# GOAL INFLUENCE IN ORGANIZATIONAL IDENTIFICATION AND POST-CHOICE BEHAVIOR

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#### **ABSTRACT**

TODD D. WOODRUFF: Goal Influence in Organizational Identification and Post-Choice Behavior (Under the direction of Jan Benedict Steenkamp)

Consumption goals instill enduring motivational force and positive emotions, making goal-relevant knowledge more accessible, directing attention, and shaping our judgments. Consumer goals are often used to segment markets, target prospective members, and inform marketers about the appropriate use of marketing mix instruments. This article demonstrates that the individual membership goals used to generate interest and induce membership have powerful and pervasive effects on the development of organizational identification and the incidence of pro-organizational behaviors, such as retention, providing word-of-mouth endorsement, and service-use. Moreover, these individual membership goals vary significantly in their effects on identification and behavior, and therefore in their value to the organization.

This paper develops and tests a conceptual framework for the relationship between membership goals, organizational perceptions and satisfaction, identification, and member behavior by using cross-sectional, multi-cohort, and two-wave panel data. It consistently finds that membership goals have significant effects on how the organization is perceived, satisfaction with the organization, organizational identification, and the incidence of pro-organizational behaviors. In general, intrinsic membership goals, such as personal self-enhancement and altruistic service to the organization's mission, are

associated with more positive perceptions of the organization, higher levels of social satisfaction, increased organizational identification, and more frequent pro-organizational behaviors. Conversely, economic membership goals tend to be associated with less positive perceptions of the organization, higher levels of economic satisfaction, decrease organizational identification, and fewer pro-organizational behaviors. Interestingly, individual membership goals had no effect on identification growth. Nevertheless, the difference in identification between those with strong intrinsic goals and those with strong economic goals was quite large, with the level of post-socialization identification among those with strong economic goals failing to reach the level of pre-socialization identification among those with strong intrinsic goals.

This suggests that managers and marketers must understand how individual membership goals affect perceptions of the organization, their members' level of satisfaction, their degree of identification, and their future behavioral choices. Exclusive use of consumer goal knowledge to maximizing membership numbers and marketing efficiency without considering the long-term impact on the relationship quality and behavior is myopic and may fail to maximize long-term value for the organization.

#### **ACKNOWLEDGEMENTS**

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#### **CHAPTER I: INTRODUCTION**

## 1.1 Membership Organizations and Membership Marketing

This dissertation looks at the influence of membership goals on identification and behavior in the context of membership organizations and membership marketing. For the purpose of this dissertation, membership goals are defined as *personal goals an individual perceives to be facilitated or advanced through the act of joining or maintaining membership*. Membership goals are as varied as the individual, but can often be categorized as relating to either:

- Altruism An intrinsic goal focused on self-transcendence and service to the organization or its causes.
- 2. Self-Enhancing An intrinsic goal focused on improving one's self-concept by improving character or reinforcing/communicating self-definition and self-image.
- Extrinsic/Economic Calculative benefits or rewards (Schwartz 1992, Kasser and Ryan 1993).

As an example, a person may have the altruistic goal of giving back to their alma mater and believe this can be accomplished through membership in their university's alumni association.

Memberships are important for reasons beyond their ability to facilitate individual goals; over 100,000 membership organizations represent an important component of the U.S. economy (U.S. Bureau of Labor Statistics 2006). Associations, which constitute a

large subset of the membership organizations, generate over \$33 billion in revenue annually, hold over \$50 billion in assets, maintain a payroll of almost \$50 billion, and employ over 1.5 million people in the U.S. alone (American Society of Association Executives (ASAE) 2007; 2009).

The impact of membership organizations is also considerable in terms of individual participation and their presence in society. The three largest membership organizations in the U.S. (AARP, AAA, and the U.S. Catholic Church) all have membership of approximately 50 million people (AARP 2008; ASAE 2009) and the average membership among the top 50 paid membership organizations exceeds 3 million (Bhattacharya et al. 1995). A 2011 Google search for "memberships" yielded over 94 million hits representing almost every industry, profession, cause, and interest group. These memberships include brand associations like the Harley Owners Group (HOG), professional associations (e.g. American Marketing Association), advocacy groups (e.g. AARP), political associations, armed forces, universities and educational organizations, religious organizations, clubs, gyms, museums, zoos, and shopping clubs.

While this sampling is quite diverse, most membership organizations can be categorized along two criteria of particular relevance to this study: 1) the type of benefits they provide to their members (economic or socio-emotional) (Bhattacharya 1998) and 2) the level of affiliation typically experienced by members. For example, retail memberships such as Costco tend to be low affiliation (limited to transactional shopping) and provide primarily economic benefits to its members. Doctors Without Borders, on the other hand, is a non-profit, cause-based, high affiliation membership where member

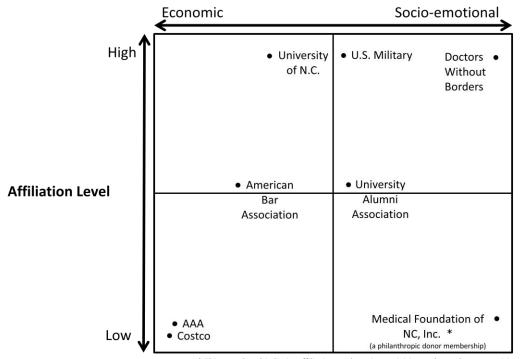
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<sup>&</sup>lt;sup>1</sup> Affiliation is defined as involvement or association with the organization.

doctors are embedded in the organization and receive socio-emotional benefits from their service to others and the organization's cause. University alumni associations represent a membership organization that tends to be positioned near the middle of both criteria. Members may derive both socio-emotional benefits (e.g. feeling good about supporting their alma matter) and economic benefits (e.g. job networking), while being able to maintain a level of affiliation that can range from high (e.g. someone who actively attends sponsored events and promotes the university) to very low (e.g. limiting involvement to passively receiving association emails and publications) (Figure 1.1). This dissertation will focus on membership contexts where there are medium to high levels of affiliation and membership benefits are not exclusively economic.

Figure 1.1 Organizational Positioning by Benefit Type and Affiliation Level

Benefit Type



<sup>\*</sup> This membership limits affiliation to donating activities and member recognition. Member in return receive only socio-emotional rewards.

## 1.2 The Influence of Membership Goals

Regardless of their characteristics, most membership organizations 1) engage in marketing activities to attract and enroll new members, 2) benefit from high quality relationships with these members, and 3) receive value from their members' relational behaviors (Bhattacharya et al. 1995; Sheth and Parvatiyar 1995). Membership goals play a key role in all three cases. In the first case, membership organizations use knowledge about their prospective members' goals, either directly or indirectly, to segment their market, target prospective members, and make decisions regarding the appropriate use of marketing mix instruments (Cermak, File, and Prince 1994). Goal knowledge is vital to these actions because goals function as prime determinants of attitudes, choices, and behaviors (Ajzen and Fishbein 1980). Furthermore, goal-relevant knowledge is more accessible, receives increased attention and processing (Aarts, Dijksterhuis, and DeVries 2011; Fishbach and Ferguson 2011), and influences how prospective members evaluate and organize information, options, and behaviors (Fishbach and Ferguson 2011; Warren, McGraw, and Van Boven 2010).

In the second case, membership goals can affect identification through their influence on attitudes, evaluations, and expectations regarding the member-organization relationship (Ajzen and Fishbein 1980). In the final case, goals can influence member behaviors through their indirect effect on identification (Arnett, German, and Hunt 2003) and their direct effect on the evaluation and execution of behavioral options (Fishbach and Ferguson 2011). This influence is potentially quite important, because the value of relational behaviors (e.g. retention, advocacy, referrals and promoting, volunteering, and donating) may represent most of the member's value, particularly among non-profit and

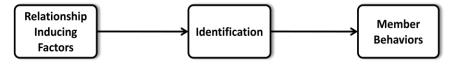
non-paid memberships (Arnett et al. 2003; Bhattacharya et al. 1995). Even within for-profit firms, relationship quality and behavior contributes substantial value through increased buying, willingness to pay, retention, and referrals (Palmatier 2008).

The influence of membership goals on the evaluation of the membership offering, identification, and future member behavior is not necessarily homogeneous across goals. There is the potential that some goals will have a positive influence on membership choice, identification, and behavior, while other goals will have a positive effect on only the membership choice, with a null or negative effect on identification and/or future behavior. Take for example university graduates considering membership in their school's alumni association. In this hypothetical illustration there is a segment of the population that has the goal of acquiring access to member benefits, such as the association's credit union, and another segment that has the goal of giving back to their alma mater. If the alumni association has identified these segments, it can cater its offerings and marketing to address both segments' membership goals and thereby influence their membership choice. After the membership choice is made, the value created for the organization by the individuals from these segments may vary based on their reasons for choosing the membership. For example, individuals with a goal of giving back to their alma mater may, on average, identify more strongly with the organization and be more likely to enact behaviors that are important to the organization than members seeking access to benefits.

While it seems reasonable that individuals with different membership goals could select the membership with similar frequency, yet vary in their identification and behavior based on their reasons for choosing the membership, the empirical evidence is

limited. Numerous studies have examined the antecedents and consequences of relationship quality (Geyskens, Steenkamp, and Scheer 1996; Morgan and Hunt 1994; Palmatier 2008), but few studies have looked at the antecedents and consequences of relationship quality within the membership context. These few studies measured relationship quality as organizational identification, which can be thought of as a sense of connectedness to the organization and tendency to define one's self in terms of the organization (Bhattacharya et al. 1995; Mael and Ashforth 1992). These studies find that identification with the membership organization has a strong positive effect on relational behaviors, such as retention and promoting (Bhattacharya et al. 1995; Mael and Ashforth 1992). They also find the effects of relationship-inducing factors, such as perceived organizational prestige and distinctiveness, are largely mediated by identification as depicted in Figure 1.2 (Arnett et al. 2003; Bhattacharya et al. 1995; Mael and Ashforth 1992).

Figure 1.2 Identification-Based Relational Model (adapted from Arnett et al. 2003



While this body of research provides important insights into relationship quality and marketing relevant membership behaviors, it does not explore the influence of membership goals on the relational model in Figure 1.2. This omission is important because 1) organizations are using knowledge of membership goals (directly and indirectly) to target marketing actions and induce membership choice, and 2) goal and hierarchy of needs theories suggest that membership goals should influence perceptions

<sup>2</sup> One exception to the use of identity or identification as the measure of membership relationship quality is Gruen, Summers and Acito (2000) who use membership commitment.

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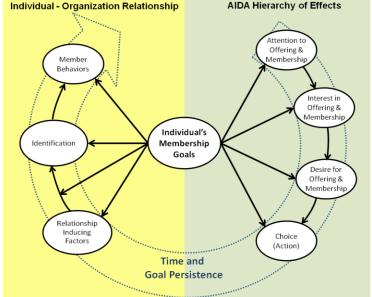
and expectations of the organization, relationship quality, and member behavior (Hall and Schneider 1972).

This argument can be illustrated by examining the effects of membership goals on an AIDA Hierarchy of Effects model and on an identification-based relational model (Figure 1.3). The right side of the figure depicts that membership goals generate 'attention' to the offering, gain and hold 'interest' in the membership, arouse 'desire' to become a member, and induce 'action' (membership choice). The left side of the figure also represents that membership goals which remain salient following the membership choice will influence the subsequent relationship by affecting perceptions of the organization (and other relationship-inducing factors), relationship quality (identification), and a number of important membership behaviors (e.g. retention and promoting). Note that the AIDA model does not influence the relational model, rather it depicts that persistently salient membership goals affect both choice and the subsequent relationship.

Figure 1.3 Goal Effects on Relational and AIDA Models (models adapted from Vakratsas and Ambler 1999; Arnett et al. 2003)

Individual - Organization Relationship

AIDA Hierarchy of Effects



## 1.3 Research Objectives

This dissertation makes use of earlier studies to integrate goal theory with social identity and organizational identification theory within the membership context in order to develop a conceptual framework for the effects of membership goals on an identification-based relational model (Figure 1.2). This dissertation develops new empirical evidence that demonstrates that membership goals do more than drive the membership decision; they also have substantial effects on how an organization is perceived, on organizational identification, and on member behaviors. Accordingly, I argue that organizations marketing to prospective members should look beyond the use of membership goals to target segments that can be recruited most efficiently or in the greatest number, and should also consider the down-stream consequences of those goals on the member's value to the firm. Failing to do so can result in myopic marketing decisions that drive higher membership numbers but create suboptimal customer lifetime value.

This dissertation does not test the AIDA model, nor does it directly measure the effect of specific membership goals on the initial membership choice. Instead it uses specific membership goals that are both reasonably widespread in their application and known to be used by the sample organization to segment their market and induce membership choice. This approach enables me to test the hypotheses that membership goals known to influence the initial membership choice have substantial effects on: 1) perceptions of the organization and other relationship-inducing factors, 2) identification with the organization, 3) member behaviors (i.e. retention, referrals, sacrifice, participation, and use of services), 4) the strength of the relationships between

relationship-inducing factors and identification (Figure 1.4).<sup>3</sup> Additionally, it enables me to test the degree to which these specific membership goals differ in their effects and investigate the dynamics of this relationship in terms of temporal precedence and growth parameters of key constructs. From a managerial perspective, the knowledge generated from this research should be particularly important for 1) assessing differences in member's long-term value to the organization based on their membership goals, in settings where economic contributions reflect only a portion of a member's value to the organization and 2) developing approaches to influence retention, sacrifice, participation, and promotion behaviors among different membership segments.

Relationship Inducing Factors

1
2
3

Member Behaviors

Membership Goals

Figure 1.4 Hypothesized Effects of Membership Goals on the Relational Model

# **1.4 Empirical Context**

This dissertation uses samples from the United States Army to refine the conceptual model and to empirically test research hypotheses. The Army provides an

<sup>3</sup> Figure 1.4 illustrates the four general hypotheses explored in this dissertation. The full hypothesized model includes seven relationship-inducing factors, five membership behaviors, and five membership goals. Specific hypotheses are developed and discussed as part of Essay 1.

interesting and important marketing and organizational behavior context for a number of reasons. First, despite being a government institution, the Army's marketing approach is

remarkably similar to those used in both business and non-profit settings, employing textbook marketing strategies of segmentation based on motivations, attitudes, and barriers to membership (Figure

Figure 1.5 The Army Segmentation Model (U.S. Army 2009)

- + Attitudes about Army service
- + Motivators for Army service
- + Barriers for Army service
- Create customer groups from custom Army market segments
- Use customer groups for directed marketing to send the right message in the right medium to the right target at the right time

1.5); brand positioning based on detailed knowledge of these segments; and a sophisticated use of marketing mix tools based on their positioning strategy and knowledge of each segment.

Second, the Army's current marketing and member integration paradigms assume that specific membership motivations or goals are less important as long as they induce membership and the individual is a high school graduate, scoring sufficiently high on aptitude testing. This is premised on the belief that initial training, acculturation, and socialization will create the desired psychological and behavioral outcomes as part of the civilian-to-soldier transformation. The Army, therefore, is focused on enlisting sufficient numbers of qualified soldiers with the maximum efficiency and is not considering the potential effects of membership goals on the Army-Soldier relationship and future membership behaviors that are of great importance to the Army. This provides a favorable setting for testing if the membership goals used to segment

prospective members and target marketing actions have downstream affects on relationship quality and behavior.

Third, the Army is an inherently high-affiliation, identity-conferring membership choice (Kleine, Kleine, and Brunswick 2009), requiring the individual to consider the consequences of choosing a high-affiliation relationship and its effect on one's identity. But the Army also emphasizes numerous functional aspects of its membership in its marketing campaign and direct recruiting efforts, resulting in its evaluation by some potential members from this functional perspective. In fact, more than one-third of Soldiers join primarily for reasons other than self-improvement or service/altruism goals and are instead more motivated by college money, bonuses, pay, or other forms of calculative benefits (Woodruff, Kelty, and Segal 2006).

Lastly, Soldier behavior aligns well with relational behaviors generally valued within the membership context. For example, behaviors that contribute to the Soldier's lifetime value to the Army include providing word-of -mouth promoting to generate interest and overcome concerns among prospective members, retention/reenlistment (which occurs every two to six years), voluntary sacrifice for the organization, participation in optional activities that benefit the Army, and increased consumption of services that are intended to improve Soldier and family wellbeing. Importantly, these are all discretionary behaviors, which should reflect relationship quality better than compulsory behaviors. Overall, the Army context provides a range of membership goals, sufficient variation in identification level, and a number of marketing and organizationally relevant member behaviors necessary for hypotheses testing and modeling.

Enlistment and membership progresses across four general stages: pre-enlistment (consistent with the AIDA model), partial membership among contracted Future Soldiers, member integration and training of New Soldiers, and full membership of Current Soldiers assigned to Army units (Figure 1.6).

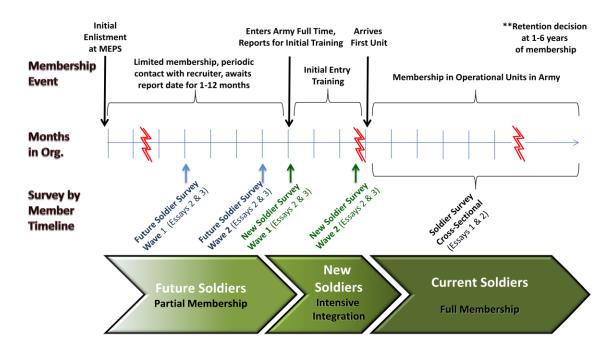


Figure 1.6 Membership Stages and Timeline

In the pre-enlistment stage (not shown) prospective members speak with friends or family having Army experience, review Army advertising (e.g. TV, radio, print, and internet), explore the Army's websites (e.g. GoArmy and America's Army), and/or engaging with an Army recruiter (e.g. the Army's sales force and hometown representatives). If the prospective member passes preliminary qualification screening and desires membership, they proceed to the Military Entrance Processing Station (MEPS) where they receive aptitude testing and screening for physical and mental qualification.

Qualified individuals then meet with a career counselor to select a job and additional enlistment options, such as enlistment duration, cash bonuses, educational benefits, specialized training options, reporting date for initial duty, and assignment location. Once the contract is signed, the individual takes an oath to support and defend the Constitution of the United States of America (see the arrow labeled as Initial Enlistment in Figure 6). At this point, it is common for Future Soldiers to enter a partial membership period that ranges from a couple weeks to 12-months, while waiting for their report date. The length of this period is typically driven by high school or college graduation or the next available slot for their selected job training. During this time, Future Soldiers report to their recruiting company commander for periodic training and accountability, remain at their home towns, are not paid, do not wear uniforms, and do not have to meet Army physical or appearance standards. At the conclusion of this period, the individual reports for active duty and begins initial entry training (see arrow labeled Enters Army Full Time in Figure 1.6).

At initial entry training New Soldiers receive haircuts (males only), uniforms, and medical/administrative in-processing and then begin an intense period of initial entry training. For most New Soldiers this includes 2-months of basic training with an additional 1 to 10-months of specific job training. At the conclusion of this period New Soldiers are sufficiently trained and acculturated to join other Soldiers in operational units. These Soldiers (now referred to as Current Soldiers) then serve their enlistments at one or more of the hundreds of possible global assignments for the remainder of their initial enlistment (2 to 6-years), before reaching their exit/reenlistment point.

The ideal study of membership goal influence on identification and behavior would include a longitudinal panel study across all four stages, as well as in-depth cross-sectional surveys of each group. Two constraints require adjustments to this sampling approach. First, access to potential members at the pre-enlistment stage was not possible, and second, the total timeline of this research was insufficient to follow a panel (or panels) of individuals through the remaining three stages. As an alternative approach, three membership samples from the United States Army were used. The first sample was drawn from Future Soldiers who had enlisted and were now awaiting their report dates for their initial entry training. The second sample was drawn from New Soldiers receiving initial entry training and integration. The final sample was drawn from the population of active duty Soldiers (Current Soldiers) typically having between six months and 15 years of membership in the Army.

Current Soldiers completed a single cross-sectional survey, while both New Soldiers and Future Soldiers completed two-wave panel surveys. Figure 1.6 positions these surveys along the membership timeline and within the membership stages. Current Soldiers provided the best opportunity for testing the core hypotheses (Figure 1.4) because they have the necessary experience to assess the behavioral intentions included in the model. There is some concern that this group is the furthest removed from their enlistment decision and may not recall their membership goals; however, Soldier interviews suggest this is not the case. More concerning is the potential of biased memories.

New Soldiers were surveyed immediately upon arriving to their administrative reception station, where they prepared for initial entry training by receiving uniforms and

haircuts and complete administrative and medical processing. The same New Soldiers were surveyed again between two and three months later, just prior to graduation from initial entry training. These surveys enable me to test the validity of the hypothesized and final models from the Current Soldier sample within the previous membership stage and then compare and contrast membership goal effects of Current and New Soldiers. Most importantly, this membership stage is where I expect the greatest change in terms of identification and behavioral intentions. The panel surveys from this group enable me to examine changes in the level and slopes of identification and behaviors based on specific membership goals.

The Future Soldier sample is most proximate to their enlistment decision and should provide the most accurate measure of membership goals. Future Soldiers were surveyed several months before reporting for initial entry training and again just prior to reporting for their initial entry training. These two panel surveys enable me to test the validity of the final models from the Current and New Soldier samples within the Future Soldier sample and then compare and contrast membership goal effects of Current and New Soldiers with Future Soldiers. The two panel surveys enable me to examine if membership goals influence change in the level and slopes of identification and behaviors. While I expect less change within this panel relative to the New Soldier panel, anticipatory socialization and modest participation may still create sufficient change to examine the differential effects of membership goals. Collectively, these three samples provide the data necessary for testing and validating the four hypotheses depicted in Figure 4 through the use of structural equation modeling, multi-group structural equation

modeling, and latent growth modeling, which function as the three primary methods of analysis in this study.

#### 1.5 Dissertation Structure and Preview

This dissertation is divided into three essays. The first essay (Chapters II through V) develops the theory, hypotheses and baseline structural model, the second essay (Chapters IV through X) examines multiple membership cohorts, and the third essay (Chapters XI through XIII) explores how membership goals affect change in the member-organization identification and behavior.

# 1.5.1 Essay I (Chapters II through V)

The objectives of Essay I are threefold:

- Develop an integrated 'membership goal-identification' model grounded on strong theory and existing empirical evidence from multiple academic fields.
- 2. Introduce and discuss the development and validation of the scales and instruments needed to test the research hypotheses.
- 3. Empirically test a 'membership goal-identification' structural model using the Current Soldier sample in order to fully understand its mechanisms and revealed structure. This includes validating the identification-based relational model and then testing the effects of membership goals across the full breadth of the relational model (see numbers 1 to 4 on page 18).

The essay begins with a discussion of goal, social identity, and organizational identification theories and their relevance for membership organizations. I then present

an argument for using identification as a measure of relationship quality within this study.

This portion of Essay I concludes with a discussion of existing evidence that suggests membership goals will affect identification-based relationships and behaviors and the introduction of a conceptual model that illustrates these effects.

Essay I continues with the development of the full model and hypotheses. Here I hypothesize the effects of specific types of membership goals (altruism/service, self-image/self-enhancement, and three types of economic benefits) on the identification-based relational model, lay out the supporting arguments for each relationship, and then represent these relationships in a series of visual models.

These hypotheses fall within four categories (see Figure 1.4, page 9):

- 1. The direct effects of membership goals on perceptions of the organization and satisfaction with the organization.
- 2. The direct and indirect effects of membership goals on identification with the membership organization.
- The direct and indirect effects of membership goals on behavior (e.g. retention, word-of-mouth referrals, participation, sacrifice, and use of member services).
- The moderating effects of membership goals on the relationship-inducing factors→identification association.

After discussing the full model and its hypotheses, I introduce the construct scales, survey instrument, and methods necessary for testing the model. I begin with a discussion of the scale development process. Construct measures were adapted from existing scales, but required enough modification to warrant new item development,

pretesting and factorial analysis, and trimming decisions to arrive at the final scales.

After discussing this process, I present the final scales and discuss their psychometric properties. I also introduce the survey instrument and discuss the development and pretesting of the survey for each of the three samples.

Essay I continues with a discussion of Confirmatory Factor Analysis (CFA) and SEM testing of the full model using the cross-sectional data drawn from the sample of approximately 1050 current Soldiers. CFA is used to test the factorial validity of the hypothesized latent constructs and to confirm that items selected during pretesting remain valid and reliable in the final sample. SEM is used to estimate the structural relationships in my conceptual model and to test its fit against rival models and alternative explanations. Effects of membership goal constructs in the full model are discussed and compared to the initial hypotheses; this includes tests for moderation and the inclusion of control variables.

# 1.5.2 Essay II (Chapters VI through X)

Essay II builds upon the theory, mechanisms, and structural model developed in Essay1. The objectives of this essay are:

1. To understand how membership evolves across the three membership cohorts representing the partial membership period (Future Soldiers), the membership integration period (New Soldiers), and the full membership period (Current Soldiers) (Figure 6). More specifically, this objective includes identifying differences between cohorts in how they perceive the organization, their level of identification with the organization, and their behavioral expectations.

Also of interest are the differences between the effects of expected satisfaction (Future Soldiers) versus experienced satisfaction (Current Soldiers).

2. To test the validity of the measurement and structural models from Essay I using two other cohorts (New Soldiers and Future Soldiers).

Essay II begins with an introduction to the Army membership process and discussion of the three Soldier samples. Each sample is then related to the Army's membership process and how they contribute to testing of the research hypotheses. From this point, the groups are empirically tested for invariance in their measurement models, structural models, and latent means. The samples are not expected to be fully non-invariant and the purpose of this testing is not to combine the samples. Instead, the type, structure, and magnitude of any differences are used to develop insights into the cohorts, the model, and its mechanisms.

Essay II continues with an introduction to the methods used for testing invariance of the items, the factorial structure, paths, and latent means. It then transitions to a discussion of the results from each of these analyses and their implications for marketing, organizational behavior, and managerial practice.

#### 1.5.3 Essay III (Chapters XI through XIII)

Essay III focuses on the change process within cohorts and has three primary objectives:

1. To identify, describe and explain the change process that occurs between time\_1 and time\_2 in the two samples.

- 2. To identify, describe, and explain how different membership goals affect the change process identified as part of Objective 1.
- To validate the causal predominance represented in the final models from the first two essays.

Essay III focuses on describing and explaining the change process that occurs between time\_1 and time\_2. Change is expected to occur within both the New Soldier and Future Soldier groups. New Soldiers are undergoing an immersive, intense two to three month period of training and integration designed specifically to change civilians to Soldiers or non-members to members. Future Soldiers are in a period of partial membership that precedes training and integration, usually remaining in their home communities and having limited contact with other members of the Army. Despite being less immersive and intense than the initial training and integration period, these Future Soldiers are expected to experience anticipatory socialization, as they prepare to accept new norms, values, attitudes, and behaviors and begin to develop expectations about membership in the Army (Simpson 1962).

This analysis uses the two-wave panel data from the New Soldier and Future Soldier samples to complete latent growth modeling (LGM). LGM, which is also an application of SEM, uses longitudinal variation and individual (cross-sectional) variation to make strong inferences about the change process. The analysis seeks to discover the mean trajectories of change observed in the two panel observations and understand the extent of individual differences in change based on variance in their growth parameters (Steenkamp and Baumgartner 2000). This ability is particularly important because it can reveal heterogeneity among individuals holding different membership goals even if no

aggregate trends are present. More generally, LGM is used to link differences in individual growth parameters to their antecedents and consequences and gain insights into the reasons for individual variation. Essay III describes the LGM methodology in greater detail and sets up the models to be tested. Emphasis is placed on linking differences in identification growth parameters to membership goals, relationship-inducing factors (e.g. perceptions of the organization), and behavioral consequences. Also of interest are the effects of membership goals on relationship-inducing factors and behavior growth parameters.

Essay III continues by discussing the method for testing moderation in LGM and testing the degree to which membership goals moderate the influence of relationship-inducing factors on identification growth parameters. Demonstrating moderation of change in two-wave panel provides stronger evidence than the cross-sectional moderation analysis presented in Essay 1.

Finally, the two-wave panel data from the New Soldier and Future Soldier samples are used to provide additional evidence for the causal predominance suggested by the structural models in Essays I and II. This analysis uses a structural model that takes measures of each latent construct at two points in time and models causal paths from the latent variables at time<sub>1</sub> to the latent variables at time<sub>2</sub> (Byrne 2001). This analysis tests the hypothesis that a latent variable at time<sub>1</sub> causes another latent variable at time<sub>2</sub> or whether the process operates in reverse. For example, I expect identification at time<sub>1</sub> to cause word-of-mouth referral behavior at time<sub>2</sub>, but I must rule out that providing word-of-mouth referrals at time<sub>1</sub> makes the member more identified at time<sub>2</sub>. After discussing the methodology and setting up the models, I discuss the results from the

initial and final (best fitting) models and their implications for the full structural models developed in the first two essays.

The essay concludes with a discussion of the results from each of these analyses and their implications for marketing, organizational behavior, and managerial practice.

This is followed by a discussion of the overall findings and implications across all three essays.

# CHAPTER II: IDENTIFICATION AND GOAL THEORY, HYPOTHESES, AND MODELS

High quality individual-organization relationships provide substantial value to firms and non-profit organizations through members' relational behaviors, such as promoting the organization and increased use of the firm's services (Bhattacharya et al. 1995; Palmatier 2008; Sheth and Parvatiyar 1995). Relationship quality may prove even more important within the membership marketing context (Gruen et al. 2000), yet there has been a dearth of academic study that addresses this area, and only a few have explored the connection between identification and member behaviors. The few studies that explored this relationship have been limited to the college alumni and art museum settings (Arnett et al. 2003; Bhattacharya et al. 1995; Bhattacharya 1998; Mael and Ashforth 1992), and none of these studies investigated the influence of membership goals on identification or other measure of relationship quality.

This chapter seeks to close this gap by examining current organizational identification and goals theory and empirical studies to develop hypotheses and models for their integration. These hypotheses and models will demonstrate that membership goals influence not only an organization's efforts to attract and enlist new members (e.g. the right side AIDA model in Figure 1.3), but also the quality of the organization's relationship with its members in terms of their perceptions of the organization, satisfaction, organizational identification, and pro-organizational behaviors (e.g. the left side relational model in Figure 1.3). Before discussing the effects of membership goals

on identification, it is necessary to first outline and understand organizational identification and its nomological network. This knowledge of organizational identification, along with a well developed structural model, is then used as the basis for empirically testing the effects of membership goals on identification, membership behaviors, and members' value to the organization.

Accordingly, this chapter discusses and develops organizational identification theory and builds a set of hypotheses to model the identification process. After validating the identification-based relational model, the chapter explores goal theory and its application to the membership marketing context. Membership goal hypotheses are developed and integrated into the previously validated identification-based relational model. The results of this empirical testing are then discussed and their practical and managerial implications developed. This study's value stems primarily from developing and testing membership goal effects on identification and members' value, but it also makes substantial contributions through 1) synthesizing and validating findings from the few previous studies using identification in the membership marketing context and 2) addressing empirical gaps and inconsistencies within these studies.

# 2.1 Identification and Relationship Quality in Membership Organizations

There is substantial theoretical and empirical support for identity constructs, which have been used for years to explain behavior and relationship performance by multiple academic disciplines (e.g. organizational behavior, marketing, sociology, and social psychology) (Mael and Ashforth 1992; Stryker and Serpe 1982). Identity has also received significant attention from consumer behavior and branding researchers who tend

to focus on the role of identity in influencing preferences, choice, and consumption related behaviors or on the use of the self-brand relationships to signal identity and enhance self perceptions (Belk 1988; Berger and Heath 2007; Kleine, Kleine, and Brunswick 2009). Research in this area convincingly demonstrated that businesses benefit from developing strong identity associations with their offerings, brands, and organization (Cohen and Reed 2006). These identification-based benefits include increased brand loyalty, repurchase and retention behavior, providing positive word of mouth, and public and prominent consumption of the brand and its related products and services (Ahearne, Bhattacharya, and Gruen 2005). Consequently, positioning brands and offerings to reflect particularly desirable identities has become a common means to develop positive brand attitudes and brand loyalty (Cohen and Reed 2006).

While the consumption of products and brand associations may contribute to an individual's identity, identity is principally derived from the social group memberships and social roles of the individual (Ashforth and Mael 1989; Stets and Burke 2000; Stryker and Serpe 1982). This is particularly true in the membership marketing context, where identity is primarily conferred through affiliation with the membership organization and less through the consumption of products, though this distinction can become blurred in some situations (e.g. brand communities such as the Harley Owners Group). This dissertation focuses on social identification with the membership organization, where the individual defines himself in terms of the organization and perceives a connectedness or belongingness with the organization.

Social identity argues that individuals derive their identity principally from the social categories to which they belong, with each person belonging to a unique

combination of social categories (Brewer 1991; Stets and Burke 2000; Taifel and Turner 1985). In this perspective, individuals engage in self categorization and social comparison, through which they seek to develop and improve their positive self-image and self-esteem (Hogg and Abrams 1988; Turner 1987). By classifying themselves and others as in-group (or out-group), individuals enhance their self-image and strengthen their identification with the group (Dutton, Dukerich, and Harquail 1994; Turner 1987). This also functions to emphasize the perceived similarities with in-group members and accentuates the perceived differences relative to out-groups (Stets and Burke 2000). In this way, identity is both a result of social interaction and a source of subsequent behaviors. In the context of relationship or membership marketing, social identity theory suggests that identified individuals will evaluate themselves relative to the in-group's attributes, characteristics, beliefs, values, and behaviors and seek positive comparison and differentiation relative to the other groups (Reed 2002). The more psychologically significant the group membership is, the more salient the identity, and the more it functions psychologically influence perception and behavior (Oakes 1987). Furthermore, individuals tend to reinforce their most salient identities by engaging in relationships (memberships) and enacting behaviors consistent with the expectations associated with the identity. For this reason, organizations benefit from developing and retaining highly identified members.4

Within the membership context, these processes are often referred to as organizational identification. Organizational identification represents a specific form of

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<sup>&</sup>lt;sup>4</sup> There are two dominant identity theories, social identity from the field of social psychological and role identity theory from sociology. Both theories are premised on the symbolic interactionist view (Blumer 1969) that behavior is influenced by the self, which is influenced by society (Hogg, Terry, and White 1995). For simplicity, this study uses only social identity, but role identity could be easily integrated and is largely consistent with social identity in the membership marketing context.

social identification, where the person defines one's self in terms of membership in a particular organization and perceives a "oneness with or belongingness" with the organization (Mael and Ashforth 1992, p. 104). These individuals then evaluate themselves relative to the attributes, characteristics, beliefs, values, and behaviors of the organization to which they are most identified and are most situationally salient (Reed 2002; Stets and Burke 2000). The stronger this identification, the more it should influence perceptions and behaviors of importance to the organization (Oakes 1987; Stets and Burke 2000). The relationships with the organization and others associated with it are used to signal one's similarities with the firm, provide differentiation with out-groups, and ultimately enhance self perceptions. The type of individuals that tend to identify with organizations can vary dramatically, but they all fill some of their self-definitional needs through their relationships with the organizations they support (Ahearne et al. 2005). Because the image, qualities, and mission of organizations vary greatly, so to should the consumers that identify with them.

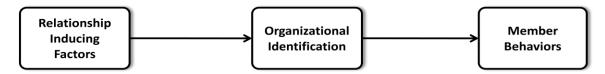
There are several key studies that illustrate the relationships inherent in organizational identification. Mael and Ashforth (1992) found that organizational prestige and distinctiveness, satisfaction, and length of membership all functioned as antecedents of alumni's identification with their alma mater. These conclusions are echoed by later findings that prestige, satisfaction, and length of membership functioned as antecedents of identification among art museum members (Bhattacharya et al. 1995). Arnett et al. (2003) confirmed that participation and prestige functioned to influence identification, but surprisingly did not find a significant relationship between satisfaction

and identification. Lastly, Dutton and colleagues (1994) found that memberships that provided self-continuity and self-enhancement strengthened identification.

In the most basic terms, the existing research suggests that positive perceptions of distinctiveness and prestige, satisfaction, and increased/prolonged engagement with the organization function as relationship-inducing factors that increase identification.

Identification then functions to increase the incidence of important relational behaviors (Figure 2.1).

Figure 2.1 Identification-Based Relational Model (reprint of Fig 1.2)

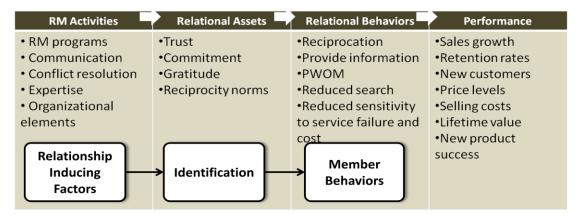


# 2.2 Why Organizational Identification?

From a relationship marketing perspective, identification functions as an important psychological driver in customer-company and member-organization relationships and creates "the kind of deep, committed, and meaningful relationships that marketers are increasingly seeking to build with their customers" (Bhattacharya and Sen 2003, 76). This is particularly true in settings where stakeholders receive social benefits from the relationship (Arnett et al. 2003) and where there are greater levels of involvement. The few relationship marketing studies that use identification as their core relational construct suggest that the identification process fits nicely within the general framework of relationship marketing. Based on the categorization from Figure 2.2, relationship-inducing factors in the organizational identification model (e.g. developing perceptions of organizational prestige) correspond to relationship marketing activities,

identification functions as a form of relational asset, and the behavioral outcomes of identification fit within the categories of relational behaviors and performance outcomes.

Figure 2.2 The Relationship Marketing Framework (adapted from Palmatier 2008)



But why use identification rather than one of the other relational constructs (e.g. commitment, trust, and gratitude/reciprocity) that are available to understand relationship quality and explain/predict relational behaviors? Among the relational constructs, commitment (particularly affective commitment) is most similar to identification, but there are differences. At their core, identification reflects a sense of psychological oneness and is more self-definitional, whereas commitment (affective commitment) represents a psychological relationship between distinct entities and is more dependent on social exchange (van Knippenberg and Sleebos 2006). In general, the more the membership context 1) provides the opportunity for affiliation (direct or psychological), 2) creates social benefits, and 3) provides the basis for positive self comparison, the more appropriate it will be to use identification. Because these conditions are common in many membership contexts, identification is particularly well suited to measuring and understanding relationship quality in this setting.

Identification also provides an understanding of certain behaviors that are not well explained by commitment, gratitude/reciprocity, or other relational constructs that tend to operate on the basis of social exchange. With identification, there is a greater potential for hyper-citizenship behaviors. In this case a person that is highly identified with the firm may perform relational behaviors that strongly benefit the organization even when the organization does not seem to provide commensurate benefits to the individual in return (Mael 1989; Swann, Gomez, Seyel, Morales, and Huici 2009). This may be one of the reasons why nonprofit, cause-based organizations seem to benefit substantially from relationships based on identification. For example, alumni that identified with their university were more likely to donate and to promote the university without any expectation of reciprocity (Arnett et al. 2003).

