

ANOTHER MISSING LINK IN THE SERVICE
PROFIT CHAIN: COMPOSITE SELF-REGULATION AS
A MEDIATOR

By

MICKEY BRANDON SMITH

Bachelor of Arts in Psychology
University of South Alabama
Mobile, Alabama
2009

Master of Arts in Psychology
University of West Florida
Pensacola, Florida
2011

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December, 2014

ANOTHER MISSING LINK IN THE SERVICE
PROFIT CHAIN: COMPOSITE SELF-REGULATION AS
A MEDIATOR

Dissertation Approved:

Dr. J. Craig Wallace

Dissertation Adviser

Dr. Bryan Edwards

Dr. Aaron Hill

Dr. Tracy Suter

ACKNOWLEDGEMENTS

To my wife Megan, you are my motivation to push forward and reach higher in everything I do. You provided me with support, in all meanings of word, and love that led me to this point. Moreover, you will soon provide me with the greatest gift imaginable in our unborn son. As motivated as I thought I was before, I have now discovered an entirely different kind of motivation. All of this is because of you. Thank you and I love you.

To my parents, I would not be who I am today without your guidance and love. It was knowing that you believed in me and expected me to succeed that steered to me choosing my own path and finding my passion. To my brother, it is because of you that I strive to learn and become better every day.

To my chair and mentor, Dr. Craig Wallace, I cannot begin to express my gratitude for all that you have done for me over the last three years. Your work ethic is contagious, and your insight into the field and profession is invaluable. I am very fortunate to be part of this academic family, and I am forever grateful to have been adopted into it. Thank you for your guidance, continued support, and all of the opportunities you afforded me.

To Dr. Aaron Hill, thank you for the guidance you have provided me over the last two years. You treated me as a colleague from day one, and I look forward to building upon our friendship in the years to come.

To Dr. Bryan Edwards, thank you for the support you provided me over the last three years. It was such a pleasure working with you and learning techniques and methods that I will use throughout the rest of my career.

To Dr. Tracy Suter, I will take so much away from our talks at OSU-Tulsa. I have always been in awe of your ability to reason and the wisdom you possess. I am not sure that you know just how much of an influence you have had on me, but you have made me strive to challenge myself more both personally and professionally. Thank you.

Name: MICKEY BRANDON SMITH

Date of Degree: DECEMBER, 2014

Title of Study: ANOTHER MISSING LINK IN THE SERVICE PROFIT CHAIN:
COMPOSITE SELF-REGULATION AS A MEDIATOR

Major Field: BUSINESS ADMINISTRATION

Abstract: The service profit chain contends that service-related human resource practices and management influence service behavior, performance, and ultimately organizational performance. This study builds upon recent work implicating service climate as the missing link in the service profit chain by explicating yet another missing link in the chain: composite self-regulation. Self-regulation is a core construct within the motivation literature, and it is a multifaceted process of monitoring and regulation. I propose that employees engage in self-regulation when interpreting the service-related predictors of service performance. In this study, I hypothesize that high-involvement management, service climate, and composite self-regulation drive group-level service performance. In order to test my hypotheses, I collect data in two phases. In the first phase, I assess the psychometric properties of new scales intended to measure composite self-regulation using data collected from Mechanical-Turk. In the second phase, I collect data from several companies and through snowball sampling to assess the hypothesized model. I find support for the validity of both a long-form scale and short-form scale for composite self-regulation. The results partially support my hypotheses. Based upon the results, I perform post hoc analyses to assess alternative methods of testing the model. In addition to discussing the findings, I provide a summary of implications and potential avenues for future research in the area.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Research Question and Contribution	4
II. REVIEW OF LITERATURE.....	7
Performance in a Service Organization	7
The Multiple-Stakeholder Perspective of Service Climate.....	8
Creating and Benefitting from a Climate of Service	12
High Involvement and the PIRK Model	14
High-Involvement Management and Service Climate.....	16
Opening the “Black Box”	18
Ego Depletion Theory: An Avenue for Composite Self-Regulation	20
ComReg: A Higher-Order Construct of Self-Regulation	22
Theoretical Integration and Hypotheses	26
III. METHODOLOGY	36
Phase One: Validation of ComReg Scales.....	36
Measure Development	36
Sample and Procedure.....	37
Measures	37
Psychometric Analyses	39
Phase Two: Test of Hypothesized Model	44
Sample and Procedure.....	44
Measures	46
Aggregation.....	47
Analysis Strategy	48
IV. FINDINGS.....	50
V. DISCUSSION AND CONCLUSION.....	54
Theoretical and Practical Implications.....	57
Limitations and Future Research	62
Conclusion	64

REFERENCES	65
APPENDICES	80

LIST OF TABLES

Table	Page
1. Means, Standard Deviations, Bivariate Correlations, and Reliabilities for Phase One.....	41
2. Comparison of Hierarchical Measurement Models for Phase One	42
3. Means, Standard Deviations, Bivariate Correlations, and Reliabilities for Phase Two.....	50
4. Path Coefficients and Indirect Effects for Mediation Models	52

LIST OF FIGURES

Figure	Page
1. Hypothesized Model	35
2. Model with Standardized Path Coefficients	51

CHAPTER I

INTRODUCTION

Organizational scientists strive to explain how employees impact outcomes at the individual, group, and firm levels. In particular, management researchers investigate the factors and mechanisms that drive performance. In much of the recent work on the individual and group levels, researchers apply an interactionist view to study how the coexistence of personal characteristics and situational factors both influence performance outcomes. As Schneider (1987) suggests, the people make the place as far as they think, feel, and behave in reaction to organizational characteristics. Schneider along with several others focuses on organizational climate as a primary source of information for employees. In addition, the leader's role in the development and measurement of climate is well studied in the management literature (Schneider, Ehrhart, & Macey, 2013). However, we know less about what happens next in the process. That is, how do employees take this information and think, feel, and behave in such a way that they accomplish performance-related goals? In this project, I propose and test a model that crosses the involvement management, climate, and self-regulation research to build upon prior work that has yet to combine these constructs. Furthermore, I conduct the first empirical investigations of a novel construct of self-regulation. Because of the nature of the model and the corresponding constructs, I couch my model within the service profit chain.

Interest in service performance is not novel. In fact, scholars have studied the predictors of service performance in one form or another for decades. According to the

Bureau of Labor Statistics (BLS, 2013), service industries employ more people than agriculture and manufacturing combined. Thus, scholars have given a great deal of effort to study service performance and continue to seek an understanding of what predictors and mechanisms lead to quality service outcomes. The crux of this research has been the association of customer satisfaction and retention with firm-level profits, which has led to the development of the service profit chain (Heskett, Sasser, & Schlesinger, 1997; Hong, Liao, Hu, & Jiang, 2013). The service profit chain is a theoretical road map leading from individual and organizational predictors to service performance and firm-level outcomes. According to Hong and colleagues (2013), service climate is an integral link between organizational predictors (e.g., human resource practices) and employee service performance.

Much of the early research on facet-specific climates focuses on service climate as the exemplar (Kuenzi & Schminke, 2009). Organizational climate is defined as a set of shared perceptions of policies, practices, and procedures (Ofstroff, Kinicki, & Tamkins, 2003; Schneider et al., 2013). Building upon this definition, service climate describes the shared perceptions of the work environment as they relate to customer service (Burke, Borucki, & Hurley, 1992; Schnedier, Ehrhart, & Macey, 2011). Consequently, most of the extant research defines service climate as an externally focused climate centering on customer service, implying a direct relationship between service climate and employee and customer perceptions (Deitz, Pugh, & Wiley, 2004; Mayer, Ehrhart, & Schneider, 2009; Salanova, Agut, & Peiró, 2005; Schneider, White, & Paul, 1998) and employee service performance (Hong et al., 2013; Kuenzi & Schminke, 2009; Schneider, Ehrhart, Mayer, Saltz, & Niles-Jolly, 2005). Recent conceptualizations of service climate move beyond the traditional focus on external stakeholders by also addressing the internal service climate (i.e., multiple-stakeholder service climate: Burke et al., 1992). Chuang and Liao (2010) apply the multiple-stakeholder approach when assessing the associations of service climate with service performance and helping behaviors. This research, along with the recent meta-analytic effort of Hong and colleagues (2013) continues to

unpack the complex processes that explain how employee perceptions of group and organizational characteristics influence service performance.

Within the service profit chain, organizational predictors of service performance such as systems-based approaches in human resources (HR), focus on strategic practices derived from large-scale initiatives (e.g., high-performance work practices: Lawler, 1986, 1992; high-involvement work systems: Vandenberg, Richardson, & Eastman, 1999; Wood & de Menezes, 2011; Zatzick & Iverson, 2006). However, recent work conceptualizes these initiatives at lower levels within the organization. Researchers interested in the effects of system-level and manager-level involvement have studied these constructs in relation to a variety of outcomes such as firm performance (Chuang & Liao, 2010; Vandenberg et al., 1999), employee well-being (Wood & de Menezes, 2011), and individual attitudes and performance (Butts, Vandenberg, DeJoy, Schaffer, & Wilson, 2009; Guthrie, 2001; Hong et al., 2013; Riordan, Vandenberg, & Richardson, 2005). Involvement is prevalent in the extant literature, and it is commonly associated with increased performance. Within the service profit chain, service climate drives the high-involvement–service-performance relationship (Chuang & Liao, 2010; Hong et al., 2013). However, researchers have not incorporated high involvement at the manager level as it relates to the development of a multiple-stakeholder service climate. Although assumed within the high-involvement work systems model, lower-level constructs such as high-involvement management narrow the lens by focusing on perceptions of manager behaviors and beliefs (Lawler, 1986, 1992; Wood & de Menezes, 2011). Indeed, recent calls in the literature suggest the benefit of investigating these relationships through different processes and contexts (Chuang & Liao, 2013; Schneider et al., 2013).

Motivation theorists contend that the internal processing of external stimuli is at least one third of the equation. Indeed, Bandura (1997) outlines the generic framework of social cognitive theory around the identification and processing of internal, social, and environmental cues. Within the workplace, these cues are provided by various sources, namely managers and climate. Thus, the components of the service profit chain create and set the expectations related to employee

performance in service organizations. However, prior research has failed to move beyond high-level theorizing to test constructs that explain how employees process social and environmental cues. In particular, the literature lacks a theory-grounded construct of self-regulation that fully captures the cognitive, emotional, and behavioral strategies employees use to interpret and act upon social and environmental stimuli. In this dissertation, I attempt to bridge the service profit chain and self-regulation literature and garner support for a higher-order construct of self-regulation. I investigate this model at the group level.

Research Question and Contribution

Across the management literature, but specifically the organizational climate literature, there is a dearth of research examining the ways in which people extract cues from the workplace environment and self-regulate accordingly. Indeed, several scholars note that this is an important area for future study (Kuenzi & Schminke, 2009; Hong et al., 2013). In this project, I aim to build upon the service profit chain in order to explore the missing link between service climate and service performance, which leads to my research question.

How and why do employees interpret and use cues from the environmental factors that comprise the service profit chain that leads to group performance?

In order to begin to understand how employees interpret the environment, I focus on predictors that are explicitly salient to employees: high-involvement management and service climate. Each of these factors fit within Bandura's (1997) model of social and environmental stimuli. As for the mechanism of interpretation and action, I integrate self-regulation of cognition, emotion, and behavior into the model. By incorporating a construct of total self-regulation (i.e., composite regulation: ComReg), this project contributes to self-regulation research as well as the service performance literature. Additionally, and more specifically, ComReg contributes to motivation research as one of the first attempts to bridge disjointed literatures that have developed along parallel streams. Several scholars state the need to build an inclusive model that removes unnecessary boundaries between

cognitive and emotional regulation while also incorporating the simultaneous processes of regulating behavior (Koole, 2009; Lord, Diefendorff, Schmidt, & Hall, 2010). Each variable in my model originates from a separate field of research. Collectively, however, they comprise a model that should advance our understanding of a phenomenon that is applicable across fields of study.

Furthermore, the expected findings of this study are pertinent to the leaders of service organizations. The recent resurgence of interest in engagement and involvement speak to the demand employers are placing on their employees. Employers are asking more from their employees today and, in some instances, offering less in return. However, high-involvement managers and a multiple stakeholder climate offer employees valuable resources they need to perform at a high level. Building a better understanding of how high-involvement management leads to the development of a multiple-stakeholder climate and how employees use these things to accomplish performance goals will allow practitioners to target specific organizational initiatives (e.g., involvement-based training, assessment of climate) that apply this model in practice.

Therefore, this dissertation seeks to accomplish the following three goals: a) investigate the service profit chain at the group level, b) integrate self-regulation into the service profit chain in order to explain how employees interpret environmental and social cues, and c) build upon early work investigating a higher-order construct of self-regulation that bridges a disjointed literature. This project follows a current trend in the management literature of studying group-level phenomena as an initial way to bridge the “micro-macro divide” (Aguinis, Boyd, Pierce, & Short, 2011: 396), because the service profit chain has been studied predominantly at the strategic level. Following the suggestions of Roussaeu (2011), I apply a multilevel rationale to hypothesize the effects of firm-level and individual-level phenomena at the group level. This study, and others of its kind, hold the potential to establish true multilevel relationships, which are currently limited in the literature. Self-regulation is inherently an individual-level phenomenon. However, like other psychological processes (e.g., collective efficacy, Bandura, 2012), creating a composite of group members’ self-regulatory processes provides detail into the general functioning of the group. Thus, self-regulation at the group

level helps to explain the mechanism by which high-involvement management and service climate lead to group performance. Finally, as previously discussed, ComReg is a higher-order construct that captures the dual systems of self-regulation prevalent in the literature (i.e., monitoring and regulating) across cognition, emotion, and behavior. As a nascent construct, the scale expected to measure ComReg needs further assessment for psychometric properties and validity. Thus, prior to testing my theoretical model, I perform a validation of the scale.

In the following sections, I provide a detailed review of the literature for each of the constructs expected to predict service performance. I conclude my review with my hypothesized model. I then describe the methods I use to test my hypothesized model and discuss the findings. I conclude with a discussion of my findings, implications for theory and practice, and opportunities for future research.

CHAPTER II

LITERATURE REVIEW

In this section, I review the literatures for each of the focal constructs studied in this project. I begin by discussing our existing understanding of service climate and how it leads to service-related performance. Specifically, I review work on a dual-system model of service climate. I then provide a review of HR constructs derived from high performance and high involvement. In this section, I define high-involvement management and describe how it is derived from the core components of high-involvement work practices. In the final section of the review, I propose a higher-order construct of self-regulation (ComReg) as the missing link in the service profit chain by hypothesizing a serial mediated model.

Performance in a Service Organization

Service organizations dominate the landscape of modern industry. According to the BLS (2013), around 80% of the workforce was employed within the “services providing” sector in 2012. Along with the growth of a service-based economy, demand for service-based performance has increased. Subsequently, researchers give a great deal of attention to service performance as an integral part of organizational outcomes. Prior work shows the direct impact of employee service performance on customer outcomes (Schneider et al., 2005; Liao & Chuang, 2004), employee attitudes (Paulin, Ferguson, & Bergeron, 2006; Salanova et al., 2005), group sales performance (George & Bettenhausen, 1990), and firm-level financial performance (Borucki & Burke, 1999).

In addition to identifying the outcomes of service performance, it is important to understand what elements drive service performance. Several authors purport that service performance is driven by managerial and organizational standards (Chenet, Tynan, Money, 1999; Parasuraman, Zeithaml, & Berry, 1985), HR practices (Chuang & Liao, 2010; Hong et al., 2013; Liao, Toya, Lepak, & Hong, 2009), personality (Liao & Chuang, 2004), and leadership styles (Liao & Chuang, 2007). Although each of these areas of study provides useful insights into what predicts service-related performance, service climate may have received the most attention at the group level (Hong et al., 2013; Schneider et al., 2013). Researchers have conducted countless projects seeking to explicate the performance-related effects of service climate. Indeed, Hong and colleagues provide evidence capturing the importance of service climate within the service profit chain, which is a process model of service performance. According to their meta-analysis, service climate mediates the effects of several of the focal predictors described above (e.g., HR practices → service climate → service performance).

Based upon the extant literature, it is evident that service performance is influenced by variables existing at all levels of the organization. Therefore, I first seek to replicate the existing service profit chain (Hong et al., 2013), particularly the linkages of high involvement at the manager level (Richardson & Vandenberg, 2005; Riordan et al., 2005), service climate using a multiple-stakeholder approach (Burke et al., 1992), and group-level service performance. Secondly, I propose that there is a another missing link. I hypothesize that each of the predictors (high-involvement management, service climate) impacts group-level service performance through composite regulation of cognition, emotion, and behavior.

The Multiple-Stakeholder Perspective of Service Climate

Organizational climate speaks to the shared perceptions of practices, policies, and procedures within the workplace (Schneider, 1975). Some of the earliest organizational scholars sought to describe the role of social climates on individual and group behavior (Lewin, 1951; Lewin, Lippit, & White, 1939). Schneider (1975) suggested that scholars define climates in terms of the desired

outcomes or specific contexts. Using a facet-based approach, Schneider suggested that researchers narrow the lens of global climate, which was commonly confused with organizational culture, by developing climates *for* something (Kuenzi & Schminke, 2009; Schneider, 1975). Some of the facet-specific climates that were developed over the years include service climate (Schneider, Parkington, & Buxton, 1980), safety climate (Zohar, 2000), and procedural justice climate (Naumann & Bennett, 2000). Over the past 38 years, the most heavily studied organizational climate is climate for service (Bowen & Schneider, 2013). Service climate is defined as “the shared sense people who work for an organization have, where policies and procedures, and the expected and rewarded employee behaviors, emphasize service excellence” (Bowen & Schneider, 2013: 2; Schneider et al., 1998). Service climate provides cues to employees about their managers’ dedication to and expectations for service quality (Lam, Huang, & Janssen, 2010).

