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Examining the intra-organizational differences among municipal employees: an empirical investigation of public safety workers in the municipal workforce

By

Joseph J. Breen

A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Doctor of Philosophy
in Public Administration
in the Political Science and Public Administration Department

Mississippi State, Mississippi

December 2014



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Examining the intra-organizational differences among municipal employees: an empirical investigation of public safety workers in the municipal workforce

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Attracting, motivating, and retaining public service employees continues to challenge both state- and municipal-level managers. Beginning with Perry's (1996) public service motivation (PSM) construct, academics and practitioners focused considerable efforts in the identification of measures and factors influencing levels of motivation with the overall intent of identifying the key components of increasing employee motivations, thereby increasing the possibility of retaining the capable employees. While this effort has focused on managerial distinctions, groupings between genders, racial backgrounds, and tenure lengths, one significant comparison has yet to be explored—the public safety worker. Identifying and examining the motivating factors of police and fire, whose considerably different work requirements and consequences of subpar performance can result in the loss of life will not only lead to future means of addressing retention and motivation, but will also create a new avenue of research in public service motivation in public administration.



Stemming from the extensive methodological work by Sangmook Kim (2010), this effort will explore the PSM constructs by utilizing exploratory factor analysis (EFA) to identify the significant factors of PSM for public safety workers, confirm these findings through confirmatory factor analysis (CFA), and identify the strengths of the various factors as they pertain to the latent constructs of PSM, job satisfaction, and organizational commitment. PSM, as it pertains to job attraction, selection, commitment, and retention plays a pivotal role in maintaining a productive and successful public organization.

In Mississippi, retention and motivation are paramount as neighboring states pay better wages, offer similar benefits, and are within a short travel distance for many state employees. By comparing public safety workers to other groups of municipal employees, this research extends the field of public administration into new territory while providing practical, real-world tools for practitioners and decision-makers to utilize in workforce development and retention efforts. This research will show that there are significant differences between the public safety workers in the municipal workforce and non-public safety workers, particularly in Mississippi. The research shows that differences in public safety workers from non-public safety workers in motivation stem from levels of political involvement, compassion, benevolence, and duty.



## DEDICATION

I dedicate this dissertation to my wife Lacey, son Cayden, family and friends.

Without them none of this would be possible, nor worth the effort.



#### **ACKNOWLEDGEMENTS**

Instrumental in the development of this document, along with the nature of my professional career are Dr. Eddie French, Dr. Marty Wiseman, Dr. Art Cosby, and Dr. Gerald Emison, not forgetting the numerous professors, colleagues, and friends. I want to thank P. Edward French "Eddie" for putting his faith in my abilities and guiding me throughout the process. I also want to thank Dr. Brian Shoup for his invaluable insight and methodological assistance throughout. I also would like to thank my parents, Peter and Josephine Breen, my brother Peter, sister Denise, and my great friends Wes James, David Parrish, and Lee Weiskopf. These three individuals kept me sane throughout my educational and professional career up to this point. I would also like to thank Luke Fowler, a dear friend and colleague. There are many, many more I could thank, so I hope you all understand how thankful I am to have you in my life and help me through this process.



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## LIST OF COMMON ACRONYMS

APM Attraction to Policy Making

COM Compassion

CPI Commitment to public interest

DC Disconnected Compassion

DHS Duty, Honor and Sacrifice

MSU Mississippi State University

PO-fit Person-organization fit

PSM Public Service Motivation

PSW Public Safety Worker

SB Societal benevolence

SS Self-Sacrifice

SSF Self-Sacrifice



#### CHAPTER I

#### INTRODUCTION

Public safety workers are exposed to a significant level of harm, stress, and physical demands unlike that of any other position in public service. Combining police and fire into public service motivation studies, as well as person-organization fit models requires reexamination, as many of these models note a lack of extrinsic or hygiene factors for public service motivation, when, it is theorized, that police and fire personnel will significantly skew these figures. Research has substantiated that employees in the public sector are more altruistic in nature compared to those in the private sector (Crewson, 1997; Rainey, 1982). Take, for example, the notion that a police officer works through training before taking a position in the workforce. During this training, the individual is exposed to physical challenges, trained to use a weapon, drive a vehicle at high rates of speed, and instructed to pass tests based on regulations and procedures in the department. Once the individual passes these tests, he or she is then placed out in society and asked to put his or her life on the line to protect other individuals in society. The same holds true for the fire fighters, with the exception of the use of a firearm, which is replaced by a water hose, an axe and other fire-fighting tools that expose the individual to heightened levels of danger. No other position in municipal government asks an individual to do these types of work while paying similar or lower wages compared to other individuals in non-public safety positions. It is safe to assume that individuals



entering into these fields are not entering based on the monetary benefits, but rather other, intrinsic measures. This leads the research to look at the possibility that public-safety workers may have stronger intrinsic, or motivator factors than non-public safety employees. Testing a combination of Perry's PSM model with Bright's (2008) combined model, should provide the foundation to conclude that public safety workers are motivated by different factors, and are more interested in intrinsic items like tenure, stability, and altruism than non-public safety workers.

Public safety workers have long been overlooked as a classification within public service employees. Several scholars have identified both police and fire as groups needing more investigation into motivation factors, but none of these works looks at both together (Kim, 2010; S. H. Lee & Olshfski, 2002; Udechukwu, 2009). The literature is virtually barren utilizing public service motivation models to explain retention (turnover intention), commitment, fit, or other aspects of public service. This is detrimental to both organizations and to the public administration, psychology, sociology, and economics scholars, as it fails to account for a significant sector of the workforce, while minimizing the importance of this sector's impact on the overall models created over the last 20 years. Even Perry (1996), Vandenabeele (2008b) and others, despite their detailed and extensive models, fail to identify public safety workers as a separate group of individuals. These same scholars are quick to compare public to private organizations, public and private employees, managers and non-managers, and even subsectors such as MBA/graduate students, however none have studied the public safety employee in detail.

Public safety employees account for a larger percentage of municipal employee than any other subgroup studied to date. In this study, the public safety employees



account for almost one-half of the workforce, more than any other grouping of classification of worker. Public safety employees place their lives on the line on a regular basis to protect the citizens of their communities, often with little gratitude in return. Public safety employees are experiencing, as are most all public service positions, a sharp increase in turnover and a larger gap in qualified personnel to replace those leaving their positions (Gillet, Huart, Colombat, & Fouquereau, 2013; Mitchell & Lee, 2001; Scaramella, Shannon, & Giannoni; Udechukwu, 2009).

If public safety employees place their lives on the line on a daily basis, how could one place those same individuals within a category alongside an individual whose responsibilities rest in entering data, answering emails, managing information technology, or studying for exams? The answer is glaringly and alarmingly simple; they cannot and should not be categorized together. Quite simply, there is no regulating or contrasting agency or group identified within these previous studies that would account for, or counteract the potential influences on model development for public service motivation, organizational fit, retention, or turnover intentions. Ignoring public safety employees in the public safety models, or simply not separating these groups is only holding back the efforts of scholars from the previous 20 years to add to the field of public administration's capabilities to provide other disciplines with scientific and quantifiable methods which answer questions spanning multiple disciplines. Identifying the public safety employees as a stand-alone group, working through the various factors of PSM, retention, fit, and turnover intentions, the field can expand its ability to adapt models and theory to account for different sectors of the workforce, only adding to the ability to expand the outreach of the concept of PSM. Scholars such as Kim et al. (2013)



note, when discussing expanding PSM into other countries, "These results raise serious concerns regarding the ability to develop a single universal scale of PSM, or making direct comparisons of PSM across countries." The response to this statement is simple—until the PSM literature adjusts to reflect various subgroups within the original models, the standard model will not be generalizable to other countries(Kim, 2010).

Gregory Mann (Mann, 2006) spent a commendable portion of his work identifying the differences between public-sector, non-profit, and private sector employees and their motivations, yet failed once again to incorporate the difference between public safety employees. It is this research's belief that if one understands the nature of public safety work, and compares the daily expectations of public safety versus non-public safety work, it is abundantly evident that the two sectors are not similar to comparing apples to apples, but are instead, akin to relating apples to honeycombs.

As many previous studies have noted, public sector employees are more likely to value intrinsic motivational factors, particularly those non-monetary reward factors (Crewson, 1997; Houston, 2000). However, given the limited research on police and fire employees' understanding of a limited pay base, structured pay incentives, and heightened public interest awareness, it is implied, assumed, and tested that public safety employees will exhibit tendencies that favor hygiene factors, or extrinsic monetary rewards (Houston, 2009; Perry, Engbers, & Jun, 2009). This theory will be tested as part of this research.

## **Statement of the Problem**

The motivation and retention of public service employees in local and state government has been an ever-increasing problem (Bright, 2005, 2008; Burgess & Ratto,



2003; Carpenter, Doverspike, & Miguel, 2012; Coursey, Perry, Brudney, & Littlepage, 2008; Fitch, 2008; Frederickson & Hart, 1985; French & Emerson, 2013; Grant, 2008; Lewis & Frank, 2002; Perry & Wise, 1990b; Rainey & Steinbauer, 1999; Wright, 2007). Multiple approaches to incorporating retention strategies, identifying intrinsic and extrinsic measures to maintain employees, and increasing levels of and identifying employees with high levels of public service motivation to increase retention and increase productivity have come to the forefront of public administration literature over the last few decades (Alonso & Lewis, 2001; Brewer, Selden, & II, 2000; Bright, 2005, 2008; Burgess & Ratto, 2003; Camilleri, 2006; Castaing, 2006; Cho & Perry, 2011; Clerkin & Coggburn, 2012; Clerkin, Paynter, & Taylor, 2009; French, 2003; French & Emerson, 2013; Gabris & Simo, 1995; Giauque, Ritz, Varone, Anderfuhren-Biget, & Waldner, 2011; D. Goodman & French, 2011; S. A. Goodman & Svyantek, 1999; Houston, 2000, 2006; Kim, 2009a, 2010; Lawther, 1999; Liu, Hui, Hu, Yang, & Yu, 2011; Liu, Tang, & Zhu, 2008; Naff & Crum, 1999; Ostrom & Ostrom, 1971; Paarlberg, Perry, & Hondeghem, 2008; Pandey, Wright, & Moynihan, 2008; Park, 2001; Perry, 1996, 1997, 2000; Perry, Hondeghem, & Wise, 2010; Perry, Mesch, & Paarlberg, 2006; Perry & Wise, 1990a; Serra, Serneels, & Barr, 2010; Theuvsen, 2004; Vandenabeele, 2008b; Wright, 2007).

Public service motivation (PSM) has been thoroughly investigated, reworked, and revisited over the past 50 years, with a pivotal moment occurring with Perry and Wise defining PSM as, "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations (Perry & Wise, 1990b, p. 368). Before Perry and Wise, scholars such as Buchanan II (1975) and Rainey (1982)



worked towards quantifying PSM, although these efforts did not incorporate a standardized, quantifiable model based on a theory which could be developed. Quantifying PSM became a reality beginning with Perry's first work, "Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity" (Perry, 1996). Perry created a 3-motive, 4-dimension construct using affective, norm-based, and rational theoretical bases to understand the motivation for public service employees. Following this breakthrough, scholars spanning multiple disciplines have worked to incorporate PSM into their quantitative approaches to understanding satisfaction, attraction, and most notably retention of public service employment. (Alonso & Lewis, 2001; Cho & Perry, 2009; Ferlie, Hartley, & Martin, 2003; Francois, 2000; French, 2003; Giauque et al., 2011; Goodman & Svyantek, 1999; Lauver & Kristof-Brown, 2001; Liu et al., 2008; Rainey & Steinbauer, 1999; Serra et al., 2010; Turban & Forret, 1998). Leonard Bright's (2008) work to reduce the 40-question PSM matrix of questions down to 24, as achieved by Perry (1996) in his efforts, and then down to 12, reinforced the notion that public administration could develop quantifiable models that would be utilized at various levels, and could be generalized to incorporate multiple facets of government. Despite backlash from some, Perry's work continues to rest at the forefront of the public service motivation research, while others work off of the original constructs to adapt to varying circumstances (Cho & Perry, 2011; Clerkin & Coggburn, 2012; Kim, 2009b, 2010; Kim et al., 2013; Perry et al., 2009).

The focus of this effort will be to investigate the numerous factors impacting motivation and retention of public service employees based on a number of theoretical foundations. To date, no comparative efforts have been made in the comparison of public



safety employees and non-public safety employees. In fact, there are only a limited number of public safety motivation studies published, and those were published in only the last decade (Gillet et al., 2013; Kim, 2010; Lee & Olshfski, 2002; Pillai & Williams, 2003; Scaramella et al.; Susan, Gakure, Kiraithe, & Waititu, 2012; Udechukwu, 2009). This effort will also identify the specific factors that contribute to or delineate from the overall public service motivation construct. The proposed methodology for this effort will include the use of Confirmatory Factor Analysis (CFA) to develop a relevant model of employee retention for municipal public safety employees. The primary theories incorporated in this work will be Kim's (2010, 2013) measure of PSM, which is the basis for this insight and Herzberg's two-factor motivation theory, which will outline the levels of hygiene and motivators present in their current positions, job satisfaction, and organizational commitment. Each of these constructs will work to enhance the overall model of motivation for public safety workers, incorporating factors for recruitment and retention for future use by practitioners. The importance of this work is two-fold: 1) implications for both academics and practitioners alike, as it works to develop a valid model on employee retention and impact on job satisfaction while 2) creating a new avenue in the literature focusing on the intra-organization comparison of municipal employees.

## Significance of the Study

Identifying significant and relevant motivating factors that drive an individual to surpass "normal" output, or to excel beyond the standard results can be incredibly important for any public or private sector management. In a protect-and-serve line of work such as police and fire, identifying motivating factors for public safety employees is



paramount to providing support, encouraging heightened levels of public service delivery, in this case, public safety and well-being.

Mississippi has long suffered from economic hardship that inevitably reflects on the salary levels paid to municipal and state employees. In several salary and compensation studies performed by the John C. Stennis Institute of Government and Community Development, municipalities in Mississippi were found to significantly underpay their employees, as a collective group, than comparable entities in the survey areas, typically those in the southeast United States with similar operating budgets and numbers of employees. If salary levels are significantly lower than that of comparable areas, one would reasonably deduce that there are other factors attracting employees to remain with and apply for jobs within Mississippi municipalities.

Amplifying this discrepancy is the salary differences in police and fire employees in the aforementioned municipalities. These employees, the municipal public safety workers, not only have to contend with reduced salary levels compared to surrounding areas, they are also faced with significant potential of bodily harm on a daily basis. While management must determine how to retain its administrative and non-public safety workforce through varying motivation and retention techniques, it must also understand that public safety employees, particularly those in an economically disadvantaged state such as Mississippi, must deal with additional factors such as danger to life and limb and emotional trauma that is part of public safety employment.

<sup>&</sup>lt;sup>1</sup> Studies performed by the Stennis Institute include the municipalities of Starkville, Pascagoula, and Hattiesburg, along with other municipalities not included in this study.



Mississippi has a storied history of low overall income and health ratings when compared to the US. Mississippi is generally ranked last or near the bottom of the rankings in education, health, infant mortality, and per capita income. Mississippi, it may be argued, is characterized by a unique landscape, population density, and disposable income levels. Mississippi also has a long history of racial discrimination and tension, which only adds to the development of measures of Mississippi which are unique from generalized models not identifying or examining Mississippi separate from other states. Mississippi, in this research, is identified as its own entity comprised of multiple municipalities to be studied based on cultural and economic characterizations.

The overall aim of this research will be to explore the motivating factors behind public safety work, particularly as it applies to police and fire employees.

Conceptualizing the components of public service motivation, together with the quantifying measures of public service motivation as it applies to job satisfaction and organizational commitment, will increase the available tools for decision makers and will allow practitioners and academics alike to advance their study of municipal employees. Public service motivation continues to evolve and ask the vital questions of what motivates employees to remain in their organizations, what provides retention, and whether levels of commitment and satisfaction are impacted by motivation. With a generation of employees nearing retirement, the generation being referred to as the baby boomer generation, organizations must look ahead and work towards enacting employment and retention strategies to combat the impact of the retirements. If successful, this research will provide a strategy for municipalities across the state of Mississispii and other areas to address the retention and motivation concerns. In addition,



this research will provide validation for the constructs of PSM, while also providing the addition of the need to compare workers within the same organizations, but in extremely different divisions with significantly different responsibilities. Future research will identify other departments, such as wildlife and fisheries and public works that could be separated from other departments and compared for future identification of motivation factors.



#### CHAPTER II

### LITERATURE REVIEW

Given the sheer expanse of theoretical work involved in this dissertation, the number of relevant literary works is vast. Therefore, the following portions of this section will be labeled with the subheadings of each dominant theory or concept. This will provide the opportunity to understand the reasoning behind the inclusion of each theory, how it applies to the overall aim of this research, and provide a more complete understanding of the need for this work in the literature. Public service motivation is the predominant theory throughout the research, and will be dissected at length, as it has undergone numerous challenges, changes, and retractions over the last two decades, yet remains one of the more relevant topics in human resource management literature. Job satisfaction and organization commitment will also be detailed, at length, with additional theories addressed to create a more complete overall picture.

This literature review will begin with the less relevant, yet still noteworthy, research areas and will continue through the relevant literature until reaching the public service motivation portion of the literature review. Many of the elements leading up to PSM will be detailed to provide the reader with an overall understanding of several of the important works pertaining to the overall concept of attraction, motivation, and retention efforts of public service organizations. Frederick Herzberg's (1968) work examining hygiene and motivators as influences on employees will be addressed first, followed by



the components of retention such as job satisfaction, person-organization fit, civil service versus at-will employment protections, and retention and turnover issues. One of the latter components, civil service protection versus at-will employment, is a more recent endeavor with several scholars only recently opening up the questions of whether civil service protection provides incentives or disincentives to working in public service organizations (Battaglio, 2010; Carpenter et al., 2012; Clerkin & Coggburn, 2012; French & Goodman, 2012; Goodman & French, 2011). The final component, attrition and retention, will serve as the overall encompassing aim for this research, followed by a detailed breakdown of public service motivation as a theoretical concept and construct. This review will encapsulate the pertinent literature for the analysis, providing an overall framework for identifying the nature of public service motivation and the implications for Mississippi municipal organizations in the future.

## Herzberg's Theory of Motivation (hygiene/motivation)

Frederick Herzberg's two factor model, as seen in Figure 1, identifies the hygiene and motivators which promote job satisfaction and can also lead to dissatisfaction. Herzberg has been used in countless studies aimed at identifying needs and motivation factors encouraging a productive workforce(Castaing, 2006; Udechukwu, 2009). The examination of Herzberg's two-factor theory through detailing the work of Abraham Maslow, focuses on the hierarchy of needs and then provides explanations into the use of hygiene and motivators in employment research. Udechukwu (2009) provides the primary piece for this insight in his efforts identifying the prevalence of corrections officer turnover. Udechukwu (2009) notes that job satisfaction has been related to employee turnover, particularly the prevalence of voluntary job turnover. Udechukwu



(2009) provides the literary foundation for investigation into job satisfaction and retention by identifying the impacts of an individual's needs and their ultimate impact on the turnover of the individual. Udechukwu (2009) states prominently that "[a] correctional officer will remain a job class plagued by high turnover" (p,79).

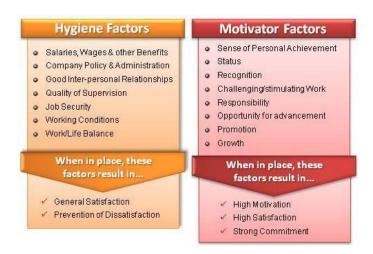


Figure 1 A graphic representation of Herzberg's Two-Factor Model.

Herzberg's two-factor model maintains that hygiene factors will not add to job satisfaction, but will assist in the prevention of dissatisfaction. Motivators, on the other hand, are highly motivating factors resulting in high satisfaction and an increase in job satisfaction and commitment to an organization. Perry (1996) incorporates several items in his scale that address these motivators and hygiene factors. This research will identify the different hygiene and motivators within the model construct, and hypothesizes that public safety employees value hygiene factors as in measures for job satisfaction and motivation. Herzberg's motivators and hygiene factors are uniquely characterized by a generalized set of constructs, assuming all employees are similar in needs and wants —



essentially creating an umbrella similar to Maslow's Hierarchy of Needs. However, as research has shown, police and fire employees have unique needs and requirements for satisfaction in their jobs, and should therefore be analyzed in a different manner than non-public safety employees (Gillet et al., 2013; Lee & Olshfski, 2002; Scaramella et al.; Susan et al., 2012; Vandenabeele, 2008b).

Herzberg's model will be implemented inside of the findings and analysis sections to provide additional insight into motivators and hygiene factors, as these may provide increasingly valuable insight into the differences in motivation dimensions for public safety workers compared to non-public safety employees. Herzberg's model will not be used for significance testing or quantifiable reasoning and justification, but will be utilized for its explanatory powers.

While Herzberg's influence has been questioned at length, it does not detract from the general concept of hygiene and motivator factors in job satisfaction. What it also provides is a general premise from which testing satisfaction provides a theoretical foundation, despite its argued premise. Herzberg's theory will most likely not create new theory, however, the extensive literature surrounding the hygiene-motivator research will add to the relevant literature of PSM.

Perhaps the most prominent use of Herzberg's insight comes from Vandenabeele, Hondeghem, and Steen (2004). The authors utilize Herzberg's hygiene and motivators approach, in conjunction with Perry's (1996) construct to develop their own 3-dimension model of public service motivation. The authors' construct is used to address the labor market shortage in Belgium, focusing on the attractiveness element of public service employment. Recruiting is an important element for investigation and action in



employment practices, as managers seek to employ the most qualified individuals for the position. Using recruiting measures to attract qualified candidates can, in some cases, add to the possibilities of retaining the qualified individuals, as findings suggest that recruiting able-bodied individuals to perform public service duties can impact overall public service motivation, and the same holds true for PSM's impact on recruiting talented individuals (Vandenabeele et al., 2004). Police and fire are provided with training and learning opportunities throughout their tenure; however, motivation to work and perform public service in the form of safety for the citizens requires an additional level of motivation, addressed throughout this manuscript.

#### Commitment

Organizational commitment is the concept that individuals will perform at higher levels when they perceive their organization supports their efforts, recognizes their achievements, and enhances their sense of belonging (Crewson, 1997; Lee & Olshfski, 2002). Another measurement of organizational commitment is that of job embeddedness. Job embeddedness, while not a significant component of the overall research, but rather a concept for future research and discussion, has the potential to provide insight into organizational commitment. Job commitment, which is a subset of organizational commitment, is the concept that individuals are committed to their job.

Employee commitment is an encompassing term which includes commitment to the boss, the workgroup, and the organization (Lee & Olshfski, 2002). This three-fold approach is particularly useful when researching public safety workers, as it tends to include the various functions of commitment, which are crucial components to public safety workers' employment (Lee & Olshfski, 2002; Meyer & Herscovitch, 2001).



Levels of commitment to the job of protecting individuals is paramount, and also sets the positions of police and fire employees apart from other positions in municipal government.

By addressing the organizational commitment model to account for public safety workers, this model development will ultimately replace what has been widely accepted, yet also debated in some circles, as the primary model for explaining public service motivation—that of Perry and Wise (1997). Using Kim (2010) as a foundation, this model will identify the impact of PSM on job commitment and job satisfaction, both of which have been shown to be positively related to increased levels of public service motivation.

Crewson (1997) argues, "organizational commitment is viewed as a better predictor of employee behavior than other attitudinal measures such as job satisfaction." He continues to note that Porter et al. (1974) agreed with this as well as stating that "measures of commitment were better able than were measures of job satisfaction to discriminate between those who stay and those who leave an organization" (Crewson, 1997, p. 508). What is interesting about this early piece of literature looking into motivation is that Crewson bases much of his claim on individuals with high commitment are more likely to continue positive participation, despite satisfaction with pay or other extrinsic motives. This notion goes against much of the more recent literature by Kim (2010, 2013) and Perry (2008, 2010), which infers individuals are influenced by extrinsic motivators, even if minimally influential.

One issue compounding organizational commitment is the measurement arguments for and against a commitment construct. Meyer and Allen (1997) create a



three-dimensional approach to commitment. Cohen (2007) argues that the construct proposed by Meyer and Allen (1997) creates ambiguity, and should be reduced to a two-stage commitment model, affective and normative. Koketso and Rust identify commitment as a necessary construct of an overall measurement of retaining and attracting talent in South Africa, noting that "these talent management challenges were found to be connected to the dependent variables of the study like pay satisfaction, turnover and intention to turnover theories, organizational commitment, employee engagement and motivation" (Koketso & Rust, 2012).

Theoretical constructs for the positive significance between PSM and commitment have been detailed in Kim (2010) and Castaing (2006), showing that PSM and organizational commitment are significant and related. While organizational commitment continues to be debated as to its relevance and significance in motivation studies, it will continue to be investigated by researchers and practitioners, particularly when one analyzes the public safety workforce in municipal settings. The public safety worker has an inherent self-motivation within himself/herself, which amplifies the need to uncover any additional factors or dimensions of motivation and satisfaction, leading to new discoveries on retention strategies.

## **Person-Organization Fit**

Leonard Bright states, "It is my belief that Person-Organization Fit (P-O Fit) is the missing link that may explain these inconsistent findings [PSM and performance studies]" (Bright, 2007, p. 361). Bright continues to reiterate the evidence of PSM's connection to public employees' work preferences, job satisfaction, perceptions of red tape, whistle-blowing activities, and tenure in public organizations, but not to individual



performance (Bright, 2007). Person-organization fit is characterized by the congruence between the characteristics of individuals and the organization. Bright subscribes to the theory that congruence is achieved in two ways: supplementary or complementary. Supplementary is when the individual and organization's characteristics are similar, or in harmony, and complementary congruence occurs when "salient unmet needs of individuals are satisfied by the resources and tasks provided by organizations (Bright, 2007, p.364). Bright found that PSM had a direct significant impact on P-O Fit, but did not have a direct impact on job satisfaction. There are multiple studies that argue that P-O Fit is not the best mediator for understanding PSM or its impact on job satisfaction (Bright, 2007; S. A. Goodman & Svyantek, 1999).

Bright (2007) works to incorporate P-O Fit into the PSM literature and despite the findings showing there was no impact of PSM on performance of employees, it is hypothesized in this research that P-O Fit will have an impact on job satisfaction, which other studies have shown as plausible (S. A. Goodman & Svyantek, 1999).

Vandenabeele (2008b) extends the notion of P-O Fit to identify the impacts of P-O Fit on PSM, and the implications for future management decisions. The findings of the article follow.

Vandenabeele (2008b) states on PSM, "diminished public trust, more competition in the labour market and the looming threats of an ageing workforce have made the field one of the most pressing matters in public human resource management" (p.1089). When Vandenabeele (2008b) states "the field", he is referring to PSM and its impact in human resource management approaches to recruitment and selection processes. Vandenabeele (2008b) states that PSM and organizational attractiveness relies heavily on the attraction-



selection-attrition scheme developed by Schneider (1987), who argued "people are not randomly assigned to real organizations, they select themselves out of real organizations" (p.400). Vandenabeele (2008b) gets to the heart of the distinction of public safety employees compared to public service employees in his statements on publicness of responsibilities or positions in organizations. Vandenabeele (2008b) states that the reasons for these different levels of publicness are 1) the services are of general public value, 2) the services should be provided by an authoritative organization, 3) the services should be provided by a disinterested organization, 4) the services should be free to citizens, or 5) the services are part of social welfare (p.1092). He also states that "High-Publicness Organizations" are closely linked to public values, and therefore have high degrees of public scrutiny and relation.