# 2.3 Where is Organizational Identification Most Appropriate?

Organizations with memberships that provide socioemotional benefits and offer the potential for moderate to high levels of affiliation have the opportunity to benefit from the development of identified individuals and the subsequent increase in its members' pro-organizational behaviors (Figure 1.1, pg 4). Identification is most likely to occur when the individual desires and is able to self-categorize with the organization. This tends to occur when the organization is perceived to 1) have prestige or a desirable corporate image and 2) have some level of distinctiveness that enables the individual to differentiate the firm (and therefore themselves) from other organizations and groups

<sup>&</sup>lt;sup>5</sup> Relationship marketing based on social exchange may limit the value of relational behaviors because the customer/member expects benefits that are commensurate with the value of their previous action. In this way, the level of reciprocity may be limited by the value of the partner's act that preceded it and the expected value of the partner's act they believe will follow it.

(Ahearne et al. 2005; Bergami and Bagozzi 2000; Bhattacharya and Sen 2003; Dutton et al.1994; Mael and Ashforth 1992; Whetten and Godfrey 1998). While prestige and distinctiveness are important, the organizational image must also be congruent with the individual's self-image or desired self image. In other words, the organization must reflect who the individual wants to be or how they want to be viewed. Additionally, the relationship must be important enough to make the identity salient to the individual (Bhattacharya and Sen 2003; Ahearne et al. 2005).

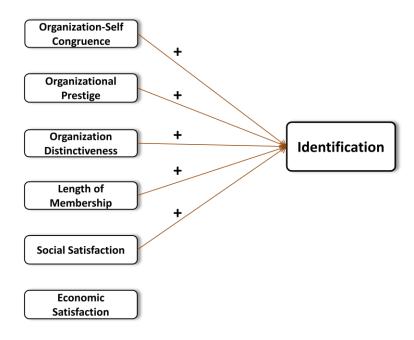
Identification is possible in many settings. In addition to contexts where the customer is also a member (e.g. alumni associations, fitness clubs, or universities), cause-based marketing, nonprofit marketing, and situations where the firm has a substantial brand or consumption communities (e.g. Harley-Davidson or Apple) seem to be particularly well-suited to identification-based relationships (Arnett et al. 2003; Bhattacharya and Sen 2003; Ahearne et al. 2005; Bhattacharya et al. 1995).

## 2.3 Organizational Identification-Based Model of Relationship Quality

#### 2.3.1 Antecedents of Identifications

As shown in Figure 2.3, I anticipate that five factors will contribute to the development of an identification-based relationship. From previous research I have identified perceptions of congruence between the individual's self-concept/desired self-concept and their image of the organization, perceptions of organizational prestige and distinctiveness, social satisfaction associated with the organization, and length of membership as antecedents of organizational identification.

Figure 2.3 Antecedents of Identification



Memberships, particularly those with high levels of affiliation, are evaluated not only on their utility, but also in relation to the self, with the person asking, "Is this organization a strong reflection of who I am or want to be?" and "Can I see myself in this membership role?" This process is an aspect of individuals' effort to engage in self categorization and social comparison to maintain or improve their positive self-image and self-esteem (Hogg and Abrams 1988). Ultimately, the membership needs to contribute to the individual's self-concept by providing self-consistency or self-enhancement. As such, assessment of self-organization congruence and/or desired self-organization congruence should also contribute to identification (Dutton et al. 1994). While the perception of self-organization congruence is sometimes argued to be synonymous with organizational identification, it is possible for a person to recognize the similarities or fit between one's self-image and the organization without feeling a sense of oneness with the organization. For example, a Marine may acknowledge that he or she shares many of the same beliefs,

values, and attributes with the Army without identifying with the Army. As such, I hypothesize that self-organizational congruence is a necessary element of organizational identification.

 $\mathbf{H_{1:}}$  Perceptions of self-organization and/or desired self-organization congruence will be positively related to identification with the organization.

In order for the organization to be perceived as a target for identity fulfillment, it should also be perceived as prestigious and sufficiently distinct from other organizations. When this is the case, the organization provides the opportunity for self-enhancement through identification (self-categorization). In a seminal paper on organizational identification, Mael and Ashforth (1992) find that organizational prestige and organizational distinctiveness both function as antecedents of alumni identification with their alma mater. Similar studies of art museum members and university alumni also found that prestige was a primary factor influencing identification (Bhattacharya et al. 1995; Arnett et al. 2003). Ahearne and his colleagues (2005) show that perceived prestige influenced identification even in a for-profit context where the identity associations were less obvious (pharmaceutical sales). Interactions with other organizational members also play a key role in perceptions of organizational prestige and distinctiveness, so when organizational members were viewed favorably it increased the likelihood that the potential member considered the organization a target for social identity fulfillment (Bhattacharya and Sen, 2003). In general, the more prestigious the organization is perceived to be, the greater the opportunity for enhancing self-concept. Similarly, to the degree the organization is perceived as distinctive from other organizations or competitors, the more clearly it can be used for self-categorization.

 $\mathbf{H}_{2:}$  Perceived prestige is related positively to organizational identification.

**H**<sub>3</sub>: Organizational distinctiveness is related positively to organizational identification.

Dutton and her colleagues argued that the longer a member remains with the organization the more salient it becomes as a basis for self-categorization (1994). Over the last twenty years several studies have provided some evidence to support this argument. Mael and Ashforth (1992) and Bhattacharya et al. (1995) both found that length of membership positively influenced identification, while Arnett and colleagues (2003) found that past participation positively affected identity salience.

**H**<sub>4:</sub> Length of membership will be positively related to organizational identification.

Early research found that satisfaction with the organization's contributions to achieving goals was associated with identification (Hall and Schneider 1972). More recent research has also postulated this relationship. Mael and Ashforth argued that satisfaction depends on the organization 'contributions to the individual's personal objectives', with satisfaction then contributing to organizational identification (1992). Arnett and his colleagues argued that satisfaction with the membership cause the individual to reevaluate or reaffirm their identification with the organization. Despite the earlier finding and the more recent theorizing, the empirical evidence supporting the relationship has been sparse and the results across three studies have been mixed. Two studies failed to find that satisfaction contributed to increased identification or increased organizational identity salience (Arnett et al. 2003; Mael and Ashforth 1992), with only Bhattacharya and his coauthors (1995) finding support for satisfaction (measured as expectation confirmation) contributing to identification.

A review of the satisfaction scales used in these studies suggests a possible cause for the inconsistent results. All three studies use of single satisfaction construct rather

than separate social and economic satisfaction constructs, which may bias their results. Arnett and colleagues (2003) hypothesized that identity is affected by the number and quality of social relationships, but then use a satisfaction scale with three of the four items measuring economic satisfaction and only the fourth item measuring social satisfaction. The study, therefore, fails to test the effects of social satisfaction. Mael and Ashforth (1992) use a satisfaction scale with items that address satisfaction with personal and social development and career training. Though it seems to be more social than the Arnett et al. (2003) scale, it still mixed social and economic satisfaction. Bhattacharya et al. (1995) measure expectation confirmation for services provided by the organization, some of which were social and others economic. Furthermore their scale suffered from low reliability (alpha .65). Ultimately, these studies fail to account for the discrete networks that exist for social and economic satisfaction.

Clarifying the satisfaction identification relationship and the source of inconsistency from previous studies represents an important aspect of this dissertation.

This dissertation makes use of two separate economic satisfaction constructs and one social satisfaction construct and hypothesizes different effects for economic and social satisfaction. The inclusion of both economic and social satisfaction constructs is motivated by two findings: 1) the null result of a satisfaction-identity relationship by Arnett et al. (2003) and Mael and Ashforth (1992) and 2) a finding by Geyskens, Steenkamp, and Kumar (1999) that revealed economic satisfaction and social satisfaction are distinct constructs with consistently and substantially different relationship across a range of settings. Consistent with the hypotheses that identity is affected by the number

and quality of social relationships (Hall and Schneider 1972; Arnett et al. 2003), I predict that social satisfaction will contribute to organizational identification.

 $\mathbf{H}_{5}$ : Social satisfaction will be positively related to identification.

Based on the null results from a satisfaction scale using primarily economic satisfaction items (Arnett et al. 2003) and the inherently social nature of organizational identification, I hypothesize there will be no direct effect from economic satisfaction on identification. However, economic satisfaction is expected to have a direct, positive effect on member behaviors.

 $\mathbf{H}_{6}$ : Economic satisfaction will be unrelated to identification.

# 2.3.2 Influences of Organizational Identification on Behavioral

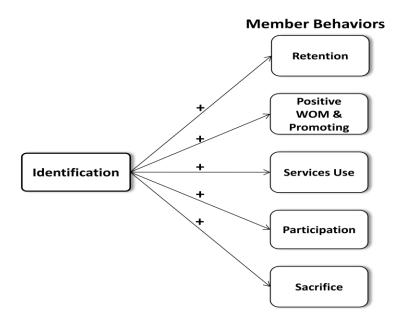
Identified individuals tend to evaluate themselves relative to the attributes, characteristics, beliefs, values, and behaviors of the organization to which they belong (Reed 2002; Stets and Burke 2000). For these individuals, relational behaviors become an act of self-expression, providing self-enhancement, self-continuity, and/or self-distinctiveness. The stronger this identification, the more it should influence the evaluation and enactment of pro-organizational behavior (Oakes 1987; Stets and Burke 2000), even to the point where individuals may seek or construct opportunities to invoke the identity through their behavior (Stryker and Serpe 1994).

In the membership marketing context, several previous studies have demonstrated that identification with an organization influences a number of member behaviors, including increased retention, positive WOM/promoting, participation and helping, donating, and consumption of offerings associated with the identity (Arnett et al. 2003;

Mael and Ashforth 1992; O'Reilly and Chatman 1986). Mael and Ashforth looked at nine behaviors related to member participation and providing positive WOM and found that all nine were positively related to organizational identification. Arnett and his colleagues (2003), looking at identity salience, found that salient organizational identity was positively related to promoting (positive WOM) and donating among museum members. Lastly, O'Reilly and Chatman (1986) found that identification strongly predicted members remaining with the organization.

Based on these findings, I hypothesize that organizational identification may be predictive of a number of behaviors that contribute value to the organization. Data from the current study measures five behaviors that are critical to the organization's success and discretionary in nature. Although this set of membership behaviors is not exhaustive, they are among the more important behaviors in terms of their value to the membership organization. These pro-organizational membership behaviors include retention, providing positive WOM, use of services, participation in organizational activities, and sacrificing for the organization. Each of these behaviors is critical to the success of both profit and non-profit membership organization and the first four are commonly used in marketing research. Sacrifice is less commonly used, but certainly beneficial to most organizations. Furthermore, sacrifice provides an example of hyper-citizenship behaviors that may be better predicted by organizational identification. I hypothesize that all five behaviors will be predicted by and have a positive relationship with organizational identification (Figure 2.4).

Figure 2.4 Behavioral Consequences of Organizational Identification



 $H_{7a}$ : Identification will be positively related to an intention to remain with the organization (retention).

 $\mathbf{H}_{7b}$ : Identification will be positively related to providing positive WOM and advocating for the organization (positive WOM).

 $\mathbf{H}_{7c}$ : Identification will be positively related to the use of services provided by the organization (service use).

 $\mathbf{H}_{7d}$ : Identification will be positively related to participation in discretionary activities that benefit the organization (participation).

 $\mathbf{H}_{7e:}$  Identification will be positively related to making sacrifices for the organization, its mission, or causes (sacrifice).

# 2.3.3 The Full Identification Model

Evidence from these earlier studies also suggests that the effects relationship-inducing factors (e.g. time in the membership and prestige) have on member behaviors (e.g. WOM and retention) is largely mediated by identification (Arnett et al. 2003; Mael and Ashforth 1992), as depicted in Figure 2.5. Additionally, I previously argued that economic satisfaction should be unrelated to identification (H<sub>6</sub>). There is considerable

evidence that indicates economic satisfaction will have behavioral consequences. In one study, pay satisfaction was negatively related to the intention to quit, while dissatisfaction was related to such detrimental behavioral outcomes as lateness, turnover and turnover intentions, and absence (Currall, Towler, Judge and Kohn 2005). Accordingly, I expect economic satisfaction will have a strongly positive, direct effect on retention, WOM, and service use behaviors (Figure 2.5).

 $H_{8a\text{-d}:}$  The effects of organizational perceptions of distinctiveness and prestige, - and social satisfaction on pro-organizational behavior will be fully mediated by organizational identification.

 $H_{9a,b}$ : Economic satisfaction will have a direct, positive relationship with an intention to remain with the organization (retention).

 $\mathbf{H}_{\mathbf{10a,b:}}$  Economic satisfaction will have a direct, positive relationship with providing positive WOM about the organization (WOM).

 $\mathbf{H}_{9c}$ : Economic satisfaction will have a direct, positive relationship with using services provided by the organization (Service-use).

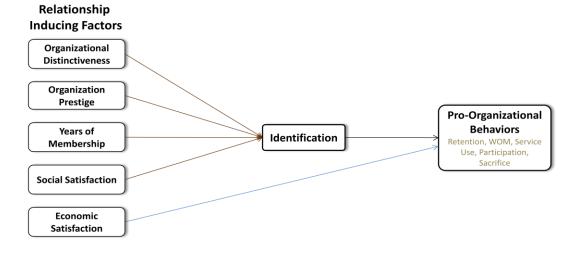
In summary, the model depicted in Figure 2.5 emphasizes the role of identification to explain important relational behaviors, which include retention, providing positive WOM, using services offered by the organization, participation in organizational events, and sacrificing for the organization. The model suggests that identification and subsequent pro-organizational behaviors (mediated through identification) can be increased when the organization raises perceptions of prestige, distinctiveness, and self-organization congruence; enhances social satisfaction associated with the membership, and increases the time in the organization among its members. The model also acknowledges that pro-organizational behavior can be affected directly by economic satisfaction. Figure 2.6 represents a simplified version of this Figure 2.5 and uses a single pro-organizational behavior construct in lieu of the five member behaviors.

This model will serve as the primary basis for assessing the effects of membership goals in the subsequent sections.

**Relationship Inducing Factors Relational Asset Member Behaviors** Organizational Identification Retention Prestige + Organization **Promoting** Distinctiveness and Positive WOM Organization-Self Congruence **Services Use** Length of Membership **Participation Social Satisfaction Economic** Sacrifice Satisfaction

Figure 2.5 The Identification-Based Relational Model

Figure 2.6 Simplified Identification-Based Relational Model



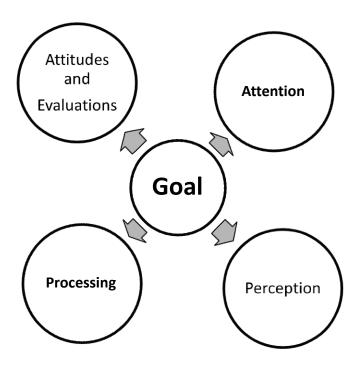
# 2.4 Goal Theory and the Effects of Individual's Membership Goals on Identification

Goals shape our preferences and behaviors by influencing how an individual evaluates and organizes information, options, and behaviors (Fishbach and Ferguson 2011; Kruglanski, Shah, Fishbach, Friedman, and Chun 2002; Warren, McGraw and Van Boven 2010). These powerful processes make goals an important element in both strategic and tactical marketing activities, with individuals' goals used to segment markets, target prospective members, and inform marketers about the appropriate use of marketing mix instruments (Cermak et al. 1994). But this represents only a portion of the potential marketing activities that would benefit from membership goal information. This section reviews evidence that suggests it is possible for an individual's membership goals (reasons for entering the membership) to influence the quality of that relationship. Surprisingly, no published study has examined the effects of individuals' membership goals on identification or member behaviors. This represents an important gap in the literature, which may also be limiting the potential marketing and organizational benefits from membership goal knowledge.

Segmentation and targeting based on potential members' goals is important, but it represents only the most obvious use of goal information and is focused almost exclusively at the front end of the relationship. But some, if not most, membership goals are not satiated through the act of joining, meaning they continue to be salient during the membership period. These active membership goals will continue to instill motivational force and positive emotions, making goal-relevant knowledge more accessible, directing attention to goal-relevant stimuli and information, increasing its processing, and influencing attitudes and evaluations of information and behavioral options of relevance

to the goal (Aarts et al. 2001; Fishbach and Ferguson 2011; Gollwitzer and Moskowitz 1996) (Figure 2.7). Consequently, goals continue to have powerful effects on preferences, choices, and behaviors subsequent to the membership choice. Failing to understand the downstream consequences of membership goals being used to segment the market and maximize membership numbers is a short-sighted and incomplete use of membership goals that may lead to poor managerial decisions and suboptimal customer lifetime value.

Figure 2.7 Goal Influence



To avoid this myopic use of membership goals, organizations must look beyond the influence goals have on the initial membership choice and understanding how relevant membership goals influence expectations, perceptions and satisfaction associated

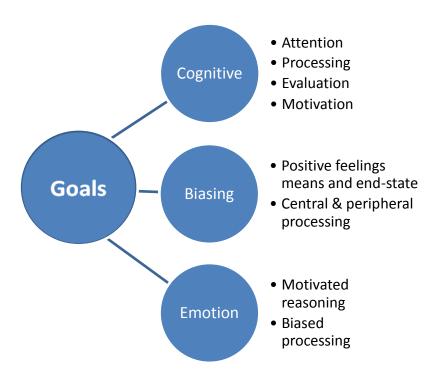
with the organization, the development of identification, and the incidence of behaviors that contribute value to the organization (Figure 1.3, pg 7).

#### 2.4.1 Goal Influence

Before developing hypotheses on how and why goals influence identification and member behaviors, it is necessary to understand what is meant by goals in general and membership goals specifically. Goals are "cognitive representations of a desired endpoint that impact evaluations, emotions, and behaviors" (Fishbach and Ferguson 2011, 3). In more concrete terms, goals represent desired outcomes in an individual's life towards which the person is expecting to or is currently directing energies (Gable 2006, pg 180). In this definition, the end-state functions as a reference point for evaluating information, options, and behaviors (Fishbach and Ferguson 2011) and then developing and organizing those options and behaviors (Kruglanski et al. 2002). This study looks more specifically at goals related to membership in an organization. Membership goals are personal goals an individual perceives to be facilitated or advanced through the act of joining or maintaining membership.

Goals have a number of important qualities. They are inherently positive, providing meaning and purpose, and instilling motivational force (Emmons 1996). Additionally, goals continue to influence evaluations, emotions, and behaviors associated with the membership for as long as they remain active. Goals are also prime determinant of expectations, perceptions, preferences, choice, and behaviors, and influence these factors through three processes: cognition, biasing, and emotion (Figure 2.8).

Figure 2.8 Goal Influence across Multiple Processes



Cognitively, goals shape and change our preferences and behaviors by functioning as a reference point for the evaluation and organization of information, options, and behaviors (Fishbach and Ferguson 2011; Kruglanski al. 2002; Warren et al. 2010). The active goal actually makes goal-relevant knowledge more accessible and influential by enhancing perception of goal relevant information, directing greater attention to goal relevant information, and increasing its cognitive processing (Aarts et al. 2001; Fishbach and Ferguson 2011; Gollwitzer and Moskowitz 1996). In general, the more an option or behavior facilitates the goal, the more intense the motivation (Ajzen and Fishbein 1980), the more it is noticed and processed, and the more positive the attitude (Gabel 2006), and the more positive the evaluation (Brendl and Higgins 1996). Conversely, information, options, and behaviors that inhibit goal attainment are evaluated more negatively. Interestingly, irrelevant information, options, and behaviors may also

experience devaluation even though they do not conflict with the focal goal (Brendl, Markman, and Messner 2003; Shah, Friedman, and Kruglanski 2002).

The effects of goals are not always objective, and even high-effort cognitive processing goals can lead to biased evaluations that result from motivated reasoning and bias processing in order to reach judgments consistent with the focal goal (Kunda 1990). In motivated reasoning, the goal creates motivation to arrive at a desired conclusion, enhances the accessibility of knowledge that is consistent with desired conclusions, and influences which beliefs are accessed to guide the search for information. As such, the goal shapes which information will be obtained to support the desired conclusion and can bias the interpretation of even evidence to the degree that even objectively disconfirming information can be interpreted as goal congruent.

Goals can also influence evaluations and behaviors without substantial cognitive effort by inducing positive emotions towards information, options, and behaviors associated with the goal (Fishbach, Shah, and Kruglanski 2004). The influence of positive emotions on attitudes and evaluations mirror those of cognition, but they operate affectively and are more influential when information and choices receive limited cognitive processing. This means goals can be highly influential even when the individual is not deliberately thinking about information and options related to the goal. Whether goal influence our evaluations, choices, and behaviors through high-effort cognitive, low-effort emotion, or biased processing, there is little doubt that goals have substantial effects on these processes and outcomes.

#### 2.4.2 Goals versus Motives

Goals are not the only motivational factor capable of creating these effects.

Motives and goals share a very similar nomological network and both focus on obtaining desired outcomes. Given this similarity, it is not uncommon to find research where motives and goals are used interchangeably without any distinction between the two (Gable 2006). Furthermore, in some research it is possible to use motives in lieu of goals without any substantial changes to the hypotheses or model. That said, there are substantive differences between goals and motives, and goals are the more appropriate construct for this research.

Motives tend to be more dispositional in nature and relatively stable over time, reflecting deeper desires and needs. Goals, on the other hand, tend to be more proximate and reflect areas in one's life where they are currently directing energy to achieve a more discreet outcome (Gable 2006). Motives, being more dispositional, are thought to precede goals, predisposing people towards goals and influencing their development (Gable 2006; Sheldon, Ryan, Deci, and Kasser 2004). As an example a person may have a strong desire for wealth and seek to acquire a high paying job. In this case, the motive would be the need for wealth, while the goal would be getting a high-paying job.

Motives and goals also tend to explain unique variance in psychological and behavioral outcomes, and in those instances when the constructs are redundant, it is the goal that tends to be significant when both motives and goals are included in the model (Gable 2006). This occurs because the goal is more proximate and situationally specific and therefore tends to explain more closely related to particular behaviors and specific attitudes. In general, this suggests there is value in researchers and marketing managers

knowing both the motives and goals of their customers/subjects, but of the two, goals will provide a better prediction of identification and behavior. The current research measures goals, not motives. Moreover, the organization used in this study segments its population and develops its marketing based on goals, which makes it possible to identify whether the specific goals used to segment the population and craft marketing have downstream effects on identification and pro-organizational behavior.

# 2.4.3 Membership Goal Categories

While specific membership goals may vary between organizations, there are three goal categories that are particularly important to many membership organizations:

- Altruism: This intrinsic membership goal is associated with providing service
  to the organization, its members, its mission, or its causes. In short it focuses
  on self-transcendence and the benefits membership can provide to others
  (Kasser and Ryan 1993; Schwartz 1992).
- 2. <u>Self-Enhancement</u>: This intrinsic membership goal is associated with improving one's self or perceived-self or reinforcing/communicating a perceived or desired self-concept to others. This enhancement may come from association only or can come from personal growth/change that is associated with membership (Kasser and Ryan 1993; Schwartz 1992).
- Economic: This extrinsic membership goal is associated with gaining or maintaining calculative benefits or rewards that are frequently economic in nature (Kasser and Ryan 1993).

As an example, members of an alumni association may have any or all of these three membership goals types. A number of individuals may have the self-transcendent/altruistic goal of giving back to their alma mater. Some individuals may seek self-enhancement from affiliation with the university; while others may have the goal of gaining employment through networking with the association's members.

This classification is based on more than its face-validity and anecdotal observations. Psychological research has often separated goals as either intrinsic or extrinsic (Kasser and Ryan 1993; Sheldon et al. 2004). Intrinsic goals are defined as those goals that are inherently rewarding and are presumed to fulfill some psychological or sociological need, such as belongingness (Kasser and Ryan 1996). Extrinsic goals, by contrast, are those goals that are not directly psychologically satisfying, but rather provide some calculative benefit, such as income.

Altruism and self-enhancement are both intrinsic goals common to the membership context, but there is reason to suspect there may be considerable differences between the two. Schwartz's (1992) influential research on values places self-enhancement and self-transcendence at opposite (and oppositional) points on a continuum. In his argument, actions taken in the pursuit of these two values (and their implicit goals) have psychological, social, and behavioral consequences that may conflict. He explicitly suggests, for example, that the pursuit of achievement and power values (self-enhancement) may conflict with the pursuit of benevolence (altruism). Based on this argument, seeking self-enhancement may hinder actions aimed at enhancing the welfare of others or the organization (altruism or self-transcendence). By using separate self-transcendent and self-enhancing membership goals, I allow for the possibility that

substantive differences exist between the two. Principal components and confirmatory factor analysis of membership goals in the current empirical context lends further weight to this argument, with analyses from multiple cohorts over multiple years indicating that extrinsic/economic, self-enhancement, and self-transcendence/altruism are discrete membership goals (Baker 1990).

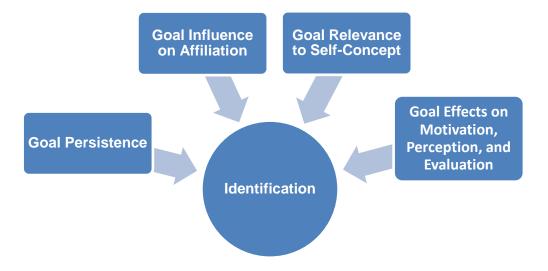
## 2.4.4 Variation among Membership Goal Influence on the Identification Process

Even when these membership goals generate comparable levels of interest and membership volume, there are reasons to expect they may have considerably different effects on identification and member behavior. Before developing specific hypotheses for the effects of these three membership goals on the identification process I will offer a framework for understanding the reasons to expect variation in the effects from extrinsic/economic, intrinsic/self-enhancement goals, and transcendental/altruistic goals on the identification process (Figure 2.9).

I propose that this variation will occur because membership goals differ on:

- 1. The point they become satiated (the goal's persistence).
- 2. The degree to which they promote affiliation or involvement with the organization, which also affects the member's relational orientation.
- 3. Their relevance to a person's self-concept.
- 4. Their predictable effects on motivation, perception, and evaluation of the organization and its behavioral options.

Figure 2.9 Goal Effect Variation



The first three points are relatively uncomplicated; in the first case, the effects of goals on preferences and decisions change over time as the goal changes in its relative salience or is fulfilled (Waren et al. 2010). In short, if the goal is fulfilled its effects on cognition and positive emotions rapidly diminish (Forster, Liberman, and Higgins 2005). Therefore knowing when and how a membership goal will be fulfilled becomes critical to understanding and predicting its effect. For example, membership goals may have very different effects if one is accrued over the lifetime of the membership and the other is gained through the initial act of joining. In the second case, the goal's ability to promote or inhibits affiliation will influence the individual's relational orientation and level of identification with the organization. If the goal can be achieved without incurring greater affiliation with the organization then the individual is less likely to perceive the need for relationship building (Palmatier 2008) and should therefore be much less likely to become identified with the organization. The third point simply suggests that if the membership goal is not relevant to the self-concept, it will have little impact on

identification. The logic behind this argument is straightforward; if the reason for membership is not associated with the individual's self-concept it is less likely for them to use their organizational membership as the basis for self-categorization and self-definition. The final factor is more complex and specific to the membership goal. In short, it says that members are likely to increase the perception, attention, and processing of organizational information and opportunities related to their specific goal or goals. They will have increased motivation to engage in organizational activities that contribute to their goal, and to the extent these activities and opportunities are provided, they will have more positive attitudes towards the organization. In summary, it should be possible to quickly assess whether a membership goal remains active after the membership choice, if it is likely to promote greater affiliation with the organization, if it will promote use of the organization for self-definition, and how it should affect evaluations of organizational information and opportunities.

Table 2.1 shows substantial differences between extrinsic goals and the two intrinsic goals, suggesting the greatest variation should be found between extrinsic and intrinsic goals. Relatively smaller differences exist between self-enhancement and altruism/self-transcendence, suggesting that differences between the effects of these two membership goals may driven less my affiliation or self concept and more by differences in perceptions and evaluations of the organization and the relevance of behavioral options to the membership goal.

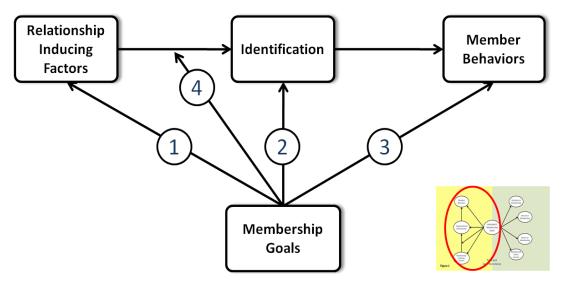
**Table 2.1 Membership Goal Effects** 

Goal Type	Goal Persistence	Goal Influence on Affiliation	Goal Relevance to Self-Concept	Goal Effects on Motivation, Perception, and Evaluation
Altruism (Intrinsic, Self-Transcend.)	Highly persistent, potentially throughout the entire life of the membership, with no defined end-point.	Involvement with the organizations is inherently high and the goal is difficult to achieve without involvement with the organization, the cause, and other members.	Self- transcendent and altruistic behaviors should provide positive self reflections and positive feedback from other members and outside groups. As such, it may have strong links with self-concept.	The organization's altruistic efforts and member opportunities will receive greater attention and processing, increase motivation to become involved with these efforts, & increase positive attitudes towards the organization.
Self-Enhancement (Intrinsic)	Highly persistent, but may experience diminishing returns.	Involvement with the organizations is inherently high, though it may be less so than the altruism goal, and is difficult to achieve without either psychological or physical affiliation with the organization.	Goal reflects a belief that the organization can provide self-enhancement and that the member desires to either reflect the organization or change in ways that are consistent with the organization.	Information and opportunities for self-enhancement will receive greater attention and processing, increase motivation to engage in these opportunities, and increase positive attitudes towards the organization.
Economic (Extrinsic)	Variable. Some economic goals are achieved through the act of joining; others require continuance. Economic goals may become routine and diminish in salience.	Goal should generate low involvement. Goal creates compliance behaviors and does not require or facilitate an intrinsic connection to the organization, its mission, or its members.	Economic outcomes may provide perception of prestige and positive self-reflection, but in general this association should be much less positive than either the altruism or self-enhancement goals.	Information and opportunities to receive economic benefits will receive greater attention and processing, increase motivation to engage in activities that provide economic benefits, and increase positive attitudes towards the organization.

# 2.4.5 General Membership Goal Influences on the Identification Process

The next five sections will develop specific hypotheses and models to empirically test the general relationships depicted in Figure 2.10. This discussion begins with an introduction to the general membership goal-identification model and its hypotheses, which are intended to provide the broader structure prior to the more detailed discussion of specific hypotheses and their rationale.

Figure 2.10 Hypothesized Effects of Membership Goals (reprint of Figure 1.4)



Providing the membership goal remains active beyond the initial act of joining, the general model argues that membership goals will:

1. Affect identification and post-choice behaviors indirectly by influencing the evaluation of relationship-inducing factors (Path 1), which occurs when the membership goal function as a reference point (or emotional basis) for evaluating the organization's characteristics (distinctiveness and prestige), self-organization congruence, and satisfaction with the organization.

- 2. Have a direct effect on identification, based on their effect on affiliation/relational orientation and its relevance to self-concept (Path 2).
- 3. Have a direct effect on membership behaviors, which occurs when the membership goal functions as a reference point (or emotional basis) for evaluating the behaviors.
- 4. Moderate the effects relationship-inducing factors on identification and identification on behavior based on constructs having greater influence in the presence of certain membership goals (Path 4) For example, distinctiveness may have a greater positive effect on identification the more salient the self-enhancement goal.

#### 2.3.4 Goal Influence on Identification Antecedents

How an individual perceives the organization, whether they believe there is a strong fit between themselves and the organization, and their level of satisfaction with the organization are likely to be influenced to be affected by their membership goals (Figure 2.11).

Relationship Inducing Factors

Organizational Identification

Member Behaviors

Membership Goals

Figure 2.11 Membership Goal – Relationship-inducing factors Path

A person who becomes a member for the purpose of self-enhancement believes a priori that membership in the organization will contribute in some way to making them a better person or the perception by others that they are a better person. During the initial membership choice, the organization's prestige and distinctiveness likely contributes to belief that the organization is a good course towards achieving self-enhancement. Once the individual is a member, goal theory would suggest that the self-enhancement goal would actually influence evaluations of the organization as prestigious and distinctive. This occurs because the more these attributes are perceived to be present in the organization, the greater its potential to confer similar qualities to the individual and thereby contributes to the individual's self-enhancement goal. Consistent with goal theory, this would make the individual more attentive to factors associated with prestige and distinctiveness, increase their effort in processing information about the organization's prestige and distinctiveness, and ultimately lead them to evaluate the organization as more distinctive and prestigious.

Similarly, a person who joins because they believe that membership will allow them to serve others or contribute to an important cause would seem to imply that they find organization to be prestigious and distinctive (e.g. you should not find many people seeking out disreputable and mundane organizations to achieve altruism goals). To the degree the person believes there is an association between the organization's prestige and distinctiveness and their success in contributing to an important cause, the altruism goal should have a positive effect on perceived prestige and distinctiveness for the same motivational and cognitive/emotional reasons discussed for the self-enhancement goal.

Alternatively, the person may believe that organizations that provide opportunities for altruistic service or self-enhancement are prestigious and distinctive.

There does not seem to be any strong association between perceiving the organization as prestigious and distinctive and achieving economic membership goals as they are operationalized in this study (e.g. relatively modest economic goals). However, it is possible that believing the organization can facilitate a loftier economic goal (e.g. achieving great wealth) would then contribute to positive perceptions of prestige and distinctiveness.

As a final note, it is possible that perceptions of organizational prestige and distinctiveness may activate self-enhancement and/or altruism goals within individuals. This would suggest the causation is reversed. While this may occur to some degree, this study takes membership goals to be exogenous. This is consistent with the current organization's own research that suggests potential members enter the relationship with goals they hope to achieve through membership.

 $H_{10a,b}$ : Self-enhancement membership goals are positively associated with evaluation of the organization as prestigious and distinctive.

 $H_{11\;a,b}$ : Altruism membership goals are positively associated with evaluation of the organization as prestigious and distinctive.

 $\mathbf{H}_{12}$ : Economic membership goals are not associated with the evaluation of the organization as prestigious and distinctive.

Perception of self-organization fit and desired self-organization fit should also be influenced by self-enhancement and altruism membership goals. Consistent with goal theory, the membership goal will function as the basis for judging self-organization fit, meaning the person would evaluate whether the organization's characteristics, beliefs, values, and practices are congruent with the individual's, given he/she holds this goal.

Because the individual joins with the a priori belief that membership will facilitate the goal, there should be greater perceived self-organization congruence. For example, when the organization is perceived to value altruism and enable achievement of altruistic membership goals it should increase positive evaluation of desired self-organization consistency among individuals holding self-transcendence/altruism goals.

The same argument can be made using self-enhancement. Individuals who hold self-enhancement membership goals already believe that being in the organization is going to change them in ways that are consistent with the person they want to become. This suggests that individuals with self-enhancement membership goals may perceive substantially higher desired self-organization congruence. This argument may not hold for those individuals with economic goals. Because this goal is extrinsic and transactional it may not indicate any congruence with beliefs, values, or characteristics. For these individuals, there is less need for individuals to believe they "fit" the organization as long as the organization is facilitating their economic goal (satisfactory pay and/or opening doors for future employment).

 $\mathbf{H}_{13a:}$  Self-Enhancement membership goals are positively associated with the perception of self-organization congruence.

 $\mathbf{H}_{13b}$ : Altruism membership goals are positively associated with the perception of self-organization congruence, though to a lesser degree than the self-enhancement membership goal.

 $\mathbf{H}_{14:}$  Economic membership goals are not associated with the perception of self-organization congruence.

Research on goals and social satisfaction has shown that people with strong social goals tend to experience greater social satisfaction (Gable 2006). Self-enhancement and altruism/self-transcendence goals are inherently more social than the extrinsic/economic

membership goal, both psychologically and because their pursuit is likely to require greater social interaction. I therefore expect both to be related positively to social satisfaction (Figure 2.12). In addition to Gable's findings, there are two reasons I expect extrinsic/economic membership goals to increase economic satisfaction and self-enhancement and altruism membership goals to increased social satisfaction: 1) because membership goals create expectations and then motivate effort to meet those expectations and 2) because goals are inherently positive they influence positive evaluations and feelings a person has towards information and activities that are most relevant to the goal.

Membership goals are desired end-states towards which the individual has or will directed effort, but they also function as expectations regarding the membership. Failing to achieve sufficient goal progress would result in disconfirmation of these expectations and lead to lower satisfaction, while sufficient goal progress would result in confirmation and greater satisfaction (Zeithaml, Berry, and Parasuraman 1996). But goals do more than just set expectations that may or may not be met, they also motivates greater and more focused sustained effort towards the goal, which should contribute to a higher likelihood of a positive outcome (and higher likelihood of meeting expectations). In other words, the membership goal sets an expectation but also strongly motivates the individual to meet that expectation.

Goals also operate to shape the individual's cognitions and emotions regarding information and activities related to the goal. Because goals are inherently positive (Gollwitzer and Moskowitz 1996), so are the attitudes towards goal relevant information and behavior (Gable 2004). To the degree that organizational relationships or social activities are seen as being relevant or contributing to the individual's self-enhancement

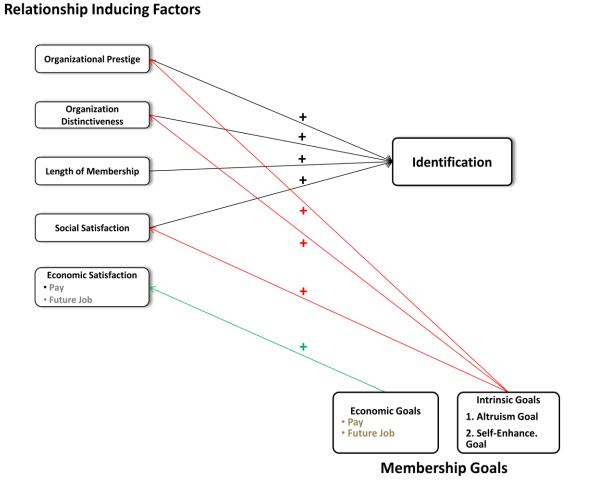
or altruism/self-transcendence membership goals, the individual should have a positive evaluation of those social activities. This logic should also hold for the evaluation of economic information and activities when the individual has an extrinsic/economic goal.

 $\mathbf{H}_{15a:}$  Self-Enhancement membership goals are positively associated with social satisfaction.

