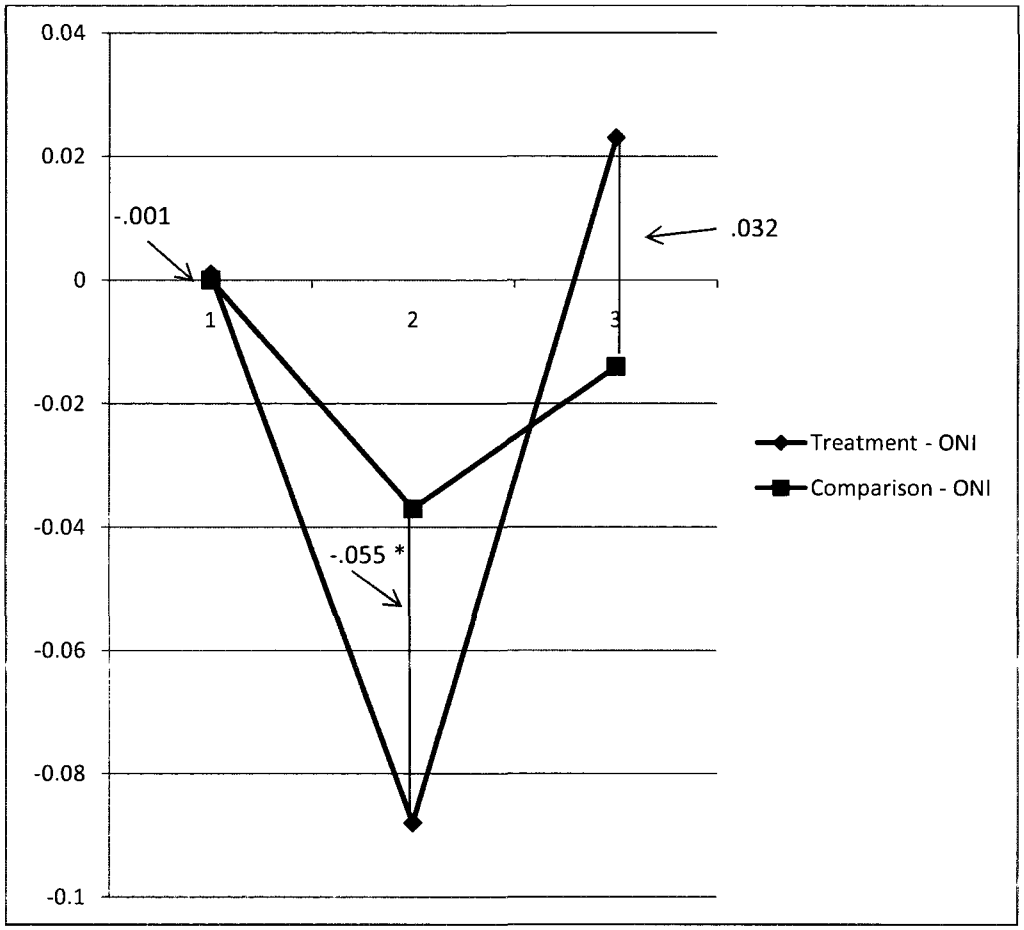
Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.9: STANDARDIZED Group Differences in Knowledge of Communities (KOC) at Baseline, Post-AmeriCorps program and Wave III (2007)

As reported in the previous hypothesis, the treatment group reported significantly lower levels of attraction to public policymaking from the comparison group immediately following the AmeriCorps program (see Figure 4.11). Similar to ONI, the differences in APP after the program are relatively small one year after baseline.

It is important to note, however, that the differences between the groups on measures of APP was nearly halved from the differences identified at the baseline wave – the comparison group reported levels of APP .099 units higher than treatment at baseline, but the difference was only .055 units at the post-AmeriCorps wave of the survey. This indicates that participation in AmeriCorps positively affects levels of APP within individuals, although program participants display lower levels of APP prior to joining the program.

Given the positive differences among AmeriCorps members' levels of commitment to public interest and knowledge of their communities, coupled with a narrowing of the difference on measures of attraction to public policymaking, this hypothesis is accepted. However, the hypothesis should be amended to omit any claims of positive difference among the treatment groups on measures of openness to new ideas.



Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.10: STANDARDIZED Group Differences in Openness to New Ideas (ONI) at Baseline, Post-AmeriCorps program and Wave III (2007)

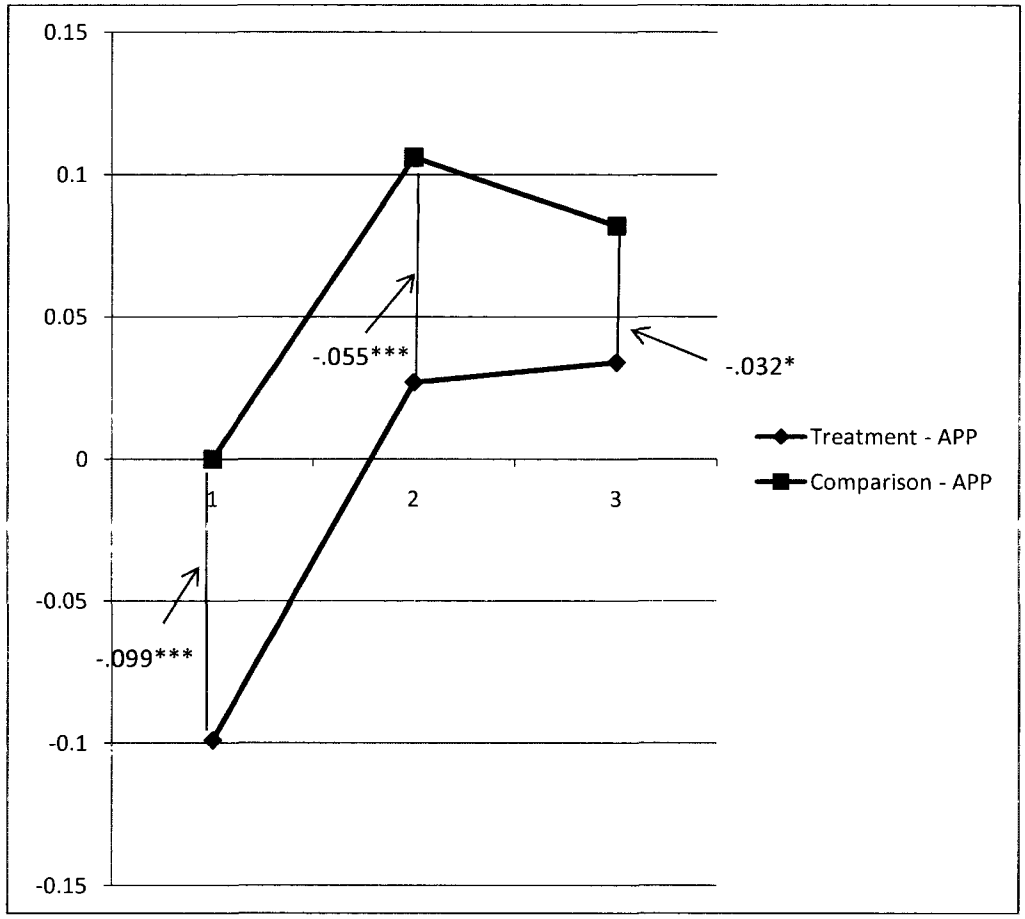
Finally, differences between the groups are analyzed at wave III (2007). This third iteration of the study allows us to track whether any differences generated as a result of participation in AmeriCorps are sustained, or whether the groups converge on measures of PSM after seven years. Here, hypothesis seven is addressed:

H_7: *There will be significant positive differences in levels of PSM between the treatment and comparison groups after eight years.*

Two measures of PSM were significantly and positively different at wave III (2007) between groups: commitment to public interest (see time point three in Figure 4.8) and knowledge of community (see time point three in Figure 4.9). In both of these diagrams, we can see that these dimensions grew considerably after participation in AmeriCorps, but declined between participation in the program and seven years later. However, when compared to the comparison group, it appears that changes in CPI and KOC generated as a result of participation in AmeriCorps programs are largely sustained over the comparison group, since level of CPI and KOC dropped in the comparison group at a similar rate to the treatment group. Since all of these differences are significant, this confirms that KOC and APP were values that were cultivated as a result of participation in AmeriCorps. It can also be concluded that these observed changes among AmeriCorps participants are sustained seven years after completion of the AmeriCorps program.

While this is an interesting finding, perhaps equally as interesting are the dimensions that revealed negative changes among program participants. While the treatment group appears to hold slightly lower values related to attraction to public policymaking, this gap appears to close between the two groups over time. Eight years after the original baseline survey, participants in AmeriCorps have cut the standardized group differences on this dimension by over two-thirds from .099 to .032. Additionally, even though the treatment group appears to make dramatic swings on the dimension openness to new ideas (Figure 4.10) over the three phases, it is important to note that the group differences reported on this dimension were not significant seven years after participation in an AmeriCorps program, thus making it difficult to draw conclusions about these changes. While AmeriCorps participants

demonstrate slightly lower levels of ONI after the program, this change is not sustained over time.



Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.11: STANDARDIZED Group Differences in Attraction to Public Policymaking (APP) at Baseline, Post-AmeriCorps program and Wave III (2007)

These findings build on Moynihan and Pandey's (2007) conclusions that organizational culture may affect individuals' levels of public service motivation. They find a negative relationship between organizational tenure and public service motivation – the longer an individual stays with an organization, the more likely their PSM will decrease. This current research finds that shorter, but perhaps more intense service experiences tend to boost PSM over the short-term and that some of these

values tended to stay inflated after service. However, since several of the dimensions of PSM tended to increase in the year following the baseline survey, but decrease in the seven years following program participation, it is possible that public service motivation tends to decline as people get older. To better assess the longitudinal changes in PSM, however, it is necessary to compare changes in the adapted measures of PSM within groups.

4.9. Examining Public Service Motivation Longitudinally

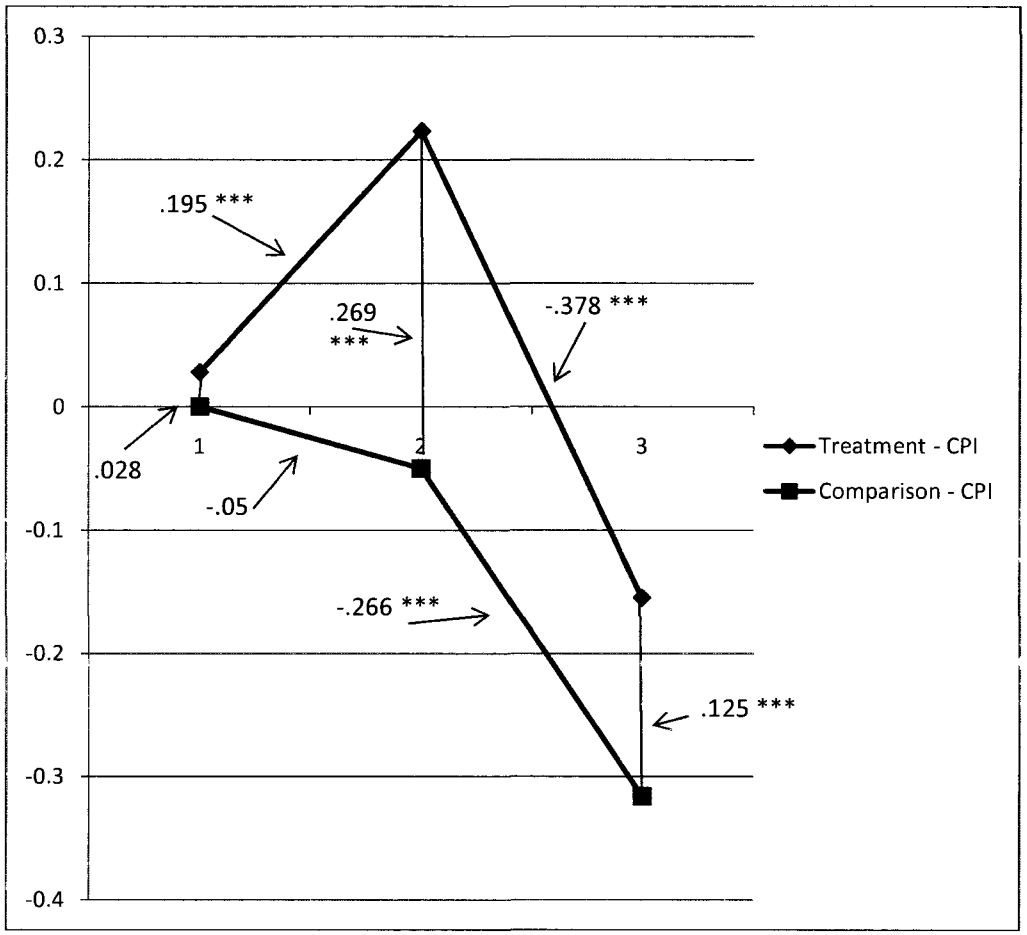
While analyzing the effects of national service on individuals' levels of public service motivation is an important component of this dissertation, arguably the greatest contribution is to the understanding of how public service motivations changes over time. Using both the treatment and comparison groups, survey data were analyzed at baseline, post-AmeriCorps program, and at wave III (2007) of the study. Using autoregressive equality constraints and MIMIC modeling techniques, differences were identified between these different data collection points in regard to the newly identified public service motivation construct. Measures of attraction to public policymaking, commitment to public interest, knowledge of communities, and openness to new ideas were all compared within groups at the different data points – changes were examined between the post-AmeriCorps program and baseline and again between wave III (2007) and post-AmeriCorps program for both the treatment and comparison groups. Here, the eighth and ninth hypotheses are addressed:

H_8: *There will be significant positive differences in levels of PSM among the treatment group between the first and second phases of the study.*

H_9: *There will be no differences in levels of PSM among the comparison group between the first and second phases of the study.*

The previous section briefly discussed some of the longitudinal changes in levels of public service motivation among the treatment and comparison groups. In this section, the longitudinal changes within groups are examined more closely and the implications of these changes are discussed.

Figure 4.12 reports the changes in levels of CPI for both the treatment and comparison groups. Here, we can see that levels of CPI increased dramatically among the treatment group after participating in the AmeriCorps program. AmeriCorps members' levels of CPI grew significantly by .195 standardized units since baseline. Conversely, the comparison group experienced a decline in CPI, albeit statistically insignificant, between the post-AmeriCorps and baseline phases of the study. These changes in CPI are represented by the trend lines on the left-hand side of Figure 4.12.



Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.12: STANDARDIZED Longitudinal Differences in Commitment to Public Interest (CPI) between Baseline, Post-AmeriCorps program and Wave III (2007)

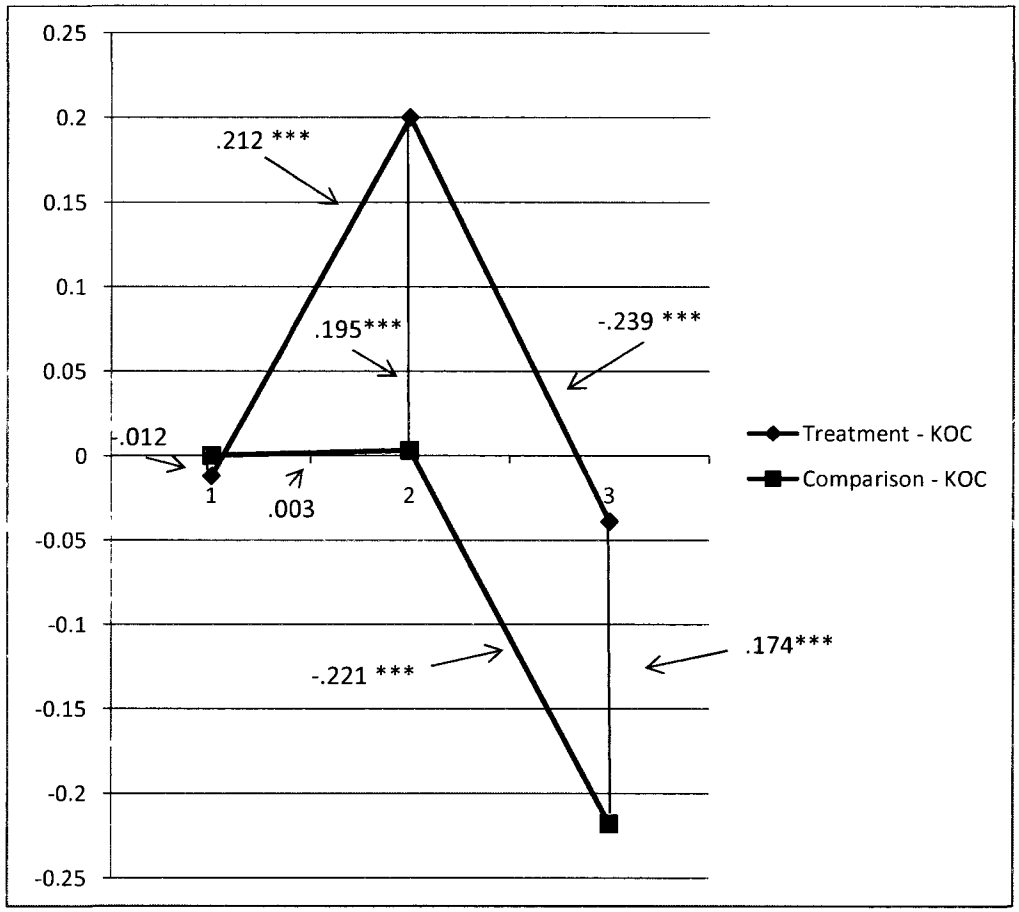
Similarly, AmeriCorps members experienced a spike in their levels of KOC immediately following participation in the program by .212 units, whereas the comparison group remained relatively flat in measures of KOC (see the two trend lines on the left-hand side of Figure 4.13). It is possible, although difficult to confirm, that as AmeriCorps members start to address social issues in their neighborhoods through their AmeriCorps service, they become more aware of the needs in the community. Since these groups were very similar in regard to their levels of KOC

prior to joining the program, we can attribute the spike in measures of CPI and KOC to program participation.

One unexpected finding relates to changes in levels of ONI in individuals among the treatment group. As is displayed in Figure 4.14, AmeriCorps participants experienced a drop in their levels of ONI by .089 standardized units between baseline and completion of the program. The comparison group reported no changes in their levels of ONI during the same time period. While this finding is difficult to explain, it is consistent with the submission earlier in this section that as AmeriCorps participants learn more about the problems affecting the communities in which they are serving (see Figure 4.13), they are more likely to develop opinions on how these problems should be addressed and less interested in hearing other people's ideas. However, to draw this conclusion, more robust research examining the relationship between the KOC and ONI values would need to be conducted. Perhaps an alternative hypothesis predicting that

Finally, AmeriCorps members experience a spike in their levels of APP between the first two phases of the study (.126 standardized units). While it is tempting to attribute this change to participation in AmeriCorps, it is important to note that the comparison group experienced similar gains (.106 standardized units) in their levels of APP (see Figure 4.15). This suggests that most young adults interested in national service, regardless of whether they actually participate in a program, are likely to experience an increase in their levels of APP around their mid-twenties. It also appears that this change is sustained over for at least seven years. Even though both groups experienced increases in levels of APP in the year following the baseline survey, it is important to note that AmeriCorps members nearly cut in half the

discrepancy seen at baseline between the groups, cutting the standardized difference from .099 to .055 after the program.



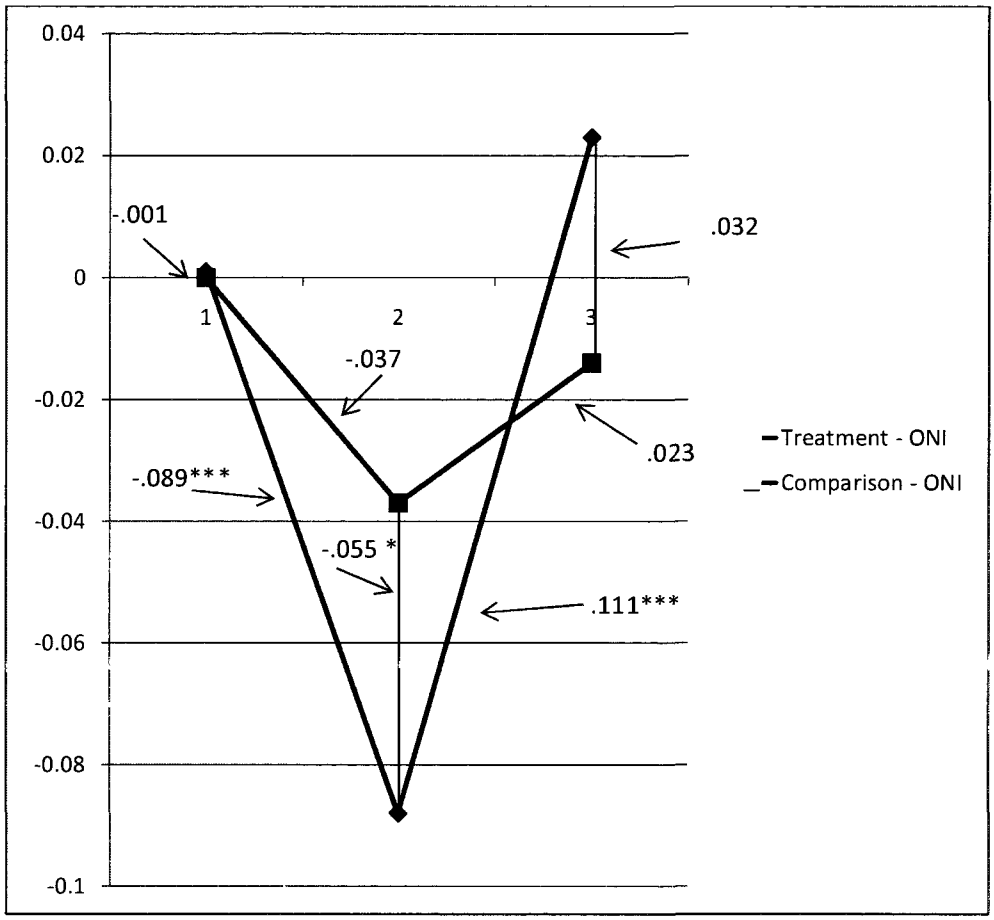
Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.13: STANDARDIZED Longitudinal Differences in Knowledge of Community (KOC) between Baseline, Post-AmeriCorps program and Wave III (2007)

Next changes between the post-AmeriCorps program and wave III (2007) phases of the study are examined in both the treatment and comparison groups. Here, the tenth hypothesis is addressed:

H_{10}: *There will be significant positive differences in levels of PSM among the treatment group between the second and third phases of the study.*

Of the four adapted dimensions of PSM used in this study, only one demonstrated a significant increase between the post-AmeriCorps program survey and wave III (2007) of the study: openness to new ideas – which was a recent addition – grew by .111 standardized units. Even so, the wave III (2007) levels of ONI are only slightly higher than the initial levels identified at baseline. While participants in AmeriCorps saw a drop in their levels of ONI upon completion of the program, their measures of ONI appear to rebound to levels slightly higher than those measured at baseline. In the comparison group, measures of ONI also appear to decline over the same period; however, members of the treatment group dropped at a more dramatic rate and end up with lower levels of ONI than the comparison group at post-AmeriCorps program. This suggests that after an intense service experience, AmeriCorps members tended to consider others' points of view at lower levels than when they started the program. This hypothesis could be accepted with amendments; however, the evidence here points toward rejection of this hypothesis.



Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.14: STANDARDIZED Longitudinal Differences in Openness to New Ideas (ONI) between Baseline, Post-AmeriCorps program and Wave III (2007)

Finally, the eleventh hypothesis is addressed:

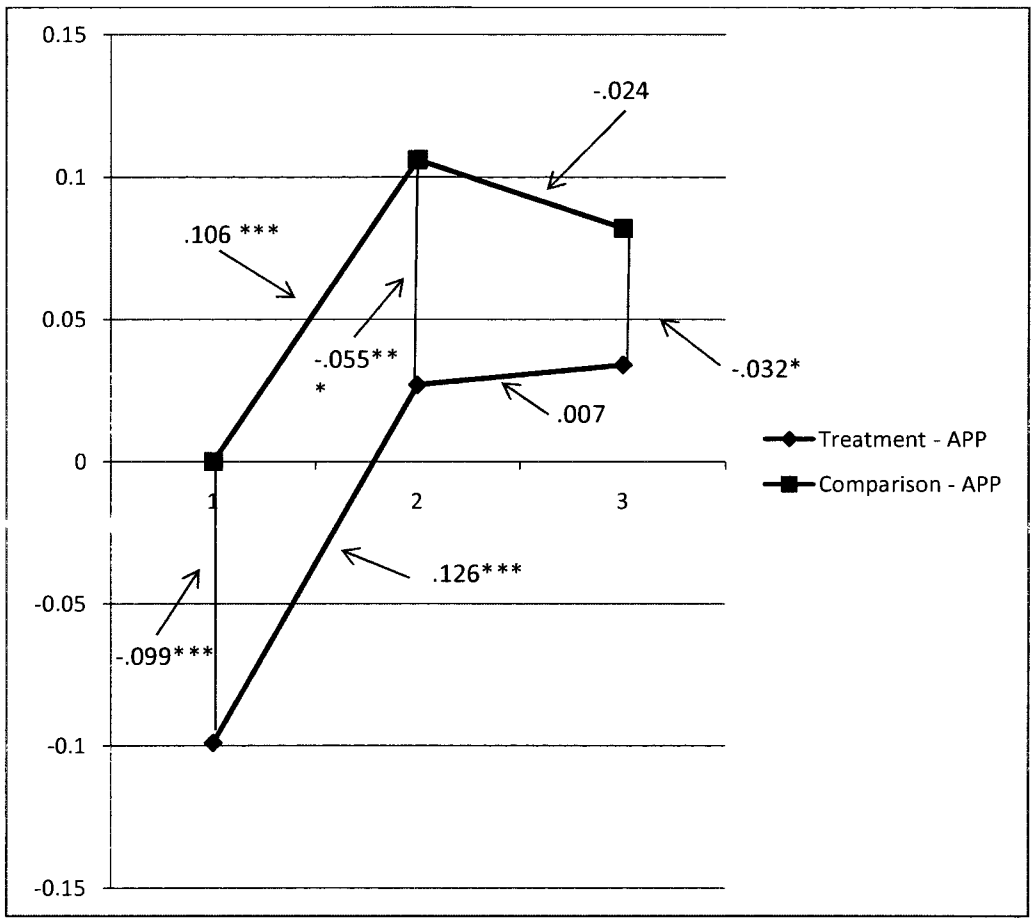
H_{11}: *There will be no differences in levels of PSM among the comparison group between the second and third phases of the study.*

Of the four adapted PSM dimensions, significant negative changes were identified in the comparison group on two dimensions: CPI which dropped by .266 standardized units since post-AmeriCorps program and KOC, which dropped by .221 standardized units over the same period. Both of these declines indicate large effects, particularly

when compared to the relatively stable, insignificant changes to CPI and KOC between baseline and post-AmeriCorps program. These drops, again suggest an argument for further studies concerning the life cycle of public service motivation in individuals, since both groups experience a large drop in these measures regardless of their participation status in AmeriCorps. Despite these dramatic drops in both groups, these dimensions support the hypothesis that changes in PSM experienced by AmeriCorps participants are sustained, when compared to similar changes in the comparison group. Additionally, measures of ONI increased and measures of APP decreased slightly between post-AmeriCorps program and wave III (2007), although both of these changes were reported at non-significant levels. The longitudinal analysis of measures of openness to new ideas reveals that there were not any significant changes in the comparison group over time, between all three phases of the study. The observed changes among the comparison groups in regard to APP, on the other hand, indicates after an initial spike between the first two phases of the study, that there appears to be a leveling off in attraction to public policymaking over the next seven years, likely during an individuals' early-to-mid-twenties (the age range of the sample identified in Table 4.3). While this finding may suggest that individual tend to reach a saturation point in regards to public policymaking activities, further longitudinal studies relating to how PSM changes in individuals over time are necessary to make more robust claims.

While two of the adapted dimensions of PSM (ONI and APP) among the comparison group reveal no significant changes between the post-AmeriCorps program and wave III iterations of the study, this hypothesis is accepted with

amendments. While no significant changes were anticipated within the comparison group, CPI and KOC appear to decline over this time period.



Note: 1=Baseline; 2=Post-AmeriCorps program; 3=Wave III (2007)

Figure 4.15: STANDARDIZED Longitudinal Differences in Attraction to Public Policymaking (APP) between Baseline, Post-AmeriCorps program and Wave III (2007)

5: Discussion and Conclusions

The previous chapter reported the analytic results of this dissertation. This final section takes time to more carefully interpret these findings. First, this study's contribution to theory are assessed, largely organized around the hypotheses identified earlier in this dissertation. Next, the implications of the findings on practice are examined. After practical relevance is discussed, areas for future research are identified. Finally, the strengths and limitations of this study are recapped, followed by conclusions drawn from this research.

5.1. Longitudinal Analysis of PSM

This dissertation used numerous statistical techniques to assess the effect of participating in AmeriCorps programs on individuals. First, exploratory and descriptive analyses determined the demographic composition of the sample. During this phase of the analysis, questions relating to the perceived impact of subsequent participation in the program were analyzed. Next, logistic regression analysis was used to estimate whether participation in national service programs can be predicted using antecedent conditions to PSM, as defined by Perry (2000). The next phase examined the external validity of the public service motivation construct via exploratory factor analyses (EFA) on the dataset to determine if a construct similar to the public service motivation factor model is identified when using secondary data that did not include questions on Perry's original PSM instrument (1996). After an adapted PSM construct was identified, confirmatory factor analysis was used to assess

whether this proposed model created using EFA accurately explains motivations of AmeriCorps participants. Using CFA, the amended public service motivation model was respecified to better represent the values identified in the initial EFA. Next, the respecified PSM model was applied to both the comparison and treatment groups to determine if there are differences between the two groups at the three different waves of the survey. Finally, changes in levels of PSM within groups (i.e., how did PSM among members of the treatment group change over time?) was examined using multiple indicator, multiple causes confirmatory factor analysis techniques.

5.1.1. Description of the Sample

To begin, the description of the sample revealed some potentially surprising findings to those unfamiliar with the national service program AmeriCorps. First, AmeriCorps is largely dominated by females. While there are certain public oriented professions that have traditionally attracted a largely female workforce, such as teaching and nursing, the overwhelming presence of females among AmeriCorps participants was unanticipated. According to the Corporation for National and Community Service, women volunteer at higher rates than men: in 2009, 30.1 percent of women in the United States volunteered, while 23.3 percent of men volunteered during the same year (2010). Additionally, DeHart-Davis et al. (2006) found that there are no significant differences between genders on dimensions of commitment to public service, but did reveal that women score higher than men on measures of compassion and attraction to public policymaking. These finding support the idea that PSM is more prevalent in females, thus making AmeriCorps more attractive with women. However, the finding that only 22 percent of those surveyed who

participated in an AmeriCorps program were men, and 78 percent were women is somewhat surprising (see Table 4.2). Given a propensity for females to join the AmeriCorps program, this finding provides support for including gender in the antecedent/process model identified by Perry (2000).

5.1.2. Self-Reported Motivation for Joining the AmeriCorps Program

Perhaps more relevant to the hypotheses posed, however, were questions relating the motivation to join the program, as well as the perceived effect of service in AmeriCorps on the individual.

At the post-AmeriCorps program administration of the survey, AmeriCorps members (those in the treatment group) indicated, the two most important factors for joining the program were "wanting to perform community service/help others" (32.7 percent) and to gain "new experiences" (27.4 percent) (see Table 4.9). Additionally, when asked to list "other important factors" for enrolling in AmeriCorps at post-AmeriCorps program, members identified four important factors: "helping the community"; "work with people who share your ideals"; "acquire skills"; and "reduce social and economic inequality."

These self-reported motivations for joining the program bode well with Perry and Wise's (1990) argument that public service motivation consists of three broad dimensions: rational, normative, and affective. Here, we see that AmeriCorps members identify rational objectives (i.e., acquire skills), normative objectives (i.e., work with people who share your values), and affective objectives (i.e., helping the community; reducing social and economic inequalities) as motivations for joining the program. While there are some slight differences between members of State and National and NCCC members, it is important to note that the motivations identified

by participants consisted of all three broad dimensions of public service motivation When members were asked the least important reasons for joining, they generally identified reasons that do not correlate well with core values PSM associated, such as "you needed a job" or "you had a friend or a family member who was joining " These finding provide support for Perry and Wise's (1996) original postulation that people who are attracted to service are motivated by rational, normative and affective drivers

Conversely, when asked what the most important factors for pursuing options other than AmeriCorps were, the comparison group identified reasons including "needed more money" (21 percent), "accepted into college" (19 percent), "found a better opportunity elsewhere" (11 percent), and "other" (25 percent) (see Table 4 10) Many of the items listed as important factors for not joining likely fall into the rational category of motivation, with very few respondents indicating that they found a job where they could be of greater service or have a larger impact on their communities These findings, however, are tentative since the treatment and comparison groups were not asked identical questions, making it difficult identify significant group differences[12]

These descriptive analyses provide support to accept the first hypothesis Where AmeriCorps participants cite other-regarding reasons as important reasons for joining the program, the comparison group cites more extrinsic, or rational motivations for pursuing other options While these findings provide some insight and context as to who participates in AmeriCorps, as well as the reasons these individuals cite for joining, or not joining, the program, this first hypothesis is merely descriptive and

[12] AmeriCorps participants were asked the question" "What factor was most important in your decision to enroll in AmeriCorps?" Members of the comparison group were asked "What factor was most important in your decision to *not* enroll in AmeriCorps?" A question worded along the lines of "What was attractive about AmeriCorps to you" would have allowed for easier comparison between the groups

does not allow for a better understanding of the effect of the program on individuals' measures of public service motivation.

5.1.3. Perceived Effect of Participation in AmeriCorps on Participants

Given these findings relating to initial motivations to join (or not) AmeriCorps, a logical next step was to determine whether AmeriCorps members perceived their AmeriCorps experiences as positive.

Generally, participants in AmeriCorps programs reported high levels of satisfaction with their program experience. When members of the treatment group were asked if they would enroll in AmeriCorps again, 76 percent of State and National members and 61 percent of NCCC members indicated that they would enroll again. Only five and 11 percent, respectively, responded that they would not do their program again.

During the early stages of the development of their theory of public service motivation, Perry and Wise (1990), suggested that their framework of motivation was founded on three types of values: rational values (i.e. how can I benefit my personal position), normative values (i.e. a desire to serve the public interest) and affective values (i.e. commitment to a program from a genuine conviction about its social importance; a patriotism of benevolence) (Perry and Wise 1990; Perry 2000). They argue that public service motivation does not simply arise out of one of these dimensions (i.e. affective), but rather motivations from each of these categories of values can motivate individuals to participate in public affairs.

When asked about their perceived accomplishments of participation in AmeriCorps, over 96 percent of participants indicated that they felt that they "made a difference in the life of at least one person" and over 92 percent felt that they "made a contribution

to the community." These perceived effects of participation in AmeriCorps on individuals suggest that participation in AmeriCorps programs address participants' affective motivations, or that they demonstrate a commitment to making a difference in their communities. Similarly, participants perceived that they were engaged in community-benefitting activities, or what Perry and Wise (1990) call "patriotism of benevolence".

Similarly, Perry and Wise (1990) argue that norm-based motivations relate to having a desire to serve the public interest and a commitment to social equity. When asked about how the program affected them individually, over 87 percent of participants indicate that they were "exposed to new ideas and ways of seeing the world", and over 77 percent believed that they "changed some of their beliefs or attitudes." These findings suggest that exposure to social inequalities among the populations being served are important to AmeriCorps participants changing their beliefs and attitudes about these populations, consistent with Younniss and Yates' (1997) findings about the effect of service on youth. Additionally, these two perceived outcomes of the AmeriCorps program on individuals provide an argument that exposure to AmeriCorps programs may affect individuals' normative motivations.

It should be noted, however, that within social psychology literature, individuals have a tendency to rationalize their past actions. Stemming from cognitive dissonance (Festinger, Riecken et al. 1956)literature, the "effort-justification" paradigm argues that individuals have a tendency to reflect on past experiences in a positive manner and relate difficult experiences as more "interesting" than easier experiences (Aronson and Mills 1959; Jost, Banaji et al. 2004). Given the descriptive

nature of the second hypothesis (as well as the variation in wording of the survey questions used for both groups), it is difficult to discern whether perceived satisfaction in program participation is a result of "effort-justification" or of actual satisfaction with the experience.

Nonetheless, these findings provide strong support for accepting this second hypothesis. It appears that individuals are attracted to serve in AmeriCorps programs for reasons that are similar to the important dimensions – rational, norm-based, and affective – of public service motivation, as identified by Perry and Wise (1990). Additionally, AmeriCorps participation seems to positively affect these values of individuals, as demonstrated by the high levels of agreement relating to public-oriented accomplishments as self-reported by program participants. While these findings provide important initial support for the argument that public service motivation plays a role in joining the AmeriCorps program, as well as indicating that participation in AmeriCorps programs may affect PSM, a series of more analytically rigorous techniques are discussed below.

5.1.4. Antecedents of Public Service Motivation

As indicated in the previous section, AmeriCorps members report values consistent with the three types of motivations associated with PSM (affective, rational, and normative) identified by Perry and Wise (1990) as important reasons for joining the programs. While these self-reported descriptive statistics are useful for providing a foundation for the argument that PSM is present in individuals who are attracted to national service, more robust statistical techniques were employed to determine if participation in AmeriCorps programs could be predicted using the antecedent

conditions of PSM, as identified by Perry (2000) and Perry et al. (2008). Using logistic regression techniques, antecedent conditions were used to predict participation in AmeriCorps among the treatment and comparison groups.

Using "participation in AmeriCorps" as the binary dependent variable, antecedent variables such as gender, ethnicity, age, income, education, family socialization, and participation in service as a youth all predicted whether a subject joined AmeriCorps. As is reported in Table 4.16 (p. 94), this model explained 20 percent of the variance in AmeriCorps participation. Despite the evidence that these findings demonstrate a medium-to-low effect, they do suggest that those who were exposed to service as a youth were more likely to seek out service opportunities later in life. Further, since the comparison group in this sample consisted of people who expressed an interest in national service, we can assume that these people hold values consistent with PSM.[13] So, among these matched populations, the antecedents of PSM helped to explain why people in the treatment group joined AmeriCorps, while those in the comparison group did not.

While most of antecedents were significant at the $p<.05$ level (although education was slightly out of the significant range), it was also found that "activity in church groups, religious organizations or community groups" did not significantly contribute to the antecedents of public service motivation model predicting participation in AmeriCorps programs. The strong contributions of most of the variables to the antecedent model further confirm Perry's hypothesis that socio-historical context, motivational context, and individual characteristics are important to developing PSM. Variables such as gender, level of education, youth exposure to service, and

[13]This assumption was confirmed in this study through EFA and CFA analysis on this sample

participation in student government are all important to whether or not a person self-selects into national service.

These findings are important because they confirm the hypothesis that researchers and program managers can accurately predict who will develop values consistent with public service motivation based on the exposures and experiences earlier in the applicant's life experiences. These findings help to support the growing research around discerning how and where public service motivation develops. This builds on Perry's (2000; 2008) work relating to the origins of public service motivation and helps to paint a more complete picture of the processes by which these values are developed.

While the testing the antecedent conditions of PSM in both populations was an important component of this dissertation, the primary focus is to examine if and how public service motivations changes as a result of participation in AmeriCorps. Since this dissertation utilizes existing, secondary data that did not ask the specific public service motivation questions identified by Perry (1996), it was necessary to use exploratory and confirmatory techniques to determine if values similar to those identified in the PSM literature are present among the population.

5.1.5. Utility of the Public Service Motivation Scale Using Secondary Data

To determine if values similar to those identified in the public service motivation literature are present among this sample, EFA consolidation grouping techniques were employed to determine the prevalence and sensitivity of measures of the PSM construct.

Perry (1996) identified four dimensions of public service motivation: commitment to public interest; attraction to public policymaking; compassion; and self-sacrifice. Exploratory factor analyses used in this thesis revealed four amended dimensions of public service motivation among the sample: commitment to public interest; attraction to public policymaking; knowledge of community; and openness to new ideas. Two dimensions -- attraction to public policymaking and commitment to the public interest -- grouped into latent factors that align relatively closely with Perry's original dimensions of the PSM construct. Perry's dimensions of PSM are compared to the factors or dimensions identified in this research in Table 5.1. These findings are important for several reasons.

Table 5.1: ORIGINAL AND ADAPTED DIMENSIONS OF PUBLIC SERVICE MOTIVATION

	Adapted Factors Identified using *AmeriCorps Data at Baseline*
Attraction to Public Policymaking	Attraction to Public Policymaking
Commitment to Public Interest	Commitment to Public Interest
Compassion	Knowledge of communities
Self-sacrifice	Openness to New Ideas

First, since there is little consensus on a single definition of public service motivation (Perry and Porter 1982; Rainey and Steinbauer 1999; Brewer, Selden et al. 2000; Vandenabeele 2007; Pinder 2008), there remain opportunities to continue to refine how PSM is conceived and measured. Many scholars acknowledge that people who are attracted to public service share a set of values; however the exact composition of these values is often subject to debate. There are very few studies –

outside of Coursey et al. (2007; 2008) and Perry's (1996) work developing the PSM construct – that explicitly use exploratory and confirmatory techniques in an effort to test the psychometric validity of Perry's work. Using questions from a secondary data source that ask questions that were deemed similar to those identified by Perry, in addition to many that addressed values that have not necessarily been broached in the PSM literature to date, we employed dimension reduction techniques to determine if Perry's construct exists among a sample of people with a demonstrated interest in public service.

Since numerous questions identified by Perry – specifically, relating to self-sacrifice and compassion – were not explicitly asked in the survey (although there were several questions that could have been interpreted as relating to these topics), it is no surprise that this exploratory factor analysis did not identify closely correlated similar factors. Rather, two unanticipated factors, Knowledge of Communities and Openness to New Ideas were identified.

Support for findings relating to openness to new ideas (ONI) can be drawn from Vanderbeele's (2008) recent work suggesting further exploration of adding a democratic governance dimension to the PSM scale. Despite Vanderbeele's findings of low validity, he provides theoretic support for adding a dimension that relates to democratic participation. This current dissertation's finding that the sample expressed values congruent with these ideals suggests this is a line of research that warrants further exploration. Additionally, support for the KOC dimension can be found in Perry's early work. Perry (1996) alludes to the possibility of including a dimension relating to social justice (Frederickson 1971) and democratic participation (Mosher 1982), which are related values to the KOC dimension identified here.

Second, testing whether PSM exists in areas outside of public institutions is an important step for expanding the theory. Gene Brewer (2010, p. 3) highlights this point:

> ...some scholars contended that the PSM construct should be broadened to include people who have service-oriented motives but do not work in public institutions or the public service. Both Rainey (1982, 297-298) and Brewer and colleagues (1998, pp. 417-418; 2000, p. 204) agreed that PSM has special significance in the public sector, but they felt that it transcends the public sector. People in all walks of life can perform meaningful public, community, and social service, and these activities are vitally important to society at large. Broadening the PSM concept in this way involves both sampling larger populations and possibly adding new dimensions to the construct, as nonprofit employees, government contractors, and others may have slightly different conceptualizations of public service.

This dissertation heeds Brewer's advice on two fronts. First, it applies the PSM model to a group of individuals who straddle the line between the public and nonprofit sectors. AmeriCorps is a quasi-governmental federal agency; however, it serves largely as a broker of human capital to nonprofit organizations and local governments. Therefore, it attracts people who may share interests with both the public and nonprofit sectors. Despite the evidence that there have been several attempts to test the public service motivation theory in a nonprofit setting (Gabris and Simo 1995; Coursey, Perry et al. 2008; Park and Word 2009), considerably more work needs to be done in exploring the validity in using the PSM model to explain motivations and behaviors in the nonprofit sector. This research serves to better bridge public and nonprofit sector research regarding motivation.

Additionally, as Brewer alludes, when applying the PSM theory to different settings, it may be appropriate to expand the construct to incorporate values not identified in the original dimensions, but that appear to be present in new settings. The findings associated with exploratory factor analyses (and subsequent

confirmatory factor analyses) provide support for considering additional dimension of openness to new ideas and knowledge of communities. The addition of these dimensions does not, however, preclude future research from testing for measures of compassion and self-sacrifice in nonprofit and voluntary settings.

Third, exploratory factor analysis represents an important step in providing a baseline measurement model for more in-depth longitudinal exploration of PSM. Using the four adapted dimensions of PSM identified in Table 5.1, this dissertation proceeds by using these factors to test for both group differences and longitudinal changes. These findings provide empirical support, in conjunction with the theoretic justifications, for analyzing changes in individuals' values as a result of participation in AmeriCorps.