Vandenabeele (2008b) uses the PSM construct to determine the impact of P-O Fit on employer attractiveness, using various measures of compassion. Individuals with high levels of PSM are more likely to seek public employment, while PO-fit has a significant impact on HRM processes (p.1101). Vandenabeele (2008b) also identifies that due to the targeted selection of respondents, in this case master's students, there is a pre-existing level of motivation present. The same assumption could be made for police and fire employees, as these individuals are pre-disposed to higher levels of self-motivation, therefore creating the unique benchmark levels for public safety employees compared to non-public safety employees.

P-O Fit, while not the focal point of this research, deserves to be investigated as a larger body of research into public service commitment, motivation, job satisfaction, and overall retention into the public sector. While this approach may have its limitations, it



provides valuable insight and investigation into motivation and PSM impact on job satisfaction, as several studies mentioned previously have worked to incorporate P-O Fit as either a mediator or a direct factor on job satisfaction and PSM.

#### Job Satisfaction

Job satisfaction and PSM have been studied for quite some time (Kim, 2005; Liu et al., 2008; Pandey et al., 2008). Kim (2010) states that "theoretical relationships can be postulated to exist between PSM and job satisfaction." This postulate, based on previous research, states that PSM, and higher levels of PSM are positively related to job satisfaction, although the levels are in question based on research groups. In this case, separating and comparing groups will provide the necessary comparison measures to determine the level in which this postulate can be proven.

Job satisfaction is a theory and construct in itself. The dimensions of job satisfaction have been extensively researched and documented at length (Cho & Perry, 2009, 2011; Cohen, 2007; French & Emerson, 2013; Gillet et al., 2013; Liu et al., 2008; Moynihan, 2007; Moynihan & Pandey, 2007b; Paarlberg & Lavigna, 2010; Perry et al., 2009). Qualitative work has shown that motivations and job context have a significant impact on job satisfaction and therefore require additional investigation (Liu et al., 2008). Job satisfaction, as a measure of potential retention and attrition reduction measure, is important to consider for practitioners. Previous studies have shown that job satisfaction is related to motivation and the same holds true for the impact of motivation on job satisfaction, therefore, the inclusion of job satisfaction in this research is vital in the overall understanding of the reach of PSM.



Naff and Crum (1999) incorporate a federal employee survey base to analyze the relationships between PSM, retention, job satisfaction, and job performance. Of increased importance is the analysis pertaining to job satisfaction, as Naff and Crum (1999) find that high levels of PSM tend to be positively associated with job satisfaction and retention efforts. Job satisfaction, as it pertains to retention, is a key component for the development of retention strategies.

Job satisfaction is the focus of several articles, with Liu et al. (2008) providing one of the most important and influential reasons for the inclusion of job satisfaction in this research endeavor. Liu et al. (2008) were using PSM observed in Western society and comparing this construct's impact on job satisfaction in China. The authors employ a series of statistical measures including exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to assess the generalizability of PSM. Once a model of PSM is developed using EFA, it is then confirmed through the use of CFA. As this model is confirmed, the authors utilized hierarchical regression analysis to examine the effects of PSM on job satisfaction. Liu et al. (2008) is highly valuable to the overall goal of this research for its methodology as well as its development process.

Liu et al. (2008) show that PSM is linked to job satisfaction in a multitude of manners. The authors build on works from various other authors to identify the level of influence PSM has on job satisfaction as well as organizational commitment, an additional variable in this research mentioned previously (Liu et al., 2008; Naff & Crum, 1999; Rainey, 1982; Taylor, 2007). The authors note, "The level of PSM is higher in public employees than in their counterparts in the private sector, and public employees with higher PSM scores are more satisfied with their jobs, more committed to their



organizations, and more productive" (Liu et al., 2008, p. 687). The authors continue, "According to motivational theories, public employees with higher PSM would devote themselves to public causes and more easily find job satisfaction and enjoyment in the daily routine" (p. 688). Naff and Crum (1999) showed that this was the case, as PSM was positively related to the level of job satisfaction and served as a detractor to leaving the organization. Taylor (2007) showed that individuals provided the opportunity to serve the public interests were more likely to be satisfied with their jobs. Liu et al. (2008) note that if an employee's PSM would be attributed to a mix of motives, it would be useful to analyze all PSM dimension simultaneously.

Job satisfaction has been described as "the most intensively studied variable in organizational research" (Liu et al., 2008, p. 687). According to numerous studies referenced by Liu et al. (2008), the nature of the work employees perform contributes higher to job satisfaction than any other factor. The authors note that with the varying degree of scholarly attribution to a number of factors of job satisfaction, the evaluation of job satisfaction should include expectations, needs, and motivations. The research contained in the following sections will include items that address each of these components, as well as building on other research identifying PSM and its impact on job satisfaction.

# Civil Service vs. At-Will

One of the characteristics that sets public safety workers apart from their non-public safety counterparts is the presence of civil service protection for some. There are several provisions under the Mississippi Code of 1972. Specifically, Mississippi Code Section 21-31-71 states



"No person in the classified civil service who shall have been permanently appointed or inducted into civil service under the provisions of Sections 21-31-51 through 21-31-75 shall be removed, suspended, demoted or discharged, or any combination thereof, except for cause, and only upon the written accusation of the appointing power or any citizen or taxpayer, a written statement of which accusation, in general terms, shall be served upon the accused, and a duplicated filed with the commission."

At-will employment provides the employer the right to terminate employment without cause. At-will employment has been shown to have a negative impact on employee motivation as a whole, particularly in minorities (Battaglio, 2010). Other scholars have noted that while at-will employment may have some positive impacts, the reclassification of employees to at-will does not appear to directly influence responsiveness, productivity or management (Goodman & French, 2011).

The influence on motivation based on the type of protection, or lack thereof, is starting to appear in recent literature (Battaglio, 2010; French & Goodman, 2012; Goodman & French, 2011). Theories of increased pressure stemming from at-will employment were hypothesized to have a positive impact on motivation and performance, however the literature found that if significant, the impact of at-will measures on motivation had a negative or neutral effect on performance and motivation. Encompassing the full spectrum for public service motivation requires the insight into all aspects of employment in the public sector.

For this research, employment security and its impact on PSM will be investigated, albeit briefly, for future research implications. The developed PSM model



for public safety workers should be discussed in terms of civil service protection versus at-will employment practices to determine if there are any differences in the levels of PSM for those public safety workers employed in an at-will environment compared to those provided with civil service protection. For those municipalities in this research, seven provide civil service protection while three employ at-will procedures on their public safety employees. Battaglio (2010) specifically examines the impact of an at-will environment and public service reform and motivation. Battaglio states that "proponets of EAW [employment at will] systems suggest that rethinking the due process rights of public employees is necessary to increase managerial flexibility" (Battaglio, 2010, p. 2). The findings section in this research will examine the results from an investigation into the hypothesis from Battaglio (2010) stating "[public safety] professionals positioned in agencies with a greater proportion of EAW employees will be less optimistic that EAW provides the necessary motivation to improve employee performance" (p. 7). In this research, the comparison will be made using the overall construct of PSM and the levels of PSM in at-will compared to civil service protection employment to determine whether this position holds true in the municipal public safety sector.

As a last reference point for employment at-will and civil service protections, Bowman and West (2006) provide insight into the introduction of at-will employment as a managerial process with aims to increase productivity. Their insight showed that at-will employment not only failed to provide evidence of superiority to civil service protections in the success of an organization or on the efficiency of an individual. The authors note, "There is simply no evidence to support the need for employment at will in government—or in business. Instead, there are powerful illusions about how things work



in the pricate sector at that its techniques can be easily used in government irrespective of cost, consequence, or corruption" (Bowman & West, 2006, p. 154). An additionally profound statement is found later in this work, noting "There is nothing automatic about the public service ethos—that employment practices will be reasonably free of political influence and that commonweal will prevail when confronted by partisan intrigue" (Bowman & West, 2006, p. 155). Commonweal, or the welfare of the public, is at the heart of public service yet the authors contend that this very ideal is not without political intervention or interaction. If there is not a clear answer to whether public employment as a whole should be at-will or protected, is there merit in suggesting that a group or designation within the public sector workforce should be subjected to a different form of employment from their counterparts? Determining the levels of PSM in individuals from different types of employment processes and protections may eventually uncover insight into the motivating factors of employees and how the forms of employment impact there motivation, intent to leave, and overall job satisfaction. This research aims to open the door to future research in this area.

#### **Retention and Turnover**

Retention and turnover issues have widely been ignored in the PSM literature and have only recently started to find their way into the mainstream literature (Meier & Hicklin, 2008). Examining the turnover and attrition rates for public safety workers, particularly as their professions tend to suffer from burnout at a much higher rate than non-public safety employees, is crucial to the PSM and public administration literature, as well as to practitioners with managerial responsibilities (Scaramella, Shannon, & Giannoni, 2006). Public safety employees, particularly police, are exposed to higher

levels of stress, increased physical demands, and more interaction with the public than many other public service employees (Gillet et al., 2013; Susan et al., 2012).

Bright (2008) posits that P-O fit will have a mediating impact on job satisfaction and ultimately retention. Bright (2008) notes that "job satisfaction and turnover intentions are reflections of the outlook that employees have about their employment. This outlook is influenced by the degree to which employees' salient needs are satisfied by their work" (p.150). He continues, "Employees display higher levels of job satisfaction, and subsequently lower turnover intentions, when the characteristics of their working environment satisfy their needs" (p. 150). In his work, Bright notes that Naff and Crum (1999) were the first, or one of the first, to show that PSM is positively related to the job satisfaction and turnover intentions of public employees. Naff and Crum (1999) employ a reduced version of Perry's (1996) construct to compare employees' perceptions and behaviors based on high and low levels of PSM. The findings in Naff and Crum (1999) support the concept that PSM is positively related to "job satisfaction, job performance, thoughts about leaving government, and receptiveness to government reinvention efforts" (p. 14).

Bright's most important contribution to this research is found in his investigation into the use of PSM measures to determine levels of voluntary turnover, also referred to as turnover intentions (Bright, 2008). Bright states, "if PSM makes individuals more tolerant of the characteristics of bureaucratic organizations, then one would expect these individuals to have higher levels of job satisfaction and turnover intentions in public organizations" (p. 151). Bright makes note of the inconsistencies in the PSM literature on whether PSM has a positive or negative role in job satisfaction and tenure, by showing



that individuals with a higher level of PSM tend to have shorter tenures in their current job. While this research will not delve into that area in as much detail as Bright (2008) or other scholars (Scott and Pandey, 2005; Naff and Crum, 1999), it is important to understand the direction some scholars have started to work towards, for future expansion on the current research presented in this manuscript.

Wright and Christensen (2010) investigate attrition based on the initial motivations of employees as they choose professions based on motives. One of their primary hypotheses, H4, states "individuals selecting their first job in the public sector are more likely to stay in the public sector if they chose their profession because of their PSM" (p. 159). The authors employ a survey of lawyers based on their reasoning that PSM has been found to have a significant relevancy in the legal profession. The authors then provided a logistic regression analysis of the respondents, separating the respondents out by the employment sector of the first job. The authors' measures for determining whether individuals were still employed in the private sector are substantially misleading, but that is not of relative significance for this research. What is important is the finding that PSM did not directly impact an individual's attrition or turnover intentions, creating the need for additional research on a somewhat larger grouping of individuals; in this case, police and fire. From Wright and Christensen's (2010) own suggestion, "any findings based on a single profession may have limited application to other professions," the research contained within this document will focus on both police and fire, as a grouping of public safety workers, both enlarging the grouping of workers and remaining within comparable positions in municipal government.



Retaining capable and productive police and fire employees is paramount to maintaining a functioning society and public service infrastructure. Susan et al. (2012) provide an insightful look into the attrition and turnover of the police force in Kenya that offers a comparable base to associate police and fire to other municipal employees. The authors posit, "The resultant poor performance in the police sector sticks out strongly and is distinct from any other poor performance in any other sector because lives, especially those at the most productive stage, are lost" (Susan et al., 2012, p. 197). The authors' most significant contribution to the literature stems from the findings presented in their conclusions. Specifically, "the current phenomenon of poor performance of the police force can be reversed if the government and other stakeholders ensure that the police are sufficiently motivated" (Susan et al., 2012, p. 202). While international comparisons provide means for debating whether cultural differences have more to do with these findings than PSM, it is important to understand that there are comparable questions being posited in other countries yet very little investigation into these questions has been accomplished to date. The significance of this research is only amplified by these studies on attrition and retention.

# **Compassion**

# **Disconnected Compassion**

Disconnected compassion is a factor of the public safety motivation construct that is comprised of two variables, both of which provide the foundation for the factor's impact on the overall motivation levels of the Mississippi municipal public safety worker. Disconnected compassion is a term coined in this research, as it does not have any definitive foundations in other literature. Instead, disconnected compassion refers to the



notion that individuals may feel empathy, compassion, or other feelings towards individuals or groups for which they have no direct connection.

The foundations of this factor rest in the premise that individuals may experience different levels of compassion, a factor from Perry's (1996) original model, for individuals they have direct contact or connection to compare to those which they have no similarities, no connections, or any reason to feel as though they are relatable to the individual. Put another way, it is perfectly feasible to assume that individuals in the public safety sector would experience higher levels of compassion towards individuals they know or are connected to, than those they are not. In fact, the underlying premise assumes that the individuals may have an underlying disposition to avoid feeling compassion towards individuals they have no connection to, in order to separate work from emotion. There is little work on this premise, but it is worth investigation and serves as a foundation for the work in the upcoming models.

Disconnected compassion will surface as part of this investigation, and should therefore be explained before it appears in the model development. This factor was not an original expectation of the work by the analysis, however it appears as a factor for public service motivation and should be examined and understood for its validity and meaning in the overall model.

# **Societal Benevolence**

Societal benevolence is the notion that individuals will feel a certain level of emotion or compassion towards individuals they have a direct connection to. This connection may be a personal relationship or simply an intrinsic connection, whereby an individual feels as though the person or persons they are identifying with have a different



sense of belonging to their own emotions. Put in a different manner, societal benevolence assumes the individual will feel compassion towards an individual or group of individuals based on a sense of connection. The variables in the model that address this connection are explained in greater detail in the next section.

There is very little examination on this concept in public administration literature as it is grounded in human behaviors and psychology more so than bureaucracy and public administration. Therefore, it is within reason of assumptions that this construct should not be viewed as a literature-backed construct, but rather a common sense based approach to explaining the results of the model. The components of this construct are part of Perry's (1996) compassion variable, which further supports the notion that this construct is grounded in compassion and compassion based feelings. Where this construct differs from the disconnected compassion construct is in the connections, or ties, to the individuals in question. As public safety officers, there are expectations that the work performed by these individuals will require interaction and assistance with individuals they are familiar with and also those they may not have any connection or interaction with, and therefore these differences can have completely different interactions with the employees' overall level of public service motivation.

Much of this investigation involves the development of a model based on data and how the data uncover interactions and relationships on the latent construct of public service motivation. As such, many of the findings that come from the model development do not compute and simply fail to provide validity on the face value of the factors. However, it is not without reason to assume that individuals will respond different and have different levels of compassion towards individuals they are familiar



with and those they do not. It is in this foundation that much of the effort of including these two factors rests.

#### **Public Service Motivation**

Public service motivation has been a topic of discussion dating back to Frederick Mosher's Democracy and the Public Service (Mosher, 1968). Scholars such as Frederickson, Ostrom & Ostrom, Buchanan II, and Rainey continued the investigation into public service motivation, but did so without the use or development of a model construct from which to operate (Buchanan, 1975; Frederickson & Hart, 1985; Ostrom & Ostrom, 1971; Rainey, 1982). It was not until Perry and Wise (1990a) began their investigation into the decline of public trust in government that the concept of public service motivation and the quantification of this construct became a hot topic. They claimed a "quiet crisis" in federal civil service precipitated the need for a construct, in which managers could address the decline in the trust from the public. Perry (1996) developed a measure of public service motivation, which paved the way for future efforts into public service motivation research, connections between PSM and job satisfaction, organizational commitment, person-organization fit, and multiple additional ties to correlate PSM and performance measures in both public and private organizations. Perry's work was the pivotal piece in what would be almost two decades of continued work into public service motivation, and is ultimately the impetus behind this research.

Perry and Wise (1990) are often cited as providing the first theoretical and quantified approach to public service motivation, as their work is cited in practically all PSM literature (Brewer & Selden, 2000; Buelens & Broeck, 2007; Francois, 2000; French & Emerson, 2013; Goodman & Svyantek, 1999; Houston, 2000; Kim, 2010; Kim



et al., 2013; Park, 2001; Perry, 1996; Vandenabeele, 2008b). Much of the work in the PSM field stems from the initial approach set forth by Perry and Wise and their identification of motives for public service motivation. Some have separated themselves from identifying the constructs of PSM as the exact definitions set forth by Perry and Wise; however, they still remain grounded in this initial work (Bright, 2009; Cho & Perry, 2011; Coursey et al., 2008; Houston, 2006; Kim, 2010; Kim et al., 2013; Liu et al., 2011; Wright & Grant, 2010; Wright, Moynihan, & Pandey, 2012).

In their pivotal work, Perry and Wise (1990) state that as part of public service motivation, there are three motives from which people rely to determine levels of motivation or interest in their profession; assertive, norm-based, and rational motives. Assertive motives are those grounded in a commitment to public service, or commitment to the public interest. Assertive motives may be viewed as the level of commitment of the public interest, or intensity of one's commitment. Norm-based motives are those grounded in the notion that the public employee works in interest of the public good, or the common good. The norm-based motives suggest that an individual is concerned with the overall good, inferring that the individual has motives that strive for a utopian-like society. Rational motives, or those most examined by economists and others, are focused around the concept of individual utility maximization. Perry and Wise describe the need to study and understand the concept of PSM based on the call for a renewed public service ethic, as set forth by President Bush following the 1988 presidential race.

Perry and Wise note that two developments have called into question the overall strength and importance of public service ethic. The first, the public choice movement, is predicated on the assumption that people are motivated by self-interest, which models



human behavior (p. 367). A second is the growing presence and popularity of monetary incentive systems found in the top-level organizations (p.367). Extrinsic rewards are the focus of managerial strategies during this article's time and stand in opposition to the view that "public service motives energize and direct the behavior of civil servants" (p.367).

Much of this piece centers around the case that public service motivation is often grounded in rational motives, notably utility maximization. Utility maximization is a concept stating that an individual will work to maximize his or her utility from any given activity. Utility can come from intrinsic, extrinsic, and other rewards, depending on the individual's perspective and concept of utility. Rawls (1971) states that greater realizations of self emanates from "skillful and devoted exercises of social duties". An individual seeking public sector employment with the hopes of participating in policy making might ultimately be satisfying their own personal needs while providing a public service in the same effort. These efforts are often referred to as motives, of which Perry and Wise (1990) categorize into three different motives: norm-based, rational, and assertive.

Rational motives are grounded in the concept derived from the works of Anthony Downs (1967). Downs (1967) argues that "some civil servants are motivated by commitment of a public program because of personal identification with the program" (Perry and Wise, 1990, p. 368). Downs offers an example of Billy Mitchell and the military use of aircraft as an example of motivation. He continues using J. Edgar Hoover and Hyman Rickover as additional examples. Perry and Wise (1990) explain, "Rickover, for example, was so dedicated to the nuclearization of the U.S. Navy that, even in the



face of opposition to his amassing influence and power, he remained at his post well beyond normal retirement age" (p. 368). Perhaps the most notable portion of Perry and Wise (1990) rational motives is that "a related rational motive that for many individuals may not be served outside of government is advocacy for a special interest" (p. 368). Individuals may have motives that their choices will facilitate the interests of certain groups. Some police and fire employees may be motivated in their service to the constituency and will therefore further the efforts and provide services for individuals who many not have the same opportunities and facilities available as others in society.

Norm-based motives stem from a "desire to serve the public interest" (Perry & Wise, 1990, p. 368). While Perry and Wise (1990) state that "others may disagree with Down's interpretation of public interest but still agree that the norm is integral to most conceptions of public service motivation" it is not without opposition. This opposition will be detailed in later sections when Perry's (1996) construct is examined and criticisms are identified. Desire to serve the public interest is only one portion of this motive noted in the Perry and Wise (1990) piece. Citing Buchanan (1975) and Mosher (1968), Perry and Wise (1990) argue that "public service ethic involves a unique sense of loyalty to duty and to the government as a whole" (p.369). The final aspect of the norm-based motive stems from the concept of social equity. Social equity is comprised of activities aimed at enhancing the well-being of minorities lacking political or economic facilities or resources. Frederickson (1985) argues that there are obligations to public administrators and are threefold; to provide services efficiently and economically while enhancing social equity.



Affective motives may stem from a conviction of public service's social importance (Perry and Wise, 1990). Frederickson and Hart (1985) assert that the central motive behind the efforts of public servants is that of the patriotism of benevolence. This concept is described as "an extensive love of all people within our political boundaries and the imperative that they must be protected in all of the basic rights granted to them by the enabling documents." This concept can be examined in another manner—willingness to sacrifice for others. Public safety workers will inevitably possess some level of this self-sacrificial motive as part of their responsibilities on a daily basis consists of placing themselves in the way of physical and emotional injury. Lee ad Olshfski (2002) reiterate this finding in their research showing that firefighters viewed themselves as committed to their job, which they viewed as an honorable profession that performs a valuable service to the community. This valuable service consists of the potential for bodily harm for the greater good, or a rewording of the motive of self-sacrifice.

Perry and Wise (1990) detail the behavioral implications of public service motivation, creating the impetus for Perry's (1996) construct and the foundation for this research endeavor. The authors state that "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" (p. 371). This states, in essence, that performance measures should not only take into account extrinsic rewards as a means of motivation, but also to identify that public service organizations at their core are based around a desire to aid the public and therefore must understand that employees work for public service organizations for other reasons outside of standard financial rewards. Municipal organizations are unique compared to state or federal



employees, and public safety workers are a specific grouping of worker requiring a different approach to understanding the motivations behind public service. Public safety workers, it has been noted, enter into service with a self-motivation and a desire to aid the community while incurring lower pay than other administrative positions, most of which have no added element of personal harm or safety concerns.

Perry (1996) took this concept of public service motivation a step further, adding factors developed by testing and reworking survey questions ultimately developing a 24-item model that has served as the basis of comparisons, arguments, and investigation into motivation. Work in public service motivation prior to the 1990 effort consisted of the theoretical investigation into motivation, with limited numbers of quantifiable studies available from which researchers could form a substantial theory or premise to work from.

Perry's 24-item scale originally consisted of six variables which made up the overall latent public service motivation construct. This construct was then reduced to four variables; attraction to policy making (APM), compassion (COM), commitment to public interest (CPI), and self-sacrifice (SS). By categorizing these factors, Perry created not only avenues for investigation on an individual level, but also provided the structure for future modifications and alterations to increase the probabilities of the model's grounded portions. The APM and COM dimensions have come under considerable scrutiny over the past 15 years, and many scholars contend that questions comprising Perry's factors do not accurately reflect the dimensions or their explanatory functions (Bright, 2005, 2008; Coursey & Pandey, 2007; Coursey et al., 2008; Diamantopoulos, Riefler, & Roth, 2008; S. Kim, 2005; Kim, 2009a, 2010; Kim et al., 2013; MacKenzie,



Podsakoff, & Jarvis, 2005; Perry et al., 2010; Vandenabeele, 2008b; Wright, 2007; Wright & Christensen, 2010). However, despite the ever-present contradictions of the 4-dimension PSM model, it continues to serve as the basis for investigation into public service motivation.

Perry's (1996) construct essentially aims to develop a theory explaining the behavioral implications behind public service ethic. The developed motives are defined as "psychological deficiencies or needs that an individual feels some compulsion to eliminate" (Perry, 1996, p. 6). Following Knoke and Wright-Isak (1982), Perry categorizes the motives into three analytically distinct categories mentioned previously: rational, norm-based, and affective. Attraction to public policy making (APM) is categorized as a rational motive in Perry's construct. Commitment to the public interest (CPI) is recognized as a normative foundation for public service, or a norm-based motive. The desire to show care for all no matter the political or economic boundaries encompasses the compassion motive (COM). Lastly, the self-sacrifice motive is considered one of the pivotal motives and is used as a foundation for many of the more recent PSM research efforts (Cho & Perry, 2011; Kim, 2010; Kim et al., 2013; Wright & Christensen, 2010; Wright & Grant, 2010; Wright et al., 2012).

Perry (1996) notes "the central purpose of the present study is to translate the theory about public service motivation into a measurement scale to facilitate research" (p. 8). Perry (1996) was focused on construct validity, parsimony, unidimensionality of the constructs, and overall fit of the model when he initiated this research. The study was administered to Masters of Public Administration (MPA) students using a Likert scale questionnaire, a useful tool to study and quantify responses on behaviors while



constraining costs compared to face-to-face interviews. Perry conducted multiple iterations of the survey, revising and reforming the questions, testing the questionnaire on MPA students at each pass. Perry (1996) suggests the limitations of exploratory factor analysis (EFA) of examining only the number of factors and observed variables creates a hurdle for his testing and therefore chose confirmatory factor analysis (CFA). While this is not the most statistically sound methodology, as many scholars point out and correct in future efforts, this was the first introduction into the development of a model without a proven, generalizable theory behind the development of the model (Cho & Perry, 2011; Christensen & Wright, 2011; Houston, 2009; Kim, 2010; Kim et al., 2013; Vandenabeele, 2008a, 2008b; Wright & Christensen, 2010; Wright & Grant, 2010; Wright et al., 2012; Wright & Pandey, 2008). Perry's resulting model, a four-factor CFA model for public service motivation, became the standard for PSM research over the next decade of research.

Houston (2000) provided further investigation into the concept of public service motivation through identifying the levels of which intrinsic and extrinsic motives impacted public service performance compared to private sector performance. Houston (2000) notes that "reform efforts that attempt to reward public employees with tools frequently used in the private sector likely will be unsuccessful" (p.714). Intrinsic and extrinsic motivation is important when comparing public sector employees to private sector employees, as the comparison provides validation that public sector employees are motivated by different factors than public sector employees, and therefore any attempts to motivate employees should be based on the type of work the individuals perform, paying attention to the mission of the organization, the type of work being performed, and the



service provided by the employees (Brewer & Selden, 2000; Brewer et al., 2000; Burgess & Ratto, 2003; Houston, 2006; Lee & Olshfski, 2002; Meyer, Becker, & Vandenberghe, 2004; Meyer & Herscovitch, 2001; Park, 2001; Theuvsen, 2004). Houston's effort stemmed from the work of Crewson explaining the intrinsic and extrinsic differences between public sector and private sector employees, adding to the literature on public service motivation in human resource and public administration journals (Crewson, 1997; Houston, 2000).

One contentious point in Houston (2000) stems from the assertion that the existing literature is limited by the scope of the data sources. Most of the literature prior to Crewson (1997) and Houston (2000) was comprised of research performed on data collected at the local, county, and state levels, often from just one of the aforementioned areas. While this limitation may exist for some wishing to examine trends and issues at the national level, it is important to understand the variations that exist at the local levels, as often the cultural and environmental differences can be significant at the local levels within a single state. Mississippi exemplifies this suggestion, as much of the state is divided by geographic, demographic, and political boundaries, providing the backdrop for differences in public and private sector organizations. Motivators for one municipality may differ from that of another municipality in a different part of the state, often due to political or economic issues in the municipalities. In Mississippi, research stratifying the state as a whole, surveying municipalities spanning different population sizes, demographic characteristics, and geographic locations provides the ideal study for public service motivation, particularly comparing groups within organizations.