 $\mathbf{H}_{15b:}$  Altruism membership goals are positively associated with social satisfaction.

 $\mathbf{H}_{\mathbf{16}:}$  Economic membership goals are positively associated with economic satisfaction.

Figure 2.12 Membership Goal Effects on Relationship-Inducing Factors



#### 2.3.5 Goal Influence on Identification

Bhattacharya and his coauthors (1995) argued that identification can be strengthened by enabling members to fulfill their goals of membership (Figure 2.13). Other evidence suggests that goals may affect identification, but that the effect can be positive or negative. A number of studies have found that people focused on extrinsic goals report greater conflict and other issues that are detrimental to high-quality relationships (Baumeister and Leary 1995; Kasser and Ryan 2001; Ryan and Deci 2001). This is contrasted with findings that positive social goals and goals linked with interpersonal relationships (both intrinsic goals) are associated with healthy relational outcomes (Gable 2006). Within the membership context, Woodruff, Kelty, and Segal (2006) found that a Soldier's affective and economic enlistment reasons had a significant positive and negative relationship with Soldier identity, respectively. Collectively, this suggests there will be substantial, but opposite, effects on identification between extrinsic and intrinsic membership goals (Figure 2.13).

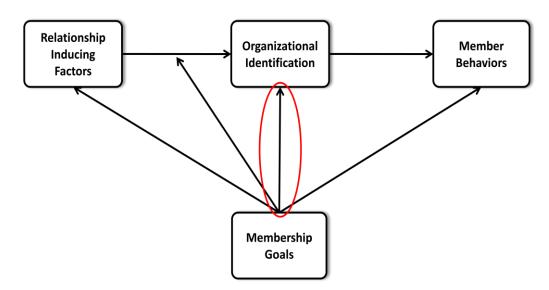


Figure 2.13 Membership Goal – Identification Path

Both self-enhancement and altruism membership goals are associated with high levels of affiliation with the organization and have strong relevance to the self-concept (Table 2.1). This contributes to those goals having a positive relationship with organizational identification. This relationship should be particularly strong with the self-enhancement membership goal. These individuals believe the organization can/will contribute to self-enhancement, which adds to its attractiveness and positive image, and therefore promotes identification (Dutton et al. 1994).

Identification in a membership context is necessarily tied to the causes and goals of the organization (Bhattacharya et al. 1995), with strong alignment between the organization's and the individual's goals leading to a sense of "oneness or belongingness" (Mael and Ashforth 1992). Based on this argument, membership goals should influence identification when those goals are aligned with those of the organization and when the organization enables members to fulfill those membership goals. In this study, the self-enhancement goal is directly related to the expectation that membership in the organization will provide opportunities to improve as a person in a way that is desired by both the organization and the individual. Similarly, the self-transcendence goal reflects the individual's desire to serve the organization or its mission/cause. This represents very close alignment with the organization's goals.

The economic membership goal, on the other hand, represents a desire for pay and for future employment outside the organization. While these are desirable to the individual holding economic membership goals, they are not aligned with the organization's overall goal or its values. In fact, the future employment opportunity represents an intention to exit the organization. This is quite important because the

individual may see the current organization as a stepping-stone to other organizations, which should inhibit identification.<sup>6</sup> Furthermore, this membership goal requires less affiliation, is arguably less relevant to the self-concept, and may become less salient as the pay benefit becomes routine (Table 2). Lastly, when the membership is selected based on its utility to reach an economic goal, organizational efforts to integrate and acculturate the new member may be threatening to the person's sense of self-continuity and induce a psychological state of reactance<sup>7</sup> that would inhibit identification (Brown and Starkey 2000; Petty and Cacioppo 1986). This is consistent with the finding that individuals with extrinsic goals experienced greater conflict, which damages high-quality relationships, and it suggests that extrinsic/economic membership goals may have a negative relationship with organizational identification.

 $\mathbf{H}_{17a}$ : The self-enhancement membership goal will be positively related to organizational identification.

 $\mathbf{H}_{17b}$ : The altruism membership goals will be positively related to organizational identification.

 $\mathbf{H}_{18}$ : Economic membership goals will have a negative relationship with organizational identification.

These hypotheses, along with hypotheses concerning the effects of membership goals on relationship-inducing factors, combine to create the structural relationship depicted in Figure 2.14. It should be noted that although the self-enhancement and self-transcendence/altruism membership goals are depicted in a single "Intrinsic Goal" block, both are entered separately in the analyzed structural model.

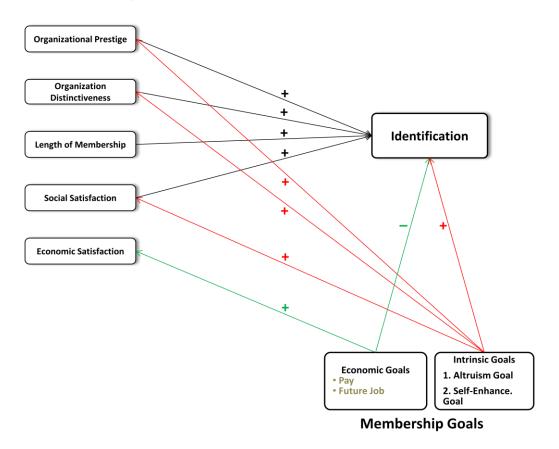
<sup>7</sup> Reactance: The psychological state hypothesized to occur when a freedom is eliminated or threatened, with the threat resulting in reactance, and reactance leading to attempts to restore the freedom (Brehm and

Brehm, 1981).

<sup>&</sup>lt;sup>6</sup> Individuals who entered an organization with the intent to leave have lower average satisfaction with the organization (Doran, Stone, Brief, and George 1991).

Figure 2.14 Membership Goal Effects on Identification and RIFs

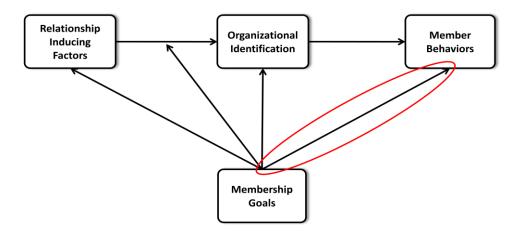
# **Relationship Inducing Factors**



# 2.3.6 Goal Influence on Membership Behavior

Member behaviors are vital to an organization's success. This is particularly true for non-profit organizations, where success may be based on generating supportive behaviors from its membership and stakeholders (e.g. donating, participation, coproduction, promoting, and providing positive word of mouth for the non-profit) (Mael and Ashforth 1992). Because membership goals functions as a reference point for developing, organizing, and evaluating behavior (Fishbach and Ferguson 2011; Kruglanski et al.2002) they should have an effect on goal-relevant membership behaviors (Figure 2.15).

Figure 2.15 Membership Goal – Member Behavior Path



In general, an active membership goal will instill motivational force to execute behaviors that are perceived to support the goal. The more the behavior facilitates the goal, the more positively it will be evaluated and the more motivated the person will be to execute the behavior (Brendl and Higgins 1996). This motivation will continue until the goal has been reached (Gollwitzer and Moskowitz 1996). The active goal will also make relevant behavioral knowledge more accessible (e.g. knowledge on dates and activities for participation or services available) and will direct attention to goal-relevant behaviors, increasing their likelihood of execution (Fishbach and Ferguson 2011; Aarts, Dijksterhuis, and DeVries 2001). Lastly, membership goals will influence the evaluation of behaviors by inducing positive emotions related to behaviors that support the goal (Fishbach et al. 2004).

By examining the role of each behavior in facilitating the each of the three membership goals it is possible to understand the probably effect the membership goal will have on the behavior. The self-transcendence/altruism membership goal is facilitated by higher affiliation (Table 2.1) and should remain active throughout the membership and should therefore influence substantially higher levels of sacrificing behavior and higher

levels of participation. Because the membership goal could remain active, potentially over many years, it should also promote retention. While the relationship with service use and WOM is less clear, increased use of services is related with increased affiliation and providing positive WOM is consistent with altruistic service to the organization. Overall, there is reason to believe that the altruism/self-transcendence membership goal should promote all five pro-organizational behaviors, particularly sacrificing.

The self-enhancement membership goal is also persistent and associated with high affiliation, but self-enhancement may experience diminishing returns over time, it may be less related with retention. While self-enhancement is related to higher affiliation with the organization, this affiliation can be psychological, meaning that social participation may be less important. The relationship with sacrificing, service use, and WOM is less clear. All three behaviors may not be perceived as contributing to the goal of self-enhancement, but rather be outcomes of goal satisfaction. For example, providing positive WOM may not be perceived as contributing to the self-enhancement goal, but it may become more likely if the person is satisfied with his or her self-enhancement goal progress. If this is true, then these behaviors should receive somewhat less positive evaluations and be less associated with positive emotions.

None of the pro-organizational behaviors (except for service-use) seem to clearly facilitate or contribute to the economic membership goal. Social participation and sacrificing for the organization may even appear to be membership costs to be avoided. The pay factor within the economic goal does require continuance, but the future employment factor requires the member to eventually leave the organization for other employment. This suggests a null or negative effect on retention. Furthermore, the

individual can continue to receive pay and job training without increasing any of the other four discretionary behaviors. Of the five pro-organizational behaviors, only service use may facilitate this goal because this behavior may reduce the cost of purchasing services elsewhere.

Lastly, there are a several reasons that neutral behaviors may be evaluated negatively. First, behaviors and information that do not contribute to the focal goal (even irrelevant behaviors and information) have been shown elicit negative evaluation, perhaps because they complete for scarce cognitive resources (Brendl, Markman, and Messner 2003; Shah, Friedman, and Kruglanski 2002)). Second, people focused on extrinsic goals report greater conflict (Baumeister and Leary 1995; Kasser and Ryan 2001; Ryan and Deci 2001) and may therefore avoid behaviors that require social interaction (participation, sacrificing, and WOM). Third, if the member has a transactional perspective of the relationship due to the extrinsic membership goal, he or she may have a low relational orientation and avoid relational behaviors (e.g. sacrifice, participation, and providing WOM). Accordingly, I expect all behaviors but service use to have a modest negative association with the extrinsic/economic membership goal and overall, I expect a negative relationship between the extrinsic/economic membership goal and the second-order pro-organizational behavior factor.

 $H_{19a}$ : The self-transcendence/altruism membership goal will have a direct, positive relationship with pro-organizational behaviors.

 $H_{19h}$ : The self-enhancement membership goals will have a small but significant direct, positive relationship with pro-organizational behaviors.

 $\mathbf{H}_{20}$ : The extrinsic/economic membership goal will have a negative relationship with pro-organizational behaviors.

These hypotheses, along with hypotheses concerning the effects of membership goals on identification, combine to create the right side of the full structural relationship (Figure 2.16). As mentioned before, self-enhancement and self-transcendence/altruism membership goals are depicted in a single "Intrinsic Goal" block for simplicity, but both are entered separately as first-order factors during testing of the structural model.

Retention Intention **Promoting and** Positive Word of Mouth Pro-Organiz. Identification Services Use **Behavior Participation** Sacrifice Intrinsic Goals **Economic Goal** 1. Altruism Goal 2. Self-Enhance. Goal Future Job **Membership Goals** 

Figure 2.16 Membership Goal – Identification and Member Behavior Model

# 2.3.8 Goal Influence on the Full Identification-Based Relational Model

Bringing together 1) the model depicting the effects of membership goals on relationship-inducing factors and identification (Figures 2.14), the model depicting the effects of membership goals on identification and pro-organizational behaviors (Figure 2.16), and the hypothesized direct effect of economic satisfaction on pro-organizational

behavior creates the full "membership goal – identification model" depicted in Figure 2.17. Worth noting is the fact that of all the latent constructs, only the extrinsic/economic membership goal is expected to have any negative effect. Importantly, its negative effects are on arguably the two most organizationally important constructs: identification (relationship quality) and pro-organizational behaviors.

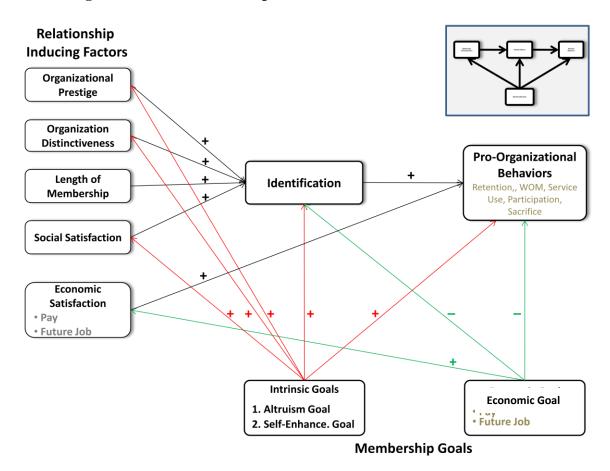


Figure 2.17 Full Membership Goal – Identification Structural Model

# 2.3.9 Goal Influence on Relationship Strength

In addition to their direct and indirect effects on the constructs in the identification model, membership goals may also influence the strength of the relationships between constructs in the identification model (Figure 2.4). Interesting

insights can be gained by identifying these interactions, and I expect to find differences between the three types of membership goals. In this context, I am asking the question, "Do relationship-inducing factors affect identification more or less strongly based on the salience or importance of a specific membership goal, and do identification or economic satisfaction influence behavior more or less strongly based on the salience or importance of specific membership goals?"

The relationship between perceptions of the organization and identification is particularly relevant to the self-enhancement goal. In fact, the self-enhancement membership goal is premised on the belief that the organization can improve the individual's character. Therefore, individuals who seek self-enhancement through association with the organization are more likely to identify with the organization than someone who does not have this goal, given they perceive the organization as equally prestigious and distinctive. Consistent with goal theory, I expect that the selfenhancement goal will interact with both prestige and distinctiveness, such that effect of these two perceptions on the development of identification is greater among individuals with highly salient self-enhancement membership goals than among those with low salience self-enhancement membership goals. This occurs because having a salient selfenhancement goal makes prestige and distinctiveness more relevant, cognitively more accessible and influential, and increases the attention and cognitive processing provided to these attributes (Aarts et al. 2001; Fishbach and Ferguson 2011; Gollwitzer and Moskowitz 1996). So even if two individuals rate the organization's level of prestige equally, the person with the self-enhancement goal will be thinking about it more, making it more salient and more influential.

I expect a similar moderation of the social satisfaction identification relationship based on the salience/strength of the altruism membership goal. In this case, social relationships are critical to the individual's ability to selflessly serve the organization or its cause, particularly in the current sample, where service to the organization and its mission are inherently and necessarily social. Specifically, I expect that the altruism goal will interact with social satisfaction, so that the effect of social satisfaction on the development of identification is greater among individuals with highly salient altruism membership goals than among those with low salience altruism membership goals. The theory behind this mirrors the previous discussion. In short, the altruism goal creates greater attention to social satisfaction, increasing salience, and increasing its effect on identification.

Based on similar logic, I expect that economic satisfaction will have a greater effect on the incidence of pro-organizational behaviors among individuals with highly salient/important extrinsic/economic membership goals than it does among those with low salience/importance extrinsic/economic membership goal.

 $\mathbf{H}_{21}$ : Self-enhancement membership goals will moderate the positive effects of perceived distinctiveness on identification.

 $\mathbf{H}_{22}$ : Self-enhancement membership goals will moderate the effects of perceived prestige on identification.

 $H_{23}$ : Altruism membership goals will moderate the effects of social satisfaction on identification.

 $\mathbf{H}_{\mathbf{24}}$ : Economic membership goals will moderate the effects of economic satisfaction on pro-organizational behavior.

# **2.3.10 Summary**

To summarize, the integration of extant goal and identification research suggest membership goals do far more than create interest in an organization and influence the membership decision. Most membership goals remain salient well beyond this point; affecting the quality of the individual's relationship with the organization and the value those individuals provide the organization. I have argued that this occurs based on the membership goal's influence on perceptions and satisfaction with the organization, and further distinguish between the effects of social and economic satisfaction. Membership goals will also affect organizational identification directly based on the degree to which they remain salient, promote affiliation, and are relevant to the self-concept. Importantly, membership goals will also function as a powerful motivational construct and a reference point for evaluating behaviors, resulting in increased incidence of those behaviors that facilitate salient membership goals. Finally, the research suggests that membership goals should differ in their value to the organization based on whether they are 'intrinsic or extrinsic' and whether they are 'self or others/organization' oriented, with intrinsic, others/organization oriented goals providing the greatest value to the organization. The next chapter looks at the process of developing and validating the items, scales and instruments needed to accurately measure these constructs and test the hypotheses discussed in this chapter.

# CHAPTER III: SCALE AND INSTRUMENT DEVELOPMENT

The purpose of this chapter is to discuss the development and validation of the items, scales, and instruments necessary for the subsequent testing of hypotheses and models developed in the previous chapter using structural equation modeling. This study used primarily reflective, multi-item scales, including six goal constructs, organizational identification, perceived organizational prestige, perceived organizational distinctiveness, two forms of self-organization congruence, economic satisfaction, social satisfaction, and five member behavior constructs. One single indicant item (time in membership) was used in the core model, plus multiple single indicant items that function as controls. This chapter begins with a discussion of scale development using the steps recommended by Netemeyer, Bearden, and Sharma (2003). This is followed by a discussion of the scales and items used in the final survey instruments. The chapter then concludes with a discussion of the control variables used in the study. Discussion of the final validation and item trimming completed using the data from the three samples (Current, New, and Future Soldiers) is deferred to the methods section for each essay. The final scales and two survey instruments are included in the appendices.

# 3.1 Scale and Item Development Process

Scale development was completed using the steps suggested by Netemyer et al. (2003), which include defining the construct and its content domain, generating and judging measurement items, designing and conducting studies to develop and refine the scales, and finalizing the scale. Construct definitions are largely consistent with previous studies and all scales and a core of initial items were adapted from existing scales exhibiting good psychometric properties in earlier studies. Furthermore, all of the latent constructs are well grounded in either organizational identification or goal theory framework. The previous review of theory and hypotheses in Chapter II provides the necessary background to understand the constructs' nomological net and content domain, and suggest there is good fit in these respects. Latent construct definitions and the source of their original scale with observed reliabilities are included later in this section.

Items development began with a review of the original scales. When possible, these items were adapted to fit the population used within this study. Additional items were generated to tap the full content domain of the item and worded to be applicable to the sampled population. Items were carefully crafted to avoid the issues of universal endorsement by all respondents, double barreled wording, and wording redundancy, which can artificially inflate scale reliability. Each initial scale included at least two negatively worded items to limit response bias from acquiescence or yea-saying. Between 6 and 12 items were generated or adapted for each construct. This provided a sufficient number to allow between 1/3 and 1/2 of the items to be trimmed in producing the final scale.

Items were assessed for content and face validity using panels of expert and population judges consistent with recommendations by Netemeyer et al. (2003). Experts included a military sociologist with expert knowledge of the population and classical test theory, two marketing PhD students and two organizational behavior PhD students with recent education in research methodology and psychometrics, and two military officers that have both experience with the population and some expertise with research methodology. In addition to reviewing the items for clarity and wording issues that can affect validity, the panel was also asked to complete a Q-sort. To complete the Q-sort, the panel was provided with the list of constructs and their definitions and a list of all proposed items. The panel was then asked to sort the items by construct. When the expert was unsure which of construct an item aligned to, they indicated this in a note. I was able to assess the degree to which the expert panel matched the items with the intended construct and reviewed their notes on specific item wording and other concerns. The Q-sort responses demonstrated very strong consistency, with over 90% agreement between respondents. The few items that were either inconsistent between respondents or failed to align with their intended factor were easily identified and either removed or rewritten. Overall, the results of the Q-sort and expert feedback indicate strong content and face validity. A population panel of 10 Current Soldiers, 10 New Soldiers, and 10 Future Soldiers was also used to review the items and provide feedback on any item that was ambiguous or confusing. Several more items were revised and the resulting set of items appears to have strong face validity.

# 3.2 Survey Instrument and Pretesting

179 items (plus control variables and several single-item questions) were developed and integrated into two survey instruments for pilot testing using samples from the three sub-populations (Current Soldiers n=124, New Soldiers n=65, and Future Soldiers n=65). The piloted surveys were administered in a web-based format. One survey was administered to Current and New Soldiers samples and the second survey was administered to Future Soldiers. The two surveys differed in one aspect, where the survey taken Current and New Soldiers measured satisfaction (social and economic) and behaviors, the Future Soldier survey measured expected satisfaction and behavioral expectations. The surveys were otherwise identical.

The survey used a seven-point Likert scales with values ranging from 1 to 7 that asked the respondent to rate their level of agreement or disagreement with a statement (Figure 3.1). One exception is the measurement of Word-of-Mouth (WOM), which used a balanced seven-point scale ranging from -3 to 3. Items were placed in logical groups (e.g. membership goals were together in one section), with the most similar items separated within the section (Edwards 2010).

Figure 3.1 Survey Likert Scale Heading

Please rate you scale.	Please rate your level of agreement or disagreement with the statements below using this 7-point scale.					
1	2	3	4	5	6	7
Strongly disagree	Disagree	Disagree somewhat	Neither agree or disagree	Agree somewhat	Agree	Strongly agree

# 3.3 Exploratory and Confirmatory Factor Analysis

Data from the piloted surveys was analyzed using Exploratory Factor Analysis (EFA) with both common factor and principal components analysis (PCA). Following

this analysis, a series of potential item combinations were analyzed using Confirmatory Factor Analysis (CFA). Analysis was conducted using the samples individually and again with the Current and New Soldiers combined. EFA/PCA was used to 1) reduce the number of items in the scales without losing information and 2) to assess the dimensionality of the scales. Because constructs were expected to be correlated, oblique (PROMAX) rotation was used in all solutions. PCA, which maximizes all variances in the items, was used for item reduction, while common factor analysis, which maximizes shared variance, was used for assessing dimensionality (Netemeyer et al. 2003). Within this study, both analyses provided largely consistent results.

The number of factors was assessed based on theory and a combination of Horn's parallel analysis and scree test results. PCA results were screened to identify and eliminate items that either failed to load to a factor at .500 or higher or cross-loaded above .300. This analysis also identified any items that had difference between the primary and secondary loadings of less than .300. These were considered candidates for elimination. Because these scales (with modification for the Future Soldier sample) would be used across multiple samples drawn from different sub-populations (Current, New, and Future Soldiers), these criteria were assessed across all three samples. In some cases, items that worked very well on one or two samples were eliminated in favor of items that worked reasonably well across all three samples.

EFA analysis was conducted in three stages. First, items intended for a single construct were run to confirm that parallel and scree analysis suggest only one factor and ensure the items load at .500 or higher. In the second stage, items from the two most theoretically related constructs were analyzed together to ensure that parallel and scree

analysis suggest two factors and identify items that fail to load as expected at .500 or higher or cross-loaded to the other factor above .300. Finally, constructs were group into related categories (membership goals, behaviors, satisfactions, and identification/organizational perceptions) to assess their dimensionality and identify poorly performing items.

Items having acceptable performance during EFA/PCA were further evaluated with Confirmatory Factor Analysis (CFA) using Lisrel 8.8. CFA allows the researcher to specify which items should load to specific constructs and then asses both the overall measurement model and individual items based on model fit, item loading (significance of parameters), standardized residuals, and modification indices (which indicate cross-loading items or correlated error). Items were retained if they loaded significantly to the intended factor and did not have cross-loading modification indices larger than 3.84. CFA was completed on the related groups of constructs and their intended items (e.g. membership goals, member behaviors, satisfactions, and identification/organizational perceptions).

CFA confirms the factor structure suggested by theory and EFA/PCA results. Despite the smaller sample sizes, convergence was never an issue and no offending estimates were observed. Furthermore, CFA largely confirms the best items suggested from EFA/PCA. As is often the case, the reverse coded items did not load as strongly as the positively worded items. In most cases, the best loading negatively worded items was retained for use in the final survey to reduce acquiescence responding. The final set of items/scales is provided in Tables 3.1 through 3.4.

Once the unidimensionality of the scales and the best set of items were confirmed, the final item sets were analyzed for internal consistency to ensure all scales had reliability scores above .7, which is the most widely accepted minimum level for adequate reliability. Scale reliabilities are provided in Tables 3.1 through 3.4. Additionally, the survey itself was analyzed for patterns of non-response or any other indications of problems. This included reviewing all comments provided by the respondents, which were solicited after the survey was completed. This analysis indicated that non-response increased markedly in the final section and comments indicated that the length of the survey was too long. The few items with higher than expected non-response and those receiving multiple comments indicating they were confusing had already been trimmed during earlier EFA/CFA analysis.

Ultimately, the process enabled the number of items to be trimmed by 40% from 179 to 108 and resulted in unidimensional scales, with 4 to 8 items, and reliabilities between .848 and .952. Subsequent analysis using these scales in a structural equation modeling demonstrated the expected relationships and suggests these scales have nomological and predictive validity. All scales are used for both the Future Soldier and Current/New Soldier surveys unless stated otherwise. The final scales used in the two surveys are discussed in the next section.

#### 3.4 Scales Discussion

This section breaks the discussion of constructs and their measurement scales into four parts, consistent with the general membership goal – Identification Model (Figure 3.2).

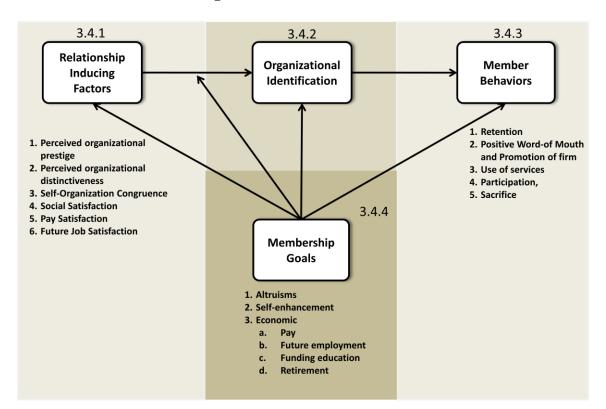


Figure 3.2 Scale Discussion Structure

# 3.4.1 Relationship-inducing factors

Perceived organizational prestige was measured using the Mael (1988) and Mael and Ashforth (1992) perceived organizational prestige scale. Organizational prestige is defines as the degree to which the organization is well regarded respected, valued, or admired by others in absolute and comparative terms (Mael and Ashforth 1992; Bergami and Baggozi 2000)

Perceived organizational distinctiveness was measured using the unpublished Mael and Ashforth scale. Construct definition, drawn from Dutton et al. (1994), is the degree to which the organization is unique and distinguishable from other organizations, particularly from competing organizations.

Self-organization congruence is defined as the degree to which the individual perceives the attributes, qualities, characteristics, beliefs, and/or values of the organization as similar to their own (Dutton et al.1994). Desired self-organizational consistency is similar, but reflects a future desire to have/develop attributes, qualities, characteristics, beliefs, or values that are perceived to be prototypical of the organization. These factors were measured using scales developed from the construct definitions proposed by Dutton et al. (1994). Dimensionality varied by sample, with the Future and New Soldier samples indicating one factor and the Current Soldier sample indicating two factors.

Economic satisfaction was adapted from the Geyskens and Steenkamp (2000) scale and is defined as the member's evaluation of the economic outcomes that result from the relationship with the organization (Geyskens and Steenkamp 2000). For this context, three forms of economic satisfaction were developed (pay, benefits, and future employment).

Social satisfaction was also adapted from the Geyskens and Steenkamp scale and is the member's evaluation of the personal contacts and interactions within or enabled by the organizational membership (Geyskens and Steenkamp 2000).

Length of membership was operationalized as the number of years and months of membership from the date of enlistment for Current and New Soldiers. Future Soldiers have not entered full-time membership status and were instead asked to indicate the number of months they had been contracted with the Army.

Table 3.1 includes the final scales for organizational perceptions and satisfactions and includes: perceived organizational prestige, perceived organizational distinctiveness, self-

organization congruence, desired self-organization congruence, economic satisfaction (pay, benefits, and future employment), and social satisfaction. These three forms of economic satisfaction and social satisfaction were reworded to create four expected satisfaction scales.

**Table 3.1 Organizational Perceptions and Satisfaction Scales** 

_		0 1 1
1.	Individuals in my home community think poorly of the Army *	Organizational
2.	The Army is respected by people who are important to me	Prestige
3.	The Army is admired by the people whose opinions I value	
4.	The important people in my life think highly of the Army	Reliability
5.	People I know consider the Army a prestigious organization	=.900
6.	The people I interact with admire the Army	
		Organizational
1.	The Army has attributes that make it distinctive	Distinctiveness
2.	The Army has a unique culture	
3.	The characteristics of the Army are very different from other groups	Reliability
4.	The Army's history distinguishes it from other institutions	=.848
5.	Army traditions make it a unique organization	
	,	Perceived Self -
1.	Traits I value in myself resemble traits I associate with the Army	Organizational
2.	Qualities I like in myself are also present in the Army	Congruence
3.	My personal qualities are very different from the Army's *	Congruence
4.	Attributes used to describe the Army could also describe me	Reliability =
5.	The Army's qualities closely relate to qualities I like in myself	.927
$\frac{3.}{1.}$	I would like to become a person that represent the values	Desired Self -
1.		v
2	exemplified by the Army	Organizational
2.	I seek to build qualities in myself that reflect the Army's culture	Congruence
3.	The Army's strengths match strengths I want to build in myself	D 11 1 11
4.	I will try to develop personal characteristics that reflect the	Reliability $= .952$
	culture of the Army	
<u>5.</u>	I aspire to develop the same qualities represented by the Army	
1.	I am satisfied with the level of pay I receive	Economic
2.	As a member of the Army, I rarely worry about having enough	Satisfaction: Pay
۷٠	money for myself or family	(0 . 0 111 )
_		(Current Soldiers)
~	I ADD DDDAODY ADODE THE CALARY DROWIGED BY THE ARMY T	D 1' 1'1' 0"
3. 1	I am unhappy about the salary provided by the Army * The salary I receive from the Army is satisfactory.	Reliability = .851
3. 4.	The salary I receive from the Army is satisfactory	•
4.	The salary I receive from the Army is satisfactory	Economic
4. 1.	The salary I receive from the Army is satisfactory  Housing benefits provided by the Army are satisfactory	Economic Satisfaction:
4. 1. 2.	The salary I receive from the Army is satisfactory  Housing benefits provided by the Army are satisfactory I am satisfied with the military healthcare I receive	Economic Satisfaction: Benefits
4. 1. 2. 3.	The salary I receive from the Army is satisfactory  Housing benefits provided by the Army are satisfactory I am satisfied with the military healthcare I receive I'm pleased with the Army's retirement benefits	Economic Satisfaction: Benefits (Current Soldiers)
4. 1. 2.	The salary I receive from the Army is satisfactory  Housing benefits provided by the Army are satisfactory I am satisfied with the military healthcare I receive	Economic Satisfaction: Benefits

1.	I'm satisfied the Army is enhancing my future employability	Economic
	It's comforting to know the Army is improving my civilian job	Satisfaction:
	prospects	Future
3.	The Army is providing me with skills needed for a civilian job	Employment
4.	I'm pleased with the Army's role in enabling me to earn greater	(Current Soldiers)
	income after the service	Reliability = .885
$\overline{1}$ .	The level of camaraderie with other soldiers is gratifying	Social
2.	I like the people I meet through membership in the Army	Satisfaction
3.	The Army enables me to associate with people I like to be around	Sansjaction
3. 4.	My relationships with other soldiers are satisfying	(Current Soldiers)
<del>4</del> . 5.	I dislike being around the kind of people that are in the Army *	(Current Soluters)
<i>5</i> .	The Army enables me to develop valuable relationships	Reliability = .858
0.	The Army enables me to develop valuable relationships	Renability =.030
1.	I am dreading the small salary I will receive from the Army *	Economic
2.	The Army will pay a satisfactory income	Expectations: Pay
3.	As a member of the Army, I should have enough money for	
٥.	myself/my family	(Future Soldiers)
4.		,
$\frac{1}{1}$ .	I expect the housing benefits provided by the Army to be	Economic
	satisfactory	Expectations:
2.	I will be pleased with the military's healthcare	Benefits
3.	I expect the Army to provide generous retirement benefits	(Future Soldiers)
4.	I expect the Army's fringe benefits to be good	
1.	I expect the Army to enhance my future employability	Economic
2.	It's comforting to know the Army will improve my civilian job	Expectations:
	prospects	Future Employment
3.	The Army will provide me with skills needed for a civilian job	
4.	The Army's will enable me to earn greater income after the	(Future Soldiers)
	service	
1.	Camaraderie with other soldiers will be rewarding	Social Expectations
2.	I will like most of the people I meet through the Army	
3.	The Army will enable me to associate with people I like to be	(Future Soldier)
	around	
4.	Friendships with other soldiers will be satisfying	
5.	I will dislike being around the kind of people that are in the	
	Army*	
6.	The Army will enable me to develop valuable relationships	
* _	- roverse ended	

<sup>\* =</sup> reverse coded

# 3.4.2 Organizational Identification

Organizational identification implies a psychological connection and a sense of oneness with the organization, in that the individual classifies or defines himself/herself in terms of the organization, and the individual would feels some psychological reaction if the connection to the organization was lost or the organization threatened. There is some concern that organizational identification and self-organization congruence are not sufficiently distinct. One key distinction is that a person may perceived a high degree of shared characteristics with the organization, yet not feel a sense oneness with the organization and may not define him- herself in terms of the organization. Members' identification with the Army (the focal organization) was measured using items from two scales: 1) Mael and Ashforth's (1992) 6-item scale, which has previous reliabilities ranging from .83 to .90 and has been successfully adapted for use with the Army and 2) an adaptation of Callero's scale (1985), which was used by Arnett and his colleagues with a reliability of .89 (2003) (Table 3.2).

**Table 3.2 Organizational Identification Scale** 

Organizational Identification Scale Items:

Reliability = .907

- 1. When someone criticizes the Army, it feels like a personal insult
- 2. Being a Soldier is central to the person I am
- 3. I would feel a sense of loss if I were no longer a part of the Army
- 4. When someone praises the Army, it feels like a personal compliment
- 5. Being in the Army is an important part of who I am
- 6. Being a Soldier has no role in how I think of myself \*
- 7. Membership in the Army is key to how I think of myself

<sup>\* =</sup> Reverse coded

# 3.4.3 Membership Behaviors

Five pro-organizational member behaviors were measured: retention, WOM, service-use, participation, and sacrifice. The first four were piloted and sacrificing was added after this analysis. Retention intention was measured using a highly reliable (.91) five item scale used by the Army to assess retention likelihood among soldiers. Word-of Mouth was measured with a balanced scale using items adapted from the Arnett et al. scale, these items measure providing positive word of mouth, "talking up" the organization, and providing positive information in social situations. Negative word of mouth was measured using a reversal of the Arnett et al. (2003) promotion scale (e.g. talking poorly about the Army to others and providing negative information about the Army to individuals not in the Army in social situations). *Participation intention* was measures using a five item scale to measure the Soldier's belief that he or she would attend discretionary events that benefit their unit or the Army. Use of services was measured using a seven-item scale designed to measure the use of Army provided services that are intended to limit financial burden and increase quality of life for the Soldier and their family. Lastly, *sacrificing intention* measures the Soldier's willingness to take actions for the benefit of the organization that are hazardous, disliked, or create hardships.

All scales, except service-use, measure behavioral intentions and are identical across both surveys and all three samples. The service-use scale measures behavior, but was adapted to measure the behavioral intention to use services among Future Soldiers, who have not yet had the opportunity to use these services.

# **Table 3.3 Member Behavior Scales**

1.	I intend to stay in the Army beyond this enlistment	Retention
2.	I will likely remain in the Army beyond my current obligation	Intention
3.	I will reenlist for another term in the Army	
4.	I see myself remaining in the Army beyond this enlistment	Reliability
5.	I plan to leave the Army after this enlistment *	=.932
6.	I would consider remaining in the Army beyond this enlistment	
1.	I will attend optional events that support the Army or my unit	Participation
2.	I would like more opportunities to be involved in Army activities	Intention
3.	If asked, I will attend a social event put on by the Army	
4.	I avoid participation in voluntary Army or unit activities *	Reliability
5.	I would participate in voluntary events and activities that support my	=.911
	unit or the Army.	
1.	I would volunteer for a hazardous mission if it was essential to my	
	unit or the Army	Sacrifice
2.	I would willingly endure physical hardship if it was important to the	Intention
	Army or my unit.	
3.	I will sacrifice my personal comfort if it strongly benefits my unit or	
	the Army.	
4.	I would volunteer for a job I disliked if it was critical to the success	
	of my unit or the Army.	
5.	I would deploy to combat with my unit if given the option to remain	
	back at my home duty station.	

<sup>\*</sup> = Reverse coded

Word-of-Mouth The paired statements in each item represent the -3 and +3 points on this scale. Please select the point on the scales that Reliability = .945best represents your actual behavior. -2 -1 +1 +2 1. I discourage my friends and relatives from . I encourage my friends and relatives to joining the Army join the Army 2. I will go out of my way to tell people . I will go out of my way to promote the about my criticisms of the Army Army to others 3. When people ask my opinion, I tell them . I recommend the Army to those people to not join the Army who seek my advice 4. I have or would post negative comments I have or would post positive comments about the Army on Facebook or other about the Army on Facebook or other social media social media 5. I speak poorly about the Army in social . I speak favorably about the Army in situations outside the organization social situations outside the organization

**Table 3.3 Member Behavior Scales (Continued)** 

The Army and Department of Defense (DoD) provides numerous services to its members. Examples include medical care, financial opportunities and assistance, recreational activities and equipment, fitness facilities and equipment, housing, educational assistance, childcare, youth programs, shopping, religious services, schools for children, and many forms of counseling (debt, marriage, substance abuse, depression, etc.).

Service-Use

(Current Soldiers)

Please consider the services that fit your circumstance (to include services not listed) and answer the following questions using the 7-point agree-disagree scale used shown above.