The next step in determining whether the newly proposed conception of public service motivation revealed through EFA was valid was to use confirmatory factor analysis techniques to test for the prevalence of PSM values among the sample. The adapted PSM model was tested again on the baseline data using CFA, to determine the goodness-of-fit of the adapted model. Using both Bayesian and maximum likelihood measures, it was determined that the newly proposed model did not accurately measure public service motivation. As is often the case when using CFA, the model required respecification to improve model-fit (Brown, 2006). Using common statistical tests, several of the indicator variables that were originally included in the model were dropped. This improved several of the overall goodness-of-fit indicators to acceptable levels. The indicatory variables (survey questions) that were retained in the CFA model still represent the adapted dimensions of PSM used in this analysis including: attraction to public policymaking, commitment to public

interest, knowledge of communities, and openness to new ideas The use of confirmatory factor analysis thus demonstrated the validity and reliability for the proposed adapted PSM model [14]

Next, latent means of the factors used in the adapted conception of PSM were then compared Additionally, this adapted, re-specified conception of PSM was used to compare latent factor means within groups, to determine whether PSM changes longitudinally among the sub-samples (i e , were there changes within the comparison group over time?) The relative absence of longitudinal assessments of PSM and the lack of understanding about organizational influences on individuals are frequently cited as two important steps in the development of the theory (Perry and Hondeghem 2008, Wright and Christensen 2010, Wright and Grant 2010) The final phase of this dissertation addresses these topics

5.2. Theoretic Perspectives

This dissertation makes several important contributions to the public service motivation literature First, it explains the usefulness of the antecedent conditions for predicting participation in service programs Second, it analyzes the validity of using the PSM construct with secondary data Since there is little consensus on a single definition of PSM, it is possible to contribute to this discussion by examining latent factors identified in a population which consists of individuals who are likely candidates to hold PSM related values On this front, it is proposed, with empirical support, that a ideas related to openness to new ideas (or value on democratic

[14] CFA is common technique for assessing the validity and reliability of psychometric and latent variable structures (Brown, 2006)

decision-making) and knowledge of one's community are important motivating factors for individuals to engage in public service.

Next, this study demonstrated that public service motivation can be cultivated through participation in service-oriented activities, such as the AmeriCorps program. This is important since the PSM literature currently does not address how PSM changes in individuals, or whether PSM is a characteristic that may be influenced. Finally, this study provided a first insight into examining how public service motivation changes in individuals over time. Since the comparison group was not exposed to the AmeriCorps program intervention, it was possible to track this group over the three time periods to determine how public service motivation changes. Among the sub-sample population that was not exposed to the AmeriCorps program, we find that PSM appears to decline significantly in two of the adapted dimensions (KOC and CPI) over time and rise significantly in relation to APP. Beside one known study examining PSM longitudinally (Wright and Christensen, 2010) this is an important contribution to understanding how PSM may be cultivated as well as how PSM changes over time in individuals.

One potential explanation for difference among the treatment and comparison group can be found in Figure 4.11. While the treatment and comparison groups demonstrate very similar levels of three of the identified latent variables at baseline, the two groups display significant differences on the Attraction to Public Policymaking dimension at baseline. It is possible that a reason the comparison group ultimately decided to not join the AmeriCorps program was their demonstrated higher levels of attraction to public policymaking attitudes and behavior. Supplemental or future

analyses should determine if the comparison group ended up choosing to enter more traditional public service experiences such as nonprofit or public sector employment.

This finding also suggests that there may be support for the notion of marginal rates of return for participating in public policymaking activities. While both groups demonstrated a spike in APP during the first year of the study, both groups' interest seems to level off, indicating that they reached a saturation point in their consumption of news and propensity to vote.

It is possible that even though decreases in the adapted measures of PSM are reported among this sample, levels of PSM could again increase later in life. To test this potential finding, however, compiling a more comprehensive longitudinal PSM dataset is necessary. For example, many of the participants in this study are young adults without children. It is possible that as these young adults age, start families, and focus on their careers, their levels of PSM decline as their motivations shift away from public or social causes toward their families (i.e., ensuring the well-being of their children or paying their mortgages). However, it is equally possible that as these individuals grow and mature and their family responsibilities become less demanding (i.e., their kids go off to college), that they again see a spike in their levels of PSM. More longitudinal research is necessary to paint a clearer, more complete picture of how PSM changes over time in individuals.

In addition to Moynihan and Pandey's findings about organizational tenure and PSM, they also find that organizational reforms are positively associated with PSM. Activities such as decentralization and employee empowerment predict positive changes in PSM. While this dissertation does not directly address issues associated with organizational reform, it should be noted that as a result of working with high-

need populations, AmeriCorps members are often engaging in reform related activities. Again, further examination of this link between reform and PSM should be considered, potentially in a broader context.

5.3. Implications on Practice

5.3.1. Implications on the AmeriCorps Program

From a practical perspective, this research has several important implications. First, it will allow service program managers to better screen candidates for program acceptance. Or, if the AmeriCorps program proceeds with the legislatively approved expansion (as planned in the Edward M. Kennedy Serve America Act of 2010), these findings will allow recruiters to more easily identify participants who will likely be a "good fit" for the program. Even though members of the comparison group demonstrate some values that are consistent with PSM, they appear to lack exposures and experiences that help to predict whether they actually engage in public service, such as AmeriCorps. For example, it appears that level of education, household income, family socialization and youth volunteering are important factors in determining who joins the AmeriCorps program. Therefore, it may be beneficial to identify both likely and target candidates in an effort to improve the effectiveness of recruiting efforts.

Additionally, this research give credibility to the perspective that the AmeriCorps program does not have clear programmatic objectives, but rather serves as a "Swiss Army knife" model purported by early observers of the program (Waldman 1995; Perry, Thomson et al. 1999). These descriptions of the AmeriCorps program suggest that rather than having a clear mission, the program serves several functions including

producing valuable outcomes in communities, an opportunity to affect positively the program participants, an opportunity for Americans to serve their country in a non-military manner, leveraging volunteers in the nonprofit sector in a cost-effective manner, bridging social classes, cultivating a civic ethic in young people and developing the next generation of civic leaders (Waldman 1995; Perry, Thomson et al. 1999; Perry and Katula 2001). This research provides support for the proposition that participation cultivates a civic ethic in young people, and helps to develop the next generation of civic leaders. From a program management perspective, it may be important for program administrators to harness these newly sharpened values and facilitate the transition of AmeriCorps participants into either public or nonprofit sector jobs, or even into private sector jobs with a public-orientation.

Additionally, this research provides program administrators and policy personnel with a new, theoretically grounded outcome measure relating to service in AmeriCorps. While this study used adapted measures of PSM, program managers should consider including the original (Perry 1996) or shortened PSM scales (Coursey and Pandey, 2007) used in other PSM literature. Similarly, this study could provide these administrators with new language and terminology for describing the outcomes and effects of service in AmeriCorps. During this research, it was often difficult to find concrete programmatic goals – this research, coupled with other programmatic priorities – could be used to help shape more specific language relating to the overall mission of the organization.

5.3.2. General Implications on Public and Nonprofit Management

In addition to practical implications on the AmeriCorps program, this thesis could help inform public managers how PSM can change as a result of organizational experience, or more simply, how PSM might change individuals over time. From a more general public management perspective, this research demonstrates that public service motivation consists of values that may be cultivated in individuals. While there has been very little longitudinal research regarding public service motivation (see Wright and Christensen 2010), this research indicates that participation in public service has a tendency to change individuals' motives for serving. Public managers should be aware that while many individuals are drawn to service in the public sector due to antecedent conditions of PSM, the proper public service environment can actually promote the further development of these values. Since the public and nonprofit sectors often have budget constraints and limited means for incentivizing individuals, it is important for these sectors to better understand how PSM may be cultivated. This knowledge could provide additional tools to managers looking to improve individual outputs and overall organizational effectiveness.

Finally, this dissertation should serve as a signal to human resources managers in all three sectors that when they recruit former AmeriCorps members, they are getting individuals who are primed for employment in public-oriented careers. First, these individuals have indicated that they have been exposed to environments that are important to developing PSM later in life (they demonstrate the antecedent conditions of PSM). Second, since these individuals report significant changes in levels of PSM after participation in a one year service program such as AmeriCorps, it is possible that the cultivation of these values could continue if these individuals were put into

the appropriate environments after their service year. In sum, these public and nonprofit managers could benefit from employing individuals who have already demonstrated an interest in service and who have like been affected by their service experiences in positive ways.

5.4. Limitations

While these findings are encouraging for the literature supporting the antecedents of public service motivation as well as the idea that PSM is a set of values that may be cultivated in individuals, these findings have limitations. In particular, while these findings support the idea that individuals who participate in AmeriCorps programs experience a shift in public service values, these findings are not generalizable beyond the AmeriCorps sample used. So, while it is important to note that these individuals experienced changes in adapted dimensions of PSM, it is unknown if participation in more traditional public sector careers create similar changes in individuals.

Similarly, since the AmeriCorps program is a quasi-governmental program that straddles the public and nonprofit sectors, it is unclear which sector this research is more applicable to. Even though AmeriCorps participants are often paid by federal or state governments, they often associate more closely with the organizations they are working for, which are frequently nonprofit organizations (Corporation for National and Community Service 2007). Therefore, this unique position makes it difficult to make generalizations about employment in either sector.

Finally, while the sampling techniques in this study included a comparison group, which helped create a clearer picture about the effects of the program on individuals, this research design omits a large portion of the general population. The study has

two groups – individuals who expressed interest in AmeriCorps, and ultimately joined, and individuals who expressed interest in the program, but did not join. Therefore, this sample only includes individuals who were aware of the AmeriCorps program and contacted the CNCS, thereby omitting those who did not know about AmeriCorps or contact the CNCS, or the vast majority of the population. To better understand the effect of participation of AmeriCorps, it would be helpful to have a larger, more randomly selected comparison group. Further, while highly unlikely, it would be preferable to have random assignment for participation in AmeriCorps to better determine the impact of service on individuals.

While every quantitative study has its limitations, the interrupted time-series design with two groups used in this thesis do provide a level of statistical rigor that is uncommon in studies in the social sciences. Therefore, while these limitations should be noted, they should not take away from the contributions of this study.

5.5. Practical Challenges

In addition to research design limitation, there are also practical challenges to consider related to this study. During the analysis and write-up of this dissertation, the AmeriCorps program was in danger of losing funding for the 2011 fiscal year. Despite being subjected to some funding cuts, the program was largely saved during this fiscal cycle. However, given the uncertainty regarding federal deficits and debt, many federal programs are in danger of future budget reductions. Therefore, while this dissertation indicates that participants in the AmeriCorps program experience real changes in their levels of public service motivation as a result of their service, it is important to acknowledge the political and budgetary climate surrounding the

program. However, regardless of the future of the AmeriCorps program, the findings in this dissertation provide important contributions to the rapidly expanding literature on public service motivation

5.6. Areas for Future Research

While this research takes many important steps toward better understanding how public service motivation is developed, how it can be affected, and how it changes over time, it also raises several questions and identifies areas for future research.

5.6.1. Additional Longitudinal Studies – Understanding the Life Cycle of PSM

First, more longitudinal work should be done examining how public service motivation changes over time in individuals. By using either existing secondary data sets, or by creating a longitudinal study that addresses the public service motivation values, research should generate a better understanding of how public service motivation changes over time. Additionally, as spikes and troughs in PSM over the course of a lifetime are identified, researchers could better identify the causes of these changes. This dissertation takes an important first step in understanding how PSM can change, but a better understanding of why public service motivation changes is vital to the theory.

Further, the role that gender plays in affecting the life-cycle of PSM should be explored. Currently, there is little understanding of how males and females levels of PSM differ throughout the course of a lifetime. For example, it could be possible that raising children affects men and women's levels of compassion differently.

Therefore, it an important next step in the PSM literature is to better understand these differences longitudinally.

5.6.2. Public Service Motivation Prior to Joining the Workforce

Second, this dissertation finds that participation in AmeriCorps programs can affect individual's levels of public service motivation. The design of the study was relatively simple – an interrupted time series with a pre-service, post-service, and post-post-service survey. A similar study could be conducted with a cohort of people who are interested in jobs in the public sector, along with two comparison groups: people who are interested in the public sector, but do not enter the public sector workforce, and a more randomly selected third group. This quasi-experimental design will allow us to better understand the effects of public sector employment on individuals. It will also allow us to understand if PSM is inherent in individuals or whether it is something than can be cultivated through the workplace. This current dissertation demonstrates that values related to PSM are malleable, but it is unclear how readily these values change outside of an intense service experience such as AmeriCorps

5.6.3. Applying PSM to Nonprofit Workforce Retention Problems

A next logical step in this research is to better understand how well public service motivation explains behavior in the nonprofit sector. Since this sample of AmeriCorps members has exposure to both the public and nonprofit sectors during their service year, this research serves as a jumping-in point for better understanding how Perry's theory applies to the nonprofit sector. One option using the current data

set would be to separate out individuals based on their sector of employment and the length of time they have worked in this sector. In particular, since the comparison sample was not exposed to the treatment of AmeriCorps, this sub-sample could provide a good opportunity to study how PSM changes over time, and also how experiences other than AmeriCorps (i.e., sector of employment; having children; going back to school; joining the military) affect levels of PSM.

5.7. Conclusions

From a theoretic point of view, this research builds on a fast-growing body of literature in the public and nonprofit management literature. Public service motivation offers practitioners and scholars a tool to help understand how employees in these two sectors are unique. However, our understanding of PSM is still somewhat limited in regards to the role of the organization or program in shaping an individual's motivations. Similarly, our understanding of how PSM changes over time is still relatively uninformed. This research starts to broach both of these topics and will potentially help to start to fill in these holes in the literature. In an age of networked governance and at a time when the lines between organizations in the public, nonprofit, and private organizations sectors are starting to blur, it is necessary to gain a better understanding of the differences and similarities between employees in these different sectors. The PSM literature has, and will continue to play an important role of better understanding what attracts people to public service.

5.8. Peroration

On a personal note, this dissertation began with an intellectual curiosity that was sparked by personal experience. After graduating with a B.A. in Economics from the University of Illinois in 2002, I decided to take year off between college and joining the workforce to engage in travel, meet other young people, and perform community service. My plan was to move to Denver, CO for one year and join the AmeriCorps National Civilian Community Corps program. Then, my plan was to return to the Chicago area and take up work in the financial or pharmaceutical industries. However, my one year in AmeriCorps turned into a two year stint. This experience parlayed into several jobs in the nonprofit sector, which inspired me to return to academia to pursue an MPA. This experience led me to a Ph.D. in Public Affairs, this dissertation, and ultimately, a tenure-track academic job. For me, my AmeriCorps experience was life-altering. When I looked around at some of my AmeriCorps colleagues, I thought I saw a similar story. The challenge, of course, was to discern if these values and propensities to serve were inherent in us, or whether our experience in AmeriCorps served as a catalyst to encourage public-oriented behavior. While I had absolutely no personal agenda in executing this dissertation, I was pleased when empirical inquiry into these questions, with an N far greater than 1, confirmed many of my personal initial hunches Although, there were certainly plenty of surprises along the way.

Appendix A: Highlights of the Edward M. Kennedy Serve America Act.

H.R. 1388, Senate-passed as of 3-26-2009

Reauthorizes and Expands the Mission of the Corporation for National and Community Service, by:

Increasing Opportunities for Americans of All Ages to Serve

- Puts young people onto a path of national service by establishing a Summer of Service program to provide $500 education awards for rising 6th-12th graders, a Semester of Service program for high school students to engage in service-learning, and Youth Empowerment Zones for secondary students and out-of-school youth.

- Dramatically increases intensive service opportunities by setting AmeriCorps on a path from 75,000 positions annually to 250,000 by 2017, and focusing that service on education, health, clean energy, veterans, economic opportunity and other national priorities. Ties the Segal AmeriCorps Education Award to the maximum Pell Grant level (now $5,350, but set to increase over time).

- Improves service options for experienced Americans by expanding age and income eligibility for Foster Grandparents and Senior Companions, authorizing a Silver Scholars program, under which individuals 55 and older who perform 350 hours of service receive a $1,000 education award, and establishing Serve America Fellowships and Encore Fellowships allowing individuals to choose from among registered service sponsors where to perform service. Also permits individuals age 55 and older to transfer their education award to a child or grandchild.

- Enables millions of working Americans to serve by establishing a nationwide Call to Service Campaign and a September 11 national day of service, and investing in the nonprofit sector's capacity to recruit and manage volunteers.

Supporting Innovation and Strengthening the Nonprofit Sector

- Creates a Social Innovation Fund to expand proven initiatives and provide seed funding for experimental initiatives, leveraging Federal dollars to identify and grow ideas that are addressing our most intractable community problems.

- Establishes a Volunteer Generation Fund to award grants to states and nonprofits to recruit, manage, and support volunteers and strengthen the nation's volunteer infrastructure.

- Authorizes Nonprofit Capacity Building grants to provide organizational development assistance to small and mid-size nonprofit organizations.

- Creates a National Service Reserve Corps of former national service participants and veterans who will be trained to deploy, in coordination with FEMA, in the event of disasters.

Strengthening Management, Cost-Effectiveness, and Accountability

- Merges funding streams, expands the use of simplified, fixed amount grants, and gives the Corporation flexibility to consolidate application and reporting requirements. Increases support for State Commissions on national and community service. Bolsters the capacity and duties of the Corporation's Board of Directors.

- Ensures that programs receiving assistance under national service laws are continuously evaluated for effectiveness in achieving performance and cost goals.

- Introduces responsible and balanced competition to the RSVP program.

- Authorizes a Civic Health Assessment comprised of indicators relating to volunteering, voting, charitable giving, and interest in public service in order to evaluate and compare the civic health of communities.

From: The Corporation for National and Community Service Website
http://www.nationalservice.gov/about/newsroom/releases_detail.asp?tbl_pr_id=1283

B: Executive Summary of the Edward M. Kennedy Serve America Act.

A Legislative Initiative to Expand and Improve Domestic and International Service Opportunities for All Americans

Senator Edward M. Kennedy and Senator Orrin Hatch

Themes

- Expand opportunities for people to serve at every stage of life.
- Use service to meet specific national challenges. Put service to work to solve our most pressing challenges, such as tackling the dropout crisis and strengthening our schools; improving energy efficiency; safeguarding the environment; improving health care in low-income communities; expanding economic opportunities for low-income individuals; and preparing for and responding to disasters and emergencies.

I. Ask Many More Americans to Give a Year to Solve Specific Challenges: Building on the success of AmeriCorps, the legislation will create new, effective "Corps" focused on areas of national need. It will ask 175,000 Americans to give a year of service through these corps as part of a new national commitment to solve these challenges, expanding the number of national service participants to 250,000.

II. Increase Opportunities to Serve by People of All Ages:

- **For Students, Increase Service Early in Life:** Service early in life will put more and more youth on a path to a lifetime of service. The legislation will improve opportunities for young people in low income, high-need communities to engage in service to improve their own communities.
- **For Working Adults, Encourage Employers to Let Employees Serve,** by establishing a tax incentive for employers who allow employees to take paid leave for full-time service.
- **For Retirees, Value Their Skills and Make Service Work for Them.** Many retiring citizens are ready, willing, and able to be involved in service and have skills the public needs – but none of the current service programs are structured with their needs in mind. The legislation will enhance incentives for retirees to give a year of service through the Corps, and will establish "Encore Fellowships" to help retirees who wish to transition to longer-term public service.
- **For Americans of All Ages, Increase Volunteering.** Not all Americans can make a significant time commitment to service, but many volunteer in other ways. The legislation will expand the volunteer pool by establishing a "Volunteer Generation Fund" to help nonprofit organizations recruit and manage more volunteers.

III. Support Innovation in the Nonprofit Sector: Social entrepreneurs who have launched innovative nonprofit organizations such as Teach for America and Citizen Schools in Boston are experimenting with new solutions to pressing problems. The legislation will recognize and support the role of effective social entrepreneurs in solving our national challenges:

- **Establish a Commission** to study and improve how the federal government, nonprofits, and the private sector work together to meet national challenges effectively.
- **Apply Effective Business Strategies to the Nonprofit Sector,** by establishing a network of "Community Solution Funds" that are basically venture capital funds to help the nonprofit sector seek talent and put it to work.

IV. Improve and Expand International Service and America's Respect in the World

Support for Short-Term International Service Opportunities: We must expand the Peace Corps so more Americans can provide critical assistance to people across the globe while promoting America's international standing. But many skilled Americans are unable to give two years. The legislation will strengthen the current "Volunteers for Prosperity" program, which coordinates and supports short-term international service opportunities for skilled professionals to serve in developing nations.

From:http://s3.amazonaws.com/btcreal/855/Kennedy_Hatch_Serve_America_Act_Summary.pdf, Bethechangeinc.org

C: Summary of National Service Outcomes

Summary of National Service Outcomes

Outcome	Positive	No effect	Negative
Servers			
Skill development	33	5	--
Civic responsibility	14	5	--
Educational opportunity	11	--	1
Self-esteem	10	2	--
Tolerance for diversity	4	5	--
Satisfaction from serving	33	--	--
Health	5	1	--
Beneficiaries			
Impacts on direct beneficiary	30	--	--
Impacts on indirect beneficiary	6	1	--
Institutions			
Expand service	23	--	--
Improve quality of services	24	--	--
Create new institutions	6	4	--
Communities			
Community strengthening	11	5	--
Benefit-cost-ratio*	13	--	1
Volunteer leveraging	16	--	--

Source Perry and Thomson (2004)

*Benefit-cost ratios greater than 1 are reported in the positive column, ratios less than 1 in the negative column

D: Original Survey Instrument

- Attraction to Policy Making (5 items)
  - PSM 11 – Politics is a dirty word. (Reversed)
  - PSM 15 – I respect public officials who can turn a good idea into law.
  - PSM 22 – Ethical behavior of public officials is as important as competence.
  - PSM 27 – The give and take of public policy making doesn't appeal to me. (Reversed)
  - PSM 31 – I don't care much for politicians. (Reversed)
- Commitment to the Public Interest (7 items)
  - PSM 7 – People may talk about the public interest, but they are really concerned only about their self-interest. (Reversed)
  - PSM 16 – It is hard for me to get intensely interested in what is going on in my community. (Reversed)
  - PSM 23 – I unselfishly contribute to my community.
  - PSM 30 – Meaningful public service is very important to me.
  - PSM 34 – I would prefer seeing public officials do what is best for the whole community even if it harmed my interests.
  - PSM 37 – An official's obligation to the public should always come before loyalty to superiors.
  - PSM 39 – I consider public service my civic duty.
- Social Justice (5 items)
  - PSM 18 – I believe that her are may public causes worth championing.
  - PSM 20 – I do not believe that government can do much to make society fairer. (Reversed)
  - PSM 32 – If any group does not share in the prosperity of our society, then we are all worse off.
  - PSM 33 – I am willing to use every ounce of my energy to make the world a more just place.
  - PSM 38 – I am not afraid to go to bat for the rights of others even if it means I will be ridiculed.
- Civic Duty (7 items)
  - PSM 14 – When public official take and oath of office, I believe they accept obligations not expected of other citizens.
  - PSM 21 – I am willing to go to great lengths to fulfill my obligations to my country
  - PSM 25 – Public service is one of the highest forms of citizenship.
  - PSM 28 – I believe everyone has a moral commitment to civic affairs no matter how busy they are.
  - PSM 29 – I have an obligation to look after those les well off.
  - PSM 35 – To me, the phrase "duty, honor, and country: stirs deeply fel emotions.
  - PSM 36 – It is my responsibility to help solve problems arising from interdependencies among people.
- Compassion (8 items)

    - PSM 2 – I am rarely moved by the plight of the underprivileged. (Reversed)
    - PSM 3 – Most social programs are too vital to do without.
    - PSM 4 – It is difficult for me to contain my feelings when I see people in distress.
    - PSM 8 – To me, patriotism includes seeing to the welfare of others.
    - PSM 10 – I seldom thing about the welfare of people whom I don't know personally. (Reversed)
    - PSM 13 – I am often reminded by daily events about how dependent we are on one another.
    - PSM 24 – I have little compassion for people in need who are unwilling to take the first step to help themselves. (Reversed)
    - There are few public programs that I wholeheartedly support. (Reversed)
- Self-Sacrifice (8 items)
    - PSM 1 – Making a difference in society means more to me than personal achievements.
    - PSM 5 – I believe in putting duty before self.
    - PSM 6 – Doing well financially is definitely more important to me that doing good deeds. (Reversed)
    - PSM 9 – Much of what I do is for a cause bigger than myself.
    - PSM 12 – Serving citizens would give me a good feeling even if no one paid me for it.
    - PSM 17 – I feel people should give back to society more than they get from it.
    - PSM 19 – I am one of those rare people who would risk personal loss to help someone else.
    - PSM 26 – I am prepared to make enormous sacrifices for the good of society.