The research on service climate is expansive enough to warrant a recent meta-analysis and a review (Hong et al., 2013; Bowen & Schneider, 2013). Each of these pieces offers several opportunities for future research exploring service climate’s place in the service profit chain. In particular, the authors of both the meta-analysis and the review suggest the need for work investigating the development of service climates as well as how employees interpret the policies, practices, and procedures of service climate in order to achieve service-related performance goals. In this project, I follow the efforts of Burke et al. (1992) by employing a dual-factor model of service climate. Below, I detail the multiple-stakeholder perspective of service climate.

Inherent in Schneider et al. (1998), service climate directly assesses how employees perceive the importance of service through various contextual factors. Service was originally focused on customer outcomes. Although service climate is inherently internal to the organization, researchers primarily attended to the effects of service climate on customer-directed service performance, with little regard to how service climate is developed. To address this, Burke and colleagues (1992) put forth a conceptual model of service climate with both an internal and external focus. Applying a multiple-stakeholder perspective, the authors proposed two higher-order constructs that constituted a more

holistic model of service climate. In addition to the external focus on customer service, Burke and colleagues suggested that managers also had to support employees in order to maximize the value of service climate. Based on this logic, service climate is comprised of concern for customers and concern for employees (Borucki & Burke, 1999; Burke et al., 1992). Burke and colleagues also referred this as service for customers and service for employees.

Organizations seek to meet customer needs in a variety of ways. In service organizations, transactions are expected to be handled with little hassle, purchases are expected to be timely, and customers should be able to easily access merchandise (Borucki & Burke, 1999; Burke et al., 1992). Essentially, service organizations stress an orientation that directly relates to service for customers, which describes the perceptions employees have of how the actions of managers and other employees impact the well-being of external stakeholders (i.e., customers: Burke et al., 1992). Service for customers most closely resembles a focus on providing quality service by removing obstacles and establishing a service orientation within the organization. For instance, environments in which employees identify and address merchandise-related obstacles that might harm a customer's experience exhibit a high level of service for customers. Other obstacles include employee preparation (e.g., lack of product/process-related knowledge, lack of training) and personnel obstacles (e.g., insufficient number of employees to handle customer flow/tasks). Taken together, service for customers focuses on external stakeholders of the organization by crafting a navigable environment that is void of obstacles. This is the traditional focus in most research on service climate.

While service for customers focuses on external stakeholders, service for employees targets the well-being of internal stakeholders (Borucki & Burke, 1999; Burke et al., 1992). In line with research on perceived organizational support (POS: Eisenberger, Fasolo, & Davis-LaMastro, 1990; Eisenberg, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002) and internal marketing (George, 2000; Grönroos, 1990), dedicating managerial and organizational resources to employees establishes norms of reciprocity and reduces internal constraints on task performance. Essentially, when employees feel that the organization has their best interests at heart, they experience positive

attitudes toward the organization and their jobs, perform at a higher level, and demonstrate beneficial behaviors (e.g., low absenteeism, citizenship behaviors: Rhoades & Eisenberger, 2002). The lower-level factors that constitute service for employees parallel the foundations of POS theory.

Additionally, the marketing literature speaks to the role of service for employees. Internal marketing is a construct addressing the importance of employees in providing service as a good (George, 2000).

Organizational leadership plays a central role in building up resources needed for quality service (personnel, knowledge, and information: Grönroos, 2006). In essence, service climate depends upon managerial action targeting service to customers and employees.

Service for employees captures six distinct factors based upon employee perceptions towards their immediate managers (Burke et al., 1992). Goal emphasis is the extent to which managers explicitly set clear performance standards. Managers exhibiting strong goal emphasis provide specific behavioral expectations for employees when interacting with customers. The next two factors relate to training: a) general training, and b) specific training. Organizations that emphasize training provide opportunities for employees to become more knowledgeable and skilled in their jobs. This can occur at a general level (general knowledge of products/services) or at a specific level (idiosyncratic process of purchase/exchange). The fourth factor is management support. Instead of referring to the general level of support within the organization (POS), management support addresses the support provided to employees by an immediate manager. Finally, the last two factors comprising service for employees are monetary and nonmonetary rewards. Monetary rewards consist of the normal extrinsic rewards that are directly tied to performance (raises and pay increases). Nonmonetary rewards include receiving praise and recognition for exceeding performance expectations. It is well established that intrinsic rewards provide a sustained level of motivation above and beyond extrinsic rewards (Deci, Koestner, & Ryan, 1999); Burke and colleagues (1992) also emphasized the importance of intrinsically rewarding excellent service performance. Together, these six factors comprise service for employees.

Burke et al. (1992) assessed their higher-order model of service climate via a factor analysis using surveys from over 18,000 employees. They found support for the proposed model, and their model has been used in subsequent service climate research. Borucki and Burke (1999) investigated the two-factor model at the organizational level and found that service orientation of top management positively influences service for customers, and service orientation of the immediate manager positively influences service for employees. Both service for customers and service for employees positively predicts sales outcomes, with little margin of difference between the two effects, which positively predict store financial performance. Hong et al. (2013) noted that recent research efforts incorporate the two-factor model of service climate when assessing individual outcomes (e.g., Chuang & Liao, 2010; Liao & Chuang, 2004). Therefore, the two-factor model of service climate captures more than the organization's goal of customer service, but also encompasses manager effort to support employees.

Creating and Benefitting from a Climate for Service

Researchers have established a general model of service performance: the service profit chain (Bowen & Schneider, 2013; Hong et al., 2013). The purpose of the service profit chain is to define and explain the factors that predict performance. Researchers recently suggested that the service profit chain was missing an integral link: service climate. In the following section, I summarize the extant research on service climate, focusing on its predictors and direct outcomes. As several recent reviews and meta-analyses provide a broad yet detailed summary of the literature, I will focus my review on those studies that are most relevant to the current project.

Bowen and Schneider (2013) provide an expansive survey of the literature on service climate. In their review, the authors purport that leadership, HR practices, and organizational resources and systems are the most commonly studied antecedents of service climate. The largest trend in this research is the study of how leadership and HR practices lead to the creation of service climate.

Indeed, Hong et al. (2013) meta-analytically assess the overall effect sizes of both HR practices and leadership across the literature.

Leaders create organizational climates (Lewin et al., 1939; Schneider, 1975). Leaders establish policies and procedures in order to set expectations within the work environment. Additionally, employees perceive managers as a medium for organizational communication and support (Eisenberger et al., 1990; Hong et al., 2013). Managerial support is particularly important in relation to service behavior because managers provide feedback, knowledge, and operational support. Scholars have mostly studied the effects of two types of leadership on service climate and performance: positive leadership styles and service-oriented leadership (Hong et al., 2013).

Positive leadership styles (e.g., transformational leadership) have been shown to strongly influence the development of service climate (Liao & Chuang, 2007). In their longitudinal study, Liao and Chuang were interested in the influence of transformational leadership on service-oriented performance. They found that manager transformational leadership influenced individual outcomes (e.g., service performance) and the development of service climate at the store level. Climate studies abroad revealed similar relationships with transformational leadership and other climates such as climate for innovation (Jung, Chow, & Wu, 2003) and climate for safety (Zohar & Luria, 2004). Transformational leadership is a general style of leadership – specific goals vary depending upon contexts. However, service-oriented leadership clearly targets service performance. Hong et al. (2013) conducted a meta-analysis comparing the overall effects of more general styles of leadership (e.g., transformational) and more narrowly focused styles such as service-oriented leadership. Although they did not specifically separate each of the positive leadership styles included in the analysis, the authors found that service-oriented leadership was more strongly related to service climate than positive leadership styles. This finding suggests that leaders have a larger impact on service climate when they target specific service outcomes (Bowen & Schneider, 2013; Hong et al., 2013). In either case, managers influence the creation of a climate for service, which provides a link between managerial predictors and employee service performance.

In addition to leadership, scholars have studied the impact of HR practices on service climate and performance. Again, service climate has been used as a link to better understand the impact of HR practices on organizational outcomes (Bowen & Schneider, 2013). Specifically, service climate has been studied along with high-involvement work systems (Chuang & Liao, 2010). Within high-involvement work systems, emphasis is placed on training, providing rewards, and selective hiring. Taken together, these practices set an expectation of high performance across the job domain. Liao et al. (2009) suggest that service-oriented HR practices, which build upon general high-performance practices, offer targeted training and rewards based upon service performance. Because service-oriented HR practices target service performance as an outcome, Hong et al. (2013) find the relationship between service-oriented HR and service climate to be stronger than the relationship between general HR and service climate.

When these results are considered together, service-focused leadership and HR practices positively and strongly relate to service climate (Bowen & Schneider, 2013; Chuang & Liao, 2010; Hong et al., 2013). Given that these antecedents have been studied in isolation but not together as a single construct, a need exists for a conceptual construct that brings together the proximal effects of leader/manager behaviors and attitudes and the more distal effects of service-oriented HR practices. In this project, I use the construct of high-involvement management to fill this gap.

High Involvement and the PIRK Model

High-involvement work processes and high-performance work systems (HIWP and HPWS, respectively) speak to a collective movement in strategic HR that began in the late 1970s and expanded in subsequent decades (Galbraith, 1973; Lawler, 1986, 1992; Huselid, 1995; Vandenberg et al., 1999). As strategic HR concepts, HIWP and HPWS began within the same humanistic paradigm. Both HR systems were tied to outcomes such as firm performance (Chuang & Liao, 2010; Vandenberg et al., 1999), employee retention and turnover (Guthrie, 2001), employee outcomes during layoffs (Zatzick & Iverson, 2006), and employee well-being (Wood & de Menezes, 2011).

Recently, researchers added to the vast research on the strategic conceptualization of HIWP by investigating high involvement at lower levels within organizations. Scholars operationalized high involvement as an employee climate (Riordan et al., 2005; Wallace, Butts, Johnson, Stevens, & Smith, 2013) and loosely as a form of management (Guthrie, 2001; Wood & de Menezes, 2011).

Lawler first described high involvement as a higher-order construct that encompassed four primary facets (Lawler, 1986). Vandenberg and colleagues (1999) provided a summary of the high-involvement components. The first component is power given employees to make decisions. Essentially, managers provide employees with the autonomy and the freedom to make day-to-day decisions without having to consult a manager or supervisor. The second facet of high-involvement management is information of organizational processes, product and service quality, customer and managerial feedback, and business results. The third attribute of high-involvement management is the distribution of rewards based upon business results and gains in capabilities and contributions to desired outcomes. Additionally, rewards need to be tied directly to outcomes, and they should be meaningful to employees (Lawler, 1996; Wallace et al., 2013). Related to information, the final component of high involvement is knowledge. Specifically, within high-involvement management, managers provide general knowledge of the work being performed and the overall work system (i.e., how their job positions relate to the larger work scheme). Taken together, these factors comprise the PIRK model of high involvement (Galbraith, 1973). Theoretically, high involvement and the PIRK model are expected to increase perceptions of empowerment, employee engagement, and employee morale (Galbraith, 1973; Lawler, 1986, 1992), which has been corroborated by empirical investigation (Butts et al., 2009; Riordan et al., 2005; Vandenberg et al., 1999).

Lawler (1986) proposed that high involvement can exist across all levels of the organization. Researchers recently began to address this claim by developing constructs of high involvement at lower levels within the organization (e.g., involvement climate, high-involvement practices; see Wood & de Menezes, 2011, for a summary of measurements). Still, most of the existing empirical work conceptualizes high involvement at the strategic level (e.g., HIWP) and as a work-group climate

(e.g., involvement climate). This project provides a conceptualization and investigation of high involvement as the perception of a manager's promotion of PIRK. According to several sources, when constructs are operationalized at lower levels in the organization, they are more effective at predicting lower-level outcomes than strategic predictors (Bowen & Ostroff, 2004; Richardson & Vandenberg, 2005; Wallace et al., 2013).

High-involvement management serves to bridge a gap in involvement research by accounting for manager-specific factors. In line with prior work on HIWP and employee involvement climate, I define high-involvement management as the perception of a manager's behavior characterized by the PIRK attributes (power, information, rewards, knowledge). For the purposes of this project, the existence of high-involvement management is based upon the original work of Lawler (1986, 1992) and the recent development of employee involvement climate (Richardson & Vandenberg, 2005; Riordan et al., 2005). Involvement climate, when adapted to high-involvement management, captures specific managerial behaviors instead of shared perceptions of work group and organizational support through the PIRK model. Therefore, the referent is the group supervisor in the current project.

High-involvement management describes the deliberate efforts of managers to distribute power through participatory decision making at the employee's discretion. High-involvement managers offer information pertaining to business systems, results, and quality-based feedback. These managers also provide meaningful rewards to employees that are directly tied to employee growth and individual contributions and to group and organizational results. Finally, high-involvement managers inform and offer employees opportunities to gain new knowledge and skills through feedback and training, while also providing knowledge of the employee's role within the larger business system.

High-Involvement Management and Service Climate

Butts et al. (2009) investigated the relationship between HIWP and employee outcomes (stress, performance, satisfaction, commitment). They surveyed employees from over 20 retail centers and collected information on HIWP, empowerment, perceived support, and employee outcomes; they

found support for the mediation of HIWP through perceptions of empowerment, which was proposed by early high-involvement scholars (Galbraith, 1973; Lawler, 1986). Additionally, Riordan et al. (2005) operationalized high involvement as a climate (employee-involvement climate). The authors randomly surveyed employees from more than 90 insurance companies in the U.S. and Canada to determine how employee-involvement climate affected organizational effectiveness (i.e., financial performance, turnover, morale). Each relationship was predicted to be positive except for involvement climate → turnover. The results supported the following mediated model: employee-involvement climate → morale → organizational effectiveness.

These examples illustrate results conveyed in most of the high-involvement literature. HIWP is shown by empirical studies to increase the effective utilization of human resources within organizations in Ireland (lower absenteeism, lower turnover: Guthrie, Flood, Lui, & MacCurtain, 2009). Additional support exists for beneficial relationships between sustained HIWP and productivity during a period of layoffs (Zatzick & Iverson, 2006). Research supports similar findings for employee-involvement climate and outcomes such as thriving and innovative behaviors (Wallace et al., 2013) and citizenship and absenteeism (Richardson & Vandenberg, 2005).

Involvement-based HR practices and management also have a well-documented relationship with service climate (Hong et al., 2013). Applying the multiple-stakeholder approach, the positive influence of high involvement on service climate is most directly tied to service for employees. Moreover, high involvement influences customer service. When the components of the PIRK model are employed, managers not only create a sense of support, they also set the standards for performance. This is important for the prevention of a “service performance gap” – where service is not executed according to manager standards (Chenet et al., 1999; Parasuraman, Berry, & Zeithaml, 1991). When standards are not clearly communicated and managers fail to provide support, service performance suffers. Therefore, high-involvement managers establish a service climate by providing employees with the power to make decisions, the information pertinent to service expectations, the

rewards representative of excellent service performance, and the knowledge of how individual service performance impacts the organization as a whole.

The multiple-stakeholder perspective and prior research on involvement-based constructs provide an approach to understanding relationships between high-involvement management (HIM) and a dual-focused service climate (Burke et al., 1992; Chuang & Liao, 2010). In the prevailing literature, direct relationships exist between a climate for service and service-related performance (Borucki & Burke, 1999; Bowen & Schneider, 2013; Hong et al., 2013; Liao & Chuang, 2004, 2007) and customer satisfaction with service (Rogg, Schmidt, Shull, & Schmitt, 2001; Salanova et al., 2005). However, we know less about how the HIM → service climate process truly drives employees to perform at higher levels. In fact, across the organizational climate literature, a growing concern is the lack of understanding of what links climate to performance (Kuenzi & Schminke, 2009; Schneider et al., 2013). Essentially, prior research provides limited answers to the question of why climate impacts performance and attitudes – leaving researchers with a black box problem. With this project, I seek to open the black box by employing a theoretical construct of composite self-regulation.

Opening the “Black Box”

Regardless of the context, organizational researchers must rely on theoretical assumptions when studying environment-performance relationships. The nature of organizational research does not offer easy access to the underlying processes driving human perception or behavior. As a result, scholars must depend upon noninvasive methods to retrospectively assess attitudes and emotions. Although novel methods of data collection attempt to lessen the potential issues that occur with retrospection and other method-related biases (e.g., event sampling method), those psychological processes driving the relationships between characteristics of the environment and behavioral criteria remain elusive. In essence, we are limited in the number of ways we can theorize and measure psychological processes like self-regulation. Self-regulation research constitutes a field that attends to the interpretation of and the response to internal and external states. Like many other areas of organizational research, such as

deviance literature (Herschovis, 2011), self-regulation literature is saturated with constructs that provide nuanced views of very similar content domains. Constructs of self-regulation have developed within separate streams, leading to similar yet distinct constructs. To date, few attempts have been made to apply a model of self-regulation that integrates cognitions, emotions, and behaviors to explain the psychological process underlying organizational outcomes.