Houston (2000) has one flaw in his research that, while documented, limits the interpretation of his findings beyond noting them and providing additional literature. Crewson (1997) and Houston (2000) both used the General Social Survey (GSS) comparing public-sector employees and private-sector employees. Houston (2000) notes that the sample size for the public sector employees is 101, while 1,356 private sector responses were used in his analysis. Providing such a small sample size when making comparisons is not advisable and findings should be noted with caution. It is with this very same caution that this research merely describes the findings from Houston (2000) as additional literature providing the support for the need to investigate public service motivation.

Vandenabeele, Hondeghem, and Steen (2004) continue the investigation into public service motivation by identifying the factors important to public service motivation, and providing justification behind the research into PSM. Important for this section is the statement from the authors that "the attractiveness of public service as an employer is an increasing problem in public sector human resource management (HRM)" (p. 319). PSM in public safety workers, particularly those in municipal governments, presents an increasingly difficult scenario if PSM is truly related to attrition and retention. The authors' utilization of a three-factor model provides the foundation for the work into the methods portion of this research, as much of the work involved in the hypotheses stems from the initial investigation undertaken in this piece.

Wright (2008) and Kim (2010) took the PSM construct developed by Perry, and began dissecting the construct to account for measures such as job description, focusing on the direction of the impact of the factors on PSM, as well as PSM's impact on other



factors. Essentially, these two scholars, among others, were the first to begin to question whether the PSM construct was reflective or formative. In other words, was PSM to be studied on how the dimensions of PSM, in the case of Perry (1996); attraction to policy making (APM), commitment to public interest (CPI), compassion (COM), and self-sacrifice, impacted the overall PSM variable, or should efforts be made to identify the interchangeable, correlated nature of the four dimensions and how they impact on one another, as well as on PSM (Kim, 2010). Should one focus on PSM and its impacts on the dimensions or the dimensions and how they impact PSM? Wright (2007) reinterpreted PSM in terms of goal theory, which Kim (2010, 2013) remained true to the basic concepts of PSM, despite utilizing a condensed form of Perry's 1996 PSM model.

Kim (2010) is one of an extremely limited group of researchers placing any investigation into public safety workers, focusing on fire fighters in Korea for his study into PSM in different subcategories of public sector workers (Lee & Olshfski, 2002; Pillai & Williams, 2003). Kim provides an exemplary table showing the numerous studies using Perry's (1996) model. The table representing the numerous studies on PSM is found in Table 1. Kim's use of firefighters in Korea is based more on a convenience subsector than that of a targeted sample, as Kim does not focus on the unique nature of the fire employee, but rather the motivation of one group, in this case the fire employee (Kim, 2009b, 2010). Kim identifies that the Perry model, even in an edited version, requires the ability to reduce down to the micro level, while being generalizable at the macro level. The research contained throughout the remainder of this analysis will be focused on the next step above the single group comparison, and that will be the grouping of fire and police into one combined group.



Wright (2008) notes that using the PSM model requires satisfying four conditions of causality; plausibility, covariance, temporal sequence, and nonspuriousness. Evidence of plausibility has been satisfied through multiple literary efforts and is not in question (Paarlberg et al., 2008; Perry & Wise, 1990b; Wright, 2008). The second claim, covariation, has been explained at great lengths in multiple works, although it has been argued in others (Wright, 2008). Wright (2008) concludes that this condition has been met with some confidence at the point of his writing. The third claim, temporal sequence, measures whether one action is the direct result of another. Several scholars have noted that PSM could be the result of different factors, and PSM may not play into account in other areas (Wright, 2008). Wright (2008) continues with the fourth condition, nonspuriousness, noting that this condition is met when three additional conditions are met. These are measurement, research design, and model specification. While the first two have been discussed at length in the previous portions of this research, model specification is the primary focus of this position. Model specification is where Perry (1996) and the reliance on CFA before having any statistical or psychological insight into the factors of the model created the possibility of challenge to this model. While Wright (2008) and others do not necessarily discredit Perry's claims, they provide enough of a foundation in their doubt to provide the impetus for using EFA to develop a model based on certain criteria before assuming CFA or any other statistical technique should be applied.

Noting table 1 below, it is abundantly obvious that not only is Perry's (1996) model widely used, it has been the source of continued investigation, testing, and



revamping in an effort to create a single construct, or model, that will identify the influences and factors involved in public service motivation.

Table 1 Previous studies using Perry's (1996) Measurement Scale for PSM.

Four-Dimension Model			Three-Dimension Model		
Lee (2005)	1)	Korea; public and private	Scott and Pandey	1)	USA; managers in state
		employees	(2005)		health and human sector
	2)	24 items; 24-items	, ,		agencies
	3)	APM, COM, CPI, SS (no		2)	11 items; 11 items
		report on $\alpha$ )		3)	APM, CPI, COM
Camilleri (2006)	1)	Malta public officials	DeHart-Davis,	1)	USA; managers in state
	2)	24 items; 24 items	Marlowe, &		health and human service
	3)	APM (.21), CPI (.63),	Pandey (2006)		agencies
		COM (.60), SS (.80);		2)	10 items; 10 items
		values are factor loadings		3)	APM (.72), CPI (.68),
		on PSM			COM (.55)
Taylor (2007)	1)	Australia; public employees	Castaing (2006)	1)	France; civil service
	2)	24 items, some revised; 24			employees
		items		2)	4 items; 4 items
	3)	APM (.64), CPI (.78),		3)	CPI (.65)
		COM (.76), SS (.82)			
Bright (2008)	1)	United States; public	Moynihan and	4)	USA; managers in state
		employees	Pandey (2007b)		health and human service
	2)	24 items; 24 items			agencies
	3)	API, CPI, COM, SS; no		5)	11 items; 7 items
		report on α		6)	APM (.72), CPI (.67)' not
					to employ COM (.40)
Vandenabeele	1)	Belgium; civil servants	Coursey and	1)	USA; managers in state
(2008a)	2)	47 items, some added; 18	Pandey (2007)		health and human service
		items			agencies
	3)	APM, CPI, COM, SS, ad		2)	10 items; 10 items
		democratic governance		3)	APM, CPI, COM; no
					report on α
Clerkin, Paynter, and	1)	USA; undergraduate	Moynihan and	1)	USA; managers in state
Taylor (2009)	•	students	Pandey (2007a)		health and human service
	2)	24 items; 24 items			agencies
	3)	. // . //		2)	11 items; 3 items
		COM (.70) SS (.78)		3)	APM; others failed to
					generate minimally
IV: (2000)	1)	77 11' 1	77 1 1 1	1)	acceptable alphas
Kim (2009a)	1)	Korea; public employees	Vandenabeele	1)	Belgium; civil servants
	2)	14 items, some revised; 12	(2008b)	2)	24 items; 13 items
	2)	items		3)	APM (.66), COM (.65),
	3)	(Sample 1, Sample 2):			CPI + SS (.71)
		APM (.75, .75), CPI (.70,			
		.71), COM (.73, .66), SS			
		(.75, .79)			



Table 1 (Continued)

Kim (2009b)	1) 2)	Korea; public employees 24 items; 14 items	Coursey et al. (2008)	1)	USA; national award- winning volunteers
	,		(2008)	2)	<u> </u>
	3)	(Sample 1, Sample 2):		2)	12 items; 12 items
		APM (.62, .71), CPI (.74,		3)	CPI, COM, SS
		.74), COM (.74, .60), SS			
		(.73, .72)			
Kim (2010)	1)	Korea; public employees	Liu, Tang, and	1)	China; part-time MPA
	2)	12 items, 12 items	Zhu (2008)		students (full-time public
	3)	APM, CPI, COM, SS; four	, ,		employees)
	,	factor tested better than		2)	
		three factor		3)	*
		unce factor		٥,	(.57); COM is not
					confirmed
IZ: (1 (2012)	1)	T / / 1 C 1	T ' ' 1 1	1)	
Kim et al. (2013)	1)	International Sample	Leisink and	1)	The Netherlands; public
	2)	33 items; 16 items	Steijn (2009)		sector employees
	3)	APS (.79), CPV (.75),		2)	11 items; 11 items
		COM (.72), SS (.82)		3)	APM (.55), CPI (.68)
			Coursey et al.	1)	USA; national award-
			(2007)		winning volunteers
				2)	12 items; 12 items
				3)	CPI, COM, SS; testing
				3)	formative and reflective
					models

Source: Table based on Kim (2010).

Scholars such as Bright, Clerkin et. al, Camilleri, and many others have identified the importance of public service motivation, and have identified different approaches to measuring and understanding motivation (Bright, 2007, 2009; Camilleri, 2006; Clerkin & Coggburn, 2012). Bright's work on PSM and its impact on job satisfaction and turnover intentions is paramount in the remaining sections of this research, in that Bright found that while person-organization fit did not serve as a mediator for PSM's impact on job satisfaction and turnover intentions, PSM was positively related to job satisfaction and a reduction in turnover intentions (Bright, 2008). Vandenabeele (2008b) contributes to the person-organization fit mediation on PSM literature through his study using masters students, building on a direct correlation between pre-service motivation and person-organization fit. PSM, and its ties to person-organization fit are important in this



research, as it is implied, both through previous literature and through assessment, that individuals entering into public safety fields are predisposed to a sense of patriotism through benevolence (Frederickson & Hart, 1985; Susan et al., 2012). Police and fire personnel could be assumed to have a higher level of public service motivation, simply based on their job context and the level of danger and exposure to harm inherent to their positions.

In what could be considered the most pivotal work to date, a team of renowned scholars and researchers crafted an approach to generalizing PSM across cultures and geographic boundaries (Kim et al., 2013). Using the insight from scholars such as Kim, Vandenabeele, Wright, and Perry, this team worked towards crafting a PSM construct based on Perry's original construct, editing this construct to reflect cultural and sociological differences while maintaining the ability to compare the results across studies. One reason this work is pivotal for future research is the work towards generalizing the PSM construct to a much larger and diverse population. This also demonstrates the need to continue the research into PSM and the factors of PSM, as the scholars collectively invest portions of their valuable time to investigate the possibility of generalizing PSM across populations. In addition, the work showed that despite the previous work by several of the authors into reducing the PSM construct from four factors down to three, the overall impact and scope of PSM is a consensus find to be a four factor construct.

Kim et al. (2013) propose that Perry's (1996) model is useful in the identification of factors, but cannot be generalized internationally, and therefore demand changes to the PSM construct for future investigation. This claim serves as the foundation for the



Wight, Wouter Vandenabeele, James Perry, and several other notable scholars combined the effort and insight from their previous research into PSM to create a team-approach identifying the factors in international studies of PSM (Kim et al., 2013). The authors suggest that PSM may have cultural differences in its operational and conceptual definitions, while also in its prevalence, antecedents, and consequences (Giauque et al., 2011; Kim et al., 2013; Leisink & Steijn, 2009; Liu et al., 2008; Vandenabeele, 2008a).

While Kim et al. (2013) were focused on geographic boundaries separating cultural differences, this investigation focuses on the cultural differences within organizations, particularly as they apply to the public service worker compared to administrative personnel, or those typically in less stressful and dangerous professions within municipal organizations. Kim et al. (2013) will be used as the framework providing investigatory questions comparing their construct and Perry's (1996) construct, from which this research hypothesizes that Kim et al. (2013) will have a more relevant model than Perry, particularly as it suggests that cultural differences provide different returns on PSM investigation. Mississippi, oft-considered an economically-challenged and lower socioeconomic status states than others, creates a unique opportunity to examine the cultural differences of employees within the same organization, in this case, public safety workers within Mississippi municipalities.

Public service motivation serves as the primary investigation target of this research, and is therefore detailed at much greater length not only in this literature review, but also throughout the methodology. Other elements, job satisfaction and person-organization fit (P-O fit) are included in this research; however, they are not a



primary focal point of the research and findings, but rather corollaries to the PSM investigation.

#### **Models of Public Service Motivation**

Using Kim's (2010) foundation for investigation, this analysis builds on a similar structure presented in Kim (2010), yet the initial formulation of PSM shows that it is valid to assume that the PSM model is best defined by a four-factor model, but that the model is not able to hold up to the initial construct developed by Perry (1996). Kim (2010) notes that the model may be constructed in a number of ways due to "sampling error or variations among samples as well as national differences, but some of the inconsistencies may be due to differences in how PSM was measured" (p. 527). In the case of the Mississippi municipal employee, particularly the public safety worker, the case can be made that the characterization of employees as having similar job responsibilities, expectations, and factors is cause to question the sampling and examination of traditional PSM measures. Despite this, Kim (2010) provides a sound approach to identifying a model for PSM, utilizing previously proven models in an attempt to include PSM for an overall construct, in this case an aid for retention. Most of Kim's (2010) work was centered on building an encompassing model, more so than to provide a reasoning for why PSM is included in an overall construct. However, much of his work starting in 2010 and continuing through 2013 centers around the same constructs as those identifying recruitment-selection-attrition strategies, also known as retaining capable and effective employees. Developing retention strategies focused on public service motivation has far-reaching implications for practitioners while providing



a foundation for increased expansion on an evolving theoretical base of public service motivation and retention of public service employees.

#### Formative model of PSM

Kim (2010) posits that a theory can be divided into two parts, with one explaining the structure of theoretical constructs and another that explains the relationships between constructs and their measures. Constructs are primarily considered as causes of indicators, whereby variation in a construct tends to result in variation in the indicators (Kim, 2010). These indicators are identified as "reflective", whereas indicators that are viewed as causes of constructs are termed "formative", meaning the construct is formed by its indicators (Edwards & Bagozzi, 2000; Kim, 2010). Transformational leadership has been modeled as a formative model, with constructs developed using indicators of charisma, influence, leadership, etc (Kim, 2010; MacKenzie et al., 2005). In this case, "these forms of leader behavior are conceptually distinct, likely to have different antecedents and/or consequences and are not interchangeable" (Kim, 2010, p. 528).

Kim (2010) states "PSM is perceived as a multidimensional construct, an overall latent variable with various latent dimensions. This is referred to as a second-order factor model" (p. 528). The concept focuses on the notion that multidimensional constructs are classified as either superordinate or aggregate. If the construct is superordinate, it implies that the dimensions are analogous to reflective measures. For this section, we are focused on the notion that the direction of the relationship between the construct and measures is that the measures develop the construct. This formative model was introduced over 40 years ago, but is only rarely used (Diamantopoulos et al., 2008; Kim, 2010). Kim (2010)



notes, "If the direction of causality between a construct and its measure is not specified correctly, it causes severe biases in parameter estimates" (p. 528).

Index construction for measurement development in a formative model focuses on explaining the abstract variance, considering multilcollinearity among indicators while emphasizing indicators' role as predictors rather than predicted variables (Kim, 2010). These formative measures are typically constructed as composites of specific component variables (Bollen, 1989; Edwards & Bagozzi, 2000; Kim, 2010). Kim (2010) states;

"A construct should be modeled as having formative indicators if the following conditions prevail: (a) the indicators are viewed as defining characteristics of the construct, (b) changes in the indicators are expected to cause changes in the construct, (c) changes in the construct are not expected to cause changes in the indicators, (d) the indicators do not necessarily share a common theme, (e) eliminating an indicator may alter the conceptual domain of the construct, (f) a change in the value of one of the indicators is not necessarily expected to be associated with a change in all the other indicators, and (g) the indicators are not expected to have the same antecedents and consequences. On the other hand, a construct should be modeled as having reflective indicators if the opposite is true" (p. 529).

Kim (2010) posits that PSM should be considered a second-order construct with its four dimensions represented as first-order factors and items of the dimensions as observed variables. Lastly, PSM should be considered formative in nature, in that the failure to include any first-order dimension from PSM may alter the meaning of PSM (Kim, 2010, p. 531). In the analysis portion of this research, the investigation will



determine whether the formative model contains more desirable statistical properties than reflective, although this research will define the PSM structure through the use of exploratory factor analysis first which defines the theoretical model, compared to confirmatory factor analysis which confirms the preconceived theory, it will still test the models to reaffirm the construction of the model. PSM, in the formative model sense, would be an aggregate of its dimensions, meaning the dimensions would form the PSM construct.

#### Reflective model of PSM

Constructs viewed as causes of indicators where the variation in a construct leads to variation in its indicators are known as "reflective" as they represent manifestations of a construct (Kim, 2010). The leader-member exchange (LMX) can be viewed as a example of a reflective model. LMX has an overall latent variable with dimensions such as affect, contribution, loyalty, and respect which are expected to be cause by LMX (Kim, 2010). Kim (2010) notes, "A superordinate construct is a general concept that is manifested by its dimensions that are analogous to reflective measures" (p. 528). To explain this in another manner, a superordinate construct reflects on its indicators, as these indicators represent reflections of the construct. The implied direction of this relationship would be from the construct to the measures. This type of reflective measurement model has been a part of the social science research for a long portion of history, whereas the formative model is relatively recent and far less commonly used.

For reflective measures, the focus is placed on the emphasis on the intercorrelations among items, the common variance, and the unidimensionality and internal consistency (Kim, 2010). The measures or indicators in reflective models, also



referred to as reflective indicators, are interchangeable and the addition or deletion of indicators will not change the essential nature of the underlying construct (Kim, 2010; Kim et al., 2013). Developing the model as a superordinate model, or identifying the dimensions as reflective and PSM is therefore a general entity manifested by dimensions that serve as its indicators. Detailing the models of PSM require the identification of the flow of relationship between the construct, PSM, and its dimensions. The models in the analysis section will represent the same model, with a difference in flow to and from the PSM construct.

### **Retention and Public Service Motivation**

Retention, as it pertains to public service motivation, is the ultimate goal of this research thrust. The PSM model constructed and tested in the previous sections would warrant the development and conclusion of a single research thrust, but the overall contribution to the literature would not be as beneficial without a relational tie-in to a human resources dilemma current in the field. Retention, particularly as it pertains to the State of Mississippi workforce employee, is a particularly tense topic. In prior discussions with the State of Mississippi Personnel Board Executive Director, Deanne Mosley, she explicitly stated that the workforce in Mississippi is set to experience the largest retirement/removal of workers in the State's history. When asked about her biggest concern, outside of the turnover, she noted that retaining employees was at the top of her list. The retention of employees has been shown to be correlated to public service motivation, job satisfaction, and organization commitment (Alonso & Lewis, 2001; Bright, 2005; French & Emerson, 2013; Jr. & Judge, 1994; Knoke & Wright-Isak,



1982; S. H. Lee & Olshfski, 2002; Leisink & Steijn, 2009; Moynihan & Pandey, 2007b; Paarlberg & Lavigna, 2010; Park, 2001; Vandenabeele, 2009).

Given the nature of retention and the importance retention plays in managing municipal, state, and federal agencies, it is an opportunistic time for the State of Mississippi to investigate the inner workings of the public service worker's motivation, particularly those individuals tasked with providing safety and security for the people of the state. Noting this, the next process in this research is to uncover the job satisfaction and organization commitment variables that make up the construct. As Kim (2010) notes, "a formative model, in isolation, is under-identified and cannot be estimated" (p. 531). He continues, "Two reflectively measured constructs, job satisfaction, and organization commitment, are added in empirical analysis as outcome variables for solving a problem of under identification" (p. 532). Using the same methodology to produce a model capable of comparison to previous literature, this research endeavor will utilize Kim's reasoning and strategy to incorporate additional features of retention to include as a model of PSM is constructed and implemented into an overall construct of retention.

Liu et al. (2008) identified the importance of PSM in the overall construct of job satisfaction, along the way identifying the need to include P-O fit into the models as an intermediary. The authors identified the importance of APM and self-sacrifice to the overall construct of job satisfaction, both of which are contained in this research.

Although self-sacrifice has been renamed and combined with commitment to public interest variables, the underlying nature of the construct falls in line with Liu et al. (2008). The commitment to public interest variable as a stand-alone "unexpectedly had"



no significant effect on job satisfaction," which is not surprising given the unique sample of the authors' selection as well as the sample of this research (Liu et al., 2008, p. 696).

Camilleri (2006) focuses on the exploration of organizational commitment using PSM within the Maltese Public Service. Previous research indicates that organizational commitment contains measures of job satisfaction as part of its construct, however the models contained in this analysis assume that organizational commitment plays into job satisfaction as posited by Kim (2010; 2013). Camilleri (2006) bases much of the findings on Meyer and Allen's three-dimensional construct, and while this development is not important for the contained research within, it is necessary to note for future exploration.

Camilleri views OC as a reflective construct on the various factors of PSM, whereas Kim (2010) models OC as a formative construct from PSM, and reflective onto job satisfaction. Vandenabeele (2009) provides the insight on organizational commitment as a construct, although the focus of his work is using OC as a mediator on PSM, identifying the nature of OC and its impact on job performance.

Essentially, much of the model development is focused on the outcome factor of retention and satisfaction, therefore OC is not a component of significant reflection or investigation in this research. It is important to explain the dimensions of OC and to identify OC in the CFA, however the work prescribed in this section is based on Kim (2010) and his inclusion of OC into the overall PSM model. Kim (2010) notes that the inclusion of OC, and in his opinion JS, is to provide statistical foundations to remove the problem of underidentification. This research suffers from a similar problem, however the research identifies the need to explain these factors as components of retention, the overall impetus for this investigation. Kim (2010) provides a footnote:



"In order to get the necessary conditions for the identification of formative indicator constructs, 1) the scale of measurement for the latent construct is established by constraining a path from one of the construct's indicators to be equal to 1 or by constraining the residual error variance for the construct to be equal to 1, and 2) to resolve the indeterminacy associated with the construct level error term, a formative construct emits paths to 2a) at least two unrelated latent constructs with reflective indicators, 2b) at least two theoretically appropriate reflective indicators, or 2c) one reflective indicator and one latent construct with reflective indicators (Kim, 2010, p. 533).

Job satisfaction, as a construct, will be provided in this model as a component reflected on by organizational commitment and PSM, similar in nature to the model in Kim (2010). Job satisfaction will be comprised of four constructs, and will be reflected upon based on the development of the model and resulting reliability measures. The construct and measures are denoted in the following sections.



#### CHAPTER III

#### EXPLORATORY METHODOLOGY

To fully dissect public service motivation for public safety workers, it is necessary to understand the working relationships between motivation, commitment, and satisfaction as they relate to the unique nature of public safety work. Identifying the components within PSM, whether based on Perry (1996), Kim et al. (2013), or some other construct creates the addition to the expanding literature on PSM while also providing unique insight into public safety employment in the face of potential retirement from the baby boomer generation. Studying a random stratified sample of Mississippi municipalities provides the groundwork for identifying the unique influencers on PSM, and how PSM influences job satisfaction and organizational commitment, thereby influencing decisions to stay with an organization.

# **Hypotheses**

With the data cleaned and a working file established, the next portion of this research will explain the hypotheses of this work. Identifying the most significant questions from this research, this section will provide each hypothesis with the necessary literary background and explanation for significance to the research. Once fully explained, this research will then provide the quantitative steps in forming the model



constructs, supplying explanatory factors for each, followed by a detailed analysis of each of the steps used to reach the findings presented.

# Hypothesis 1: Perry's 4-dimension PSM model will not be statistically significant for all 4 dimensions for public safety workers.

James Perry (1996, 1997) developed an extensive 24-factor, 4-dimension construct measuring PSM for public and private employees. This construct has served as the foundation for countless studies, been the basis for countless contradictions to the PSM theory, and has served as the reasoning for additional work into PSM (Bright, 2008; Kim, 2010; Perry, 2008; Vandenabeele, 2008). This construct has 4 dimensions; 1) attraction to policy making (APM), 2) compassion (COM), 3) commitment to public interest (CPI), and 4) self-sacrifice (SSF). While Kim's (2010) work proved that Perry's full model was not relevant for his study of firefighters, it is necessary to determine whether or not the full construct is valid, reliable, and applicable for the Mississippi municipal employee comparison, to determine the micro-generalizability of the construct. It is anticipated that the full Perry model will not be valid or significant for this study. A modification of Kim's 2010 model is assumed to be the predominant model for comparison, and will be tested during this hypothesis as Kim's model relies on Perry's PSM dimensions, albeit altered dimensions.

The altered dimensions of the PSM model will account for the variations of job satisfaction found in Kim (2010), based on theoretical foundations from previous work (Bright, 2005; Camilleri, 2006; Coursey & Pandey, 2007; Houston, 2000; Jurkiewicz, 2000; Kim et al., 2013; Vandenabeele et al., 2004; Wright & Christensen, 2010; Wright & Pandey, 2005). Tests for the mediating effects will be performed and reported.



Perry's (1996) construct will not be completely transferable to the Mississippi municipal workforce for several reasons. First, it has been previously detailed in the prior sections of this research that Perry's construct is not applicable in its entirety to different groupings within organizations. It is hypothesized that the same will remain true with this data. Much like Kim et al. (2013), this data is quite possibly vulnerable to low factor loading from either the compassion variable (COM) and/or the attraction to policy making variable (APM). Police and fire have been shown to have a self-motivation quality in their professions, given the unique nature of their professions demanding self-sacrifice and placing themselves in danger, and therefore are expected to show higher factor loadings of self-sacrifice (SS) and lower levels of APM and COM (Kim, 2010; Kim et al., 2013; Lipsky, 2010; Wright & Christensen, 2010).

The significance of this hypothesis is important as it provides the starting point, or benchmark, for the testing of the following hypotheses. Perry's (1996) has been found to lack generalizability in many studies, however, these same authors report the importance of investigation into the use of the Perry model but in iterations, with modifications (Kim et al., 2013; Wright & Christensen, 2010; Wright & Grant, 2010; Wright et al., 2012). Assuming the model is significant would present validity problems for the future hypotheses in this research, unless the hypothesis is proven false, at which point the following hypotheses can still be tested, with simple adjustments to the descriptive characteristics of the model. Put in different terms, if Perry's (1996) model holds true and significant for all four dimensions using the same questions to provide validation for the dimensions, the following hypotheses may still be tested. However, instead of using exploratory factor analysis (EFA) to perform the model building efforts, the hypotheses



can be tested using CFA or SEM, as the theory and model will prove valid from the original test. This hypothesis provides the first step in a serious of tests and explorations for future effort in defining PSM factors for public safety employees. It is assumed this hypothesis will hold, rendering the next hypotheses important for investigation.

## Hypothesis 2: Public safety workers will report experiencing lower overall levels of PSM than non-public safety municipal workers

There are multiple reasons why public safety workers may experience lower levels of PSM than non-public safety workers (Lee & Olshfski, 2002; Udechukwu, 2009). Fire employees reported a commitment to their job and their job provides a valuable service to the community, however, this value is not necessarily seen in extrinsic, hygiene based rewards (Lee & Olshfski, 2002). Pay for the positions of police and fire are, on average, equivalent to positions with less physical demands, less educational requirements, fewer hazards, and less stressful conditions.<sup>2</sup> One of the primary reasons public safety employees may experience lower levels of PSM is grounded in the attraction to policy making (APM) dimension, which Kim noted were not applicable to his studies of firefighters, and therefore were reworked to accommodate different workforce subgroups (Kim, 2010). Using Kim's (2010) APM construct, examining municipal safety workers to non-safety workers will result in comparable construct figures, as well as significant construct loadings, while providing a base for comparison between overall impacts of the different dimensions of PSM on overall job satisfaction and organizational commitment. Without reconstructing the APM

<sup>&</sup>lt;sup>2</sup> Data derived from the John C Stennis Institute of Government 2013 Municipal Salary Study.



component, comparisons across divisions would not be possible, as the construct loading factors would not be significant, therefore rendering the models insignificant for comparison.