Reliability = .852

- 1. I use services provided by the Army even when civilian alternatives are available
- 2. I check the availability of Army services before looking outside the community
- 3. I take time to become familiar with the services offered by the Army
- 4. If both Army and civilian services are available, I chose to use civilian, off-base services \*
- 5. If on-base and off-base housing options were equal in size, newness, and other attributes, I would choose to live on-base
- 6. If they are comparable in quality, I would prefer to use Army provided services
- 7. I use Army services unless I am unhappy with their quality
- 1. I would use services provided by the Army even when civilian options are available
- 2. I will check the availability of Army services before looking outside the Army
- 3. I will take time to become familiar with the services offered by the Army
- 4. If both Army and civilian services are available, I would chose to use civilian, off-base services \*
- 5. If on-base and off-base housing were equal in size, newness, and other features, I would live on-base
- 6. If they are comparable in quality, I would prefer to use Army provided services
- 7. I will use Army services unless they are poor quality

(Future Soldiers)

*Use of services intentions* 

<sup>\* =</sup> Reverse coded

# 3.4.4 Membership Goals

Over the last several decades the goals associated with membership in the U.S. Army have remained fairly stable, with factor analysis and confirmatory factor analysis has repeatedly indentifying between four and six significant enlistment goals: selfenhancement, patriotic service/altruism, college funding, economic/in-kind benefits, and future employment in other organizations (Baker 1990). Altruism/self-transcendence (patriotic service/altruism in the Army studies) is a common membership goal observed across a number of non-profit associations and is related to serving the organization or its cause. Self-enhancement reflects a belief that association with the organization will lead to actual or perceived improvement of character, maturity, or values associated with the organization. It does not include acquiring new skills or training. Economic/in-kind benefits reflect goals such as economic independence, a steady income, and housing or healthcare. As a precaution, I include items that are able to distinguish pay from general benefits. Future employment reflects a goal of acquiring skills and experiences that will make the individual more marketable for employment outside the current membership context (Army). College funding reflects the individual's goal of acquiring benefits that pay college or vocational training tuition and provide the financial means to attend future schooling. Both future employment and college funding have an economic component and end-states that are associated with exiting the current membership. This goal is particularly interesting because it represents a means to another goal (college graduation) that requires counter-organizational behavior (exiting the Army). In this case the individual must terminate full-time membership to become a member of a competing organization (college or university membership).

Using the Army's scales (Baker 1990), I selected 28 items to measure the five or six membership goals. Reliabilities for these constructs have historically exceeded .80 for all enlistment goal constructs.

**Table 3.4 Membership Goal Scales** 

I joined the Army because it enables me to" substituting the enand using this 7-point scale.	ndings included below
1. Serve my country	Altruism Goal
2. Defend our way of life	Reliability = .937
3. Contribute to a significant cause	
4. Fulfill my patriotic duty	
5. Do my part to serve the nation	
Develop personal responsibility	Self-Enhancement
2. Build strong values	Goal
3. Strengthen my character	
4. Become self-reliant	Reliability = .933
5. Gain maturity	
1. Improve my economic situation	Pay Goal
2. Earn an income	
3. Provide financially for my myself or family	Reliability =.919
4. Establish financial security	
1. Gain retirement benefits	Benefits Goal
2. Obtain housing	
3. Have healthcare benefits	Reliability = .874
4. Attain fringe benefits	
5. Earn retirement pension	
1. Get a better job in the future	Future
2. Acquire training for later employment	<b>Employment</b>
3. Be more marketable after getting out	Goal
4. Improve my subsequent employment opportunities	Reliability = .940
5. Gain a profitable skill	
1. Get money for college or civilian training	Future
2. Fund my future education	Education Goal
3. Pay for civilian education	Reliability = .939
4. Finance my college education	

# **3.5** Control Variables and Demographics

Demographic and context specific variables are used to ensure the observed effects are attributable to the core constructs and to better understand the identification

and goal influence processes. Such variables are managerially less actionable and typically play a lesser role in explaining individual behavior (Steenkamp and de Jong 2010), but a number of organizational studies indicate they may play a role in the membership choice, organizational identification, and behavior (Chattopadhyay 1999; Tsui, Egan, and O'Reilly 1992). To this end, I incorporate age, rank, race, gender, education level, marital status, number of children, and job type. Additionally, many of the respondents are deployed to combat and have been previously deployed to combat. To control for the effects of this experience, both the current deployed status (deployed, not deployed) and the total number combat deployments are included in the model.

Rank was measure using the Soldiers' pay grade. Race was measures by respondents selecting from Asian/Pacific Islander, Black/African-American, Hispanic, Native American, White /Caucasian, and other. Educational level was measured using six categories (non-high school graduate, high school graduate, some college, four-year degree, some graduate school, and completed graduate school). Marital status was measures as married, single, divorced, and widowed/separated/other. Lastly, job type was coded to reflect either combat arms or non-combat arms/support positions. The actual wording and placement of control variables can be reviewed in the two survey instrument included in the appendices.

# CHAPTER IV: RESEARCH METHODOLOGY AND RESULTS

This chapter begins with a brief review of the empirical context and a discussion of the Current Soldier sample. It then develops and validates the identification-based relational model, which serves as the basis for subsequently assessing the effects of membership goals. Membership goals are then integrated into the component and overall model and their effects on the identification process and member behavior are assessed.

# **4.1 The Empirical Context**

Current Soldiers are those members that have been acculturated and trained and are now serving in operational units within the organization. These individuals provided the best opportunity for developing the core models because they have the necessary experience to assess the behavioral intentions included in the model. The United States Army had an active duty, Current Soldier membership of 565,463 during as of September 2011, which falls within the data collection period for this study. This research included only the six junior ranks (E1 to E6) within this population, which numbers roughly 400,000 (Department of Defense, Statistical Information Analysis Division, 2011). Data was collected from this population using two sampling methods: 1) sampling operational units, using a method similar to stratified cluster sampling and 2) simple random sampling from the full relevant population. The use of multiple sources helps to prevent some of the issues related to the use single source, self-reported data (Podsakoff and

Organ 1986). Three units were selected for sampling, one unit was deployed to combat, one unit that had just returned, and one unit that had spent the previous year at its home station. These organizations included both combat arms and non-combat arms subordinate units and Soldiers. Two of these units asked all of its members within the six junior ranks to complete the survey. Response rates were 69% and 90%, with the lower response rate coming from the unit currently deployed to combat. Given the difficulty of some members to access the web-based survey while deployed, the 69% response rate likely exceeds 90% of the available population. The third unit distributed the web-based survey as Soldiers rotated through duties that provided both access to a computer and the time needed to complete the survey. As such, it is impossible to know what percent of the organization were afforded the opportunity to take the survey or what portion of Soldiers asked to participate did so. Given that roughly 29% of the relevant population completed the survey and only a portion of the unit was provided the opportunity to take the survey, it is likely this represents a response rate in excess of 50%. Ultimately this sampling method generated 505 surveys, of which 23 surveys were incomplete and dropped, resulting in 481 usable surveys.

Simple random sampling was used to generate the second data set. Individual web-based survey links were sent to 4277 Soldiers selected randomly from the active duty, junior ranking population using the Army's email system. This resulted in 702 responses, from which 92 respondents did not complete all the questions. Analysis of the response pattern and participant comments indicates that this higher non-completion rate was due to the long length of the survey, with questions in the final section typically being the ones that went unanswered. Because this form of non-response is not random,

multiple imputation was not used and these cases were subsequently dropped. It should be noted that unlike the participants within the surveyed units, these Soldiers completed the survey at the individual level and did not receive time from their chain of command to complete the survey. This usable response rate (derived by dividing the usable responses by the number of surveys invitations sent) was 14%, but this number probably understates the true rate. Army statistics indicate that only 56% of Soldiers use their Army provided email address, with the rate of non-usage being substantially lower among the junior population, which are less likely to have offices or work stations with computers (Army Knowledge Online statistics 2011). Adjusted for email use rates, this suggests at least 25% of Soldiers receiving the survey completed the instrument.

The combined sample was composed primarily of men (86.5%), which is typical of this organization. The average respondent was almost 28 years old, had been in the organization for average of 5.7 years, and has deployed to combat on average two times. Approximately 62% of the sample was unmarried, and 93.5% had at least a high school education, with over half of the sample having some college. Racially, the sample was composed of 62% Caucasian, 15.5% African American, 12% Hispanic, and 10.5% other racial backgrounds. The sample included only Soldiers in the six most junior enlisted ranks, including three pay-grades of privates, specialists, sergeants, and staff sergeants).

#### **4.2 Response Bias and Data Issues**

In order to check for non-response and sampling bias, I have used population statistics from the United States Army for comparison to the simple random sample, the unit sample, and the combined sample. A comparison of the statistics and their

distribution indicate several issues. First, the simple random sample is unbiased in its distribution but bias in its responses. While the web-based survey was distributed in a manner consistent with simple random sampling, individuals with greater rank and those in units with more analytical or administrative missions have greater access to computers and were more likely to receive the survey and better positioned to complete it. This resulted in the simple random sample having greater representation from the sergeant and staff sergeant ranks, females, and noncombat arms specialties.

The unit sample is also biased relative to the overall organization because the sampled combat and combat support organizations tend to be younger, have greater proportion of lower ranking, male, combat arms Soldiers than the Army at large.

Fortunately, the biases from both of these samples are in offsetting directions, so that the combined sample is much closer to the population statistics than either individual sample. For example, the simple random sample oversamples the sergeant ranks and females, while undersampling Hispanics and privates. Conversely, the unit samples oversample privates, males, and Hispanics, while undersampling sergeants and staff sergeants. When combined, the samples are much closer to the frequencies and distributions observed within the population. The only two areas where significant differences exist between the combined sample and the population are in the African-American and staff sergeant statistics. African-Americans and staff sergeants comprise 21 and 16 percent of the overall Army population, respectively, while they comprise 15.5 and 24 percent in the combined sample. Overall, the combined sample represent the organization quite well.

In checking the assumption of normality, univariate skewness for all factor items is no greater the 1.4 in absolute value, with kurtosis falling between -1.2 and 2.1,

indicating that no items are excessively skewed or platy/leptokurtic. Skewness is primarily negative and examination of skewness relative to its standard error of skewness indicates that many of the items may suffer from non-normality of distribution.

The negative skew was expected. Goals are inherently positive (Fishbach and Ferguson 2011) and are very likely to have distributions that would concentrate towards the higher end of the scale. Furthermore, since only members were surveyed it would be surprising if perceived prestige and distinctiveness were not negatively skewed. Unlike the relational and goal items, years in the organization, age, number of deployments, and number of children are positively skewed to a point of non-normality.

This skewness is not necessarily a large issue. When most variables have univariate skewness that are within +/- 1, there is likely to me very limited bias in the estimates derived. Only when skewness and kurtosis approached +/-2 and the constructs have larger correlations (.5 and higher) do bias estimates typically become a problem. Given that 1) the item with the largest absolute skewness is -1.432, 2) only 13 of 38 items have a skewness that exceeds +/-1 in absolute terms, and 3) the average correlation among factors is 0.444, I do not expect estimates to suffer from skewness induced bias. Additionally, nonnormality inflates the chi-square value when maximum likelihood estimates are used (as they are in this study), making it more likely that I reject a true relationship than accept a false one (Curran, West, and Finch 1996).

As a precaution, bootstrapping was used to generate unbiased standard errors with 95% confidence intervals in the final model. Substantial differences between the maximum likelihood (ML) and bootstrapped standard errors is an indication of multivariate non-normality in the data (Byrne 2001). A comparison of the ML standard

errors and then bootstrapped standard errors show that the ML standard errors are marginally smaller, indicating some multivariate non-normality in the data. However, the bootstrapped 95% confidence intervals indicate that only two of the 21 structural paths that are significant under ML analysis would fail to reach significance using bootstrapped standard errors (bootstrapped p-values .08 and .09). This suggests effects of multivariate non-normality and biased standard errors are minimal and do not affect the overall conclusions or the interpretation of individual membership goal effects.

As an additional check for non-normality, the ten largest multivariate outliers were identified using Mahalanobis scores and removed from the data before rerunning the analysis of the final model. While there is some modest change to some path estimates, the same relationships exist; with all but one of the 21 structural paths continuing to be significant. Overall, the same conclusions are drawn whether or not the outliers are dropped or retained. A review of these cases indicates that most are thoughtful and deliberate responses from highly altruistic individuals and not simply haphazard or satisficing responses. Thus, these cases were retained in the final analysis.

As a final check, the skewed control variables were log transformed and the final model was rerun with the transformed control variables. Changes in the standardized structural paths estimates between the models using logged and non-logged control variables were statistically and practically insignificant, indicating that the positive skewness in some control variables has not biased the final results. Since the differences were so minimal and these variables have meaningful values (e.g. number of deployments), the logged values were not used in the final analysis. Overall, there is some evidence of modest univariate and multivariate non-normality, however, multiple

analyses indicate that the presented results are sufficiently robust to not be changed by normalizing transformations, removal of outliers, or bootstrapped standard errors.

#### 4.3 Measurement Model

Analysis of the data was completed using structural equation modeling (AMOS 17.0) using the entire sample of 1091. Intensive pretesting and earlier refinement had established the content, face, convergent, and discriminant validity of the factors; however, it is still necessary to reestablish the convergent and discriminant validity of the measures in the current sample before analyzing the hypothesized model. Assessment of the individual factors and the overall measurement model was completed in three steps. First, the items were entered into Principal Components Analysis. Next the factors were analyzed using Confirmatory Factor Analysis (CFA) in a first-order factor model. Lastly, the model was adjusted to include three second-order factors and again tested using CFA. This process enabled the targeted elimination of items that cross-loaded to other factors or resulted in large correlated error. The trimming of items was expected because the majority of items were developed to be used for three different subpopulations (Current, New, and Future Soldiers). The original 79 items were trimmed to minimize item crossloading and correlated error and maximizing measurement model fit. The final measurement model included 38 items across 15 first-order factors. This trimming was expected because the initial set of was items intended to work across three different samples.<sup>8</sup> Table 4.1 provides construct means, standard deviations, and correlations.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> The final model was also estimated using minimally trimmed scales that demonstrated good psychometric properties across all three samples. Results using these scales corroborate the original results.

<sup>&</sup>lt;sup>9</sup> Self-Organization Congruence and the Retirement Membership Goal are included in the correlation matrix, but are not included in the measurement model results below because they were not used in the analysis of the final structural model.

Table 4.1, Model Correlations, Means and Standard Deviations

9 1	0.005	-0.017	0.120	0.076	0.067   0.129   0.076   0.120   -0.017   0.009	0.067	0.058	0.147   0.084   0.065	0.084		0.09	0.005   0.007   0.410   0.222   0.133	0.222	0.410	0.007	0.005	0.067	4.647	6.719	18. Year in Org	
	1	0.479	0.64		0.606 0.674	0.590	0.414	0.504	0.54	0.52	0.465	0.521	0.441	0.695	0.641 0.536	0.641	0.463	1.194	5.026	17. Future job Satsif.	
		1	0.39	0.422	0.322	0.321	0.284	0.37	0.316	0.328	0.351	0.301	0.205	0.410	0.294	0.304	0.22	1.667	3.938	16. Pay Satisfaction	Satisfac.
			1	0.771	0.731	0.672	0.564	0.633	0.479	0.565	0.503	0.599	0.410 0.362		0.311	0.554	0.546	1.319	5.263	15. Social Satisfact.	
				1	0.802	0.779	0.634	0.692	0.629	0.623	0.573	0.745	0.410 0.446		0.352	0.683	0.678	1.249	5.299	14. Self-Org Congru.	9.
					1	0.749	0.614	0.602	0.604	0.550	0.461	0.602	0.329	0.411	0.362	0.546	0.636	1.054	5.685	13. Distinctiveness	of Ora
						1	0.561	0.578	0.603	0.568	0.455	0.597	0.333	0.368	0.313	0.522	0.598	1.234	5.296	12. Prestige	Derrent
							1	0.741	0.563	0.564	0.510	0.570	0.325	0.157	0.119	0.354	0.562	1.546	5.076	11. Sacrifice	
								1	0.654	0.646	0.717	0.606	0.354	0.241	0.174	0.445	0.526	1.594	4.858	10. Participation	Behavior
									1	0.541	0.544	0.532	0.391	0.375	0.280	0.474	0.443	1.294	5.063	9. Service Use	ship
										Д	0.587	0.564	0.363	0.276	0.219	0.414	0.453	1.483	4.775	8. WOM	Member- 8.
											1	0.552	0.443	0.283	0.238	0.392	0.376	1.891	4.680	7. Retention	
												1	0.432	0.299	0.255	0.59	0.649	1.486	4.966	6. Identification	Rel-Qual
													ב	0.589	0.574	0.507	0.414	1.598	5.129	5. Retirement	
														ם	0.693	0.654	0.412	1.349	5.439	4. Future Job	Goals
															1	0.444	0.238	1.322	5.649	3. Pay	ship
																1	0.69	1.464	5.401	2. Self-Enhancement	Member- 2.
																	ь	1.332	5.641	1. Altruism	
18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Std. Dev.	Mean		

Principal Components Analysis of the 38 items indicate they load as hypothesized to the 15 factors, with loading of .725 or higher, only one cross-loadings greater than .20, and no cross-loadings exceeding .25 (Table 4.2).

**Table 4.2 Principal Components Analysis Pattern Matrix** 

							Co	mpon	ent						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SocialSat1												.905			
SatSoc4												.908			
SatEcon1				.937											
SatEcon3				.860											
SatEcon8				.866											
Partic1															.924
Partic5															.728
Altru_2											.775				
Altru_4											.953				
Pay_2										.929					
Pay_4										.914					
Job_1		.889													
Job_3		.934													
Job_4		.810													
Identif2	.889														
Identif3	.907														
Identif5	.890														
Identif6	.842														
Distinct1							.874								
Distinct2							.891								
Distinct4							.742								
SatEmpl1														.847	
SatEmpl4														.831	
Prestige3						.887									
Prestige4						.930									
Prestige6						.881									
Slf Enh.2													.902		
Slf Enh3													.901		
WOM1			.906												
WOM2			.866												
WOM3			.902												
Sacrifice2									.860						
Sacrifice4									.936						
Retention3								.948							
Retention4								.977							
Serv-use2					.786										
Serv-use6					.902										
Serv-use7					.935										

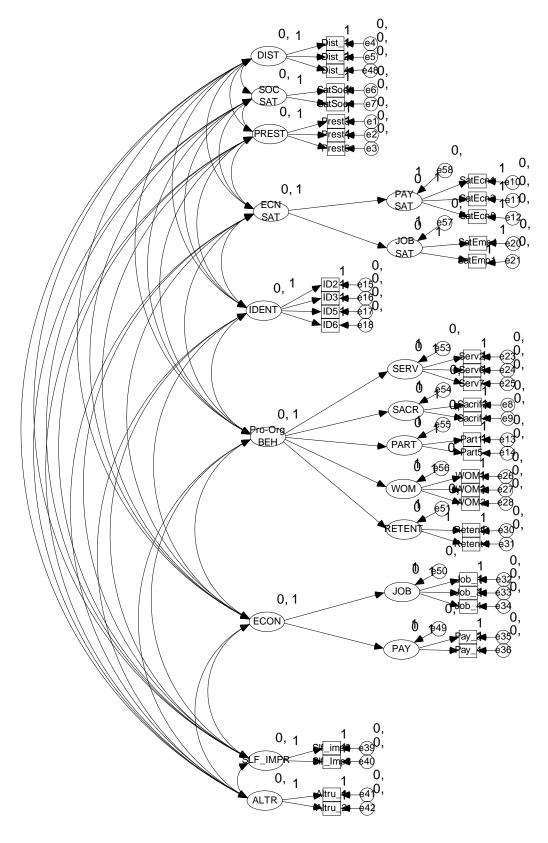
CFA results of the final first-order measurement model produces strong fit indices, with a comparative fit index (CFI) of .977 and a root mean square error of approximation (RMSEA) of .035 ( $\chi^2$  =435.408, df =173). These fit indices indicate good model fit and meet the prevailing recommendations for CFI of .95 or greater and RMSEA of .05 or .06 (Hu and Bentler 1999). All loadings were significant with Z-scores ranging from 24.8 to 56.2, providing evidence of convergence for all factors. Reliabilities ranged from .788 to .940, with only one factor having reliability below .800 (Table 4.3). Lambda modification indices are generally small and suggest acceptable discriminant validity of the measures. Standardized residual covariances are also acceptable, with the largest standardized residual being 3.04, only 13 residuals exceeding +/- 1.96, and the great majority being less than one in absolute value. This suggests internally and externally consistent item-to-factor assignment.

Three second-order factors were used to create the final measurement model: a general economic satisfaction factor, an economic membership goal factor, and a proorganizational behavior factor. This measurement model enables structural modeling that is more analytically tractable and less conceptually complex. Furthermore, there is ample theoretical justification for these second-order factors. In the first case, the first-order future employment satisfaction and pay satisfaction factors are likely context specific and reflect aspects of the individual's general economic satisfaction. Consequently, the use of second-order economic satisfaction factor provides a more theoretically relevant and less domain specific form of satisfaction. The second case presents a similar situation. Goals are often conceptualized as either extrinsic or intrinsic (Kasser and Ryan 1993), and the pay and future employment goals in the first-order measurement model likely

reflect more specific elements of an economic membership goal. A similar argument can be made for creating a second-order intrinsic goal factor for the altruism and self-enhancement goals. This is not done because Schwartz's (1992) research on values suggests that self-transcendence (altruism) and self-enhancement values may be oppositional and have very different psychological and behavioral consequences. Lastly, the five behavioral outcomes are believed to reflect a more general behavioral orientation to enact pro-organizational behaviors. The creation of this factor also acknowledges that although each of these behaviors is distinct and demonstrates adequate convergent and discriminant validity, they are highly correlated and share common variance.

Like the first-order measurement model, CFA of the second-order measurement model, which includes all first-order factors, produces strong fit indices (CFI = .966, RMSEA = .040,  $\chi^2$  =1703.5, df =620). All loadings were significant, with Z-scores for first-order loading ranging from 53.9 to 23.8 and Z-scores for second-order loadings ranging from 31.8 to 14.7 (Table 4.3). There are three standardized residual covariances that exceed 4.0 and 13.4% of the standardized residuals exceeding +/-1.96, though the majority of the residuals continue to be less than one in absolute value. Almost all the significant standardized residuals are between items that belong to different second-order factors. Overall, the second-order measurement model does not fit the data as well as the first-order data, but it does provide acceptable fit, enables the use of more theoretically meaningful factors, and provides a more tractable and comprehensible model (Figure 4.1).





**Table 4.3 Measurement Model Properties** 

Construct -Indicators	Standard. Loading	Reliability	Construct -Indicators	Standard. Loading	Reliability
Altruism Goal		.837	Prestige		.911
Altru 2	.880		Prest3	.911	
Altru_4	.820		Prest4	.892	
_			Prest6	.839	
Self-Enhance. Goal		.899	Distinctiveness		.830
Slf_Imp2	.905		Dist_1	.743	
Slf_Imp3	.902		Dist_2	.792	
			Dist_4	.829	
Pay Goal		.913	Social Satisfaction		.828
Pay_2	.917		SatSoc1	.854	
Pay_4	.917		SatSoc4	.836	
Future Job Goal		.911	Pay Satisfaction		.871
Job_1	.911		SatEcn1	.899	
Job_3	.883		SatEcn3	.741	
Job_4	.847		SatEcn8	.867	
Identification		.915			
ID2	.905		Future Job Satisfact.		.857
ID3	.884		SatEmp1	.868	
ID5	.759		SatEmp4	.866	
ID6	.868		•		
Retention		.940			
Retent3	.968		<b>Second-Order Factors</b>		
Retent4	.947				
		.885	Pro-Org. Behavior		
WOM			Retention	.746	
WOM1	.862		WOM	.753	
WOM2	.789		Service Use	.739	
WOM3	.909		Participation	.895	
			Sacrifice	.785	
Service Use		.857	Economic Goal		
Serve2	.798		Pay Goal	.710	
Serve6	.856		Future Job Goal	.980	
Serve7	.798				
Participation		.881	Economic Satisfact.		
Part1	.847		Pay Satisfaction	.486	
Part5	.931		Future Job Satisf.	.991	
Sacrifice		.788			
Sacrif2	.827				
Sacrif4	.795				

### **4.4 Structural Models**

Analysis begins with the estimation and development of the identification-based relational model. Membership goals are then integrated to estimate their effects in the full membership goal—identification model. The identification-based relational model was built in four steps.

- 1. The first model tests the effects of relationship-inducing factors (RIFs) on organizational identification (Figure 4.2). 10
- 2. The second model tests the effects of organizational identification on proorganizational member behaviors (Figure 4.3).
- 3. In the third step, these two models are integrated to create the full identification-based relational model, which includes RIFs as antecedents of identification and identification as an antecedent to the five pro-organizational behaviors, with identification mediating the effects of RIFs on behavior (Figure 4.4).
- 4. In the final step, the model from the previous step is respecified to include pro-organizational member behavior as a second-order factor (Figure 4.5).

  Results are summarized in Table 4.4.

The integrated membership goal-identification model was developed in a similar manner using three steps. In the first step, the three membership goals are entered as exogenous variables influencing perceptions of the organization and satisfaction (RIFs) and identification (Figure 4.6). In the second step, the three membership goals are

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<sup>&</sup>lt;sup>10</sup> Self-Organization Congruence was dropped as an antecedent of identification. While analysis indicates it is an important antecedent, it appears to mediate the effects of distinctiveness, prestige, and social satisfaction on identification. While this is an important insight, the intent is to validate an identification-based model that has been used in previous marketing and organizational behavior research to assess the effects of membership goals on identification and member behaviors.

entered as exogenous variables that influence identification and the second-order proorganizational behavior variable (Figure 4.7). In the third stage, the three membership goals are entered as exogenous variables that influence the full model (RIF, identification, and pro-organizational behavior) (Figure 4.8).

Membership goals are also tested to determine if they influence relationship strength among the constructs in the identification-based relational model. The chapter concludes by estimating two alternate model specifications and assessing the validity of the results from the final model.

Each individual model is estimated by first adding control variables to the model. I then investigate if relaxing restrictions on the model suggested my modification indices would improve model fit, provided these changes are both substantively meaningful and supported by theory. Lastly, I identify and eliminate nonsignificant paths. Paths that were significant in the final identification-based relational model are retained in the final model integrating membership goals even if they become non-significant in the full membership goals - identification model.

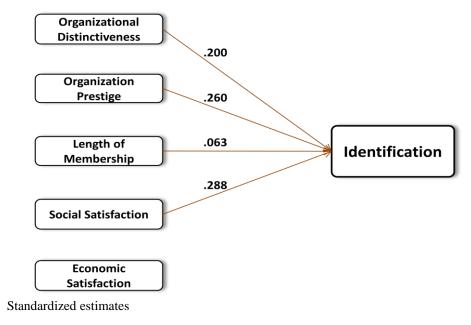
Similarly, if a path from a control variable to latent construct is significant in the identification-based relational model it is retained in the full membership goal-identification model even if it becomes insignificant. When significant, control variables were allowed to covary among themselves, with membership goals, and with years in membership. In general, control variables have minimal effect on the model and their inclusion or exclusion does not change the significance of any path (the largest change in standardized path estimates is .055). A discussion of control variables is provided in section 4.5. Model fit for the final membership goal—identification model with and

without control variables is acceptable. Without control variables RMSEA is .040 and CFI is .967. When control variables are included RMSEA is .036 and is CFI .960. The effects of these variables are provided in Table 4.7, pg 124.

### 4.4.1 Identification-Based Relational Models

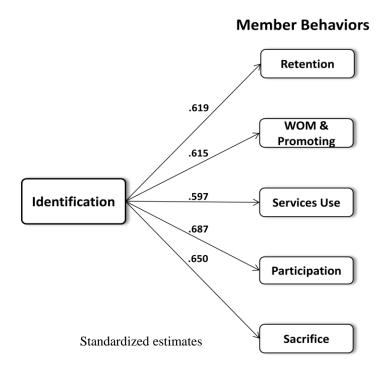
Results from first model indicate that all four of the hypothesized antecedents of identification are supported, with perceptions of organizational prestige and distinctiveness, as well as social satisfaction, all having reasonably strong influence on identification. The path from economic satisfaction to identification was fixed to zero as hypothesized. Modification indices suggest no additional structural paths for improving the model, which support this hypothesis (Figure 4.2). Thus,  $H_1$  through  $H_6$  are supported (Table 4.8). The model explains 45.3% of variance in organizational identification and fit indices indicate the model fits the data well (RMSEA .033, CFI .979,  $\chi^2$ =708.067, df =308).

Figure 4.2 Estimates of Relationship-inducing Factors Effects on Identification



Results from second model indicate that identification affects all five member behaviors as hypothesized and that all five relationships are relatively strong, supporting hypotheses  $H_7$  through  $H_{11}$  (Table 4.8). Organizational identification explains between 37% and 50% of variance in the behaviors, with the strongest relationship existing between identification and participation and the weakest between identification and service-use (Figure 4.3). An RMSEA of .061 and CFI of .927 ( $\chi^2$  = 1420.9, df =283) indicate the model fit is acceptable, but could be improved. Examination of the modification indices suggests there are associations between the behaviors that are not fully explained by identification, but none of the potential modifications are relevant to this research.

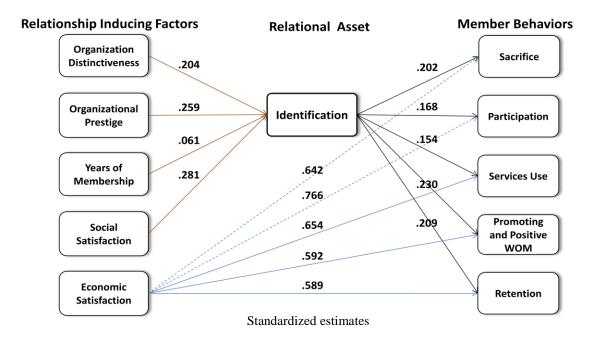
Figure 4.3 Estimates of Identification Effects on Member Behaviors



Analysis of the third model integrates models one and two and tests if identification mediates the effects of RIFs on member behavior and if economic

satisfaction directly affects member behavior. The analysis reveals that all hypothesized paths are supported, this includes all hypotheses from the previous models plus  $H_{13}$ through H<sub>15</sub>, which predict that economic satisfaction will have a direct effect on retention, WOM, and service-use (Table 4.8). Examination of the modification indices suggests that model fit would be improved if the paths from economic satisfaction to participation and sacrifice were freed. Originally, these behaviors were hypothesized to be more affective and therefore less likely to be influenced by economic satisfaction, but it is possible that being satisfied with one's pay and future employment prospects could also make the individual more likely to reciprocate through increased sacrifice and participation. This is consistent with social exchange based arguments regarding gratitude and reciprocity made by Palmatier (2008). Freeing these two paths result in both paths being significant and improved model fit, with RMSEA decreasing from .046 to .037 and CFI increasing from .940 to .961 ( $\chi^2 = 2344.3$ , df =711  $\rightarrow \chi^2 = 1785.8$ , df =709) (Table 4.4). Further examination of the modification indices identifies no meaningful direct paths from perceptions of distinctiveness and prestige or social satisfaction to membership behaviors. This suggests their effect is full mediated by identification and provides support for  $H_{12}$ . In its final structure, the full model with the two freed paths explains substantially more variance in member behaviors than did the second model where identification functioned as the only causal driver of behavior. Whereas organizational identification explained between 37% and 50% of variance in member behaviors, the integrated model incorporating direct effects of economic satisfaction explains between 53% and 74% (Figure 4.4).





In the final specification of the identification-based relational model the secondorder member behavior factor (pro-organizational behavior) is used so that identification
and economic satisfaction have direct effects on this factor. All of the relationshipinducing factors (perceptions of distinctiveness and prestige, time in the organization, and
social satisfaction) continue to influence identification across all three of the relevant
models and both economic satisfaction and identification have substantial positive effects
on pro-organizational behavior. Modification indices suggest that both distinctiveness
and prestige may have directs effects on pro-organizational behavior, with distinctiveness
having the larger expected effect. When the path from distinctiveness to proorganizational behaviors is freed, it is significant with a strong positive effect on
behavior, and the modification index from prestige to pro-organizational behavior is not
significant. The final model with standardized estimates is depicted in Figure 4.5. The
addition of the second-order behavior factor and freeing the path from distinctiveness to

behavior results in improved model fit (RMSEA .034, CFI .967,  $\chi^2$  = 1906.3, df =796). This is the final model that will be carried forward into the next section and is used to assess the effects of membership goals on identification and member value to the organization. All four identification-based relational models are summarized in Table 4.4.

Figure 4.5 Identification-Based Relational Model with 2<sup>nd</sup> Order Behavior Factor

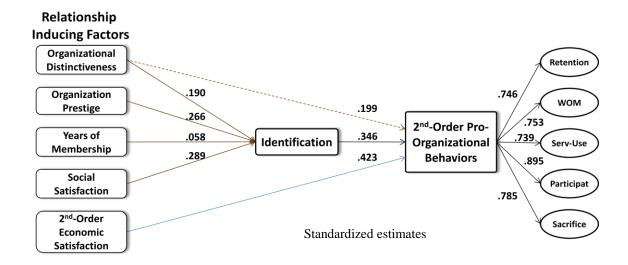


Table 4.4 Standardized Effects for Identification-Based Relational Model

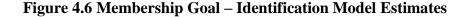
	RIF→Identif. (RIF =relationship inducing factor)	Identification→ Behavior	RIF→Identif. →Behavior	RIF→Identif.→ Pro-Org Behavior (2 <sup>nd</sup> Order Factor)
Prestige → Identification	.260		.259	.266
Distinctive. → Identification	.200		.204	.190
Time in Org. → Identification	.063		.061	.058
Social Satisf >> Identification	.288		.281	.289
Model Fit	RMSEA .033 CFI .979			
Identification → Retention		.619	.209	
Identification → Pos. WOM		.615	.230	
Identification -> Service Use		.597	.154	
Identification → Participat.		.687	.168	
Identification <del>&gt;</del> Sacrifice		.650	.202	
Model Fit		RMSEA .061 CFI .927		
Econ. Satisf.→ Retention			.589	
Econ. Satisf. → Positive WOM			.592	
Econ. Satisf. → Service Use			.654	
Econ. Satisf. → Participat.			.766	
Econ. Satisf. → Sacrifice			.642	
Model Fit			RMSEA .037 CFI .961	
Distinctive. → Pro-Org Behav.				.199
Identificat. → Pro-Org Behav				.346
Econ Satisf. → Pro-Org Behav.				.423
Model Fit				RMSEA .034 CFI .967

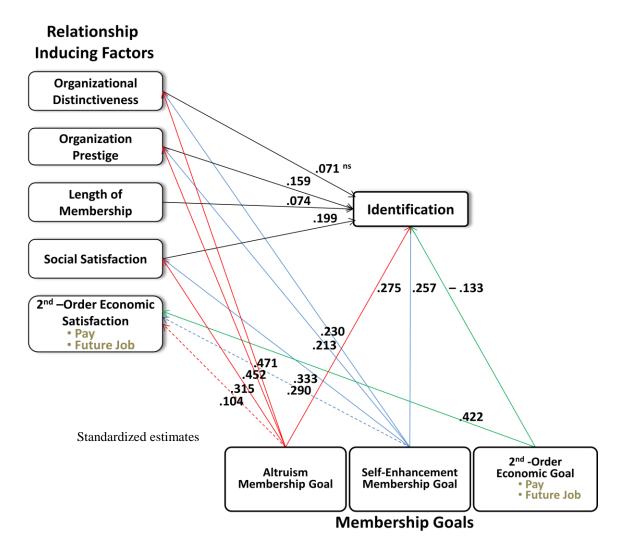
# 4.4.2 Membership Goal Affects on Identification and Pro-Organizational Behavior

It was expected that membership goals would influence members' processing and evaluations of information about the organization, and thus shape perceptions of organizational prestige and distinctiveness. It was also expected that membership goals would influence attitudes and expectations regarding the organization and therefore affect social and economic satisfaction. Additionally, different membership goals were expected influence identification when they promote affiliation the organization and/or have 'self' relevance. Lastly, I expected that membership goals would influence member behaviors directly, with behaviors perceived to facilitate the goal having more positive evaluation and more likely to be enacted (Brendl and Higgins 1996). A summary of hypotheses (supported and unsupported), as well as modifications, is presented in Table 4.8 at the end of this chapter. A table of standardized estimates for all three models integrating membership goals is presented in Table 4.5 and shows that membership goals have the expected effects on relationship-inducing factors, identification, and member behaviors. Furthermore, these effects vary substantially by membership goal type in ways that are largely consistent with my hypotheses.

### 4.4.2.1 Membership Goal Affects on Relationship-inducing factors & Identification

Integrating membership goals into the first (left-side) identification-based relational model indicates that membership goals have powerful effects on how the organization is perceived and their level of satisfaction with the organization (Figure 4.6).





First, both altruism and self-enhancement membership goals have substantial effects on perceptions of distinctiveness, prestige, and social satisfaction as expected. The altruism membership goal has a particularly strong effect on perceptions of distinctiveness (.471) and prestige (.452) compared to self-enhancement (.230 and .213, respectively), while both altruism and self-enhancement goals strongly influence social satisfaction (.315 and .333, respectively).

Examination of the modification indices suggests model fit could be improved by freeing the paths from altruism to economic satisfaction and from self-enhancement to

economic satisfaction. There are several reasons why these modifications may be justified. First, having intrinsic goals may lower economic expectations. Second, having intrinsic membership goals may have the effect of improving the overall perceptions of the organization, which may enhance economic satisfaction. Lastly, individuals with self-enhancement membership goals may see improved future employment prospective as linked to elements of self-improvement. When these paths are freed, both altruism and self-enhancement have significant positive effects on economic satisfaction (.104 and .290, respectively).

As expected, the economic membership goal is strongly related to economic satisfaction (.422), but not related to social satisfaction or perceptions of organizational prestige. Examination of modification indices, however, suggests that the economic membership goal may be related to perceptions of distinctiveness, but the value of the freed path, although significant, is not sufficient in magnitude to justify its inclusion.

As hypothesized, both altruism and self-enhancement membership goals have strong positive relationships with organizational identification (.275 and .257), while the economic membership goal has a negative relationship with identification (-.133). The effects of prestige, social satisfaction, and time in the organization continue to have a significant effect on identification, though the effects of prestige and social satisfaction on identification or diminished relative to the model that does not include membership goals (prestige .266 $\rightarrow$ .159 and social satisfaction .289 $\rightarrow$ .199). Perceptions of distinctiveness, however, ceases to be significant once membership goals are included, diminishing from .190 to .071 (p = .188). For purposes of consistency and identification

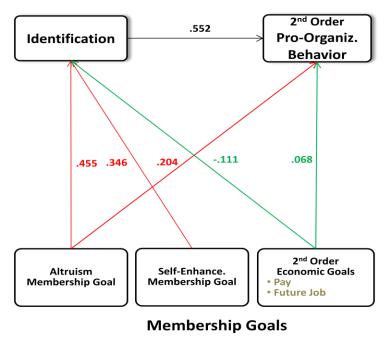
of membership goals effects on identification, distinctiveness is retained throughout subsequent analysis.

The revised model has strong fit to the data (RMSEA = .036, CFI = .967,  $\chi^2$  = 1407.5, df = 579). Overall, membership goals explain 44% of variance in distinctiveness, 40% in prestige, 37% in social satisfaction, and 54% in economic satisfaction, while membership goals and relationship-inducing factors together explain 55% of variance in organizational identification.

# 4.4.2.2 Membership Goal Affects on Identification and Pro-Organizational Behavior

Integrating membership goals into the second (right-side) identification-based relational model provides additional support for the argument that membership goals have powerful effects on identification (Figure 4.7).