Self-regulation is a staple in motivation theories and theories of emotion. Self-regulation is commonly defined as the internal appraisal of and volitional reaction to (i.e., monitoring, regulation) thoughts, emotions, and behaviors that are educed by internalized perceptions and traits, social interaction, and environmental stimuli (Bandura, 1991). A short list of the most prominent theories using self-regulation as a primary motivational mechanism includes self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000), social cognitive theory and self-efficacy (Bandura, 1991, 1997), regulatory focus theory (Higgins, 1997), theory of reasoned action, and theory of planned behavior (c.f., Bagozzi, 1992), and theories of ego and resource depletion (Baumeister & Newman, 1994; Maruven & Baumeister, 2000). Each of the aforementioned theories proposes a set of assumptions that involve components of self-regulation in which thoughts, emotions, and/or behaviors are monitored and regulated. However, these theories are limited in scope, only attending to one or two facets of self-regulation (e.g., social cognitive theory: cognitive and behavioral regulation). Researchers will benefit from an integrative approach to self-regulation that broadens the bandwidth of current self-regulatory constructs.

Early attempts to integrate self-regulatory theories exist within the literature, but they have largely been unsuccessful. For instance, scholars proposed a potential link between emotional regulation and cognitive regulation within regulatory focus theory (RFT). However, scholars stated that certain emotions result from the success/failure of goal attainment (Brockner & Higgins, 2001), which is not indicative of co-existing systems. Likewise, emotional regulation is solely focused on the suppression and reappraisal of emotions (Wallace, Edwards, Shull, & Finch, 2009). The control of outward expression of emotions is loosely coupled with behavioral self-regulation (Goldberg &

Grandey, 2007). In order to further the conversation on self-regulation, we need a construct that captures each facet of self-regulation while maintaining the integrity of existing constructs and theory. I propose that ComReg, a higher-order construct consisting of the monitoring and regulation of cognition, emotion, and behavior (Wallace, in progress), is a means of explaining how high-involvement management and service climate lead to increased service performance. I couch my proposal within resource-based theories of self-regulation.

Ego Depletion Theory: An Avenue for Composite Self-Regulation

Self-regulation is ultimately a cognitive process (Bandura, 1991, 1997); however, the targets of self-regulation vary and lead to different outcomes (e.g., emotion suppression – coping, behavior modification). Therefore, the self-regulation of cognitions, emotions, and behaviors are fundamentally separate systems that are theoretically tied to a larger construct. Self-regulation is most commonly studied as a motivational mechanism explaining goal-directed behavior. Although several theories of self-regulation acknowledge cognition and behavior, these theories fail to fully integrate emotion regulation into the model. Instead, emotions are assumed to be a result of either cognitive or behavioral self-regulation (Bandura, 1997; Higgins, 1997) or, in the case of emotional intelligence, internal processing of emotion (George, 2000). It should be noted that emotional intelligence has drawn criticism by scholars for the lack of divergent validity shown between emotional intelligence and other self-regulatory constructs (Davies, Stankov, & Roberts, 1998). Emotion regulation, like cognitive and behavioral regulation, is defined as the volitional attempt to assess and control initial emotional reactions (Koole, 2009; Koole, van Dillen, & Steppes, 2011; Wallace, Johnson, & Frazier, 2009; Westphal & Bonanno, 2004), which is consistent with cognitive and behavioral regulation. Failure to integrate all three facets of self-regulation denies the existence of a common theoretical domain. In order to combine cognitive, emotional, and behavioral regulation into one construct, a robust theory that applies across all self-regulatory systems is needed. I propose that resource-based theories provide a conceptual foundation for composite self-regulation.

Resource-based theories assume that self-regulation is dependent upon a pool of psychological resources. Self-control and ego-depletion theories apply across each of the three self-regulatory domains (Baumeister, DeWall, Ciarocco, & Twenge, 2005). Self-control theorists assert the necessity of psychological and physical resources in order to cope with emotional reactions to stress, perform cognitive tasks, and modify behavior. Originally developed as a theory explaining the psychological effects of stress, self-control and ego depletion assume that resources are limited. Across time, resources are devoted to psychological and physical activity, which effectively limits the resources available for subsequent activity. Because resource depletion results in poor performance and a lack of self-control, people strive to retain and build up their resource reserve. Scholars are increasingly interested in methods of replenishing and strengthening the resources driving self-regulation, which is a mechanism of goal-directed motivation (Ghumman & Barnes, 2013; Tice, Baumeister, Shmueli, & Muraven, 2007).

Self-regulation is both a resource itself and a process that consumes resources (Baumeister, Bratslavsky, Muraven, & Tice, 1998). Self-regulation as a resource is commonly referred to as self-control (Muraven & Baumeister, 2000; Hagger, Wood, Stiff, & Chatzisarantis, 2011). In this line of thinking, self-control resembles a muscle and individuals are capable of strengthening it by continually expressing self-control when tempting situations present themselves (Baumeister et al., 1998; Muraven & Baumeister, 2000). However, self-control is a limited resource; like a muscle, strain across time depletes resources, making it more difficult to exert self-control. Ego depletion refers to the exhaustion of self-regulatory resources, which ultimately leads to self-regulatory failure (Baumeister et al., 1998; Baumeister, Muraven, & Tice, 2000; Muraven & Baumeister, 2000; Tice et al., 2007). Researchers apply self-control and ego depletion to explain unethical behavior and decision making (Barnes, Schaubroeck, Huth, & Ghumman, 2011; Joosten, Dijke, Heil, Cremer, 2013), risky behavior (Fischer, Kastenmüller, & Asal, 2012; Unger & Stahlberg, 2011), abusive supervision and deviance (Thau & Mitchell, 2010), faking emotional expressions (Grandey, Fisk, & Steiner, 2005), and service interactions and cognitive tasks (Zyphur, Warren, Landis, & Thoresen,

2007). Across these studies, ego depletion results in negative outcomes. Depletion may occur because there is internal conflict, such as that created by acting in a way contradictory to a natural proclivity (i.e., faking emotional expressions: Grandey et al., 2005). In other cases, negative outcomes result from emotional or cognitive exhaustion (Thau & Mitchell, 2010; Zyphur et al., 2007).

Ego depletion due to internal conflict is particularly salient to the current project. In order to assess the combined effects of cognitive, emotional, and behavioral self-regulation, attention should be given to the debilitating effects of environmental ambiguity as well as the beneficial effects of an environment that is consistent with employee expectations. Prior research indicates that when faced with inconsistent information or conflicting environments, people attempt to cognitively reconcile the situation – thus consuming psychological resources. Likewise, when faced with conflicting environmental stimuli, people will react emotionally, which may not be appropriate within the workplace. Finally, if environmental stimuli seem to require different behavioral norms, resources will be consumed while attempting to monitor and regulate behaviors to fit conflicting expectations. However, when facets of the environment are harmonious, resources are devoted to goals instead of the environment. A higher-order construct of self-regulation will explain how high-involvement management and service climate lead to employees who work smarter (cognition), calmer (emotion), and harder (behavior).

ComReg: A Higher-Order Construct of Self-Regulation

As previously outlined, several theories exist that attempt to explain human behavior and motivation through self-regulation. Although some theories are best suited for one form of self-regulation (e.g., regulatory focus – cognitive self-regulation), resource-based theories assume that self-regulation occurs across cognitive, emotional, and behavioral planes (Baumeister et al., 1998; Hobfoll, 1989, 2001). However, researchers continue to study self-regulation piecemeal, only suggesting that future studies should explore all forms of self-regulation in concert (Koole, 2009). In order to fulfill this call within a single study, the need exists for a higher-order construct of self-

regulation that captures each of the three facets. Below, I build upon current work (Wallace, in progress) that proposes a higher-order construct of self-regulation that allows for the coexistence of cognitive, emotional, and behavioral self-regulation.

Self-regulation is a principle factor in motivation. Self-regulation explains “how individuals allocate volitional, cognitive, and affective resources” (Lord et al., 2010: 544). Self-regulation includes goal setting, goal striving, and modification in light of progress and discrepancies between current states and goals (Karoly, 1993; Lord et al., 2010). Regulation of behavior, cognition, and emotion are intertwined, leading to a complex network of monitoring and regulating systems. For instance, within the larger concept of self-regulation, emotions and cognitions are regulated together to influence behavior (Koole et al., 2011). In the emotion regulation literature, Koole (2009) describes the dearth of research exploring physiological and behavioral regulation of emotion, suggesting that in addition to cognitive regulation of emotions, volitional changes in behaviors and voluntary physiological expression may serve as another conduit of self-regulation.

The notion of the differential processing of cognition, emotion, and behavior has long existed (Lazarus, 1984; Phelps, 2006; Zajonc, 1984), but the evidence to support it has predominantly come with advances in neural imaging. Indeed, cognitive neuroscientists are beginning to map the neural substrates of cognitive and emotional processing (Beauregard, Lévesque, & Bourgouin, 2001; Kim & Hamann, 2007; Ochsner, Bunge, Gross, & Gabrieli, 2002). Beauregard et al. (2001) measured the brain activation of 10 male participants while they viewed film excerpts. The authors were interested in the conscious self-regulation of emotions: arousal and the voluntary inhibition of arousal. Results reveal that arousal is associated with the activation of the limbic and paralimbic systems, while inhibition is associated with activation of various prefrontal regions of the brain. Kim and Hamann (2007) reported activation of the prefrontal regions of the brain for cognitive regulation and activation in the amygdala for emotion processing and regulation. Furthermore, Ochsner and colleagues (2002) reported prefrontal activation in the reappraisal of emotions (i.e., cognitive reappraisal). Taken

together, this snippet of cognitive neuroscience research provides results indicative of separate but coexisting neural processing of cognition, emotion, and behavior (Heatherton & Wagner, 2011).

Because the functional processes of cognitions, emotions, and behaviors are fundamentally distinct yet closely interrelated, ComReg provides a higher-order psychological construct that depicts a dual-system approach to self-regulation. Self-regulation has long been defined as a process of monitoring and regulating (Karoly, 1993, Snyder, 1974, 1987). When individuals shift attention to their current thoughts while striving for a goal, they are cognitively monitoring their progress toward achieving that goal. If their thoughts do not align with the achievement of the goal, they can volitionally reset or refocus their cognitions. The monitoring and regulating mechanisms also control emotional and behavioral self-regulation. Wallace (in progress) proposes that individuals monitor current cognitions, emotions, and behaviors in order to detect mismatches. If there is a mismatch, people can volitionally change their cognitions, emotions, and behaviors to align with goal attainment (i.e., regulation). Therefore, ComReg is a higher-order construct consisting of two self-regulatory functions applied within three dimensions.

Combining related constructs to form a higher-order construct is in line with current trends in the organizational sciences (Edwards, 2001; Johnson, Rosen, & Chang, 2011). For instance, constructs such as core self-evaluations (CSE: Judge & Bono, 2001; Judge, Locke, & Durham, 1997) and psychological capital (PsyCap: Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans & Youssef, 2004, Luthans, Youssef, & Avolio, 2007) collapsed previously defined traits into a single multidimensional construct. Judge and colleagues define CSE as a broad trait consisting of self-esteem, generalized self-efficacy, locus of control, and emotional stability. The authors purport that the goal of creating CSE is to generate a single broad trait that maximizes conceptual utility by combining related constructs within the same content domain (c.f. Chang, Ferris, Johnson, Rosen, & Tan, 2012; Judge et al., 1997). Furthermore, the authors task themselves with defining a general trait that directly and indirectly predicts job satisfaction. Luthans and colleagues created PsyCap within

the growing movement of positive organizational behavior. They define PsyCap as a state-like construct consisting of four components: self-esteem, hope, optimism, and resiliency (Luthans & Youssef, 2004). Much like the creators of CSE, Luthans and colleagues sought to define a higher-order construct that would adequately capture multiple constructs within a common conceptual domain. Preliminary indications (Wallace, in progress) suggest that ComReg fits nicely within the content domain of other self-regulatory constructs. However, ComReg complements the existing literature by consolidating several self-regulatory processes across three general dimensions – cognition, emotion, and behavior. Wallace provides evidence that ComReg relates to thriving, PsyCap, and emotion regulation. Subsequently, I will further assess the construct validity of ComReg in order to provide empirical evidence of Wallace's claims.

Additionally, organizational scholars study psychological constructs at the group level. For instance, self-efficacy is the psychological assessment of perceived ability to perform a specific task (Bandura, 1997). Researchers have taken self-efficacy to the group level in order to study the collective perception of a group's ability to perform a task (Bandura, 2012). Collective efficacy has been shown to be a valid predictor of group performance (Little & Madigan, 1997; Watson, Chemers, & Preiser, 2001). At the individual level, self-efficacy serves as a self-regulatory mechanism of motivation. At the group level, collective efficacy serves as a regulatory mechanism that influences group dynamics and performance (Bandura, 2012). In the current project, I assess ComReg at the group level.

Both CSE and PsyCap have gained the attention of scholars with the encompassing nature of the constructs and their broad bandwidth. Essentially, these higher-order constructs provide a conceptual framework to bridge gaps in the literature and reduce the issue of construct saturation. The self-regulation literature faces similar issues with fragmentation and loosely connected constructs. ComReg contributes to the self-regulation literature in several ways. First, ComReg consolidates three separate but closely related streams of literature and subsequently meets the need for integrating constructs within and across the research fields. Additionally, ComReg is a multidimensional

construct that provides two advantages: a) ComReg provides the opportunity to study self-regulation as a holistic psychological phenomenon, and b) ComReg offers a motivational mechanism that will mediate the combined effects of high-involvement management and service climate on service performance. Finally, group-level ComReg exists at the same level of analysis as high-involvement management, service climate, and group service performance – better capturing the group dynamics that lead to service performance.

Theoretical Integration and Hypotheses

This study integrates the conceptual frameworks of high-involvement management, service climate, and self-regulation to put forth an extended model of the service profit chain (Hong et al., 2013). The first link in the service profit chain is the creation of service climate through HR practices and leadership. High-involvement management integrates the traditional perspective of involvement-based HR practices and the functional effects of immediate managers. Through PIRK, high-involvement managers provide support relevant to service performance. Each facet of the PIRK model provides specific psychological and material resources that influence employee perceptions of service climate.

High-involvement managers distribute power to their subordinates (Vandenberg et al., 1999). According to self-determination theory (Deci & Ryan, 1985), autonomy is a basic need that motivates goal-directed behavior. Employees gain a sense of autonomy when they are given the ability to make job-related decisions without having to consult their managers (Wallace et al., 2013). Having to constantly seek out the manager to approve customer requests creates an obstacle that can repress service performance (Burke et al., 1992). Power distribution leads to the perception of support that impacts service for employees. Additionally, power distribution removes obstacles that can prevent employees from attending to their jobs.

Feedback is crucial for motivation and goal setting (Bandura, 1991; DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004; Locke & Latham, 2002). Feedback is also an important

component of the information facet within PIRK (Vandenberg et al., 1999). According to Burke and colleagues (1992), feedback is relevant for each dimension of service climate. Feedback serves two purposes. First, it informs employees how well they are performing in relation to expectations. Feedback also enhances employee perceptions of managerial support. From employees' perspective, managers who provide quality feedback want to see them succeed. Therefore, feedback creates a perceived concern for employees. High-involvement managers also inform employees of organizational processes, business results, and products. The additional information provided by high-involvement managers gives employees a better sense of their roles within the organization – how their jobs impact those around them.

Rewarding employees within the PIRK model requires that rewards be timely, meaningful, and tied to specific outcomes (Lawler, 1986; Wallace et al., 2013). In service organizations, high-involvement managers reward employees for excellent service performance. What differentiates these rewards from other, more traditional rewards is the nature of the reward. Rewards that provide basic benefits (e.g., bonus) are not ideal within the PIRK model. Instead, rewards must be meaningful to the degree that they fulfill employee needs (Deci & Ryan, 1985). The timeliness of rewards is important, because rewards also serve to inform employees that their performance met or exceeded expectations. Essentially, timeliness establishes connections between performance and rewards. Thus, when they are meaningful and fulfill employee needs, rewards help to establish perceived service for employees.

Finally, high-involvement managers acknowledge and promote the acquisition of knowledge (Vandenberg et al., 1999). Employees gain knowledge of their jobs and organizations in several ways (Bowen & Schneider, 2013; Denison, 1996). Within the context of service climate, employees require specific knowledge in order to perform their jobs and provide quality service (Burke et al., 1992). Product knowledge and knowledge of the organizational system as a whole represent important aspects that can become obstacles when employees lack an adequate understanding. Within organizations, training is a primary source of knowledge for employees. Service employees commonly interact directly with customers. Training employees through simulation and role-playing

allows them to practice customer interactions. Employees learn strategies for interacting with customers – building their confidence and understanding of what is expected when interacting with customers. When employees are provided with opportunities to learn, they feel supported by the organization. Additionally, training employees reduces obstacles related to knowledge deficits. Employees are better prepared to provide quality service for customers.

The multiple-stakeholder perspective (Burke et al., 1992) provides a foundation for the holistic view of service climate. Only when both aspects of service climate exist will employees perceive the support of the organization and realize service performance standards. Focusing on internal service climate at the cost of customer service will negatively impact service quality, while shifting the focus solely to customer service will detrimentally impact employee morale and perceived support (Borucki & Burke, 1999; Burke et al., 1992). Therefore, the “best practice” for managers is to establish work environments that explicitly support both employee and customer service.

While general and service-oriented HR practices appear to predict the formation of a customer-focused service climate (Hong et al., 2013; Salanova et al., 2005), more proximal predictors of employee service performance such as leadership and support proceed through the employee-focused component of service climate (Chuang & Liao, 2010; Hong et al., 2013). Indeed, Chuang and Liao proposed that poor leadership likely undermines the creation of a dual-focused service climate in light of involvement-based HR practices. High-involvement managers provide the psychological and material resources that positively drive performance (Lawler, 1986; Vandenberg et al., 1999; Wallace et al., 2013). High-involvement managers offer salient support for employees, while also providing clear expectations for service quality. Furthermore, high-involvement managers appropriately balance the internal and external aspects of service climate by promoting the PIRK model. High-involvement managers delegate power to employees, giving them enhanced flexibility to act autonomously when making decisions and executing daily work tasks. High-involvement managers provide pertinent information and offer opportunities to develop job-related skills and knowledge, which increase competence and perceived support for employee success. Finally, meaningful and timely rewards

reiterate performance standards and further motivate employees to provide excellent customer service. Collectively, the PIRK factors drive the creation of a multiple-stakeholder service climate by supporting employee needs that drive service performance, by clearly setting performance standards, and by removing obstacles that deter service performance.