Within this hypotheses lies the overarching question for this particular research. Should public safety workers be managed in a different manner compared to their non-public safety counterparts? If the tested models prove that different dimensions of PSM are not valid, or must be reworked for the proper model construct, it can then be derived that the public safety employee has different motivators and should therefore be managed in a different manner than the non-public safety worker.

Public safety employees have been vastly overlooked in PSM literature, yet in a growing number of psychological, vocational, and even economic journals, they have been the topic of a growing level of investigation (Carpenter et al., 2012; Fitch, 2008; Gillet et al., 2013; Liu et al., 2008; Udechukwu, 2009). Public safety employees have been reported as having a unique level of self-motivation, therefore they can be assumed to have a lower level of PSM than non-public safety employees, as their initial motives for public service will provide a set level of motivation, with additional constructs not influencing these levels of PSM in the same magnitude as other public service employees.

Should the public safety employee be treated in a different manner than non-public safety employees if they enter the workforce with a different set of motivators than others? While it would be simple for an organizational model to assume all public safety employees are equal and should therefore be treated and managed equally, it would be shortsighted to act and manage in this manner. Instead, managers should be cognizant of



the differences within all of the divisions within his or her municipal organization, paying close attention to motivating dimensions, providing guidance and motivation based on the different types of public service employees and their unique typologies.

Mississippi municipal employees may be considered their own unique entity, not subject to comparisons to other municipal employees both domestic and international. However, it would serve little to no purpose to generalize employees at the local level as having the same motivation characteristics as federal service employees, notably found in studies examining the federal service level of PSM and ignoring the local level distinction (Crewson, 1997; Frank & Lewis, 2004; Houston, 2000, 2006; Lewis & Frank, 2002; Perry et al., 2010). Adding to the literature and expanding on the previously established and oft-tested model first established by Perry (1996), this hypothesis provides additional support for increased investigation into PSM at the local levels, rather than focusing solely on national and international samples.

### Hypothesis 3: Public safety workers are more likely to exhibit overall job satisfaction than their non-public safety counterparts.

Public safety workers, as part of their duty, understand that they are part of an organization and that the organization is structured in a way that advancement and structure are parallel (Lipsky, 2010). Fire and police are subject to additional self-motivating factors, and are therefore less reliant in the on-the-job factors which impact typical administrative and non-public safety employee (Gillet et al., 2013). While Gillet et al. do not specifically state that police job satisfaction would be higher, this research takes into context the constructs comprising Kim's (2010) 4-component PSM model and its impact on job satisfaction, this hypothesis lends itself to justification. By using the



PSM model, the authors are hypothesizing that PSM's influence on job satisfaction is worth investigation, which is a premise of this research endeavor as well.

Job satisfaction, as it is perceived to be influenced by PSM and organizational commitment, will be higher in public safety employees as their expectations are more likely to be in line with their experiences in the workplace, compared to others (Udechukwu, 2009). Using studies on job satisfaction and PSM, studies have shown that job satisfaction is positively influenced by and influential on public service motivation, with organizational commitment providing additional positively correlated dimensions to job satisfaction (Camilleri, 2006; Lyons, Duxbury, & Higgins, 2006; Meyer et al., 2004; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001; Naff & Crum, 1999; Perry et al., 2006; Scaramella et al., 2006).

Police and firefighters exhibit a unique quality that is separate from non-public safety workers, the willingness to risk life and limb to provide a service to the public (Brewer et al., 2000; Gillet et al., 2013; Lee & Olshfski, 2002; Lipsky, 2010; Scaramella et al., 2006; Udechukwu, 2009). Public safety employees will inevitably exhibit higher levels of job satisfaction, as it is hypothesized, based on two factors. First, the public safety employee has a higher level of self-motivation, providing a transferrable quality into job satisfaction while also increasing overall levels of satisfaction in their job performance. Second, public safety employees have a higher level of job commitment, also referred to as organizational commitment in this research, primarily due to the demands of their jobs and their willingness to continue their efforts to provide a public service, despite risk of injury and even death.



To assess the validity of this hypothesis, overall levels of job satisfaction will be compared between public safety employees and non-public safety employees, focusing on the levels of significance between PSM, commitment and job satisfaction. Job satisfaction is a widely tested and hotly debated topic, as many individuals have used constructs from multiple disciplines and therefore muddying the waters of job satisfaction. For this study, several questions will be used to determine levels of job satisfaction, although it is theorized that job satisfaction can be determined using one simple survey question, "I am satisfied with my current job". Comparing the impact factors from the commitment latent construct and the PSM construct, it should be readily apparent that public safety employees have significantly higher levels of commitment than non-public safety employees, leading to the finding that despite lower overall levels of PSM, public safety employees will have higher overall job satisfaction, essentially reducing the levels of voluntary turnover for the future.

Reducing future turnover intentions, particularly voluntary turnover, can drastically increase retention efforts for all organizations (Camilleri, 2006; Cohen, 2007; Georgellis, Iossa, & Tabvuma, 2010; Goodman & French, 2011; Holtom, Mitchell, & Lee, 2006; Jaros, 2007; Lee & Maurer, 1997; Mitchell et al., 2001; Williams, Edwards, & Vandenberg, 2003). Providing an avenue for practitioners to address retention issues, particularly by identifying voluntary turnover in public safety officers, may reduce the costs and delays associated with turnover. Despite the best efforts of managers across the globe, turnover is typically an expensive and time-consuming topic as it requires the recruitment, training, and supplementing of new workers into a workforce that can ill-



afford to withstand delays. Put simply, crime and destruction will not wait for a new public safety employee to be brought up to speed.

## Hypothesis 4: Public safety workers experience higher levels of commitment to public interest than non-safety workers as factors for PSM

Based on their commitment to a more volatile, potentially dangerous position, police and fire are more likely to exhibit higher levels of self-sacrifice and commitment to public interest than non-public safety workers (Gillet et al., 2013; Lee & Olshfski, 2002; Udechukwu, 2009). Police and fire exhibit higher levels of self-motivation that in turn, results in a higher level of self-sacrifice. Attraction to policy-making (APM) will be included in the overall investigation, but the direction of the path and the strength of the relationship is not within the scope of this portion of the research.

The commitment dimension has been contested in several well-established articles (Liu et al., 2008; Moynihan & Pandey, 2007a, 2007b). Most note that COM fails to load significantly on the PSM construct, providing the foundations for the research to remove the COM variable from the PSM construct. This is troublesome for the researcher wishing to retain the four-dimension PSM construct, as the four-dimension construct typically produces a better overall fit for PSM despite lower levels of significance for some of the influencing variables (Christensen & Wright, 2011; Kim, 2010; Kim et al., 2013; Wright & Grant, 2010; Wright et al., 2012).

Commitment in its basic form should inevitably be higher in public safety employees than non-public safety employees based on the characteristics of the job. While it is assumptive to say this is the case for each individual employee in a comparison, as a whole this assumption should prove true and at a significantly high



level. Determining the levels of commitment in Mississippi municipal public safety employees and comparing them to the non-public safety counterparts should be a straightforward process, as the comparison will be grounded in factor loading and significance testing of the variable and its impact on the PSM construct, comparing these findings between public safety and non-public safety employee.

Finding there are higher levels of commitment in public safety employees can create the opportunity for managers to focus on this level of commitment in retention efforts, while also providing the impetus for additional focus on other influencers of PSM paving the way for more effective management practices. This can also increase the knowledge base among PSM scholars, providing additional foundation for the focusing of different variables on PSM as individual measures, proving there is more to study at the local comparison level of PSM than previously thought.

### Hypothesis 5: PSM, as it applies to public safety employees, is a first-order reflective, second-order formative model.

Reconfirming Kim's (2010) assessment of the public service motivation construct, PSM for public safety employees will be a first-order reflective, second order formative model. What this states is that for public safety employees, the main factors within the PSM latent construct will be positively, significantly correlated to PSM. In their second order, they will correlate to each other, and to other factors such as job satisfaction and organizational commitment, which provides the basis for examination at different levels of investigation.

PSM is a superordinate multidimensional construct representing a generalized concept manifested by specific dimensions (Edwards, 2001). Kim (2010) posits



"multidimensional constructs and their dimensions are better treated as latent variables in structural equation models." He continues, "A superordinate construct is best viewed as a second-order factor with its dimensions as first-order factors" (Kim, 2010, p. 153).

Essentially, the second-order model of PSM utilizes the four first-order factors as indicators of a single second-order factor (PSM), thereby providing the degrees of freedom (Kim, 2010). If this model is correct theoretically, it should possess the ability to explain the six covariances between the four factors with only four parameters (Kim, 2010).

Kim (2010) states, "A theory can be divided into two parts: one that specifies relationships between theoretical constructs and another that describes relationships between constructs and measures" (p. 527). Constructs are typically viewed as causes of indicators, meaning that variation in a construct leads to variation in its indicators. Such indicators are termed reflective because they represent manifestations of a construct (Kim, 2010). As found in some circumstances, indicators are assessed as causes of constructs. Such indicators are termed formative, meaning that the construct is formed or induced by its indicators (Edwards & Bagozzi, 2000). As mentioned previously, PSM is considered a second-order factor model. Kim (2010) states, "The direction of the relationship is either from the construct to the measures (reflective measurement) or from the measures to the construct (formative measurement)" (p. 528). While the reflective measurement has a long and storied tradition of use in the social sciences, formative models have only recently been utilized (Diamantopoulos et al., 2008). If the direction of causality between a construct and its measure incorrectly specified, it can cause significant biases in parameter estimates (Kim, 2010).



To summarize the differences, Kim (2010) presents the following: "For reflective measures, scale development places major emphasis on the intercorrelations among the items, focuses on common variance, and emphasizes unidimensionality and internal consistency. For formative measures, index construction focuses on explaining abstract variance, considers multicollinearity among the indicators, and emphasizes the role of indicators as predictor rather than predicted variables" (p. 528).

If the hypothesis holds true, the model created from this research will be comprehensive, complete, and reflect the PSM, job satisfaction, and organizational commitment based on Kim and Perry's research. PSM is an aggregate measure, therefore all first-order dimensions must be considered. The relationship between PSM and its measures shows that it is formative in nature. Kim (2010) posited that the original Perry (1996) construct needed to be revisited with the same measurement validity tests, which this hypothesis will provide. It is hypothesized that the model will provide the same findings in terms of construct development as Kim's 2010 work.

# Hypothesis 6: PSM for public safety employees is positively related to job satisfaction and organizational commitment, regardless of person-organization fit.

Person-organization fit, detailed previously, will not play a significant role in PSM, although it will be significant in identifying the hygiene and motivators for public safety employees. Herzberg's hygiene and motivators will be tested and identified as a corollary to the research, as the identification of the strength, role, and path of hygiene and motivators will add to the research into what motivates public safety workers, which has been an ongoing question for researchers (Udechukwu, 2009).



P-O fit has been shown to have both significant and no impact on motivation, depending on the research question (Bright, 2007; Goodman & Svyantek, 1999; Lauver & Kristof-Brown, 2001). Bright (2007) found that P-O fit played no part in mediating the impact of PSM, but did not discount its impact in future research. This hypothesis will determine the levels of fit, commitment, and factors impacting public safety workers compared to non-public safety workers in municipalities in Mississippi.

Vandenabeele (2008b) found that PSM had no impact on the attraction process for public service motivation despite the presence of P-O Fit in the analysis. While this would typically dissuade a research endeavor from testing this premise on his or her own research, it is believed that the target sample Vandenabeele used in his analysis will have different results than the comparison of public safety employees. That stated, it is hypothesized that P-O Fit will not have a significant impact on PSM or commitment, as it is believed that the P-O Fit component is not significant in the overview of the motivation factors for employment.

Bright (2008) has been at the forefront of examining P-O fit in public organizations, and his work provides the foundation for this hypothesis. Bright states, "one area of research that may be able to provide an explanation for the inconsistencies found in the PSM literature is person-organization (P-O) fit" (p. 151). Bright notes that congruence between individuals and their respective organizations is found in either a supplementary or complementary manner. For the comparison of the public safety worker, this is particularly interesting as, given the definitions provided by Bright (2008), public safety workers will find both complementary and supplementary congruence, thereby potentially nullifying the P-O fit influence. Essentially, P-O fit, if it is to be



classified as one way or another, will nullify itself if a worker is found to exhibit both qualities, particularly in studies where both public safety employees and non-public safety employees are grouped together in the same analysis. Bright defines the two congruence measures in a straightforward manner. He states, "Supplementary congruence is achieved when the characteristics of individuals and organizations are similar to each other, whereas complementary congruence is achieved when the characteristics of individuals and organizations add something that is missing to make each other whole" (p. 152). While the focus of this hypothesis does not focus on the direction or strength of the mediating factors of P-O fit, it is important to identify the influence on job satisfaction and commitment to the job as other studies have identified this construct as an important measure for future research.

Regardless of the impact of P-O fit, PSM will have a positive influence on job satisfaction and organization commitment, as those Mississippi municipal public safety employees are inevitably bound to exhibit higher levels of job satisfaction and organizational commitment. Combining the nature of their positions with the demands of their jobs, providing a public service that ensures the safety and well-being of the citizens of the municipalities in which they reside, often with their families and friends, will provide the foundation for the increased levels of job satisfaction and commitment.

#### **Survey Instrument**

The survey for this research was developed by Dr. P. Edward French as part of a research effort to identify the motivation of public service employees in the state of Mississippi. Using funding and resources provided by the John C. Stennis Institute of Government and Community Development at Mississippi State University, French and



other staff members at the Institute including the author of this research worked to implement the survey instrument across the state. The survey instrument was developed as the product of a multiple dimension PSM survey, implementing questions from numerous PSM scholars and survey instruments. The construction of the survey in this manner allows for research into motivation from multiple angles, groupings, and constructs, all while providing a robust sample size for analysis. The survey instrument includes all 24 items from Perry's (1996) PSM construct, along with many others from Kim (2010), Houston (2000, 2006), and Vandenabeele (2008). While Kim et al. (2013) provide a unique take on questions offered through Perry's (1996) original construct, the authors reword several of the questions and come to different conclusions than Perry (1996) or Kim (2010). Noting these differences, this survey's main strength rests in its ability to provide multiple options for constructing PSM models, also allowing for the tests on job satisfaction and organizational commitment.

The survey was administered over a 7-month period, with supervision provided along the way. The survey lead, French, was able to collect a statistically significant sample from 10 municipalities across Mississippi, unique in geography, demographics, and culture. The instrument provided a sample size of 927 from a random sample drawn from the municipality, with the details of the data provided in the next section. In the analysis section of this research, the different questions and items from the survey will be identified and explained as they relate to the statement of the problem for this research.

Information and data provided from this survey are part of the intellectual property of P. Edward French, PhD. With his explicit permission, this research has utilized the wealth of information provided by this survey and inherently credits the data



availability throughout to French and his survey research team (M. Emerson, J. Breen, B. Eskridge).

#### Data

The data are comprised of ten municipalities in Mississippi, a state which typically underpays its public sector workers compared to other states in the region.<sup>3</sup> If the PSM models are to incorporate all sectors of a public sector workforce, studying the underserved populations of Mississippi will provide the micro-level analysis inferred by Kim (2010) and Kim et al (2013). Before the PSM construct can be generalized to account for international territories, it would benefit PSM scholars to understand the implications of the PSM model for a low-income state such as Mississippi. While PSM scholars continue the daunting task of developing a model reflective of cultures and geographic regions, this research aims to uncover the factors involved in motivation and retention in public safety employees, as this sector in public employment has gone vastly under-analyzed.

For this study, a random sample was chosen from 3,698 municipal employees from ten cities spanning the state of Mississippi, each selected based on their geographic locations, economic conditions, and population distribution. The survey was administered to 1,159 public employees over a seven-month period in mid-to-late 2012. Employees in each municipal department were allowed the opportunity to complete the survey anonymously during their normal paid work hours. The survey team was on-site

<sup>&</sup>lt;sup>3</sup> Deanne Mosley, Executive Director State Personnel Board, presentation. March 2014, Mississippi State University.



at various locations to oversee administration of the survey, providing answers to questions regarding the survey and overall support for the respondents when needed. At the end of the collection period, 927 surveys were completed resulting in an 80% response rate. Respondents represented all municipal departments including public safety, administration, public works and others. The survey's intent was to collect information concerning employee motivation, reward preference, and demographics.

Stratifying the municipalities, the study collected municipal employee data for 10 different municipalities in Mississippi. These 10 municipalities are listed, along with their workforce population in table 2 below. Cities participating in this study included Biloxi, Greenville, Gulfport, Hernando, McComb, Meridian, Natchez, Pascagoula, Starkville, and Tupelo. These cities represent all areas of the state, at varying levels of population and workforce. In addition, the municipalities each have a different level of police and fire workforce, which adds to the validity of this study.

Table 2 Mississippi municipalities surveyed, and responses given.

City	Population	Number of Employees	Number in Random Sample	Number Received from Random Sample	Percent (Response Rate)
Biloxi	44,054	591	200	153	76.5%
Greenville	34,400	441	109	100	91.7%
Gulfport	67,793	635	200	141	70.5%
Hernando	14,090	131	50	42	84.0%
McComb	12,790	182	60	27	45.0%
Meridian	41,148	458	150	117	78.0%
Natchez	15,792	245	70	61	87.1%
Pascagoula	22,392	271	77	51	66.2%
Starkville	23,888	294	88	81	92.0%
Tupelo	34,546	450	155	154	99.4%
Totals	310,893	3,698	1,159	927	80.0%



Table 3 Police fire response rate

City	Number of Employees	Number in Random Sample	Random Sample Response	Number of Police and Fire	Percent (Respondents
Biloxi	591	200	153	82	53.6%
Greenville	441	109	100	65	63.0%
Gulfport	635	200	141	78	54.6%
Hernando	131	50	42	29	69.0%
McComb	182	60	27	12	40.7%
Meridian	458	150	117	68	57.3%
Natchez	245	70	61	31	50.8%
Pascagoula	271	77	51	33	64.7%
Starkville	294	88	81	30	35.8%
Tupelo	450	155	154	74	46.8%
Totals	3698	1159	927	502	53.3%

A majority of respondents were male (73.6%), with the largest demographic between the ages of 35 and 44 (31.7%). Minorities and females were also represented as approximately 32% of respondents were non-white and 27% were female. 54% of respondents reported having a high school degree of less, with the largest percentage of respondents reporting working for their municipality for 5 years or less (32%). Just over half (54%) of respondents were fire and police personnel, and a majority of the public safety employee respondents were non-management positions (99%).

Each municipality was delivered a set of questionnaires, and the questionnaires were given to the HR director or applicable person if the HR Director was not available. Of the surveys issued, the return response rate was over 75%. The sample collected from the survey instrument totaled 927 municipal employees. Cleaning the data for repetitive/anticipated responses, clustered responses, and non-variance responses, the usable sample for this set was 916 municipal employees. Of these 916 employees, 502



were full-time police or fire. Of these 502, 266 were full-time police officer, non-administrative, while 235 were full-time fire personnel, non-administrative.

Demographics for the public safety personnel are found below, in table 3.

The public safety workers and non-public safety workers share similarities in age, education, which allows for comparisons across municipal organizations. In this analysis, controls will be made for age, gender, race, and education.

Examining agency affect provides a consideration of the impact profession has on the multiple dimensions of PSM. Crewson (1997) states that comparing professions allows for the testing of assumptions regarding persons and their chosen professions. There is an established expectation of differing value preferences between and among professions (Edwards, Nalbandian, & Wedel, 1981). Given the demands placed on individuals working the public safety sector, it is reasonable to assume they will have a stronger attraction to the commitment to public interest (CPI) and self-sacrifice dimensions of PSM, as proposed by Kim (Guy, Newman, & Mastracci, 2008; Kim, 2010). The theories tested in the following hypotheses will exhibit that municipal public safety employees will display higher levels of certain PSM dimensions than non-public safety workers.

Public safety workers within Mississippi earn less than 40% of the salary of comparable positions around the country. In fact, these very same positions make less money than their counterparts in neighboring states. Table 4 below shows the data found from 2013 O-Net and Bureau of Labor Statistics.



Table 4 Salary statistics, fire and police

Job	Location	Pay			2013		
JUD	Location	Period	10%	25%	Median	<b>75%</b>	90%
	United	Hourly	\$10.56	\$14.95	\$21.92	\$29.58	\$38.67
Fire	States	Yearly	\$22,000	\$31,100	\$45,600	\$61,500	\$80,400
_	Mississinni	Hourly	\$9.54	\$11.09	\$14.06	\$17.61	\$21.60
	Mississippi -	Yearly	\$19,800	\$23,100	\$29,200	\$36,600	\$44,900
	United	Hourly	\$15.71	\$20.15	\$26.99	\$35.44	\$43.60
D-1:	States	Yearly	\$32,700	\$41,900	\$56,100	\$73,700	\$90,700
Police -	Missississis	Hourly	\$10.21	\$12.36	\$15.12	\$18.01	\$20.73
	Mississippi -	Yearly	\$21,200	\$25,700	\$31,400	\$37,500	\$43,100

Table 4 shows the discrepancy in pay between the public safety workers in Mississippi and the rest of the United States. The median salary in 2013 for fire personnel in Mississippi was only 64% of the median salary for fire personnel in the United States. For police personnel, this discrepancy was even larger, with Mississippi police personnel median earnings at only 56% of their counterparts' median salary in the United States.

Table 5 Comparable state (Alabama) salary statistics

Job	Location	Pay			2013		_
300	Location	Period	10%	25%	Median	<b>75%</b>	90%
	Mississippi	Hourly	\$9.54	\$11.09	\$14.06	\$17.61	\$21.60
Mississippi -	Yearly	\$19,800	\$23,100	\$29,200	\$36,600	\$44,900	
Fire Alabama	Hourly	\$11.56	\$14.82	\$18.95	\$24.20	\$2,847.00	
	Alaballa	Yearly	\$24,000	\$30,800	\$39,400	\$50,300	\$59,200
	M:::	Hourly	\$10.21	\$12.36	\$15.12	\$18.01	\$20.73
	Mississippi	Yearly	\$21,200	\$25,700	\$31,400	\$37,500	\$43,100
Police Alaba	Alahama -	Hourly	\$12.50	\$14.85	\$18.96	\$23.94	\$28.43
	Aiavailla	Yearly	\$26,000	\$30,900	\$39,400	\$49,800	\$59,100



Looking at these figures, it is readily apparent that not only are Mississippi public safety workers paid far below the national median, but adjacent states pay higher wages than Mississippi municipalities. While some findings suggest that public service employees value intrinsic rewards over extrinsic rewards, extrinsic discrepancies such as these can create job dissatisfaction for some (Bright, 2008; Guy et al., 2008; Leisink & Steijn, 2009; Moynihan & Pandey, 2007b; Perry et al., 2009; Wright, 2007).

Table 6 Comparison of public safety worker age

			Aş	ge			
	24 or	25.24	25.44	45.54	55.64	65 or	T . 1
	younger	25-34	35-44	45-54	55-64	older	Total
Non-Public	22	73	100	131	90	9	425
Safety Worker	5.2%	17.2%	23.5%	30.8%	21.2%	2.1%	100.0%
Public	27	133	192	120	28	2	502
Safety Worker	5.4%	26.5%	38.2%	23.9%	5.6%	0.4%	100.0%
Totala	46	205	290	247	116	11	927
Totals	5.0%	22.1%	31.3%	26.6%	12.5%	1.2%	100.0%

Table 7 Comparison of public safety worker gender

	Gender				
	Male	Female	Total		
Non-Public	255	170	425		
Safety Worker	60.0%	40.0%	100.0%		
Public Safety	423	79	502		
Worker	84.3%	15.7%	100.0%		
Totals	678	249	927		
	73.1%	26.9%	100.0%		



Table 8 Comparison of public safety worker, race

			R	ace			
					Native		Total
	White	Black	Hispanic	Asian	American	Other	
Non-Public	257	161	4	0	2	1	425
Safety Worker	60.5%	37.9%	0.9%	0.0%	0.5%	0.2%	100.0%
Public	376	117	1	1	2	5	502
Safety Worker	74.9%	23.3%	0.2%	0.2%	0.4%	1.0%	100.0%
Total	633	278	5	1	4	6	927
	68.3%	30.0%	0.5%	0.1%	0.4%	0.6%	100.0%

Table 9 Comparison of public safety worker education

	Education							
	less than HS	HS/GED	2 yr. college	4 yr. college	Masters	Law degree	Doctorate	Total
Non- Public	24	192	109	73	22	3	2	425
Safety Worker	5.6%	45.2%	25.6%	17.2%	5.2%	0.7%	0.5%	100.0%
Public Safety	6	279	129	78	9	0	1	502
Worker	1.2%	55.6%	25.7%	15.5%	1.8%	0.0%	0.2%	100.0%
Total	30	471	238	151	31	3	3	927
	3.2%	50.8%	25.7%	16.3%	3.3%	0.3%	0.3%	100.0%

Public safety workers in this sample are primarily white (75%) compared to their public service counterparts (61%). The education levels of the public safety worker were primarily of the high school level, with 55.6% of the public safety respondents reporting a high school diploma or GED, and an additional 41.2% reporting either a 2- or 4-year degree. For their non-public safety counterparts, 45.2% reported obtaining a high school diploma or GED, with an additional 42.8% reporting either a 2- or 4-year degree.



Table 10 Characteristics of public safety workers

Variables	Characteristics	Respondents (%)
Sex	Male	84.3
	Female	15.7
Age	Under 24	5.4
	24-35	26.5
	35-44	38.2
	45-54	23.9
	55-64	5.6
	Over 65	0.4
Length of service (years)	0-5	32.9
	5-10	23.6
	10-15	14.4
	15-20	16.9
	25+	12.2
Education	HS Diploma	55.6
	2 year college	25.7
	4 year degree	15.5
	Graduate Degree	2.0
Organization	Police	53.0
	Fire	47.0

(n=502)

Note: No answer is excluded.

Many of the public safety employees in this sample are relatively new to their profession, as 56.4% of the public safety respondents reported being employed for less than 10 years of service. Of those reporting a tenure of less than 10 years, 57.7% were police and 42.3% were fire employees. While much of the analysis in the following sections will focus primarily on the public safety employee, it is important for comparison purposes to report the non-public safety employees' characteristics. This becomes evident throughout as indirect comparisons and some direct comparisons are used to exemplify the differences between public safety employees and their counterparts. The resulting comparisons will create the justification for the research into



public safety employees as its own unique classification, rather than lumping these individuals in with other personnel at the municipal level.

Table 11 Characteristics of non-public safety workers

Variables	Characteristics	Respondents (%)
Sex	Male	60.0
	Female	40.0
Age	Under 24	5.2
	24-35	17.2
	35-44	23.5
	45-54	30.8
	55-64	21.2
	Over 65	2.1
Length of service (years)	0-5	37.7
	5-10	26.3
	10-15	12.3
	15-20	10.4
	25+	13.3
Education	HS Diploma	45.2
	2 year college	25.6
	4 year degree	17.2
	Graduate Degree	6.4
Organization	Administration	9.2
	Comm Dev	3.4
	HR/Personnel	3.6
	Parks and Rec	18.1
	Planning	5.3
	Public Works	31.1
	Electric	5.1
	Other	24.3

(n=425)

For the non-public safety worker respondents, much of the data was similar to that of the public safety worker, with some areas of difference, particularly in gender. Public safety employment is primarily male-dominated, with 84% of the respondents reporting their gender as male, compared to 60% of non-public safety employees. For this reason, gender will be controlled for in the analysis portion of this research. In addition, race,



age, and education will be controlled for, as the data does not permit the clean analysis of demographic factors on public service motivation.