Figure 4.7 Membership Goal – Identification and Behavior Estimates



Standardized estimates

Consistent with the previous model, both altruism and self-enhancement membership goals have substantial positive effects on identification (.455 and .346, respectively), while the economic membership goal has the opposite effect, negatively influencing identification (-.111). As anticipated, the altruism membership goal is positively related to pro-organizational behavior (.204), but contrary to expectations, the self-enhancement goals did not have a significant relationship with behavior and economic membership goals had a weak positive relationship with behavior (.068). Examination of modification indices suggests no structural adjustments.

After fixing the self-enhancement  $\rightarrow$  pro-organizational behavior path to zero, the model has a strong fit to the data (RMSEA = .037, CFI = .966,  $\chi^2$  = 1336.6, df = 537). In this model (without relationship-inducing factors), membership goals explain 47% of variance in organizational identification, while membership goals and organizational identification collectively explain 55% of variance in pro-organizational behavior.

### 4.4.2.3 Membership Goal Effects on the Full Identification-Based Relational Model

Integration of membership goals into the full identification-based relational model illustrates their potent effects on member-organization relationship quality and proorganizational behavior. Furthermore, the model demonstrates how substantially these effects differ between membership goals, particularly along the intrinsic and extrinsic distinction (Figure 4.8).

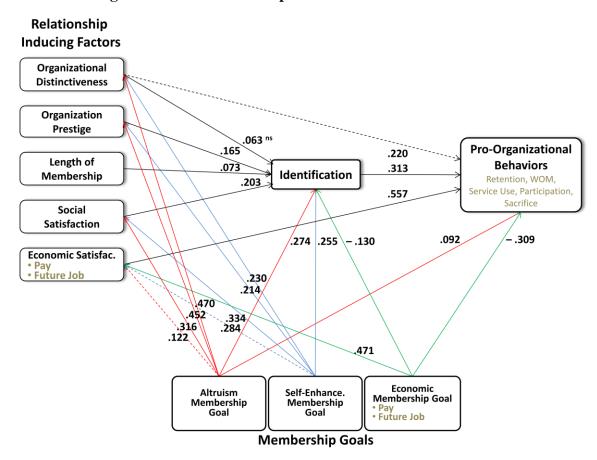


Figure 4.8 Full Membership Goal – Identification Estimates

In this final model, both altruism and self-enhancement membership goals have substantial, positive direct effects on organizational identification (.274 and .255, respectively). They also continue to have direct positive effects on perceptions of distinctiveness (.470 and .230), prestige (.452 and .214), social satisfaction (.316 and .334), and economic satisfaction (.122 and .284). The economic membership goal has the opposite effect on organizational identification (-.130), but positively influences economic satisfaction (.471).

The direct effects of membership goals on pro-organizational behavior are also telling. As hypothesized, altruism has a modest, direct positive effect on behavior (.092), while the self-enhancement goal continues to be unrelated (directly) to pro-organizational

behavior. Conversely, the second-order economic membership goal has a strong, direct, negative influence on pro-organizational behavior (-.309). Recall that the economic goal had a small positive effect on behavior in the previous model. The inclusion of relationship-inducing factors, particularly, economic satisfaction, and the economic membership goal reveals that the direct effect of economic membership goals is actually negative, while the effect of economic satisfaction is quite positive (.557). This negative relationship with behavior and the highly positive relationship through economic satisfaction to behavior suggests there may also be an omitted variable that intervenes between the economic membership goal and pro-organizational behavior (e.g. calculative commitment) (Zhao, Lynch, and Chen 2010). Future research should explore this possibility.

In addition to the direct positive effects of altruism goals and economic satisfaction and the direct negative effect of economic goals, pro-organizational behavior is influence directly by both organizational identification (.313) and perceptions of organizational distinctiveness (.228). Lastly, prestige, social satisfaction, and time in the organization related positively related to identification (.162, .073, .201, respectively), while the effect of distinctiveness on identification fails to reach significance (Table 4.5).

Overall, the model explains 73% of variance in pro-organizational behavior, 55% of organizational identification, 63% of economic satisfaction, 37% of social satisfaction, 44% of distinctiveness, and 40% of prestige, and the model demonstrates good fit (RMSEA = .035, CFI = .960,  $\chi^2$  = 2525.6, df = 1080). A summary of supported/non-supported hypotheses and modifications are presented in Table 4.8.

**Table 4.5 Standardized Effects for Membership Goal- Identification Models** 

	RIF Identif.	Identif. Behavior	RIF Identif. Behavior
	Goals	Goals	Goals
Altru. Goal → Distinct.	.492		.470
Altru. Goal → Prestige	.452		.452
Altru. Goal→Soc.Sat.	.315		.316
Altru. Goal → Econ Sat.	.107		.122
Self-Enhance. Goal→ Distinctiveness	.142		.230
Self-Enhance. Goal → Prestige	.213		.214
Self-Enhance. Goal→ Social Satisfaction	.334		.334
Self-Enhance. Goal → Econ Satisfaction	.275		.284
Economic Goal → Econ Satisfaction	.438		.471
Prestige → Identif.	.157		.165
Distinctive. → Identif.	.077 NS		.063 NS
Time in Org → Identif.	.074		.073
Social Satisf. → Identif.	.197		.203
Altru. Goal → Identif.	.274	.455	.274
Self-Enhance. Goal→ Identification	.255	.346	.255
Economic Goal → Identification	130	111	130
Model Fit	RMSEA .036 CFI .967		
Identification → Pro-Org Behavior		.552	.313
Altruism→ Pro-Org Behavior		.204	.092
Self-Enhancement → Pro-Org Behavior		.000	.000
Economic → Pro-Org Behavior		.068	309
Model Fit		RMSEA .037 CFI .966	
Distinctiveness→ Pro-Org Behavior			.220
Economic Satisfac.→ Pro-Org Behavior			.557
Model Fit			RMSEA .035 CFI .960

# 4.4.2.4 Decomposition of and Review of Membership Goal Effects

A brief review and comparison of the final identification-based relational model to the model integrating the three membership goals reveals some substantive insights. First, the identification-based model is quite robust to the addition of membership goals, such that most of its structural paths remain significant. The notable exception being that when membership goals are included, distinctiveness no longer has a significant influence on identification.

The model also provides a good basis for assessing the affect of membership goals on identification and member behaviors. In the current context, intrinsic and extrinsic membership goals have considerably different effects on identification and member behavior. In terms of relationship quality, both intrinsic and extrinsic goals are strongly related to identification, but in opposite directions. While both intrinsic membership goals promote a strong positive connection with the organization, economic goals seem to inhibit a connection or sense of oneness with the organization. The differences between membership goals are just as substantial in terms of their effects on pro-organizational behaviors, but in this case, the differences are between intrinsic and extrinsic goals and within intrinsic goals. These differences are particularly important to assessing the member's value to the organization, particularly in situations where economic returns only reflect a portion of the member's contribution to the organization. Table 4.6 decomposes the effects from each of the three membership goals on proorganizational behavior and reveals that intrinsic membership goals provide greater value to the organization than economic goals, which in this context had an overall negative effect on behavior (-.062). But it also demonstrates that altruistic, self-transcendent goals that focus on the organization (or its mission) have a greater total influence (.401) on proorganizational behaviors than self-enhancing goals (.285). This is probably attributable to the focus of these two goals, one being aligned to the organization and the other being focused on the self. The routes by which these goals influence behavior are also quite different. The negative effect of extrinsic membership goals operates directly on behavior (-.322) and indirectly via negative effects on identification (-.039) and total -.360, while its positive effects on behavior operate indirectly via economic satisfaction and perception of distinctiveness (.300). Intrinsic membership goals operate primarily or exclusively through their indirect effects to influence member behaviors (e.g. less than 25% of the effect of altruism and 0% of self-enhancement is direct).

Table 4.7 depicts the total, direct, and indirect effects of the final model. Of note, the largest drivers of pro-organizational behaviors are economic satisfaction, altruistic membership goals, organizational identification, and self-enhancement membership goals, while the only factor that decreases pro-organizational behavior is economic membership goals. The largest drivers of organizational identification are altruistic and self-enhancement membership goals, social satisfaction, and prestige, while the only factor that decreases pro-organizational behavior is the economic membership goal.

**Table 4.6 Goal Effect Decomposition** 

Goal Influence on Pro-Org. Behavior	Direct Effect	Path of Indirect Effect	Indirect Effect	Total Effect
Altruism Goal → Pro-Org. Behavior	0.092	Altru→Identification→Pro-Org. Behavior	0.0858	0.3925
		Altru.→Distinctive.→Pro-Org. Behavior	0.1034	(0.4015 if ns path
		Altru→Econ Satisf.→Pro-Org. Behavior	0.0680	from distinct > to identif
		Altru→Prestige→Identification→ Pro-Org. Behavior	0.0233	is added)
		Altru→Social Sat→Identificat.→ Pro-Org. Behavior	0.0200	
		Altru→Distinct →Identification→	0.0000	
		Pro-Org. Behavior	0.3005	
Self-Enhance. Goal →Pro-Org. Behavior	0.000	Self-Enhance → Identific. → Pro-Org. Behavior	0.0798	0.3117
		Self-Enhance → Distinctive → Pro- Org. Behavior	0.0506	(0.3162 if ns path
		Self-Enhance→Econ Satisf →Pro- Org. Behavior	0.1582	from distinct > to identif
		Self-Enhance→Prestige →Identific→Pro-Org. Behavior	0.0120	is added)
		Self-Enhance→Social Sat→ Identific.→ Pro-Org. Behavior	0.0111	
		Self-Enhance→Distinctiveness→	0.0000	
		Identific. → Pro-Org. Behavior	0.3117	
Economic Goal → Pro-Org. Behavior	-0.309	Economic → Identific. → Pro-Org. Behavior	-0.0407	- 0.0874
		Economic →Econ Satisf →		
		Pro-Org. Behavior	<u>0.2623</u>	
			0.2216	

22

Table 4.7 Total, Direct, and Indirect Effects by Construct

The effect of each column variable on each row variable after standardizing all variables.	Type of Effect	Altruism Membership Goal	Self-Enhancement Membership Goal	Economic Membership Goal	Identification	Prestige	Distinctiveness	Social Satisfaction	Economic Satisfactio	Years in Organization	Age	Deployed	Number of Deployments	African American	Other Race	Education
Pro-	Total	.402	.326	087	.313	.052	.240	.064	.557	.073	.094	103	050	.023	023	.064
Organizational	Direct	.092		309	.313		.220		.557		.078	046		022		.064
Behavior	Indirect	.310	.326	.222		.052	.020	.064		.073	.016	057	050	.045	023	
	Total	.452	.373	130		.165	.063	.203		.073	.011	022	008		009	
Identification	Direct	.274	.255	130		.165	$.063^{\text{ns}}$	.203		.073					$.029^{ns}$	
	Indirect	.168	.118								.011	022	008		038	
	Total	.452	.214								.047	051	050		091	
Prestige	Direct Indirect	.452	.214								.047 <sup>ns</sup>	051	050		091	
	Total	.470	.230			,	•		,		.057	067	•		085	
Distinctiveness	Direct Indirect	.470	.230								.057	067			085	
G : 1	Total	.316	.334									048			079	
Social Satisfaction	Direct	.316	.334									048 <sup>ns</sup>			079	
Saustaction	Indirect															
Economic	Total	.122	.284	.471								063	085	.081		
Economic Satisfaction	Direct Indirect	.122	.284	.471								063 <sup>ns</sup>	085	.081		

<sup>-</sup>All effects are significant at the .05 level or less unless marked <sup>ns</sup> (not significant). Total and indirect effects that operate through distinctiveness include the non-significant effect (.071) of distinctiveness on identification, which explains any differences between Tables 4.6 and 4.7.

Table 4.8 Hypotheses Testing: Identification & Membership Goal-Identification Models

	ification-Based Relational Model			_	ntification N	
Uynothogic	Dalationship	Direction	Suppo	rted	Std. E	stimate
Hypothesis	s Relationship	Direction	M1	M2	M1	M2
$\mathbf{H}_1$	Self-Org. Congruence → Identif.	+	Yes*	NA	.751+++	.557+++
$\mathbf{H}_2$	Org. Prestige → Identification	+	Yes	Yes	.259+++	.165+++
$\mathbf{H}_3$	Org. Distinctive. → Identification	+	Yes	No	.204+++	.063 ns
$\mathbf{H_4}$	Yrs. in Membership→Identificat.	+	Yes	Yes	.061+	.073+++
$\mathbf{H}_{5}$	Social Satisf.→Identification	+	Yes	Yes	.281***	.203+++
$\mathbf{H}_{6}$	Econ. Satisf. is unrelated to Identif.	0	Yes	Yes		
$\mathbf{H}_{7\mathrm{a}}$	Identification → Retention	+	Yes	Yes	.209+++	
$\mathbf{H}_{7\mathrm{b}}$	Identification→Positive WOM	+	Yes	for 2 <sup>nd</sup>	$.230^{+++}$	.313+++
$\mathbf{H}_{7\mathrm{c}}$	Identification→Service Use	+	Yes	Order	.154+++	.313
$\mathbf{H}_{7\mathbf{d}}$	Identification → Participation	+	Yes	Behav	.168+++	
$\mathbf{H}_{7\mathrm{e}}$	Identification→Sacrifice	+	Yes	Factor	$.202^{+++}$	
Modific.	Distinctiveness→Pro-Org. Behavior <sub>b</sub>	+	NA			$.220_{b}^{+++}$
$\mathbf{H}_{8 ext{a-c}}$	Distinctiveness <sub>a</sub> , Prestige <sub>b</sub> , and Social	0	Partial			
	Satisf. <sub>c</sub> effects on behavior will be		$Yes_b$	$Yes_b$		
	fully mediated by Identification		$Yes_c$	$Yes_c$		
$\mathbf{H}_{9\mathbf{a}}$	Economic Satisf. → Retention	+	Yes	Yes	.589+++	
$\mathbf{H}_{\mathbf{9b}}$	Economic Satisf.→Positive WOM	+	Yes	for 2 <sup>nd</sup>	.592+++	
$\mathbf{H}_{9c}$	Economic Satisf.→Service Use	+	Yes	Order	.654+++	.557+++
Modific.	Economic Satisf. → Participation	+	NA	Behav	.766+++	
Modific.	Economic Satisf.→Sacrifice	+	NA	Factor	.642+++	
$\mathbf{H}_{10\mathrm{a,b}}$	Self-Enhancement Goal → Prestige <sub>a</sub> & Distinctiveness <sub>b</sub>	+		$Yes_a$ $Yes_b$		.214 <sup>+++</sup> .230 <sup>+</sup>
$H_{10a,b}$	Altruism Goal → Prestige <sub>a</sub> & Distinctiveness <sub>b</sub>	+		Yes <sub>a</sub> Yes <sub>b</sub>		.452 <sup>+++</sup> .470 <sup>+++</sup>
$\mathbf{H}_{11}$	Economic Goal is unrelated to Prestige <sub>a</sub> & Distinctiveness <sub>b</sub>	0		$Yes_a$ $No_b$		.000 <sup>ns</sup> .099**
$H_{12a}$	Self-Enhancement Goal → Self-Org. Congruence	+		Yes*		.216
$\mathbf{H}_{12\mathrm{b}}$	Altruism Goal →Self-Org. Congruence	+		No*		.062 ns
$\mathbf{H}_{13}$	Economic Goal is unrelated to Self-Org. Congruence	0		Yes*		.000 ns
$\mathbf{H}_{14a}$	Self-Enhancement Goal → Social Satisfaction	+		Yes		.334+++
$\mathbf{H}_{14\mathrm{b}}$	Altruism Goal→Social Satisf.	+		Yes		.316+++
H <sub>15</sub>	Econ. Goal is unrelated to Soc. Sat.	0		Yes		.000 ns
Modific.	Self-Enhance. Goal→Econ Satisf	+		NA		.284+++
Modific.	Altruism Goal→Economic Satisf	+		NA		.122++
$\mathbf{H}_{16a}$	Self-Enhance. Goal→Identific.	+		Yes		.255+++
H <sub>16b</sub>	Altruism Goal → Identification	+		Yes		.274+++
$\mathbf{H}_{17}$	Economic Goal → Identification	-		Yes		130 <sup>+++</sup>
$H_{18a}$	Self-Enhanc. Goal→Pro-Org Beh.	+		No		.000 ns
$H_{18b}$	Altru. Goal→Pro-Org Behavior	+		Yes		.092+
$\mathbf{H}_{19}$	Econ. Goal→Pro-Org Behavior	-		Yes		309+++

<sup>\*</sup> Self-Org Congruence was dropped from the final models; this estimate is extracted from a separate model for purposes of addressing the Self-Org Congruence hypotheses only.

<sup>\*\*</sup>Economic Goal Distinctiveness would be significant if added but did not justify the modification ns not significant, + significant at the .05, ++ significant at .01, +++ significant at .001,

### 4.5 Control Variable Effects

Demographic and combat deployment variables had modest effects on the model and were substantially less influential than the latent constructs used in the model. The most influential control variables were the dichotomous variable indicating if the member was currently deployed or not and the number of total deployment the members has experience (Table 4.9). The results indicate that when individuals were deployed they perceive the organization as less distinctive and prestigious; moreover they were less economically satisfied and less likely to enact pro-organizational behaviors. The perception of prestige and economic satisfaction also decreased as the number of deployments experiences went up. The standardized effects from these variables ranged from -.046 to -.085, so their influence was modest when compared to the effects of individual membership goals.

Demographically, Soldiers from low density racial groups (e.g. those Soldiers that are not White, African American, or Hispanic) perceived the organization as less distinctive and prestigious and experienced less social satisfaction than Caucasian members, while African Americans were more likely to be economically satisfied relative to Caucasian Soldiers. Otherwise there were no other differences based on racial background. Greater age and education level were positively related pro-organizational behaviors, while tenure in the Army was related to higher levels of identification and age was positively related to greater perceived distinctiveness. All of these standardized

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<sup>&</sup>lt;sup>11</sup> Native American, Asian/Pacific Islander, and others ethnic backgrounds were combined into a single "others" category. The rationale behind this decision is twofold. First, unlike Caucasians, African American, and Hispanics, the lower representation of these racial groups is likely to create a situation where members of these groups don't feel the organization "looks like them". This should have a similar effect on identification across all three low-density racial groups. Second, the small number of observations for these groups makes analysis using SEM problematic.

relationships were in the range of .05 to .10 in absolute value. Lastly, gender, rank, the number of children, marital status, and being in a combat arms specialty had no significant effect on any latent variables in the model.

**Table 4.9 Demographics and Control Variables** 

Deployed→Distinctiveness	067	Other Race→ Distinctiveness	091
Deployed→Prestige	051	Other Race→Prestige	099
Deployed→Econ. Satisfaction	063	Other Race→Social Satisfaction	079
Deployed→Pro-Org. Behavior	046	African American→Econ. Satisf.	.081
# of Deployments→Prestige	050	Age→Distinctiveness	.057
# of Deployments→Econ. Satisf.	085	Age→Pro-Org. Behavior	.078
Education→ Pro-Org. Behavior	.064	Years in Org.→Identification	.073

Standardized estimates, all values significant at the .05 level

### **4.6 Moderation Analysis**

To evaluate whether membership goals moderate the influence of the constructs in the identification-based relational model I use multi-group analysis with median splits for the altruism, self-enhancement, and economic membership goals (N=545 and 546). Each of these membership goals is analyzed separately, with the high and low groups for the goal estimated simultaneously. The unstandardized path estimates and standard errors are then used to compute Z-scores for the path difference between the two groups. A significant difference indicates the path is moderated by the membership goal. There are seven structural paths (four direct antecedents of identification and three direct antecedents of pro-organizational behavior, so a Bonferroni correction was applied by dividing .05 by seven to get a *p*-critical value of .007 and a Z-Score critical value of 2.45. Path estimates, standard errors and Z-scores are summarized in Table 4.10. All three high-low goal group comparisons had an RMSEA of .026 and a CFI from .956 and .960.

Several interesting insights are gained by examining how construct relationship strength changed based on the self-enhancement membership goal level. First, consistent

with my hypothesis, perception of organizational distinctiveness seems to have a greater positive influence on the development of identification among the high self-enhancement group than within the low self-enhancement group ( $\beta_{high}$ .614, SE<sub>high</sub>.144,  $\beta_{low}$ .001, SE<sub>high</sub>.100, Z-Score 3.497). Second, the perception of organizational distinctiveness also seems to have a greater positive influence on pro-organizational behavior among the high self-enhancement group than within the low self-enhancement group ( $\beta_{high}$ .835, SE<sub>high</sub>.189,  $\beta_{low}$ .268, SE<sub>high</sub>.103, Z-Score 2.634). Third, the opposite seems to be true for the effect of social satisfaction on identification, with the social satisfaction having a greater influence in identification among the low self-enhancement group, though the effect is just shy of being significant at the .007 level. This indicates that for individuals seeking self-enhancement through membership, perceiving the organization as distinctive is vital if the organization is going to develop and maintain a strong relationship with the member and elicit the most positive membership behaviors.

Interestingly, the direct relationship from self-enhancement to distinctiveness in the full membership goal - identification model is not particularly strong. This would suggest that while having a salient self-enhancement goal may not make the individual perceive the organization as more distinctive, it does make the perception of distinctiveness more influential on identification and behavior. Furthermore, while the full membership goal - identification model indicates the overall affect of distinctiveness on identification is not significant, it appears to be highly significant for those with salient self-enhancement goals. For individuals who did not join for reasons of self-enhancement, it appears that positive social relationships with other members are more important to promoting a stronger relationship with the organization.

Altruism also moderates the relational process, with social satisfaction playing a greater role in developing identification among those with less altruistic membership goals than among those with more altruistic membership goals ( $\beta_{high}$ .164,  $SE_{high}$ .082,  $\beta_{low}$ .557, SE<sub>high</sub> .099, Z-Score 3.057). This is quite interesting and exactly opposite of what was hypothesized. Instead, it appears that among individuals joining for altruistic reasons that social satisfaction plays a much more limited role in developing identification. This may because individuals who join for reasons of altruistic service to the organization or it mission are already predisposed to identifying with the organization. Second, the perception of organizational distinctiveness seems to have a greater positive influence on pro-organizational behavior among the high altruism goal group than within the low altruism goal group ( $\beta_{high}$ .619, SE<sub>high</sub>.151,  $\beta_{low}$ .123, SE<sub>high</sub>.138, Z-Score 2.425), though the effect is just shy of being significant at the .007 level. This means that perceptions of distinctiveness is a key driver of pro-organizational behaviors for individuals who join for either altruism or self-enhancement and it suggest that distinctiveness may be an important driver for pro-organizational behavior among those with intrinsic membership goal in general.

It was anticipated that the importance or salience of the economic membership goal would moderate the effect of economic satisfaction on pro-organizational behavior. While the level of moderation does not reach significance for the second-order economic goal, post-hoc analysis of four different first-order economic membership goals (pay, future employment, funding education, and retirement) show that these first-order economic membership goals moderate the effect of economic satisfaction on pro-organizational behavior as hypothesized. This suggests there may be moderation that is

masked by the second-order factor. More importantly it is important to the organization, in terms of facilitating pro-organizational behaviors, that individuals joining for economic reasons be satisfied with these benefits.

**Table 4.10 Moderation Tests** 

Moderation Hypothesis: Yes/No

Membership Goal Moderator and Relationship	Support: Yes/No	$eta_{high}$	SE <sub>hi</sub>	$_{ m gh}$ $\beta_{ m low}$	v SE <sub>low</sub>	Z Score (CV=2.45)
<u>Altruism</u>						
Organizat. Dist. → Identification	No/Yes	.364	.118	.081	.113	1.7322
Social Satisf. → Identification	Yes/Yes	.164	.082	.557	.099	$3.0572^{+}$
Org. Prestige → Identification	No/Yes	.307	.076	.268	.082	0.3488
Years Member. → Identification	No/Yes	.029	.010	.016	.012	0.8322
Identif.→Pro-Org. Behavior	No/Yes	.494	.070	.362	.056	1.4725
Distinctiv. → Pro-Org. Behav.	No/Yes	.619	.151	.123	.138	2.4247
Econ. Satisf.→Pro-Org. Behav.	No/Yes	.677	.138	.820	.170	0.6531
Self-Enhancement						
Org. Distinct. → Identification	Yes/Yes	.614	.144	.001	.100	$3.497^{+}$
Social Satisf.→Identification	No/Yes	.146	.102	.473	.087	2.440
Org. Prestige → Identification	Yes/No	.166	.096	.349	.072	1.525
Years Member. → Identification	No/Yes	.013	.010	.036	.012	1.472
Identif.→Pro-Org. Behavior	No/Yes	.391	.070	.476	.061	0.915
Org. Distinct.→Pro-Org. Behav.	No/No	.835	.189	.268	.103	2.634+
Econ. Satisf.→Pro-Org. Behav.	No/Yes	.628	.149	.704	.149	0.361
<b>Economic</b>						
Org. Distinct. → Identification	No/Yes	.313	.122	.218	.118	0.600
Social Satisf.→Identification	No/Yes	.442	.097	.401	.100	0.294
Org. Prestige → Identification	No/Yes	.343	.092	.319	.075	0.202
Years Member. → Identification	No/Yes	.012	.011	.028	.012	0.983
Identif.→Pro-Org. Behavior	No/Yes	.429	.062	.437	.061	0.092
Distinct.→Pro-Org. Behavior	No/Yes	.409	.188	.327	.104	0.382
Econ. Satisf.→Pro-Org. Behav.	Yes/No	1.067	.199	.672	.145	1.604

<sup>&</sup>lt;sup>+</sup> Significant at the .007 level, which reflects the .05 significance level with Bonferroni correction for seven post-hoc moderation tests.

 $\beta$  coefficients are unstandardized.

# **4.7 Alternative Model Specifications**

To better understand the effects of membership goals I run two additional models that focus the effects of membership goals on identification and behavior. The first model drops the relationship-inducing factors from the left side of the model, drops the second-order economic membership goal factor, and adds retirement as an additional economic membership goal. The second model takes the additional step of also dropping the second-order pro-organizational behavior factor. By dropping the second-order economic membership goal factor and adding the retirement membership goal, I am able to examine how economic goal vary in their effects on identification and behavior (Figure 4.9). An RMSEA of .038 and a CFI of .963 indicates good model fit. All control variables are retained in the model but are not discussed.

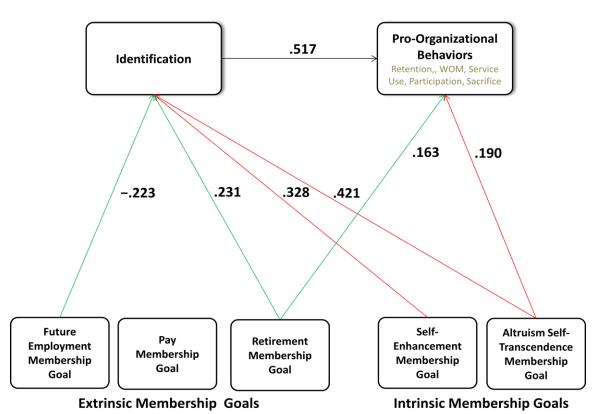


Figure 4.9 Specific Membership Goal Effects

This model identifies two new aspects of membership goals. Most importantly, extrinsic membership goals can and do vary substantially in their effects on identification and behavior. The inclusion of the retirement membership goal provides three different types of economic membership goals: future employment, pay, and retirement. Their standardized effect on identification ranges from -.223 (future employment) to .231 (retirement), with pay having no association. Furthermore, only the retirement membership goal has a significant direct relationship with pro-organizational behavior in this model. This may seem surprising given the strong association between the economic membership goal and pro-organizational behavior in the final model, but recall that this direct effect is offset by a strong positive indirect effect that operates through economic satisfaction, such that the total effect on pro-organizational behavior was fairly modest (-.06). This creates a situation where the effects of these three extrinsic goals, in terms of their influence on behavior, range from quite negative, as is the case for future employment (-.115 total effect on behavior), to completely neutral (pay, no effect on behavior), to quite positive (retirement, .283 total effect on behavior). Why would this level of variation occur? I suggest there are two reasons: future orientation towards the organization and persistence. The future employment membership goal predisposes the individual to gain marketable skills in the current organization and then leave to apply them elsewhere, which should naturally decrease the likelihood of identifying with the organization. Conversely, the retirement goal requires a long-term relationship to accrue and vest into the benefits. Because the long-term relationship with the organization enables the member to achieve their goal, the relationship should be evaluated more positively. The lack of associations with the pay membership goal is likely attributable to a lack of goal persistence. Once the member begins receiving pay routinely, the goal is achieved, and no additional investment of relational energy or behavior is necessary. It therefore rapidly loses salience and its cognitive influences diminish. The membership goal would only become salient again if the pay was threatened or discontinued.

To test this hypothesis, a future education membership goal was used to replace the future employment membership goal. Like future employment, the future education membership goal predisposes the individual to gain educational benefits in the current organization and then leave the current organization to apply then in an educational or vocational institution. When future education is included in the model in lieu of future employment, it had almost the identical relationship, with both being negatively related to identification (-.161 for future education and -.223 for future employment) and both being directly unrelated to pro-organizational behavior.

While the extrinsic goals range from quite negative to very positive in their effects on identification and behavior, the two intrinsic goals both have strongly positive total effects on identification and behavior. Consistent with findings from the full model, altruism has the only direct effect on behavior and the more positive total effect on behavior, while both have strong positive effects on identification. This reinforces the earlier argument that intrinsic membership goals seem to provide greater value to the organization, but it also demonstrates that both extrinsic and intrinsic membership goals can be valuable to the organization, though extrinsic membership goals have greater variation and risk.

The second model looks at effects on specific pro-organizational member behaviors. The RMSEA of .051 and a CFI of .935 indicate this model's fit could be

improved. Examination of the modification indices reveals that the reduced fit occurs because the residual for participation is correlated with the other behavioral factors. This is despite the fact that there are no significant cross-loading for the participation items in the measurement model and no large cross-loading of other items to the participation factor. When participation is dropped from the model, fit improved to an RMSEA of .043 and a CFI of .954, but the structural path estimates for the remaining behaviors are largely unchanged. I therefore retain participation in the model.

This model demonstrates that specific membership goals have direct effects on specific behaviors and that their broader affects across multiple behaviors results from their effect on identification, the retirement goal being an exception (Table 4.11). As expected, altruism is strongly related to sacrificing behavior, and slightly less so to participation. Surprisingly, it has a small negative relationship with retention. This suggests the relatively modest positive relationship between altruism and proorganizational behavior in the full model is a product of combining its lack of relationships with WOM and service-use with the stronger positive relationship it has with sacrifice and participation. Altruism's strong positive relationship with identification creates a substantial, positive total effect on all behaviors. The retirement goal has a positive effect on all five behaviors, as well as a moderate, positive effect on all behaviors through its effect on identification. Neither self-enhancement nor pay goals have a direct effect on any behavior, though self-enhancement does have a strong indirect effect on behavior that operates through identification. The future employment goal has the most negative effects, demonstrating a strong, direct negative effect on sacrificing behavior and a negative total effect on all behaviors with the exception of service-use.

**Table 4.11 Goal Effects on Specific Member Behaviors** 

The effect of each column variable on each row variable after standardizing all variables.	Type of Effect	Intrinsic Membership Goals		Extrinsic Membership Goals			Relation Quality
		Altruism Membership Goal	Self-Enhancement Membership Goal	Retirement Membership Goal	Pay Membership Goal	Future Employment Membership Goal	Identification
Identification	Total	.431	.329	.226	No effect on identification	217	
	Direct	.431	.329	.226	or behavior		
	Indirect						
Retention	Total	.156	.184	.374		121	.559
	Direct	085		.247			.559
	Indirect	.241	.184	.126		121	
WOM	Total	.243	.185	.264		123	.565
	Direct			.136			.565
	Indirect	.243	.185	.128		123	
Service-Use	Total	.217	.165	.198		.058	.503
	Direct			.085		.167	.503
	Indirect	.217	.165	.114		109	
Participation	Total	.375	.186	.200		123	.565
	Direct	.132		.072			.565
	Indirect	.244	.186	.128		123	
Sacrifice	Total	.484	.143	.231		271	.436
	Direct	.296		.133		176	.436
	Indirect	.188	.143	.099		095	

# **5.8 Robustness Analyses**

I employ six approaches to assess the robustness and validity of these findings. First, I simultaneously estimate the best fitting model discussed earlier (Figure 4.7) for two groups created by randomly splitting the full sample (N=545 and N=546). In this process, I run an omnibus test prescribed by Byrne (2001) where the two groups (subsamples) are constrained as equal and estimated simultaneously for the two samples. This

process tests if the model developed through theory and post-hoc modifications using the full sample is still valid using the two smaller samples. Second, the model with all structural paths constrained as equal, is freed one path at a time to test for non-invariance by path. Third, three additional randomly split sample are created to look for instability among the pathway parameters. Fourth, I identify and remove outlier cases and determine if the results hold using the sample with these cases removed. Fifth, I use bootstrapping to test for bias among the maximum likelihood estimates and identify if any of the paths fail to reach significance using the bootstrapped standard errors. Lastly, I use an alternate set of items derived in the next essay. These are the items that work reasonably well across all three sampled cohorts, and therefore provide a more rigorous test of the final model.

In the first approach I use the best fitting model developed using the full sample and create two randomly split samples (n=545 and n=546). I then constrain all structural paths among the core variables as equal and use a chi-square test to determine if model fit varies significantly between the two split samples. The unconstrained model produces a chi-square value of 3870.3 with 2158 degrees of freedom, while the model where all causal paths are constrained as equal produces a chi-square of 3910.5 with 2180 degrees of freedom. The chi-square difference between the two groups is 40.2 with a change of 22 degrees of freedom, p = .01.

In the second test, the structural paths are constrained as equal and then freed one path at a time to test for noninvariance and develop more detailed information on instability or differences of specific paths between groups. Applying a Bonferroni correction for 22 tests yields a significance level of .002. The chi-square test with 1 df at

.002 has a critical value of 9.6. This test identifies all structural paths as invariant across groups. The relational path with the largest chi-square was self-enhancement  $\rightarrow$  social satisfaction ( $\chi^2 = 8.1$ , 1 df).

In the third analysis, I split the full sample three additional times and retest these paths using the same Bonferroni correction and critical value. None of the three tests produced a noninvariant path, and only the altruism $\rightarrow$ distinctiveness approached the threshold of noninvariance ( $\chi^2 = 8.0$ , 1 df). Overall, these split sample analyses indicate that these paths are quite robust.

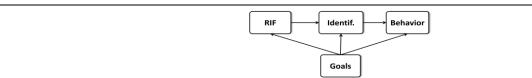
In the fourth analysis, I identify the ten largest outliers (those with Mahalanobis scores over 150). These high leverage outliers were removed and the analysis of the final model was rerun (n=1081). All paths that were significant in the final model using the full sample (n=1091) remain significant using the sample without the ten outliers. Furthermore, while the elimination of these cases creates some minor changes in standardized path estimates, the largest standardized change is less than .05 (self-enhancement→economic satisfaction changes from .273 to .230). RMSEA improves slightly from .035 to .034 and CFI improves from .960 to .962. While there is some support for the removal of these outliers, the earlier findings are robust to their inclusion and these cases have been retained.

In the fifth analysis, I bootstrap 500 samples an rerun my final model. Earlier analysis indicated that some of the items and control variables had modest deviations from normality, which can bias standard estimates downward in maximum likelihood estimation and lead to incorrect findings of significance. While the univariate deviations from normality were relatively small, it is prudent to validate using unbiased

bootstrapped standard error. Results from this analysis indicate that self-enhancement  $\rightarrow$  distinctiveness and altruism  $\rightarrow$  pro-organizational behaviors would not reach significance based on bootstrapped standard errors and 95% confidence intervals for their standardized path estimates with p-values of .08 and .09, respectively. The collective weight of these validation tests indicates that the findings and conclusions are highly robust and appear valid across multiple subsamples, an outlier trimmed sample, and the application of debiasing procedures.

In the final analysis, I test if the results are robust to changes in the measurement model. To do this I bring forward the construct scales used in the second essay for multicohort analysis. These scales include additional items that work reasonably well across the three different lifecycle cohorts, but are not optimal for this sample. Results from the alternate scales exhibit full configural invariance with the model using the Essay I scales (Table 4.12). Model fit is diminished, but RMSEA is still well below the recommended threshold of .06 (Hu and Bentler 1999), and while the CFI is lower than the .95 recommendations, this is attributable to the increased complexity that results from adding 18 additional items. Overall, these six analyses suggest that the final model is quite robust.

Table 4.12 Comparison of Final Model using Essay I and Essay II Scales



	Faces I Coolea	Essay II,
	Essay I Scales	Multi-Cohort Scales
Altru. Goal → Distinct.	.470	.421
Altru. Goal → Prestige	.452	.396
Altru. Goal→Soc.Sat.	.316	.244
Altru. Goal → Econ Sat.	.122	.063
Self-Enhance. Goal→	.230	.303
Distinctiveness	.230	
Self-Enhance. Goal →	.214	.285
Prestige Self-Enhance. Goal→		465
Social Satisfaction	.334	.465
Self-Enhance. Goal →	204	.241
Econ Satisfaction	.284	· <del>-</del> ·-
Economic Goal → Prestige	.000	.000
Economic Goal → Social Satisf	.000	.000
Economic Goal → Econ Satisf	.486	.580
Prestige → Identif.	.165	.095
Distinctive. → Identif.	.063 NS	.118
Time in Org→ Identif.	.073	.070
Social Satisf. → Identif.	.203	.283
Altru. Goal → Identif.	.274	.209
Self-Enhance. Goal → Identif.	.255	.259
Economic Goal →	130	160
Identification	.130	
Identification →Pro-Org Behav	.313	.317
Altruism→Pro-Org Behavior	.092	.155
Self-Enhance. → Pro-Org		.000
Behav	.000	.000
Economic → Pro-Org Behavior	322	442
Distinctive. → Pro-Org	.220	.124
Behavior	.220	
Econ. Satisf. → Pro-Org Behav.	.552	.715
Model Fit	RMSEA .035	RMSEA .046
	CFI .960	CFI .913

### CHAPTER V: DISCUSSION AND MANAGERIAL IMPLICATIONS

This study integrated two important areas of research, organizational identification and goal theory, within the membership marketing and relationship marketing contexts. In the first area, highly identified individuals are known to provide substantial value to firms and non-profit organization through their relational behaviors, such as providing positive word-of-mouth for the organization and increased participation in organizational activities (Bhattacharya et al. 1995). In the second area goals shape our preferences and behaviors by influencing the evaluation and organization of information, options, and behaviors (Kruglanski et al. 2002; Fishbach and Ferguson 2011; Warren, McGraw and Van Boven 2010). While several studies have examined identity or identification within the membership context and there have been numerous studies examining goal effect, none of these studies has yet examined how individuals' membership goals influence identification or member behaviors. This study sought to close this gap by clarifying the role of membership goals in identification and behavior within the membership setting.