Source: Perry, J. L. (1996). Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity. *Journal of Public Administration Research and Theory: J-PART, 6*(1), 5-22.

E: Revised Survey Instrument

- Attraction to Public Affairs
  - Politics is a dirty word (reversed)
  - The give and take of public policymaking doesn't appeal to me (reversed)
  - I don't care much for politicians (reversed)
- Commitment to the Public Interest
  - It is hard to get me genuinely interested in what is going on in my community (reversed)
  - I unselfishly contribute to my community
  - Meaning public service is very important to me
  - I would prefer seeing public officials do what is best for the community, even if it harmed my interests
  - I consider public service a civic duty
- Compassion
  - I am rarely moved by the plight of the underprivileged (reversed)
  - Most social programs are too vital to do without
  - It is difficult for me to contain my feelings when I see people in distress
  - To me, patriotism includes seeing to the welfare of other.
  - I seldom think about the welfare of people whom I don't know personally (reversed)
  - I am often reminded by daily events about how dependent we are on one another
  - I have little compassion for people in need who are unwilling to take the first step to help themselves
  - There are few public programs I wholeheartedly support (reversed)
- Self-sacrifice
  - Making a difference in society means more to me that personal achievements
  - I believe in putting duty before self
  - Doing well financially is definitely more important to me than doing good deeds (reversed)
  - Much of what I do is for a cause bigger than myself
  - Serving citizens would give me a good feeling even if no one paid me for it
  - I feel people should give back to society more than they get from it
  - I am one of those rare people who would risk personal loss to help someone else
  - I am prepared to make enormous sacrifices for the good of society

Source: Perry, J. L. (1996). Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity. *Journal of Public Administration Research and Theory: J-PART, 6*(1), 5-22.

F: Key Findings from Still Serving...

- "AmeriCorps makes alumni more likely to enter into nonprofit or government careers, with 60 percent of AmeriCorps alumni choosing to work with a nonprofit organization or public agency."
- Pipeline effect: "AmeriCorps has an even greater relative impact on the career choices of minority members and individuals from disadvantaged circumstances. Minority AmeriCorps members in the State and National program are significantly more likely to choose a career in public service than similar members of the comparison group (44% compared to 26%). AmeriCorps members from disadvantaged circumstances are 20 percentage points more likely to be employed in a public service field (46% compared to 26%)."
- "AmeriCorps has a significant positive impact on members' attachment to community, their understanding of community problems, their sense of efficacy in working to address community needs, and their participation in community meetings and events."
- "AmeriCorps exposes members to new career opportunities and is beneficial to them in the job market. About 80 percent of members reported that their service exposed them to new career options (83% of NCCC members and 79% of State and National members), and more than two-thirds of the former members report that their service was an advantage to them in the job market. Members who served in AmeriCorps are more satisfied with their lives eight years later than individuals who did not end up serving in AmeriCorps. Ninety percent of NCCC and 86 percent of State and National alumni, for example, are satisfied with their careers."

- CNCS measuring civic engagement
- "To measure the levels of community participation among AmeriCorps alumni, researchers investigated attitudes and behaviors, including members' sense of connection to their community, participation in community meetings and events, sense of duty to their neighbors, volunteering and voting habits, and feelings of social trust. While some early effects faded over time, there are several significant differences between AmeriCorps alumni and their comparison group eight years after the study began." Executive Summary

Source: Corporation for National and Community Service, (2008). Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni. Washington, DC: 56.

G: Survey Questions for Treatment Group at Wave III (2007).

Wave III (2007) AC members

Longitudinal Study of AmeriCorps Wave III (2007)

AmeriCorps Member Survey

Hello My name is _____ I'm calling on behalf of AmeriCorps When you enrolled in AmeriCorps, you became part of an important long-term study of AmeriCorps This study will help us understand what happens to
people after their involvement in AmeriCorps May we continue with the interview?

First, just to confirm, did you serve in AmeriCorps in 1999-2000 or 2001 <treatment>

☐ Yes

☐ No

PRIME I would like to begin by asking you about your current experiences

1 How do you spend most of your time now? (READ LIST, CODE ALL THAT APPLY)
[NOTE Questions repeat as necessary to collect all activities/stints Please see codebook for names of
iterative
variables]

	ENTER CODE FOR OCCUPA	ENTER CODE FOR FIELD	What year did you begin this activity?

	Yes	No	TION (1a)	(1b)	(1c)
a. Working <q1a>	☐		<q1aa_1>	<q1ab_1>	<q1ac_1>
IF YES Is this full-time or- part time? <q1a1_1>	☐ Full-time	☐ Part-time			
IF NO Are you looking for work? <q1a2>	☐	☐			
b Enlisted in military service <q1b>	☐	☐			<q1bc>
c Enlisted in National Guard/Reserve <q1c>	☐	☐			
If YES Is this full-time or- part time? <q1c1>	☐ Full-time	☐ Part-time			<q1cc>
d Participating in AmeriCorps? <q1d>	☐	☐		<q1dbs1>	
If YES Is this full-time or- part time? <q1d1>	☐ Full-time	Part-time			<q1dc>
e Participating in national service or volunteer work, for example Peace Corps, faith-based volunteer service, etc <q1e>	☐	☐		<q1eb_1>	<q1ec_1>
IF YES is this full-time or part-time? <q1e1_1>	☐ Full-time	☐ Part-time			
f Attending school <q1f>	☐	☐		<q1fb_1>	<q1fc_1>
If YES Is this full-time or part-time? <q1f1_1>	☐ Full-time	☐ Part-time			
What type of school are you attending <q1f2_1>					
High school equivalent or GED	☐	☐Two-			
year community college	☐				
	☐Technical school or				
apprenticeship program	☐				
A four-year college	☐	☐A			
graduate or professional school	☐	☐			
g Are you currently taking care of your children/parents at home <q1g>	☐	☐			<q1gc>
IF YES Is this full-time or part-time? <q1g1>	☐ Full-time	☐ Part-time			
h Are you currently retired <q1h>	☐	☐			<q1hc>
i Dealing with personal health problems <q1i>	☐	☐			<q1ic>
j Any other ways that you are currently spending your time? (SPECIFY) <q1j> _____ <q1j1_1>	☐	☐	<q1ja_1>	<q1jb_1>	<q1jc_1>

members

1a. IF WORKING What do you do? PROBE What occupation is it? (IF NECESSARY, PROBE BY READING LIST BELOW ENTER CORRESPONDING CODE FOR OCCUPATION) <q1aa>

CODES FOR 1a (Occupation)

8 9

1

2 10 11 12 13 14

3

4

5

6

7

ent Occupations

M Business and Financial Operations Occupations

a Computer and Mathematical Occupations

n Architecture and Engineering Occupations

a Life, Physical, and Social Science Occupations

g Community and Social Services Occupations

e Legal Occupations

m Education, Training, and Library Occupations

Occupations
15 Personal Care and Service Occupations
16 Sales and Related Occupations
17 Office and Administrative Support Occupations
18 Farming, Fishing, and Forestry Occupations
19 Construction and Extraction Occupations
20 Installation, Maintenance, and Repair Occupations
21 Production Occupations
22 Transportation and Material Moving Occupations
23 Military Specific Occupations
24 Unemployed
25 Homemaker
26 Child care/Day care
27 Veterinarian/Animal care
28 Self employed/Business owner

1b FOR EACH ACTIVITY CODED "YES," ASK In what field? (IF NECESSARY, PROBE BY READING LIST BELOW ENTER CORRESPONDING CODE FOR FIELD FOR EACH ACTIVITY in Q 1) <q1ab>

CODES FOR 1b (Field)

1 Accounting
2 Administrative/clerical
3 Agriculture/farming
4 Arts (visual dance music performance)
5 Athletics
6 Automotive
7 Banking/finance
8 Biotech/science
9 Business
10 Computer/technical/scientific
11 Construction
12 Culinary arts/food service
13 Customer service
14 Design
15 Distribution/shipping
16 Engineering
17 Environmental
18 Facilities
19 Grocery
20 Health care
21 Hospitality/hotel
22 Human resources
23 Information technology
24 Installation/maintenance/repair
25 Insurance
26 Legal
27 Legal admin
28 Manufacturing
29 Marketing
30 Media/journalism/newspaper
31 Military
32 Nonprofit social services
33 Nurse
34 Pharmaceutical
35 Professional services
36 Public safety/law enforcement
37 Purchasing/procurement
38 Real estate
39 Religious activities
40 Research
41 Restaurant/food service
42 Retail Sales
43 Skilled trades (masonry, carpentry, electrician)
44 Social/community work
45 Strategy/planning
46 Teaching children/adults
47 Telecommunications
48 Training
49 Transportation
50 Warehouse
51 Child Care
52 Counseling e g general counseling, therapist,
53 family counseling, drug addiction counselor
Liberal Arts e g History, English, Literature etc
54 Fund raising
55 Veterinarian/Animal care
56 Government
57

1 c. What year did you begin this activity? <q1ac_1>

_____ YEAR

1d. IF WORKING FULL- OR PART-TIME IN Q.1: Is this in the (READ) sector? <q1k_1>

- ☐ Government/public sector
  - IF YES: Was this in the <q1k1a_1>:
    - ☐ Federal government
    - ☐ State government ☐ Local government
    - ☐ International government
- ☐ For-profit/Private sector
- ☐ Non-profit organization (tax-exempt, charitable organization)
- ☐ Self-employed
  - IF YES: Was this in the: <q1n1a_1>
    - ☐ Private sector
    - ☐ Non-profit sector

2 In addition to what you are doing now, what else have you been doing since 2000? (CODE ALL THAT APPLY)

[NOTE Questions repeat as necessary to collect all activities/stints Please see codebook for names of iterative variables]

		Yes	No	ENTER CODE FOR OCCUPATION (2a)	ENTER CODE FOR FIELD (2b)	YEARS ACTIVITY TOOK PLACE (2c)
a.	Working <q2a>	☐	☐	<q2aa_1>	<q2ab_1>	<q2ac_1> to <q2ac1_1>
	IF YES Was this full-time or- part time? <q2a1_1>	☐ Full-time	☐ Part-time			
	IF NO Were you looking for work? <q2a2>	☐	☐			
b	Enlisted in military service <q2b>	☐	☐			<q2bc_1> to <q2bc1_1>
c	Enlisted in National Guard/Reserve <q2c>	☐	☐			
	If YES Was this full-time or- part time? <q2c1>	☐ Full-time	☐ Part-time			<q2cc_1> to <q2cc1_1>
d.	Participated in AmeriCorps? <q2d>				<q2db_1>	
	If YES Was this full-time or- part time? <q2d1_1>	☐ Full-time	☐ Part-time			<q2dc_1> to <q2dc1_1>
e.	Participated in national service or volunteer work, for example Peace Corps, faith-based volunteer service, etc <q2e>		☐		<q2eb_1>	<q2ec_1> to <q2ec1_1>
	IF YES Was this full-time or part-time? <q2e1_1>	☐ Full-time	Part-time			
f	Attended school <q2f>	☐	☐		<q2fb1c1> to <q2fb1c57>	<q2fc_1> to <q2fc1_1>
	If YES Was this full-time or part-time? <q2f1_1>	Full-time	Part-time			
	What type of school were you attending <q2f2_1>					
	High school equivalent or GED	☐	☐			
	Two-year community college	☐	☐			
	Technical school or apprenticeship program	☐	☐			
	A four-year college	☐	☐			
	A graduate or professional school	☐	☐			
g.	Took care of my children/parents at home <q2g>	☐	☐			<q2gc_1> to <q2gc1_1>
	IF YES Is this full-time or part-time? <q2g_1>	☐ Full-time	☐ Part-time			
h.	Had you retired <q2h>	☐	☐			
	IF YES What year did you retire? <q2hc_1)					
	IF YES Have you come out of retirement? <q2hcout1>	☐	☐			
	IF YES What year did you come out of retirement? <q2houty1>					
	IF YES Did you go back to retirement since 2000? <q2hh_1>	☐	☐			
i	Dealt with personal health problems <q2i>	☐	☐			<q2ic_1> to <q2ic1_1>
j	Were there any other ways you were spending your time?<q2j> (SPECIFY)<q2j1_1> _____	☐	☐	<q2ja_1>	<q2jb_1>	<q2jc_1> to <q2jc1_1>

2a. IF WORKING What did you do? PROBE What occupation was it? (IF NECESSARY, PROBE BY READING LIST BELOW ENTER CORRESPONDING CODE FOR OCCUPATION)

CODES FOR 2a (Occupation)

1 Management Occupations
2 Business and Financial Operations Occupations
3 Computer and Mathematical Occupations
4 Architecture and Engineering Occupations
5 Life, Physical, and Social Science Occupations
6 Community and Social Services Occupations
7 Legal Occupations
8 Education, Training, and Library Occupations
9 Arts, Design, Entertainment, Sports, and Media Occupations
10 Healthcare Practitioners and Technical Occupations
11 Healthcare Support Occupations
12 Protective Service Occupations
13 Food Preparation and Serving Related Occupations
14 Building and Grounds Cleaning and Maintenance Occupations
15 Personal Care and Service Occupations
16 Sales and Related Occupations
17 Office and Administrative Support Occupations
18 Farming, Fishing, and Forestry Occupations
19 Construction and Extraction Occupations
20 Installation, Maintenance, and Repair Occupations
21 Production Occupations
22 Transportation and Material Moving Occupations
23 Military Specific Occupations
24 Unemployed
25 Homemaker
26 Child care/Day care
27 Veterinarian/Animal care
28 Self employed/Business owner

2b FOR EACH ACTIVITY CODED "YES," ASK In what field? (IF NECESSARY, PROBE BY READING LIST BELOW ENTER CORRESPONDING CODE FOR FIELD FOR EACH ACTIVITY in Q 2)

CODES FOR 2b (Field)

1 Accounting
2 Administrative/clerical
3 Agriculture/farming
4 Arts (visual dance music performance)
5 Athletics
6 Automotive
7 Banking/finance
8 Biotech/science
9 Business
10 Computer/technical/scientific
11 Construction
12 Culinary arts/food service
13 Customer service
14 Design
15 Distribution/shipping
16 Engineering
17 Environmental
18 Facilities
19 Grocery
20 Health care
21 Hospitality/hotel
22 Human resources
23 Information technology
24 Installation/maintenance/repair
25 Insurance
26 Legal
27 Legal admin
28 Manufacturing
29 Marketing
30 Media/journalism/newspaper
31 Military
32 Nonprofit social services
33 Nurse
34 Pharmaceutical
35 Professional services
36 Public safety/law enforcement
37 Purchasing/procurement
38 Real estate
39 Religious activities
40 Research
41 Restaurant/food service
42 Retail Sales
43 Skilled trades (masonry, carpentry, electrician)
44 Social/community work
45 Strategy/planning
46 Teaching children/adults
47 Telecommunications
48 Training
49 Transportation
50 Warehouse
51 Child Care
52 Counseling e g general counseling,
53 therapist, family counseling, drug addiction counselor
Liberal Arts e g History, English,
54 Literature etc
Fund raising
55 Veterinarian/Animal care
56 Government
57

2c.

FOR EACH ACTIVITY CODED "YES," ASK: During what years were you doing (ACTIVITY)? (MULTIPLE RESPONSES ALLOWED. Column C allows for multiple stints in nonconsecutive time periods. Probe if necessary.)

2d.

IF WORKING FULL- OR PART-TIME IN Q.2: Was this in the (READ) sector? <q2k_1>

- ☐ Government/public sector
  - IF YES: Was this in the: <q2k_1a_1>
    - ☐ Federal government
    - ☐ State government ☐ Local government
    - ☐ International government
- ☐ For-profit/Private sector
- ☐ Non-profit organization (tax-exempt, charitable organization)
- ☐ Self-employed
  - IF YES: Was this in the: <q2n1a_1>
    - ☐ Private sector
    - ☐ Non-profit sector

3. In 1999 you inquired about an AmeriCorps program. How did you inquire about this program? (CODE ALL THAT APPLY. READ LIST IF NECESSARY.)

- ☐ Contacted program directly <q3_1>
- ☐ Went through National AmeriCorps website <q3_2>
- ☐ Went through state, local, or program AmeriCorps website <q3_3>
- ☐ Called the National AmeriCorps toll-free number <q3_4>
- ☐ Learned about it on college campus <q3_5>
- ☐ Learned about it at a job fair <q3_6>
- ☐ Don't remember <q3_7>
- ☐ Through a friend or relative <q3_8>
- ☐ Ad, newspaper, TV<q3_9>
- ☐ Flyer <q3_10>
- ☐ Internet <q3_11>
- ☐ Through the mail <q3_12>
- ☐ School councilor/through school <q3_13>
- ☐ Word of mouth <q3_14>
- ☐ Another AmeriCorps member <q3_15>
- ☐ While job searching or on the job <q3_16>
- ☐ Through another non-profit program such as YMCA, community centers <q3_17>

PRIME: We are interested in volunteer activities, that is, activities for which people are not paid, except perhaps expenses. We only want you to include volunteer activities that you did through or for an organization, even if you only did them once in a while.

4. In the last 12 months, have you done any volunteer activities through or for an organization? <q6>

- ☐ Yes (GO TO Q5)
- ☐ No

4a.

IF NO Sometimes people don't think of activities they do infrequently or activities they do for children's schools or youth organizations as volunteer activities In the last 12 months have you done any of these types of volunteer activities? <q6a>

☐ Yes (GO TO Q5)
☐ No

4b

IF NO Sometimes people don't think of activities they do through religious organizations as volunteer activities In the last 12 months have you done any of this type of volunteer activity? <q6b>

☐ Yes (GO TO Q5)
☐ No

4c

IF NO VOLUNTEERING IN PAST 12 MONTHS, INCLUDING FOR SCHOOL OR RELIGIOUS PURPOSES Q 4, Q 4a, and Q4b In talking to people about volunteering, we often find that a lot of people were not able to volunteer because they did not know how to get involved, or they were sick, or they just didn't have the time What single most important reason best describes why you haven't performed volunteer service in the last 12 months? (CODE ONE) <q6c>

☐ Gave money to donations instead of volunteering time
☐ Personal schedule too full
☐ Unable to honor volunteer commitment
☐ Health problems, physically unable
☐ No interest
☐ Took a second job/ need to work more hours
☐ I already volunteer as much as I can
☐ My age
☐ Don't have necessary skills
☐ Don't have transportation
☐ People should be paid for their work
☐ Don't know how to become involved
☐ No one I know personally asked me
☐ No organization contacted me and asked me to volunteer
☐ I've volunteered enough in the past
☐ My past volunteering experience
☐ My AmeriCorps experience
☐ Taking care of family members—child, parent, grandparent, etc
☐ Other (SPECIFY)

_____

4d. IF NO VOLUNTEERING IN PAST 12 MONTHS, INCLUDING FOR SCHOOL OR RELIGIOUS PURPOSES Q 4, Q 4a, and Q4b Were you asked to volunteer? <q6d>

☐ Yes, I was asked to volunteer
IF YES Who asked you to become a volunteer for this organization?
☐ Friend <q6d1y_1>
☐ Relative <q6d1y_2>
☐ Co-worker <q6d1y_3>
☐ Someone in the organization/school <q6d1y_4>
☐ Boss or employer <q6d1y_5>
☐ Church member <q6d1y_9>
☐ No, I was not asked to volunteer

5 How many different organizations have you volunteered through or for in the last 12 months? <q7>

_ 1234567
_ More than 7 organizations
_
_ What is the organization you volunteer for the most?
_
_
_
_

5a

What organization is it?
IF NECESSARY ASK What type of organization is that? (CODE FROM LIST BELOW) <q7atype>

5b (ASK IF NECESSARY DO NOT READ CATEGORIES ALOUD) What type of organization is that? (CODE FROM LIST)

1 RELIGIOUS ORGANIZATION
2 CHILDREN'S EDUCATION, SPORTS, OR RECREATIONAL GROUP
3 OTHER EDUCATIONAL GROUP
4 SOCIAL AND COMMUNITY SERVICE GROUP
5 CIVIC ORGANIZATION
6 CULTURAL OR ARTS ORGANIZATION
7 ENVIRONMENTAL OR ANIMAL CARE ORGANIZATION
8 HEALTH RESEARCH OR HEALTH EDUCATION ORGANIZATION
9 HOSPITAL CLINIC OR HEALTHCARE ORGANIZATION
10 IMMIGRANT/REFUGEE ASSISTANCE
11 INTERNATIONAL ORGANIZATION
12 LABOR UNION, BUSINESS OR PROFESSIONAL ORGANIZATION
13 POLITICAL PARTY OR ADVOCACY GROUP
14 PUBLIC SAFETY ORGANIZATION
15 SPORTS OR HOBBY GROUP
16 YOUTH SERVICES ORGANIZATION
17 GOVERNMENT ORGANIZATION - PUBLIC SCHOOLS, LIBRARY, RED CROSS, GENERAL GOVERNMENT
18 NON-PROFIT ORGANIZATION
19 SOME OTHER TYPE OF ORGANIZATION (ENTER VERBATIM RESPONSE)