### **Case Screening**

The next step in this process was the data cleaning and preparation. This is a step often overlooked by new researchers as they may assume that data collected in a survey is ready for analysis as is. This can result in erroneous findings, incorrect directional variables, and inaccurate measures of strength of variables. The data were collected and entered into a Microsoft Excel spreadsheet. From this stage, the data were then cleaned and entered into IBM's Statistical Package for the Social Sciences (SPSS) version 21.0. The data were then analyzed for missing data from responses. Through the resulting analysis, the data were found to be missing responses in several instances. Where applicable, these cases were removed, as the methodology for this investigation demands non-missing data, and it was determined that the removal of the cases provided a better solution than missing data imputation strategies.

Through examination, McComb, MS had 12 respondents from the police workforce, however no responses were given from the fire department. In the interest of data validity and reliability, McComb was removed from the working data set. This move meant there are 27 fewer cases reported, with 12 fewer public safety workers and 15 fewer non-public safety municipal employees. Cases were then searched and analyzed for unengaged responses. This refers to those answers appearing multiple times in a row, where an individual appeared to fill out one answer multiple times. Surprisingly, the standard deviations for the questions were large enough to warrant continuing with the data as they were. The last test looked for outliers in hours, age,



tenure, and any other continuous nominal variables in the data set. Two cases were found to have typographical errors, as one case displayed an age of 4777 with a tenure of 22 years, which was corrected to state 47 years of age, and another case showing education at a 55, which was classified as a 5.

Police and fire were analyzed for managerial versus non-managerial personnel.

Table 11 below shows the breakdown of the remaining municipalities by public safety personnel.

Table 12 Public safety worker breakdown

		Public Safety Worker				
		NPS	PS	Total		
City	Pascagoula	18	33	51		
	Starkville	51	30	81		
	Greenville	35	65	100		
	Natchez	31	31	62		
	Hernando	13	29	42		
	Biloxi	71	82	153		
	Gulfport	63	78	141		
	Meridian	49	68	117		
	Tupelo	79	74	153		
Total		410	490	900		

The public safety worker total of 490 cases provides a sufficient sample size for analysis, with the recommended sample size for factor analysis to remain over 200 cases (Iacobucci, 2010; K. H. Kim, 2005; Nachtigall, Kroehne, Funke, & Steyer, 2003).

Iacobucci (2010) states that the 200 target may be little more than folklore, however Kim (2010) suggests 200 to 250 cases is the minimum for a significant analysis. Despite removing McComb from the analysis, the sample of 490 responses for the public safety



workforce is very good for the investigation. The new values for the data are reported in the following tables below.

Table 13 Working data values, public safety employees

Variables	Characteristics	Respondents (%)
Sex	Male	84.9
	Female	15.1
Age	Under 24	5.3
_	24-35	26.3
	35-44	38.6
	45-54	23.9
	55-64	5.5
	Over 65	.4
Length of service (years)	0-5	32.7
	5-10	23.7
	10-15	14.5
	15-20	17.1
	25+	8.4
Education	HS Diploma	54.9
	2 year college	25.9
	4 year degree	18.0
	Graduate Degree	2.0
Organization	Police	51.8
	Fire	48.2
(n=490)	THE	40.

With the removal of McComb from the data, the ratio of police to fire is almost even, providing the ability to group the variables without fear of bias from one sector to the other. Police and fire, public safety professions, comprise over half of the available data, with a working sample size n=490, and no missing data from the variables.

### **Solving for Model fit**

Building the model from the provided survey questions is more than simply accepting the structure as is from previous studies. Before developing the constructs for



the Mississippi municipal public safety employee, this analysis must first test the Perry (1996) and Kim (2010) models of PSM to determine whether these models hold true for the Mississippi municipal public safety workforce since Kim (2010) previously proved that the Perry (1996) original model was not significant for his sample of firefighters in Korea. Testing Perry's (1996) model, this first step will be to attempt to factor load the various questions from Perry's original 24-item, four factor model. Next, the analysis will work to perform a similar task on Kim's (2010) 12-item, four-factor model. Once performed, the next section will detail the analysis of the findings from both the exploration and the model building.

The methods performed here and throughout consist of a confirmatory factor analysis (CFA) using Perry's (1996) 24-item four-factor model. CFA is used in this effort due to the theory being set in place and proven throughout multiple efforts.

Because the data is being tested within a proven model, CFA and not EFA will be performed to determine if each of the factors will load based on the derived scale.

Using IBM's Analysis of Moment Structures (AMOS) version 20.0, Perry's (1996) model of PSM was constructed, as seen in Figure 2. Using SPSS version 21.0, the model's statistics were analyzed for variance levels and overall correlations for the analysis. The comparisons between Perry (1996) and the implemented survey are listed in Table 14 below. "(R)" denotes the results were reversed in order for analysis.



Table 14 Perry (1996) model factors with current survey questions.

Perry Factor	Perry Q Num	Question	Research Survey
A: .	PSM11	Politics is a dirty word (Reversed)	Q11b(R)
Attraction to Policy Making APM	PSM 27	The give and take of public policy making doesn't appeal to me (Reversed)	Q11k(R)
APIVI	PSM 31	I don't care much for politicians (Reversed)	Q11m(R)
	PSM 16	It is hard for me to get intensely interested in what is going on in my community (Reversed)	Q11e(R)
Commitment to	PSM 23	I unselfishly contribute to my community	Q11h
Public Interest	PSM 30	Meaningful public service is very important to me	Q11l
СРІ	PSM 34	I would prefer seeing public officials do what is best for the whole community even if it harmed my interests	Q11n
	PSM 39	I consider public service my civic duty	Q11o
	PSM 2 PSM 3	I am rarely moved by the plight of the underprivileged Most social programs are too vital to do without	Q10c(R) Q10d
	PSM 4	It is difficult for me to contain my feelings when I see people in distress	Q10e
	PSM 8	To me, patriotism includes seeing to the welfare of others	Q10h
Compassion COM	PSM 10	I seldom think about the welfare of people whom I don't know personally (Reversed)	Q11a(R)
	PSM 13	I am often reminded by daily events about how dependent we are on one another	Q11a
	PSM 24	I have little compassion for people in need who are unwilling to take the first step to help themselves (Reversed)	Q11i(R)
	PSM 40	there are few public programs that I wholeheartedly support (Reversed)	Q11p(R)
	PSM 1	Making a difference in society means more to me than personal achievements	Q10b
	PSM 5	I believe in putting duty before self	Q10f
	PSM 6	Doing well financially is definitely more important to me than doing good deeds (Reversed)	Q10g(R)
	PSM 9	Much of what I do is for a cause bigger than myself	Q10a
Self-Sacrifice SS (or SSF)	PSM 12	Serving citizens would give me a good feeling even if no one paid me for it	Q11c
	PSM 17	I feel people should give back to society more than they get from it	Q11f
	PSM 19	I am one of those rare people who would risk personal loss to help someone else	Q11g
	PSM 26	I am prepared to make enormous sacrifices for the good of society	Q11j



Table 15 Factor reduction dimensions, full MS data

Communalities						
	Initial	Extraction				
q11breverse	1.000	.638				
q11kreverse	1.000	.409				
q11mreverse	1.000	.684				
q11ereverse	1.000	.401				
q11h	1.000	.357				
q11I	1.000	.468				
q11n	1.000	.260				
q11o	1.000	.506				
q10creverse	1.000	.669				
q10d	1.000	.533				
q10e	1.000	.434				
q10h	1.000	.504				
q11areverse	1.000	.487				
q11d	1.000	.436				
q11ireverse	1.000	.389				
q11preverse	1.000	.352				
q10b	1.000	.554				
q10f	1.000	.459				
q10greverse	1.000	.510				
q10a	1.000	.521				
q11c	1.000	.391				
q11f	1.000	.379				
q11g	1.000	.550				
q11j	1.000	.558				

Note: Extraction Method: Principal Component Analysis

Table 15 exemplifies the issues with the CFA run by Perry (1996), with several variables shockingly low in their communalities. Table 16 below exemplifies the issues with the CFA technique, if one assumes the Perry (1996) model is complete. Simply showing the variables loading on multiple factors provides enough evidence that the model is misspecified for the Mississippi data set. Further investigation using this model

would be a poor decision and present construct validity issues, thereby rendering the findings useless.

Table 16 Pattern matrix, full MS sample

	Component				
	1	2	3	4	5
q11breverse		0.817			
q11kreverse		0.483			
q11mreverse		0.838			
q11ereverse		0.334		0.32	
l unselfishly contribute to my community	0.43				
Meaningful public service is very important to me					-0.521
I would prefer seeing public officials do what is best for the whole community even if it harmed my interests	0.482				
I consider public service my civic duty	0.387				-0.421
q10creverse				0.856	
Most social programs are too vital to do without			0.683		
It is difficult for me to contain my feelings when I see people in distress			0.669		
To me, patriotism includes seeing to the welfare of others			0.469		-0.321
q11areverse				0.64	
I am often reminded by daily events about how dependent we are on one another			0.424		-0.348
q11ireverse		0.388	0.31		
q11preverse				0.334	
Making a difference in society means more to me than personal achievement					-0.649
I believe in putting duty before self					-0.548
q10greverse			-0.392	0.552	
Much of what I do is for a cause bigger than myself					-0.734
Serving citizens would give me a good feeling even if no one paid me for it	0.467				
I feel people should give back to society more than they get from it	0.603				
I am one of those rare people who would risk personal loss to help someone else	0.744				
I am prepared to make enormous sacrifices for the good of society	0.649				

(n=900)

Performing a simple CFA on the Perry (1996) model on the full Mississippi data set provides validation that the CFA approach to the local-level data is not conceivable



using all 24-items. In the following section, this research will explore the possibility of maintaining the Perry (1996) model for specification and dimension reduction in an attempt to fit the full data to a reduced-form model using the questions from Perry's model. For the model to provide validity in both construct and structure, the model must be able to load the dimensions for each factor without duplicate loading, or essentially having the covariances correlated between multiple variables (Law & Wong, 1999; MacKenzie et al., 2005; Williams et al., 2003).

Given the inability to use Perry's full 24-item model, the next step was to attempt to incorporate Sang Mook Kim's 2010 PSM model, comprised of 12 questions and four dimensions into the public safety worker dataset. Kim (2010) implements an abridged 12-item scale of PSM based on Perry's (1996) model, with the changes primarily within the APM variable. Kim uses three questions with adjusted wording to identify the APM variable. Table 17 shows the APM questions used by Kim (2010) to address APM. Table 18 shows the questions that have been used in place of Kim's 2010 model, pulled from the survey. The CPI, COM, and SS variables have all remained the same from Perry's (1996) model, although Kim (2010) has reduced the constructs down to three questions for each variable.



Table 17 Kim (2010) descriptive and measurement statistics

Category	Dimension/Item	Mean (	(SD)	SFL		SMC (	$R^2$ )		
	PSM1: I am interested in making public								
	programs that are beneficial for my country								
	or the community I belong to.	3.57 (.3	812)	0.83	4	0.658	3		
APM	PSM2: Sharing my views on public policies								
AI IVI	with others is attractive to me	3.51 (.3	827)	0.84	5	0.714	4		
	PSM3: Seeing people get benefits from the								
	public program I have been deeply involved								
	in brings me a great deal of satisfaction	3.79 (.	782)	0.81	1	0.693	5		
	PSM4: I consider public service my civic								
	duty	4.02 (	743)	0.85	8	0.73	7		
	PSM5: Meaningful public service is very								
COM	important to me	4.00 (	741)	0.88	2	0.778	3		
	PSM6: I would prefer seeing public officials	S							
	do what is best for the whole community								
	even if it harmed my interests	3.98 (.	788)	0.75	9	0.57'	7		
	PSM7: It is difficult for me too contain my								
	feelings when I see people in distress	4.14 (.	688)	0.80	5	0.648	3		
CPI	PSM8: I am often reminded by daily events								
CII	how dependent we are on one another	3.96 (.	699)	0.7		0.49	)		
	PSM9: I feel sympathetic to the plight of the								
	underprivileged	4.15 (	704)	0.79	3	0.63			
	PSM10: Making a difference in society								
	means more to me than personal								
SS	achievements	3.52 (.3	859)	0.77	1	0.593	5		
55	PSM11: I am prepared to make enormous								
	sacrifices for the good of society	3.55 (.3		0.83	3	0.689	9		
	PSM12: I believe in putting duty before self	3.62 (	826)	0.79	5	0.632	2		
Chronbacl	h's alpha, composite reliability, and interfacto	r correl	ations						
		Alpha	CR	AVE	1	2	3		
1.	APM	.852	.869	0.689	•	_			
2.	CPI	.858	.873	0.697	.647				
3.	COM	.805	.811	0.589	.586	.835			
	SS	.839	.841	0.639	.789	.728	.59		

(n=2,497)

Note: SFL, standardized factor loading; SMC, squared multiple correlations; alpha, Chronbach's alpha; CR, composite reliability. All standardized factor loadings and correlations are significant at p < .001. PSM9, "I feel sympathetic to the plight of the underprivileged," replaced the reverse-scored item of "I am rarely moved by the plight of the underprivileged.



Table 17 shows the reliability, means, and other descriptive properties of Kim's (2010) findings on his 4-dimension, 12-item PSM model. These results provide the benchmark for the comparison test of the Mississippi municipal public service employee. Table 18 shows the results of the use of the Kim (2010) model adjusted for the questions available as part of the research endeavor. Of particularly interest is the rewording of the APM items for the new test. This is a point of debate where an argument may be made that the comparison is not equal without using the same questions for all items. This is a valid argument that would be countered with the statement that many previous studies have done similar modifications using abridged or edited versions of the Perry (1996) scale (see Table 1 above). Table 18 shows the new questions for APM along with the corresponding descriptive statistics. It would be best noted at this point that this research implements Kim's (2010) techniques throughout, combining CFA with model-estimation to determine the possibility of using the same methodology and model throughout. It has been hypothesized in H<sub>1</sub> that Perry's (1996) model will not be significant for all 4 items. This research must also prepare an approach to a new model formation using the Mississippi municipal workforce data, in order to present the findings in a significant model. As such, Kim (2010) states, "In order to get the necessary conditions for the identification of formative indicator constructs, 1) the scale of measurement for the latent construct is established by constraining a path from one of the construct's indicators to be equal to 1 or by constraining the residual error variance for the construct to be equal to 1 and 2) to resolve the indeterminacy associated with the construct level error term, a formative construct emits paths to 2a) at least two unrelated latent constructs with reflective indicators 2b) at least two theoretically appropriate reflective indicators, or 2c)



one reflective indicator and one latent construct with reflective indicators" (Kim, 2010, p. 533). Kim (2010) continues, "The methods traditionally used for assessing construct reliability and validity are not appropriate for a formative model because the direction of causality is posited to flow from the dimensions of PSM" (p.535).

While this explanation would suffice for the following research, the revised scale of Kim's (2010) model does not provide valid factor loadings for several variables, as well as providing overall significance of p = .000. This findings proves that we fail to reject the null hypothesis that the model is a good fit for the available data. When reduced to model fit for the Mississippi municipal public safety workforce, the deficiencies in the data stand out. The significance of the model remains at .000, which proves the model does not fit the data. In addition, the available questions do not reduce nor do they load on the model. Should this research choose to accept Kim (2010) based on previous work, it would overlook the fact that the model is not applicable for the Mississippi data. Noting the deficiencies in Kim's model for the Mississippi data, the research and analysis in the next chapter will focus on a new PSM model composed of several components of Perry's (1996) model. The next section will focus on the development of a new model, reflective of the data showing that public safety workers are unique from other public service workers within the same organization or structure. The efforts will begin with an exploratory factor analysis (EFA), as there has yet to be a model constructed focusing on the variation between public safety workers and non-public safety workers in municipal government. The EFA, once completed, will be verified using CFA, and results will be analyzed, interpreted, and reported in the following chapter. One should note that this will be the first efforts to develop a model of PSM for the public safety workforce, hence



the need to explore the data for commonalities, create a PSM measurement, and perform analyses on the comparison between the workers.

Table 18 Kim (2010) PSM model using new APM items and questions

Category	Dimension/Item
APM	q11eR:It is hard for me to get intensely interested in what is going on in my community (Reversed)
	q11kR: The give and take of public policy making doesn't appeal to me (Reversed) q11cR: Serving citizens would give me a good feeling even if no one paid me for it
СОМ	q110: I consider public service my civic duty q11l: Meaningful public service is very important to me q11n: I would prefer seeing public officials do what is best for the whole community even if it harmed my interests
СРІ	q10e: It is difficult for me too contain my feelings when I see people in distress q11d: I am often reminded by daily events how dependent we are on one another q10cR: I feel sympathetic to the plight of the underprivileged
SS	q10b: Making a difference in society means more to me than personal achievements q11j: I am prepared to make enormous sacrifices for the good of society q10f: I believe in putting duty before self

Survey Items listed for Mississippi Survey. Data not shown as model is not valid in Kim's Model Note: SFL, standardized factor loading; SMC, squared multiple correlations; alpha, Chronback's alpha; CR, composite reliability. All standardized factor loadings and correlations are significant at p < .001. PSM9, "I feel sympathetic to the plight of the underprivileged," replaced the reverse-scored item of "I am rarely moved by the plight of the underprivileged.

Testing one other approach, using a 3-factor PSM model, is necessary for the continued effort with a 4-factor PSM model, as this effort has identified the literature suggesting a 4-factor model is the preferred method of PSM investigation (Camilleri, 2006; Houston, 2000; S. Kim, 2005; Kim, 2009a, 2009b, 2010; Perry, 1996; Wright, 2004, 2007). Using a model derived from Coursey and Pandey (2007), a 10-item, 3-dimension model will be tested to determine whether a 3-dimension or 4-dimension is the preferred method of modeling PSM, comparing the findings in overall model significance



between the two models for the Mississippi municipal data. Table 19 shows the 3-dimension model and the corresponding questions from Perry (1996), and the corresponding Mississippi municipal questionnaire.

Table 19 Public service motivation questions

Coursey & Pandey	Question	Perry Q Num	Survey Q Num
Attraction to Policy Making	Politics is a dirty word (Reversed)	PSM11	Q11breverse
	The give and take of public policy making doesn't appeal to me (Reversed)	PSM 27	Q11kreverse
ALIVI	I don't care much for politicians (Reversed)	PSM 31	Q11mreverse
	I unselfishly contribute to my community	PSM 23	Q11h
Commitment	Meaningful public service is very important to me	PSM 30	Q11l
to Public Interest / Civi Duty CPI	I would prefer seeing public officials do what is cbest for the whole community even if it harmed my interests	PSM 34	Q11n
	I consider public service my civic duty	PSM 39	Q11o
Compassion COM	It is difficult for me to contain my feelings when I see people in distress	PSM 4	Q10e
	I am often reminded by daily events about how dependent we are on one another	PSM 13	Q11a
	I have little compassion for people in need who are unwilling to take the first step to help themselves (Reversed)	PSM 24	Q11ireverse

Coursey & Pandey (2007)

The Coursey and Pandey (2007) findings are similar to Kim (2010). The model as a whole is not a viable model for CFA purposes, but does provide some insight. The overall RMSEA and GFI indicators are lower than Kim (2010), while the overall chi-square statistic is lower than both Kim (2010) and Perry (1996). The next step is to determine the factors necessary for a valid and reliable model for PSM with Mississippi municipal safety workers.



### EFA: Mississippi Municipal Public Safety Worker

Using the findings from the previous section showing that the data is not a fit for Kim (2010) model, the next step in this process will be the construction of a new model. Exploratory factor analysis (EFA) will take place in this portion of the research, creating a new model of PSM for the Mississippi municipal workforce and potentially for the public safety workforce as a separate model. Once a model is formed, the next chapter will focus on the results of a CFA performed on the new model, and findings and details will be expanded upon in that section.

Using the original scale from Perry (1996), all 24-items were inputted into SPSS v. 21 and descriptive statistics were investigated. The first step in the EFA process is to identify any skewness or kurtosis issues, once any missing data issues have been rectified.<sup>4</sup> Results from this investigation are below, noting that any value for the two tests resting between +/- 1 are considered very good, and +/- 2 are acceptable.<sup>5</sup> Table 20 shows the results from this process.

All but one item, question 10a "Much of what I do is for a cause bigger than myself", had a skewness statistic between +/- 1. Two variables, question 10a and 111 "Much of what I do is for a cause bigger than myself" and "Meaningful public service is very important to me", had kurtosis values between +/- 2. 10a may prove to be troublesome, but this research will wait to remove this variable until additional tests have been performed on the data. Both variables do not exhibit enough variation to warrant removal from the data set, but future efforts will ensure that these variables have a

<sup>&</sup>lt;sup>5</sup> Ibid.



<sup>&</sup>lt;sup>4</sup> http://psychology.illinoisstate.edu/jccutti/138web/spss/spss3.html

significant reason for inclusion in the overall model for the Mississippi municipal workforce. These tests are for the full workforce data set, as these tests are used on the full data set and will then be implemented to the public safety workforce, assuming the model holds true for the public safety worker as well as the non-public safety worker.

Table 20 24-item Mississippi municipal worker data, descriptive results

Variables	N	Me	ean	Std. Deviation	Skewness		Kurtosis		
	Statistic	Statistic	Std. Error	Statistic	Statistic	SE	Statistic	SE	
q11breverse	900	2.7589	.03597	1.07901	010	.082	671	.163	
q11kreverse	900	3.0344	.02937	.88110	067	.082	.029	.163	
q11mreverse	900	2.6544	.03525	1.05759	.080	.082	589	.163	
q11ereverse	900	3.6489	.03087	.92611	638	.082	003	.163	
q11h	900	3.5200	.02796	.83888	494	.082	.227	.163	
q11I	900	3.9611	.02435	.73043	695	.082	1.266	.163	
q11n	900	3.6478	.02863	.85899	522	.082	.333	.163	
q11o	900	3.7456	.02720	.81609	486	.082	.230	.163	
q10creverse	900	3.5600	.03490	1.04714	410	.082	344	.163	
q10d	900	3.0422	.03354	1.00632	032	.082	447	.163	
q10e	900	3.1044	.03687	1.10625	128	.082	804	.163	
q10h	900	3.8211	.03101	.93039	809	.082	.628	.163	
q11areverse	900	3.6022	.03275	.98238	654	.082	.033	.163	
q11d	900	3.7278	.02929	.87881	811	.082	.673	.163	
q11ireverse	900	2.4822	.03725	1.11752	.478	.082	571	.163	
q11preverse	900	2.7856	.03187	.95599	.164	.082	467	.163	
q10b	900	3.8211	.03085	.92560	549	.082	.082	.163	
q10f	900	3.8267	.02964	.88929	700	.082	.454	.163	
q10greverse	900	3.5967	.03102	.93062	536	.082	.154	.163	
q10a	900	4.0622	.03009	.90267	-1.087	.082	1.459	.163	
q11c	900	3.6633	.03189	.95679	773	.082	.458	.163	
q11f	900	3.6833	.02943	.88288	591	.082	.363	.163	
q11g	900	3.6156	.03111	.93325	548	.082	.065	.163	
q11j	900	3.3900	.02946	.88374	100	.082	282	.163	

(n=900)

Note: The descriptions for each of the tables can be found in Table 14



The next step in this process involves the iteration process to determine a clean pattern matrix. Once the iterations are complete, the tests for convergent validity, discriminant validity, and reliability will determine the overall model fit and capabilities of describing the data concerning the Mississippi municipal workforce as a whole.

#### **Pattern Matrix Iterations**

For this step, the variables will be analyzed in SPSS using the factor dimension reduction process. Communalities and pattern matrix components of this step will provide the decision foundation on whether to fit the variables into the model. This process consists of the fit for the 4-factor PSM model, as it has been shown to be more relevant and a stronger explanatory model than the 3-factor PSM models (Houston, 2000; Kim, 2009a, 2010; Kim et al., 2013). This noted, the model development efforts will focus on the development of a new model, with the anticipation of fitting a four dimension model to the data. Upon initial investigation, the model suggested by SPSS investigation is a 5-factor model, whose pattern matrix provides 5 distinct dimensions, none of which involves a factor loading onto more than 1 dimension. However, the correlation matrix suggests dimensions 1 and 5 are highly correlated, prompting the need for further investigation and iterations. In addition, the 5-factor, 24-item model only explains 37% of the variation in the data, which is not acceptable for continued investigation with the model as it is currently configured.

Continuing this process, the iterations were computed at a regular interval, often working through two or three model iterations per day for more than three weeks during July and August of 2014. This process is tedious but vital to the development of a theoretical approach using data. As not to allow the data to drive the model, there were



theoretical considerations throughout the process. For instance, at one point in the iteration process, a model came to fruition meeting all statistical rigor. However, it was discovered that two similar items were classified in different factors, not passing the "eye test" or face value testing of a model. This face-value consideration is one often overlooked by researchers and analysts, as often individuals are quick to apply data to models and forego the practical applicability of the factors they are creating (Gaskin, 2012). Determining the model's validity through a combination of previous literature, educated theorization, and testing the model or model are often the most effective methods to deriving a theory or model to explain certain phenomenon.

## **Model Specification Structure and Results**

After countless iterations a 13-item, four factor model was defined. This identification consisted of two dimensions previously identified by other authors, and two additional dimensions not previously explored in this context in the PSM literature. The process, exploratory factor analysis (EFA), is detailed in the next section. The reasoning behind the use of EFA, and factor analysis in general, rests in the nature of the data and the PSM literature to date. PSM has been debated, restructured, and retested over the last 20 years. Rather than accept the PSM factors and literature as is, the research identified the unique nature of the sample, the demographics of the respondents, and determined that the best solution was not to assume the underlying theory was accurate, and should pursue identifying unique items and factors contributing to PSM in Mississippi municipal organizations, particularly the public safety employee in these organizations. EFA, CFA, and structural equation modeling (SEM) are utilized to uncover the underlying factors contributing to the latent factors of the model.



## Exploratory Factor Analysis

The EFA process consisted of the factor analysis, or dimension reduction, utilized in IBM's SPSS 21.0. Figure 2 shows a graphic depiction of the EFA process (Gaskin, 2012).

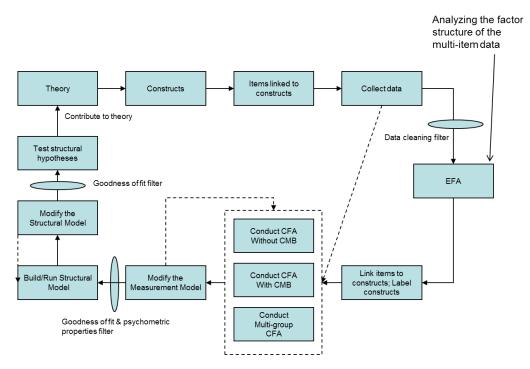


Figure 2 The EFA Process (Gaskin, 2012)

Exploratory factor analysis is concerned primarily with uncovering the number of factors necessary to explain the relations among a set of items using estimation and factor loading. Factor analysis explores the inter-relationships among variables anticipating whether those variables can be grouped into a smaller number of underlying factors (Gaskin, 2012). These resulting groupings are then able to reflect the causal impact of the latent factor, in this case PSM. Assumptions are necessary in factor analysis and have



been fine-tuned over the last few decades as these procedures have garnered more interest (Diamantopoulos et al., 2008; Diamantopoulos & Siguaw, 2006; Edwards, 2001; Iacobucci, 2010; MacKenzie et al., 2005; Nachtigall et al., 2003; Williams et al., 2003). Some of these assumptions include 1) data matrix must have a sufficient number of correlations (greater than .30), 2) metric variables are assumed, although dummy variables may be used, and 3) all variables must be of at least an ordinal scale (Gaskin 2012). Normality is not a concern in this type of analysis, and typically the minimum number of variables in a factor should be no less than 2 (Gaskin, 2012, Vandenabeele, 2008).