I hypothesize that high-involvement management positively relates to employee perceptions of service for employees and service for customers. The increased focus on employee needs captures each dimension of service for employees proposed by Burke and colleagues (1992). Likewise, high-involvement managers clearly articulate performance standards and create an obstacle-free environment, thus promoting service for customers.

Hypothesis 1a: High-involvement management positively relates to service for employees.

Hypothesis 1b: High-involvement management positively relates to service for customers.

Results from the service climate literature highlight the positive effects of service climate on service quality and customer attitudes (Borucki & Burke, 1999; Chuang & Liao, 2010; Deitz et al., 2004; Liao & Chuang, 2004). Yet the relationships become nuanced when different criteria are studied (Hong et al., 2013). The logic underlying the multiple-stakeholder framework offers some insight into why researchers might find mixed results. For example, the multiple stakeholder service climate promotes two distinct value-based concepts. If one is stronger than the other (e.g., strong service for customers, weak service for employees), they become competing values.

Competing values are common in the workplace and commonly have deleterious effects for performance and other employee outcomes, yet the multiple-stakeholder approach to service climate advises that internal and external foci can work in harmony. The competing values framework (CVF: c.f. Quinn & Rohrbaugh, 1981, 1983) incorporates three sets of competing values (focus, structure, organizational means and ends) into four effectiveness quadrants (human relations, open system, rational goal, internal process). The crux of the CVF is that means and ends within one quadrant are expected to compete with the means and ends in the other three quadrants. However, Quinn and Rohrbaugh (1981) propose that value competition can be mitigated by a balanced approach. The

multiple-stakeholder perspective champions means and ends from two of the four quadrants. Service for employees closely aligns with the human relations model emphasizing human resources, while service for customers aligns most with the rational goal model emphasizing productivity and performance. However, Burke and colleagues (1992) find that when both dimensions of service climate exist, they do not conflict with each other. Instead, only when there is an imbalance do performance and employee attitudes begin to suffer. This closely aligns with the work from CVF suggesting that effectiveness is reached when a balance exists between quadrants (Patterson, West, Shackleton, Dawson, Lawthorn, Maitlis, Robinson, & Wallace, 2005; Quinn & Rohrbaugh, 1981, 1983).

In order to prevent competing values, managers must establish and maintain employee perceptions of service to both customers and employees. Managers provide the resources employees seek to perform their jobs. When managers provide support related to the performance of their jobs (e.g., training, feedback, autonomy), employees are prepared and willing to provide quality customer service – they are not simply mandated to do so. In a service-based organization, service for customer service is likely to be engrained in the culture of the organization – as the primary value. Applicants are likely selected on factors related to service performance such as service experience, service orientation, extraversion, and emotional stability (Hong et al., 2013). The socialization of new employees includes the reiteration of the importance of quality service. Finally, in service-oriented organizations such as those studied in the current project, metrics of service quality (i.e., patient satisfaction) are the largest facets of employee evaluation.

Focusing solely on the customer may lead to immediate returns, but over time the negative attitudes and stress that evolve from not feeling the support of management will erode service performance. If service for customers is not balanced with service for employees, competing values become salient to employees. In service organizations, service for customers is more likely to be the primary focus at the cost of service for employees. Employees attend to this discrepancy, leading them to focus less on providing quality service and more on monitoring and regulating cognitive and

emotional reactions – and potentially behaviors. Essentially, instead of devoting valuable resources to task performance, employees engage in self-regulation targeted at the discrepancy, not their jobs. The extant research has not incorporated self-regulation as a mediator of service climate and service performance. I propose that self-regulation provides a mechanism by which to explain how the multiple-stakeholder service climate leads to service performance.

When employees operate on a day-to-day basis, they are faced with countless demands. According to resource-based theories of self-regulation, people progress through the day expending their psychological resources. Across different tasks and situations, individuals self-regulate by recognizing and attempting to control cognitions, emotions, and behaviors (Lord et al., 2010). As employees attempt to self-regulate, characteristics of the environment provide primary information for expected goals and progress toward those goals. For instance, in customer-facing jobs, the environment likely limits the display of certain emotions and behaviors. When interacting with unruly customers, employees will expend large amounts of resources to monitor and regulate their emotions and behaviors to fit the goal – to make sure emotions such as anger and resentment are not expressed.

Additional factors in the organizational environment influence the demands placed upon self-regulatory resources. When employees experience conflicting information in the environment, demands on self-regulatory systems increase. Self-regulation acts as a discrepancy-reducing mechanism (Lord et al., 2010). Therefore, contradictions or inconsistencies in the organizational environment elicit dissonant effects, thus resulting in resource consumption. When both components of service climate exist, employees are less likely to perceive conflict. Prior research suggests that service quality and employee morale are highest when both components of service climate exist. However, when only one of the components of service climate exists, either service quality, employee morale, or both will decrease (Burke et al., 1992). Warren (2006) demonstrated the deleterious effects of an imbalanced service climate. Within a sample of teachers, Warren found that when both facets of service climate are present, participants report greater job-related positive affect and less job-related negative affect. When there is an imbalance, teacher job-related affect is negatively impacted.

Warren's dissertation represents one of few studies that test the combined effects of the multiple-stakeholder climate. However, Warren does not include specific mechanisms that might drive the observed effects.

Because employees possess a limited pool of resources that are required for the regulation of cognitions, emotions, and behaviors, self-regulation failure occurs most frequently when resources are depleted and are not replenished (Baumeister et al., 1998; Hobfoll, 1989; Muraven & Baumeister, 2000). In the event that service for employees and service for customers do not co-exist, employees devote resources to rectifying the conflict instead of devoting those resources to job performance. Employees focus on the missing aspect of service climate. Consequently, when employees perceive both components of service climate to exist, they are able to devote resources to the regulation of thoughts, feelings, and behaviors so that they are in line with performance goals. The balance between service for customers and service for employees provides the greatest opportunity to hone the ability to self-regulate and direct it to providing quality service to customers.

In order to test these assumptions, ComReg serves as a construct of composite self-regulation. Wallace (in progress) defines ComReg as a dual-component process (i.e., monitoring, regulating) of self-regulation across cognition, emotion, and behavior. Because it is a construct of self-regulation, the ability to engage ComReg is contingent upon the availability of psychological resources (Baumeister et al., 1998; Hobfoll, 2001). The ideal scenario is one in which ComReg is completely devoted to providing excellent customer service. Employees who perceive a balance between the support they receive from their managers and the support for customer needs apply ComReg to performance goals. A balanced service climate not only removes physical and systemic obstacles, it also removes psychological obstacles that consume resources by subverting performance as the reference goal for ComReg. I hypothesize that each facet of the multiple-stakeholder service climate positively relates to ComReg.

Hypothesis 2a: Service for employees positively relates to ComReg.

Hypothesis 2b: Service for customers positively relates to ComReg.

Self-regulation is the volitional appraisal and adaptation of cognitions, emotions, and behavior. Individuals self-regulate in order to maximize the likelihood for goal achievement (Bandura, 1991). The extant research demonstrates a clear relationship between self-regulatory processes and facets of performance. Self-regulation most commonly appears in the organizational literature as a mediator (Keith & Frese, 2005; Porath & Bateman, 2006; Roe, 1999) used to explain the effect of distal predictors (e.g., personality, leadership) on facets of performance (e.g., safety performance, task performance). Self-regulation is an integral part of the human experience. Bandura (1991) calls it the primary mechanism of internal adaptation to external stimuli and conditions.

Wallace (in progress) contends that people monitor and regulate cognitions so that their thoughts are in line with goals. Also, people monitor and regulate emotions so that raw reactions are detected and modified and can become useful for achieving goal success. In addition to cognitions and emotions, ComReg allows people to monitor their behavior as it relates to a particular situation (e.g., interacting with patients) and regulate their behavior to successfully achieve the goal (e.g., patient satisfaction with interaction). ComReg results in complete awareness of how thoughts, emotions, and behaviors align with goal attainment. I propose that ComReg serves as a predictor of group-level service performance. Specifically, ComReg will directly influence service performance in a positive manner. When self-regulation is devoted to service performance, individuals appropriately appraise internal states and adapt to external demands, which leads to successful goal attainment (e.g., excellent customer service).

Hypothesis 3: ComReg positively relates to group performance (i.e., task and service).

Hong and colleagues (2013) proposed that service climate is the missing link within the service profit chain. In their conceptual model, service climate mediates the effects of HR practices and leadership on employee attitudes and performance. I hypothesize that high-involvement management positively relates to the development of a multiple-stakeholder service climate (H1a, H1b). Because high-involvement management leads directly to the creation of a multiple-stakeholder service climate that drives employee self-regulation, high-involvement management will have an indirect effect on

ComReg. This indirect effect is explained by the mediating role of service climate, such that the positive relationship between high-involvement management and ComReg is explained by the development of a balanced service climate. Thus, I propose that service climate will mediate the effect of high-involvement management on service performance.

Hypothesis 4: High-involvement management influences ComReg indirectly through service for employees and service for customers.

According to the service profit chain, leadership influences the development of a service climate, which then leads to increased performance (Hong et al., 2013). I contend that there is another missing link. Employee outcomes largely depend on how employees process the organizational environment. They evaluate the balance between customer-focused and employee-focused support (Borucki & Burke, 1999; Burke et al., 1992). Resource-based theories purport that the success/failure of self-regulation depends upon a limited pool of resources (Baumeister & Newman, 1994; Hobfoll, 1989). Self-regulation is a discrepancy reduction mechanism; as discrepancies become larger, more resources will be consumed. In a service organization, a multiple-stakeholder service climate removes obstacles that distract employees and allows them to devote all of their resources to providing excellent customer service (Burke et al., 1992). Essentially, when service for employees is balanced by service for customers, employees are able to focus on performance. Employees dedicate resources to service performance and not to the reduction of a discrepancy created by an imbalanced service climate.

I propose that the service profit chain should include ComReg as a second mediator that drives the service climate/performance relationship. Employees monitor and regulate their cognitions, emotions, and behaviors according to environmental cues and self-determined goals. Thus, a multiple-stakeholder service climate explicates the expectations of service performance and offers an environment conducive to the appropriation of self-regulatory resources to goal attainment (i.e., service performance). As in other self-regulatory constructs (e.g., collective self-efficacy), I propose

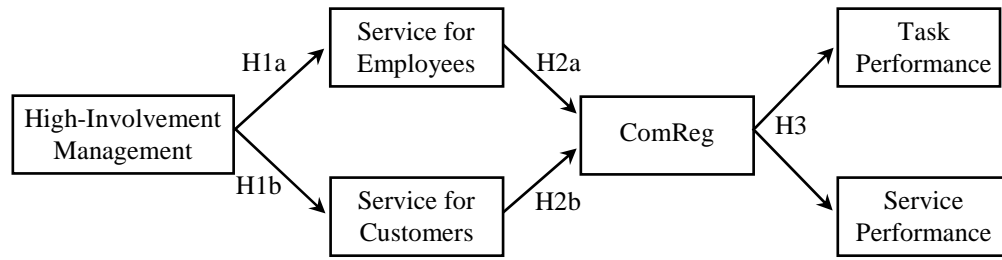
an additive model of group-level ComReg, which I hypothesize to mediate the positive effect of service climate on service performance.

Hypothesis 5: Service for employees and service for customers influence group service performance indirectly through ComReg.

As suggested above, I propose an extended model of the service profit chain. I propose that high-involvement managers establish a multiple-stakeholder service climate, which allows employees to appropriately engage ComReg in the direction of service performance. See Figure 1 for the complete serial mediated model.

Hypothesis 6: High-involvement management leads to shared perceptions of service for employees and service for customers, each of which positively influences ComReg, which then positively influences performance.

Figure 1. Hypothesized Model



H4: High-Involvement Management → Service Climate → ComReg

H5: Service Climate → ComReg → Performance

H6: High-Involvement Management → Service Climate → ComReg → Performance

CHAPTER III

METHODOLOGY

In order to test my hypothesized model, I first addressed the validation of a newly developed scale of ComReg. Therefore, I conducted a two-phase study to accomplish the following goals: 1) validate the ComReg scale, and 2) test my proposed model. I collected data in two separate stages following prior work on scale validation and serial mediated analyses. The Institutional Review Board (IRB) at Oklahoma State University approved both forms of data collection.

Phase One: Validation of the ComReg Scale

Measure Development

Development of the ComReg scale was already underway at the beginning of my study. Following Hinkin (1998), I began my analysis of the ComReg scale at step four: confirmatory factor analysis (CFA). Wallace (in progress) developed the scale by generating items (step one), administering the survey (step two), and making initial item reductions (step three). Each of these steps consists of several methods that Hinkin (1998) describes in detail. Some of these methods include surveying content domain, a content analysis, determining the appropriate sample size, and performing an exploratory factor analysis. Completing steps one through three resulted in a 19-item scale of ComReg.

The 19-item scale consisted of seven items for the cognitive factor, seven items for the emotional factor, and five items for the behavioral factor. Again, ComReg was theorized as a higher-order factor similar to constructs like CSE (Judge et al., 1997) and PsyCap (Luthans et al.,

2006). Thus, I followed the process described by Luthans, Avolio, Avey, and Norman (2007) in which the authors created a new survey measure intended to capture each of the four facets of PsyCap.

The purpose of conducting a CFA is to determine specific factor structure and demonstrate a construct to be valid (Hinkin, 1998; MacKenzie, Podsakoff, & Podsakoff, 2011). ComReg is a multidimensional construct of self-regulation across cognitive, emotional, and behavioral dimensions. Similar to PsyCap, I expected these three first-order factors to load onto ComReg as the higher-order factor. In addition to conducting a CFA, I also assessed the reliability of the scale. In phase one, my ultimate goal was to further validate the ComReg scale prior to testing my hypotheses in phase two.

Sample and Procedure

I collected data using Amazon Mechanical-Turk (M-Turk). M-Turk is a paid service offered by Amazon that allows researchers to post surveys and recruit participants. Researchers pay participants through M-Turk, and the participants remain anonymous. M-Turk allows researchers to specify characteristics of their sample. The only specification I made was that participants were above the age of 18 years, which was required by the IRB. I paid participants \$1.00 for completing the survey, and participants could only complete the survey once. The final sample size was 257. Prior work has suggested that 250 is an appropriate size to conduct a CFA for most measurement models (Hu & Bentler, 1999; Kline, 2011). The mean age for participants was 33.53 years (sd = 12.1). The sample was 37% female. The race/ethnicity of the sample consisted of 7% African-American, 10.5% Asian/Asian-American, 69.3% Caucasian/White, 6.6% Hispanic/Latino, .4% Native American, 1.6% other, and 4.7% no response.

Measures

In order to demonstrate convergent and discriminant validity, one must compare the focal construct to other related constructs using various metrics. I measured additional constructs that I expected to be related to ComReg so that I could demonstrate that ComReg was part of a larger

nomological network and occupied an independent niche in that network. Thus, I included the following constructs in the survey. I expected ComReg to relate to each of these constructs, but I particularly expected ComReg to be related to emotion regulation and regulatory focus, which are both constructs of self-regulation.

ComReg. The ComReg scale consisted of 19 items that measured the roles of monitoring and regulation across cognitive, emotional, and behavioral domains (Wallace, in progress). Seven items comprised the cognitive component. An example item is “I am aware when my thoughts align with a goal.” Chronbach’s alpha for these seven items was .86. Seven items comprised the emotional component. An example item is “I reappraise and modify my emotions to be in line with my goals.” Chronbach’s alpha for the emotional subscale was .89. Five items comprised the behavioral component. An example item is “I am aware of my body language when going after a goal.” Chronbach’s alpha for the behavior subscale was .81. All items were scored along a five-point Likert-type scale (1-never, 2-sometimes, 3-occasionally, 4-often, 5-constantly). Chronbach’s alpha for the full 19-item scale was .94.

Satisfaction. Satisfaction was measured using items from Spector’s (1985) satisfaction survey. The scale consisted of eight items. An example item is “Everything else equal, my job is better than most.” The items were scored along a five-point Likert-type scale (1-strongly disagree, 5-strongly agree). Chronbach’s alpha for the scale was .85.

Positive and Negative Affect. Positive and negative affect were measured using the PANAS developed by Watson, Clark, and Tellegen (1988). The PANAS consists of 20 adjectives, and participants rate the extent to which each item describes them. Ten items relate to positive affect and ten items relate to negative affect. Example words relating to positive affect include “excited” and “enthusiastic.” An example of words relating to negative affect include “nervous” and “guilty.” All items were scored along a five-point Likert-type scale (1-not at all, 2-a little, 3-moderately, 4-quite a bit, 5-extremely). The Cronbach’s alphas were .92 for positive affect and .93 for negative affect.

Dark Triad. The dark triad (DT) was measured using the Dirty Dozen scale developed by Jonason and Webster (2010). The DT consists of three component traits: Machiavellianism, narcissism, and psychopathy. Each trait is measured by a four-item subscale. An example item from the Machiavellianism scale is “I tend to manipulate others to get my way.” An example item for narcissism is “I tend to want others to admire me.” An example item for psychopathy is “I tend to lack remorse.” All items were scored along a five-point Likert-type scale (1-strongly disagree, 5-strongly agree). Cronbach’s alpha for this scale was .86.