_____

PRIME I'm going to ask you some questions about (ORGANIZATION)

6 During how many weeks in the last year did you do volunteer activities for (ORGANIZATION)? (ENTER NUMBER OF WEEKS, 1-52) <q8>

_ Less than one week (GO TO Q8) <q8wks>

_____# weeks

7 IF ONE WEEK OR MORE In those (ENTER NUMBER FROM ABOVE) weeks that you volunteered for (ORGANIZATION), how many hours per week did you do volunteer activities? <q9>

_ Varies

_____# Hours (1-168) <q9hrs>

8

How many hours did you do volunteer activities for (ORGANIZATION) in the last year? <q10>

_____# Hours (1-8736)

9

Now I'm going to ask you about activities you might have done for (ORGANIZATION) in the last year For each activity that I mention, please tell me—yes or no—whether you did that activity for that organization in the last year In the last 12 months did you (IF HELP IS REQUESTED, READ EXAMPLES)

		Yes	No
a.	**Coach, referee, or supervise sports teams? <q11a>**	☐	☐
b	**Tutor or teach** (includes reading to children or adults, assisting teachers, helping with homework or school projects) <q11b>	☐	☐
c	**Mentor youth** (includes being a Boy Scout/Girl Scout Leader, Big Brother/Big Sister, or engaging in other mentoring activities) <q11c>	☐	☐
d.	**Be an usher, greeter, or minister** (includes showing people to their seats, giving directions, handing out programs and other materials) <q11d>	☐	☐
e	**Collect, prepare, distribute, or serve food** (includes serving meals in shelters, packaging meals for distribution) <q11e>		
f	**Collect, make or distribute clothing, crafts, goods other than food** (includes gathering clothes for a clothing drive, producing handmade items such as quilts, collecting furniture) <q11f>	☐	☐
g	**Fundraise or sell items to raise money** (includes manning concession booths, working in thrift stores, or at events for which the purpose is to raise money) <q11g>		
h.	**Provide counseling, medical care, fire/EMS, or protective services?** <q11h>		
i	**Provide general office services** (includes clerical, administrative activities, running errands, manning information booths) <q11i>	☐	☐
j	**Provide professional or management assistance including serving on a board or committee (DOES NOT INCLUDE** MEDICAL OR EMERGENCY CARE BUT **INCLUDES** PROVIDING LEGAL, COMPUTER, OR ACCOUNTING SERVICES) <q11j>	☐	☐
k	**Engage in music, performance, or other artistic activities** (includes choir, musical, dance, theatrical performances, fine arts) <q11k>	☐	☐
l	**Engage in general labor; supply transportation for people** (includes building, repairing, or cleaning indoors or outdoors, driving school teams to games or practices, driving people to a political rally) <q11l>	☐	☐
m	**Other** (SPECIFY) (includes campaigning, registering people to vote, political activities, and any other activities which do not belong in one of the above categories) <q11m>	☐	☐
n	**Animal Care** <q11n>	☐	☐
o	**Political Activity** <q11o>	☐	☐

10 Which of the activities that you performed did you spend the most time doing for (ORGANIZATION) last year? (INTERVIEWER CAN RE-READ LIST IF NECESSARY) (CODE FROM ABOVE) <q12>

_____

11 Did you live in the community where you did most of your volunteer activity for (ORGANIZATION)? (CODE ONE) <q13>

- ☐ Yes, for all of the volunteer activities
- ☐ Yes, for most of the volunteer activities
- ☐ Yes, for some of the volunteer activities
- ☐ No

12 Now I'd like to ask you how you first became a volunteer for (ORGANIZATION) Did you approach the organization yourself, did someone ask you, or did you become involved in some other way? <q14>

- ☐ Approached the organization
- ☐ Was asked
  - IF YES Who asked you to become a volunteer for this organization?
  - IF YES Who asked you to become a volunteer for this organization? <q14a>
    - ☐ Friend
    - Relative
    - ☐ Co-worker
    - ☐ Someone in the organization/school
    - ☐ Boss or employer
    - ☐ Someone else (SPECIFY)_____
- Some other way
  - IF YES Please describe how you became involved with this organization (READ LIST IF NECESSARY)
    - ☐ Court-ordered community service <q14ba>
    - ☐ Family member's involvement in the organization <q14bb>
    - ☐ Friend's, co-worker's, or roommate's involvement in the organization <q14bc>
    - ☐ Own involvement in organization/school <q14bd>
    - ☐ Public housing requirement <q14be>
    - ☐ Referred to by volunteer organization <q14bf>
    - ☐ Responded to public appeal in newspaper/radio/TV/flyer/Internet <q14bg>
    - ☐ School requirement <q14bh>
    - ☐ Other (SPECIFY) _____ (ENTER VERBATIM RESPONSE) <q14bi>
    - ☐ Church recommendation <q14bj>

13 Are you satisfied with the amount of volunteering you did in the last 12 months? <q15>

- ☐ Yes (GO TO Q14)
- ☐ No

13a IF NO What single most important reason best describes why you haven't performed more volunteer service in the last 12 months? (CODE ONE) <q15a>

- Personal schedule too full
- Unable to honor volunteer commitment
- Health problems, physically unable
- No interest
- Took a second job/ need to work more hours
- Don't know how to become involved
- I already volunteer as much as I can
- My age
- Don't have necessary skills
- Don't have transportation
- People should be paid for their work
- No one I know personally asked me
- No organization contacted me and asked me to volunteer
- I've volunteered enough in the past
- My past volunteering experience
- My AmeriCorps experience
- Children/pregnant
- Moving, Relocating
- Lazy
- Respondent hasn't found appropriate volunteer work
- Other (SPECIFY)

14 How likely is it that you will volunteer in the future? Would you say you will (READ LIST) <q16>

- Definitely be involved in volunteer activities
- Probably be involved in volunteer activities
- Probably not be involved in volunteer activities

15 In the last 12 months, have you asked your friends, parents, children, or other family members to volunteer with you in any activities? (CODE ONE) <q17>

- YES
- NO (GO TO Q16)

15a IF YES Have your friends, parents, children, or other family members volunteered with you in any activities because you asked? (CODE ONE) <q17a>

- YES
- NO

16 Have you in the last 12 months attended any public meeting in which there was discussion of community affairs? (CODE ONE) <q18>

- YES
- NO (GO TO Q17)

16a IF YES About how many times in the past twelve months did you do this? <q18a>

_____ Number of times

17 Have you in the last 12 months worked with other people in your neighborhood to fix or improve something? (CODE ONE) <q19>

☐ YES
☐ NO (GO TO Q18)

17a IF YES About how many times in the past 12 months did you do this? <q19a>

_____ Number

18 Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? <q20>

☐ Most people can be trusted
☐ You can't be too careful in dealing with people

PRIME Now think about any organizations you have made a donation to in the last 12 months Charitable organizations include religious or non-profit organizations that help those in need or that serve and support the public interests They range in size from national organizations like the United Way and the American Red Cross down to local community organizations They serve a variety of purposes such as religious activity, helping people in need, health care and medical research, education arts, environment, and international aid

Donations include any gifts of money, assets, or property made directly to the organizations, through payroll deduction, or collected by other means on behalf of the charity This interview is limited to donations made during the last 12 months

19 In the last 12 months, did you or anyone in your family donate money, assets, or property with a combined value of more than $25 to religious or charitable organization? (CODE ONE) <q21>

☐ YES
☐ NO (GO TO Q20)

19a IF YES To what organizations did you donate $25 or more, in total dollar value of all donations? (READ LIST) Please note that some organizations address multiple issues Please choose only one organization for each donation

19b FOR EACH ORGANIZATION DONATED TO How much did you give to that organization?

a. CODE ALL THAT APPLY	b TOTAL DONATION AMOUNT
☐ College or institution for higher learning <q22a>	$ <q22ab> $
☐ Religious organizations/ purposes <q22b>	<q22bb>
☐ Hospital, clinic, healthcare organization, or medical research organizations <q22c>	$ <q22cb>
☐ Children's education, sports, or recreational group <q22d>	$ <q22db> $
☐ Youth and family services <q22e>	<q22eb> $
☐ Arts, culture, and ethnic awareness <q22f>	<q22fb> $
☐ International aid or world peace <q22g>	<q22gb> $
☐ Environmental, conservation, or wildlife conservation <q22h>	<q22hb> $
☐ Labor union, business, or professional organization <q22i>	<q22ib> $
☐ Political party, political candidate or advocacy group <q22j>	<q22jb> $
☐ Public safety organization <q22k>	<q22kb> $
Social organization <q22l>	<q22lb>
☐ Disaster relief <q22m>	$ <q22mb>
☐ United Way <q22o>	$
Veterans, purple heart <q22p>	$$
Shelter, clothes for the homeless <q22q>	$<q22nb>
Other (SPECIFY) <q22n>	

20 In response to Hurricane Katrina, did you donate any of the following to a charity or nonprofit organization? (READ LIST)

		Yes	No
a.	Money <q23a>	☐	☐
b	Blood <q23b> Time	☐	
c	<q23c>	☐	☐
d.	Clothing, food, water or similar supplies <q23d>	☐	☐
e.	Your professional skills (e g work with evacuees) <q23e>	☐	☐
f	Other contribution (SPECIFY) <q23f>	☐	☐
g.	Prayers <q23g>	☐	☐
h	Shelter <q23h>	☐	☐

21 Did you donate any of the following items to a charity or non-profit organization for national or international disaster in the past 12 months? (READ LIST)

		Yes	No
a.	Money <q24a>	☐	☐
b	Blood <q24b> Time	☐	☐
c	<q24c>	☐	☐
d.	Clothing, food, water or similar supplies <q24d>	☐	☐
e.	Your professional skills (e g work with evacuees) <q24e>	☐	☐
f	Other contribution (SPECIFY) <q24f>	☐	☐
g.	Prayers <q24g>	☐	☐

PRIME Now I'm going to ask you about voting

22 Are you currently registered to vote? <qb1>

- YES
- NO

23 Did you vote in the most elections last November? (CODE ONE) <qb2>

- Yes, I voted (GO TO Q24)
- No, I did not vote

23a IF NO In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, or they were sick, or they just didn't have the time Which of the following statements best describe why you did not vote in the elections last November? (READ LIST CODE ALL THAT APPLY) <qb2a>

- Not registered (although 18 years or older) <qb2a_1>
- I thought about voting, but didn't <qb2a_2>
- Out of country/state <qb2a_3>
- I was new to the area/ I just moved <qb2a_4>
- Elections don't affect me <qb2a_5>
- Feel vote won't make a difference <qb2a_6>
- Inconvenient <qb2a_7>
- Not interested in participating in State/local elections <qb2a_8>
- My party was not represented <qb2a_9>
- No time, forgot <qb2a_10>
- Sick, health problems <qb2a_11>
- Not a citizen, not allowed to vote <qb2a_12>
- Not interested in the people running <qb2a_13>
- Did not research candidates <qb2a_14>

24 Did you vote in the 2004 presidential election? <qb3>

- Yes I voted (GO TO Q25)
- No, I did not vote

24a IF NO Which of the following statements best describe why you did not vote in the 2004 presidential election? (READ LIST CODE ALL THAT APPLY)

- Not registered (although 18 years or older) <qb3ac01>
- I thought about voting, but didn't <qb3ac02>
- Out of country/state <qb3ac03>
- I was new to the area/ I just moved <qb3ac04>
- Elections don't affect me <qb3ac05>
- Feel vote won't make a difference <qb3ac06>
- Inconvenient <qb3ac07>
- Not interested in participating in national elections <qb3ac08>
- My party was not represented <qb3ac09>
- No time, forgot <qb3ac10>
- Sick, health problems <qb3ac11>
- Not a citizen, not allowed to vote <qb3ac12>
- Not interested in the people running <qb3ac13>

PRIME: Now I'm going to ask you HOW OFTEN you do certain things. Please answer if you do these things **never**, **not very often**, **sometimes**, **very often**, or **always**.

25. How often have you been in a group situation with others where you have done the following things? <qb4>

	Never	Not Very Often	Some-Times	Very Often	Always
a. We discuss issues and problems and share ideas. <b4a>	☐	☐	☐	☐	☐
b. We involve everyone and avoid favoritism. <b4b>	☐	☐	☐	☐	☐
c. We can disagree and be different from one another without fear. <b4c>	☐	☐	☐	☐	☐
d. We take time to work out any conflicts. <b4d>	☐	☐	☐	☐	☐

26. How often do you do each of the following? (READ ITEM) Would you say you do this never, not very often, sometimes, very often, or always?

	Never	Not Very Often	Some-Times	Very Often	Always
a. Participate in events such as community meetings, celebrations, or activities in your community. <qb4_1a>	☐	☐	☐	☐	☐
b. Join organizations that support issues that are important to you. <qb4_1b>	☐	☐	☐	☐	☐
c. Write or e-mail newspapers or organizations to voice your views on an issue. <qb4_1c>	☐	☐	☐	☐	☐
d. Vote in local elections. <qb4_1d>	☐	☐	☐	☐	
e. Try to learn as much as you can about candidates or ballot questions before voting. <qb4_1e>	☐	☐	☐		☐
f. Keep informed about local or national news <qb4_1f>	☐	☐	☐	☐	☐

27. In the last 12 months how often have you …

	Never	Not very Often	Some-times	Very Often	Always
a. Expressed your opinions using the Internet <qb5a>	☐	☐	☐	☐	☐
b. Expressed your opinions through radio call-ins <qb5b>	☐	☐	☐	☐	☐
c. Talked to other people to persuade them to vote for a particular party or candidate <qb5c>	☐	☐	☐	☐	☐
d. Contacted a government official to express your opinion on a local or national issue <qb5d>	☐	☐	☐	☐	☐
e. Worked as a volunteer for a political party or candidate running for national, state, or local office <qb5e>	☐	☐	☐	☐	☐

27a. In general, how much influence did your AmeriCorps experience have on your decision to participate in activities like the ones we just discussed? (CODE ONE) <qb6>

No Influence	A little bit of influence	Some Influence	Quite a bit of influence	A Lot of Influence
☐	☐	☐	☐	☐

28. Please answer how often you do the following. (READ ITEM) Would you say you ... never do this, do this not very often, sometimes, very often, or always? <qb8>

	Never	Not Very Often	Some-times	Very Often	Always
a. You try to understand other team members' ideas and opinions before arguing or stating your own. <qb8a>	☐	☐	☐	☐	☐
b. You try to present your ideas without criticizing the ideas of others. <qb8b>	☐	☐	☐	☐	☐
c. You encourage different points of view without worrying about agreement. <qb8c>	☐	☐	☐	☐	☐
d. You try to consider all points of view or possible options before forming an opinion or making a decision. <qb8d>	☐	☐	☐	☐	☐
e. You encourage the participation of other team members and support their right to be heard. <qb8e>	☐	☐	☐	☐	☐
f. You help find solutions when unexpected problems arise. <qb8f>	☐	☐	☐	☐	☐

PRIME: Now we are going to switch gears, where I am going to read you some statements. Please answer whether you **strongly disagree**, **disagree**, **neither agree nor disagree**, **agree**, or **strongly agree**.

29. Thinking of all your voluntary community service or volunteer activities over the past 12 months, please indicate how much you agree with the following statements. (READ ITEM) Would you say you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree?

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a.	You felt that you made a contribution to the community. <qb9a>	☐	☐	☐	☐	☐
b.	You re-examined your beliefs and attitudes about yourself. <qb9b>	☐	☐	☐	☐	☐
c.	You were exposed to new ideas and ways of seeing the world. <qb9c>	☐	☐	☐	☐	☐
d.	You felt like part of a community. <qb9d>	☐	☐	☐	☐	☐
e.	You learned more about the "real" world. <qb9e>	☐	☐	☐	☐	☐
f.	You felt you made a difference in the life of at least one person. <qb9f>	☐	☐	☐	☐	☐
g	You did things you never thought you could do. <qb9g>	☐	☐	☐	☐	☐
h.	You changed some of your beliefs and attitudes <qb9h>	☐	☐	☐	☐	☐

30

Please indicate how strongly you agree with each of the following statements about your community (READ ITEM) Would you say you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree?

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a.	You have a strong attachment to your community <qb10a>	☐	☐	☐	☐	☐
b	You often discuss and think about how larger political and social issues affect your community <qb10b>	☐	☐	☐	☐	☐
c	You are aware of what can be done to meet the important needs in your community <qb10c>	☐	☐	☐	☐	☐
d.	You feel you have the ability to make a difference in your community <qb10d>	☐	☐	☐	☐	☐
e	You try to find the time or a way to make a positive difference in your community <qb10e>	☐	☐	☐	☐	☐
f	If people from different backgrounds took the time to understand each other, there wouldn't be so many social problems <qb10f>	☐	☐			
g	Some of your friends are of different backgrounds from you racial, cultural, ethnic, or language <qb10g>	☐	☐	☐	☐	☐
h	Racism affects everyone <qb10h>	☐	☐	☐	☐	☐
	You feel comfortable belonging to groups where people are different from you <qb10i>	☐	☐	☐	☐	☐
j	Diverse viewpoints bring creativity and energy to a work group <qb10j>	☐	☐	☐	☐	☐
k.	Multicultural teams can be stimulating and fun <qb10k>	☐	☐	☐	☐	☐
l	People are more motivated and productive when they feel they are accepted for who they are <qb10l>	☐	☐	☐	☐	☐
m	Diversity improves the work of organizations <qb10m>	☐	☐	☐	☐	☐
n.	Diversity brings many perspectives to problem-solving <qb10n>	☐	☐	☐	☐	☐
o	You are comfortable interacting with people from a different racial or ethnic background <qb10o>	☐	☐	☐	☐	☐

31. Thinking about your AmeriCorps experience, please indicate how much you agree with each of the following statements. Would you say you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree?

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a. AmeriCorps had an influence on my commitment to volunteer service <qb11a>	☐	☐	☐	☐	☐
b. AmeriCorps had an influence on my personal and family life <qb11b>	☐	☐	☐	☐	☐
c. AmeriCorps had an influence on my interest in current events and issues <qb11c>	☐	☐	☐	☐	☐

32. On a scale of 1 to 5 where 1 = not very interested and 5 = very interested, how would you describe your **interest** in forming friendships with people who come from a different race or ethnicity from you? (CONFIRM RESPONSE) <qb13>

Not very interested				**Very interested**
1	2	3	4	5

PRIME: Now we are going to ask you a few questions on how satisfied you are. Please rate on the following scale: **not at all satisfied, not too satisfied, somewhat satisfied,** or **very satisfied**.

33. Please tell me overall, how satisfied you are with each of the following areas of your life. Are you very satisfied, somewhat satisfied, not too satisfied or not at all satisfied with your…

	Not at all Satisfied	Not too satisfied	Somewhat satisfied	Very satisfied
a. Work or career overall <qb14a>	☐	☐	☐	☐
b. Personal financial situation <qb14b>	☐	☐	☐	
☐c. Physical health <qb14c>	☐			☐
☐d. Personal relationships with family and friends <qb14d>	☐	☐	☐	
☐e. Religious or spiritual life <qb14e>	☐			☐
☐f. Leisure activities <qb14f>	☐	☐	☐	☐

PRIME: Now I'm going to ask you how important things are to you. Please answer whether they are **not important**, **somewhat important**, or **very important**.

34. (READ ITEM) Would you say this is very important, somewhat important, or not important to you?

	Not Important	Somewhat Important	Very Important
a. Working to correct social and economic inequalities <prq1a>	☐	☐	☐
b. Having a job that involves working with other people as part of a team <prq1b>	☐	☐	☐
c. Working in a job where you are of direct service to people <prq1c>	☐	☐	☐

d. Making a difference in the community <prq1d> ☐ ☐ ☐

35 Do you feel that each of the following is not an important obligation, a somewhat important obligation, or a very important obligation that a citizen owes to the country?

		Not an Important Obligation	**Somewhat Important Obligation**	**Very Important Obligation**
a.	Serving on a jury if called <prq2a>	☐	☐	☐
b	Reporting a crime that you may have witnessed <prq2b>	☐	☐	☐
c	Participating in neighborhood organizations (school, religious, community, recreational organizations) <prq2c>	☐	☐	☐
d.	Voting in elections <prq2d>	☐	☐	
	☐e	Keeping informed about news and		
public issues <prq2e>			☐	
f	Helping to keep the neighborhood safe <prq2f>?	☐	☐	
	☐g.	Helping to keep the neighborhood		
clean and beautiful <prq2g>?		☐	☐	☐
h	Helping those who are less fortunate <prq2h>	☐	☐	☐

36 Below is a list of activities that you, along with others, might accomplish Think about how hard it would be for **you** to accomplish each activity Assume that each of these is an activity you feel is worthwhile to accomplish

		I would not be able to get this done	**I might be** able to get this done	**I would be** able to get this done
a.	Getting the local government to fix a pothole in my street <prq3a>	☐	☐	☐
b	Getting the local government to build an addition to the community center <prq3b>	☐	☐	☐
c	Organizing an event to benefit a charity or religious organization <prq3c>	☐	☐	☐
d.	Getting an issue on the ballot for a statewide election (Assume your state allows this) <prq3d>	☐	☐	☐
e.	Starting an after-school program for children whose parents work <prq3e>	☐	☐	☐
f	Organizing an annual cleanup program for the local park <prq3f>	☐	☐	☐

37 On a scale from 1 to 5 where 1 = nothing and 5 = a great deal, how much do you feel you know about problems facing the community such as ?