## Iterations and process for determining EFA

Through a series of iterations, a set of items and factors were developed. The testing procedure used throughout the process included several statistical methods. First, the process tested for missing data. As the data set did not contain any missing data for the particular PSM questions, this step was accomplished rather quickly. The next step, checking for outliers, was a simple test using the minimum and maximum output from the data set. There were two cases where the values of Likert scale questions ranging from one to five resulted in figures of 44 and 55. It was the researcher's determination that this was a duplication error in data input and these cases were with answers to the questions as 4 and 5, respectively. Once tested, the data were determined clean for continued investigation and insight into the PSM construct.



## Testing the data appropriateness

After the data were cleaned, the next step in this process was to determine the level of applicability factor analysis has with the data set. The first test, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was performed on the data using SPSS version 21.0. When performed on the full data set of Mississippi municipal workforce employees, the overall KMO score was .798, which is essentially considered "meritorious" (Gaskin, 2012). Any score above .6 is considered acceptable by most, so a measure of .8 provides the support to continue. Bartlett's test of sphericity, while significant, is not cited as a supporting measure as the large number of the sample may cause significance that is distorted or irrelevant.

The next step used in this investigation was the extraction method for the data. This is a particularly interesting portion of the analysis as researchers and scholars alike choose a number of different processes courtesy of the advent of technology making the extraction process much simpler to perform in a very short amount of time. For this process, this analysis used the principal component analysis (PCA) extraction method. PCA considers all variance in the analysis, seeks a linear combination of variables, and results in uncorrelated factors. This is particularly useful as the PSM literature has been on the fence as to whether factors should be correlated or should be mutually exclusive. Ensuring the factors are uncorrelated, providing for a more sound foundation, the PCA method was preferred. Some statisticians have noted that using principal component extraction will assume that all of the variability of the items whether explained or unique can be accounted for in the analysis and is flawed and should not be used in an exploratory factor model (Gaskin, 2012). While this argument holds merit, it also



simplifies the process of factor analysis, in that it assumes the researcher will use the model as an end-point in researching the area he or she is investigating. This PSM literature and research will be an ongoing, fluid, and dynamic field, often morphing in ways unimagined in previous literature as technology and insight advances as a rapid pace. In fact, Kim (2013) addresses his own shortcomings from his prior work (2005, 2008) as the technology has permitted the expansion of his investigation techniques to address variance in several factors. This investigation seeks to address the foundations of PSM using a unique subset of employees, the Mississippi municipal public safety worker.

The rotation used in this analysis is oblique promax, as it is commonly referenced and utilized in large datasets (Gaskin, 2012; Liu et al., 2008). This approach also removes the assumption that variables share variance between factors, which is counterproductive to this investigation. The unique relationships are uncovered in the pattern matrix, a similar depiction of the relationship to that of a loading matrix. SPSS defaults to the PCA measure of extraction, and given the nature of the investigation, the promax approach to rotation will be utilized in this analysis.

The extraction of factors for this model was based on a number of steps. The first was to identify the number of factors based on eigenvalues greater than 1. For this analysis, there were four factors with eigenvalues greater than 1. Using these four factors, the model explains approximately 57% of the variance regarding PSM. A Scree plot was analyzed to determine the plausibility of using the four factors, as additional verification. Figure 3 shows the Scree plot results.



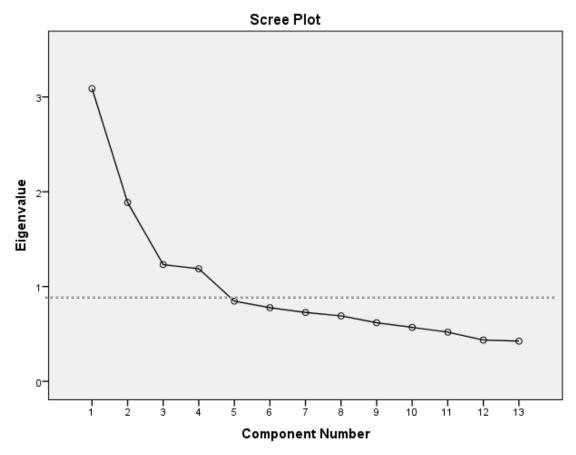


Figure 3 Scree plot, Mississippi municipal worker (n=900)

Based on the factor loadings requirements, the rotation matrix shows a unique blend of a 13-item model each with factor loadings above .550, well above the requirements for a sample size of this magnitude (Hair, 2010). The one limitation of this pattern rotation matrix is the cross-loading of the question "meaningful public service is very important to me". The cross-loading is permissible in this instance based on several factors. First, cross-loading has been shown to be permissible as long as there is at least a .2 difference in loading (Gaskin, 2012; Hair, 2010; Van Prooijen & Van Der Kloot, 2001). In this case, the difference is almost .3, suggesting that cross-loading does not hinder the analysis. In addition, there have been several instances of cross-loaded

100

variables in factors from prior published research (Liu et al., 2008; Vandenabeele, 2008a, 2010). The pattern matrix is listed below in table 21.

Table 21 Pattern (rotation) matrix

	Component			
	1	2	3	4
q11j PerrySS26: I am prepared to make enormous sacrifices for	.752			
the good of society				
q11g PerrySS19: I am one of those rare people who would risk	.704			
personal loss to help someone else				
q10f PerrySS5: I believe in putting duty before self	.702			
q10b PerrySS1: Making a difference in society means more to	.684			
me than personal achievement				
q11o PerryCPl39: I consider public service my civic duty	.679			
q11I PerryCPI30: Meaningful public service is very important to	.587		.318	
me				
g11mreverse PerryAPM31Rev: I do not care much for politicians		.85		
q i infreverse PerryAPini3 i Rev. I do not care much for politicians		0		
q11breverse PerryAPM11Rev: Politics is a dirty word		.83		
q 1 bicverse 1 city/4 Wi 11 tev. 1 onlies is a dirty word		6		
q11kreverse PerryAPM27Rev: The give and take of public policy		.55		
making does not appeal to me		0		
q10creverse PerryCOM2Rev: I am rarely moved by the plight of			.862	
the underprivileged				
q11areverse PerryCOM10Rev: I seldom think about the welfare			.731	
of people whom I don't know personally				
q10e PerryCOM4: It is difficult for me to contain my feelings				.840
when I see people in distress				
q10d PerryCOM3: Most social programs are too vital to do				.732
without				

(n=900)

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization. Rotation converged in 5 iterations.



## Validity and Reliability

Based on the factor structure above, it is necessary to identify the validity and reliability of the model. Convergent validity, or the levels of correlation between variables within a single factor, for this sample size requires a factor loading of at least .3 (Hair, 2010). The model shows this requirement is met and the analysis may continue. The cross-loading factor was left in the model for a number of reasons. First, removal of the cross loading factor reduced the Cronbach's alpha measure of reliability. Second, the removal of the variable reduced the overall explanatory power of the full model. Lastly, the removal of the variable did not meet the face value testing of the model, as the premise of PSM states that public service employees are more highly motivated to serve the public good (Carpenter et al., 2012; Christensen & Wright, 2011; Perry et al., 2010; Wright et al., 2012).

Discriminant validity explains the level to which factors are distinct and uncorrelated. As noted above, the cross-loading onto factors of a variable have been addressed as the variable cross-loads at a much larger measure than the .2 required (Gaskin, 2010). The second measure to determine discriminant validity is to identify and analyze the component correlation matrix. For this to be significant, it is essential that the factors have values below .7 (Gaskin, 2010; Hair 2010). The correlation matrix, found that no individual variance is greater than .192. The shared variance is calculated by multiplying the variances, which in this case, would state that no factors share more than 3.6% variance, which is incredibly strong for EFA.

Face validity tests for this data show that the factors make sense and appear to differ enough among each other as well as explain the levels of PSM, the model analysis



continues. Based on discussions with methodologists and experts involved in this research, the factors explain a unique set of measures for PSM and warrant continued investigation.

Reliability, or the consistency of item-level errors within each factor, is measured using Cronbach's alpha and is found in the scale measure of SPSS 21.0. Cronbach's alpha should generally be considered when at or above .6, but can be lower based on number of variables within each factor. Because of this, the two factors with two explanatory variables each have lower Cronbach's alpha than is typically noted. The alpha statistic for the societal benevolence variable, questions 10d and 10e, was .422. This is generally lower than one would permit, however, when items are added to the reliability, it diminishes the statistic. This statistic is low primarily based on the low number of factors. The next two-variable factor, currently referred to as individual emotion, or questions 10cReverse and 11aReverse, reported a Cronbach's alpha of .530. This is acceptable as it is near the acceptable range and it also has explanatory relevance, suffering from adding variables to the factor. The next factor, Perry (1996) APM factor, contains all three variables from Perry's original work, and reports a Cronbach's alpha of .641, acceptable for this investigation. The final factor, a combination of self-sacrifice and commitment to public interest similar to Vandenabeele (2008a), reported a Cronbach's alpha of .775, excellent for this analysis. This series of tests confirms the model's validity, reliability, and usability for continued analysis.

### **Model Factor Nomenclature**

Before the analysis section containing the confirmatory factor analysis (CFA) is applicable, this section will identify the four factors uncovered from the previous section



and provide a naming convention to identify each factor as a unique component of public service motivation for the Mississippi municipal employee as well as explain the relevance of each factor as it pertains to PSM. When variables are described as using the reverse scaling, this is due to the question wording reflecting a negative connotation and the remedy of the situation is to reverse the scaling, thereby transforming the responses into a positive reflection of PSM.

The first factor will remain the attraction to policy making (APM) in descriptive labeling. This is done to relate the findings back to previous work done by multiple scholars as well as remaining consistent in reporting throughout. Due to the nature of the questions remaining the same as for Perry's (1996) validated model, the questions have been coded as APM1, APM2, and APM3. Table 24 breaks down the variables, questions, and nomenclature.

The second factor, self-sacrifice and commitment to public interest will be renamed to duty, honor and sacrifice (DHS). The reasoning is to identify the sacrifice-based questions and CPI questions from Perry (1996), yet rename these to reflect the combination as they are reflective of public safety workers and municipal employees. Duty, honor and sacrifice are terms often used in the public safety workforce sector, and it is assumed that the separation of the public safety workforce will result in stronger factor loadings for this factor, therefore this factor will be labeled with the HS designation.

The next factor, questions 10c(reverse) and 11a(reverse), uses the reversed scale of Perry's (1996) compassion questions. Upon investigation, it would appear as these items have different meanings from other compassion questions. These two questions



provide insight into individual's reflection on the welfare of others in society, for whom they may not have any relation or understanding. From this, the factor will be named the societal benevolence (SB). This factor will explain the levels of compassion or insight one takes when reflecting on individuals they do not have a direct affiliation with or relationship to, ceteris paribus. Question 10c(reverse), or "I am rarely moved by the plight of the underprivileged" will be labeled as SB1 and question 11a(reverse), "I seldom think about the welfare of people whom I don't know personally" will be labeled as SB2.

The last factor also uses questions from Perry's (1996) compassion factor. These two questions, questions 10d and 10e, reflect the general welfare compassion notion. In other words, this factor identifies how an individual values or reflects on the welfare of the greater good, in more of a hypothetical or generalized fashion. This variable will be identified as the disconnected compassion (DC) variable. Question 10e, "It is difficult for me to contain my feelings when I see people in distress" will be labeled as DC1 and question 10d, "Most social programs are too vital to do without" will be labeled as DC2.

Some may contend that the naming of the variables should be adjusted or changed to reflect the true nature of the questions, however, that is not the focus of this investigation. Instead, focus should remain on the actual variables and factors, and the nomenclature for these factors should merely be referenced as an identifier. Before continuing to the analysis portion of this research, it should be restated that these findings and information are based on the Mississippi municipal data set and should be researched against different samples should an individual wish to expand upon this research.



## **Public Safety Worker Extraction**

The crux of this research is to identify the inner workings and motivators for the public safety employees within the Mississippi municipal workforce. The previous model development focused on the full data set, but it is important to test the model extracting the public safety worker from the data to ensure the model is relevant for both public safety and non-public safety employees.

Filtering out public safety employees from the full data set, the findings are very similar to the full model results. The KMO measure for the PSW is .736, still middling and acceptable. No communality was below .3, and the total variance explained by the model for public safety employees is 56%. An analysis of the Scree plot, shown below in figure 4, shows a similar pattern of the eigenvalues from the full model. The overall model reliability is still acceptable at .683, although it is not as strong as the original model. A brief examination of the ANOVA table shows the model is significant and reliable. Validity tests all pass similarly to the full data set, and the factors load in the same manner with similar strengths as with the full data set, with the exception of the cross-loading variable. In the full data set, the cross-loading variable shared correlation between the DHS factor and the PWI factor. In the public safety data set, the factor does not cross-load at all. Running reliability tests on each factor shows similar Cronbach's alpha statistics for the four factors. The duty, honor and sacrifice variable (DHS), reported an alpha of .775. The APM factor reported an alpha of .644. PWI, as it did not have a cross-loading variable, reported an alpha of .47 and GWC reported an alpha of .400.



Identifying a model for public safety workers that is also transferable to the full data set is useful for intra-organizational comparisons. For this purpose, the comparisons will focus on public safety and non-public safety departments within the municipal environment, although the data and model provide the foundation for future comparisons of different departments within the organizations.

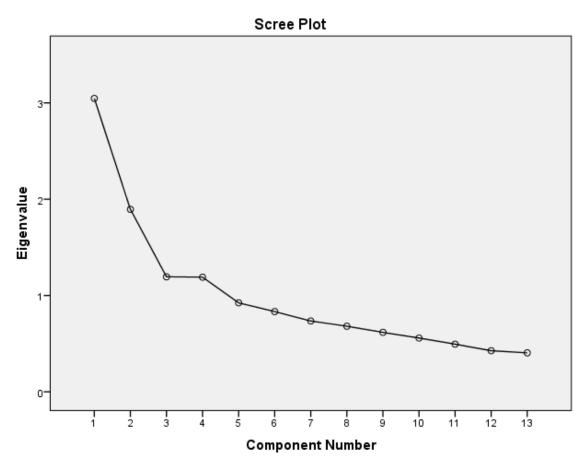


Figure 4 Scree plot, Mississippi municipal public safety employee (n=490)

Testing the public safety employee model was important prior to continuation into confirmatory factor analysis to ensure the model was able to withstand investigation into a number of factors.



Table 22 EFA confirmed model and variables, full data and psw

PSW PSM Model	Label	Question	Survey Q Num
Attraction to Policy Making (APM)	APM1	Politics is a dirty word (reversed)	Q11breverse
	APM2	The give and take of public policy making doesn't appeal to me (Reversed)	Q11kreverse
	APM3	I don't care much for politicians (Reversed)	Q11mreverse
Disconnected Compassion (DC)	DC1	I am rarely moved by the plight of the underprivileged	Q10creverse
	DC2	I seldom think about the welfare of people whom I don't know personally	Q11areverse
Societal Benevolence (SB)	SB1	Most social programs are too vital to do without	Q10d
	SB2	It is difficult for me to contain my feelings when I see people in distress	Q10e
Duty, Honor and Sacrifice (DHS)	DHS1	I am prepared to make enormous sacrifices for the good of society	Q11j
	DHS2	I believe in putting duty before self	Q10f
	DHS3	I consider public service my civic duty	Q11o
	DHS4	Making a difference in society means more to me than personal achievement	Q10b
	DHS5	Meaningful public service is very important to me	Q11I
	DHS6	I am one of those rare people who would risk personal loss to help someone else	Q11g



#### **CHAPTER IV**

#### CONFIRMATORY METHODOLOGY

Using this data, this research will propose a series of hypotheses aimed at identifying the differences in PSM, job satisfaction, and organizational commitment between those in the public safety sector of municipal workforce, and those not. From this portion of the analysis until declared later, the public safety employee data set will be utilized for the analysis. The foundation of this insight is exploring the motivation factors of public safety workers, with an overall investigation into the differences between public safety employees and non-public safety employees.

The public safety employee data consists of 490 employees (54%) from the overall data set. The public safety employee consists of police and fire employees, and McComb has not been included in this data due to a lack of representation from both departments of the municipality's public service workforce. The police and fire departments of the municipal workforce represent those areas whose employees place themselves in danger potentially every day they report to work. They are also responsible for providing safety and protection for the greater good. Most non-public safety employees do not have this same expectation nor do they have any real fear of placing themselves in danger during their day-to-day operations, with a few exceptions.



## **Confirmatory Factor Analysis**

Confirmatory factor analysis (CFA) is used to confirm the factor structure of the model developed in the previous process. During this phase, the research will essentially confirm the findings from the EFA, and will provide a basis for the use of the PSM model together with the latent constructs of job satisfaction and organizational commitment. Using PSM as a reflective model to job satisfaction is essential as job satisfaction has shown to have a positive correlation on retention and intentions to remain the current positon (Bright, 2008; Carpenter et al., 2012; Houston, 2000; S. H. Lee & Olshfski, 2002; T. W. Lee & Maurer, 1997; Liu et al., 2008; Mitchell et al., 2001; Naff & Crum, 1999; Porter et al., 1974). Exploratory factor analysis performed on its own provides a powerful and insightful look into data and its structure, providing the impetus for the development of future theory. Confirmatory factor analysis has the capacity to confirm the structure and factors provided by the EFA. Statistical rigor suggests a multitude of tests and measures to permit the continued exploration of data and theory, particularly in fields where theory may have yet to fully mature, such as public administration (Gaskin, 2012; Hair, 2010).

Providing the framework for the execution of a CFA for this particular data set was rather simple, as the prior EFA provided the significant variables, factors, and loadings onto the latent variable, PSM. When extracted for the public safety employee, the significance, validity, and reliability tests all proved significant and valid, meaning the model is applicable not only for public safety employees, but for the entire Mississippi municipal employee data set. The CFA and results will serve as the backdrop for the investigation into the models, and subsequent research using other local data



should take into consideration the fact that many different and unique solutions can be derived using EFA, however finding solutions that are validated using CFA can often be tricky and beyond the scope of the data presented (Van Prooijen & Van Der Kloot, 2001). The CFA in the following sections will be reported as findings for the structure of the Mississippi municipal public safety worker, and will provide the foundation for the insight into the comparison between the public safety worker and non-public safety worker.

## **CFA for PSM: Public Safety Worker**

Performing the CFA on the dimensions of public safety worker provides a sound and definitive model for public safety motivation. In the previous chapter, the exploratory factor analysis model provided a 13-item, 4 factor model for public service motivation for Mississippi municipal workers, and provided significance and statistical rigor for public safety workers as well. Testing the structure and nature using EFA provided much of the necessary screening for the PSM latent construct, which is the crux of this investigation, however the impact of PSM on job satisfaction and organization commitment is where this research will expand upon the findings of the EFA and explain the impacts on retention factors. The first subsection will describe the findings from the CFA of PSM on public safety employees for Mississippi municipalities, followed by a section on how this relates to previous efforts on PSM. The next section will contain a section on the overall model, built using CFA for job satisfaction and organization commitment, as both have been tested using similar questions and the findings have been much more closely related than those of PSM or other retention-based inquisitions. The final section will consist of



a detailed breakdown of each of the earlier posited hypotheses, of which much of this work will contribute to the future work in public service motivation.

Public service motivation for the public safety worker

Public service motivation for the public safety worker is paramount for exploring levels of motivation in the public sector workforce. Many studies, as previously detailed, have combined or ignored the public safety worker in the analyses performed, which overlooks a unique sector of public service employee. Providing the statistical confirmation to a theoretical construct will continue public service motivation scholarly activity towards an overarching theory, or at the very least, will provide fodder for future discussion into the public safety versus public sector discussion.

Utilizing the model constructed by the EFA, as seen below in figure 4, the confirmatory factor analysis was conducted using the AMOS v.20 software, which provides a graphical user interface approach to CFA, among other statistical approaches. Table 22 above breaks down the variables, factors, and provides the question numbers, from which the referenced questions will be referred to from this point forward in the research. By first identifying the factor loadings for PSM and detailing the reliability, validity, and significance of the model, the next steps are then confirmed for exploration. Figure 5 below provides a graphic depiction of the public service motivation model for the public safety worker. The model, as shown in previous sections of this research, is applicable for the full data set as well as subsets such as public safety. The compassion categorizations, personal and disconnected, provide unique aspects of this research yet to be fully explored in the published PSM literature currently available.



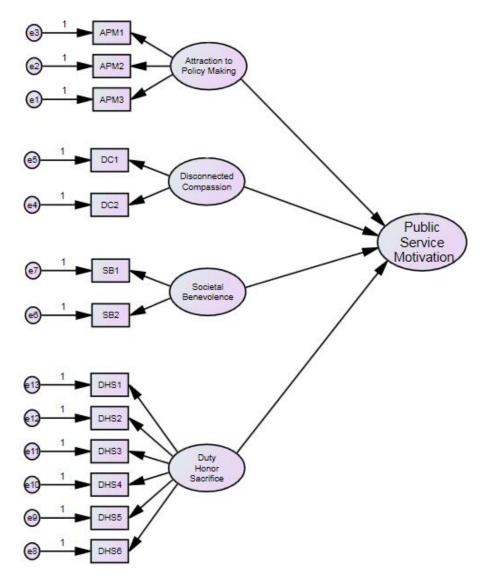


Figure 5 Public service motivation: MS municipal public safety worker

In the figure above, the variables have been named according to table 22. The error term for each, denoted with a lowercase "e", provide the level of variance for each variable, and will be reported when applicable. In this example, public service motivation is a formative model, comprised of four factors; attraction to policy making (APM), disconnected compassion (DC), societal benevolence (SB), and duty, honor, and



sacrifice (DHS). Table 23 shows the individual variables and the standard factor loadings for each variable in the model.

Table 23 Public safety worker PSM Model statistics, EFA.

PSW PSM Model	Label	Question	Mean(SD)	SFL
Attraction to Policy Making (APM)	APM1	Politics is a dirty word (reversed)	2.61 (1.06)	0.836
	APM2	The give and take of public policy making doesn't appeal to me (Reversed)	2.95 (.86)	0.545
	APM3	I don't care much for politicians (Reversed)	2.49 (1.04)	0.865
Disconnected Compassion (DC)	DC1	I am rarely moved by the plight of the underprivileged	3.49 (.99)	0.879
	DC2	I seldom think about the welfare of people whom I don't know personally	3.62 (.94)	0.702
Societal Benevolence (SB)	SB1	Most social programs are too vital to do without	2.89 (.97)	0.714
	SB2	It is difficult for me to contain my feelings when I see people in distress	2.87 (1.10)	0.826
Duty, Honor and Sacrifice (DHS)	DHS1	I am prepared to make enormous sacrifices for the good of society	3.48 (.90)	0.725
	DHS2	I believe in putting duty before self	3.89 (.90)	0.725
	DHS3	I consider public service my civic duty	3.82 (.80)	0.673
	DHS4	Making a difference in society means more to me than personal achievement	3.92 (.87)	0.649
	DHS5	Meaningful public service is very important to me	4.04 (.67)	0.646
	DHS6	I am one of those rare people who would risk personal loss to help someone else	3.73 (.90)	0.707

Note above that all factor loadings for this model are above .5, and the reliability coefficients for each were satisfactory, as explained in the previous section for the EFA.

Table 24 shows the results for the confirmatory factor analysis, to provide the comparison between the exploratory model and the confirmatory model, with most providing similar results. Note that due to the nature of confirmatory factor analysis, one variable per



factor, at a minimum, was to be constrained to 1 in order for the model to converge permitting an evaluation tool. The model shown permits the important items for DHS to provide factor loadings while constraining some of the other variables. This was done with the inclusion of job satisfaction and organization commitment in mind, as both will be shown in the next figure as part of the full PSM and retention model.

OC and JS construct variables and reliability measures

Job satisfaction presented by Kim (2010) is measurement component that, when analyzed using the Mississippi municipal public safety worker data set, is not considered a reliable construct. That noted, a three-dimension construct of job satisfaction was developed and tested. The sample questions of the job satisfaction include 1) "In general, I am satisfied with my job", 2) "Overall, my city is a good place to work", and 3) "I feel good about my job - the kind of work I do". The reliability coefficient for the job satisfaction construct is .765. This is considered as a good measure of internal reliability.

Organizational commitment is comprised of three variables. These items are measured together as a component for PSM and retention, as in Kim's (2010) work. The three-item sample includes questions 1) "I would recommend this local government as a place to work", 2) "The work performed by my department provides the public a worthwhile return on their tax dollars", and 3) "Most employees give their best effort in doing their jobs". Each of these variables is included based on the concept that organization commitment is a product of opinions of the organization or city as a whole. The reliability statistic for this construct is .743, a good indicator of internal reliability for the model.



# **Testing Both Formative and Reflective Models of PSM**

As part of the investigation into the PSM model, it is important to identify the nature of the PSM model, determining whether the model is reflective or formative. Figure 6 shows the reflective model of PSM with JS and OC included. To test for common method variance, or common method bias, in the reflective model, the Harman's single factor test was employed. This method suggests that if the method of survey or data collection creates an inflationary or deflationary effect, bias will be introduced and inflated in the model, rendering the model insignificant as a whole. The single factor test combines all variables in the model and tests for variance based on this construct. When tested, common method bias was not a factor, as only 22% of the variance in the model using all variables can be explained by a single factor, well below the threshold for concern (Gaskin, 2012).

Figure 6 shows the emitting paths to job satisfaction and organizational commitment. Kim (2010) notes that using maximum likelihood estimates (MLE) can produce bias in estimates, however others use this method when the sample size is large and model significance is not important or reported (Liu et al., 2008). The analysis in this research will use asymptotically distribution-free estimation method as part of the structural equation modeling (SEM) technique. Using the EFA from the original model development, the SEM performed provides a statistical base for analysis.



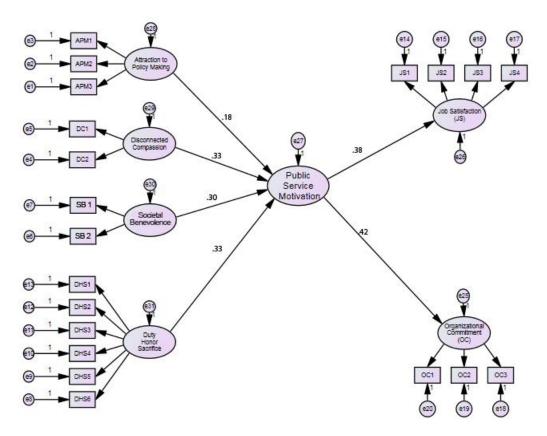


Figure 6 Reflective model of PSM with JC and OS (1=constraint) (n=490)

The reflective model provides little significance for the four factors of PSM.

Each factor loads significantly, yet the factor weights are minimal for the purposes of this analysis. None of the four-items of PSM standardized factors load at a measure above .33. Average variance extracted is .802 while the composite reliability is .722. So the model is significant, yet the power of the explanation in the reflective model is minimal. Convergent validity can also be determined by computing the average variance in the first-order dimensions accounted for by the second-order latent construct they represent (MacKenzie et al., 2005). To calculate this statistic, the average of the squared multiple correlations of the construct's first-order factors must be computed and reported (Kim,



2010). The desired statistic is above .50 for this calculation, and the resulting statistics are comparable to the R<sup>2</sup> for the variables. The squared multiple correlations of the four dimensions range from .491 to .701, sufficient for support of reliability and convergent validity for this model. According to Kim (2010), with PSM representing the lone latent construct at the second-order level there is no appropriate use of an assessment of discriminant validity, so that will be overlooked at this point in the analysis.