#### 5.1 Insights and Contribution to the Identification-Based Relational Model

Previous research suggests that members develop identification with the organization when they perceive the organization as prestigious (or believe others view it

as prestigious), when they view the organization as distinctive from others, through increased participation and time in the membership, and when they experience greater satisfaction (Mael and Ashforth; Bhattacharya et al. 1995; Arnett 2003); though the findings regarding the satisfaction-identification relationship have been inconsistent (Arnett et al. 2003; Mael and Ashforth 1992). Earlier research has also suggests that identification promotes important behaviors, such as increased donating, greater product and service use, greater participation, increased sharing of information, and promoting (Arnett 2003; Ahearne et al. 2005).

My research substantiates most of these conclusions, finding that identification was enhanced by perceptions of prestige and distinctiveness and increased based on time in the organization. Unlike earlier research that modeled satisfaction as a single factor, using both social and economic satisfaction items, this study examined the discrete effects of economic and social satisfaction. My research demonstrates that while both social and economic satisfaction have quite strong influence on pro-organizational behaviors, only social satisfaction affects organizational identification, which fully mediates its effect on behavior. Economic satisfaction, conversely, is unrelated to identification, but has strong direct effects on pro-organizational behaviors. Lastly, identification with the organization appears to make members more likely to remain with the organization, provide positive WOM regarding the organization to others, use organization's services, participate in organizational activities, and sacrifice for the organization, even when it is contrary to their own interests.

### 5.2 Effects of Membership Goals on the Member-Organization Relationship

Each of the membership goals discussed in this paper was used by the United States Army and its marketing agency to segment its market and then tailor advertisements and communications to generate interest d increase high-quality enlistments. It is very likely that most of the respondents in this study consumed advertisements and communications that were targeted to their personal goals. The question then is, "Given that these membership goals are used to generate interest and induce membership by the organization, what are their subsequent effects on identification and member behaviors?" Membership goals were expected to influence members' processing and evaluations of information about the organization, and thus shape perceptions and expectations of the organization. Furthermore, it was anticipated that membership goals would influence identification by promoting or inhibiting affiliation with the organization and its level of 'self' relevance. Lastly, member behaviors perceived to facilitate the goal were expected to receive more positive evaluation and be more likely to be enacted.

By first validating the identification-based model and clarifying the relationship of economic and social satisfaction, this study was able to assess the degree to which membership goals known to be used in segmentation and influence enlistment subsequently influence the quality of the individual-organization relationship.

Specifically, this research has contributed substantially to answering the following questions:

1. What are the effects of membership goals on perceptions of the organization and satisfaction with the organization?

- 2. What are the effects of membership goals on identification with the organization?
- 3. What are the effects of membership goals on behavior that is valued by the organization (retention, word-of-mouth referrals, participation, sacrifice, and use of member services).
- 4. Do membership goals moderate the associations between relationship-inducing factors and identification and between identification and behavior?
- 5. How do membership goals vary in their effects and how do membership goals vary in their value to the organization?

The results clearly indicate that the influence of membership goals go well beyond generating interest in an organization and inducing membership. Taken as a whole, this study develops strong evidence that membership goals play a key role in how the members perceives the organization, their level of social and economic satisfaction with the organization, their level of identification with the organization, and their likelihood of executing membership behaviors of importance to the organization. It further identifies that these effects vary considerably between intrinsic and extrinsic membership goals across the entire range of construct relationships, with intrinsic membership goals providing markedly greater value in the current context. Overall, the findings are consistent with the membership goal hypotheses of this study. The results of the study also suggest that the effects of intrinsic and extrinsic membership goals vary substantially within the intrinsic/extrinsic categories. Among intrinsic membership goals, altruistic/self-transcendence membership goals provide greater value to the organization

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<sup>&</sup>lt;sup>12</sup> Value being measured by higher identification and greater likelihood of enacting pro-organizational behaviors within contexts where there are mid to high levels of affiliation and membership benefits are not exclusively economic.

than self-enhancement goals. Intrinsic membership goals not only provide greater value to the organization in terms of identification and member behaviors, they also appear to be more consistently positive. Conversely, economic membership goals seem to vary sharply in their value based on differences in their future orientation towards the organization and their level of persistence. Goals that require longer terms of membership are related to much greater value than those with benefits tied to exiting the organization, which actually seem to harm identification with the organization and decrease the likelihood of pro-organizational behaviors. Goals that lose their salience after the membership is initiated (e.g. pay membership goals) may help induce membership, but have no subsequent effect on identification or behavior.

This study indicates that membership goals have significant effects on the perception of organizational prestige and distinctiveness and on both social and economic satisfaction with the organization. This was particularly true for both intrinsic membership goals, which had significant positive effects on all four of these factors. In short, having intrinsic membership goals was related with perceiving the organization as more distinctive and prestigious and being more socially and economically satisfied with the organization. Having an economic membership goal was associated with greater economic satisfaction and, to a lesser degree, perceiving the organization as more distinctive. Economic goals differed from intrinsic membership goals because they primarily affect economic satisfaction, whereas intrinsic goals, though related to economic satisfaction, had stronger affect on social satisfaction and positive perceptions of the organization.

This distinction creates significant differences in identification with the organization. Because economic satisfaction is unrelated to identification, economic membership goals had almost no indirect effect on identification. Conversely, both intrinsic membership goals exhibited significant, positive indirect effects on identification. The division between the direct effects of intrinsic and extrinsic membership goals on identification is even more pronounced, with the economic membership goal decreasing identification and both intrinsic membership goals increasing identification. Taken as a whole, the differences in their total effects are striking. The altruism and self-enhancement intrinsic membership goals have a considerable positive, total effect on identification (.444 and .364, respectively), while the economic membership goal had the opposite effect, decreasing identification (-.118). This divergence of effects on identification is particularly important because identification is a principal component of relationship quality in membership contexts with higher levels of affiliation and some degree of noneconomic benefits.

In this context value is generated to a large degree through members' behaviors, and this study reveals that membership goals play a substantial role in this regard. Again the effect varied greatly between the three membership goals, between intrinsic and extrinsic goals, and to some degree with these categories. In general, the intrinsic membership goals produce greater behavioral value than extrinsic/economic membership goals. Not surprisingly, the greatest behavioral value is created from the altruism/self-transcendence membership goal (total effect .401), which focuses on serving the organization or its mission. Its behavioral benefits are produced both directly and

indirectly, resulting from enhanced perceptions of organizational prestige and distinctiveness, greater social and economic satisfaction, and stronger identification.

Self-enhancement also creates behavioral value for the organization (total effect .285), albeit less benefit than the altruism membership goal, with of its influence on behavior operating indirectly. Some of the reasons it creates less value for the organization can be attributed to the goal being self-focused rather than organizational-focused. While self-enhancement reflects some degree of calculative self interest, it is also implies that association with the organization will improve them as a person or provide the positive reflections on the members. This aligns the individual's self-enhancement goals with the goals of the organization and results in increased social and economic satisfaction, enhanced perceptions of organizational prestige, and a perceptions of the organization as a good target for identification.

The economic membership goal has both negative direct (-.322) and negative total effects (-.06) on pro-organizational behaviors. Its relationship with behavior is also much less complex than those associated with intrinsic membership goals. In short, the strongly negative direct effect on behavior is partially offset by its positive effect on economic satisfaction, which mediates a positive effect from the goal to behavior (economic goal → econ. satisfaction → behavior = .27). While economic goals appear to reduce the likelihood of pro-organizational behaviors, particularly relative to intrinsic membership goals, the analysis of multiple economic membership goals suggests certain economic goals can have positive effects on behavior. Consider the retirement and future-employment membership goals. The retirement goal has a strong positive effect on all five of the pro-organizational behaviors, while the future-employment membership goal

has almost uniformly negative effects on behavior. In the first case, the member's goal is tied to a long-term membership with the organization, albeit for calculative, economic reasons, while the future employment goal implies an intention to leave the organization. This suggests that economic goal effects on behavior vary considerably, but it also indicates that this variation is relatively predictable.

Lastly, while deployment and demographic variables had some influence on perceptions of the organization, satisfaction, identification, and behavior, these effects were all modest in their magnitude. The most pervasive (and negative) influence came from being currently deployed or having been deployed more frequently in the past.

Together these variables affected perceptions of the organization, satisfaction, identification and behavior. But the real story seems to be the absence of any large effect. Indeed, given the modest size of their influence, it could be argued that a member's race, gender, family status, age, rank, or education level really don't matter in terms of how they perceive the organization, their degree of satisfaction, or their levels of identification and pro-organizational behaviors. What really seems to matter is why they became members.

#### 5.3 Managerial Insights and Implications for Relationship Marketing

This study provides a number of important insights for managers. Five of these are addressed in this section. First, and perhaps most importantly, managers and marketers must understand that while membership goals are used effectively to segment the population, generate attention and interest in the organization, and increase membership, there also create downstream consequences for the organization, affecting

relationship quality and pro-organizational behaviors. Managers should understand that membership goals will function as reference points for evaluating, judging, and organizing information and behavioral options associated with the organization.

Ultimately they affect how the member perceives the organization, their expectations of and satisfaction with the organization, and choices regarding their behavioral options.

Exclusive focus on using membership goals to maximizing membership numbers or marketing efficiency without considering its long-term impact on the relationship and behavior is likely to result in myopic decisions that fail to maximize long-term value for the organization.

Second, the evidence suggests that managers in membership contexts with moderate to high affiliation and some noneconomic membership benefits will derive the greatest relational and behavioral value from intrinsic, rather than economic membership goals. Managers and marketers, with the choice to target a range of membership goals, should strongly pursue the former over the later under most circumstances. Furthermore, among the intrinsic goals, altruistic self-transcendent membership goals, which focus on benefitting the organization or its mission, seem to provide greater value than self-enhancement goal, which while aligned with the organization, are ultimately self-serving. Both membership goals, however, provide almost uniformly positive effects for the organization and are preferable to economic goals, which have greater variation in their effects and potentially greater risk for the organization (Table 5.1)

**Table 5.1 Goal Valence with Specific Member Behaviors** 

	Intr	Extrinsic	
Construct	Altruism Self-Transcendence	Self-Enhancement	Economic
Pro Organiz. Behavior	+		_
Identification	+	+	-
<b>Economic Satisfaction</b>	+	+	+
Social Satisfaction	+	+	
Prestige	+	+	
Distinctiveness	+	+	+

Large +/- symbols indicate standardized relationships larger than .250 in absolute value.

Third, given the variation and potentially negative effects observed among the specific economic membership goals, it is even more important for managers to assess and understand their effects within their organization. It seems particularly important to avoid targeting membership goals with end-states that involve leaving the organization at a relatively early point. While this may seem quite obvious, these goals may be one of the easiest to target by the organization and quite effective at inducing membership. In the current context, the US Army routinely targets individuals with membership goals related to funding future education and enhancing future employment opportunities to increase enlistment numbers. While the eventual loss of the member is detrimental, the degradation to identification and pro-organizational behavior associated with these membership goals exacerbates their negative effect. In these cases, not only are the members predisposed to leaving the organization, but they are less identified and less likely to enact pro-organizational behaviors while they are in the organization.

Fourth, managers should consider what specific behaviors are most important to the organization. The evidence suggests that not only do membership goals have relationships with pro-organizational behavior, but that specific membership goals also have associations with specific member behaviors. For example, in this sample, the altruism membership goal had the strongest association with sacrificing behavior, while the future employment goal had the strongest negative relationship with sacrificing. Organizations like the Army, which places more value on sacrificing behavior, may need to focus more heavily on altruism membership goals and avoid marketing to those with future employment goals. An alumni association may take the opposite perspective because the future employment goal is associated with increased service-use, which may be of greater importance.

Finally, managers should consider the persistence of the membership goals tied to their marketing. Consider that in the current sample having a pay membership goal had no association with identification or behavior. It is very likely that this goal was important in driving the membership decision, but from the member's perspective, the goal was achieved at the time of initial membership. A similar situation could occur in the alumni association where individuals join to gain access to financial services (e.g. credit union) or a social network. If the goal is achieved with the act of membership, it will cease to have any cognitive or emotional effect on the relationship or behavior. Conversely, the altruism goal may remain salient for as long as the individual remains with the organization. While persistent and positive membership goals should add great value, a persistent membership goal associated with lower identification and reduced proorganizational behaviors may be highly problematic. Consider that the Army has one of

the most robust acculturation and integration programs, and yet individuals that had completed basic training and unit integration that joined for reasons of future employment still had substantially negative effects, even after controlling for time in the organization and rank. This suggests that salient, persistent goals are resistant to even rigorous efforts by the organization to change negative perceptions and expectations associated with the goal.

# CHAPTER VI: THEORY, MEMBERSHIP LIFECYCLE, AND HYPOTHESES

The previous essay (Chapters II through V) demonstrated the important effects of individuals' membership goals on perceptions and expectations of the organization and identification with the organization. Furthermore, it revealed their critical impact on enacting relational behaviors of value to the organization. This essay builds upon these findings, using the structural models and theory developed in Essay1 to expand our understanding of the effects of membership goals on relationship quality across the most of the membership lifecycle. More specifically, this essay has two primary objectives. First, it seeks to understand how the effects of individual membership goals evolve across the three membership cohorts of partial membership (Future Soldiers), membership integration (New Soldiers), and full membership (Current Soldiers). This analysis involves identifying differences in how membership goals affect the cohorts' perceptions of the organization, their expectations and satisfaction with the organization, their level of identification with the organization, and their behavior or behavioral intentions. The second objective is to refine a multi-cohort measurement model and test the validity of the structural models from Essay I using two additional cohorts (New Soldiers and Future Soldiers).

Essay II (Chapters VI through X) begins by reviewing and then expanding upon the discussion of identification and goal theory as they relate to the membership lifecycle.

Chapter VII elaborates on the Army membership discussion provided in the introductory chapter and further develops each of the three Soldier cohorts. In Chapter VIII I briefly introduce the methodology used for multi-group invariance testing in structural equation modeling and then empirically tests for invariance in the cohorts' measurement models, structural models, and latent means. The essay closes with a chapter discussing the results from each of these analyses and their implications for marketing, organizational behavior and managerial practice.

Organizational identification and goal theories continue to function as the core theoretical basis for this essay. It is expected that individual membership goals and the identification model constructs will function in the same general manner across all three membership cohorts, and the hypotheses and supporting arguments from Essay I's final model are used again in this essay. Accordingly, I expect the relationships depicted in the final model in Essay I to be significant and have the same valence across all cohorts. The theories and arguments for each hypothesis was developed in Chapter II, but are briefly reviewed below to refamiliarize the reader.

## **6.1 Theory Review**

#### **6.1.1. Identification Review**

We know that businesses benefit from developing strong identity associations with their offerings, brands, and organization (Cohen and Reed 2006) through increased brand loyalty, repurchase and retention behavior, providing positive word of mouth, and public and prominent consumption of the brand and its related products and services (Ahearne et al. 2005). In the membership marketing context, identity is primarily

developed through affiliation with the membership organization and less through the consumption of products. Identified individuals perceive a sense of oneness or belongingness with the organization (Mael and Ashforth 1992, p. 104) and tend to evaluate themselves relative to the attributes, characteristics, beliefs, values, and behaviors of the organization (Reed 2002; Stets and Burke 2000). The stronger the identification, the more it influences perceptions and behaviors (Stets and Burke 2000; Oakes 1987). Results from Essay I reinforce the conclusions of extant research that perceptions of distinctiveness and prestige, satisfaction, and prolonged affiliation with the organization function to increase identification. Identified individuals are then more likely to enact behaviors of value to the organization

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#### **6.1.2 Goal Theory Review**

Goals are "cognitive representations of a desired end-point that impact evaluations, emotions, and behaviors" (Fishbach and Ferguson 2011, 3). As such, they are a prime determinant of expectations, perceptions, preferences, choice, and behaviors. Cognitively, goals shape and change our preferences and behaviors by functioning as a reference point for the evaluation and organization of information, options, and behaviors (Kruglanski et al. 2002; Fishbach and Ferguson 2011; Warren et al. 2010). The active goal actually makes goal-relevant knowledge more accessible and influential by enhancing perception and increasing attention to goal relevant information and increasing its cognitive processing (Fishbach and Ferguson 2011; Aarts et al. 2001; Gollwitzer and Moskowitz 1996). In general, the more an option or behavior facilitates the goal, the more it is noticed and processed, the more positive the attitude (Gabel 2006), the more

positive the evaluation (Brendl and Higgins 1996), and the more powerful the motivation to enact the behavior (Ajzen and Fishbein 1980). Conversely, information, options, and behaviors that inhibit goal attainment are evaluated more negatively.

Goals can lead to biased evaluations that result from motivated reasoning and bias processing in order to reach judgments consistent with the focal goal (Kunda 1990). Goals also influence evaluations and behaviors without substantial cognitive effort by inducing positive emotions towards information, options, and behaviors associated with the goal (Fishbach et al. 2004). The influence of positive emotions on attitudes and evaluations mirror those of cognition, but are more influential when information and choices receive limited cognitive processing.

## **6.1.3** The Intersection of Identification-Goal Theory

To the best of my knowledge, there is no research that looks at the intersection of goal theory and organizational identification, and certainly none that does so from a marketing perspective. By applying both theories to the membership context, this study is able to examine how membership goals influence used to segment the market and shape marketing actions intended to induce membership also affect the member's value to the organization in terms of organizational identification and relational behaviors. By applying goal theory hypotheses to the specific mechanisms of the identification process (antecedents, identification, and behavioral outcomes), it is possible to anticipate how specific membership goals will influence identification and behavior. In this context, the membership goal will function as a reference point or emotionally bias the evaluation of organization's characteristics and behavioral options and also influence expectations and

satisfaction with the organization when they are relevant to the goal. This suggests that the intrinsic membership goals will influence perceptions of prestige, distinctiveness, and social satisfaction. Consequently, intrinsic membership goals will also have an indirect effect on identification and behavior. Economic goals, on the other hand, should influence perceptions of economic satisfaction and consequently influence behavior.

Membership goals may also have a direct effect on identification when the membership goal promotes greater affiliation/relational orientation and/or has relevance to the self-concept, as is the case for the two intrinsic membership goals. The economic membership goal is unlikely to promote greater affiliation and has little relevance to the self-concept, and may even inhibit identification. In terms of pro-organizational behaviors, members will evaluate the behaviors based on their ability to facilitate the membership goal. In general, the five pro-organizational behaviors promote the achievement of the altruism membership goal, but may be perceived as costly in terms of achieving economic membership goals.

#### **6.1.4** Hypotheses Review

I expect the same psychological and social processes that underpin organizational identification and goal theories to operate across all three cohorts and anticipate that the same pattern of relationships will be observed across all three cohorts. Table 6.1 summarizes the hypotheses and modifications from Essay I that are tested in the multicohort context. <sup>13</sup>

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<sup>&</sup>lt;sup>13</sup> Only control variables and factors that are common to all three cohorts are included in the multi-cohort model. Therefore, the hypothesis that greater time in membership is included. Furthermore, important control variables (e.g. deployed and number of times deployed) are not common to all three cohorts and are not tested in the Essay II model. It should be noted that the use or non-use of these variable would not have substantively changed the final model results from Essay I

**Table 6.1 Multi-Cohort Hypotheses** 

Hypothesis	Relationship			
$\overline{ m H_2}$	Org. Prestige→Identification +			
$\mathbf{H}_3$	Org. Distinctiveness → Identification +			
$\mathbf{H}_{5}$	Social Satisfaction → Identification +			
$\mathbf{H}_{6}$	Econ. Satisfaction is unrelated to Identif.			
$ m H_{7a-e}$	Identification→Retention, WOM, Service Use, Participation and Sacrifice (Pro-Organizational Behaviors) +			
Modification	Distinctiveness → Pro-Org. Behavior +			
$ m H_{8b\&c}$	Prestige <sub>b</sub> and Social Satisfaction. <sub>c</sub> effects on behavior are fully mediated by Identification			
$\mathbf{H}_{9}$	Economic Satisfaction → Pro Organizational Behaviors +			
$\mathbf{H}_{10\mathrm{a,b}}$	Self-Enhancement Goal → Prestige <sub>a</sub> & Distinctiveness <sub>b_+</sub> +			
$\mathbf{H}_{10\mathrm{c,d}}$	Altruism Goal $\rightarrow$ Prestige <sub>a</sub> & Distinctiveness <sub>b</sub> +			
$\mathbf{H}_{11}$	Economic Goal is unrelated to Prestige <sub>a</sub> & Distinctiveness <sub>b</sub> +			
$\mathbf{H}_{14a}$	Self-Enhancement Goal → Social Satisfaction +			
$\mathbf{H_{14b}}$	Altruism Goal→Social Satisfaction +			
$\mathbf{H}_{15}$	Econ. Goal is unrelated to Social Satisfaction			
Modification	Self-Enhance. Goal→Econ Satisfaction +			
Modification	Altruism Goal→Econ Satisfaction +			
$\mathbf{H}_{16a}$	Self-Enhance. Goal → Identification +			
$\mathbf{H}_{16\mathrm{b}}$	Altruism Goal→Identification +			
$\mathbf{H}_{17}$	Economic Goal → Identification -			
$\mathbf{H}_{18a}$	Self-Enhanc. Goal→Pro-Org Behavior +			
$\mathbf{H}_{18b}$	Altru. Goal→Pro-Org Behavior +			
$\mathbf{H}_{19}$	Econ. Goal → Pro-Org Behavior -			

While I expect membership goals and identification to operate relatively consistently across the three cohorts, it should also be considered that these cohorts are at very different points in the membership lifecycle and have substantially different levels of experience and knowledge of the organization

## **6.2 Membership Lifecycle Stages**

This section briefly reviews the discussion of the membership cohorts provided in the dissertation's introduction (Chapter I). It builds on this summary to develop a better understanding of the cohorts' differences and similarities and adds context to the

subsequent multi-group analysis. Additionally, it combines knowledge of the cohort lifecycles with identification and goal theory and uses inductive logic to understand where and why cohort specific differences may arise.

Enlistment and membership in the U.S. Army can be viewed as progressing across four general stages: membership choice (information gathering and decision making), partial membership (contracted Future Soldiers), member integration, socialization, and training (New Soldiers), and full membership within Army units (Current Soldiers) (Figure 6.1).

#### **6.2.1 Membership Choice Stage**

The membership choice stage covers the period when the potential member seeks information regarding the membership by speaking with friends or family having Army experience, consuming Army advertising (TV, radio, print, and internet), exploring the Army's websites (GoArmy and America's Army), and/or engaging with an Army recruiter (the Army's sales force and hometown representative). This information is developed into an understanding of the options, risks, and rewards associated with membership. These individuals also consider their broader goals and how membership may contribute to or detract from their achievement when making a tentative decision to either join or not join the organization. If the prospective member decides he or she wants to become a member and passes preliminary qualification screening, they go to the Military Entrance Processing Station (MEPS) where they receive aptitude testing and screening for physical and mental qualification. If they pass the full screening process,

and most do not, <sup>14</sup> they meet with a career counselor to select a job and additional enlistment options (e.g. enlistment duration, cash bonuses, educational benefits, specialized training options, and assignment location). This period culminates with the individual signing the membership contract and taking an oath to support and defend the Constitution of the United States. <sup>15</sup> This membership stage is not represented in the analysis because it was not feasible to contact and survey these individuals. This occurred because these individuals are typically dealing directly with an Army recruiter and cannot be contacted without going through a highly time consuming and decentralized process of working through hundreds of recruiting offices in the local communities. Additionally, this activity was not approved by the Army's Institutional Review Board.

While this membership stage is not sampled, interviews with recruiters and proprietary research by the Army, as well as the AIDA model, suggests that individual membership goals coalesce during this period as membership information, options, and benefits are aligned with existing personal goals. This suggests that membership goal effects are present within the initial membership cohort (Future Soldiers). If true, these effects will remain active until the goal is attained or otherwise loses its salience. Additionally, these individuals may begin identifying with the Army, even before they have any formal membership. In fact, it is not uncommon to see individuals who aspire to become members already wearing organizational hats and shirts, displaying organizational stickers, and taking other actions to signal their desired affiliation. This suggests that identification with the organization begins to develop prior to the first

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<sup>&</sup>lt;sup>14</sup> According to Department of Defense statistics, 75% of all 17-24 year-olds are disqualified based on medical issues, low mental aptitude/education, illegal drug use, or criminal record (2011).

<sup>&</sup>lt;sup>15</sup> This is the first point represented on the membership stage timeline in Figure 7.1

sample (Future Soldiers) and that some individuals may already be highly identified by the time they reach the Future Soldier/partial membership stage.

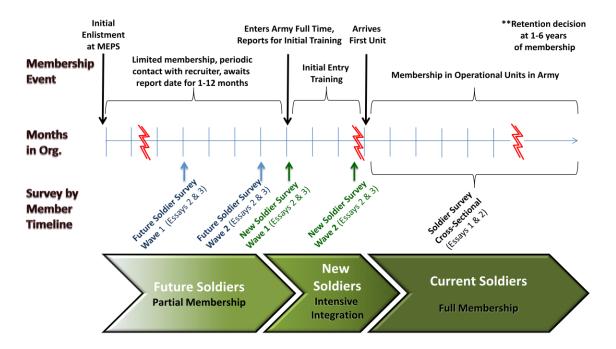


Figure 6.1 Membership Stages and Timeline

# **6.2.2 Partial Membership Stage**

Once the individuals are contracted, they are considered Future Soldiers and enter a period of partial membership that ranges from a couple weeks to 12-months based on high school or college graduation dates, availability of training slots, and personal preference. During this time Future Soldiers remain in their home communities, are not paid, do not wear uniforms, and do not have to meet Army physical or appearance standards. The individuals do report to their recruiting company commander for periodic training and accountability (typically monthly), which provides some limited opportunity for socialization and enables the Future Soldiers to gain more information about the

organization, their forthcoming integration and initial training, and their future in the Army. This period ends when the individual reports for active duty and begins initial entry training (also known as basic training).

At this point, most of the information individuals have about the organization is based on WOM, news and entertainment media, and organizational communication intended to induce membership. Often their direct experience with the organization is limited, and many Future Soldiers will have never spent time on an Army installation. This creates a situation where some individuals form an organizational image and expectations based on limited, arms-length information. As a result, the Future Soldier cohort may have perceptions and expectations of the organization that are somewhat idealized and untarnished by proximity and familiarity with the Army. If perceptions and expectations are more idealized at this stage, it may be manifested in higher Future Soldier latent means for prestige, distinctiveness, and the two intrinsic membership goals.

#### **6.2.3** Member Integration and Training Stage

Entry into active duty represents a major turning point in the membership, with the New Soldier experiencing a substantial break from all elements of their previous life. The process has two primary purposes: 1) integration and socialization into the organization and 2) developing the baseline skills necessary to function as a member of the organization. At initial entry training New Soldiers are received with unsympathetic discipline, the loss of most privileges (e.g. phone calls, privacy, and civilian clothes), razor-stubble length haircuts for the men, Army uniforms, and medical/administrative processing. Beyond preparing the New Soldiers for training, the experience is

intentionally stressful and designed to create a clear split from civilian life and signal the beginning of the New Soldiers development process. At this point, many New Soldiers are home-sick, feeling overwhelmed, and may be questioning their enlistment decision.

The process continues with an intense period of initial entry training designed to build character and develop soldier skills. For most New Soldiers this training includes 2-months of basic training with an additional 1 to 10-months of specific job training. Every New Soldiers understands they will go through this experience, but for most individuals the process is stressful and difficult. As part of the process, the New Soldiers face a constant series of physical, mental, and emotional challenges (e.g. physical fitness tests, marksmanship, hand-to-hand combative training, obstacle/confidence courses, and moving under live machinegun fire). Each event is designed to develop skills and build confidence. Soldiers begin to earn greater privileges and are congratulated on their accomplishments by their leaders. As the process continues, New Soldiers typically feel an increasing sense of pride in themselves, their training unit, and the Army. Graduation from Basic Training is typically a moment of great pride and confidence for most New Soldiers and marks a second clear turning point in their organizational membership.

If the partial membership stage is characterized by limited knowledge, experience, and participation, which enables idealized perceptions and expectations of the organization, then the integration and training stage could be considered to be an experiential overload. Even though most New Soldiers understand this period is intentionally stressful and temporary, it would not be surprising to find that idealized perceptions and expectations of the organization are challenged under these harsh organizational conditions. For those who have been looking forward to this experience,

particularly those who joined for self-enhancement, it may be possible to maintain an idealized view of the organization, For those who joined for more economic reasons, it may be an undesirable experience that degrades organizational image.

#### 6.2.4 Full Membership Stage

At the conclusion of the member integration and training stage New Soldiers are sufficiently trained and acculturated to join other Soldiers in operational units. These Soldiers (now referred to as Current Soldiers) serve their initial membership period (2 to 6-years) at one or more of the hundreds of possible global assignments before reaching their exit/reenlistment point. Those that reenlist may remain in the Army up to 30-years. The positions and roles filled by these members vary from special operations forces and infantrymen to administrative and logistic specialists. Living and working conditions range from clandestine bases in hostile environments to gated-community single family homes and the finest office settings. Accordingly, this membership stage is the characterized by the greatest variation in their organizational backgrounds and day-to-day experiences.

Current Soldiers, unlike the other two cohorts, have the necessary experience to assess their behavioral intentions and behavioral history with regard to the proorganizational behaviors measured in this study. Furthermore, any idealized perceptions of the organization should have been replaced with perceptions and expectations based on in-depth knowledge and first-hand experience. While perceptions and expectations are malleable, they should be relative stable by this stage. Lastly, members of this cohort

may begin to achieve or satiate their membership goals, at which point they would begin to lose salience. If this occurs, those goals would diminish in their effect.

### CHAPTER VII: SAMPLING METHODOLOGY

#### 7.1 Future Soldier Sampling and Survey Methodology

The first sample was drawn from Future Soldiers who had already enlisted and were awaiting their initial entry report dates. The Future Soldier sample is most proximate to their enlistment decision and should provide the most accurate measure of individual membership goals, <sup>16</sup> but they are also the sample with the least experience to judge satisfaction and behavioral intentions. Future Soldiers were surveyed several months before reporting for initial entry training (Figure 7.1) using a web-based survey delivered through their Army email address. The survey instrument differed from the surveys received by New and Current Soldiers in that it measured expected satisfaction and expected service-use behavior rather than experience satisfaction and past service-use behavior (see Chapter III for a full discussion of the instrument). Email addresses were available for every Future Soldier that would enter active duty during the months of January, February, and March 2012. Each of these 9,186 Future Soldiers were emailed between 90 and 150 days prior to their active duty report date. This period was chosen because it was sufficiently removed from their active duty report date and provided the opportunity for a second survey just prior to their active duty report date (the analysis of this two-wave panel is discussed in Essay III).

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<sup>&</sup>lt;sup>16</sup> All three cohorts are asked to consider the reasons why they initially joined the Army. Their current goals are not measured.

In practice, the process did not approach a census of all Future Soldiers with report dates in this 90-day period. This was due to low usage rates of the Army email. While almost all Future Soldiers were registered to use the Army email system, routine communications with the recruiter and company commander were completed through Facebook, Twitter, and text messaging. Most Future Soldiers were never required to check their Army email accounts. For example, Future Soldiers would be informed of a required meeting through a Facebook posting and a Twitter message, and their leadership would stress that Future Soldiers should remain in contact using these forms of communication. This resulted in a minority of Future Soldiers checking their Army emails. This was confirmed by over 100 email messages received from Future Soldiers who contacted me after the survey had closed to say they just logged into their Army email for the first time. Recruiting Command, the parent organization for the Future Soldiers, estimates a 10% success rate for sending emails and receiving confirmation. The distribution of those Future Soldiers using their Army email is driven largely by the needs of the recruiting offices and should not substantially bias the sample.

Based on these observations, I am using the conservative assumption that 20% of Future Soldiers actually received the surveys. This means that approximately 1,838

Future Soldiers received the survey invitation. From this number I received 853 surveys, from which 71 respondents failed to complete all the questions. The response pattern from these 71 incomplete surveys indicates the last sections/questions were not completed, suggesting the respondent ran out of time or patience for the survey. This form of non-response is not random, and therefore multiple imputation was not used to replace missing data and these cases were dropped, leaving 781 usable responses and a

usable response rate of 42%. A comparison of the incomplete and complete data sets suggests there is little meaningful difference between the two.

These responses were primarily male (82%), which is typical of the larger organization. The average respondent was almost 22 years old and had been contracted with the Army as a Future Soldier for just over 2 months. Approximately 84% of the sample was unmarried, 96.75% had at least a high school education and over half had some college, and the sample was almost evenly split between combat and non-combat job specialties. Racially, the sample was composed of 69% Caucasian, 10% African American, 13% Hispanic, and 8% other racial backgrounds. All of these statistics are consistent with overall Army statistics and do not indicate any issues with the representativeness of the sample. These figures were compared to those with incomplete surveys. The statistics from the incomplete surveys were quite similar to the completed survey (79% male, 94.4% having a high school education or higher, 63% Caucasian, 13% African American, and 14% Hispanic). As a final check, the mean identification and altruism scores were compared between the complete data and the incomplete data. The identification mean for the completed surveys was 5.89 compared to 5.87 for the incomplete surveys, while altruism was 6.51 for both samples. Overall these statistics suggest there is minimal difference with the larger Army population and little evidence of bias from the removal of incomplete responses.

#### 7.2 New Soldier Sampling and Survey Methodology

The second sample was drawn from New Soldiers receiving integration and initial entry training. In most cases New Soldiers were surveyed within the first seven days of

arriving to their administrative reception station, where they prepared for initial training by receiving uniforms and haircuts and completed administrative and medical processing. A small number of New Soldiers were survey after they had completed administrative processing and had transitioned to initial training, but these surveys were still completed within the first two weeks of entering the organization. In both cases, these Soldiers have not yet adjusted to the increased rigor and remain at a point of peak stress.

The New Soldier sample is still proximate to their enlistment decision but has begun to acquire the experience needed to better judge satisfaction and behavioral intentions. New Soldiers received a paper-based survey through their chain of command. Other than being paper-based, the New Soldier surveys were identical to the web-based survey used by Current Soldiers. No specific numbers were provided for those who declined to participate, but it is likely that almost every New Soldier in the unit received the survey, with those who did not want to participate simply turning in blank surveys.

Of the 701 surveys that were received, 646 were completed, with 10 being effectively blank, 10 containing skipped pages, and the remaining 35 having questions at the end of the surveys that had not been answered. There was no evidence of non-responding to any specific questions. All 646 completed surveys were from male respondents. This is because basic training is gender segregated and the units on this installation were all male. Participants came from three battalions that were selected based on access provided by their commanding officers. The average respondent was 22 years old and had spent an average of 5-months as a Future Soldier before entering active duty. Like the Future Soldier sample, 96.7% of respondents had at least a high school education, with just under half having some college, and 77% were unmarried. The New

Soldier sample is overrepresented by non-combat specialties at 78%. This is due to an undersampling of units that were conducting basic training for combat specialties (e.g. infantry and armor specialties). Based on the lack of significant effects from the combat specialty control variable in Essay I, it is unlikely that the overrepresentation of non-combat specialties will bias the results. Racially, the sample was composed of 59% Caucasian, 19% African American, 14% Hispanic, and 9% other racial backgrounds. This represents an underrepresentation of Caucasian Soldiers and on overrepresentation of African American Soldiers relative to the overall Army population. This outcome was expected and occurred because African American are overrepresented within the noncombat job specialties and is not related to response bias within the sampled organization. As was the case for the combat specialty variable, the African American variable had very limited effects in Essay I and is unlikely to bias the focal relationships.

## 7.3 Current Soldier Sampling and Survey Methodology

The final sample was drawn from the population of active duty Soldiers (Current Soldiers) typically having between six months and 15 years of membership in the Army. Current Soldiers are the most experienced cohort and are in the best position to judge satisfaction and behavioral intentions/history, but they are also the furthest removed from their enlistment decision and their true membership goals. Sampling and response rates for the Current Soldier cohort were described in detail in Chapter IV and are not reviewed again here. The reader is encouraged to review this section in Chapter IV as needed.

The Current Soldier sample was largely male (86.5%), which is just slightly higher than the proportion of males in the larger organization, and the average respondent was almost 28 years old, which is six years older than the other two cohorts, and had been in the organization for average of 5.7 years. This suggests the enlistment ages for all three cohorts are almost identical (22 years). Approximately 62% of the sample was unmarried, 43.5% were in combat job specialties, and 93.5% had at least a high school education, with 2/3<sup>rd</sup> of the sample having some college. Racially, the sample was composed of 62% Caucasian, 15.5% African American, 12% Hispanic, and 10.5% other racial backgrounds. Unlike the other cohorts, Current Soldiers have been deployed to combat on average two times and include Soldiers in the six most junior enlisted ranks, whereas the New Soldier cohort was represented by the four most junior ranks. Table 7.1 includes a summary of the descriptive statistics for each of the three cohorts.

**Table 7.1 Cohort Descriptive Statistics** 

	<b>Future Soldiers</b>	New Soldiers	<b>Current Soldiers</b>	
Age	22 years	22 years	28 years	
<b>Average Length</b>	2 months partial	5 months partial	5.7 of active	
of Affiliation	membership	membership	membership	
Percent	84%	77%	62%	
Unmarried				
Race	Caucasian 69%	Caucasian 59%	Caucasian 62%	
	African Amer. 10%	African Amer. 19%	African Amer. 15.5%	
	Hispanic 13%	Hispanic 14%	Hispanic 12%	
	Other 8%	Other 9%	Other 10.5%	
<b>Percent Male</b>	82%	100%	86.5%	
Education	High School 96.7%	High School 96.7%	High School 93.5%	
	Some College 50%	Some College 45%	Some College 65.7%	
Rank	NA	Four most junior	Six most junior	
		ranks	ranks, includes	
			Sergeants and Staff	
			Sergeants	
Percent in	50%	22%	43.5%	
Combat Job				
Specialty				
Combat	None	None	2 on average	
Deployments				

# CHAPTER VIII: MULTI-COHORT METRIC AND STRUCTURAL INVARIANCE METHODOLOGY AND RESLUTS

This chapter seeks to determine if a person's initial membership goals have different effects at different points in the membership lifecycle and better estimate their long-term effects on the member's value to the organization. It then discusses the methodology and results from multi-cohort metric and structural invariance testing. Additionally, this chapter seeks to validate the theory and models applied in Essay I across two additional samples from different points in the membership lifecycle and identify measurement scales that functions best across the full membership lifecycle. Accordingly, this section discuss follow the following broad methodological steps:

- Refine the multi-cohort measurement scales by identifying and removing excessively poor fitting items and ensuring there is configural invariance and adequate reliability in the multi-cohort measurement model.
- 2. Test for metric invariance in the first- and second-order measurement models and retain the appropriate constraints on the multi-group model.
- 3. Test for configural invariance in the structural model.
- 4. Given sufficient metric invariance in Step 2, test for invariance in the magnitudes of the model paths and constrain invariant paths as equal.
- 5. Use post-hoc pairwise comparisons of non-invariant structural paths to determine specific cohort differences.