Regulatory Focus. Regulatory focus was measured using the Regulatory Focus Questionnaire (RFQ; Lockwood, Jordan, & Kunda, 2002). The RFQ is an 18-item scale with nine items measuring promotion focus and nine items measuring prevention focus. An example item of promotion focus includes “I often think about how I will achieve success,” and an example item of prevention focus includes “I am more oriented toward preventing losses than I am toward achieving gains.” All items were scored along a nine-point Likert-type scale (1-not at all like me, 9-very true of me). The Chronbach alphas were .90 for prevention focus and .91 for promotion focus.

Emotion Regulation. Emotion regulation was measured using the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). The ERQ consists of two five-item scales measuring emotion reappraisal and emotion suppression. An example item for reappraisal is “When I want to feel a more positive emotion (such as joy or amusement), I change what I’m thinking about.” An example item for suppression is “I control my emotions by not expressing them.” All items were scored along a seven-point Likert-type scale (1-strongly disagree, 7-strongly agree). Chronbach’s alpha was .90 for reappraisal and .70 for suppression.

Psychometric Analyses

Because my goal was to validate the scale as a measure of a higher-order factor, I did not assess each subscale against the other variables in my survey. Instead, I evaluated the full scale for its psychometric properties. Prior to conducting a CFA, I assessed the internal consistency (i.e.,

Chronbach's alpha) for the 19-item ComReg scale, evaluated descriptive statistics (e.g., means, standard deviations), and determined bivariate correlations among the variables. The reliability of the ComReg scale was well above the generally accepted rule of .7 for Chronbach's alpha. Furthermore, the internal consistency of the subscales was acceptable. I reported all means, standard deviations, correlations, and reliabilities in Table 1.

I conducted a CFA to determine appropriate factor structure for the ComReg scale. Luthans, Avolio, Avey, & Normal (2007) developed their scale to tap each of the four facets comprising PsyCap as a higher-order factor. I followed the process described by the authors by accomplishing the following: 1) reliability of the ComReg measure, 2) unitary factor structure, 3) convergent validity with similar constructs, 4) discriminant validity with dissimilar constructs, and 5) variance in outcomes beyond similar constructs.

I conducted a CFA using maximum-likelihood estimation, which requires multivariate normality. In the event that the data does not meet the multivariate normality assumption, it may be necessary to perform transformations prior to conducting the CFA (Kline, 2011). I assessed the skewness and kurtosis for each of the items. All items had values below three for skewness and below two for kurtosis. Additionally, I evaluated the Shapiro-Wilks test and found that the result was not significant. Taken together, I determined that the data met the assumption for multivariate normality.

I conducted the CFA by creating three first-order factors based on the theoretical dimensions of ComReg: 1) cognitive, 2) emotional, and 3) behavioral. I then fit each of the three first-order factors onto the higher-order latent factor for ComReg. This model led to the following results:

$\chi^2_{(149)} = 622.40$ ($p < .05$), comparative fit index (CFI) = .84, root mean square error of approximation (RMSEA) = .11, standard root mean square residual (SRMR) = .07. These results indicated relatively poor fit within the model. Additionally, the standardized coefficients indicating factor loadings for three of the variables were well below the general rule-of-thumb of .7 (Hu & Bentler, 1999).

Therefore, I decided to re-specify the measurement model by dropping the three items with poor factor loadings. I was able to justify this because only one item from each of the three first-order

Table 1. Means, Standard Deviations, Bivariate Correlations, and Reliabilities for Phase One

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. ComReg	3.41	.68	.94								
2. Positive Affect	3.06	.86	.50**	.92							
3. Negative Affect	1.53	.71	-.05	-.02	.93						
4. Dark Triad	2.32	.71	-.04	.02	.39**	.87					
5. Prevention Focus	5.28	1.64	.02	-.12	.40**	.25**	.90				
6. Promotion Focus	6.55	1.33	.48**	.39**	-.16*	-.08	-.21**	.91			
7. Emotion Reappraisal	5.00	1.08	.43**	.32**	-.18**	-.05	-.07	.43**	.90		
8. Emotion Suppression	4.27	1.08	.04	-.03	.16*	.31**	.29**	-.07	.13*	.70	
9. Satisfaction	3.60	.69	.35**	.32**	-.21**	-.04	-.19**	.30**	.21**	-.02	.85

* $p < .05$, ** $p < .01$

factors were dropped. Furthermore, dropping these items did not alter the greater content of the scale. The items that remained sufficiently covered the content domain intended for the scale. Upon re-specifying the model, the new model produced the following results, indicating acceptable fit: $\chi^2_{(101)} = 347.27$ ($p < .05$), CFI = .90, RMSEA = .09, SRMR = .06. Although these findings are right at the generally accepted cutoffs, it should be noted that Hu and Bentler (1999) demonstrated that those values may need to be adjusted to account for more complex models such as higher-order models. In addition to the fit indices, all factor loadings were above .7. To provide a more robust assessment of the model, I assessed the differences among competing models (i.e., two-factor model, one-factor model). Table 2 reports the findings from these comparisons.

Table 2. Comparison of Hierarchical Measurement Models for Phase One

Model	Factor	χ^2	df	$\Delta\chi^2$	RMSEA	CFI	SRMR
Baseline Model	3 factors as indicators of ComReg	347.27	101	—	.09	.90	.06
Model 2	2 factors as indicators of ComReg	476.58	103	129.31*	.12	.85	.07
Model 3	1 factor with 16 items	523.42	104	176.15*	.13	.83	.07
* $p < .01$							

I compared the correlations between ComReg and the other variables I measured in the survey to demonstrate convergent and discriminant validity. Additionally, I assessed the additional variance explained by regressing ComReg onto satisfaction along with other similar variables. Convergent validity is demonstrated when the focal construct is shown to relate to constructs within similar content domains. I expected to see ComReg correlate with promotion focus and the reappraisal facet of emotion regulation. I expected this because promotion focus is a form of self-regulation in which the end goal is achievement and growth (Higgins, 1997). Thus, people who are promotion-focused actively identify opportunities and pursue goals. Emotion reappraisal involves assessing and acting upon emotional states (Gross & John, 2003). Additionally, affect is the prolonged experience of emotion, also referred to as mood (Watson et al., 1988). Positive and negative affect share some overlap in the emotion domain, and they should relate to an extent to the monitoring and regulation of emotion. Thus, promotion focus, affect, and emotion reappraisal should be related to ComReg.

As expected ComReg was significantly correlated to promotion focus, emotion reappraisal, and positive affect. It was not significantly correlated with negative affect. ComReg was positively related to promotion focus ($r = .50, p < .01$). The positive correlation was expected because people high in ComReg are actively monitoring and adapting to achieve goals. These individuals are highly aware of their surroundings; and they are aligning their thoughts, emotions, and behaviors to achieve goals. This focus on achievement mirrors what would be expected from someone who is promotion focused. ComReg was also positively correlated with emotion reappraisal ($r = .45, p < .01$). Again, I expected a positive correlation between ComReg and emotion reappraisal, because both constructs speak to paying attention and being aware of emotional states. Emotion reappraisal most closely aligns with the emotional component of ComReg, but the base self-regulatory functions are quite similar as well. Monitoring and changing emotion is inherent in the construct. Finally, ComReg was positively correlated with positive affect ($r = .48; p < .01$). I expected ComReg to be negatively related to negative affect, but I could not detect a significant effect. However, the positive relationship between ComReg and positive affect was expected. Positive affect is related to the experience of positive emotion and mood. ComReg relates to the tendency to be aware of those emotions and alter them to align with goals when needed. One reason that negative affect was not related to ComReg is that negative emotions such as being anxious or scared lead to the inhibition of goal attainment. Extreme cases of the negative emotions may lead people to engage in more of a prevention focus, which I did not expect to relate to ComReg.

I included additional variables that I did not expect to relate to ComReg to demonstrate discriminant validity. Prevention focus, emotional suppression, and the DT were not expected to relate to ComReg. First, the DT is a set of aberrant personality traits that occupy a different content domain altogether (O'Boyle, Forsyth, Banks, & McDaniel, 2012; Jonason & Webster, 2010). Secondly, prevention focus is a form of self-regulation that consists of avoiding loss and averting failure (Higgins, 1997; Lockwood et al., 2002). ComReg, on the other hand, speaks to active goal pursuit unrelated to loss or failure. The specific focus on failure explicated by prevention focus led

me to expect that there would not be a relationship between the two constructs. Finally, emotion suppression is similar to prevention focus in that it reflects inhibition as opposed to exhibition of goal pursuit (Gross & John, 2003). ComReg does not address suppression as much as it addresses altering emotions, thoughts, and behaviors. As seen in Table 1, my assertions were supported.

The final portion of phase one was to assess the additional variance in job satisfaction accounted for by ComReg. I expected ComReg to positively relate to job satisfaction, because employees who are actively pursuing goals are likely to experience success and intrinsic motivation. Active goal pursuit is a powerful motivator in and of itself. As expected, ComReg was positively correlated to job satisfaction ($r = .35, p < .05$). Furthermore, ComReg explained a significant amount of variance above the other seven variables when regressed onto job satisfaction ($R^2 = .21; \Delta R^2 = .03, p < .01$). Taken together, the evidence presented above supports the ComReg scale as a sound and valid measure.

Phase Two: Test of Hypothesized Model

Upon validating the 16-item ComReg scale. I moved onto phase two of my study in which I tested Hypotheses 1-6. Below, I describe the sample and procedure, measures, assessment of aggregation, and analyses.

Sample and Procedure

I collected data for phase two from various sources. I was allowed access to employees and supervisors from three medium to large companies (i.e., 50-300 employees per organizations) with locations through the United States. Participants were recruited through an email to participate in my study. All employees received an email and had three weeks to complete the survey. At the end of the third week, supervisors received an email to take a different survey. In addition, I collected data using the snowball technique at a large southeastern university. Students were asked to recruit three working adults and their direct supervisors to take the same set of surveys. Employee survey responses were matched to ratings provided by the supervisors. These surveys were administered

concurrently. In both instances, employees and supervisors completed separate surveys to minimize the effects of same-source bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Employees and supervisors were recruited via email in the three companies that allowed me to directly survey their employees. These organizations provided email addresses for all organizational members. Employees and supervisors received two different surveys. Both employees and supervisors had the opportunity to complete the employee survey. This survey contained items for the following variables: high-involvement management, service climate, and ComReg. The supervisor survey was only sent to supervisors and contained items pertaining to task and service performance. The two surveys were sent at least three weeks apart. The second source of data for phase two came from a snowball sample. The technique works by having students recruit a working adult who then disseminates the employee survey to his/her coworkers and supervisor (Mayer, Aquino, Greenbaum, & Kuenzi, 2012). Business students from a large southeastern university recruited a working adult, who was then asked to give a packet containing the study information to his/her supervisor. Each packet had instructions for the employee survey and the supervisor survey. Supervisors were asked to disseminate the information form for the employee survey to at least three employees under their direct supervision. In order to prevent potential problems with dishonesty or data corruption, I required each participant to enter his/her name and a unique identifier.

The initial sample, prior to matching the data, consisted of 378 employees, which was an initial response rate of 60%. The final matched sample consisted of 188 employees and 59 supervisors (i.e., groups). The final employee response rate was 30%, and the supervisor response rate was 40%. Because part of the data collection was conducted in organizations, demographic data on supervisors was limited. Thus, I report the demographic characteristics of the employees only. The mean age of the sample was 33.8 years ($sd = 12$), and 48.9% of the participants were female. Within the sample, 12.2% were African-American, 80.3% were Caucasian/White, and 6.5% claimed other race/ethnicities.

After matching the data, there were 59 work groups of two or more employees. Prior group-level research has suggested that group samples above 45 are sufficient to model testing (Fauth, Hattrup, Mueller, & Roberts, 2013; Morrison, Wheeler-Smith, & Kadmar, 2011). The average age of employees in each work group was similar to the mean age of the sample at 33.1 years ($sd = 9.8$), ranging from 20.5 to 58 years. The average group size was 3.2 ($sd = 1.8$), ranging from two employees to 14 employees. The mean tenure with the company of group members was 5.4 years ($sd = 5.1$) with a range of .5 to 26 years.

Measures

High-Involvement Management. Perceptions of high-involvement management were assessed with a measure operationalizing the four dimensions of high-involvement work practices – “power,” “information,” “rewards,” and “knowledge” (Riordian et al., 2005). There were 14 items, and participants rated each item on a five-point Likert-type scale (1-strongly disagree, 5-strongly agree). Scores were obtained by computing the mean rating of the 14 items. Example items are “My manager provides updates regarding the status of the ideas that they have represented to upper-management” and “My manager teaches employees how to evaluate their own performance.” The scale scores demonstrated strong internal consistency ($\alpha = .95$).

Service Climate. Service for customers was measured using the Schneider et al. (1998) service climate scale. I also used the same scale to measure service to employees by changing the focus from customer to employees. This was similar to the method used by Burke and colleagues (1992). Participants responded to the same seven items for both customer service and employee service. The items were scored along a five-point Likert-type scale (1-poor, 5-excellent). Example items included “How would you rate the overall quality of service at [your company] provide to: (1) customers, (2) employees.” Internal consistencies (i.e., coefficient alpha) for scores on the scale are given for each referent (Customers: $\alpha = .90$; Employees: $\alpha = .89$).

ComReg. ComReg was measured using the 16-item measure validated in phase one. The scale was shown to adequately map the three first-order dimensions of cognitive, emotional, and behavioral self-regulation onto the higher-order factor of ComReg. Example items from the scale included “I am aware of my thoughts while striving for a goal” and “I change my behavior to accomplish ‘small-victories’ when going for a goal.” All items were scored along a five-point Likert-type scale (1-never, 5-constantly). The scale demonstrated strong internal consistency ($\alpha = .97$).

Performance. Performance was measured with an eight-item scale. Supervisors rated their employee’s performance along task performance (four items) and service performance (four items). The four task-performance items were adapted from Welbourne, Johnson, and Erez (1998); the four service-performance items were from Liao and Chuang (2004). All items were scored along a five-point Likert-type scale (1-needs much improvement, 5-excellent). The scales demonstrated good internal consistency (task performance: $\alpha = .89$; service performance: $\alpha = .90$).

Controls. Prior group research has demonstrated the effects of group size and tenure on performance outcomes (Cole, Carter, & Zhang, 2013; Whitman, Van Rooy, & Viswesvaran, 2010). Therefore, I controlled for group size (excluding the supervisor). This was the sum of the number of respondents for each work group. I also controlled for the average tenure of the group members.

Aggregation

Prior to conducting mediation tests on the data, I had to aggregate the individual-level data to the group level. In order to justify data aggregation, a few assumptions must be satisfied. Bliese (2000) stated that in order to justify aggregation, researchers had to demonstrate within-group homogeneity, between-group heterogeneity, and that the groups are naturally occurring. Within the data, I defined groups as two or more employees working under a unique supervisor. The bottom cutoff of two employees has been used in prior group research (Fauth et al., 2013; Morrison et al., 2011). To assess homogeneity and heterogeneity, I assessed agreement statistics such as $r_{wg(j)}$ (James, Demaree, &

Wolf, 1993) and interclass correlations (Bliese, 2000). I calculated these statistics for each of the study variables.

Group homogeneity, or within-group agreement, was calculated using $r_{wg(j)}$ (James et al., 1993). Within-group agreement was high for high-involvement management ($r_{wg(j)} = .92$, $sd = .19$), service for customers ($r_{wg(j)} = .88$, $sd = .20$), service for employees ($r_{wg(j)} = .90$, $sd = .18$), ComReg ($r_{wg(j)} = .88$, $sd = .26$), task performance ($r_{wg(j)} = .83$, $sd = .26$), and service performance ($r_{wg(j)} = .85$, $sd = .24$). Collectively, within-group agreement was consistently strong across the study variables. Interclass correlations were used to determine the meaningfulness of group membership (i.e., ICC(2)) and the reliability differences between groups (i.e., ICC(2)). Across the variables, the values for the interclass correlations supported aggregation. High-involvement management had values of ICC(1) = .33 and ICC(2) = .61, suggesting significant group variance ($F_{(58,188)} = 2.53$, $p < .05$). The two components of service climate had values of ICC(1) = .25 and ICC(2) = .51, suggesting significant variance attributable to groups for service for customers ($F_{(58,188)} = 2.03$, $p < .05$), and ICC(1) = .23 and ICC(2) = .48, suggesting significant variance in group membership for service for employees ($F_{(58,188)} = 1.91$, $p < .05$). ComReg had values of ICC(1) = .24 and ICC(2) = .05, which were significant ($F_{(58,188)} = 2.53$, $p < .05$). Finally, task performance had values of ICC(1) = .28 and ICC(2) = .55 at a level of significance ($F_{(58,188)} = 2.24$, $p < .05$), and service performance had values of ICC(1) = .26 and ICC(2) = .53, which was also significant ($F_{(58,188)} = 2.14$, $p < .05$). Based on these results, I determined that aggregation was justified.

Analysis Strategy

The nature of my model is one that requires tests of ordered mediation. Hayes (2012) calls this a *serial multiple mediator model*. In this type of model, multiple mediators are attached in a causal chain. Because of the nature of this model, simple tests of indirect effects do not capture the direct and indirect effects created by linking multiple mediators (Baron & Kenny, 1986; Hayes, Preacher, & Myers, 2011; Preacher & Hayes, 2004). However, there are several techniques that may be used to

test a serial mediation model. Each of these methods has advantages and disadvantages. For instance, structural equation modeling is most effective with sample sizes above 250 (Kline, 2011). My sample size is 59 groups, which makes structural equation modeling an ineffective strategy. Structural path analysis is more feasible when studying group-level models. A smaller burden is placed on sample size, and specific paths can be drawn or written in software packages such as SAS, AMOS, Mplus.