Figure 7 shows the formative model of PSM, with emitting paths to job satisfaction and organizational commitment. According to Kim (2010), there are three issues requiring attention to construct a model using formative indicators: content validity, identification, and indicator collinearity (Kim, 2010). Content validity is necessary and essential when developing constructive formative indicators as the scope of the construct is essentially formed by the indicators (p. 537). Based on the work in this analysis set forth by the previous models, PSM is captured by all first-order dimensions similar to Perry (1996) and Kim (2010), therefore content validity is achieved by theory-driven conceptualization of the measure (Kim, 2010, p. 537), Kim (2010) notes that to avoid under-identification in the process of achieving identification with formative indicators, the residual error variance for PSM to unity (or set to 1 in AMOS) and adding two unrelated constructs with reflective indicators has been performed. Multicollinearity is assessed and avoided at all costs as it causes estimation difficulties (Diamantopoulos & Siguaw, 2006). Kim notes, "Multicollinearity occurs 'when intercorrelations among some variables are so high (e.g., >0.85) that certain mathematical operations are either impossible or unstable because some denominators are close to zero' (Kline 2004, p. 56)" (Kim, 2010, p.538). While Kim (2010) presented a model showing



intercorrelations, the model constructed for this analysis assumes no correlations between factors. To prove this, the models were tested using an intercorrelation test, however the correlations between factors rendered the model void, showing no significant correlation between the factors. The covariance measures between the factors of PSM were removed for model integrity.

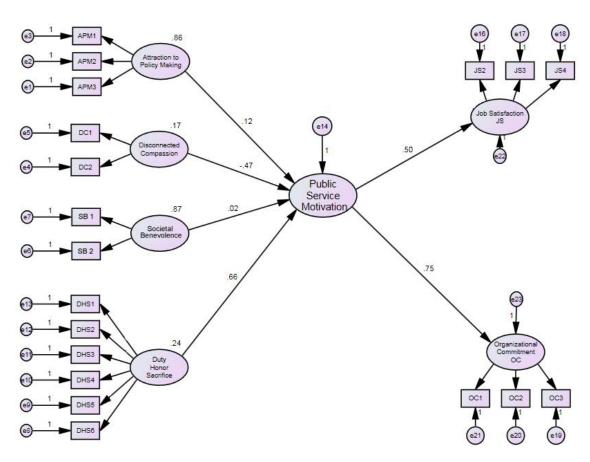


Figure 7 Formative model of PSM with JS and OC (n=490)

The four dimensions explain a fair share of the variance of PSM ( $R^2 = .398$ ). All paths of the formative model are significant, however the significance of the SB factor is significant at the .05 level, whereas all other paths are significant at the .001 level.



Criterion validity, or predictive validity concerns the correlation between a multi-item operationalization of a construct and a certain criterion variable of interest to the model (Kim, 2010, p. 538). The magnitude of the paths between PSM and the two constructs is greater with the formative model than reflective. Also, the differences between correlations shows that the variance of organizational commitment is greater with the formative model. According to Kim (2010), this suggests the formative model outperforms reflective measures in terms of criterion validity. This also suggests that a formative model of PSM provides a better predictor of job satisfaction and organizational commitment than a reflective model.



#### CHAPTER V

#### RESULTS

Given the breakdown of the previous section, the following section will provide results for the hypotheses presented earlier in the analysis. During the process, several of the hypotheses were tested as part of the model building and validation phase, and will be revisited throughout this section. During the presentation of the findings and results, many similar outcomes to previous literature will appear, and while not unusual, it provides for a number of references to authors such as Kim (2010; 2013) and others.

## **Hypothesis Testing Results**

Hypothesis 1: Perry's 4-dimension PSM model will not be statistically significant for all 4 dimensions for public safety workers.

As part of the initial testing of this investigation, Perry's 4-factor PSM model was executed using both the full Mississippi municipal employee data and the subset of the data including only public safety workers, police and fire. Resulting from the running of this model, the CFA provided no useful model using AMOS, nor did it provide an opportunity for reduction to a suitable model. Following multiple tests and iterations, it was determined that for the data, Perry's (1996) model of public service motivation was not suitable for the Mississippi data. Consequent to examination of the reliability and validity statistics, the lone factor from Perry's (1996) PSM model which showed significance using the Mississippi data was the attraction to policy making (APM), which



proved to be significant in its entirety for the full data set as well as the Mississippi municipal public safety worker data set as well. This finding of the APM factor is encouraging for future research as it shows that despite arguments from scholars that the APM wording is questionable and should be reworded, the factor provides comparable analysis for future efforts in public service motivation research.

While the remaining factors were not significant as a whole for the data set, some of the questions from each factor were combined. The commitment to public interest (CPI) variables and some from the self-sacrifice (SS) variable were combined to form an overarching variable, renamed Duty, Honor and Sacrifice (DHS). The compassion (COM) factor derived by Perry (1996) and disputed by Kim (2010, 2013) also provides an avenue of interest. The COM factor was divided up into two sections, societal benevolence (SB) and disconnected compassion (DC).

Two new factors arose from the EFA performed on the Mississippi municipal public service employee data set, societal benevolence and disconnected compassion. Both factors are based on variables from the Perry (1996) PSM model factor Compassion, and both provide a unique perspective on compassion, as the previous efforts have viewed compassion from an internal reflection perspective. However, in this manner, the connection to the individual or groups is overlooked, and therefore combining these variables does not make complete sense. Instead, the idea to separate these into distinct factors and then describe the manner in which these factors influence public service motivation became the most practical use of the data and theory behind the data.



Societal benevolence is comprised of only two variables, which is not ideal however the inclusion of a third variable created unstable factor loadings, and also did not provide the strength in reliability or face validity. The societal benevolence components include "Most social programs are too vital to do without" and "It is difficult for me to contain my feelings when I see people in distress". When referring to the personal component of societal benevolence, the concept here is that the individual respondent is reporting on self-aware feelings towards individuals, or emotions towards those individuals or groups with a connection to the respondent. This is different from disconnected compassion as it speaks to a heartfelt emotion towards individuals, whereas disconnected compassion is felt for those without any sense of connection to the respondent.

Disconnected compassion is also comprised of two variables, and much like societal benevolence, it is subject to speculation as one would prefer three variables or more per factor (J. R. Edwards, 2001; Law & Wong, 1999; MacKenzie et al., 2005; Wright & Pandey, 2005). The two variables in disconnected compassion are denoted by the questions "I am rarely moved by the plight of the underprivileged" and "I seldom think about the welfare of people whom I don't know personally". Each of these variables, DC1 and DC2 respectively, are centered on a compassion question regarding individuals of whom the respondent does not have an assumed direct connection. This can also be interpreted as a variable containing components of compassion for group disconnected compassion, as the underprivileged and the welfare of a group of people, in this case people unknown to the respondent, represent a grouping of individuals.



However, for the purposes of this research, the two groups are distinct in their approach towards a personal connection to the respondent.

While Perry (1996) provided the groundwork for PSM investigation, scholars like Kim (2010; 2013), Wright (2007; 2008), and others have utilized Perry's initial work to advance the theory of PSM for the future of public administration theory. For the purposes of this analysis we fail to reject the null hypothesis, PSM based on Perry's (1996) model is not compatible with the Mississippi municipal data set for public safety workers.

# Hypothesis 2: Public safety workers will report experiencing lower overall levels of PSM than non-public safety municipal workers

This hypothesis requires the use of both models from the previous work. The first model, PSM, will provide the definitive results for rejecting or failing to reject the null hypothesis. The second model will provide support for rejecting or failing to reject the null hypothesis as it pertains to PSM and the impact on retention methods. The theory behind this hypothesis is that public safety workers enter into their professions with an inherent feeling of motivation, as they are called upon to place their lives in danger to protect the common good. Many fire personnel and police have reported their feelings of public service from the other individuals they know based on the feeling that they sign up for service knowing that they could ultimately lose their lives or suffer injuries in their everyday responsibilities (Lee & Olshfski, 2002; Scaramella et al., 2006). With a preconceived notion of responsibilities and expectations, it is hypothesized that the police and fire personnel will experience overall levels of PSM lower than that of non-public safety personnel. A reprise of the PSM model for public safety workers shows that the



public safety worker has a significant level of factor loading, and the strengths of the regression weights show the strength each factor plays on the overall PSM. Figure 8 shows the SEM diagram for public safety workers' level of PSM.

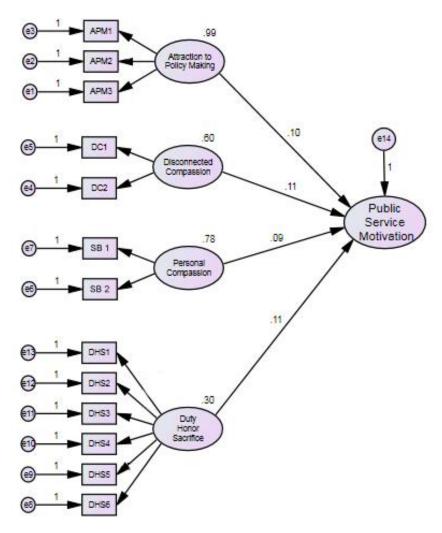


Figure 8 PSM of Mississippi municipal public safety workers

Following this procedure, Figure 9 shows the same PSM construct for non-public safety employees.



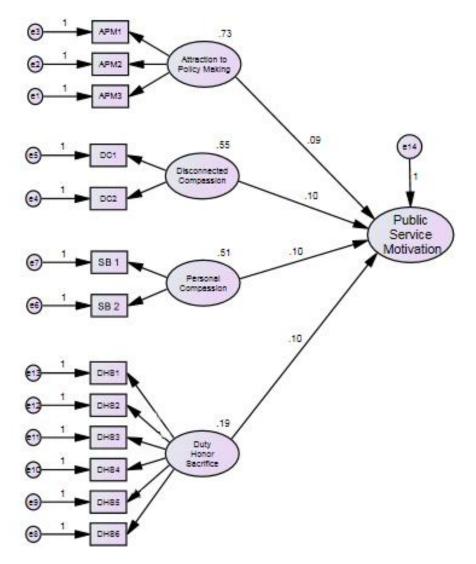


Figure 9 PSM of non-public safety workers, Mississippi municipal data

Looking at the figures where the arrows represent regression weights and the numerical values above the latent factors are the factor loading values, the values for each of the factors load on the factors of PSM to a higher level in public safety employees than non-public safety workers. While the level of regressive weights is statistically insignificant, it is worth noting that the overall strength of each of the factors is stronger in public safety employees than their non-public safety counterparts. While this finding

rejects the null hypothesis, it is not beyond the scope of reason that this would be the case. Previous literature has suggested that public safety workers may exhibit higher levels of motivation pre-enrollment period, or during the selection process, but it was assumed that this would result in a lower level of PSM.

A higher level of PSM for public safety workers implies that even with a predisposition to public service motivation, the continued level of PSM is higher in public safety workers than non-public safety workers, as it pertains to the proposed model. PSM in Mississippi municipal workers, no matter the department, appears to be constructed in a unique manner than any previous studies referenced in this research. Discounting pre-conceived public service motivation assumes the officers and fire personnel will not possess a higher level of PSM at employment, which is suspect as it would appear as though regardless of the levels of PSM inherent in public safety employees, they continue to exhibit higher levels of PSM throughout their employment. The next step in the analysis will be to compare the retention and commitment levels of public safety employees as it pertains to PSM.

Hypothesis 3: Public safety workers are more likely to exhibit overall job satisfaction than their non-public safety counterparts and Hypothesis 4: Public safety workers experience higher levels of commitment to public interest than non-safety workers as factors for PSM

Both of these hypotheses relate to one another, and to hypothesis 2 as they require the overall retention model as it pertains to PSM, job satisfaction, and organization commitment. Hypothesis 3 infers that public safety workers will be more likely to enjoy their jobs, be more likely to approve of their city or organization as a place of employment, and will be more likely to stay with the organization in the long term. The



last point, intent to stay, will not be studied in this analysis as a turnover intention construct, but rather a value that will identify the retention possibilities of the employees. Higher job satisfaction for public safety workers is assumed to be a construct of higher levels of organizational commitment. The public safety workforce tends to exhibit higher levels of commitment to an organization for a myriad of reasons (Burton, Holtom, Sablynski, Mitchell, & Lee, 2010; Udechukwu, 2009). One of these reasons is the police and fire fighters train with their cohort in regular intervals, aiding one another in climbing to the next level of fitness, training, or education. The collegial nature of the work lends itself to a higher level of organizational commitment, thereby increasing the level of job satisfaction.

When viewed from PSM as a standalone construct reflected upon by PSM only, job satisfaction will be higher for public safety workers than non-public safety workers as the levels of PSM are higher, as shown in the previous example. Higher levels of PSM will lead to higher levels of job satisfaction, and when one assumes that higher levels of job satisfaction leads to higher levels of performance and retention, it can be stated that higher levels of PSM in turn result in higher levels of retention for an organization (Kim, 2010).

Hypothesis 4 was initiated with the supposition that the Perry (1996) commitment to public interest (CPI) factor would remain intact for the duration of the analysis. The underlying premise was that public safety workers have a higher sense of duty and commitment, therefore the hypothesis can be altered to state that the Duty, Honor and Sacrifice (DHS) factor will be higher in public safety employees than non-public safety employees. If the hypothesis is reworded to test this hypothesis, than it is abundantly



clear that the DHS factor loads onto PSM at a much higher level for public safety employees than non-public safety employees. DHS accounts for 93% of the variance of PSM for public safety employees compared to just 12% for non-public safety employees.

Hypothesis 3 necessitates the full PSM model evaluation, as the constructs of job satisfaction and organizational commitment are the key components of this hypothesis. Organizational commitment, while not a specific component of job satisfaction in the previous models, can be attributed to job satisfaction and with only a few modifications to the model, can be incorporated into job satisfaction. Given the nature of this research and the potential for a completely new path of research, the investigation into organizational commitment's impact on job satisfaction will be withheld for future research. Instead, this analysis will provide an exploratory investigation into job satisfaction and organizational commitment to provide the field of public administration and practitioners seeking insight into job satisfaction, retention, and public service motivation in general.

Testing for hypothesis 3 involves little additional effort from the previous analysis, outside of a comparative analysis between public safety employees and non-public safety employees. It is assumed that public safety employees will have higher levels of job satisfaction as they will demonstrate higher levels of organizational commitment, which when factored into job satisfaction, will create a higher level of job satisfaction for the public safety employee. In addition, the previous analysis section demonstrated that public safety employees do, in fact, demonstrate higher levels of public safety motivation, which would lead one to assume the same would hold true for job satisfaction, if PSM plays a role in job satisfaction. Figure 10 shows the factor loading



and regression weight for PSM on job satisfaction for public safety workers. Figure 11 shows the results of the model for non-public safety employees. Figure 12 depicts the regression weight and factor loadings for job satisfaction as a function of both PSM and organizational commitment.

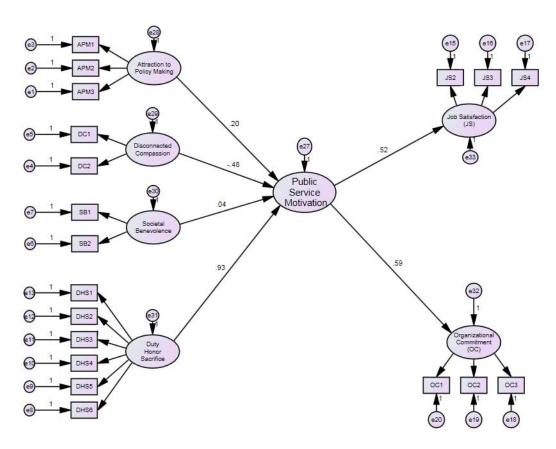


Figure 10 PSM for public safety employees, reflective to JS and OC (n=490)

To reiterate on the dimensions of the full PSM model, similar to Kim (2010), the negative component of disconnected compassion (DC) provides a glimpse into some of the differences in public safety employees compared to non-public safety employees, in that the public safety worker is negatively impacted by DC factors, or experiences lower



levels of PSM when faced with situations dealing with individuals they do not associate with. It would appear as though these individuals' plights were a burden to the public safety worker. However, that is beyond the scope of the research for this paper. Non-public safety workers appear to have a higher affinity for social benevolence than public safety workers, however this difference is countered by the increase of DHS of public safety workers than non-public safety workers.

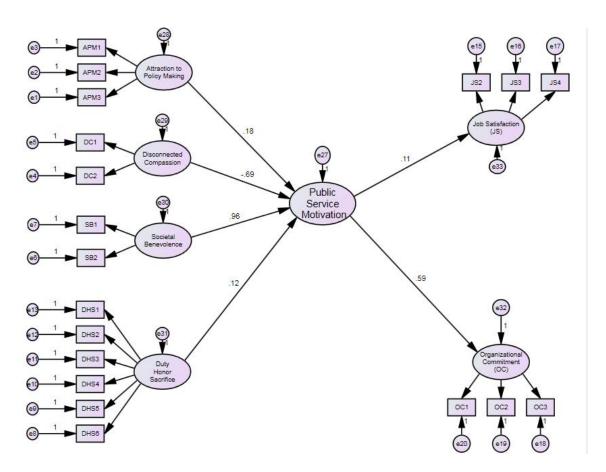


Figure 11 PSM for non-public safety employees, reflective to JS and OC (n=410)



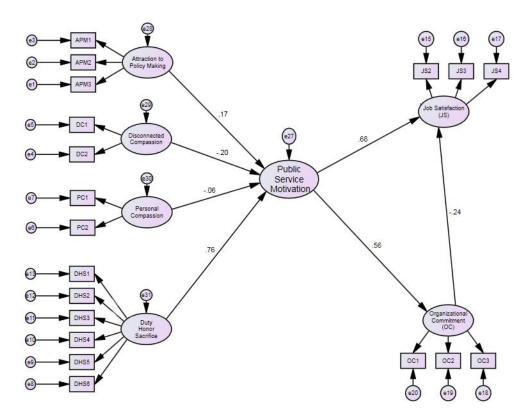


Figure 12 Job Satisfaction using PSM and OC as indicative factors (n=490)

When attempting to provide the same model testing with the non-public safety employee, the model fails to converge, providing the foundation for the finding that job satisfaction is significant for public safety employees as a reflective factor of PSM. One striking finding from this analysis is that the level of organizational commitment has a negative impact on job satisfaction. One cause for this might be that as an individual is more committed to an organization, he or she might begin to notice some of the more tedious, or red-tape, issues in the organization (Brewer & Selden, 2000; Buchanan, 1975; Gillet et al., 2013; Scott & Pandey, 2005). A second issue might be internal issues with dedication to an organization, such as the case when individuals are not able to advance in their careers despite tenure and success (Bright, 2008, 2009; Frank & Lewis, 2004).



Regardless of the reasons, it is important to note that there is further research needed in this area to shed light onto this construct.

PSM has been shown to be positively correlated to job satisfaction, particularly as it represents a measure of performance on the job (Coursey et al., 2008; S. Kim, 2005; Kim, 2010; Liu et al., 2008; Naff & Crum, 1999; Pandey et al., 2008). Kim (2010) notes, "For firefighters, these wants and expectations may be linked to a desire to help individuals and to contribute to society through protecting life and property from fires and providing relevant services to communities". He continues, "Firefighters may choose their occupation to realize these desires, and so they are committed to the honorable profession and the organization that impose the role on them" (p. 539). Essentially, PSM is an important individual predisposition which aids in the explanation of job satisfaction and organization commitment (Castaing, 2006; Kim, 2010).

# Hypothesis 5: PSM, as it applies to public safety employees, is a first-order reflective, second-order formative model.

PSM has rational, norm-based, and affective motives (Perry & Wise, 1990a).

Based on Kim (2010) and others, PSM should be studied as an aggregate construct with reflective properties (Kim et al., 2013; Vandenabeele, 2010; Wright et al., 2012). To refer to a factor as a first-order or second-order describes its function within the model or equation. In this case, the PSM construct's first-order properties are reflective, in that the construct as a whole possessive reflective characteristics on the latent constructs of job satisfaction and organizational commitment. The second-order nomenclature denotes that the aggregate construct of the PSM dimension is based on the four developed factors of PSM, in this case APM, DC, SB, and DHS. While the direction of the disconnected



compassion was negative and creates a unique measurement situation, it provides insight into the unique operations and public safety worker environment in the Mississippi municipal workforce.

Testing the reflective and formative models of PSM, the model statistics show that PSM for the public safety workforce in Mississippi should be an aggregate construct, with the factors developing the overall construct. Conceptualizing PSM's influence on the concepts of job satisfaction and organizational commitment proved to be a little more difficult for comparative purposes, however the overall model testing and construction shows that the model is best suited as a first-order reflective, second-order formative model. For the PSM dimension as a formative versus a reflective construct, the RMSEA and GFI indicators proved that the model was a better fit as a formative construct. While there are some limitations of this study that will be explained in the next section, the overall findings are consistent with many of the results of Kim's (2010) work, and provide the basis for continued investigation.

The main reason for identifying the construct development and components based on rank order of this type of work is threefold. First, this research began as an exploratory effort into developing a sound theory of public service motivation for local, municipal level employees. Prior work on PSM primarily focused on graduate students, state employees and the federal workforce (See Table 1). While these efforts provided numerous findings and ultimately led to the first combined, multinational approach to identify the public service motivations across geographies, they overlooked the local level employees (Kim et al., 2013). This effort used data collected based off of the original constructs of Perry (1996) and removed the theoretical constructs constraining



the fit of the data. To put another way, the theory was constraining the flexibility of the data, forcing the data to fit into a structure not conducive to local level motivation factors. So identifying whether the construct should be a reflective or formative one was critical to this process.

Second, there have been very few models to date that explored the dimensions and the directions of the correlations of these variables (Kim, 2010; Kim et al. 2013). Many previous attempts at identifying the factors of PSM and the direction of the correlations provided results that were unstable, inconclusive, or simply did not provide realistic results (Clerkin & Coggburn, 2012; Liu et al., 2008; Paarlberg & Lavigna, 2010). By starting with the EFA process, allowing the factors to be removed based on statistical theory, creating a model that could be confirmed using CFA techniques, this process has provided the statistical rigor necessary for developing a model that can withstand opposition from the standard questions.

The final reason the testing of the directions of impact or correlation is important is for confirmation. To make the inferences and recommendations which will be documented in the following section, it is necessary to provide the framework, validity, and then the support for the model developed. PSM should be considered an aggregate construct with reflective characteristics, depending on the identified constructs of interest. It should possess reflective characteristics, as PSM has been shown to provide statistically significant influence on various factors such as job satisfaction, organizational commitment, and turnover intentions, among others. It should provide a better understanding of how motivation can be impacted as well as how increased levels of motivation can work to better an organization as well as retain talented employees.



# Hypothesis 6: PSM for public safety employees is positively related to job satisfaction and organizational commitment, regardless of person-organization fit.

Public service motivation has been tested and re-tested with mediating factors, or factors which may not directly cause change but rather indirectly influence levels of PSM, by a number of authors (Goodman & Svyantek, 1999; Lauver & Kristof-Brown, 2001; Vandenabeele, 2009; Vandenabeele & Ban, 2009). Each of the attempts has provided insight into P-O fit and its influence on PSM and other constructs such as job satisfaction and organizational commitment. Testing whether P-O fit has an influence on job satisfaction or organizational commitment will allow the confirmation of P-O fit's lack of significance or influence on the reflected constructs of PSM in the model for Mississippi municipal public safety workforce.

Person-Organization Fit will be identified as an aggregate factor, comprised of one single question from the survey questionnaire. This was performed particularly for the future scholarly work, more so than the statistically detailed acumen involved in developing a perfect model. Given the notion that PSM is an ever-changing, evolving theory on motivation, it is necessary to identify potential influences and mediators before providing conclusive recommendations.

Using P-O fit as a mediator, it is readily apparent that the mediating effects provide a lack of significance in the findings, and therefore render the model insignificant. Figure 13 below shows the P-O fit model in terms of job satisfaction. Figure 14 depicts the P-O fit mediation model in terms of organizational commitment, both of which provide invaluable insight into retention and PSM. P-O fit, as is depicted in both models, is not a significant mediator of PSM on job satisfaction or organizational commitment when applied to Mississippi municipal public safety employees.



P-O fit, as it applies to PSM, has been studied in various manners, most of which involve P-O fit as a mediator or moderating affect of public service motivation (Bright, 2007; Goodman & Svyantek, 1999; Bretz Jr. & Judge, 1994; S. Kim, 2005; Vandenabeele & Ban, 2009; Wright & Pandey, 2008). In many of these studies, personorganization fit was one of many other influences on public service motivation or organization commitment from which the authors drew correlations. What should not be overlooked is the simple, or mediating impact of P-O fit. While these models do not provide the statistical significance necessary for continued investigation into the mediating effects of P-O fit on job satisfaction or organizational commitment, they do not detract from the need to continue to include P-O fit constructs as a potential influential component of PSM.

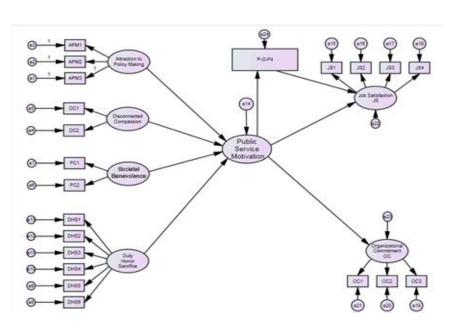


Figure 13 Person-Organization Fit on Job Satisfaction for Mississippi municipal public safety workers (n=490).



In the above diagram, P-O fit serves as a mediator for job satisfaction. The formative components of PSM serve as unconstrained factors influencing PSM. PSM's reflective characteristics provide the regressive factors necessary for comparison when using PSM as an influence variable or factor on job satisfaction or organizational commitment, depending on the desired comparison in the research at the given time.

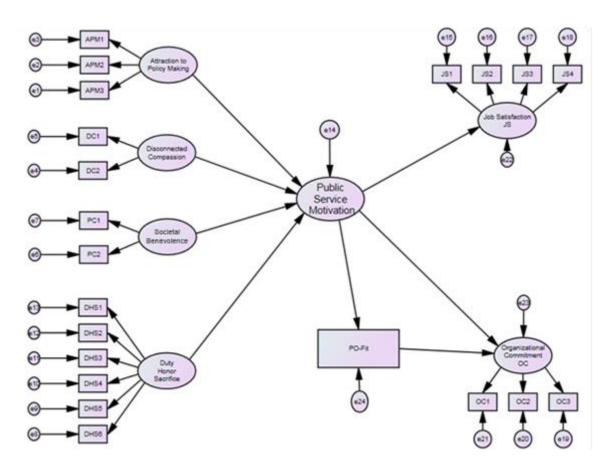


Figure 14 Person-Organization Fit on OC for Mississippi municipal public safety workers (n=490).

P-O fit has been posited to serve as a possible mediator of PSM, however studies have failed to show P-O fit as a significant mediator on a consistent basis. However, P-O



fit continues to be studied as a mediator, predictor, or determinant of public service motivation (Edwards, 2001; Ferlie et al., 2003; Lauver & Kristof-Brown, 2001; Lee & Olshfski, 2002).