## 8.1 Refining the Measurement Model and Establishing Configural Invariance

Pretesting of the scales and instrument (Chapter III), combined with the performance of the measurement model (Chapter IV) has provided evidence for the content, face, convergent, and discriminant validity of the scales used in the analysis of Current Soldiers. The two additional samples warrant additional testing and refinement to check its reliability and validity across full membership lifecycle. The scales and survey instrument was developed based on the assumption that some items would not work well across all three sub-population. Accordingly, the initial set of items was intentionally large to provide the ability to trim items that fail to demonstrate good psychometric properties across all three samples.

Assessment and refinement of the individual scales and the overall measurement model was completed in three steps. As an initial step, first-order CFA was conducted independently for each of the three samples using the full set of items to assess their suitability in terms of fit, significance of loadings, and identify excessively large modification indices. Second, multi-group first-order CFA was conducted with the model being estimated simultaneously for all three cohorts and assessed using the previous criteria. Based on these two analyses, poorly fitting items were trimmed to provide the final first-order model. Lastly, the model was adjusted to include the three second-order factors used in Essay I and again analyzed using multi-group CFA and assessed based on overall model fit, significance of the second-order loadings, and modification indices.

The full set of scales and items was discussed in Chapter III, and readers are invited to review this chapter as needed. Readers should recall that the three Future Soldier satisfaction scales (social, future employment, and pay) measure expected

satisfaction rather than current satisfaction, as is the case for the other two cohorts. Similarly, the Future Soldier service-use scale measures expected service-use, while scales for the other two cohorts measure current/past service-use behaviors. These adjustments were necessary because Future Soldiers do not have experience with the organization's services, nor do they typically have enough experience to judge their satisfaction with the organization's social relationships, pay, or efforts to develop marketable skills.

Results from the three independent first-order CFA analyses indicated that 23 of 91 scaled items had some issue in one or more of the cohorts. Of these 23 items, eight were reverse coded items that loaded poorly and degraded model fit. <sup>17</sup> The fifteen additional items produced standardized loading below .6, chi-square increases in excess of 100 for 1 df, or both. <sup>18</sup> Trimming these items produced a model with configural invariance and scales that contained between three and six items (average scale size was four items), with all items loading to their intended factor above .6 and no problematic cross-loadings to other factors (Figure 8.1). Future, New, and Current Soldier cohort RMSEA scores for the first-order measurement model were .038, .039, and .045 and CFI scores were .934, .923, and .930, respectively. Additionally, all scales had reliabilities above .75 using three to five items.

Simultaneous multi-group estimation (Figure 8.1) suggests that this first-order model is suitable for all three cohorts and produced strong fit indices, with an RMSEA of .025, a CFI of .933, and a  $\chi^2$  of 11229.1 with 4317 degrees of freedom. RMSEA indicates good model fit and meets the prevailing recommendation RMSEA of .05/.06 or

<sup>&</sup>lt;sup>17</sup> Prest1, SatEcn 5, SocSat 5, Ident 2, Retent 2, Part 4, Serv 4, DS Con3

<sup>&</sup>lt;sup>18</sup> Altr\_3, SLF\_Imp3, Slf\_Imp5, Pay\_1, ID5, ID7, Prest2, Dist\_3, Retent1, Part3, Sacrif3, Sacrif4, WOM4, Serve5, Serve7

below (Hu and Bentler 1999). The CFI of .930 is above the recommendation of .90 or higher. All loadings across all three cohorts were significant at the .001 level, with the smallest Z-scores being 11.5, providing evidence of convergence for all factors in all three membership cohorts (Table 8.1). Moreover, only four of the 200-plus standardized factor loadings were below .6 and none were below .5. Scale reliabilities for the three membership cohorts ranged from .961 to .770, with only two factor having reliability below .800 for a single cohort (Table 8.2). These reliabilities are also highly consistent across the cohorts. Additionally, lambda modification indices are small and do not warrant adjustment of the measurement model. Overall, the analysis suggests internally and externally consistent item-to-factor assignment and establishes the configural invariance of the first-order measurement model across the three cohorts.

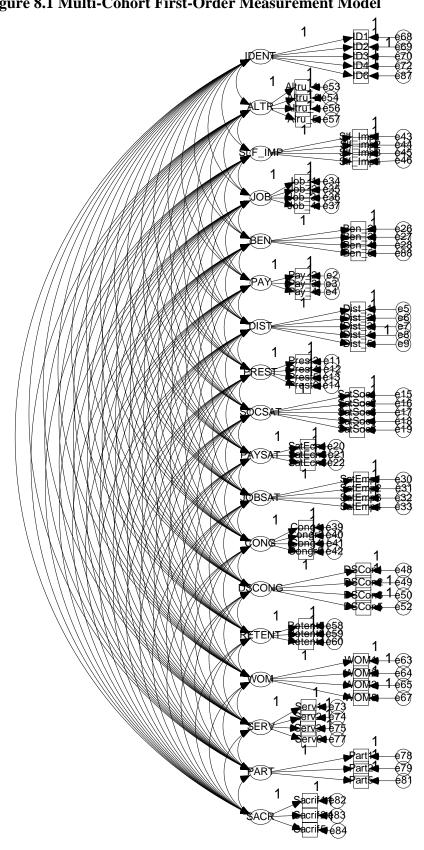


Figure 8.1 Multi-Cohort First-Order Measurement Model

**Table 8.1 Multi-Cohort Unconstrained Measurement Model Properties** 

Construct -Indicators	Future Cohort Estimate (SE)	New Cohort Estimate (SE)	Current Cohort Estimate (SE)
	Estimate (SE)	Estimate (SE)	Estimate (SE)
Altruism	1.00	1.00	1.00
Altru_1 Altru 2	1.00 1.150 (.042)	1.00 1.060 (.041)	1.174 (.030)
Altru_4	1.360 (.047)	1.264 (.048)	1.201 (.033)
Altru_5	1.245 (.035)	1.264 (.048)	1.199 (.028)
Self-Enhanc.	1.243 (.033)	1.201 (.042)	
	1.00	1.00	1.00
Slf_Imp1	1.00	1.00 .948 (.040)	1.119 (.030)
Slf_Imp2	.963 (.036)	` ´	1.016 (.029)
Slf_Imp4	1.127 (.044)	.977 (.045)	1.010 (.02)
Future Job	1.00	1.00	1.00
Job_1	1.00	1.00	.856 (.026)
Job_2	.710 (.030)	.840 (.045)	.068 (.023)
Job_3	.989 (.032)	.961 (.044)	.920 (.023)
Job_4	.899 (.027)	.882 (.043)	.,25 (.025)
Pay	1.00	1.00	1.00
Pay_2	1.00	1.00	1.00 .953 (.026)
Pay_3	.875 (.029)	.907 (.043)	1.050 (.023)
Pay_4	1.063 (.026)	1.106 (.045)	1.030 (.023)
Identificat.	1.00	1.00	1.00
ID1	1.00	1.00	1.00
ID2	1.354 (.087)	1.375 (.101)	1.230 (.047)
ID3	1.492 (.097)	1.433 (.106)	1.271 (.049)
ID4	.979 (.085)	1.300 (.109)	1.214 (.053)
ID6	1.167 (.077)	1.251 (.093)	1.160 (.046)
Retention	1.00	1.00	1.00
Retent5	1.00	1.00	1.00
Retent3	.950 (.017)	.927 (.019)	.890 (.020)
Retent4	1.010 (.022)	.975 (.018)	1.007 (.015)
Service Use		1.00	1.00
Serve1	1.00	1.00	1.00
Serve2	.999 (.048)	1.079 (.045)	1.042
Serve3	.698 (.039)	.804 (.040)	.813
Serve6	.857 (.49)	.822 (.051)	.949
Participation			
Part1	1.00	1.00	1.00
Part2	.781 (.041)	.816 (.044)	.928 (.033)
Part5	.942 (.026)	1.062 (.039)	1.097 (.028)
Sacrifice			
Sacrif1	1.00	1.00	1.00
Sacrif2	.789 (.036)	.715 (.040)	.854 (.030)
Sacrif5	1.062 (.055)	.860 (.053)	1.030 (.037)

**Table 8.1 Multi-Cohort Unconstrained Measurement Model Properties (Continued)** 

	onort Unconstrained M		
Construct	<b>Future Cohort</b>	New Cohort	<b>Current Cohort</b>
-Indicators	Estimate (SE)	Estimate (SE)	Estimate (SE)
WOM			
WOM1	1.00	1.00	1.00
WOM2	1.010 (.046)	1.220 (.070)	.783 (.024)
WOM3	1.047 (.040)	1.491 (.080)	1.005 (.027)
WOM5	.883 (.036)	1.511 (.083)	.827 (.026)
Distinctiveness			
Dist_1	1.00	1.00	1.00
Dist_2	1.264 (.072)	1.134 (.079)	1.062 (.042)
Dist_4	1.463 (.079)	1.291 (.096)	1.240 (.046)
Dist_5	1.317 (.070)	1.332 (.089)	1.344 (.050)
Prestige			
Prest3	1.00	1.00	1.00
Prest4	1.139 (.037)	1.021 (.037)	1.001 (.023)
Prest5	.948 (.046)	.797 (.045)	.906 (.025)
Prest6	.955 (.038)	.838 (.038)	.899 (.023)
Social Sat.	,	,	
SatSoc1	1.00	1.00	1.00
SatSoc2	1.207 (.090)	1.098 (.069)	.929 (.035)
SatSoc3	1.432 (.081)	1.132 (.073)	1.057 (.034)
SatSoc4	1.004 (.058)	.958 (.062)	.862 (.031)
SatSoc6	1.219 (.068)	.938 (.067)	.949 (.032)
Pay Sat.	1.217 (.000)	.730 (.007)	.545 (.032)
SatEcn1	1.017 (.045)	.822 (.044)	.982 (.029)
SatEcn3	.695 (.039)	.750 (.046)	.853 (.030)
SatEcn8	1.000	1.00	1.00
Fut.Job Sat.	1.000	1.00	1.00
	1.000	1.00	1.00
SatEmp1	1.000		
SatEmp2	1.110 (.59)	1.187 (.063)	1.052 (.030)
SatEmp3	1.160 (.062)	1.218 (.071)	1.080 (.032)
SatEmp4	1.248 (.071)	1.049 (.063)	1.073 (.032)
2 <sup>nd</sup> Order Factors			
Econ Goal		(0.70)	
Pay	.793 (.042)	.695 (.050)	.682 (.030)
Future Job	1.00.	1.00	1.00
Pro-Org Beh			
Retent.	1.090 (.062)	1.196 (.072)	1.070 (.043)
WOM	.766 (.50)	.544 (.050)	.888 (.039)
ServUse	.804 (.51)	.710 (.049)	.708 (.032)
Partic.	1.000	1.00	1.00
Sacrif	.862 (.046)	1.183 (.071)	.866 (.038)
EconSat.1			
Pay Sat.	.791 (.063)	.831 (.084)	.667 (.049)
Fut Job Sat.	1.00	1.00	1.00
	Only the scales used in the		

Unstandardized estimates. Only the scales used in the final structural model are shown here.

**Table 8.2 Multi-Cohort Scale Reliabilities** 

Construct	Reliability	Construct	Reliability
-Indicators	- Current Cohort	-Indicators	- Current Cohort
	- New Cohort		- New Cohort
	- Future Cohort		- Future Cohort
Altruism		Prestige	
Altru_1	.930	Prest3	.920
Altru_2	.914	Prest4	.853
Altru_4	.905	Prest5	.869
Altru_5		Prest6	
Self-Enhanc.		Distinctiv.	
Slf_Imp1	.900	Dist_1	.874
Slf_Imp2	.858	Dist_2	.795
Slf_Imp4	.871	Dist_4	.837
-		Dist_5	
Future Job		Social Sat.	
Job_1	.911	SatSoc1	.897
Job_2	.847	SatSoc2	.814
Job_3	.894	SatSoc3	.788
Job_4		SatSoc4	
_		SatSoc6	
Pay		Pay Sat.	
Pay_2	.912	SatEcn1	.871
Pay_3	.864	SatEcn3	.808
Pay_4	.912	SatEcn8	.814
Identificat.		Fut.Job Sat.	
ID1	.907	SatEmp1	.906
ID2	.841	SatEmp2	.805
ID3	.823	SatEmp3	.836
ID4		SatEmp4	
ID6		r	
Retention		Participation	
Retent3	.940	Part1	.866
Retent4	.961	Part2	.831
Retent5	.951	Part5	.915
Service Use		Sacrifice	
Serve1	.883	Sacrif1	.841
Serve2	.842	Sacrif2	.770
Serve3	.817	Sacrif5	.788
Serve6			
WOM			
WOM1	.903		
WOM2	.874		
WOM3	.877		
WOM5	.0,,		

Only the scales used in the final structural model are shown here.

Consistent with Essay I, three second-order factors were used to create the final measurement model: a general economic satisfaction factor, an economic membership goal factor, and a pro-organizational behavior factor. The theoretical justifications for these second-order factors were discussed in Chapter 3. The second-order measurement model produces acceptable fit indices (RMSEA = .025, CFI = .933,  $\chi^2$  = 11229.1 with 4317 df). All first- and second-order factor loading are significant at the .001 level, and Z-scores for second-order loadings range from 31.9 to 10.8. Somewhat concerning is the substantially lower standardized loading of pay satisfaction on the second-order economic satisfaction factor. For both the Current and New Soldier membership cohorts this loading is below .5, with the future employment satisfaction loadings being over .950. Similar to Essay I, the second-order measurement model does not fit the data as well as the first-order model, but it provides acceptable fit and enables the use of a more tractable and comprehensible model. Furthermore, like the first-order model, it has configural invariance across the three cohorts. Unstandardized factor loadings by membership cohort are provided in Table 8.1.

## 8.2 Metric Invariance Testing in the Measurement Model

Given the final multi-cohort measurement model demonstrated configural invariance and good psychometric properties, it was then tested for metric invariance among the membership cohorts. A measure is invariant when individuals of the different membership cohorts who have the same position on the construct being measured provide the same observed score on the survey. If individuals from different membership cohorts are equal on their true construct level but score differently, invariance is violated (Vandenberg and Lance 2000; Byrne 2006). For the purpose of this research, I am

concerned with testing both metric (factor loading) and scalar (intercept) invariance, which are necessary to meaningfully compare the structural paths and latent factor means, respectively. Unlike configural variance, where the items load significantly on the same factors across all three cohorts, metric invariance indicates that not only do the items load to the same factors, but that they also load to the same magnitude. The discussion of scalar invariance is deferred to the next chapter.

Overall metric invariance was tested by constraining item factor loadings as equal across the three cohorts (except for the item that is set to 1 in order to set the scale for each factor). The fit indices for the model with factor loadings constrained as equal were compared with the model without factor loading equality constraints. This was initially completed on the first-order model and later expanded to include the second order model. The base measurement model (without factor loading equality constraints) has RMSEA and CFI scores of .024 and .942, and a chi-square of 10143.5 with 4137 df. The measurement model with factor loadings constrained as equal has an RMSEA scores of .024, a CFI of .939, and a chi-square of 10555.1 with 4219 df. The chi-square change of 411.6 with a degrees of freedom change of 82 is highly significant and indicates noninvariance of factor loadings among the three cohorts. This is neither overly problematic nor unexpected. Full metric invariance based on a chi-square change is seldom achieved in practice and some level of metric invariance is acceptable when comparing structural paths among the membership cohorts. As an alternative to chisquare, Cheung and Rensvold (2002) argue that the comparative fit index (CFI) provides the best index of change in fit between the models, and suggest changes in fit of less than .01 tend to have limited practically importance. The CFI difference between these two

nested models is .003. This suggests that the level of noninvariance, while statistically significant, will not create an issue for the comparison of the structural paths across the three cohorts.

As an additional check, items were constrained to be equal one at a time to estimate the chi-square change (2 df) for each item. This analysis identified 18 of 56 factor loadings as noninvariant, with no highly problematic items. Table 8.3 includes the unstandardized factor loadings for the equality constrained factors, identifies which items were invariant, and reports the chi-square differences for constraining each of the noninvariant items across the three cohorts.

After reviewing the results of this analysis, it appears that the first-order model achieves a sufficient level of metric invariance to make meaningful comparisons in the structural model. Accordingly, the factor loadings for the model were constrained as equal across all three cohorts for all subsequent analysis. This judgment was made based on two criteria: 1) chi-square tests identify minor changes in fit as statistically significant when there are large sample sizes and 2) the CFI difference between the two nested models was .003, well below the .01 level of practical significance propose by Cheung and Rensvold (2002).

The next test for metric invariance involves testing the second-order measurement model. The model with first-order factor loadings constrained as equal and the second-order factor loadings unconstrained was used as the baseline model. This model was compared to the model with both first- and second-order factor loadings constrained as equal. The baseline second-order model had a chi-square of 11229.1 with 4317 df and fit indices of .933 and .025 for CFI and RMSEA, respectively. When the second-order

factor loadings were constrained to be equal across the membership cohorts, the model fit decreases slightly (CFI = .930, RMSEA=.026, and chi-square = 11673.5 with 4411 df). As was the case for the first-order model, the chi-square change is significant but the CFI change of .003 suggests this decreased fit is acceptable. An examination of each individual second-order factor loadings shows that all but the pro-organizational behavior  $\rightarrow$  sacrifice loading are invariant, and the chi-square change for this constraint is only 15.3 with 2 df (bottom of Table 8.3). This is strong support for constraining the second-order factor loadings as equal and indicates that these structural model paths can be meaningfully compared between cohorts.

**Table 8.3 Multi-Cohort Constrained Model Properties** 

	Construct Estimate Constrain Equal							
Construct	Unstandard.	<del>-</del>						
-Indicators	Unstandard. Loading	Standard Error	Constrain Equal					
Altruism			_					
Altru_1	1.00		Loading=1					
Altru_2	1.143	(.021)	invariant					
Altru_4	1.256	(.023)	9.1					
Altru_5	1.226	(.019)	invariant					
Self-Enhanc.								
Slf_Imp1	1.00		Loading=1					
Slf_Imp2	1.040	(.020)	40.5					
Slf_Imp4	1.026	(.021)	19.6					
Future Job								
Job_1	1.00		Loading=1					
Job_2	.800	(.018)	18.2					
Job_3	.971	(.017)	invariant					
Job4	.907	(.016)	invariant					
Pay			_					
Pay_2	1.00		Loading=1					
Pay_3	.917	(.017)	invariant					
Pay_4	1.065	(.016)	Invariant					
Identificat.								
ID1	1.00		Loading=1					
ID2	1.281	(.038)	invariant					
ID3	1.341	(.041)	12.5					
ID4	1.189	(.042)	20.2					
ID6	1.173	(.036)	invariant					
Retention								
Retent5	1.00		Loading=1					
Retent4	.999	(.010)	7.0					
Retent3	.926	(.011)	invariant					
WOM		(1.2.)						
WOM1	1.00		Loading=1					
WOM2	.906	(.021)	19.0					
WOM3	1.096	(.023)	invariant					
WOM5	.950	(.021)	41.8					
Service Use	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(10-1)						
Serve1	1.00		Loading=1					
Serve2	1.046	(.021)	invariant					
Serve3	.787	(.021)	invariant					
Serve6	.907	(.024)	6.5					
Participation	.,,,,	(.021)						
Part1	1.00		Loading=1					
Part2	.855	(.022)	invariant					
Part5	1.030	(.022) $(.017)$	16.9					
Sacrifice	1.030	(.017)	10.7					
Sacrif1	1.00		Loading=1					
Sacrif2	.812	(.020)	invariant					
Sacrif5	1.007	(.020) $(.027)$	invariant					
Sacilly	1.00/	(.021)	mvariani					

Construct	Standard. Constrain	$\chi^2 \Delta$ to	
-Indicators	Unstandard. Loading	Standard Error	Constrain Equal
Prestige			
Prest3	1.00		Loading=1
Prest4	1.039	(.017)	10.0
Prest5	.900	(.020)	invariant
Prest6	.901	(.017)	invariant
Distinctiv.			
Dist_1	1.00		Loading=1
Dist_2	1.125	(.033)	invariant
Dist_4	1.305	(.037)	7.9
Dist_5	1.322	(.037)	12.2
Social Sat.			
SatSoc1	1.00		Loading=1
SatSoc2	1.016	(.030)	invariant
SatSoc3	1.147	(.030)	6.8
SatSoc4	.914	(.025)	invariant
SatSoc6	1.018	(.027)	6.1
Pay Sat.			
SatEcn1	1.00		Loading=1
SatEcn3	.788	(.021)	13.1
SatEcn8	.957	(.021)	14.3
Fut.Job Sat.			
SatEmp1	1.00		Loading=1
SatEmp2	1.082	(.025)	invariant
SatEmp3	1.115	(.026)	invariant
SatEmp4	1.101	(.026)	9.8
Second-Order	Unstand.		2.
Factors	<b>Loading</b> Constrained Equal		$\chi^2 \Delta$ to Constrain Equal
Pro-Org. Beh.			
Retent.	1.084	(.031)	invariant
WOM	.777	(.026)	invariant
ServUse	.720	(.023)	invariant
Partic.	1.00		Loading =1
Sacrif.	.911	(.027)	15.3
Econ Goal			
Pay	.720	(.022)	invariant
Future Job	1.00	. ,	Loading =1
EconSat.1			<u> </u>
Pay Sat.	.732	(.034)	invariant
Fut Job Sat.	1.00	` '	Loading =1

## 8.3 Invariance Testing and Comparison within the Structural Model

The three cohorts were not expected to be fully invariant in the magnitudes of their causal paths ( $\beta$  and  $\eta$ ). In fact, it is the type and magnitude of the differences that provide insights into the cohorts and the influence of individual membership goals. As part of this analysis, I look at configural invariance of the causal paths, test for invariance in the magnitudes of the causal paths, and then conduct post hoc pairwise comparison of the noninvariant paths.

Several changes are implemented from the analysis of the final model presented in Essay I. First, the measurement model factor loadings have been fixed as equal across the cohorts. Second, because the focus is on the structural paths and not the measurement model, I then use item parcels in lieu of the full set of items. In this approach and individual's item scores for each factor are averaged and used as a single item. The error variance for this item is set to 1 minus the scale's reliability and then multiplied by the variance of the mean-score item  $(1-\alpha * \text{var})$ . This approach captures and makes use of the measurement error like a multi-item construct, but also reduces the chance of estimation errors and is more likely to meet the multivariate normality assumptions than individual items (Sass and Smith 2006). Lastly, because of sample size differences between the cohorts, the level of significance is set at .10, rather than the .05 value used up to this point.

### 8.3.1 The Structural Model and Configural Invariance

Estimating the structural model for the three cohorts without equality constraints on the causal paths produces reasonably strong fit (CFI = .928, RMSEA = .034, and chi-

square =2179.8, df = 550) and suggests the model functions well across all three cohorts. Overall, 53 of 60 paths (20 structural paths per cohorts) are significant at the .10 level (Table 8.4). Among the Current Soldier cohort, only the effect of altruism on economic satisfaction fails to reach significance. Within the New Soldier cohort four of the 20 paths fail to reach significance, while two of 20 paths fail to reach significance within the Future Soldier cohort. Two of these nonsignificant paths are shared across the New and Future Soldier cohorts: prestige →identification, and self-enhancement →economic satisfaction. Modification indices suggest no additional causal paths for any of the three membership cohorts. Overall, these result show that the effects of membership goals on the perceptions and expectations of the organization, satisfaction, identification, and behavior are largely configurally invariant. <sup>19</sup>

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<sup>&</sup>lt;sup>19</sup> Configural invariance testing of the structural model simply looks at whether the model paths are significant across the cohorts and whether any modifications are warranted.

**Table 8.4 Simultaneous Estimation with Structural Paths Free to Vary** 

			Member	Cohort			Configural
Path	Fı	ıture		New	Curi	ent	Invariance
Altru. Goal→ Distinct.	.389	(.033)	.240	(.031)	.364	(.031)	Yes
Altru. Goal→ Prestige	.481	(.056)	.284	(.046)	.398	(.034)	Yes
Altru. Goal→ Soc.Sat.	.289	(.033)	.251	(.038)	.252	(.034)	Yes
Self-Enhance. Goal → Distinctive.	.169	(.029)	.249	(.033)	.234	(.028)	Yes
Self-Enhance. Goal  → Prestige	.105	(.048)	.177	(.048)	.248	(.031)	Yes
Self-Enhance. Goal→Social Sat	.245	(.029)	.220	(.040)	.403	(.031)	Yes
Self-Enhance. Goal →Econ Satisfaction	.062	$(.039)^{ns}$	.036	$(.038)^{ns}$	.193	(.038)	No
Altru. Goal → Econ Satisfaction	.089	(.039)	.136	(.029)	.041	$(.033)^{n}$	No No
Econ. Goal → Econ Satisfaction	.566	(.031)	.681	(.047)	.614	(.038)	
Prestige → Identif.	.046	$(.044)^{ns}$	.077	$(.061)^{ns}$	.113	$(.060)^{+}$	No
Distinctive. → Identif.	.390	(.105)	.046	$(.098)^{ns}$	.214	(.071)	No
Social Satisf.→ Identif.	.209	$(.117)^{+}$	.285	(.069)	.350	(.064)	Yes
Altru. Goal→ Identif.	.388	(.055)	.443	(.047)	.292	(.044)	Yes
Self-Enhan. Goal→ Identification	.137	(.049)	.176	(.058)	.238	(.052)	Yes
Econ. Goal→ Identification	157	(.037)	126	(.062)	195	(.045)	Yes
Identification → Pro-Org Behavior	.203	(.036)	.372	(.046)	.329	(.029)	Yes
Altru Goal→ Pro-Org Behavior	.189	(.043)	.185	(.053)	.158	(.040)	Yes
Econ Goal → Pro-Org Behavior	206	(.055)	688	(.153)	460	(.067)	Yes
Distinctiveness → Pro-Org Behavior Econ Satisfaction	.394	(.068)	085	$(.155)^{ns}$	.140	(.065)	No
→Pro-Org Behavior	.231	(.078)	.916	(.235)	.754	(.089)	Yes
<b>Model Fit</b>		Chi-Sq	uare = 2179	9.8, df = 55	0, RMSEA	= .034,	CFI .928

Model Fit Chi-Square = 2179.8, df = 550, RMSEA = .034, CFI .928 All estimates are unstandardized. All estimates are significant at the .05 level unless otherwise noted.

<sup>&</sup>lt;sup>+</sup> indicates significance at the .10 level ns indicates nonsignificance/p-values greater than .10

#### **8.3.2** Invariance of the Causal Structure

While configural invariance provides some information about the pattern of the causal structure, a better test of invariance in the causal structure is provided by constraining the causal paths as equal and assessing changes to model fit (Byrne 2001). Comparison of the baseline model without equality constraints on the causal paths to one where all paths are constrained to be equal indicates significant differences between the cohorts (CFI  $\Delta$  = .016, chi-square  $\Delta$  = 416.2, and df  $\Delta$  = 46). To identify the source of the difference, invariance testing was conducted for each of the 20 causal paths. This analysis identified ten relationships as being non-invariant across the cohorts. Table 8.5 provides the unstandardized estimates for the model, identifies relationship as either invariant or non-invariant, and provides the chi-square increase for constraining the noninvariant relationships. A significance level of .033 was used for this analysis, which reflects the .10 significance level (adjusted up from .05 because of differences in sample sizes) dived by 3 based on a Bonferroni correction for three post-hoc comparisons

This test has two primary purposes. First, it provides a strong cross-validation test of the hypotheses and final model from Essay I. Second, the differences enable an exploration of how and why individual membership goals may have different effects across the three cohorts. Regarding the first purpose (hypotheses testing and cross-validation), once the invariant paths are constrained as equal, almost all of the configural noninvariance observed in the model where casual paths are not constrained as equal is eliminated. In fact, all the noninvariant relationships, except one, differ in magnitude only. This means the hypotheses underlying each of the causal paths and the overall model from Essay I are supported across all three membership cohorts (Table 8.6). Only

the effect of the economic membership goal on perceptions of distinctiveness varied across the cohorts, being positive and significant in the Current and New Soldier cohort and negative and nonsignificant in the Future Soldier cohort. The final model, where the 10 invariant causal paths are constrained equal and the 10 invariant paths are fee to vary between cohorts, yields an RMSEA of .034, a CFI of .927, and a chi-square of 2238.8 with 573 df (Table 8.5).

The second purpose, exploring how and why the effects of individual membership goals differ across the three cohorts, is completed by examining the 10 noninvariant causal paths. This more detail investigation is discussed in the next section along with an examination of total, direct, and indirect effects across the cohorts.

Relationship **Inducing Factors** Organizational Distinctiveness Organization Prestige **Pro-Organizational Behaviors** Identification Retention, WOM, ervice Use, Participation, Social Sacrifice Satisfaction Economic Satisfac. PayFuture Job Economic Membership Goal Membership Goal Membership Goal Future Job **Membership Goals** 

Figure 8.2 Membership Goal – Identification Based Relational Model

**Table 8.5 Simultaneous Estimation, Invariant Structural Paths Constrained Equal** 

		Member		χ <sup>2</sup> Change if Constrained	
Path	Future Estimate/SE				
Altru. Goal→ Distinct.	.367 (.029)	.235 (.027)	.387 (.025)	No	9.2
Altru. Goal→ Prestige	.431 (.049)	.249 (.039)	.452 (.029)	No	12.8
Altru. Goal→Soc.Sat.	.279 (.028)	.231 (.037)	.296 (.030)	No	10.6
Self-Enhance. Goal → Distinctiveness	-	.216 (.017)	-	Yes	<6
Self-Enhance. Goal→ Prestige	-	.195 (.023)	-	Yes	<6
Self-Enhance. Goal → Social Satisfaction	.271 (.025)	.221 (.037)	.368 (.028)	No	8.9
Self-Enhance. Goal  → Econ Satisfaction	.081 (.035)	.048 (.033) <sup>ns</sup>	.149 (.033)	No	12.6
Altru. Goal → Econ Sat.	-	.099 (.019)		Yes	<6
Econ. Goal → Econ Satisf.	.547 (.031)	.667 (.046)	.606 (.038)	No	53.3
Prestige → Identif.	-	.062 (.030)	-	Yes	<6
Distinctive. → Ident.	-	.219 (.049)	-	Yes	<6
Social Satisf. → Ident.	-	.339 (.042)	-	Yes	<6
Altru. Goal → Ident.	-	.368 (.027)	-	Yes	<6
Self-Enhance. Goal → Identification	-	.180 (.030)	-	Yes	<6
Econ. Goal → Identification	-	168 (.026)	-	Yes	<6
Identification → Pro-Org Behavior	.209 (.034)	.379 (.042)	.330 (.029)	No	13.3
Altruism Goal→ Pro-Org Behavior	-	.181 (.026)	-	Yes	<6
Economic Goal →Pro-Org Behavior	213 (.053)	676 (.148)	492 (.064)	No	14.7
Distinctiveness → Pro-Org Behavior	.398 (.063)	072 (.141) <sup>ns</sup>	.113 (.062)+	No	7.6
Econ. Sat. → Pro- Org Behavior	.250 (.079)	.909 (.224)	.871 (.021)	No	33.2

Model Fit RMSEA = .034, CFI = .927,  $\chi^2$  = 2238.8 with 573 df Notes: Estimates are unstandardized. Chi square critical value for .033 level of significance is 6.0. **Model Fit** 

<sup>&</sup>lt;sup>+</sup> indicates significance at the .10 level

ns indicates nonsignificance/p-values greater than .10

Table 8.6 Multi-Cohort Hypotheses Test Summary

II	Dalastin alder	Supported: Yes or No				
Hypothesis	Relationship	Future	New	Current		
$\overline{\mathbf{H}_{2}}$	Org. Prestige → Identification	Yes	Yes	Yes		
$H_3$	Org. Distinctive. → Identification	Yes	Yes	Yes		
$H_5$	Social Satisf.→Identification	Yes	Yes	Yes		
$\mathbf{H}_{6}$	Econ. Satisf. is unrelated to Identif.	Yes	Yes	Yes		
$\mathbf{H}_7$	Identification → Retention	Yes	Yes	Yes		
$H_8$	Identification→Positive WOM	Yes	Yes	Yes		
$\mathbf{H}_{9}$	Identification→Service Use	Yes	Yes	Yes		
$\mathbf{H}_{10}$	Identification → Participation	Yes	Yes	Yes		
$\mathbf{H}_{11}$	Identification→Sacrifice	Yes	Yes	Yes		
Modific.	Distinctiveness→Pro-Org. Behavior <sub>b</sub>	Yes	No	Yes		
$\mathbf{H}_{12\mathrm{b\&c}}$	Prestige <sub>b</sub> and Social Satisf. <sub>c</sub> effects on behavior are fully mediated by Identification	Yes	Yes	Yes		
H <sub>13-15</sub>	Economic Satisf. → Pro Organizational Behaviors	Yes	Yes	Yes		
$H_{16a,b}$	Self-Enhancement Goal → Prestige <sub>a</sub> & Distinctiveness <sub>b</sub>	Yes	Yes	Yes		
$\mathbf{H}_{17a,b}$	Altruism Goal $\rightarrow$ Prestige <sub>a</sub> & Distinctiveness <sub>b</sub>	Yes	Yes	Yes		
$\mathbf{H}_{18\mathrm{a,b}}$	Economic Goal is unrelated to Prestige <sub>a</sub> & Distinctiveness <sub>b</sub>	Yes	Yes	Yes		
$\mathbf{H}_{22}$	Self-Enhancement Goal→ Social Satisfaction	Yes	Yes	Yes		
$\mathbf{H}_{23}$	Altruism Goal→Social Satisf.	Yes	Yes	Yes		
$\mathbf{H}_{24}$	Econ. Goal is unrelated to Soc. Sat.	Yes	Yes	Yes		
Modific.	Self-Enhance. Goal→Econ Satisf	Yes	No	Yes		
$\mathbf{H}_{25}$	Self-Enhance. Goal → Identific.	Yes	Yes	Yes		
$\mathbf{H}_{26}$	Altruism Goal → Identification	Yes	Yes	Yes		
$\mathbf{H}_{27}$	Economic Goal →Identification	Yes	Yes	Yes		
$\mathbf{H}_{28}$	Self-Enhanc. Goal→Pro-Org Beh.	Yes	Yes	Yes		
$\mathbf{H}_{29}$	Altru. Goal→Pro-Org Behavior	Yes	Yes	Yes		
$\mathbf{H}_{30}$	Econ. Goal→Pro-Org Behavior	Yes	Yes	Yes		

## **8.3.3 Effects Comparisons**

One difference among the cohorts is the weaker relationships that exist between pro-organizational behavior and all four antecedents among the Future Soldier cohort (Table 8.7). In short, identification, economic satisfaction, the economic membership goal, and distinctiveness all have weaker effects on pro-organizational behavior among the Future Soldier cohort relative to both the Current or New Soldier cohorts. The smaller magnitude is not surprising given the Future Soldier cohort has substantially less knowledge and almost no experience with the behaviors being measures. Additionally the service-use behavior and future employment satisfaction are measured as expectations in the Future Soldier survey. Arguably more interesting is the fact that despite having little experience and a limited understanding of pro-organizational behaviors the Future Soldier cohort still displays the same causal relationships as the other two cohorts. This is observed whether the relationship is invariant or noninvariant. Even before Future Soldiers have an opportunity to enact most pro-organizational behaviors, their membership goals seem to influence the expectation of enacting these behaviors in the future.<sup>20</sup>

Two other interesting trends emerge with the examination of the pattern of noninvariance. First, the five noninvariant effects from the two intrinsic membership goals decrease in their magnitude with the transition from the Future to New Soldier cohort. Moreover, both economic membership goal paths increase in their magnitude with the transition from the Future to the New Soldier cohort (e.g. the positive effect becomes more positive and the negative effect becomes more negative) (Table 8.7,

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<sup>&</sup>lt;sup>20</sup> Altruism and self-enhancement membership goals increase expectations of pro-organizational behavior, while the economic membership goal decreases the expectation of enacting pro-organizational behaviors.

Figure 8.3). Second, this trend is reversed among all five of the intrinsic membership goals and both of the economic goal effects with the transition from New to Current Soldier cohorts. More broadly, the magnitude change trend is reversed in nine of the ten noninvariant relationships in the subsequent transition from New to Current Soldier cohorts (Figure 8.3).

While these are not longitudinal observations, the consistency that exists in the membership induction and integration process, combined with the use of control variables (e.g. age and combat/noncombat specialties) suggests that the differences in relationship strength may be more a product of the cohort's position in the membership lifecycle than any other factor. If true, these observations are interesting because the New Soldier cohort is sampled when these individuals are at a period of maximum stress, stripped of their civilian identities and freedoms, and beginning an intensive and nerveracking transition to full membership. This raises the potential that economic membership goals exert increased influence under periods of high stress and uncertainty, while the intrinsic membership goals exert decreased influence. This would be very interesting and seemingly contrary to expectations of altruism and calculative self interest. It should be cautioned that this observation is not based on a series of observations of the same individuals, but rather observations from three different samples of individuals drawn from three different points in their membership lifecycle.