	Know Nothing 1	2	3	4	Know a Great Deal 5
a The environment <prq4a>	☐	☐	☐	☐	
b Public health issues <prq4b>				☐	☐
c Literacy <prq4c>	☐	☐	☐		☐
d Crime <prq4d>	☐	☐	☐	☐	☐
e Lack of civic involvement <prq4e>	☐	☐	☐	☐	☐

PRIME Now I'm going to ask you about your current regular job(s) in more detail

38 IF YES TO Q 1 WORKING Thinking about all your current regular jobs, how many hours in total do you work in a typical week? <qb15>

_____ # Hours per week

39 IF YES TO Q 1 WORKING To what extent do all your current regular jobs allow you to (READ ITEM) (CODE RESPONSE)

	Never	Not very often	Some times	Very often	Always
a. Work to correct social and economic inequalities <qb16a>	☐	☐	☐	☐	☐
b Work with other people as part of a team <qb16b>	☐	☐	☐	☐	☐
c Provide direct service to people <qb16c>	☐	☐	☐	☐	☐
d. Make a difference in the community <qb16d>	☐	☐	☐	☐	☐

40 How has your experience in AmeriCorps influenced your career choices? (READ LIST, CODE ALL THAT APPLY)

☐ AmeriCorps affected the career I chose <qb17a>
☐ AmeriCorps gave me exposure to new career options <qb17b>
☐ My priorities in what I wanted in a job changed <qb17c>
If YES to this option How did your priorities change?
☐ I wanted financial security <qb17c_1>
☐ I decided to devote my career to a cause/issue I became passionate about through my activities and experiences in 1999-2000 <qb17c_2>
☐ I realized I could be more effective in making change by doing a different kind of work <qb17c_3>
☐ I decided I wasn't interested in the career I thought I wanted <qb17c_4>
☐ I became more realistic about my career choices <qb17c_5>
☐ My AmeriCorps affiliation gave me connections that helped me get a job <qb17d> ☐
My time in AmeriCorps put me at an advantage when trying to find a job <qb17e>
☐ My AmeriCorps experience had no effect on my career choices <qb17f>
☐ Any other ways your AmeriCorps experience has influenced your career choices? <qb17g>
☐ My AmeriCorps experience affected my skills <qb17h>

PRIME: We are almost done. Now I just need to ask you some background information, like your education.

41. What is the highest level of education you expect to complete? (READ LIST IF NECESSARY. CODE ONE.) <qc3>

- ☐ Some high school, no diploma
- ☐ High school diploma
- ☐ High school equivalency, or GED
- ☐ Vocational, trade, or business school after high school, not for a BA or MBA
- ☐ Two years or less of college
- ☐ Two or more years of college, including 2-year degree
- ☐ College degree, 4- or 5-year degree
- ☐ Master's degree or equivalent
- ☐ Ph.D., M.D., or other professional degree

42. What is the highest degree, or level of school, you have completed? (READ LIST IF NECESSARY. CODE ONE.) <qc2>

- ☐ 8th grade or less
- ☐ Some high school, no diploma
- ☐ High school diploma
- ☐ High school equivalency, or GED
- ☐ Vocational, trade, or business school after high school (not for a BA for MBA)
- ☐ Some college credit, but less than 1 year
- ☐ One or more years of college, no degree
- ☐ Associate degree
- ☐ Bachelor's degree ☐
  Master's degree
- ☐ Ph.D., M.D., or other professional degree

43. Have you used your AmeriCorps education award? <qc4>

- ☐ Yes (GO TO Q45)
- ☐ No, I did not use it
- ☐ No, I did not qualify for an AmeriCorps education award (GO TO Q47)

43a IF NO: Do you expect that you will use your AmeriCorps education award in the next two years? <q4a>

- ☐ Yes
- ☐ No

43b. IF NO: Why haven't you used the AmeriCorps Education award? (CODE ALL THAT APPLY)

- ☐ I forgot about it <qc4bc01>
- ☐ I finished my education or paid for my education before I earned the award <qc4bc02>
- ☐ I had planned to, but now I'm out of school <qc4bc03>
- ☐ I decided to work instead <qc4bc04>
- ☐ I decided to care for my family/children <qc4bc05>
- ☐ I didn't have the time <qc4bc06>
- ☐ Not interested in using the award <qc4bc07>
- ☐ I didn't need it <qc4bc08>
- ☐ Award amount was not sufficient <qc4bc09>
- ☐ Information on the award was inadequate <qc4bc10>
- ☐ Never received a voucher from CNCS <qc4bc11>
- ☐ My educational institution wouldn't accept it <qc4bc12>
- ☐ My educational institution didn't know what it was <qc4bc13>
- ☐ I didn't want to use the award for school expenses <qc4bc14> ☐ Too many rules <qc4bc15>
- ☐ I didn't want to pay the taxes <qc4bc16>
- ☐ Other (SPECIFY) <qc4bc95>

44. How did you use your education award? (CODE ALL THAT APPLY)

- ☐ Loan repayment <qc5_1>
- ☐ Tuition <qc5_2>
- ☐ Other educational costs (e.g. books, supplies) <qc5_3> ☐ Some other way <qc5_4>
- ☐ Study abroad <qc5_5>
- ☐ Living expenses <qc5_6>
- ☐ Computer <qc5_7>
- ☐ Transportation <qc5_8>

45. How important was the AmeriCorps education award on your ability to pursue/finish your education/degree? <qc6>

- ☐ Not important
- ☐ Somewhat important
- ☐ Very important

46. Did your AmeriCorps education award affect the type of education institution you attended? <qc7>

- ☐ YES
- ☐ NO (GO TO 47)

46a IF YES: What type of school did you attend because of the AmeriCorps education award? <qc8>

- ☐ Two-year community college
- ☐ Four-year graduate program
- ☐ Professional graduate program (e.g., MBA, JD, etc.)
- ☐ Four-year undergraduate program
- ☐ Technical school

47 How has your AmeriCorps experience shaped your education choices? (READ LIST CODE ALL THAT APPLY)

☐ AmeriCorps affected the degree/major I chose <qc9_1>

IF YES How did your AmeriCorps experience affect the degree/major you chose? <qc9_1a>
- ☐ Helped pick a career path, opened up my options
- ☐ Made me further my education
- ☐ Made me change my career path or major
- ☐ Gained experience from AmeriCorps
- ☐ Other

☐ AmeriCorps affected the concentration/focus I chose <qc9_2>

IF YES How did your AmeriCorps experience affect the concentration/focus you chose? <qc9_2a>
- ☐ Helped pick a career path, opened up my options
- ☐ Made me further my education
- Made me change my career path or major
- Gained experience from AmeriCorps
- Other

☐ AmeriCorps made me more interested in the topic I pursued in school <qc9_3>
AmeriCorps helped me see the importance of education <qc9_4>
☐ My personal goals for educational attainment increased <qc9_5>
I decided not to pursue further education <qc9_6>
☐ The education award made continuing my education possible <qc9_7>
☐ My AmeriCorps experience had no effect on my education <qc9_8>
☐ Any other ways your AmeriCorps experience has influence your career choices? <qc9_9>

PRIME Now I want you to think back to when you first accomplished some major milestones in your life Please remember the best you can the year

48 IF NOT CURRENTLY IN SCHOOL FULL-TIME IN Q 1 When was the last time you were in school full-time? <qc12>

_____ YEAR

49 When was the first time you were employed full-time? <qc13>

_____ YEAR

50 What is your current marital status? (READ LIST CODE ONE) <qc14>

☐ Single, never married
☐ Married
☐ In a committed long-term relationship
IF YES Have you ever been married? <qc14_1>
- ☐ Yes (GO TO 50a)
- ☐ No

☐ Widowed
☐ Divorced
☐ Separated

50a IF EVER MARRIED When did you first get married? <qc14a>

_____ YEAR

51 Do you have any children? <qc15>

☐ YES
☐ NO (GO TO Q53)

51a IF YES How many children do you have? _____ <qc15a>

51b IF YES What age is your oldest child? _____ <qc15b>

52 How many years have you lived in your present community? <qc16>

☐ Less than 1 year
☐ 1 to 2 years
☐ 3 to 4 years
☐ 5 or more years

53 Do you or anyone else in your household (READ ITEM)?

		Yes	No
a.	Live in public housing or projects <qc17_a>	☐	☐
b	Receive public assistance, welfare, food stamps, or WIC <qc17_b>	☐	☐
	Receive other housing assistance, such as Section 8, housing vouchers, or other subsidies <qc17_c>	☐	

54 What kind of jobs did your parents have growing up? (USE OCCUPATION CODES FROM Q 1)

54a Mother's Occupation <qc18a_1> to <qc18a_28>

55b Father's Occupation <qc18b_1> to <qc18b_28>

55 How often do you attend religious services, excluding weddings and funerals? <qc19>

☐ Never
☐ Rarely
☐ Once or twice a month
☐ Once a week or more

56 How important is religion in your life? <qc20>

☐ Not important
☐ A little important
☐ Pretty important
☐ Very important

57 57a

Which of the following best represents the total annual income in 2005 for you **before taxes** Please include wages, salaries, interest, dividends, social security, and other forms of income (READ LIST CODE ONE) <qc20a>

57b

Which of the following best represents the total annual income in 2006 for your immediate family living in your household **before taxes** Please include wages, salaries, interest, dividends, social security, and other forms of income (READ LIST CODE ONE) <qc20b>

57a **Your own** 2005 income (before taxes)

- Under $5,000
- $5,000 - less than $10,000
- $10,000 - less than $15,000
- $15,000 - less than $20,000
- $20,000 - less than $25,000
- $25,000 - less than $30,000
- $30,000 - less than $40,000
- $40,000 - less than $50,000
- $50,000 - less than $60,000
- $60,000 - less than $70,000
- $70,000 - less than $80,000
- $80,000 - less than $90,000
- $90,000 - less than $100,000
- $100,000 or more

57b **Total for the family** in your household (before taxes)

- Under $5,000
- $5,000 - less than $10,000
- $10,000 - less than $15,000
- $15,000 - less than $20,000
- $20,000 - less than $25,000
- $25,000 - less than $30,000
- $30,000 - less than $40,000
- $40,000 - less than $50,000
- $50,000 - less than $60,000
- $60,000 - less than $70,000
- $70,000 - less than $80,000
- $80,000 - less than $90,000
- $90,000 - less than $100,000
- $100 000 or more

Part II: Ask only if missing from prior waves of the survey

NOTE TO CATI/ INTERVIEWER Questions in this section marked ASK ONLY IF MISSING are asked only if respondents did not answer at baseline 1999 or post-AmeriCorps program supplemental 2003 CATI to flag missing variables

58 ASK ONLY IF MISSING What is your race? Are you (READ LIST MULTIPLE RESPONSES ALLOWED) <because of the small sample size for NCCC, we collapsed the race categories other than white into other_NCCC>

- ☐ American Indian or Alaskan Native <amind_SN>
- ☐ Asian <asian_SN >
- ☐ Black or African American <black_SN >
- ☐ Native Hawaiian or other Pacific Islander <nathi_SN >
- ☐ White <white_SN or white_NCCC>

59 ASK ONLY IF MISSING Are you Hispanic or Latino? <hisp_SN>

- ☐ YES
- ☐ NO

60 ASK ONLY IF MISSING What is your gender? <gender>

Male
Female

61 ASK ONLY IF MISSING What is your date of birth? <dobyearf_tc>

_____/ _____ / 19__ __
Month Day

PRIME The next set of questions asks you about your experiences while growing up, your motivation for inquiring about AmeriCorps, your experiences during AmeriCorps, and your experiences since you left AmeriCorps We'll start with some questions about your youth By "youth," I mean the experiences you had before the age of 18 I will use the terms "youth" and "growing up" interchangeably

62 ASK ONLY IF MISSING Which of these categories indicates the kind of place or places where you spent most of your youth?

	Yes	No
Rural areas <youth_rural>	☐1	☐2
Urban areas <youth_urban>	☐1	☐2
Suburban areas <youth_suburb>	☐1	☐2

63 ASK ONLY IF MISSING Before the age of 18, how many times did you move to a new house or apartment? <moved>

_____ Times

64 ASK ONLY IF MISSING During your youth, what language did you usually speak at home—English or something else? <home_language>

☐ English
☐ English and a different language
☐ A different language

65 ASK ONLY IF MISSING We would like to address information about where you lived during high school Please give me the street address, city, state, zip code, and country for an address at which you lived while you were in high school (PROBE FOR CROSS STREETS IF NECESSARY) This information will be kept confidential <live_hs_ctry>

STREET

CITY

ZIP CODE COUNTRY

66 ASK ONLY IF MISSING Please give me the name, city, state, and country of the high school that you attended at this time <hs_ctry>

HIGH SCHOOL

CITY _____ STATE _____

COUNTRY

67 ASK ONLY IF MISSING Was this high school located in the neighborhood that you were living in at the time? <hs_nh_live>

☐ YES
☐ NO
☐ REFUSED
☐ DONT KNOW

68 ASK ONLY IF MISSING Did you do any of the following things when you were younger?

		Yes	**No**
a.	Saw someone in your family help others <fam_help>	☐1	☐2
b	Personally saw someone you admire (not a family member) helping others <other_help>	☐1	☐2

PRIME Now I'd like to ask you some questions about your primary caretakers and the community in which you lived while you were growing up By primary caretakers, I mean your parents or another person or people who provided you with substantial emotional and/or financial support

69 ASK ONLY IF MISSING During your youth, which primary caretakers contributed most to your upbringing? (CODE ALL THAT APPLY)

- ☐ Mother <pri_mo>
- ☐ Father <pri-fa>
- ☐ Stepmother/father's partner <pri_smo>
- ☐ Stepfather/mother's partner <pri_sfa>
- ☐ Grandmother <pri_grma>
- ☐ Grandfather <pri_grfa>
- ☐ Aunt <pri_aunt>
- ☐ Uncle <pri_unc>
- ☐ Other (SPECIFY AS MANY AS NECESSARY)

70 ASK ONLY IF MISSING Which of the following categories best describe the highest educational level that your (PRIMARY CARETAKER 1) has currently completed? (REPEAT FOR EACH PRIMARY CARETAKER CODED IN Q69) <mom_educ>, <dad_educ>, <smom_educ>, <sdad_educ>, <grma_educ>, <grpa_educ>, <aunt_educ>, <uncl_educ>

- ☐ Less than a high school graduate, diploma, or the equivalent
- High school graduate
- High school diploma or the equivalent, for example, GED
- Some college, no degree
- ☐ Associate's or Bachelor's degree
- Master's degree
- ☐ Ph D , M D , or other professional graduate degree

71 ASK ONLY IF MISSING During your youth, how many people in your neighborhood would you or your family members have felt comfortable (READ ITEM) Would you say no one, some neighbors, many neighbors, or almost all neighbors?

		No one	Some neighbors	Many neighbors	Almost all neighbors
a.	borrowing a cup of milk, sugar, or similar items? <borrow_milk>	1	2	3	4
b	using their phone? <use_phone>	1	2	3	
	4c	asking for a ride or other assistance 1			2
	3 getting somewhere? <ask_ride>	4			
d.	asking for help in an emergency? <help_emerg>	1	2	3	4
e	asking to stay at their house if you were alone? <stay_house>	1	2	3	4

72. ASK ONLY IF MISSING. During your youth, how strongly connected do you believe your family was to (READ ITEM) Would you say not at all connected, somewhat casually connected, or very strongly connected?

		Not at all connected	Somewhat casually connected	Very strongly connected
a.	your neighborhood? <cnct_nhood>	1	2	3
b	colleagues from your parents' or primary caretakers' workplace? <cnct_colleagues>	1	2	3
c	the schools that you and/or your siblings attended? <cnct_sch_sib>	1	2	3
d.	a religious organization? <cnct_rel_org>	1	2	3e
	other organizations or social networks in your community? <cnct_orgs>	1	2	3
f.	your community as a whole? <cnct_comm>	1	2	3

73. ASK ONLY IF MISSING. During your youth, did you or anyone else in your household receive (READ ITEM)?

		Yes	No
a.	Receive public assistance, such as welfare, food stamps, or WIC <hh_rec_welfare>	1	0
b	Live in public housing or projects <hh_live_pub_housing>	1	
	0c	Receive	
other housing assistance, such as Section 8 or housing vouchers <hh_rec_housing_vouch>		1	0

PRIME: Now I'm going to ask you what you were doing **before** you started AmeriCorps. This would be prior to your joining AmeriCorps in 1999.

74. ASK ONLY IF MISSING: In the twelve months before you started AmeriCorps, what were you doing? (CODE ALL THAT APPLY.)

- ☐ Working outside the home <preac_work>
- ☐ Attending school <preac_sch>
- ☐ Taking care of my children at home <preac_child>
- ☐ Looking for a job <preac_jobsearch>
- ☐ Volunteering/voluntary community service <preac_vol>
- ☐ Anything else? (SPECIFY) <preac_else> _____

75. ASK ONLY IF MISSING: Before you started AmeriCorps, had you **ever** participated in voluntary community service or a volunteer activity? <preac_ever_vol>

- ☐ Yes
- ☐ No

PRIME: Now I'd like to ask a question about your reasons for inquiring about AmeriCorps and your alternatives to AmeriCorps.

76. ASK ONLY IF MISSING: What other options did you seriously consider when you inquired about AmeriCorps? (CODE ALL THAT APPLY.)

☐ HIGH SCHOOL/GED
<option_hs>
☐ COLLEGE
<option_college>
☐ VOCATIONAL SCHOOL/JOB TRAINING
<option_train>
☐ GRADUATE OR PROFESSIONAL SCHOOL
<option_gradsch>
☐ JOB IN PRIVATE SECTOR
<option_jobpriv>
☐ JOB IN PUBLIC OR NON-PROFIT SECTOR
<option_jobpub>
☐ MILITARY SERVICE
<option_mil>
☐ OTHER FULL-TIME SERVICE ACTIVITY
<option_ftserv>
☐ TRAVEL
<option_travel>
☐ DID NOT CONSIDER OTHER AVAILABLE OPTIONS0
<option_notcons>
☐ NO OTHER OPTIONS AVAILABLE
<option_noavail>

H: EFAs for Post AmeriCorps Program

Table A.1: FACTOR LOADINGS FOR ROTATION OF FACTORS AT POST-AMERICORPS PROGRAM FOR TREATMENT GROUP – PAF, PROMAX (N=2,228)

Item	Factor Loading			
	1	2	3	4
Strong attachment to community	.50			
Think about political issues that affect comm.	.35			
Aware of community needs	.45	.32		
Feel I have the ability to make a difference	.48			
Make positive diff in comm.	.59			
Participate in comm. orgs	.51			
Vote in elections	-			.46
Keep neighborhood safe	.46			
Keep neighborhood clean	.43			
Help those who are less fortunate	.47			
Participate in comm. meetings	.40			
Join organizations that support issues important to me	.36			
Vote in local elections				.81
Learn about candidates				.83
Keep informed about news				.34
Know about environment		.51		
Know about public health		.70		
Know about literacy problems		.70		
Know about crime		.68		
Know about civic involvement		.63		
Work to correct social and economic inequalities	.36	-		
Working in a job in direct service to people	.32	-		
Understand others ideas before stating my own opinion			.61	
Present my ideas without criticizing others			.69	
Encourage different points of view without worrying about agreement			.57	
Consider all points of view before deciding			.66	
Encourage participation – support right to be heard			.68	
Help find solutions when unexpected problems arise			.55	
Eigenvalues	6.18	2.40	2.11	1.76
% of variance	22.06	8.56	7.53	6.30

Note. Loadings < .32 omitted.

Table A.2: FACTOR LOADINGS FOR ROTATION OF FACTORS AT POST-AMERICORPS PROGRAM FOR COMPARISON GROUP – PAF, PROMAX (N=2,228)

Factor Loadings for Rotation of Factors at Baseline for Comparison Group (n=1,925)

Item	Factor Loading			
	1	2	3	4
Make positive diff in comm.	.62			
Feel I have the ability to make a difference	.52			
Aware of community needs	.49			
Strong attachment to community	.48			
Participate in comm. orgs	.48			
Participate in comm. meetings	.45			
Join organizations that support issues important to me	.39			
Help those who are less fortunate	.36			
Work to correct social and economic inequalities	.35			
Keep neighborhood safe	.35			
Keep neighborhood clean	-			
Working in a job in direct service to people	-			
Encourage participation – support right to be heard		.66		
Consider all points of view before deciding		.65		
Understand others ideas before stating my own opinion		.60		
Present my ideas without criticizing others		.60		
Encourage different points of view without worrying about agreement		.57		
Help find solutions when unexpected problems arise		.54		
Learn about candidates			.75	
Vote in local elections			.75	
Vote in elections			.52	
Think about political issues that affect comm.			.39	
Keep informed about news			.38	
Know about crime				.65
Know about literacy problems				.63
Know about public health				.63
Know about civic involvement				.54
Know about environment				.44
Eigenvalues	5.78	2.39	1.92	1.65
% of variance	20.66	8.54	6.85	5.88

Note. Loadings < .32 omitted.

I: EFAs Wave III (2007)

After these initial EFAs were conducted using the baseline iteration of the data, the third phase of the data (Wave III (2007)) was examined using similar principal analysis factor techniques. Similar to the EFA reported above, the groups were divided into treatment and control groups and factor analyses were run on each respective group to determine if there were any changes in the groups since baseline. While this technique is not as robust for determining the goodness-of-fit of preconceived theoretic constructs as CFA or SEM, it is useful here to determine if the PSM construct is worth examining in more depth using later waves of the data from the study. While the previous EFA reported only the combined-groups analysis, the following analyses will be separated in treatment and comparison tables.

The factor loadings for the treatment group at the third phase of surveys are reported in Table 4.19. Similar to the baseline PAF analysis, the items loaded into similar groups. Here, items associated with the sub-constructs of commitment to public interest, knowledge of community, and attraction to public policymaking all loaded as expected. The first factor included seven of the survey items at the .33 level. There were six items from the original EFA that did not load onto any of the factors in the model. Additionally, none of the indicators cross-loaded onto any other factors above the .33 level. Overall, this factor model explained roughly 44 percent of the variance; however, the first factor accounted for 21 percent of this variance.

Finally, the comparison group (expressed interested in AmeriCorps, but did not join) factor loadings at the third phase of surveys are reported in Table 4.20. While the factor loadings do appear to have changed since baseline, these loadings still grouped around similar sub-constructs. These loadings included participation in/knowledge of community, openness to new ideas, attachment to community, and attraction to public policymaking. Most notably, several items originally found in the commitment to public interest dimension did not load onto any factors in this PAF. None of the items cross-loaded onto any two dimensions. These four factors accounted for roughly 42 percent of the variance among the sample.

Table A.3: FACTOR LOADINGS FOR ROTATION OF FACTORS AT WAVE III (2007) FOR TREATMENT GROUP – PAF, PROMAX (N=1,350)

Item	Factor Loading			
	1	2	3	4
Make positive diff in comm. (PSM 5)	.68			
Participate in comm. orgs (PSM 6)	.43			
Feel I have the ability to make a difference (PSM 4)	.68			
Strong attachment to community (PSM 1)	.65			
Aware of community needs (PSM 3)	.53			
Participate in comm. meetings (PSM 11)	.57			
Help those who are less fortunate (PSM 10)	-			
Keep neighborhood safe (PSM 8)	-			
Keep neighborhood clean (PSM 9)	-			
Join organizations that support issues important to me (PSM 12)	.56			
Work to correct social and economic inequalities (PSM 21)	-			
Think about political issues that affect comm. (PSM 2)				
Working in a job in direct service to people (PSM 22)	-			
Encourage participation – support right to be heard (PSM 27)		.72		
Consider all points of view before deciding (PSM 26)		.65		
Present my ideas without criticizing others (PSM 24)		.67		
Understand others ideas before stating my own opinion (PSM 23)		.65		
Encourage different points of view without worrying about agreement (PSM 25)		.57		
Help find solutions when unexpected problems arise (PSM 28)		.62		
Know about public health (PSM 17)			.69	
Know about literacy problems (PSM 18)			.71	
Know about crime (PSM 19)			.74	
Know about civic involvement (PSM 20)			.65	
Know about environment (PSM 16)			.46	
Learn about candidates (PSM 14)				.73
Vote in local elections (PSM 13)				.65
Vote in elections (PSM 7)				.37
Keep informed about news (PSM 15)				.40
Eigenvalues	5.97	2.72	1.91	1.78
% of variance	21.32	9.72	6.86	6.37

Note. Loadings < .33 omitted.