However, because of the nature of my data, I chose to analyze the serial mediated effects with PROCESS using SPSS. Hayes (2012, 2013) describes PROCESS as a macro that combines tests of indirect effects, conditional indirect effects, and other various forms of mediation and moderation. Hayes' macro allows researchers to specify models with up to four mediators that are hypothesized to be linked in a particular order. PROCESS is a tool that can be used with several software packages (e.g., SPSS, SAS). PROCESS allowed me to simultaneously test all indirect and direct effects in the model and provide bias-corrected confidence intervals derived via bootstrapping.

CHAPTER IV

FINDINGS

Table 3 shows the means, standard deviations, bivariate correlations, and reliabilities. According to the correlations, Hypotheses 1 and 2 were supported. High-involvement management was positively related to service for employees ($r = .62, p < .01$) and service for customers ($r = .56, p < .01$). These results were further supported by the direct effects of high-involvement management on service for employees ($\beta = .62, p < .01$) and service for customers ($\beta = .56, p < .01$). ComReg was positively correlated with service for employees ($r = .49, p < .01$) and service for customers ($r = .41, p < .01$). Interestingly, the direct effect between ComReg and service for employees was significant ($\beta = .44, p < .05$), but the effect between ComReg and service for customer was not significant ($\beta = .09, p > .05$). Hypothesis 3 was not supported. In fact, none of the predictor variables were found to be significantly related to either performance outcome.

Table 3. Means, Standard Deviations, Bivariate Correlations, and Reliabilities for Phase Two

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Group Size	3.19	1.84	—							
2. Group Tenure	5.44	5.14	.11	—						
3. High-Involvement Management	3.95	.50	-.15	-.09	.95					
4. Service Climate for Employees	3.93	.50	-.16	-.09	.62**	.89				
5. Service Climate for Customers	3.98	.48	-.14	.09	.56**	.77**	.90			
6. ComReg	3.85	.56	-.01	-.04	.29*	.49**	.41**	.97		
7. Task Performance	4.11	.55	-.21	.10	.01	.03	.10	.06	.89	
8. Service Performance	4.13	.59	-.02	.11	.07	.06	.13	.13	.80**	.90

N = 59. Reliability coefficients (Cronbach's Alpha) are reported along the diagonal. All correlations were calculated at the group level.

* $p < .05$, ** $p < .01$

Although I did not find a significant effect between ComReg and performance, I went ahead with my analysis of mediation. I performed two sets of analyses using the PROCESS macro. The first set of analyses assessed the entire model one outcome at a time. Each set of analyses tested direct effects between each variable in the model. This was not ideal, as I did not predict a direct effect between the two service climate constructs. Additionally, due to this issue, the analysis included indirect effects that I did not hypothesize. To rectify this, I used PROCESS to test the indirect effects between high-involvement management and ComReg, then the indirect effects between each facet of service climate and performance. I finally compared those results to the initial set of findings from the entire model. I ran supplemental analyses using structural path analysis also as a comparison. Across all of the techniques, I could not find an effect between any of the predictors and the performance outcomes.

The direct effects found from the analyses are depicted in Figure 2. Table 4 provides the tests of indirect effects, which include the bias-corrected confidence intervals. As shown in Figure 2, the direct effects between high-involvement management and each of the service climate facets were significant and in the hypothesized direction. Service for employees was positively related to ComReg, but not service for customers. Furthermore, I was only able to partially detect the indirect effect predicted in Hypothesis 4. I found a significant effect for the HIM → SE → CR path (.29, $p < .05$). I did not find support for any of the other indirect effects.

Figure 2. Model with Standardized Path Coefficients

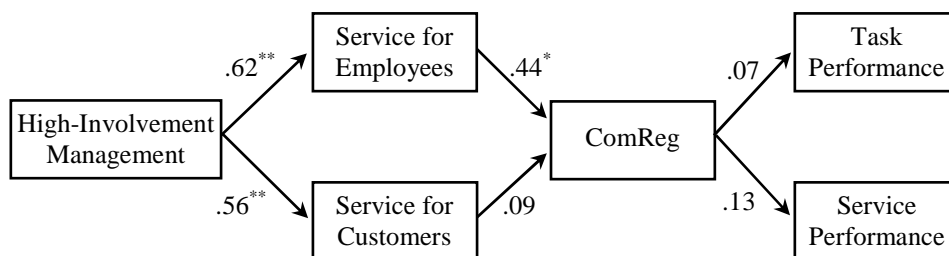


Table 4. Path Coefficients and Indirect Effects for Mediation Models

	Path Coefficients					Indirect Effects		
	to Service for Employees	to Service for Customers	to ComReg	to Task Performance	to Service Performance	Estimate	SE	Bias-Corrected 95% CI
High-Involvement Management	.62**	.56**	-.03	-.06	.04			
Service for Employees	—	—	.44*	-.09	-.13			
Service for Customers	—	—	.09	.13	.14			
ComReg	—	—	—	.07	.13			
HIM→SE→CR						.29*	.16	[.03, .69]
HIM→SC→CR						.07	.14	[-.21, .33]
SE→CR→TP						.04	.08	[-.12, .20]
SE→CR→SP						.08	.09	[-.38, .37]
SC→CR→TP						.02	.06	[-.09, .17]
SC→CR→SP						.05	.06	[-.06, .19]
HIM→SE→CR→TP						.02	.05	[-.05, .16]
HIM→SE→CR→SP						.04	.05	[-.02, .20]
HIM→SC→CR→TP						.00	.01	[-.00, .04]
HIM→SC→CR→SP						.00	.01	[-.01, .05]

N= 59. Bootstrap N = 10,000. All coefficients are standardized. Controls were mean group tenure and mean group size. HIM: High-Involvement Management; SE: Service for Employees; SC: Service for Customers; CR: ComReg; TP: Task Performance; SP: Service Performance

* $p < .05$, ** $p < .01$

I performed supplemental analyses in structural path analysis and compared those results to my initial findings. Overall, the same patterns emerged. Based upon these findings, the front end of the model appeared to work as expected. High-involvement leadership positively led to both service for customers and service for employees. However, the $HIM \rightarrow SE \rightarrow CR$ path was the only significant indirect effect, which signified that ComReg was only being impacted by the employee-based constructs. Service for customers was not a predictor of ComReg. In sum, Hypotheses 1 and 2a were supported. Hypothesis 4 was partially supported. Hypotheses 2b, 3, 5, and 6 were not supported.

CHAPTER V

DISCUSSION AND CONCLUSION

The purpose of this dissertation was to address three primary needs in the current literature:

a) investigate the service profit chain at the group level, b) integrate self-regulation into the service profit chain in order to explain how employees interpret environmental and social cues, and c) build upon early work investigating a higher-order construct of self-regulation that bridges a disjointed literature. Using prior service profit chain research, the extant theory on self-regulation, and a group-based analytical approach, I developed and tested a theory-grounded model that extended the service profit chain.

Recently, researchers have shown a reinvigorated interest in service climate and involvement-based management, which are both critical components of the service profit chain (Hong et al., 2013). To date, however, researchers have not attempted to fit the service profit chain at the group level. Instead, prior literature has primarily focused on the firm-level effects of high-involvement work practices and service climate (Butts et al., 2009; Liao & Chuang, 2004). We know less about how the service profit chain operates at lower levels in the organization, although involvement-based constructs and service climate have appeared independently in group-level research. Thus, it is inherently beneficial to complement these lines of research by combining high involvement, service climate, and the service profit chain as a whole at the group

level. Doing so contributes to the organizational behavior literature by beginning to explicate the process by which involvement and service climate operate within work groups.

Finding that the first half of the model worked lends credence to the appropriateness of studying the core constructs within the service profit chain (e.g., high-involvement management, service climate) at the group level. Also, both aggregation statistics and the effects among high-involvement management and service climate supported a group-level construct of self-regulation and its place within the service profit chain. A disadvantage to studying the service profit chain at the group level was that I was unable to account for cross-level effects. In addition to the trend in management research to study constructs at the group level, there is an equally strong push to tease the intricate relationships among firm-level, group-level, and individual-level phenomena. Although I did not originally hypothesize cross-level effects (i.e., the group-level effects of high-involvement management/service climate on individual ComReg and performance), it is possible that this model is better suited for multilevel analyses. Consequently, I conducted post hoc multilevel mediation analyses by applying the methods described by Bauer, Preacher, & Gill, 2006; Zhang, Zyphur, & Preacher (2009). Based upon my initial findings, this looks to be a promising avenue for future research. There appear to be nuanced cross-level effects that might capture the effects I initially sought to uncover in my analyses (e.g., mediating effect of ComReg). This multilevel approach would contribute to the service profit chain literature as well as management research as a whole (Aguinis et al., 2011; Liao & Chuang, 2004).

The service profit chain currently consists of high-involvement management and service climate (Hong et al., 2013), which hinges upon the notion that employees engage in goal-directed action by drawing cues from their managers and the workplace environment (Bandura, 2012; Lord et al., 2010). The revised model of the service profit chain that I proposed and tested built upon prior work to explain *how* employees interpret environmental and social cues, *what* employees are actually doing when they self-regulate, and the underlying processes of monitoring and regulating their thoughts, emotions, and behavior. Ultimately, I was unable to detect an indirect effect that implicated ComReg

as driving the high-involvement management – performance and service climate – performance relationships. In response to these non-findings, I reviewed both the theory I used to justify my model and the methodology I employed to test the model. I discuss this in more detail below.

Beyond the service profit chain, there is general dearth of research explaining the complex processes of recognizing and altering thoughts, emotions, and behavior so that they align with specific work-related goals (Lord et al., 2010). Wallace (in progress) seeks to address this need with ComReg. However, prior to testing my model in phase two, I needed to justify the need and nomological fit of ComReg as a higher-order construct of self-regulation. Because the self-regulation literature is saturated with constructs that have developed along parallel streams, ComReg addresses the calls to consolidate similar constructs that have also appeared in other areas of management research (e.g., Hershcovis, 2011).

Throughout the self-regulation literature, monitoring and regulating are the core mechanisms that drive motivated action. In some models, such as emotion regulation, the focus is placed on reappraising and suppressing emotions (Gross & John, 2003). The focus shifts to recognizing desired end states and creating a strategy to accomplish those end states through promotion or prevention (Higgins, 1997). To date, the foundation has been laid for a higher-order theory of monitoring and regulating across the cognitive, emotional, and behavioral domains, but no one has acted upon it (Koole, 2009; Koole et al., 2011). ComReg is a construct that acts as a conceptual bridge within the literature, which is its primary contribution to the field.

Early research by Wallace (in progress) shows ComReg to correlate with other self-regulation constructs while also occupying a unique content domain. In phase one of this project, I focused on replicating and extending these findings. Furthermore, I sought to improve the existing ComReg scale by conducting psychometric analyses. Psychometrics and CFA provided support for the proposed three-factor structure of ComReg. Additionally, my assessment of convergent and discriminant validity further supported ComReg's place among other self-regulation constructs (e.g., regulatory focus, emotion regulation). ComReg added to the explanatory power of other self-regulation

constructs when predicting satisfaction. Findings from the CFA provided evidence that the ComReg scale was psychometrically sound and valid, which further contributes to the literature by providing future researchers with a source for the validity of the ComReg scale.

Below, I provide a deeper discussion of the theoretical and practical implications of my findings. The service profit chain yields clear benefits to practitioners and managers looking to improve service performance within their firms. The research on the service profit chain has led to several improvements and refinements of the mechanisms that really drive firm performance and employee outcomes. As alluded to above, the addition of ComReg to the literature offers a theoretical bridge for the relatively unconnected constructs that comprise the self-regulation literature. Practically, managers and organizations may use ComReg in various contexts to improve performance outcomes and organizational effectiveness. In addition to the contributions of this study, I discuss limitations of this project and how future research may use these limitations to refine the theoretical model and methods I used in order to advance the literature.

Theoretical and Practical Contributions

This study offers several contributions to the field and practice, because the service profit chain is both a theoretical and practice-driven model (Heskett et al., 1997). The core components of the model are theoretical constructs, but they also have clear value to managers and organizational leaders. Prior research has demonstrated this value in terms of firm profits and customer-related outcomes (Hong et al., 2013; Liao & Chuang, 2004; Liao et al., 2009). By studying the service profit chain at the group level, this research provides initial evidence that the chain is operational within work groups. There is a rich literature dedicated to group dynamics that will benefit, and be benefitted by, the research on the service profit chain. Service employees dominate the workforce, and most of the work today is performed in work groups. Thus, the service profit chain begins to explain one avenue for how service-related organizational phenomena impact group performance. The findings from this study suggest that the service profit chain is not only operational at the group level of analysis, but that it

provides a powerful way of describing *what* motivates service employees and *how* those things motivate service employees.

In phase two of this project, I tested the service profit chain at the group level with the newly validated ComReg scale. As expected, high-involvement management led to the development of both facets of service climate: service for customers and service for employees. Burke and colleagues (1992) established the importance of establishing a “complete” service climate, which requires management to create a balanced score card of values by emphasizing service for employees in addition to service for customers. This balance prevents competing values, which may motivate employees to engage in dissonance-reducing strategies instead of focusing on their jobs – a hindrance to organizational effectiveness (Quinn & Rohrbaugh, 1981, 1983). Essentially, competing values leave employees wondering about what matters more (e.g., quality or quantity, customers or me). However, high levels of both service for customers and service for employees appear to create a clear understanding of what outcomes are expected and how things are to be done. Setting these clear expectations and providing the corresponding support allow employees to focus on their work instead of remedying the imbalance of perceived concerns (Borucki & Burke, 1999; Burke et al., 1992). By replicating these findings, I have added to the existing knowledge of how high-involvement management and service climate are intricately linked at the group level of analysis. The theoretical contribution here is that it is possible to bridge the micro/macro divide through multilevel theorizing (Aguinis et al., 2011). The paths can also be reversed such that micro constructs may be aggregated to the group and business unit levels. Each level of analysis requires scholars to revisit theoretical and methodological strategies, as demonstrated in this project, but this is a clear path for future management research.

This study contributes to the self-regulation literature by adding to the early study of ComReg. Although self-regulation appears in management research, we have a poor general understanding of how cognition, emotion, and behavior coexist and are simultaneously processed in the workplace. ComReg addresses this need by providing the literature with the first higher-order factor of self-

regulation. Other constructs, such as emotion regulation and regulatory focus, fail to explicitly address all domains of self-regulation. Furthermore, many of the existing self-regulation constructs treat behavior as a result of either cognitive or emotional regulation instead of a coexisting regulatory system. Several definitions of self-regulation implicate emotion, cognition, and behavior (c.f. Lord et al., 2010), but ComReg is the only construct that addresses all three domains simultaneously.

ComReg not only bridges a gap in knowledge, it also provides relief to a field of study saturated with similar constructs. This study provided evidence that the proposed three-factor structure of ComReg did capture goal-striving across each domain. ComReg appropriately fit well with existing self-regulation constructs, but also demonstrated additional explanatory power beyond some of those constructs.

This project contributed to the organizational behavior literature by integrating ComReg into a model consisting of involvement-based management and service climate. A construct such as ComReg is poised to contribute to other areas of organizational research as well (e.g., strategy, entrepreneurship). For instance, it would be interesting to study ComReg among top management team members in order to gather information on how they strive to accomplish numerous complex goals. Additionally, entrepreneurs must be able to identify opportunities and strategize ways of seizing those opportunities. ComReg may offer an explanation for how executives and entrepreneurs monitor and regulate their thoughts, emotions, and behaviors such that they successfully navigate multiple goals and overcome the obstacles hindering entrepreneurial sight. In either case, ComReg offers contributions beyond the scope of this study. However, this project laid the foundation for future ComReg research in management.

Although findings that support my initial hypotheses offer contributions to future research, it is also important to note the instances in which I did not find results to support my hypotheses, namely Hypotheses 3, 5, and 6. The lack of evidence for these hypotheses suggests that none of the predictor variables directly or indirectly led to performance outcomes. This finding contradicts the prior literature on both high-involvement management and service climate. Failing to find these results

may be attributed to several factors. First, although prior literature has demonstrated the effectiveness of smaller sample sizes at the group level (e.g., Fauth et al., 2013, Shin & Choi, 2010), there might still be a power problem with my analyses. Power is highly dependent upon sample size and effect size such that smaller effect sizes require larger sample sizes. Without having prior knowledge of what the population effect size should be with the relationship between ComReg and performance, it is difficult to determine a minimum sample size. At this point, that should be a concern moving forward.

Secondly, there may be an issue with the measure of performance. I performed supplemental analyses to determine whether combining the two measures was more effective, and a CFA suggested that the data had better fit with the two-factor structure. Furthermore, I performed log transformations to remedy potential issues related to skewness and kurtosis. Researchers commonly use log transformations when the data suggests non-normal distributions or when there is a low base rate. Even after transforming the outcomes, I was not able to find an effect. One last issue that might have impacted my results is the variability of performance ratings. Essentially, it could be that there simply was not enough of a difference in performance ratings to capture an effect due to distribution errors or weak group-level differences in performance. I calculated aggregation statistics prior to conducting the analyses; but even with sufficient values for the interclass correlations, meaningful group differences could be smaller than expected. Nonetheless, my non-findings have implications for future research. First, the extant literature has consistently found that involvement-based constructs and service climate influence employee and firm performance. However, few of those studies explore group performance, which was one of the primary goals of this project. A complex construct such as ComReg may create a bandwidth problem such that a certain level of variance in the outcome is required to detect a relationship. Group performance may create a problem if the variances are below that threshold. In addition to performance, there are other important employee and group outcomes that should be considered by future research (e.g., commitment, well-being, group dynamics).