Person-Organization fit does not provide a significant mediator effect for this model. In fact, the model loses its overall significance when P-O fit is introduced into the PSM model. Table 24 shows the impact of P-O fit as both a direct and indirect mediator of PSM on job satisfaction and organizational commitment. In the table, JS represents job satisfaction, OC represents organizational commitment, and PSM represents public service motivation.

Table 24 P-O fit as a mediator of PSM on Job Satisfaction (JS) and Organizational Commitment (OC).

Relationship	Direct w/o P-O fit	Direct w/ P-O fit	Indirect
PSM - PO - JS	.816 **	0.702	NS
PSM - PO - OC	1.274**	1.642	NS

(n=490)

Note: \* ns = not significant, \*\* p < .05.

The P-O fit variable introduced into this model presents problems throughout the testing procedures. There are several reasons for this difficulty. First, there are two factors, SB and DC, which are constructed with two variables each, providing the foundation for instability in the model. The second problem presented in this model is face validity for P-O fit in this model. P-O fit has been tested in several methods, both as an aggregate measure and as a single-variable construct. In this instance, P-O fit is measured as a single-variable construct, as the survey instrument did not provide significant measures for P-O fit according to EFA models initially tested. As the model stands, there are theoretical reasons to include P-O fit as a construct as job satisfaction, or



as a mediator of PSM on job satisfaction and/or organizational commitment based on psychological and workforce behavior studies, however this model does not provide the necessary foundation to suggest the inclusion of P-O fit as a mediating factor of PSM on job satisfaction or organizational commitment. Perhaps future measures could expand upon the use of P-O fit in local workforce data sets, however it is suggested by this research that P-O fit be relegated to state-level and larger aggregation-based data investigations.



#### CHAPTER VI

#### DISCUSSION

#### **Factors**

The previous chapters have worked to develop a working model of public service motivation consisting of a number of factors based on the original efforts of James Perry (1996) and Sangmook Kim (2010), as both provided a substantial amount of statistical and literary foundation to continue investigating PSM. This effort, however, focuses on the local level, as many studies ignore or choose to aggregate local-level data for the use of state and federal level data. What many fail to realize or incorporate is the importance of local-level investigation when examining the impacts of factors involved in potential macro-level foundations. Without the inclusion of, or with the ignoring of, local-level data, a scientist or practitioner will ultimately overlook the micro-level phenomena necessary to study before relaxing assumptions. Macro-level assumptions require the relaxation of human factors and behaviors, enough to the level that some may question the amount of data and information overlooked for the betterment of data cleanliness. However, when a scientist or practitioner wishes to examine the impacts and factors involved in the motivation of employees, it is crucial to work from a bottom-up approach, as many of the issues pertinent to employees in state and federal government are similar to those of local-level governments, yet the local-level government employees are often



overlooked. No one department is more overlooked when examining municipal or state employees as public safety workers.

From this research, there were only 4 available public safety employee pieces which identified, or worked to identify factors of motivation of public safety employees. What this amplifies is the need for individuals to identify the overlooked municipal employee, particularly as attraction, selection, and retention strategies are employed to combat the loss of qualified employees from the public workforce.

### **Attraction to Policy Making**

One of the original factors from Perry (1996) that sustained its significance and relevance throughout the testing procedures is the attraction to policy making (APM) factor. This is not surprising as many of the studies shown in Table 1 provided the foundations for APM's inclusion into public service motivation studies. However, several newer studies, particularly Kim et al. (2013), have shown that APM provides a foundation for questioning the wording and construction of the factor as Perry (1996) first envisioned.

However, such a significant number of studies have shown that APM is not only the most static and statistically significant factor throughout the deconstruction and reconstruction of the PSM construct, but APM provides a unique look at the involvement in politics for those studied.

APM is particularly interesting for those involved in local government on several levels. First, APM suggests that individuals are impacted by political influences, however local government is often party-neutral. Party-neutral refers to the concept that local government politics are not as driven by political lines that state and federal politics



are typically referenced, and therefore are not subject to the same quantification that state and federal political backdrops are referenced. That stated, there are several implications for APM as a variable in PSM ultimately requiring the investigation of APM in future studies.

Attraction to policy making suggests that individuals are interested in the policymaking process, and are ultimately driven by decisions that are influenced by politics and policy, despite the data-driven questions of relevancy depending on the target population. For this research, local-level public safety employees have shown that they are impacted by politics, in that they believe that politics is a dirty word, based on Perry's (1996) original construct. In addition, local-level public safety employees are essentially concerned about the give and take of policy making. This is very important as public safety employees may be extremely interested in the policy-making process as their positions rely on the policies set in place on when they are permitted to react and when they are not. For instance, a police officer may not react unless acted upon, and would, in theory, be interested in the policies in place that determine how he or she can or cannot react in a moment of concern. It does not require much abstract thought to see how attraction to policy making would be particularly interesting and concerning to a local government employee, whereas a state-level employee may feel his or her concern would go unnoticed.

Of note in the development of this construct is the combination of politics and the identity of politics as a dirty word and the potential implications at the local level. For policy, this is not necessarily a concern as an individual may feel that he or she may have more influence on policy at the local level. That stated, it is not above or beyond the



range of normal thought that an individual may have stronger feelings towards politics or politicians at the local level, as he or she may have regular dealings with local politicians and therefore would elicit stronger, more impactful feelings towards politicians and politics. An oversight of the state and national models, also found in the international Kim et al. (2013) model, is the fact that at the macro-levels, interest in politics may not be directly associated with believed impact on policy or politics, whereas interest and involvement in local politics and policy may have a different impact. An anecdotal example of this would be the involvement of townspeople in city hall meetings. Should one visit a local town, he or she may notice that individuals present for many meetings tend to be the local police and fire employees, which are particularly interested in decisions that impact them on what could possibly be viewed as a personal basis. While the intentions and decisions of the political figures' decisions are beyond the scope of this research, it should not be overlooked as to the importance of policy and politics at the local level, as decisions can often be made based on one-to-one conversations, whereas state and federal influence primarily comes from much larger and more organized entities. Local-level politics tend to have an influential impact on individuals, as many local-level politicians have relatives and family members who are members of the municipal workforce.

Future research should examine the impact on the impact of local level politics on the influence of willingness to work for the government, involvement in politics, and willingness to work with others across political lines to determine if there exists a divide between those involved in politics, or those with family members involved in politics, and those who are not. Attraction to policy making infers that there exists the desire to be



involved in policy making, or at the very least the desire to remove oneself from politics, to further the enhancement of public service motivation. APM, as a construct, provides the solidified construct that handles the reduction to the local level, and therefore is essential in the future investigation for public service motivation for local level employees. The factor of attraction to policy making for Mississippi municipal public safety workers provides reinforcement to the original concept developed by Perry (1996) stating that individual levels of motivation are influenced by the involvement in policy making and politics by the public service employee.

#### Societal benevolence

Societal benevolence proved to have a significant factor loading on the PSM construct, showing that societal benevolence is a significant component in understanding public service motivation. In fact, higher levels of societal benevolence for public safety employees results in higher levels of overall motivation, which leads to higher levels of job satisfaction and organizational commitment. Individuals who are able to display levels of compassion for those they feel a connection to ultimately experience higher levels of public service motivation. Societal benevolence assumes that individuals will act in an effort to better society as a whole. This act or desire to better people will be reflected in the need to include social programs in government and the emotions stirred from seeing individuals in need.

This finding speaks volumes to the public safety work in the state of Mississippi.

Anecdotally, the state of Mississippi is a very tight-knit state, in that many of the individuals residing in Mississippi grew up in the state and remain in Mississippi throughout their careers. This is particularly important as individuals in public safety are



often called upon to provide protection and service to all people, whether they are familiar with the individuals, feel a connection to the individuals, or none of the above. Understanding the level of compassion, the influence on motivation, and the direction of the relationship between societal benevolence and PSM can add to the level of attention and investigation necessary to facilitate the increase of PSM of public safety employees, particularly in the Mississippi municipal workforce, as it pertains to this particular investigation.

Increased attention to societal benevolence can result in somewhat higher levels of public service motivation, according to the results of this analysis. The standardized regression weights show that while the impact is minimal, it remains a positive impact on public service motivation and creates a venue for practitioners and academics alike to continue exploring as investigation into public service motivation continues. While societal benevolence may not provide a substantial effect on PSM according to standardized regression output based on asymptotically-free distribution regression, also known as weighted-least squares regression, it does provide a substantial regressor when using maximum likelihood estimate analysis, however that was not detailed in this particular investigation.

Statistical techniques using EFA and CFA, along with the analysis component of SEM requires the ability to change methods, adjust to the sample provided, and continue investigation. This analysis provides a point-in-time analysis of a data set that is so rich in potential insight, it must provide one direction and work from that direction.

Venturing into the different statistical techniques is the next step in the research.

Recommendations, presented in the next subsection, will surround the continued



exploration into various other statistical techniques which will examine the levels of significance and impact of the proposed model. Mississippi public safety employees exhibit a significant level of social benevolence, meaning the employees are impacted by the level of social action he or she is willing to take part in to better society.

## **Disconnected Compassion**

Perhaps the most perplexing factor derived from the exploratory factor analysis is that of the disconnected compassion component. Coining this perplexing is done for several reasons. First, disconnected compassion provides a unique look into how individuals respond to compassion for those whom they do not feel any direct connection, or no direct connection can be assumed. The statistic for this factor was negative, which on face value is a bit disturbing until it is explained in greater detail. A negative direction or relationship with disconnected compassion concludes that individuals who feel a sense of empathy towards those whom they have no direct ties or connections can ultimately lead to reduced levels of public service motivation. Put in another context, those public safety workers who concern themselves in the welfare and well-being of individuals they do not know or have any connection with tend to exhibit lower levels of public service motivation.

This finding can be explained in several ways. The first reason rests in the potential for increased sympathy for those they cannot aid, which could result in a feeling of hopelessness. This hopelessness can build, particularly in a workforce whose responsibility rests in placing themselves in harm's way to provide safety and protection for those very same individuals with whom they have no connection. A second explanation could be that as individuals concern themselves with the feelings and



situations of those whom they have no connection to, they lose sight of what their responsibilities are and the overall mission of the organization. The third possibility rests in the simple presupposition that individuals who do not worry with people or things outside of themselves, or are more self-focused, may be predisposed to higher levels of public service motivation than others. This third possible explanation opposes what many in the field believe, but it does not imply this could not be a possible explanation. Further research is needed to uncover the relationship between levels of compassion, particularly as they relate to motivation, job satisfaction, and retention in the public sector workforce. Retention is a necessary and important factor to work towards and understanding the influence of compassion on individuals' levels of motivation can only increase the knowledge and opportunities to positively impact retention strategies in public sector workforces across the globe. However it is imperative to work from a local-level to a macro-level to understand and conceptualize the "boots on the ground" perspectives of public service motivation, particularly in the public safety sector, as the local-level individuals are the very individuals providing the services to the community (Lipsky, 2010). Public safety employees exhibit a level of disconnected compassion which will positively impact motivation as a formative component. However, if one is examining DC on motivation as a reflective component for retention, he or she should be cautious as the explanatory power of disconnected compassion is altered with the added level of complexity.

### **Duty, Honor and Sacrifice**

Duty, Honor and Sacrifice (DHS) is the final component derived from the effort of the EFA and CFA process. This component combines the factors from Perry's (1996)



self-sacrifice (SS) and commitment to public interest (CPI). The terminology or acronym developed to represent the factors was at the discretion of the researcher, and therefore there rests little rhyme or reason to the nomenclature, other than it encompassed the overall variables into the factor in the most succinct manner. Based on the primary focus of this investigation examining the public safety workforce, some of who have military backgrounds, the nomenclature for this variable seemed appropriate to encompass all of the variables.

The DHS factor is comprised of six variables, more than any other factor, and it loaded stronger than any of the compassion factors, with a higher standardized regression weight than any factor loading on PSM, with the exception of APM. This does not come as a surprise as many of the characteristics of the variables in this factor directly pertain to the public safety sector. There is literature showing that police and fire employees are typically predisposed to feelings of civic duty and responsibility for the protection of the public (Castaing, 2006; Gillet et al., 2013; Lee & Olshfski, 2002; Scaramella et al., 2006; Susan et al., 2012). This insight proves that there is a predisposition to assistance and aid by police and fire that goes beyond the everyday public service employee, and rests primarily with the public safety employee in municipal organizations, in this instance.

When this angle on public service employee motivation was undertaken, there was a preliminary focus on duty and service as it was assumed that public safety employees would exhibit higher levels of duty and sacrifice than non-public safety employees. This finding held true in the analysis portion and provides additional support to the notion that public safety employees are unique from other public service employees, not only in their job responsibilities but also in their response to various



influences throughout the course of their jobs. DHS as a factor provides the necessary insight to confirm that not only are public safety individuals unique, they must be managed in a manner that is different than other public service employees to effectively manage the organization

## **Implications**

The implications of this research are far-reaching and expansive. This work has shown that the public safety employee is unique as a group within public service employees, particularly as it pertains to the Mississippi municipal workforce. As has been the case throughout the last two decades of research on PSM, public safety employees are often lumped together with other public service employees and are essentially overlooked as a separate department or classification within a greater whole. The responsibilities and duties of public safety employees alone should warrant a different approach to management and retention strategies in the practitioner-based world, and the merits of the addition to the scholarly world have been shown in great detail throughout the analysis. Understanding how employees are motivated, the various elements of a worker's responsibilities as part of his or her job, and the overall management practices necessary to maintain a talented and capable workforce are the cornerstones to good management. This research has provided the starting point for those in the State along with any others interested in evaluating their public safety employees in an effort to increase retention and reduce attrition.

Focusing on public safety employees' dedication to DHS factors, along with the involvement and interest in the policy-making components of their employment, managers can increase attention to these areas to enhance public service motivation



within the public safety sector, ultimately leading to increased job satisfaction. Much of this is still new as this research is investigating a subsection of a topic, and therefore would require additional insight and perhaps some applied research into the area. However, if the previous literature is correct and job satisfaction has a positive correlation to retention and reduced attrition, then it is apparent that increasing the public service motivation for employees in the public sector in Mississippi can only increase the retention of capable employees, particularly in the public safety sector. And an increase in the retention of capable employees will aid in the overall effectiveness of the organization.

Public service motivation insight can lead to a number of important managerial advances in handling employees, hr strategies, compensation structure revamping, among a list of other aids for an organization. What should be examined in future research is how well do managers adhere to the different factors which are shown to be important and impactful for different sectors of the public sector workforce. In addition, much of the scholarly work performed over the course of the last two decades will be for naught if those responsible for making decisions for organizations do not actively seek to incorporate some of the strategies and suggestions stemming from these works.

#### **Future Research**

The next steps in the PSM research, particularly as it pertains to the public safety workforce begins with an insight into the factors and constructs shown in this model expanded to incorporate other regions and state-level employees. A model has been derived from little more than data, with the assumption that the theory behind PSM was not applicable to the public safety workforce, and has been shown to implement many of



the PSM factors from the works of previous scholars, just in a new combination. Noting this, the work performed by the previous scholars in addition to the models and effort provided in this literature supply the foundation for the advancement of this insight into PSM into other areas, regions, and aggregation levels.

Expansion of this model into the state-level workforce in Mississippi is the penultimate mission of this effort. Once a structure of PSM was identified at the local level for a random sample of Mississippi municipal workers, the next progression in this investigation is to apply this model at a macro-level, incorporating the State of Mississippi's workforce and their characteristics and determining the level of applicability of the model to this workforce demographic. Expanding the model would entail an analysis of the applicable employee workforce and the surveying of the individuals using the same survey questions, yet including some of the new survey questions proposed by Kim et al. (2013) in their work with international PSM comparisons and the impact of PSM as it pertains to a global economy. At the conclusion of this expansion, it is anticipated that the result will be a model that will have the capacity to be drilled down to the micro, or local, level while also proving applicable at the macro, or state, level.

In addition, future research should be expanded to identify the impacts, if any, of civil service protection versus at-will employment on public service motivation for public safety employees. This research aimed to uncover any implications the classification of employees may have on the motivation of public safety employees. However, once calls were made to determine the type of protection offered public safety employees from this data set, it was determined that there was not enough variation in the data to warrant an



unbiased examination of this effect. However, the future efforts of examining different local governments, government agencies, and organizations should work to uncover these differences in the event there are factors contained within the data regarding employment protections.

Civil service protections offered to public service employees provide the protection against unlawful termination, whereas at-will employment suggests an individual may be terminated for any reason, without the requirement to show cause. Some scholars have worked to identify whether these protections provide a different level of employment production, satisfaction, and motivation, yet further research may uncover the impacts of these protections on public safety employees, providing a new avenue for research (Battaglio, 2010; Condrey, 2002; French & Goodman, 2012; D. Goodman & French, 2011). Employment protection may provide insight into why individuals choose to remain in their current environment, however it may also shed light on why individuals choose to leave, but until that area of research has been completely uncovered, it will remain little more than a possible avenue for research. Using the work put forth in this document, continued investigation into public service motivation for public safety employees will provide the footing and base for expanding the research.

Regardless of the avenue this research will pursue in future efforts, contributions to the field of public administration, particularly human resource management and organizational theory, will continue. In fact, opening up a field of research to include an oft-overlooked group of individuals such as police and fire provides a new venue for future exploration and contributions not only to the field of public administration, but also to those in managerial positions in the field.



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## APPENDIX A SURVEY INSTRUMENT



## Dear Participant:

You have been randomly selected to participate in a survey of local government employees in the State of Mississippi. You will be asked several questions on the following pages concerning motivation, incentives, commitment to the public interest, compassion, self sacrifice, and your personal demographics. When completing this survey, we ask that you do not provide your name so that the confidentiality of your responses will be ensured. Please provide honest and candid responses to each of the survey questions. The information provided will be utilized by the Stennis Institute of Government at Mississippi State University to assess the impact of public service motivation of local government employees on several relevant issues to this public sector of employment.



## Mississippi Local Government Survey Administered by the John C. Stennis Institute of Government at Mississippi State University

1.	Please indicate the name of your department:
	[ ] Administration [ ] Community Development [ ] Fire [ ] Human Resources / Personnel [ ] Parks & Recreation [ ] Planning & Development [ ] Police [ ] Public Works [ ] Other (please list)
2.	How many years have you worked for this city?
3.	Are you employed:
	[ ] Full-Time [ ] Part-Time
4.	Please indicate the average number of hours per week you work in your curren position
5.	How long have you been at your current position?
6.	Are you classified as a department head, manager, or supervisor?  [ ] Yes [ ] No



7.	Please indicate whether you have worked mainly in the public or private sector
	Public-sector work includes work at non-profit organizations and local, state, or
	federal government. Private-sector work is working for yourself or others at a
	for-profit business or corporation. (PLEASE CHECK)
	[ ] Most of my work experience is in the public sector.
	[ ] Most of my work experience is in the private sector.
	[ ] I have worked a great deal in both the public and the private sectors.

8. Different people want different things from their work. How important is each of the following to you? (Place an X in the appropriate box):

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Getting a feeling of accomplishment from your job					
The chances you have to accomplish something worthwhile					
Your chances of getting a promotion					
The amount of job security you have					
Your chances for receiving a performance award					
A job that allows you to help other people					
A job that is useful to society					
Status / Prestige					
High Income/ Salary					



9.	Please rank the following five (5) job characteristics in numerical order from 1 to
	5 for level of importance to you (1 = most important, $2 = 2^{nd}$ most important, $3 = 2^{nd}$
	$3^{rd}$ most important, $4 = 4^{th}$ most important, and $5 = 5^{th}$ most important).
	[ ] High Income
	[ ] Short Working Hours / Lots of Free Time
	[ ] No Danger of Being Fired
	[ ] Chances for Promotion
	[ ] Work that is Important / Gives a Feeling of Accomplishment

10. Indicate your level of agreement with the following statements (Place an X in the appropriate box):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Making a difference in society means more to me than personal achievement.					
I am rarely moved by the plight of the underprivileged.					
Most social programs are too vital to do without.					
It is difficult for me to contain my feelings when I see people in distress.					
I believe in putting duty before self.					
Doing well financially is definitely more important to me than doing good deeds.					
To me, patriotism includes seeing to the welfare of others.					
Much of what I do is for a cause bigger than myself.					



11. Indicate your level of agreement with the following statements (Place an X in the appropriate box):

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree			1	Agree
I seldom think about the welfare of					
people whom I don't know					
personally.					
Politics is a dirty word.					
Serving citizens would give me a					
good feeling even if no one paid me					
for it.					
I am often reminded by daily events					
about how dependent we are on one					
another.					
It is hard for me to get intensely					
interested in what is going on in my					
community.					
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 unselfishly contribute to my					
community.					
I have little compassion for people in					
need who are unwilling to take the					
first step to help themselves.					
I am prepared to make enormous					
sacrifices for the good of society.					
The give and take of public policy					
making does not appeal to me.					
Meaningful public service is very					
important to me.					
I do not care much for politicians.					
F					
I would prefer seeing public officials					
do what is best for the whole					
community even if it harmed my				1	
interests.				1	
I consider public service my civic				1	
duty.				1	
duty.					
There are few public programs that I					
wholeheartedly support.					
mioreneuroury support.					
	i	•			

12.	What is your age range?
	[ ] 24 or younger [ ] 25 to 34 [ ] 35-44 [ ] 45-54 [ ] 55-64 [ ] 65 or older
13.	What is your gender?
	[ ] Male [ ] Female
14.	What state were you born in?
15.	How many years have you resided in the state of Mississippi?
16.	Did you grow up within a 50 mile radius of where you currently work?
	[ ] Yes [ ] No
17.	What is your race?
	<ul> <li>[ ] Caucasian/White</li> <li>[ ] African-American/Black</li> <li>[ ] Hispanic</li> <li>[ ] Asian</li> <li>[ ] Native American</li> <li>[ ] Other</li> </ul>



18. Please indicate the extent to which each of the following statements describes you (Place an X in the appropriate box):

	Does NOT describe me at all	Does NOT describe	Neutral	Describes me a little	Describes me very well
I often have tender, concerned feelings for people less fortunate than me.	me at an	me much			
Sometimes I don't feel sorry for other people when they are having problems.					
When I see someone being taken advantage of, I feel kind of protective toward them.					
Other people's misfortunes do not usually disturb me a great deal.					
When I see someone treated unfairly, I sometimes don't feel very much pity for them.					
I am often quite touched by things that I see happen. I would describe myself as a pretty soft-hearted person.					

19. Indicate your level of agreement with the following statements (Place an X in the appropriate box):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
People should be willing to help others who are less fortunate.					<i>Q</i>
Those in need have to learn to take care of themselves and not depend on others.					
Personally assisting people in trouble is very important to me.					
These days, people need to look after themselves and not overly worry about others.					



20. Within the past year, please indicate whether you have participated in any of the following activities (Place an X in the appropriate box):

	Yes	No
Given directions to a stranger		
Allowed a stranger to go ahead of you in line		
Given money to a charity		
Given food or money to a homeless person		
Looked after a person's plants, mail, or pets while they were away		
Returned money to a cashier after getting too much change		
Carried a stranger's belongings		
Done volunteer work for a charity		
Offered your seat on a bus or in a public place to a stranger		
Let someone you did not know well borrow an item of some value		
Donated blood		

21. Please answer the following statements (Place an X in the appropriate box):

	Yes	No
When you were growing up, did your family actively volunteer		
for different activities or organizations?		
Were both of your parents employed in public sector jobs?		
Was one of your parents employed in a public sector job?		
Do you consider yourself a religious person?		
Did you vote in the last presidential election?		
Do you generally vote in state and local elections?		



22. V	Which political party do you most identify with?
]	<ul><li>] Republican</li><li>] Democrat</li><li>] Independent</li><li>] Other</li></ul>
23. A	are you a military veteran?
[ [	] Yes ] No

24. Indicate the importance of the items below in choosing to work for your local government employer (Place an X in the appropriate box):

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Relationship with Supervisor/Manager			important.		imporum.
Personal Development					
Responsibility					
Social Orientation (your impact on society) Challenging work					
Personal Interest					
Customer Orientation (your impact on customer satisfaction)					
Prestigious Employer  Fast Promotion					
Fringe Benefits (Monetary-bonuses)					
A Successful Employer					
Wages / Salary					
Lack of Stress					
Fringe Benefits (Non- monetary-pension, vacation, healthcare, etc.,)					
Easy Promotion					
Equal Opportunity for Men and Women					
Job Security					

23. What is your highest level of educational attainment?
<ul> <li>[ ] Less than high school diploma</li> <li>[ ] High school diploma/GED</li> <li>[ ] 2 Year college degree</li> <li>[ ] 4 Year college degree</li> <li>[ ] Master's degree</li> <li>[ ] Law degree</li> <li>[ ] Doctorate degree (Ph.D, M.D., Ed.D.)</li> </ul>
26. What is your current marital status?
<ul><li>[ ] Single</li><li>[ ] Married</li><li>[ ] Widowed</li><li>[ ] Cohabiting</li></ul>
27. Do you have children?
[ ] Yes (If you answered yes, please answer question a. below) [ ] No (If you answered no, please skip to question 28)
a. If you answered yes to the above question, do you have a child under the age of 18?
[ ] Yes [ ] No
28. What is your salary level?
[ ] \$0 to \$19,999 [ ] \$20,000 to \$39,999 [ ] \$40,000 to \$59,999 [ ] \$60,000 to \$69,999 [ ] \$70,000 to 99,999 [ ] \$100,000 and above



29. Do you anticipate being employed in this same position one year from today?
[ ] Yes  [ ] No: If you answered no, please indicate a reason below for this answer.  [ ] Dissatisfaction with pay, benefits, work conditions, etc.  [ ] Promotion to another position within this organization  [ ] Retirement  [ ] Potential Lay Off  [ ] Other, please list:
30. Do you anticipate being employed in this same position five years from today?
[ ] Yes  [ ] No: If you answered no, please indicate a reason below for this answer.  [ ] Dissatisfaction with pay, benefits, work conditions, etc.  [ ] Promotion to another position within this organization  [ ] Retirement  [ ] Potential Lay Off  [ ] Other, please list:
31. Are you a member of a professional society (e.g. ASPA, ICMA, ACPA, etc.)?
[ ] Yes (If you answered yes, please answer questions a, b, and c below) [ ] No (If you answered no, skip to question 32)
a. I attended most meetings of this professional society in the last two years.
[ ] Yes [ ] No
b. I am an office holder in a professional society.
[ ] Yes [ ] No
c. I have made presentations at recent professional society meetings.
[ ] Yes [ ] No



32. Please indicate your level of agreement with the following statements (Place an X in the appropriate box):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
People who think they are treated unfairly should take care of themselves.	2.170				8
It is self evident that you benefit your friends.					
I do not think people should always be treated equally (there are various good reasons not to do so: time, money, etc.)					
Tolerance towards other cultures is crucial					
To me, public servants should not be led by their political stances.					
One should always respect the opinion of others, even if it is not in their best interest.					
Everybody is entitled to good service, even if it costs a lot of money.					
Even in the case of major disasters, public service should be maintained.					
When something goes wrong at work, the supervisor is accountable.					
It is important that public servants account for all the costs they make.					
If there are clear rules, one should not deviate from these.					
In case of an emergency, a public servant can ignore the law.					
It does not matter if you tried your best; if the result is not good you did a bad job.					



33. Please indicate your level of agreement with the following statements (Place an X in the appropriate box):

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3				
	Disagree	Disagree	Disagree	Disagree



Thank you again for your participation in this survey. Your responses will be kept confidential.