Table A.4: FACTOR LOADINGS FOR ROTATION OF FACTORS AT WAVE III (2007) FOR COMPARISON GROUP – PAF, PROMAX (N=1,350)

Item	Factor Loading			
	1	2	3	4
Make positive diff in comm. (PSM 5)	.80			
Participate in comm. orgs (PSM 6)	.60			
Feel I have the ability to make a difference (PSM 4)	.60			
Strong attachment to community (PSM 1)	.57			
Aware of community needs (PSM 3)	.44			
Participate in comm. meetings (PSM 11)	.60			
Help those who are less fortunate (PSM 10)	-			
Keep neighborhood safe (PSM 8)	-			
Keep neighborhood clean (PSM 9)	-			
Join organizations that support issues important to me (PSM 12)	.56			
Work to correct social and econ. inequalities (PSM 21)	-			
Think about political issues that affect comm. (PSM 2)	-			
Working in a job in direct service to people (PSM 22)	-			
Encourage participation – support right to be heard (PSM 27)		.74		
Consider all points of view before deciding (PSM 26)		.64		
Present my ideas without criticizing others (PSM 24)		.65		
Understand others ideas before stating my own opinion (PSM 23)		.68		
Encourage different points of view without worrying about agreement (PSM 25)		.61		
Help find solutions when unexpected problems arise (PSM 28)		.50		
Know about public health (PSM 17)			.630	
Know about literacy problems (PSM 18)			.69	
Know about crime (PSM 19)			.69	
Know about civic involvement (PSM 20)			.69	
Know about environment (PSM 16)			.41	
Learn about candidates (PSM 14)				.81
Vote in local elections (PSM 13)				.75
Vote in elections (PSM 7)				.53
Keep informed about news (PSM 15)				.39
Eigenvalues	5.55	2.67	4.84	1.72
% of variance	19.80	9.49	6.57	6.14

Note. Loadings < .33 omitted.

J: Bayesian Estimation of the First Order Model

Table A.5: MAXIMUM LIKELIHOOD AND BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR FIRST ORDER CFA FOR BOTH GROUPS – REDUCED INDICATORS (N=2,228; DF = 294)

Observed Variable	*Latent Construct*	*Comparison*		*Treatment*	
		Bayesian	*ML*	*Bayesian*	*ML*
Make positive diff in comm. (PSM 5)	Comm. to Publ. Int.	1.188	1.156	1.187	1.213
Participate in comm. orgs (PSM 6)	Comm. to Publ. Int.	.386	.398	.383	.369
Feel I have the ability to make a difference (PSM 4)	Comm. to Publ. Int.	.877	.851	.877	.907
Strong attachment to community (PSM 1)	Comm. to Publ. Int.	1.057	1.055	1.055	1.055
Aware of community needs (PSM 3)	Comm. to Publ. Int.	-	-	-	-
Encourage participation – support right to be heard (PSM 27)	Open. to New Ideas	1.052	1.025	1.053	1.080
Consider all points of view before deciding (PSM 26)	Open. to New Ideas	1.093	1.065	1.093	1.121
Present my ideas without criticizing others (PSM 24)	Open. to New Ideas	1.070	1.043	1.070	1.096
Understand others ideas before stating my own opinion (PSM 23)	Open. to New Ideas	.997	.997	.997	.997
Encourage different points of view without worrying about agreement (PSM 25)	Open. to New Ideas	1.105	1.064	1.106	1.125
Help find solutions when unexpected problems arise (PSM 28)	Open. to New Ideas	-	-	-	-
Know about public health (PSM 17)	Know. of Comm.	.988	.996	.990	.984
Know about literacy problems (PSM 18)	Know. of Comm.	1.073	1.146	1.073	1.021
Know about crime (PSM 19)	Know. of Comm.	.883	.916	.883	.861
Know about civic involvement (PSM 20)	Know. of Comm.	-	-	-	-
Know about environment (PSM 16)	Know. of	.719	.716	.719	.724

Learn about candidates (PSM 14)	Comm. Att. to Pub. Pol.	3.579	3.208	3.581	3.837
Vote in local elections (PSM 13)	Att. to Pub. Pol.	4.281	4.089	4.280	4.427
Vote in elections (PSM 7)	Att. to Pub. Pol.	-	-	-	-

Bayesian Posterior Predictive p: .50

Both skewness and kurtosis are close to zero on nearly all of the indicators, suggesting they are normally distributed. Similarly, when comparing parameter estimates between the groups, they appear to be very similar. Since this analysis was conducted at using the baseline phase of the survey data, there appears to be little differences among the groups.

In Amos, Bayesian estimates are not generated on a structural diagram – rather, they are reported in tables. The ML estimates for both groups at baseline are reported in Figures 4.4 and 4.5. Below, the Bayesian estimates, standard error and standard deviations are reported for the first order factor analysis. Table A.2 displays results from the comparison group. The unstandardized mean is reported, which are analogous to regression weights – i.e. the regression weight for Commitment to Public Interest on "Make a Positive Difference in My Community" is 1.188. The standard deviation of the probability distribution (analogous to standard error in frequentist analyses) is also reported.

Similarly, Table A.3 reports the Bayesian parameter estimates for the first order CFA for the Treatment group at baseline.

Table A.6: BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR FIRST ORDER CFA FOR COMPARISON GROUP – REDUCED INDICATORS (N=1,925; DF = 294)

Observed Variable	*Latent Construct*	*Mean (Un.)*	*SE*	*S.D.*
Make positive diff in comm. (PSM 5)	Comm. to Publ. Int.	1.188	.001	.036
Participate in comm. orgs (PSM 6)	Comm. to Publ. Int.	.384	.000	.019
Feel I have the ability to make a difference (PSM 4)	Comm. to Publ. Int.	.877	.000	.028
Strong attachment to community (PSM 1)	Comm. to Publ. Int.	1.057	.000	.027
Aware of community needs (PSM 3)	Comm. to Publ. Int.	-	-	-
Encourage participation – support right to be heard (PSM 27)	Open. to New Ideas	1.052	.000	.028
Consider all points of view before deciding (PSM 26)	Open. to New Ideas	1.093	.000	.032
Present my ideas without criticizing others (PSM 24)	Open. to New Ideas	1.070	.000	.024
Understand others ideas before stating my own opinion (PSM 23)	Open. to New Ideas	.997	.000	.024
Encourage different points of view without worrying about agreement (PSM 25)	Open. to New Ideas	1.105	.001	.035
Help find solutions when unexpected problems arise (PSM 28)	Open. to New Ideas	-	-	-
Know about public health (PSM 17)	Know. of Comm.	.988	.001	.029
Know about literacy problems (PSM 18)	Know. of Comm.	1.073	.001	.030
Know about crime (PSM 19)	Know. of Comm.	.883	.000	.026
Know about civic involvement (PSM 20)	Know. of Comm.	-	-	-
Know about environment (PSM 16)	Know. of Comm.	.719	.00	.026
Learn about candidates (PSM 14)	Att. to Pub. Pol.	3.579	.002	.116
Vote in local elections (PSM 13)	Att. to Pub. Pol.	4.281	.002	.132
Vote in elections (PSM 7)	Att. to Pub. Pol.	-	-	-

Table A.7: BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR FIRST ORDER CFA FOR TREATMENT GROUP – REDUCED INDICATORS

Observed Variable	*Latent Construct*	*Mean (Un.)*	*SE*	*S.D.*
Make positive diff in comm. (PSM 5)	Comm. to Publ. Int.	1.187	.001	.036
Participate in comm. orgs (PSM 6)	Comm. to Publ. Int.	.383	.000	.019
Feel I have the ability to make a difference (PSM 4)	Comm. to Publ. Int.	.877	.001	.028
Strong attachment to community (PSM 1)	Comm. to Publ. Int.	1.055	.001	-
Aware of community needs (PSM 3)	Comm. to Publ. Int.	-	-	-
Encourage participation – support right to be heard (PSM 27)	Open. to New Ideas	1.053	.000	.027
Consider all points of view before deciding (PSM 26)	Open. to New Ideas	1.093	.001	.031
Present my ideas without criticizing others (PSM 24)	Open. to New Ideas	1.070	.001	.032
Understand others ideas before stating my own opinion (PSM 23)	Open. to New Ideas	.997	.001	-
Encourage different points of view without worrying about agreement (PSM 25)	Open. to New Ideas	1.106	.001	.034
Help find solutions when unexpected problems arise (PSM 28)	Open. to New Ideas	-	-	-
Know about public health (PSM 17)	Know. of Comm.	.990	.990	.029
Know about literacy problems (PSM 18)	Know. of Comm.	1.074	.000	.030
Know about crime (PSM 19)	Know. of Comm.			
Know about civic involvement (PSM 20)	Know. of Comm.	-	-	-
Know about environment (PSM 16)	Know. of Comm.	.719	.001	.034
Learn about candidates (PSM 14)	Att. to Pub. Pol.	3.581	.002	.116
Vote in local elections (PSM 13)	Att. to Pub. Pol.	4.280	.002	.134
Vote in elections (PSM 7)	Att. to Pub. Pol.	-	-	-

(N=2,228; DF = 294)

Posterior Predictive p: .50
Note: SE = Standard Error; C.R. = Critical Ratio; C.S. = Convergence Statistic

Next, factor intercorrelatoins are examined. In Table A.4, the unstandardized Bayesian intercorrelations are reported. These demonstrate covariances among the latent factors and help to provide an indication of fit of the model. Additional analysis of standardized covariance matrices reveals high correlation among the latent variables.

Table A.8: UNSTANDARDIZED FACTOR INTERCORRELATIONS FOR THE CFA MODELS FOR PARTICIPATION IN AMERICORPS (TREATMENT) AND NON-PARTICIPANTS (COMPARISON) AT BASELINE

Factor	1	2	3	4
Participated in AmeriCorps (Comparison)				
1. Commitment to the Public Interest	1	-	-	-
2. Openness to New Ideas/Democratic Citizenship	.079	1	-	-
3. Knowledge of Community	.172	.121	1	-
4. Attraction to Public Policymaking	.045	.026	.068	1
Did Not Participate in AmeriCorps (Treatment)				
1. Commitment to the Public Interest	1	-	-	-
2. Openness to New Ideas/Democratic Citizenship	.079	1	-	-
3. Knowledge of Community	.172	.121	1	-
4. Attraction to Public Policymaking	.045	.026	.068	1

K: Bayesian Estimation of the Second Order Model

Bayesian estimates for the same order CFA are presented in Table A.5. The first table reports the regression weights (note that these are the unstandardized estimates, not the standardized estimates reported in Figure 4.6), the standard error, and the standard deviation of the each indicator for the comparison group at baseline.

Table A.6 reports the Bayesian parameter estimates for the second order CFA for the Treatment group at baseline. Notice that several of the items did not load into the structural equation model and were omitted from the analysis.

Table A.9: BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR SECOND ORDER CFA FOR COMPARISON GROUP – REDUCED INDICATORS (N=1,925; DF = 294)

Observed Variable	*Latent Construct*	*Mean (Un.)*	*SE*	*S.D.*
Make positive diff in comm. (PSM 5)	Comm. to Publ. Int.	1.166	.002	.051
Participate in comm. orgs (PSM 6)	Comm. to Publ. Int.	.402	.001	.028
Feel I have the ability to make a difference (PSM 4)	Comm. to Publ. Int.	.860	.002	.042
Strong attachment to community (PSM 1)	Comm. to Publ. Int.	1.054	.001	.037
Aware of community needs (PSM 3)	Comm. to Publ. Int.	-	-	-
Encourage participation – support right to be heard (PSM 27)	Open. to New Ideas	1.025	.002	.040
Consider all points of view before deciding (PSM 26)	Open. to New Ideas	1.065	.002	.044
Present my ideas without criticizing others (PSM 24)	Open. to New Ideas	1.039	.002	.051
Understand others ideas before stating my own opinion (PSM 23)	Open. to New Ideas	1.000	.001	.033
Encourage different points of view without worrying about agreement (PSM 25)	Open. to New Ideas	1.063	.002	.051
Help find solutions when unexpected problems arise (PSM 28)	Open. to New Ideas	-	-	-
Know about public health (PSM 17)	Know. of Comm.	1.001	.002	.047
Know about literacy problems (PSM 18)	Know. of Comm.	1.151	.002	.051
Know about crime (PSM 19)	Know. of Comm.	.919	.002	.043
Know about civic involvement (PSM 20)	Know. of Comm.	-	-	-

Table A.9: BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR SECOND ORDER CFA FOR COMPARISON GROUP – REDUCED INDICATORS (N=1,925; DF = 294) (CONTINUED)

Know about environment (PSM 16)	Know. of Comm.	.722	.001	.042
Learn about candidates (PSM 14)	Att. to Pub. Pol.	3.217	.004	.098
Vote in local elections (PSM 13)	Att. to Pub. Pol.	4.090	.007	.181
Vote in elections (PSM 7)	Att. to Pub. Pol.	-	-	-
Commitment to Public Interest (CPI)	PSM	1.502	.004	.098
Openness to New Ideas (ONI)	PSM	-	-	-
Knowledge of Community (KOC)	PSM	2.321	.009	.201
Attraction to Public Policymaking (APP)	PSM	.582	.002	.057

Table A.10: BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR SECOND ORDER CFA FOR TREATMENT GROUP – REDUCED INDICATORS (N=2,228; DF = 294)

Observed Variable	*Latent Construct*	*Mean (Un.)*	*SE*	*S.D.*
Make positive diff in comm. (PSM 5)	Comm. to Publ. Int.	1.197	.002	.046
Participate in comm. orgs (PSM 6)	Comm. to Publ. Int.	.367	.001	.026
Feel I have the ability to make a difference (PSM 4)	Comm. to Publ. Int.	.896	.002	.037
Strong attachment to community (PSM 1)	Comm. to Publ. Int.	-	-	-
Aware of community needs (PSM 3)	Comm. to Publ. Int.	-	-	-
Encourage participation – support right to be heard (PSM 27)	Open. to New Ideas	1.089	.001	.042
Consider all points of view before deciding (PSM 26)	Open. to New Ideas	1.132	.002	.043
Present my ideas without criticizing others (PSM 24)	Open. to New Ideas	1.105	.00	.042
Understand others ideas before stating my own opinion (PSM 23)	Open. to New Ideas	-	-	-
Encourage different points of view without worrying about agreement (PSM 25)	Open. to New Ideas	1.135	.002	.0047
Help find solutions when unexpected problems arise (PSM 28)	Open. to New Ideas	-	-	-
Know about public health (PSM 17)	Know. of Comm.	.985	.002	.038
Know about literacy problems (PSM 18)	Know. of Comm.	1.020	.002	.037
Know about crime (PSM 19)	Know. of Comm.	.864	.001	.033
Know about civic involvement (PSM 20)	Know. of Comm.	-	-	-
Know about environment (PSM 16)	Know. of Comm.	.726	.002	.034
Learn about candidates (PSM 14)	Att. to Pub. Pol.	3.857	.009	.175

Table A.10: BAYESIAN ESTIMATION: REGRESSION WEIGHTS AT BASELINE FOR SECOND ORDER CFA FOR TREATMENT GROUP – REDUCED INDICATORS (N=2,228; DF = 294) (CONTINUED)

Vote in local elections (PSM 13)	Att. to Pub. Pol.	4.442	.009	.199
Vote in elections (PSM 7)	Att. to Pub. Pol.	-	-	-
Commitment to Public Interest (CPI)	PSM	-	-	-
Openness to New Ideas (ONI)	PSM	-	-	-
Knowledge of Community (KOC)	PSM	2.209	.005	.176
Attraction to Public Policymaking (APP)	PSM	.557	.002	.055

Posterior Predictive p: .50

REFERENCES

(2006). AmeriCorps Fact Sheet. C. f. N. a. C. Service: 2.

(2006). "Our Mission and Guiding Principles." Retrieved January 29, 2009, from http://www.nationalservice.org/about/role_impact/mission.asp.

(2008). Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni. Washington, D.C., Corporation for National and Community Service, Office of Research and Policy Development.

(2011). Labor Force Statistics from the Current Population Survey. B. o. L. Statistics. Washington, D.C.

Allison, G. T. (1984). Public and Private Management: Are They Fundamentally Alike in All Unimportant Respects? Classics of Public Administration. J. M. Shafritz and A. C. Hyde. Pacific Grove, California, Brooks/Cole Publishing Company: 510-529.

Alonso, P. and G. B. Lewis (2001). "Public Service Motivation and Job Performance: Evidence from the Federal Sector." American Review of Public Administration **31**(4): 363-380.

Alter, J. (2009). An Army of Changemakers. Newsweek. **Online**.

Alter, J. (2009). Don't Muffle the Call to Serve; From FDR to Bill Clinton's AmeriCorps, leadership in service has always come from the president. Newsweek. **152:** 48.

Anderson, E. (2011). "Amos - Latent Growth Curve Modeling." Division of Statistics and Scientific Computation Retrieved February 23, 2011, from http://ssc.utexas.edu/software/faqs/amos#Amos_4.

Anonymous. (2010). "Volunteering of Women." Volunteering in America Retrieved May 3, 2011, 2010.

Antonsen, M. and T. B. Jørgensen (1997). "The 'Publicness' of Public Organizations." Public Administration **75**(2): 337-357.

Arbuckle, J. L. (2010). IBM SPSS Amos 19 User's Guide. Crawfordville, FL, Amos Development Corporation: 654.

Aronson, E. and J. Mills (1959). "The Effect of Severity of Initiation on Liking for a Group." The Journal of Abnormal and Social Psychology **59**(2): 5.

Arrow, K. J. (1951). Social choice and individual values. New York
London, Wiley ;Chapman & Hall.

Baldwin, J. N. (1987). "Public versus Private: Not That Different, Not That consequential." Public Personnel Management **16**(2): 181.

Barber, B. R. (1984). Strong democracy : participatory politics for a new age. Berkeley, University of California Press.

Barzelay, M. (2001). The new public management : improving research and policy dialogue. BerkeleyNew York, University of California Press : Russell Sage Foundation.

Behn, R. D. (1995). "The Big Questions of Public Management." Public Administration Review **55**(4): 313-324.

Bolton, P., M. Dewatripont, et al. (2005). Contract theory. Cambridge, Mass., MIT Press.

Boyne, G. (2002). "Public and Private Management: What's the Difference?" Journal of Management Studies **39**: 97-122.

Boyne, G. A. (2002). "Public and Private Management: What's the Difference?" Journal of Management Studies **39**(1): 97-122.

Bozeman, B. and S. Bretschneider (1994). "The "Publicness Puzzle" in Organization Theory: A Test of Alternative Explanations of Differences between Public and Private Organizations." Journal of Public Administration Research and Theory **4**(2): 197-224.

Brewer, G. A. (2003). "Building Social Capital: Civic Attitudes and Behavior of Public Servants." Journal of Public Administration Research and Theory **13**(1): 5-26.

Brewer, G. A. (2009). The Possibility of an Ethical Dimension of Public Service Motivation. International Public Service Motivation Research Conference. Bloomington, IN: 14.

Brewer, G. A. and S. C. Selden (1998). "Whistle Blowers in the Federal Civil Service: New Evidence of the Public Service Ethic." Journal of Public Administration Research and Theory: J-PART **8**(3): 413-440.

Brewer, G. A., S. C. Selden, et al. (2000). "Individual Conceptions of Public Service Motivation." Public Administration Review **60**(3): 254-264.

Bright, L. (2005). "Public Employees With High Levels of Public Service Motivation: Who Are They, Where Are They, and What do They Want?" Review of Public Personnel Administration **25**(2): 138-154.

Bright, L. (2007). "Does Person-Organization Fit Mediate the Relationship Between Public Service Motivation and the Job Performance of Public Employees?" Review of Public Personnel Administration **27**(4): 361-379.

Brower, R. and F. S. Berry (2006). "On the Success of AmeriCorps Programs in Strengthening Communities: Evidence from Florida." International Journal of Public Administration **29**: 849-871.

Brown, T. A. (2006). Confirmatory factor analysis for applied research. New York, Guilford Press.

Buchanan, B., II (1974). "Government Managers, Business Executives, and Organizational Commitment." Public Administration Review **34**(4): 339-347.

Buchanan, B., II (1975). "Red-Tape and the Service Ethic: Some Unexpected Differences Between Public and Private Managers." Administration Society **6**(4): 423-444.

Buckley, W. F. (1990). Gratitude : reflections on what we owe to our country. New York, Random House.

Byrne, B. M. (2001). Structural equation modeling with AMOS : basic concepts, applications, and programming. Mahwah, N.J., Lawrence Erlbaum Associates.

Byrne, B. M. (2010). Structural equation modeling with AMOS : basic concepts, applications, and programming. New York, Routledge.

Cable, D. M. and C. K. Parsons (2001). "Socialization Tactics and Person-Organization Fit." Personnel Psychology **54**(1): 1-23.

Camilleri, E. (2006). "Towards Developing an Organisational Commitment - Public Service Motivation Model for the Maltese Public Service Employees." Public Policy and Administration **21**(1): 63-83.

Camilleri, E. (2007). "Antecedents affecting public service motivation." Personnel Review **36**: 356-377.

Castaing, S. (2006). "The Effects of Psychological Contract Fulfillment and Public Service Motivation on Organizational Commitment in the French Civil Service." Public Policy and Administration **21**(1): 84-98.

Cerase, F. P. and D. Farinella (2006). Explorations in Public Servie Motivation: The case of the Italian Revenue Agency. EGPA Conference. Milan.

Cherniss, C. and J. S. Kane (1987). "Public Sector Professionals: Job Characteristics, Satisfaction, and Aspirations for Intrinsic Fulfillment through Work." Human Relations **40**(3): 125-136.

Clary, E. G. and J. Miller (1986). "Socialization and Situational Influences on Sustained Altruism." Child Development **57**(6): 1358-1369.

Clerkin, R. M., S. R. Paynter, et al. (2008). "Public Service Motivation in Undergraduate Giving and Volunteering Decisions." American Review of Public Administration **XX**(Dec.): 24.