Other than methodological reasons, there may need to be some theoretical refinements. Although the service profit chain has been supported by prior literature, there may be additional self-regulatory constructs that are better suited as mediators. Additionally, ComReg is a higher-order construct. With most multidimensional constructs, such as CSE and PsyCap, researchers commonly study the higher-order factor and the first-order factors separately. This may be an interesting way to build theory from the ground up to support the ComReg-performance relationship. Finally, and related to the last point, there is a trade-off with higher-order factors. Scholars run the risk of increasing bandwidth at the cost of construct fidelity (Hogan & Roberts, 1996; Ones & Viswesvaran, 1996). In this instance, it is important to understand exactly how large an effect the higher-order factor will create in order to adjust the power of the study to capture smaller effects related to lower fidelity. Again, it is not uncommon for researchers to study the first-order factors of a higher-order construct independently, and this practice is particularly useful when theory suggests specific relationships between a first-order factor and an outcome.

Beyond theoretical implications, good theory should have real-world implications. This model is highly relevant to practitioners. In fact, both high involvement and service climate have been predominately studied in the field and at the firm level. However, this research has shown to be quite beneficial in building an understanding of how high involvement-based strategic HR initiatives positively impact employee and firm-level outcomes (Butts et al., 2009; Vandenburg et al., 1999). Likewise, the verdict is relatively clear that service climate positively impacts firm performance (Burke et al., 1992; Hong et al., 2013). Thus, the impact of either of these constructs at lower levels in the organization is also important to study as firm performance in service organizations is largely dependent upon the performance of its employees.

The self-regulation literature also benefits practitioners. Employees who more effectively self-regulate are an important asset to organizations. These individuals are more likely to stay on task, avoid motivational pitfalls, and work through complex problems in the workplace. By determining employee strengths and weaknesses in terms of self-regulation, employers and supervisors could

select applicants who demonstrate higher levels of ComReg in various selection procedures (e.g., selection test, assessment center exercises). Furthermore, understanding how supervisors themselves self-regulate is important because they are the most proximal influence on employee behavior in organizations.

Limitations and Future Research

This study is not without limitations. In fact, I have already discussed some potential limitations that should drive future research. Some of these limitations are easier to overcome than others, but I attempt to provide potential remedies for each. First, the issue of power is one of the easier to address. Larger sample sizes are usually desired in management research, especially when field research yields smaller effect sizes for more complex relationships. Power is particularly important for researchers studying complex models, such as the serial mediation model proposed in this project. Future research should attend to this issue and collect data with larger sample sizes, which I plan to do beyond this project.

Secondly, I made an effort to remove same-source bias to best of my ability by collecting supervisor-rated performance ratings instead of having employees self-report it. I did use the same method (i.e., survey methodology), but I conducted a partial correlation test suggested by Podsakoff et al. (2003) to further assess the likelihood that common-method bias was driving the effects observed on the front end of the model. I found no evidence that this was the case. Furthermore, several authors have questioned the true effects driven by common-method bias (Spector, 2006).

Serial mediation is a special case of a multiple mediator model (Hayes, 2012). Particularly when using Hayes' macro (i.e., PROCESS), it automatically assigns direct paths to each mediator in the order that they are entered. There are two solutions to remedy this, each of which I attempted. First, the macro allows researchers to enter mediators in different orders. Thus, when I entered service for customers or service for employees first, I found corresponding results that collectively matched the results I got from running the model in a structural path analysis. Essentially, I had to alter the order

of the first mediator to get the correct results. However, there were no inconsistencies in the results related to the indirect effects. PROCESS simply modeled more of them. This is a lesson for future researchers interested in studying similar models. My model needed to be specified because I had multiple mediators occurring simultaneously, like a simple multiple mediated model (Preacher & Hayes, 2004). However, PROCESS recognizes each mediator as ordered. One remedy would have been combining the service climate constructs, but that was not my intention in building my hypothetical model. Other remedies, which I discussed earlier, include running the model as a true structural path model, or increasing the sample size to an adequate amount for structural equation modeling. Additionally, my hypotheses implied an ordered (i.e., causal) chain. However, I collected my data concurrently, which does not meet the burden of temporal precedence that must be met to infer causality (Stone-Romero & Rosopa, 2008). Future research may attend to this problem by collecting data longitudinally. Relatedly, groups are dynamic settings, and this model is likely dependent upon changes in the group that I could not account for in my analyses. This is a larger problem in group research, and scholars must continue to seek ways of remedying this issue.

There are likely moderators and additional mediators that influence my model. Additionally, I based my inclusion of group size and average group member tenure as controls on current trends in the group literature (Cole et al., 2013). There are additional factors that future researchers may consider as control variables. For instance, the self-regulation literature speaks to various goal-specific factors that influence how people set and strive for goals (Lord et al., 2010). Some of the factors include goal complexity, goal-performance discrepancy, and goal interference (multiple competing goals). Goal complexity might interfere with the measurement of ComReg and performance. Although these measurements were independently measured, employees were allowed to specify their own goals when answering the ComReg items. Managers were asked to rate task and service performance; however, I did not specify specific tasks, duties, or responsibilities. The effect may have been stronger had I specified a specific goal that both employees and supervisors were to consider while completing the survey.

Finally, I based my theoretical model on prior literature and theory. However, no theoretical model is ever perfect, and scholars must continually look for ways to tweak and improve the underlying theory and constructs. This model is no different. I plan to continue working in this research domain, because it is an area that will benefit our general understanding of workplace phenomena.

Conclusion

The service profit chain, self-regulation, and employee performance are crucial outcomes for modern service organizations. Continued research in these areas, and research that attempts to bridge these areas, are important for both theoretical and practical reasons. In this project, I built a theory-based model and tested that model in the field. Based upon my findings, the relationships among high-involvement management, service climate, and ComReg opens the door for future research. I hope my findings drive others to continue researching these and other self-regulatory and service-based organizational phenomena.

REFERENCES

- Aguinis, H., Boyd, B.K., Pierce, C.A., & Short, J.C. (2011). Walking new avenues in management research methods and theories: Bridging micro and macro domains. *Journal of Management*, 37, 395-403.
- Bagozzi, R.P. (1992). The self-regulation of attitudes, intentions, and behavior. *Social Psychology Quarterly*, 55, 178-204.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-287.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38, 9-44.
- Barnes, C.M., Schaubroeck, J., Huth, M., & Ghumman, S. (2011). Lack of sleep and unethical conduct. *Organizational Behavior and Human Decision Processes*, 115, 169-180.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bauer, D.J., Preacher, K.J., & Gil, K.M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, 11, 142-163.
- Baumeister, R.F., Bratslavsky, E., Muraven, M., & Tice, D.M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74, 1252-1265.
- .

- Baumeister, R.F., DeWall, C.N., Ciarocco, N.J., & Twenge, J.M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88, 589-604
- Baumeister, R.F., Muraven, M., & Tice, D.M. (2000). Ego depletion: A resource model of volition, self-regulation, and controlled processing. *Social Cognition*, 18, 130-150.
- Baumeister, R.F., & Newman, L.S. (1994). Self-regulation of cognitive inference and decision processes. *Personality and Social Psychology Bulletin*, 21, 3-19.
- Beauregard, M., Lévesque, J., & Bourgouin, P. (2001). Neural correlates of conscious self-regulation of emotion. *The Journal of Neuroscience*, 21, 6993-7000.
- Bliese, P.D. (2000). Within-group agreement, non-independence, and reliability. In K.J. Kline & S. Koslowski (Eds.), *Multilevel theory, research, and methods in organizations*, 349-381. San Francisco: Jossey-Bass.
- Borucki, C.C., & Burke, M.J. (1999). An examination of service-related antecedents to retail store performance. *Journal of Organizational Behavior*, 20, 943-962.
- Bowen, D.E., & Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the “strength” of the HRM system. *Academy of Management Review*, 29, 203-221.
- Bowen, D.E., & Schneider, B. (2013). A service climate synthesis and future research agenda. *Journal of Service Research*, online: 1-18.
- Brockner, J., & Higgins, E.T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational Behavior and Human Decision Processes*, 86, 35-66.
- Bureau of Labor Statistics. (2013). *Industry employment and output projections to 2022*. United States Department of Labor, Monthly Labor Review. Retrieved from <http://www.bls.gov/opub/mlr/2013/article/industry-employment-and-output-projections-to-2022.htm>.
- Burke, M.J., Borucki, C.C., & Hurley, A.E. (1992). Reconceptualizing psychological climate in a retail service environment: A multiple-stakeholder perspective. *Journal of Applied Psychology*, 77, 717-729.

- Butts, M.M., Vandenberg, R.J., DeJoy, D.M., Schaffer, B.S., & Wilson, M.G. (2009). Individual reactions to high involvement work processes: Investigating the role of empowerment and perceived organizational support. *Journal of Occupational Health Psychology, 14*, 122-136.
- Chang, C-H., Ferris, D.L., Johnson, R.E., Rosen, C.C., & Tan, J.A. (2012). Core self-evaluations: A review and evaluation of the literature. *Journal of Management, 38*, 81-128.
- Chenet, P., Tynan, C., & Money, A. (1999). Service performance gap: Re-evaluation and redevelopment. *Journal of Business Research, 46*, 133-147.
- Choi, Y.S.N. (2010). What makes a group of good citizens? The role of perceived group-level fit and critical psychological states in organizational teams. *Journal of Occupational & Organizational Psychology, 83*, 531-552.
- Chuang, C-H., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology, 63*, 153-196.
- Cole, M.S., Carter, M.Z., & Zhang, Z. (2013). Leader-team congruence in power distance values and team effectiveness: The mediating role of procedural justice climate. *Journal of Applied Psychology, 98*, 962-973.
- Davies, M., Stankov, L., Roberts, R.D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*, 989-1015.
- Deci, E.L., Koestner, R., & Ryan, R.M. 1999. A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*, 627-668.
- Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Denison, D. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of Management Review, 21*, 619-654.

- DeShon, R.P., Kozlowski, S.W.J., Schmidt, A.M., Milner, K.R., & Wiechmann, D. (2004). A multiple-goal, multilevel model of feedback effects on the regulation of individual and team performance. *Journal of Applied Psychology*, 89, 1035-1056.
- Dietz, J., Pugh, S.D., & Wiley, J.W. (2004). Service climate effects on customer attitudes: An examination of boundary conditions. *Academy of Management Journal*, 47, 81-92.
- Edwards, J.R. (2001). Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods*, 4, 144-192.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75, 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Fauth, T., Hattrup, K., Mueller, K., & Roberts, B. (2013). Nonresponse in employee attitude surveys: A group-level analysis. *Journal of Business and Psychology*, 28, 1–16.
- Fischer, P., Kastenmüller, A., & Asal, K. (2012). Ego depletion increases risk-taking. *The Journal of Social Psychology*, 152, 623-638.
- Galbraith, J.R. (1973). *Designing complex organizations*. Reading, MA: Addison-Wesley.
- George, J.M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53, 1027-1055.
- George, J.M., & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology*, 75, 698-709.
- Ghumman, S., & Barnes, C.M. (2013). Sleep and prejudice: A resource recovery approach. *Journal of Applied Psychology*, 43, 166-178.
- Goldberg, L.S., & Grandey, A.A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, 12, 301-318.

- Grandey, A.A., Fisk, G.M., & Steiner, D.D. (2005). Must “service with a smile” be stressful? The moderating role of personal control for American and French employees. *Journal of Applied Psychology, 90*, 893-904.
- Grönroos, C. (1990). *Service management and marketing: Managing the moments of truth in service competition*. Lexington, MA: Lexington Books.
- Grönroos, C. (2006). On defining marketing: Finding a new roadmap for marketing. *Marketing Theory, 6*, 395-417.
- Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*, 348-362.
- Guthrie, J.P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal, 44*, 180-190.
- Guthrie, J.P., Flood, P.C., Liu, W., & MacCurtain, S. (2009). Higher performance work systems in Ireland: Human resource and organizational outcomes. *The International Journal of Human Resources, 20*, 112-125.
- Hagger, M.S., Wood, C., Stiff, C., Chatzisarantis, N.L.D. (2011). Ego depletion and the strength model of self-control: A meta-analysis. *Psychological Bulletin, 136*, 495-525.
- Hayes, A.F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from <http://www.afhayes.com/public/process2012.pdf>.
- Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Hayes, A.F., Preacher, J.J., & Myers, T.A. (2011). Mediation and the estimation of indirect effects in political communication research. In E.P. Buscy & R. Lance Holbert (Eds), *Sourcebook for political communication research: Methods, measures, and analytical techniques*, 434-465. New York: Routledge.

- Heatherton, T.F., & Wagner, D.D. (2011). Cognitive neuroscience of self-regulation failure. *Trends in Cognitive Sciences*, 15, 132-139.
- Hershcovis, M.S. (2011). Incivility, social undermining, bullying...oh my! A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, 32, 499-519.
- Heskett, J.L., Sasser, W.E., & Schlesinger, L.A. (1997). *Service profit chain*. New York: Simon and Schuster.
- Higgins, E.T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280-1300.
- Hinkin, T.R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1, 104-121.
- Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Hobfoll, S.E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50, 337-421.
- Hogan, J., & Roberts, B.W. (1996). Issues and non-issues in the fidelity–bandwidth trade-off. *Journal of Organizational Behavior*, 17, 627-637.
- Hong, Y., Liao, H., Hu, J., & Jiang, K. (2013). Missing link in the service profit chain: A meta-analytic review of the antecedents, consequences, and moderators, of service climate. *Journal of Applied Psychology*, 98, 237-267.
- Hu, L.-T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1-55.
- Huselid, M.A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38, 635-672.

- James, L.R., Demaree, R.G., & Wolf, G. (1993). RWG: An assessment of within-group interrater agreement. *Journal of Applied Psychology*, 78, 306-309.
- Johnson, R., Rosen, C., & Chang, C.-H. (2011). To aggregate or not to aggregate: Steps for developing and validating higher-order multidimensional constructs. *Journal of Business and Psychology*, 26, 241-248.
- Jonason, P.K., & Webster, G.D. (2010). The dirty dozen: A concise measure of the dark triad. *Psychological Assessment*, 22, 420–432.
- Joosten, A., Dijke, M., Hiel, A., & Cremer, D. (2013). Being “in control” may make you lose control: The role of self-regulation in unethical leadership behavior. *Journal of Business Ethics*, n.i.: 1-14.
- Judge, T.A., & Bono, J.E. (2001). Relationship of core self-evaluation traits - self-esteem, generalized self-efficacy, locus of control, and emotional stability - with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86, 80-92.
- Judge, T.A., Locke, E.A., & Durham, C.C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19, 151-188.
- Jung, D., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The Leadership Quarterly*, 14, 525-544.
- Karoly, P. (1993). Mechanisms of self-regulation: A systems view. *Annual Review of Psychology*, 44, 23-52.
- Keith, N., & Frese, M. (2005). Self-regulation in error management training: emotion control and metacognition as mediators of performance effects. *Journal of Applied Psychology*, 90, 677.
- Kim, S.H., & Hamann, S. (2007). Neural correlates of positive and negative emotion regulation. *Journal of Cognitive Neuroscience*, 19, 776-798.
- Kline, R.B. (2011). *Principles and practice of structural equation modeling*. New York: Guildford Press.

- Koole, S.L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23, 4-41.
- Koole, S.L., van Dillen, L.F., & Steppes, G. (2011). The self-regulation of emotion. In K.D. Vohs & R.F. Baumeister (Eds.), *Handbook of Self-regulation: research, theory, and applications*, 22-40. New York: Guilford Press.
- Kuenzi, M., & Schminke, M. (2009). Assembling fragments into a lens: A review, critique, proposed research agenda for the organizational work climate literature. *Journal of Management*, 35, 634-717.
- Lam, C.K., Huang, X., & Janssen, O. (2010). Contextualizing emotional exhaustion and positive emotional display: The signaling effects of supervisors' emotional exhaustion and service climate. *Journal of Applied Psychology*, 95, 368-376.
- Lawler, E.E.III. (1986). *High involvement management*. San Francisco: Jossey-Bass.
- Lawler, E.E.III. (1992). *The ultimate advantage: Creating the high involvement organization*. San Francisco: Jossey-Bass.
- Lazarus, R.S. (1984). On the primacy of cognition. *American Psychologist*, 39, 124-129
- Lewin, K. (1951). *Field theory in social science*. New York: McGraw-Hill.
- Lewin, K., Lippit, R., & White, R. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10, 271-299.
- Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47, 41-58.
- Liao, H., & Chuang, A. (2007). Transforming service employees and climate: A multi-level, multi-source examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92, 1006-1019.
- Liao, H., Toya, K., Lepak, D.P., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology*, 94, 371-391.