Coleman, J. S. (1990). Foundations of social theory. Cambridge, Mass., Belknap Press of Harvard University Press.

Corporation for National and Community Service, O. o. R. a. P. D. (2007). AmeriCorps: Changing Lives, Changing America. Washington, D.C.

Coursey, D. and J. L. Brudney (2009). Does Volunteering Domain Matter for PSM? A Test of Functional Theory and Approach. International Public Service Motivation Research Conference. Bloomington, IN**:** 28.

Coursey, D. H. and S. K. Pandey (2007). "Public Service Motivation Measurement: Testing an Abridged Version of Perry's Proposed Scale." Administration & Society **39**(5): 547-568.

Coursey, D. H., J. L. Perry, et al. (2008). "Psychometric Verification of Perry's Public Service Motivation Instrument: Results for Volunteer Exemplars." Review of Public Personnel Administration **28**(1): 79-90.

Crewson, P. E. (1997). "Public-Service Motivation: Building Empirical Evidence of Incidence and Effect." Journal of Public Administration Research and Theory: J-PART **7**(4): 499-518.

Crozier, M. (1964). The bureaucratic phenomenon. Chicago], University of Chicago Press.

Dahl, R. A. and C. E. Lindblom (1953). Politics, economics, and welfare: planning and politico-economic systems resolved into basic social processes. New York, Harper.

DeHart-Davis, L., J. Marlowe, et al. (2006). "Gender Dimensions of Public Service Motivation." Public Administration Review **66**(6): 873-887.

deLeon, L. and R. B. Denhardt (2000). "The Political Theory of Reinvention." Public Administration Review **60**(2): 89-97.

DeLeon, L. and R. B. Denhardt (2000). "The political theory of reinvention." Public Administration Review: 89-97.

deLeon, P. (1997). Democracy and the policy sciences. Albany, State University of New York Press.

deLeon, P. and L. deLeon (2002). "What Ever Happened to Policy Implementation? An Alternative Approach." Journal of Public Administration Research & Theory (Transaction) **12**(4): 467.

Denhardt, J. V. and R. B. Denhardt (2007). The new public service : serving, not steering. Armonk, N.Y., M.E. Sharpe.

Denhardt, R. B. (2007). Theories of public organization. Belmont, CA, Thomson Higher Education.

DeVellis, R. F. (2003). Scale development : theory and applications. Thousand Oaks, Calif., Sage Publications, Inc.

Dionne, E. J. and K. M. Drogosz (2003). "The promise of national service: A (very) brief history of an idea." National Civic Review **92**(4): 21-26.

Dionne, E. J., K. M. Drogosz, et al. (2003). United we serve : national service and the future of citizenship. Washington, D.C., Brookings Institution Press.

Downs, A. (1967). Inside bureaucracy. Boston, Little.
Editorial (2009). The Moment for National Service. The New York Times. New York**:** 1.

Enicleriko, R. (2006). U.S. national debate topic 2006-2007 : national service. Bronx, NY, H.W. Wilson.

Ferlie, E. (1996). The new public management in action. Oxford ; New York, Oxford University Press.

Festinger, L., H. W. Riecken, et al. (1956). When prophecy fails. Minneapolis,, University of Minnesota Press.

Fischer, F. (2003). Reframing public policy : discursive politics and deliberative practices. Oxford ; New York, Oxford University Press.

Fleeson, W. (2001). "Toward a structure-and process-integrated view of personality: Traits as density distributions of states." Journal of Personality and Social Psychology **80**(6): 1011-1027.

Frederickson, G. H. (1971). Toward a New Public Administration. Toward a New Public Administration; the Minnowbrook perspective. F. Marini. Scranton,, Chandler Pub. Co.: xxv, 372 p.

Frumkin, P. and J. Jastrzab (2010). Serving Country and Community: Who benefits from national service? Cambridge, Mass., Harvard University Press.

Frumkin, P., J. Jastrzab, et al. (2009). "Inside National Service: AmeriCorps' Impact on Participants." Journal of Policy Analysis and Management **28**(3): 23.

Gabris, G. T. and G. Simo (1995). "Public Sector Motivation as an Independent Variable Affecting Career Decisions." Public Personnel Management **24**(1).

GAO (2009). Older Workers: Enhanced Communication among Federal Agencies Could Improve Strategies for Hiring and Retaining Experienced Workers. U. S. G. A. Office, U.S. Government Accountability Office.

Gold, K. A. (1982). "Managing for Success: A Comparison of the Private and Public Sectors." Public Administration Review **42**(6): 568-575.

Gore, A., National Performance Review (U.S.), et al. (1997). Businesslike government : lessons learned from America's best companies. [Washington, D.C.?] [Supt. of Docs., U.S. G.P.O., distributor,, National Performance Review :.

Greenaway, J. (1995). "Having the Bun and the Halfpenny: Can Old Public Service Ethics Survive In the New Whitehall?" Public Administration **73**(3): 357-374.

Guion, R. M. and F. J. Landy (1972). "The Meaning of Work and Motivation to Work." Organizational Behavior and Human Performance **7**: 308-339.

Haas, J. E., R. H. Hall, et al. (1966). Toward an Empirically Derived Taxonomy of Organizations. Studies of Behavior in Organizations. R. V. Bowers. Athens, University of Georgia Press.

Hajer, M. A. and H. Wagenaar (2003). Deliberative policy analysis : understanding governance in the network society. Cambridge, UK ; New York, USA, Cambridge University Press.

Hall, D. T. and E. E. Lawler (1970). "Job Characteristics and Pressures and the Organizational Integration of Professionals." Administrative Science Quarterly **15**(3): 271-281.

Hancock, G. R. (2004). *Experimental, Quasi-Experimental, and Nonexperimental Design and Analysis with Latent Variables. The Sage handbook of quantitative methodology for the social sciences*. D. Kaplan, & Sage Publications inc. . Thousand Oaks, Calif., Sage.

Haque, M. S. (2001). "The Diminishing Publicness of Public Service under the Current Mode of Governance." Public Administration Review **61**(1): 65-82.

Hattenhauer, H. (1994). Europäische Rechtsgeschichte. Heidelberg, C.F. Müller.

Hood, C. (1991). "A Public Management for All Seasons?" Public Administration **69**(1): 3-19.

Houston, D. J. (2000). "Public-Service Motivation: A Multivariate Test." J Public Adm Res Theory **10**(4): 713-728.

Houston, D. J. (2006). ""Walking the Walk" of Public Service Motivation: Public Employees and Charitable Gifts of Time, Blood, and Money." Journal of Public Administration Research and Theory: J-PART **16**(1): 67-86.

Hu, L.-t. and P. M. Bentler (1999). "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives." Structural Equation Modeling: A Multidisciplinary Journal **6**(1): 1 - 55.

Jost, J. T., M. R. Banaji, et al. (2004). "A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo." Political Psychology **25**(6): 881-919.

Jurkiewicz, C. L. and R. G. Brown (1998). "Generational Comparisons of Public Employee Motivation." Review of Public Personnel Administration **18**(4): 18-37.

Karl, K. A. and B. Peat (2004). "A match made in heaven or a square peg in a round hole? How public service educators can help students assess person-environment fit." Journal of Public Affairs Education **10**(4): 265-78.

Kim, S. (2005). "Individual-level factors and organizational performance in government organizations." Journal of Public Administration Research and Theory: J-PART **15**(2): 245-61.

Kim, S. (2006). "Public Service Motivation and Organizational Citizenship Behavior in Korea." International Journal of Manpower **27**(8): 19.

Kim, S. and W. Vandenabeele (2010). "A Strategy for Building Public Service Motivation Research Internationally." Public Administration Review **70**(5): 701-709.

Kingdon, J. W. (2003). Agendas, alternatives, and public policies. New York, Longman.

Klem, L. (2000). Structural equation modeling. Reading and understanding MORE multivariate statistics., Washington, DC, US: American Psychological Association: 227-260.

Kline, R. B. (1998). Principles and practice of structural equation modeling. New York, Guilford Press.

Koehler, M. and H. G. Rainey (2008). Interdisciplinary Foundations of Public Service Motivation. Motivation in Public Management: The Call of Public Service. J. L. Perry and A. Hondeghem. Oxford, Oxford University Press: 33-55.

Konig, K. (1997). "Zur Kritik eines neuen offentlich Verwaltung [Towards a Criticism of a New Public Management]." Speyer: Forschungsinstitute fur offentlich Verwaltung.

Kyburg, H. E. and H. E. Smokler (1964). Studies in subjective probability. New York,, Wiley.

Laffont, J.-J. (2003). The principal agent model : the economic theory of incentives. Cheltenham, UK ; Northhampton, MA, USA, E. Elgar Pub.

Laffont, J.-J. and D. Martimort (2002). The theory of incentives : the principal-agent model. Princeton, N.J., Princeton University Press.

Landy, F. J. and R. M. Guion (1970). "Development of Scales for the Measurement of Work Motivation." Organizational Behavior and Human Performance **5**: 93-103.

Leech, N. L., K. C. Barrett, et al. (2008). SPSS for intermediate statistics : use and interpretation. New York, L. Erlbaum Associates.

Leisink, P. and B. Steijn (2009). "Public service motivation and job performance of public sector employees in the Netherlands." International Review of Administrative Sciences **75**(1): 35-52.

Lenkowsky, L. and J. L. Perry (2000). "Reinventing Government: The Case of National Service." Public Administration Review **60**(4): 10.

Lewis, D. E. (2010). "Measurement and Public Service Motivation: New Insights, Old Questions." International Public Management Journal **13**(1): 46 - 55.

Lewis, G. B. and S. A. Frank (2002). "Who Wants to Work for the Government?" Public Administration Review **62**(4): 395-404.

Light, P. C. (1999). The new public service. Washington, D.C., Brookings Institution Press.

Lindblom, C. E. (1977). Politics and markets: the world's political economic systems. New York, Basic Books.

Macedo, S. (2005). Democracy at risk: how political choices undermine citizen participation and what we can do about it. Washington, D.C., Brookings Institution Press.

McKelvey, B. (1982). Organizational systematics--taxonomy, evolution, classification. Berkeley, University of California Press.

Mortimer, J. T. and J. Lorence (1979). "Occupational Experience and the Self-Concept: A Longitudinal Study." Social Psychology Quarterly **42**(4): 307-323.

Mosher, F. C. (1982). Democracy and the public service. New York, Oxford University Press.

Mosher, F. C. and R. J. Stillman (1982). Professions in government. New Brunswick, N.J., Transaction Books.

Moynihan, D. P. and S. K. Pandey (2007). "The Role of Organizations in Fostering Public Service Motivation." Public Administration Review **67**(1): 40-53.

Murray, M. A. (1975). "Comparing Public and Private Management: An Exploratory Essay." Public Administration Review **35**(4): 364-371.

Naff, K. C. and J. Crum (1999). "Working for America: Does Public Service Motivation Make a Difference?" Review of Public Personnel Administration **19**(4): 5-16.

O'Toole, L. J. (2000). "Research on Policy Implementation: Assessment and Prospects." Journal of Public Administration Research and Theory **10**(2): 263-288.

Okun, M. A. and A. Schultz (2003). "Age and motives for volunteering: testing hypotheses derived from socioemotional selectivity theory." Psychology and aging **18**(2): 231-9.

Osborne, D. and T. Gaebler (1993). Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector. New York, Plume.

Ostrom, V. (2007). Some Developments in the Study of Market Choice, Public Choice, and Institutional Choice. Handbook of Public Administration. J. Rabin, W. B. Hildreth and G. J. Miller. Boca Raton, FL, CRC Press: 1101-1122.

Ostrom, V. and E. Ostrom (1971). "Public Choice: A Different Approach to the Study of Public Administration." Public Administration Review **31**(2): 14.

Pandey, S. K. and E. C. Stayzk (2008). Antecedents and Correlates of Public Service Motivation. Motivation in Public Management: The Call of Public Service. J. L. Perry and A. Hondeghem. Oxford, Oxford University Press: 101-117.

Park, S. M. and J. Word (2009). Motivated to Serve: Constructs and Consequences of Work Motivation for Public and Nonprofit Managers. International Public Service Motivation Research Conference. Bloomington, IN: 46.

Patchen, M. (1965). Some questionnaire measures of employee motivation and morale; a report on their reliability and validity. [Ann Arbor], Survey Research Center, Institute for Social Research.

Perry, J. L. (1996). "Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity." Journal of Public Administration Research and Theory: J-PART **6**(1): 5-22.

Perry, J. L. (1997). "Antecedents of Public Service Motivation." Journal of Public Administration Research and Theory: J-PART **7**(2): 181-197.

Perry, J. L. (2000). "Bringing Society In: Toward a Theory of Public-Service Motivation." Journal of Public Administration Research and Theory: J-PART **10**(2): 471-488.

Perry, J. L. (2004). "Civic Service in North America." Nonprofit & Voluntary Sector Quarterly **33**(4): 167S-183S.

Perry, J. L. (2004). "Civic Service in North America." Nonprofit & Voluntary Sector Quarterly **33**(4_suppl): 167S-183.

Perry, J. L., J. L. Brudney, et al. (2008). "What Drives Morally Committed Citizens? A Study of the Antecedents of Public Service Motivation." Public Administration Review **68**(3): 445-458.

Perry, J. L. and A. Hondeghem (2008). "Building Theory and Empirical Evidence about Public Service Motivation." International Public Management Journal **11**(1): 3 - 12.

Perry, J. L. and A. Hondeghem (2008). Directions for Future Research and Theory. Motivation in public management : the call of public service. J. L. Perry and A. Hondeghem. Oxford; New York, Oxford University Press: 294-313.

Perry, J. L. and A. Hondeghem (2008). Editors' Introduction. Motivation in public management: the call of public service. J. L. Perry and A. Hondeghem. Oxford ; New York, Oxford University Press: 1-16 p.

Perry, J. L. and A. Hondeghem, Eds. (2008). Motivation in public management: the call of public service. New York, Oxford University Press.

Perry, J. L., A. Hondeghem, et al. (2010). "Revisiting the Motivational Bases of Public Service: Twenty Years of Research and an Agenda for the Future." Public Administration Review **70**(5): 681-690.

Perry, J. L. and M. C. Katula (2001). "Does Service Affect Citizenship?" Administration Society **33**(3): 330-365.

Perry, J. L. and K. L. Kraemer, Eds. (1983). Public Management: Public and private perspectives. Palo Alto, CA, Mayfield.

Perry, J. L., D. Mesch, et al. (2006). "Motivating Employees in a New Governance Era: The Performance Paradigm Revisited." Public Administration Review **66**(4): 505-514.

Perry, J. L. and L. W. Porter (1982). "Factors Affecting the Context for Motivation in Public Organizations." The Academy of Management Review **7**(1): 89-98.

Perry, J. L. and H. G. Rainey (1988). "The Public-Private Distinction in Organization Theory: A Critique and Research Strategy." The Academy of Management Review **13**(2): 182-201.

Perry, J. L. and A. M. Thomson (2004). Civic service: what difference does it make? Armonk, N.Y., M.E. Sharpe.

Perry, J. L., A. M. Thomson, et al. (1999). "Inside a Swiss Army Knife: An Assessment of AmeriCorps." Journal of Public Administration Research and Theory: J-PART **9**(2): pp. 225-250.

Perry, J. L. and L. R. Wise (1990). "The Motivational Bases of Public Service." Public Administration Review **50**(3): 367-373.

Pinder, C. C. (2008). Work motivation in organizational behavior. New York, NY, Psychology Press.

Posner, B. Z. and W. H. Schmidt (1996). "The values of business and federal government executives: more different than alike." Public Personnel Management **v25**(n3): p277(13).

Pratchett, L. and M. Wingfield (1996). "Petty Bureaucracy and Woollyminded Liberalism? The Changing Ethos of Local Government Officers." Public Administration **74**(4): 639-656.

Pugh, D. S., D. J. Hickson, et al. (1969). "An Empirical Taxonomy of Structures of Work Organizations." Administrative Science Quarterly **14**(1): 12.

Rainey, H. G. (1982). "Reward Preferences among Public and Private Managers: In Search of the Service Ethic." American Review of Public Administration **16**(4): 288-302.

Rainey, H. G. (1983). "Public Agencies and Private Firms: Incentive Structures, Goals, and Individual Roles." Administration & Society **15**(2): 207-242.

Rainey, H. G. (2003). Understanding and managing public organizations. San Francisco, Jossey-Bass.

Rainey, H. G. and B. Bozeman (2000). Comparing Public and Private Organizations: Empirical Research and the Power of the A Priori. **10:** 447-470.

Rainey, H. G. and Y. H. Chun (2005). Public and Private Management Compared. The Oxford handbook of public management. E. Ferlie, L. E. Lynn and C. Pollitt. Oxford; New York, Oxford University Press**:** 72-102 p.

Rainey, H. G. and P. Steinbauer (1999). "Galloping Elephants: Developing Elements of a Theory of Effective Government Organizations." Journal of Public Administration Research and Theory: J-PART **9**(1): 1-32.

Rochefort, D. A. and R. W. Cobb (1994). The politics of problem definition: shaping the policy agenda. Lawrence, Kan., University Press of Kansas.

Rosenhan, D. (1970). The Natural Socialization of Altruistic Autonomy. Altruism and Helping Behavior. J. Macaulay and L. Berkowitz. New York, Academic Press**:** 251-68.

Schumacker, R. E. and R. G. Lomax (1996). A beginner's guide to structural equation modeling. Mahwah, N.J., L. Erlbaum Associates.

Scott, P. G. and S. Falcone (1998). "Comparing Public and Private Organizations: An Exploratory Analysis of Three Frameworks." The American Review of Public Administration **28**(2): 126-145.

Scott, P. G. and S. K. Pandey (2005). "Red Tape and Public Service Motivation: Findings from a National Survey of Managers in State Health and Human Services Agencies." Review of Public Personnel Administration **25**(2): 155-180.

Shadish, W. R., T. D. Cook, et al. (2001). Experimental and quasi-experimental designs for generalized causal inference. Boston, Houghton Mifflin.

Simon, C. A. and C. Wang (2002). "The Impact of Americorps Service on Volunteer Participants: Results from a 2-Year Study in Four Western States." Administration Society **34**(5): 522-540.

Simon, H. A. (1995). "Organizations and Markets." Journal of Public Administration Research and Theory: J-PART **5**(3): 273-294.

Simon, H. A. (1998). "Why Public Administration?" Journal of Public Administration Research and Theory: J-PART **8**(1): 1-11.

Steijn, B. (2008). "Person-Environment Fit and Public Service Motivation." International Public Management Journal **11**(1): 13 - 27.

Steijn, B. and P. Leisink (2006). "Organizational commitment among Dutch public sector employees." International Review of Adminstrative Sciences **72**(2): 187-201.

Stengel, R. (2007). A Time To Serve. TIME. **170:** 48.

Stengel, R. (2008). A Sense of Community.(SECOND ANNUAL NATIONAL SERVICE ISSUE). TIME. **172:** 48.

Stengel, R. (2008). The Service Agenda. TIME. **172:** 4.

Stengel, R. (2008). What We Can Do.(SECOND ANNUAL NATIONAL SERVICE ISSUE). TIME. **172:** 6.

Tabachnick, B. G. and L. S. Fidell (2007). Using multivariate statistics. Boston, Pearson/Allyn & Bacon.

Tschirhart, M., D. J. Mesch, et al. (2001). "Stipended Volunteers: Their Goals, Experiences, Satisfaction, and Likelihood of Future Service." Nonprofit and Voluntary Sector Quarterly **30**(3): 422-443.

Vandenabeele, W. (2007). "Toward a public administration theory of public service motivation." Public Management Review **9**(4): 545 - 556.

Vandenabeele, W. (2008). "Development of a Public Service Motivation Measurement Scale: Corroborating and Extending Perry's Measurement Instrument." International Public Management Journal **11**(1): 143 - 167.

Vandenabeele, W. (2009). "The mediating effect of job satisfaction and organizational commitment on self-reported performance: more robust evidence of the PSMâ€"performance relationship." International Review of Administrative Sciences **75**(1): 11-34.

Verplanken, B. and R. W. Holland (2002). "Motivated Decision Making: Effects of Activation and Self-Centrality of Values on Choices and Behavior." Journal of Personality and Social Psychology **82**(3): 434-447.

Vinzant, J. C. (1998). "Where Values Collide." The American Review of Public Administration **28**(4): 347-366.

Von Neumann, J. and O. Morgenstern (1953). Theory of games and economic behavior. Princeton,, Princeton University Press.

Waldman, S. (1995). The bill: how the adventures of Clinton's National Service bill reveal what is corrupt, comic, cynical, and noble, about Washington. New York, N.Y., U.S.A., Viking Books.

Weisbrod, B. A. (1997). "The future of the nonprofit sector: Its entwining with private enterprise and government." Journal of Policy Analysis and Management **16**(4): 541-555.

Wilson, W. (1887). The study of administration. New York, Bobbs-Merrill.

Wise, L. R. (2004). "Bureaucratic Posture: On the Need for a Composite Theory of Bureaucratic Behavior." Public Administration Review **64**(6): 669-680.

Wittmer, D. (1991). "Serving the People or Serving for Pay: Reward Preferences among Government, Hybrid Sector, and Business Managers." Public Productivity & Management Review **14**(4): 369-383.

Wright, B. E. (2004). "The Role of Work Context in Work Motivation: A Public Sector Application of Goal and Social Cognitive Theories." Journal of Public Administration Research and Theory: J-PART **14**(1): 59-78.

Wright, B. E. (2007). "Public Service and Motivation: Does Mission Matter?" Public Administration Review **67**(1): 54-64.

Wright, B. E. (2008). Methodological Challenges Associated with Public Service Motivation Research. Motivation in public management: the call of public service. J. L. Perry and A. Hondeghem. Oxford; New York, Oxford University Press: 80-98 p.

Wright, B. E. and R. K. Christensen (2010). "Public Service Motivation: A Test of the Job Attraction-Selection-Attrition Model." International Public Management Journal **13**(2): 155 - 176.

Wright, B. E. and A. M. Grant (2010). "Unanswered Questions about Public Service Motivation: Designing Research to Address Key Issues of Emergence and Effects." Public Administration Review **70**(5): 691-700.

Youniss, J. and M. Yates (1997). Community service and social responsibility in youth. Chicago, Ill., University of Chicago Press.

Zahariadis, N. (2003). Ambiguity and choice in public policy: political decision making in modern democracies. Washington, D.C., Georgetown University Press.

Zhang, Z., F. Hamagami, et al. (2007). "Bayesian analysis of longitudinal data using growth curve models." International Journal of Behavioral Development **31**(4): 374-383.