- Little, B.L., & Madigan, R.M. (1997). The relationship between collective efficacy and performance in manufacturing work teams. *Small Group Research*, 28, 517-534.
- Locke, E.A., & Latham, G.P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717.
- Lockwood, P., Jordan, C.H., & Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology*, 83, 854-864.
- Lord, R.G., Diefendorff, J.M., Schmidt, A.M., & Hall, R.J. (2010). Self-regulation at work. *Annual Review of Psychology*, 61, 543-568.
- Luthans, F., Avey, J.B., Avolio, B.J., Norman, S.M., & Combs, G.M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior*, 27, 387-393.
- Luthans, F., Avolio, B.J., Avey, J.B., & Norman, S.M. (2007). Psychological capital: Measurement and relationship with performance and job satisfaction. *Personnel Psychology*, 60, 541-572.
- Luthans, F., & Youssef, C.M. (2004). Human, social, and now positive psychological capital management. *Organizational Dynamics*, 33, 143-160.
- Luthans, F., Youssef, C.M., & Avolio, B.J. (2007). *Psychological capital*. Oxford, UK: Oxford University Press.
- MacKenzie, S.B., Podsakoff, P.M., & Podsakoff, N.P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, 35, 293-A5.
- Mayer, D.M., Aquino, K., Greenbaum, R.L., & Kuenzi, M. (2012). Who displays ethical leadership and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, 55, 151-171.
- Mayer, D.M., Ehrhart, M.G., & Schneider, B. (2009). Service attribute boundary conditions of the service climate-customer satisfaction link. *Academy of Management Journal*, 52, 1034-1050.

- Morrison, E.W., Wheeler-Smith, S.L., & Kamdar, D. (2011). Speaking up in groups: A cross-level study of group voice climate and voice. *Journal of Applied Psychology*, 96, 183-191.
- Muraven, M., & Baumeister, R.F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126, 247-259.
- Naumann, S.E., & Bennett, N. (2000). A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal*, 43, 881-889.
- O'Boyle, E.H.J., Forsyth, D.R., Banks, G.C., & McDaniel, M.A. (2012). A meta-analysis of the Dark Triad and work behavior: A social exchange perspective. *Journal of Applied Psychology*, 97, 557-579.
- Ochsner, K.N., Bunge, S.A., Gross, J.J., & Gabrieli, J.D.E. (2002). Rethinking feelings: An fMRI study of the cognitive regulation of emotion. *Journal of Cognitive Neuroscience*, 14, 1215-1229.
- Ofstroff, C., Kinicki, A.J., & Tamkins, M.M. (2003). Organizational culture and climate. In W.C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Handbook of industrial and organizational psychology*, 565-593. New York: Wiley.
- Ones, D.S., & Viswesvaran, C. (1996). Bandwidth-fidelity dilemma in personality measurement for personnel selection. *Journal of Organizational Behavior*, 17, 609-626.
- Parasuraman, A., Berry, L.L., & Zeithaml, V.A. (1991). Perceived service quality as a customer-based performance measure: An empirical examination of organizational barriers using an extended service quality model. *Human Resource Management*, 30, 335-364.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Patterson, M.G., West, M.A., Shackleton, V.J., Dawson, J.F., Lawthom, R., Maitlis, S., Robinson, D.L., & Wallace, A.M. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, 26, 379-408.

- Paulin, M., Ferguson, R.J., & Bergeron, J. (2006). Service climate and organizational commitment: The importance of customer linkages. *Journal of Business Research*, 59, 906-915.
- Phelps, E.A. (2006). Emotion and cognition: Insights from studies of the human amygdala. *Annual Review of Psychology*, 57, 27-53.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Porath, C.L., & Bateman, T.S. (2006). Self-regulation: From goal orientation to job performance. *Journal of Applied Psychology*, 91, 185-192.
- Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36, 717-731.
- Quinn, R.E., & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review*, 122-140.
- Quinn, R.E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29, 363-377.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87, 698-714.
- Richardson, H.A., & Vandenberg, R.J. (2005). Integrating managerial perceptions and transformation leadership into a work-unit level model of employee involvement. *Journal of Organizational Behavior*, 26, 561-589.
- Riordan, C.M., Vandenberg, R.J., & Richardson, H.A. (2005). Employee involvement climate and organizational effectiveness. *Human Resource Management*, 44, 471-488.
- Roe, R.A. (1999). Work performance: A multiple regulation perspective. In C.L. Robertson (Ed.), *International review of industrial and organizational psychology*, 231-335. New York: John Wiley & Sons Ltd.

- Rogg, K.L., Schmidt, D.B., Shull, C., & Schmitt, N. (2001). Human resource practices, organizational climate, and customer satisfaction. *Journal of Management*, 27, 431-449.
- Rousseau, D.M. (2011). Reinforcing the micro/macro bridge: Organizational thinking and pluralistic vehicles. *Journal of Management*, 37, 429-442.
- Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Salanova, M., Agut, S., & Peiró, J.M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90, 1217-1227.
- Schneider, B. (1975). Organizational climates: An essay. *Personnel Psychology*, 28, 447-479.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.
- Schneider, B., Ehrhart, M.G., & Macey, W.H. (2011). Perspectives on organizational climate and culture. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology: Vol. 1. Building and developing the organization*, 373-414. Washington D.C.: American Psychological Association.
- Schneider, B., Ehrhart, M.G., & Macey, W.H. (2013). Organizational culture and climate. *Annual Review of Psychology*, 64, 361-388.
- Schneider, B., Ehrhart, M.G., Mayer, D.M., Saltz, J.L., & Niles-Jolly, K. (2005). Understanding organization-customer links in service settings. *Academy of Management Journal*, 48, 1017-1032.
- Schneider, B., Parkington, J.P., & Buxton, V.M. (1980). Employee and customer perceptions of service in banks. *Administrative Science Quarterly*, 25, 252-267.
- Schneider, B., White, S.S., & Paul, M.C. (1998). Linking service climate and customer perceptions of service climate: Test of a causal model. *Journal of Applied Psychology*, 83, 150-163.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30, 526-537.

- Snyder, M. (1987). *Private appearances/public realities: The psychology of self-monitoring*, New York: Freeman.
- Spector, P. (1985). Measurement of human resources staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13, 693-712.
- Spector, P.E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9, 221-232.
- Stone-Romero, E.F., & Rosopa, P.J. (2008). The relative validity of inferences about mediation as a function of research design characteristics. *Organizational Research Methods*, 11, 326-352.
- Thau, S., & Mitchell, M.S. (2010). Self-gain or self-regulation impairment? Tests of competing explanations of the supervisor abuse and employee deviance relationship through perceptions of distributive justice. *Journal of Applied Psychology*, 95, 1009-1031.
- Tice, D.M., Baumeister, R.F., Shmueli, D., & Muraven, M. (2007). Restoring the self: Positive affect helps improve self-regulation following ego depletion. *Journal of Experimental Social Psychology*, 43, 379-384.
- Unger, A., & Stahlberg, D. (2011). Ego-depletion and risk behavior. *Social Psychology*, 42, 28-38.
- Vandenberg, R.J., Richardson, H.A., & Eastman, L.J. (1999). The impact of high involvement work processes on organizational effectiveness: A second-order latent variable approach. *Group and Organization Management*, 24, 300-339.
- Wallace, J.C. (in progress). *The good life*.
- Wallace, J.C., Butts, M.M., Johnson, P.D., Stevens, F.G., & Smith, M.B. (2013). A multilevel model of employee innovation: Understanding the effects of regulatory focus, thriving, and employee involvement climate. *Journal of Management*.
- Wallace, J.C., Edwards, B.D., Shull, A., & Finch, D.M. (2009). Examining the consequences in the tendency to suppress and reappraise emotions on task-related job performance. *Human Performance*, 22, 23-43.

- Wallace, J.C., Johnson, P.D., & Frazier, M.L. (2009). An examination of the factorial, construct, and predictive validity and utility of the regulatory focus at work scale. *Journal of Organizational Behavior, 30*, 805-831.
- Warren, C.R. (2006). *On the importance of balancing organizational stakeholders: Investigating climate perceptions using referent cognitions and polynomial regression*. Unpublished dissertation, Tulane University, New Orleans, LA.
- Watson, C.B., Chemers, M.M., & Preiser, N. (2001). Collective efficacy: A multilevel analysis. *Personality and Social Psychology Bulletin, 27*, 1057-1068.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
- Welbourne, T.M., Johnson, D.E., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal, 41*, 540-555.
- Westphal, M., & Bonanno, G.A. (2004). Emotion self-regulation. In M. Beauregard (Ed.), *Consciousness, emotional regulation and the brain*, 1-34. Philadelphia: John Benjamins B.V.
- Whitman, D.S., Van Rooy, D.L., & Viswesvaran, C. (2010). Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. *Personnel Psychology, 63*, 41-81.
- Wood, S., & de Menezes, L.M. (2011). High involvement management, high-performance work systems and well-being. *The International Journal of Human Resource Management, 22*, 1586-1610.
- Zajonc, R.B. (1984). On the primacy of affect. *American Psychologist, 39*, 117-123.
- Zatzick, C.D., & Iverson, R.D. (2006). High-involvement management and workforce reduction: Competitive advantage or disadvantage? *Academy of Management Journal, 49*, 999-1015.
- Zhang, Z., Zyphur, M.J., & Preacher, K.J. (2009). Testing multilevel mediation using hierarchical linear models: Problems and solutions. *Organizational Research Methods, 12*, 695-719.

- Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*, 85, 587-596.
- Zohar, D., & Luria, G. (2004). Climate as a socio-cognitive construction of supervisory safety practices: Scripts as proxy to behavior patterns. *Journal of Applied Psychology*, 89, 322-334.
- Zyphur, M.J., Warren, C.R., Landis, R.S., & Thoresen, C.J. (2007). Self-regulation and performance in high-fidelity simulations: An extension of ego-depletion research. *Human Performance*, 20, 103-118.

APPENDICES

Survey Items

Phase One

ComReg (indicates items that were dropped for 16-item scale)*

1. I am aware of my body language when going after my goal
2. I monitor my actions and behaviors in my mind's eye
3. I recognize my behaviors are in sync with the goal I am pursuing
4. *I change my behavior to overcome potential obstacles
5. I change my behavior to accomplish 'small-victories' when going for a goal
6. When going after a goal I recognize if I am 'thinking the goal'
7. I am aware of my thoughts while striving for a goal
8. I am aware when my thoughts align with my goal
9. I self-observe when going after a goal
10. *While striving for goals, I adapt my thinking to be in sync with the goal
11. When striving for a goal, I change my strategies to maximize gains
12. I choose which thoughts I should exercise and which thoughts I should discard
13. *I know how I feel when going after a goal
14. I recognize I am 'amped up' going after this goal
15. I recognize my passion for my goal
16. I reappraise and modify my emotions to be in line with my goals
17. I change my emotions to ensure they are in tune with the goal
18. I adapt my raw emotions into goal-targeted motivation
19. I adapt my emotions during goal-striving by 'educating the emotion' to be in tune with the goal

Satisfaction

1. I feel that training for employees is adequate.
2. My organization provides time off for training.
3. My coworkers make my day better.
4. I get along well with my coworkers.
5. My supervisor is quite competent in doing his/her job

6. My supervisor is fair to me.
7. Everything else equal, my job is better than most.
8. My job is enjoyable.

PANAS

1. Interested
2. Distressed
3. Excited
4. Upset
5. Strong
6. Guilt
7. Scared
8. Hostile
9. Enthusiastic
10. Proud
11. Irritable
12. Alert
13. Ashamed
14. Inspired
15. Nervous
16. Determined
17. Attentive
18. Jittery
19. Active
20. Afraid

Dark Triad

1. I tend to manipulate others to get my way
2. I have used deceit or lied to get my way
3. I have used flattery to get my way
4. I tend to exploit others towards my own end
5. I tend to lack remorse
6. I tend to be unconcerned with the morality of my actions
7. I tend to be callous or insensitive
8. I tend to be cynical
9. I tend to want others to admire me
10. I tend to want others to pay attention to me
11. I tend to seek prestige or status
12. I tend to expect special favors from others

Regulatory Focus

1. In general, I am focused on preventing negative events in my life.
2. I am anxious that I will fall short of my responsibilities and obligations.
3. I frequently imagine how I will achieve my hopes and aspirations.
4. I often think about the person I am afraid I might become in the future.
5. I often think about the person I would ideally like to be in the future.
6. I typically focus on the success I hope to achieve in the future.
7. I often worry that I will fail to accomplish my goals.
8. I often think about how I will achieve success.
9. I often imagine myself experiencing bad things that I fear might happen to me.
10. I frequently think about how I can prevent failures in my life.
11. I am more oriented toward preventing losses than I am toward achieving gains.
12. My major goal in school right now is to achieve my academic ambitions.
13. My major goal in school right now is to avoid becoming an academic failure.
14. I see myself as someone who is primarily striving to reach my “ideal self”—to fulfill my hopes, wishes, and aspirations.
15. I see myself as someone who is primarily striving to become the self I “ought” to be—to fulfill my duties, responsibilities, and obligations.
16. In general, I am focused on achieving positive outcomes in my life.
17. I often imagine myself experiencing good things that I hope will happen to me.
18. Overall, I am more oriented toward achieving success than preventing failure

Emotion Regulation Questionnaire

1. When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.
2. I keep my emotions to myself.
3. When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.
4. When I am feeling positive emotions, I am careful not to express them.
5. When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.
6. I control my emotions by not expressing them.
7. When I want to feel more positive emotion, I change the way I'm thinking about the situation.
8. I control my emotions by changing the way I think about the situation I'm in.
9. When I am feeling negative emotions, I make sure not to express them.
10. When I want to feel less negative emotion, I change the way I'm thinking about the situation.

Phase Two:

High Involvement Management

1. My manager/supervisor encourages stakeholders to set goals above their past performance accomplishments.
2. My manager/supervisor encourages stakeholders to regularly record their performance accomplishments.
3. My manager/supervisor provides updates regarding the status of the ideas that they have represented to upper-management.
4. My manager/supervisor encourages stakeholders to present contradicting opinions during meetings
5. My manager/supervisor sets goals with stakeholders during performance evaluations.
6. My manager/supervisor encourages the free exchange of ideas and opinions.
7. My manager/supervisor teaches stakeholders how to evaluate their own performance.
8. My manager/supervisor promotes open discussion of all issues that are raised at department meetings.
9. When dealing with upper-management, my manager/supervisor relates what he/she learned to my department.
10. When an employee questions organizational policy, my manager/supervisor relays his/her concerns to upper-management.
11. My manager/supervisor keeps track of individual stakeholders' performance in order to facilitate personal goal setting.
12. When assigning projects, my manager/supervisor states the expectations of upper-management.
13. When conflicts arise within my department, my manager/supervisor acts as a mediator.
14. My manager/supervisor encourages employee questions in department unit meetings.

Service Climate

How would rate...a) employees, b) customers

1. the job knowledge and skills of employees at [your company] to deliver superior quality work and service to:
2. efforts to measure and track the quality of work and service at [your company] for:
3. the recognition and rewards employees receive for the delivery of superior work and service for:
4. the overall quality of service at [your company] provided to:
5. the leadership shown by your immediate supervisor at [your company] in supporting the service quality effort to:
6. the effectiveness of [your company] communication efforts
7. the tools technology, and other resources provided to stakeholders at [your company] to support the delivery of superior quality work and service to:

ComReg

1. I am aware of my body language when going after my goal
2. I monitor my actions and behaviors in my mind's eye
3. I recognize my behaviors are in sync with the goal I am pursuing
4. I change my behavior to accomplish 'small-victories' when going for a goal
5. When going after a goal I recognize if I am 'thinking the goal'
6. I am aware of my thoughts while striving for a goal
7. I am aware when my thoughts align with my goal
8. I self-observe when going after a goal
9. When striving for a goal, I change my strategies to maximize gains
10. I choose which thoughts I should exercise and which thoughts I should discard
11. I recognize I am 'amped up' going after this goal
12. I recognize my passion for my goal
13. I reappraise and modify my emotions to be in line with my goals
14. I change my emotions to ensure they are in tune with the goal
15. I adapt my raw emotions into goal-targeted motivation
16. I adapt my emotions during goal-striving by 'educating the emotion' to be in tune with the goal

Job Performance

1. Quantity of work output
2. Quality of work output
3. Accuracy of work
4. Customer service provided (internally and externally)

Group Service

1. Being friendly and helpful to customers/clients
2. Helping customers/clients when needed
3. Providing solutions to customer/client issues
4. Suggesting products customers/clients might like but did not think of

Oklahoma State University Institutional Review Board

Date: Monday, April 21, 2014
IRB Application No: BU1420
Proposal Title: Validation of ComReg Scale

Reviewed and
Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/20/2017

Principal
Investigator(s):

Mickey B. Smith	Julian Craig Wallace
OSU Tulsa 311 N. Hall	OSU Tulsa 306 N. Hall
Tulsa, OK 74412	Tulsa, OK 74106

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

X The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,


Sheila Kennison, Chair
Institutional Review Board

Oklahoma State University Institutional Review Board

Date: Wednesday, April 16, 2014
IRB Application No: BU1419
Proposal Title: Another Link in the Service Profit Chain

Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 4/15/2015

Principal Investigator(s):

Mickey B. Smith	Julian Craig Wallace
OSU Tulsa 311 N. Hall	OSU Tulsa 306 N. Hall
Tulsa, OK 74412	Tulsa, OK 74106

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☐ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,


Sheila Kennison, Chair
Institutional Review Board

VITA

Mickey Brandon Smith

Candidate for the Degree of

Doctor of Philosophy

Thesis: ANOTHER MISSING LINK IN THE SERVICE PROFIT CHAIN:
COMPOSITE SELF-REGULATION AS A MEDIATOR

Major Field: Business Administration (Management)

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Business Administration at Oklahoma State University, Stillwater, Oklahoma in December, 2014.

Completed the requirements for the Master of Arts in Psychology at the University of West Florida, Pensacola, FL in 2011.

Completed the requirements for the Bachelor of Arts in Psychology at University of South Alabama, Mobile, AL in 2009.

Experience:

Consultant for AOE Group, Center for Applied Psychology at the University of West Florida

Professional Memberships:

Academy of Management, 2011-present

Society for Industrial/Organizational Psychology, 2009-present

American Psychological Association, 2014-present

Southern Management Association, 2011-present