**Table 8.7 Post Hoc Pairwise Comparisons** 

Path	Membership Cohort	$\beta_1$	SE <sub>1</sub>	$\mathbf{B}_2$	SE <sub>2</sub>	t Score (CV=2.13)
Altruism Goal→	Current vs. New	0.387	0.025	0.235	0.027	4.1308+
Distinctiveness	Current vs. Future	0.387	0.025	0.367	0.029	0.5224
	New vs. Future	0.235	0.027	0.367	0.029	-3.3314+
Altruism Goal→	Current vs. New	0.452	0.029	0.249	0.039	4.1769+
Prestige	Current vs. Future	0.452	0.029	0.431	0.049	0.3688
	New vs. Future	0.249	0.039	0.431	0.049	-2.9061+
Altruism Goal→	Current vs. New	0.296	0.03	0.231	0.037	1.3646
Social Satisfact.	Current vs. Future	0.296	0.03	0.279	0.028	0.4143
	New vs. Future	0.231	0.037	0.279	0.028	-1.0345
Self Enhance.	Current vs. New	0.368	0.028	0.221	0.037	3.1681+
Goal→ Social	Current vs. Future	0.368	0.028	0.271	0.025	2.5841+
Satisfaction	New vs. Future	0.221	0.037	0.271	0.025	-1.1197
Self Enhance. →	Current vs. New	0.149	0.033	0.048	0.033	2.1642
Econ. Satisfaction	Current vs. Future	0.149	0.033	0.081	0.035	1.4136
	New vs. Future	0.048	0.033	0.081	0.035	-0.6860
Economic Goal→	Current vs. New	0.606	0.038	0.667	0.046	-1.0224
Econ. Satisfaction	Current vs. Future	0.606	0.038	0.547	0.031	1.2031
	New vs. Future	0.667	0.046	0.547	0.031	2.1633
Economic Goal→	Current vs. New	-0.492	0.064	-0.676	0.148	1.1411
Pro-Org Behavior	Current vs. Future	-0.492	0.064	-0.213	0.053	-3.3575+
	New vs. Future	-0.676	0.148	-0.213	0.053	-2.9452+
Identification >	Current vs. New	0.330	0.029	0.379	0.042	-0.9600
Pro-Org Behavior	Current vs. Future	0.330	0.029	0.209	0.034	2.7077+
	New vs. Future	0.379	0.042	0.209	0.034	3.1460+
Econ. Sat→	Current vs. New	0.871	0.210	0.909	0.224	-0.1238
Pro-Org Behavior	Current vs. Future New vs. Future	0.871 0.909	0.210 0.224	0.250 0.250	0.079 0.079	2.7678+ 2.7745+
		0.909	0.224	0.230	0.079	2.114J±
Distinct.	Current vs. New	0.113	0.062	-0.072	0.141	1.2011
Pro-Org Behavior	Current vs. Future	0.113	0.062	0.398	0.063	-3.2243+
	New vs. Future	-0.072	0.141	0.398	0.063	-3.0434+

<sup>+</sup> Significant at the .033 level, which reflects the .10 significance level (adjusted up from .05 because of differences in sample sizes) dived by 3 based on a Bonferroni correction for three post-hoc comparisons.

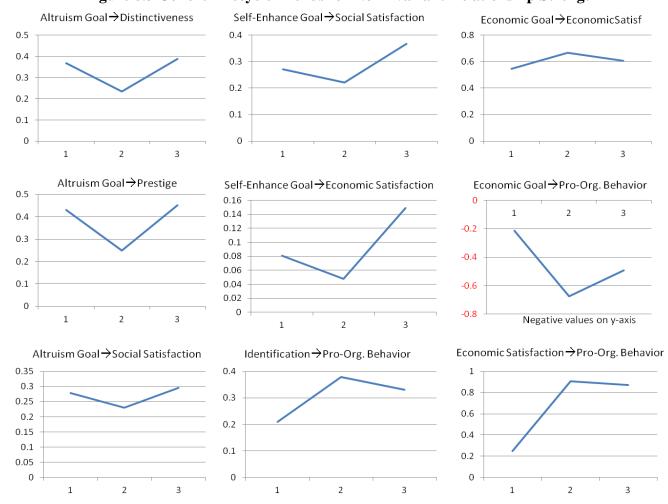


Figure 8.3 Cohort Lifecycle Trends for Noninvariant Relationship Strength

- Future, New, and Current Soldier cohorts correspond to the numbers 1, 2, and 3 on the X-axis, respectively.
- Values along the y-axis reflect unstandardized path estimates.

The previous tests examined the invariance of the direct effects in terms of their magnitude. As a final assessment I also examine the degree to which unstandardized total, direct, and indirect effects change across the cohorts (Table 8.8). The results indicate a strong degree of consistency in the effects of individual membership goals across the cohorts. Overall, it appears that individual membership goals have a substantial and consistent effect on the individual's perceptions, level of satisfaction/expected satisfaction, and identification with the organization. Most importantly, individual membership goals have a considerable effect on proorganizational behavior, and while these effects vary considerably between intrinsic and economic membership goals, they are remarkably stable over the course of the membership lifecycle.

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Table 8.8 Total, Direct, and Indirect Goal and Identification Effects Across the Membership Cohorts

effect of column able on characters after lardizing ariables.		Altruism Membership Goal			Self-Enhancement Membership Goal		Economic Membership Goal			Identification			
The effect of each column variable on each row variable after standardizing all variables.	Type of Effect	Future	New	Current	Future	New	Current	Future	New	Current	Future	New	Current
Pro-	Total	.471	.448	.497	.176	.147	.266	111	133	053	.209	.379	.330
Organizational	Direct	.181	.181	.181				213	676	492	.209	.379	.330
Behavior	Indirect	.290	.267	316	.176	.147	.266	.102	.543	.439			
	Total	.569	.513	.581	.331	.314	.363	168	168	168			
Identification	Direct	.368	.368	.368	.180	.180	.180	168	168	168			
	Indirect	.201	.145	.213	.151	.134	.183						
	Total	.431	.249	.452	.195	.195	.195						
Prestige	Direct	.431	.249	.452	.195	.195	.195						
	Indirect												
	Total	.367	.235	.387	.216	.216	.216						
Distinctiveness	Direct	.367	.235	.387	.216	.216	.216						
	Indirect												
Social	Total	.279	.231	.296	.271	.221	.368						
Satisfaction	Direct	.279	.231	.296	.271	.221	.368						
Butisfuction	Indirect												
Economic	Total	.099	.099	.099	.081	.048	.149	.547	.667	.606			
Satisfaction	Direct Indirect	.099	.099	.099	.081	.048	.149	.547	.667	.606			

<sup>-</sup>All effects are unstandardized and significant at the .05 level or less unless marked <sup>ns</sup> (not significant). Total and indirect effects that operate through distinctiveness include the non-significant effect (.071) of distinctiveness on identification, which explains any differences between Tables 4.6 and 4.7.

# CHAPTER IX: MULTI-COHORT LATENT MEAN COMPARISONS METHODOLOGY AND RESLUTS

### 9.1 Scalar Invariance Testing in the Measurement Model

Scalar invariance (invariance of the factor item intercepts) is helpful when trying to make meaningful comparisons of the latent factor means between groups or cohorts. The approach used for testing scalar invariance is very similar to the method used for testing metric invariance, except the intercepts are constrained in addition to the factor loadings. To identify the model, the intercept of each marker item was set to zero (e.g. the item with its factor loading set to 1 also has its intercept set to zero) (Steenkamp and Baumgartner 1998). The first-order measurement model with all factor loadings constrained as equal (or 1) serves as the baseline model for comparison and has CFI of .939, an RMSEA of .024, and a chi-square of 10555.1 with 4219 degrees of freedom. Constraining all item intercepts as equal across the cohorts (except those set to zero) produced a CFI of .929 and an RMSEA of .026. Examination of the intercept modification indices indicated that one the five social satisfaction items was noninvariant. Once this intercept was freed, the model produced a CFI of .930, an RMSEA of .026, and a chi-square of 11494.3 with 4299 degrees of freedom, with no intercept modification indices of sufficient magnitude to require additional changes to the model. After freeing this one noninvariant intercept, the CFI difference between this model and the baseline model is .009, with a chi-square change of 2615.5 and df change of 112. While the

change in chi-square is significant the change in CFI of .009 is still below the threshold recommended by Cheung and Rensvold for practical significance (2002). This suggests there is sufficient scalar invariance between the three cohorts and that latent factor means can be meaningfully compared. In practical terms, this means that individuals from different cohorts with the same true score on a latent construct exhibit the same observed scores on the survey.

## 9.2 Latent Mean Comparisons

Table 9.1 shows the latent mean estimates for the Future, New, and Current Soldier cohorts. These scores reflect the latent means for each cohort along with their standard errors. Three pairwise comparisons (Future to New, New to Current, and Future to Current) were run for every model construct. The .10 significance level was used (based on the different sample sizes), with a Bonferroni adjustment for three post-hoc tests, yielding a significance level of .033 for these tests. Every latent mean comparison was significant across all three sets of mean comparison, except for the mean of prestige between the Future and New Soldier cohorts. The differences between the Future and New Soldier cohorts are the smallest, while the differences between the Current Soldier cohort and the other two cohorts are quite substantial (Table 9.1).

The cohort means are not just different, the also create clear patterns, with every latent mean score decreasing from the New to Current member cohorts. Even identification, which was positively related to time in the organization in Essay I and other studies (Mael and Ashforth 1992; Bhattacharya et al. 1995), decreases monotonically across the three cohorts. Additionally, 12 of 15 latent means are at their

highest point among the Future Soldier cohort and then decrease monotonically across the other two stages of the membership lifecycle. The three factors that increase from Future to the New Soldier cohort are economic in nature and include the future employment and pay goals and future employment satisfaction. Overall, it appears quite clear that latent means generally decrease across the lifecycle of membership cohorts. Given there is partial scalar invariance, it suggests that members are becoming somewhat less identified and less likely to enact discretionary pro-organizational behaviors the greater the tenure of the cohort.

**Table 9.1 Latent Means Comparison** 

Latent Factor	Future Mer	nber	New Mem	ber	<b>Current Member</b>		
	Cohort	,	Cohort	t	Cohort		
	Latent Mean	SE	Latent Mean	SE	Latent Mean	SE	
Altruism Goal	6.622	.025	6.206	.037	5.973	.034	
Self-Enhance Goal	6.428	.032	6.135	.042	5.429	.044	
Future Employ Goal	6.099	.033	6.236	.042	5.480	.044	
Pay Goal	6.022	.041	6.283	.039	5.669	.039	
Identification	5.720	.039	5.333	.045	4.835	.047	
Distinctiveness	6.364	.024	6.183	.029	5.771	.031	
Prestige	6.069	.037	5.972	.044	5.379	.039	
Social Satisfaction	6.408	.027	5.726	.039	5.224	.042	
Pay Satisfaction	5.819	.035	5.328	.049	3.689	.055	
Future Employ Sat	6.099	.033	6.250	.033	5.292	.040	
Retention	5.964	.043	5.308	.063	4.742	.058	
WOM	6.215	.035	5.516	.053	4.762	.048	
Service-use	6.062	.031	5.820	.041	4.927	.042	
Participation	6.233	.028	5.739	.042	4.829	.049	
Sacrifice	6.359	.031	5.684	.052	5.278	.049	

Changes in the individual membership goals are of particular interest. The mean individual membership goals of the Future Soldiers should reflect the truest scores. This is because this cohort is closest to the membership decision point and the goal(s) being

measured in all three cohorts is the goal(s) associated with their initial membership decision. With the other two cohorts, there is the potential that time and circumstances may alter their ability or willingness to accurately recall their individual membership goals. Differences in the latent goal means across the cohorts suggest there may be some bias in the recall of initial membership goals or that the cohorts differ in their relative membership goal levels. The relative values of the latent mean scores in the Future Soldier cohort suggest that altruism represents the most important individual membership goal, followed by self-enhancement, future employment, and then pay. Altruism also has the greatest mean in the other two cohorts, but the relative values of the other membership goals vary across cohorts. Overall, this seems to indicate that on average, intrinsic goals are more important than the economic goals at the time of enlistment.

## 9.3 Latent Mean Comparisons by Gender and Combat Specialty

Latent means comparisons are also examined based on gender within the Future Soldier cohort (recall that the New Soldier cohort is all male). Because this analysis is within a single cohort, the significance level is set to .05. The analysis reveals five significant differences. These differences are marked by asterisks next to the latent factor name (Table 9.2). First, males and females vary in three of the four membership goals, with females having higher mean values for self-enhancement, pay, and future employment membership goals. Females also expect to be more satisfied with their pay and seem to be more likely to provide positive word-of-mouth for the organization. Conversely, they are less willing to sacrifice for the organization relative to their male counterparts.

Table 9.2 Latent Means Comparison by Gender for Future Soldier Cohort

	Future Soldier		Future Soldier	
Latent Factor	Female		Male	
	Latent Mean	SE	Latent Mean	SE
Altruism Goal	6.661	.045	6.618	.028
Self-Enhance Goal*	6.656	.061	6.409	.036
Future Employ Goal*	6.252	.088	5.876	.053
Pay Goal*	6.277	.069	5.906	.050
Identification	5.773	.075	5.809	.050
Distinctiveness	6.426	.042	6.378	.028
Prestige	6.119	.085	6.081	.040
Social Satisfaction	6.447	.049	6.460	.028
Pay Satisfaction*	6.005	.066	5.753	.041
Future Employ Sat	6.032	.065	5.913	.043
Retention	6.061	.092	5.950	.048
WOM*	6.440	.061	6.168	.041
Service-use	6.079	.066	5.959	.041
Participation	6.299	.062	6.206	.033
Sacrifice*	6.179	.075	6.366	.035

Latent means comparisons are also examined based on the individual's specialty within the organization. While there are dozens of jobs within the organization, these were collapsed into a dichotomous variable indicating whether their job was a combat arms specialty or not. For example, a Future Soldier going into the infantry is consider to be in a combat specialty and a Future Soldier going into communications is considered to be in a noncombat specialty. The organization's own classification system was used for this process. A significance level of .05 was again used and adjusted to .025 based on one post-hoc comparison. The analysis reveals six significant differences. These differences are marked by asterisks next to the latent factor name (Table 9.3). First, combat versus noncombat specialties vary in three of the four membership goals, with combat specialties having higher mean altruism goals and noncombat specialties having higher

mean pay and future employment membership goals. The noncombat specialties also have higher expected satisfaction in terms of their future employment outside the organization. Neither of these observations is surprising, given that the combat specialties tend to have less transferability to the civilian market. Future Soldiers enlisting into combat specialties have both higher mean levels of identification and willingness to sacrifice for the organization. Overall, it appears that those who join combat specialties have more altruistic goals, are more identified with the organization, and more willing to make sacrifices on its behalf. Conversely, those who join noncombat specialties have higher mean economic goals and an expectation of being more satisfied with their post-membership employment opportunities.

**Table 9.3 Latent Means Comparison by Combat Specialty** 

	Future So		Future Soldier Non			
Latent Factor	Combat Sp	ecialty	Combat Specialty			
	Latent Mean	SE	Latent Mean	SE		
Altruism Goal*	6.690	.032	6.563	.035		
Self-Enhance Goal	6.500	.042	6.391	.049		
Future Employ Goal*	5.777	.071	6.129	.056		
Pay Goal*	5.882	.064	6.070	.054		
Identification*	5.906	.052	5.688	.058		
Distinctiveness	6.416	.031	6.363	.032		
Prestige	6.128	.047	6.039	.053		
Social Satisfaction	6.472	.033	6.436	.034		
Pay Satisfaction	5.828	.047	5.773	.053		
Future Employ Sat*	5.837	.051	6.037	.046		
Retention	6.046	.058	5.881	.062		
WOM	6.215	.048	6.219	.050		
Service-use	6.010	.047	5.969	.048		
Participation	6.269	.042	6.174	.040		
Sacrifice*	6.488	.039	6.176	.047		

#### **CHAPTER X**

#### DISCUSSION AND MANAGERIAL IMPLICATIONS

This essay builds upon the findings of Essay I, which showed that membership goals play a key role in individuals' perceptions, level of social and economic satisfaction, and level of identification with the organization. Perhaps most importantly, individual membership goals are strongly related to pro-organizational behaviors. It also identified that these effects vary considerably between the membership goals, with intrinsic membership goals providing markedly greater value than economic goals. Given these findings, Essay II had two purposes: 1) validate the measurement and structural models using samples from other stages in the membership lifecycle and 2) to build on Essay I's findings and develop insights into the influence of individual membership goals based on between-cohort differences and similarities. The results from the current essay indicate that the measurement and structural models are valid and robust across all three membership lifecycle stages. Key insights include the consistency and persistence of individual membership goal effects on identification and behavior across the progression of membership lifecycle cohorts. It is particularly telling that economic membership goals continue to have negative effects on identification and behavior despite vigorous organizational efforts to build stronger individual-organization relationships and promote pro-organizational behaviors.

#### 10.1 Validation of the Measurement and Structural Models

The results discussed in the previous chapter show that the measurement model has full configurable invariance, with all factors loading to the intended factor with no substantial cross-loadings. Additionally, the measurement model demonstrated partial metric invariance, with most items being statistically invariant and all factors exhibiting sufficient invariance to be considered equal across cohorts (except WOM). Overall, the findings suggest that the scales are effective and exhibit good psychometric properties regardless of the point of sampling within the membership lifecycle and could be used as a starting point for other measurement instruments investigating identification and/or membership goals. The second-order measurement model also demonstrated invariance and was able to be constrained as equal across the cohorts. The measurement model also had scalar invariance among the membership cohorts, though the CFI change was close the level of practical significance and one item needed to be freed.

Analysis of the structural model indicates a high degree of validity across the full range of membership lifecycle cohorts. The final multi-cohort analysis with invariant causal paths constrained as equal shows that 1) every path with equality constraints is significant and 2) there are only two nonsignificant noninvariant paths, and then only for a single cohort (distinctiveness pro-organizational behavior and self-enhancement goals peconomic satisfaction). Furthermore, both of these paths were added as modifications to the hypothesized model in Essay I. The overall pattern of relationships was consistent even when there were profound differences in cohort knowledge and experience regarding the organization and pro-organizational behaviors. Moreover, the model continued to demonstrate strong validity even when 'expected satisfaction' was

used in lieu of 'experienced satisfaction' and service-use intentions were used in lieu of service-use history.

Combined with the robustness checks from Essay I, these analyses provide powerful evidence for the soundness of the items, scales, hypotheses, and structural model presented in this essay. This level of robustness and validity across the range of lifecycle stages, knowledge and experience levels, and survey formats suggests that these scales and models have strong potential for use in future research involving identification and membership goals. In addition to establishing robust and valid scales, instruments, and models, this study's methodology contributes value in several other ways. First, the validation of the structural model with all three cohorts and the strong support for almost all hypotheses suggests that identification and goal theory is applicable across the entire membership lifecycle. Second, this is the only membership goals study I am aware of that examines the organization's membership lifecycle at multiple points ranging from preintegration to post-integration.<sup>21</sup> Third, this study uses a membership context where the respondents' membership goals range from highly altruistic to highly economic. Lastly, this study confirms both the validity and necessity of using social and economic satisfaction in the membership marketing context and helps to explain why previous identification studies have suffered from inconsistent findings regarding the association between satisfaction and identification.

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<sup>&</sup>lt;sup>21</sup> While this approach falls short of the rigor provided by following a panel of individuals over time, it is expected that the current samples differ primarily based on their point in the membership lifecycle. This assumption is premised on the organizational context being fairly stable over the tenure of all but the longest serving members from this sample and the consistency of the recruiting and integration processes used for all three cohorts.

#### 10.2 Theoretical and Empirical Insights

This essay also provides several important academic and managerial insights derived from two key findings.

- 1. That latent means decline from the most junior to the most senior cohort, but the economic latent means are highest during the period of greatest stress.
- 2. That individual membership goal effects are consistent and persistent across all three lifecycle cohorts.

#### 10.2.1 Patterns in Latent Means

Differences between the cohorts' latent means show two clear patterns that may prove important: 1) latent means consistently decline from the Future to the Current Soldier cohorts and 2) economic latent means increase from the Future to New Soldier cohort. In the first case, every latent mean decreases from the New to the Current cohort despite the relationships between these latent factors remaining relatively stable. This seems to suggest that the decreasing latent means are not changing the psychological and behavioral effect of perceptions, expectations, or satisfaction on identification or proorganizational behaviors. Nor is it changing the effects of the individual membership goals. It may be that this decline in latent means is a product of the Future and New Soldier cohorts progressing from having idealized organizational perceptions and expectations to a more realistic, information-based assessment of the organization.

Future research should look at the Current Soldier cohort over time to determine if latent means continue to decline once they are fully integrated in the organization and no longer in a transitional period. If latent means continue to decline after these members

have gained a more realistic assessment of the organization, then there are problems within the organization that require substantial leadership attention. The presence in Essay I of a moderate positive effect from the length of time in the organization on the level of identification suggest that once these members enter a period of full and stable membership that declining means (at least identification) may be reversed. The finding of decreasing latent means suggests that the organization may have significant influence on the level of prestige, distinctiveness, satisfaction, identification, and behavior, even if they do not change the relationship between these factors. It is possible that through effective marketing and addressing the individual's goals, the organization is creating initially high perceptions and expectations that cannot be sustained as the person gains proximity to the organization. This is consistent with research that suggests the application process and organizational entry period is especially crucial for the development of identification (Schultz and Schultz 1998).

In the second case, contrary to the overall decline in the latent means, pay, future employment, and benefits goals all increase from the Future to New Soldier cohorts. <sup>22</sup> The first few weeks of the reception, integration, acculturation, and training process involves divesting new members of freedoms, privileges, contacts with outside relationships, and visible signs of losing one's personal identity (haircuts, uniforms, strict rules and schedule, etc.). It is possible that this process biases the individuals' ability to recall or their desire to admit to having intrinsic membership goals, while the economic goals may provide some rational self-justification for the enlistment decision at this "low

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<sup>&</sup>lt;sup>22</sup> The benefits membership goal was not used in the structural analysis for consistency with the Essay I model and is only used in the measurement model and latent means comparisons.

point" in membership status. Future research should more closely examine this phenomenon.

# 10.2.2 Robustness of Membership Goal Effects to Knowledge, Time & Intervention

The consistency of causal relationships across the cohorts may seem uninteresting, but consider the very different conditions and turning point experienced by these cohorts and their substantial differences in organizational knowledge and experience. Despite these differences, the three cohorts display essentially the identical pattern of relationships in terms of their significance and valence, with 50% of the relationships being invariant in magnitude. This is critically important for a number of reasons. First, it suggests that an individual's membership goals, in addition to driving the initial membership decision, will strongly influence both the quality of memberorganization relationship and the member's willingness to enact pro-organizational behaviors over their entire membership lifetime.

Perhaps most importantly, the results of this study indicate that the organization may have very little ability to influence the effects of these membership goals once the membership decision is made. For members that have primarily altruism and/or self-enhancement membership goals, this works in the organization's benefit. Unfortunately, it also means that on average, those with primarily economic membership goals will always be less likely to strongly identify with the organization or enact discretionary behaviors that benefit the organization.

Consider the evidence for this argument. The organization attracts and enlists new members by targeting a broad range of individual membership goals. It then uses an

exceptionally strong integration and training process to improve relationship quality, promote pro-organizational behaviors, and reduce the effects of individual differences in membership goals, motives, or backgrounds. Despite this, all effects of the individual membership goals are configurally invariant across all three cohorts, except for the effects of economic goals on perceptions of distinctiveness (Table 10.1). Second, even the total effects in Table 10.2 demonstrate that individual membership goals have substantial effects that are remarkably similar whether the individuals have participated in the member integration and training process or not. Third, examination of the final model shows that 10 of the 20 causal paths are invariant, displaying consistent effects across the cohorts (Table 10.1), and that among the invariant paths, all ten regress back towards their initial magnitude following basic training and their transition to the Current Soldier cohort (Figure 8.2). This would suggest that changes in the strength of membership goal effects during the integration and training process may be temporary and regress back to its original level of influence once the member is removed from this environment. Lastly, consider that the integration and acculturation efforts in the U.S. Army are carefully designed to build stronger identification and commitment to the organization and induce pro-organizational behaviors and are among the most intensive found in any membership context. It is therefore very unlikely that more effort or intensity will eliminate the negative effects of economic membership goals.

**Table 10.1 Goal Influence by Cohort** 

	Intrinsic							Extrinsic			
Construct	Altruism			Self-	Enhance	ment	Economic				
	Future	New	Current	Future	New	Current	Future	New	Current		
Pro-Organizat. Behavior	+			No	Relations	hip	_	_	_		
Identification	+				+		_				
Economic Satisfaction	+			+	Not Signif	+	+	+	+		
Social Satisfaction	+	+	+	+	+	+	No Relationship				
Prestige	+	+	+		+		No Relationship				
Distinctiveness	+	+	+		+		No Relationship				

Table 10.2 Total, Direct, and Indirect Goal Effects

Standardized Total Effects		Altruism Membership Goal			Self-Enhancement Membership Goal			Extrinsic/Economic Membership Goal		
		Future	New	Current	Future	New	Current	Future	New	Current
Pro-Org. Behavior	Total	.471	.448	.497	.176	.147	.266	111	133	053
	Direct	.181	.181	.181				213	676	492
Identification	Total	.569	.513	.581	.331	.314	.363	168	168	168
	Direct	.368	.368	.368	.180	.180	.180	168	168	168

While this study does not test why the effects of economic membership goals are so resistant to change, there are several theories that may explain this observation.

Reactance theory suggests that individuals presented with situations that threaten or eliminate behavioral freedoms will experience a psychological state of reactance. This state can cause the individual to strengthen a view or attitude that is contrary to that desired by the organization, and make them resistant to persuasion (Brehm and Brehm

1981). In the current study, it would suggest that individuals holding strong economic membership goals may experience reactance during member integration that is focused on promoting more relational and altruistic behaviors. Evidence of this can be observed in the unstandardized direct effect of the economic membership goal on proorganizational behavior in the New Soldier cohort, which is sharply more negative within this cohort than in either of the other two cohorts (Table 10.2). New Soldiers with primarily economic membership goals are experiencing particularly intense pressure to behave in a manner that is contrary to their membership goals, so it would be very consistent with reactance theory for them to experience a psychological state of reactance which would be manifested by a reduced willingness to enact discretionary proorganizational behaviors.

A second possibility is provided by self-continuity or self-consistency. People generally want to maintain their self-concepts over time and across situations (Dutton et al. 1994; Steele 1988) and tend to notice and process information that supports their self-concept to a greater degree. In this situation, the individual may simply ignore or fail to internalize the organizational efforts to promote a self-concept that discounts their economic reasons for membership. Lastly, this outcome may be explained by simple goal incongruence. Information that is not relevant to the individual's membership goal will receive limited attention and processing (Fishbach and Ferguson 2011; Aarts et al. 2001) and have limited influence how the members evaluate and organize information, options, and behaviors (Fishbach and Ferguson 2011; Warren et al. 2010). Suffice it to say, there are a number of theoretically sound explanations for the persistently negative effects of extrinsic membership goals.

Given that individual membership goal effects appear to be resistant to organizational interventions during the member integration period. Future research should examine if there are earlier points or alternative treatments that may enable the organization to reduce or eliminate the negative effects on identification and behavior that are associated with economic membership goals. For example, are relationship building and persuasion efforts that occur prior to the membership choice more effective?

#### 10.3 Managerial and Marketing Implications

In the introduction of this dissertation I argued that most membership organizations 1) engage in marketing actions to attract and enroll new members, 2) benefit from high quality relationships with these members, and 3) derive value from their members' relational behaviors (Bhattacharya et al. 1995; Sheth and Parvatiyar 1995). The results from Essays I and II indicate that identification and the likelihood of enacting relational behaviors vary substantially based on the individual's membership goals. Therefore, to the extent organizations use knowledge of potential members' goals to segment the market and develop marketing actions that attract and induce new members, they are also influencing organizational identification and pro-organizational behaviors within their membership. Both essays find that economic membership goals are associated with lower identification with the organization and lower likelihood of the member enacting relational behaviors that create value for the organization. Essay II also finds that membership goal effects, both positive and negative, are quite stable across the progression of the membership lifecycle. This occurs despite the organizations efforts to promote relationship quality and pro-organizational behaviors.

The example provided by the focal organization used in this study illustrates this point. The U.S. Army operates on the assumption that negative effects from individuals' membership goals can be reduced or eliminated as new members are integrated into the organization. Consequently, they treat all individual membership goals as being equally attractive, providing they are effective and efficient at inducing membership. The findings from the current essay indicate that this assumption is wrong and they clearly demonstrate that the negative effects associated with economic membership goals persist despite this organization's use of an immersive and intense process of reception, integration, acculturation, and training. In fact, the effects of economic membership goals are almost as negative post-integration as they were beforehand and improve very little with increased time and participation in the organization.

Managers and membership marketers should glean a number of important implications from these findings. First, managers should recognize that the lifetime value of their members varies substantially based on the individual's membership goals. Accordingly, managers must understand how their marketing strategy and tactical marketing actions shapes the profile of individual membership goals in their organization. Take the U.S. Army as an example. They spend considerable effort understanding the individual goals within the population of potential members and use this information to segment the population based on membership goals and motives (among other factors) and then match marketing actions to target each segment. But their approach does not consider the downstream effects of this approach on relationship quality and behaviors. Consequently, they may myopically invest more resources in recruiting individuals with

economic membership goals if econometric analysis indicates they are more efficient to recruit.

Second, managers must understand that once a new member is recruited, the effects of their individual membership goals are likely to persist. For example, a person joining based on economic membership goals may have a lower indefinitely relational orientation ad infinitum. Additionally, managers must realize that once a person becomes a member, organizational interventions or treatments are not likely to change the effects of the membership goals. This is important because attempts to do so may result in wasted organizational effort and resources, or worse induce reactance and relational resistance within some individuals.

Accordingly, managers should develop the ability to measure/identify individual membership goals within their organization and their population of potential members. Furthermore, they must be capable of measuring member and potential members' lifetime value based on the prevalent individual membership goals. The robustness and validity of the measurement scales and the structural model developed and used in this dissertation provide an excellent starting point to develop organizationally specific measurement instruments and models.

# CHAPTER XI: IDENTIFICATION GROWTH AND GOAL INFLUENCE HYPOTHESES AND MODELS

Essay III (Chapters XI through XIII) focuses on describing and explaining the change process that occurs during key periods in the membership lifecycle within the Future and New Soldier cohorts. Toward this end, it seeks to 1) describe and explain change within the identification framework applied in the two previous essays and 2) describe and explain how different membership goals affect this change. This analysis uses two-wave panel data from the New and Future Soldier cohorts, with the sampling points for each cohort spanning a period in the membership lifecycle where identification growth is most likely to occur. This data is used to complete latent growth modeling (LGM). LGM, which is an application of SEM, uses longitudinal variation and individual (cross-sectional) variation to make strong inferences about the change process. The analysis seeks to discover the mean trajectories of change observed in the two panel observations and understand the extent of individual differences in change based on variance in their growth parameters (Steenkamp and Baumgartner 2000). This ability is particularly important because it can reveal heterogeneity among individuals holding different membership goals even if no aggregate trends are present. More generally, LGM is used to link differences in individual growth parameters to their antecedents and consequences and gain insights into the reasons for individual variation. Emphasis is placed on linking differences in identification growth parameters to membership goals, relationship-inducing factors (e.g. perceptions of the organization), and behavioral

consequences. Also of interest are the effects of membership goals on the relationship-inducing growth factors.

Essay III contains three chapters. Chapter X begins with discussions of theory and empirical evidence regarding growth in identification and other relational constructs and sets up the hypotheses and general models to be tested. The chapter continues with a discussion of the hypothesized influence of membership goals on the growth of identification and its antecedents and consequences. These relationships, though using LGM factors, are based on the relationships and models introduced in the previous essays. Chapter XI begins with a brief discussion of the LGM methodology and continues with a series of three sections that discuss the results from 1) identification and relationship inducing factor latent growth models, 2) the integration of these latent growth models into portions of the larger identification model used in Essays I and II, and 3) the effects of membership goals on the identification growth model. Chapter XI concludes with a brief test of the causal sequence using the two wave panel data and the final model from Essay I and II. The essay concludes with a chapter that discusses the results from each of these analyses and their implications for marketing and managerial practice (Chapter XII).

This chapter builds upon the identification and goal theory arguments developed in Essay I and elaborated in Essay II. For brevity I will not revisit this content again, but instead develop those theories in terms of identification and relationship inducing factor growth. The reader is encouraged to revisit Chapter II as needed to review identification and goal theory. In addition to the extant theory, hypotheses are informed by the results from Essays I and II and an in-depth knowledge of the organizational environment during

the two sampled periods. Regarding the first point, results from Essays I and II suggest the following are true:

- Perceptions of distinctiveness and prestige along with expected and experienced social satisfaction (referred to collectively as relationship inducing factors) are positively related to identification.
- 2. Identification is positively related to pro-organizational behaviors (retention, providing WOM, use of organizational services, discretionary participation, and willingness to make sacrifices for the organization).
- Altruism membership goals are positively related to relationship inducing factors, identification, and pro-organizational behaviors.
- 4. Self-enhancement membership goals are positively related to relationship inducing factors and identification.
- 5. Economic membership goals are positively related to economic satisfaction but negatively related to identification and pro-organizational behaviors.

Hypotheses in the current essay are also based on the unique situation of each sampled cohort. In the case of Future Soldiers, the individuals are in their home communities and are generally not highly engaged in activities that would alter their existing perceptions of the organization or their expectations of satisfaction. Despite this, Future Soldiers are expected to experience anticipatory socialization, where they begin to align themselves with the norms, values, attitudes, and behaviors they associate with the organization (Simpson 1962). Thus, I expect growth in identification will be driven by anticipatory socialization, which results in increased congruence between self-concept and organizational image, and indirectly increases identification.

In the case of New Soldiers, their intense two to three month period of integration, socialization, and training is designed to increase perceptions of organizational distinctiveness and prestige and foster camaraderie and social satisfaction. This effort is obviously well aligned to the current model. Consequently, I expect growth in perceptions of distinctiveness and prestige and increased social satisfaction. In addition to growth in each of these relationship inducing factors, New Soldiers often experience enhancement to their self-concept as they successfully navigate the many challenges intended to induce personal growth. To the degree this experience enhances the individual's self-concept, it should also increase identification with the organization (Wan-Huggins, Riordan, and Griffin 1998). This creates a situation where, in addition to relationship inducing factors, at least two unmodeled influences (anticipatory socialization and self-enhancing experiences) should also contribute to growth in identification. Table 11.1 summarizes all the hypotheses involving growth factors at the end of this chapter.

#### 11.1 Growth within the Identification Model

# 11.1.1 Relationship Inducing Factors and Identification Latent Growth

This section discusses hypotheses about the effects from the level and the growth of distinctiveness, prestige and social satisfaction on the growth of identification. The hypotheses from this section are consistent with previous essays, except for the inclusion of the growth factors.

In the case of the individual construct latent growth models, I expect there to be significant growth of identification in both samples, with growth among New Soldiers

being considerably greater based on the intense and deliberate organizational efforts to improve individual-organization relationship quality. Furthermore, I expect there to be significant variance in both the intercept and slope factors for both cohorts, indicating the existence of heterogeneity in the level and growth rate of identification. I believe that the growth of distinctiveness, prestige, and social satisfaction will be limited to the New Soldier population. More specifically, there is no reason to expect aggregate growth in those relationship inducing factors among the Future Soldiers, nor is there reason to expect significant heterogeneity in their growth slopes. Conversely, there should be substantial growth in the perceptions of distinctiveness, prestige, and social satisfaction based on this cohort's participation in basic training. This should result in aggregate growth (an increase in the mean slope) and significant variance within both the level of and rate of growth of identification.

# 11.1.2 Relationship Inducing Factors and Identification Latent Growth Effects

Theory concerning the effects of distinctiveness, prestige, and social satisfaction growth on identification growth is lacking, but social identification theory provides related arguments that can be used to construct these hypotheses. We know that individuals engage in self categorization and social comparison, and that through this process they seek to develop and improve their positive self-image and self-esteem (Hogg and Abrams 1988; Turner 1987). To the degree the organization appears increasingly distinctive or prestigious, it should enhance their self-image and increase their identification with the organization (Turner 1987; Dutton et al. 1994). Consequently, I expect that increasing perceptions of prestige and distinctiveness and increasing social

satisfaction (e.g. growth) will result in corresponding growth in identification (Figure 11.1). In other words, if an individual has an experience that makes the organization seem more distinctive it should enhance their self-concept and create growth in identification.

Consistent with Essays I and II, higher levels of the relationship inducing factors will be associated with higher levels of identification. I also believe that growth in distinctiveness, prestige, and social satisfaction may create growth in identification that is not observed during the same period. This means that the effects from the growth of distinctiveness, prestige, or social satisfaction that occurred prior to the observed period may have effects on identification growth in the current period. This may appear as a positive association between the level of the relationship inducing factors and identification growth. Therefore I hypothesize that the level of distinctiveness, prestige, and social satisfaction will be positively related to growth in identification within this study. Given more observed periods, I believe this relationship would be observed as a lagged effects of relationship inducing factor growth on identification growth.

Distinctiveness

Intercept +
Slope +
Identific.
Intercept +
Slope +
Social Satisfaction

Intercept +
Slope +
Slope Social Satisfaction

Figure 11.1 Relationship Inducing Factors on Identification Level and Growth

Intercept = Level T1

Slope = change from T1 to T2

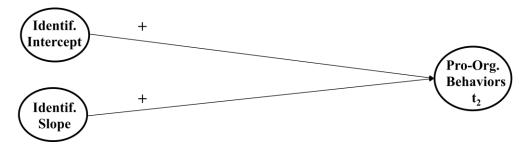
In terms of cohort differences, I do not expect aggregate growth or significant heterogeneity in perceptions of distinctiveness and prestige and social satisfaction among Future Soldiers. Consequently, I do not expect a strong effect from the slope factors for this cohort. New Soldiers, on the other hand, are experiencing a deliberate organizational effort to increase the perceptions of distinctiveness and prestige and go through a group development process in their initial training that should result in increased social satisfaction based on increased cohesion and improving group outcomes.

# 11.1.3 Identification Level and Growth on Pro-organizational Behaviors

One of the results from the previous essays is the strong positive influence of identification on membership behaviors valued by the organization. Given the

consistency of these results and the results from other studies (Ashforth and Mael 1992; Arnett et al. 2003), I expect that the level of identification (the intercept factor) will have positive effects on all pro-organizational behaviors, though studies using other relationship quality constructs (e.g. commitment and trust) have found that the construct level loses influence as the relationship ages (Hibbard, Brunel, Dant and Iacobucci 2001). Given the early stages of membership, this should not occur in either cohort and the level of identification should be influential. There is also evidence to suggest that the growth of relational constructs can be more influential than their level in determining relational outcomes (Palmatier 2008). While this study involved commitment and trust rather than identification, I expect that growth of identification will also have a substantial effect on behavior. Accordingly, I expect to find that both the level and the growth of identification will have strong positive relationships with each of the pro-organizational behaviors measured at time 2 (Figure 11.2).

Figure 11.2 Identification Level and Growth on Pro-organizational Behaviors



Intercept = Level T1 Slope = change from T1 to T2

#### 11.2 Goal Influence (Time\_1) on Growth in the Identification Model

# 11.2.1 Goal Influence (Time\_1) on Distinctiveness, Prestige, and Social Satisfaction Growth

The expected effect of membership goals on the perceptions of distinctiveness and prestige and on social satisfaction are unchanged from previous essays, with altruism and self-enhancement expected to have positive effects on each of these relationship inducing factors. This was tested and supported in Essays I and II.

Consistent with the hypotheses in Section 11.1.1, I do not expect growth or significant heterogeneity in the growth of the relationship inducing factors among the Future Soldiers. Accordingly, altruism and self-enhancement goals should only have positive effects on the levels of the relationship inducing factor and no effect on their growth. New Soldiers, who are participating in an organizational effort to increase favorable perceptions of the organization and build social cohesion, should experience growth and heterogeneity in their relationship inducing factors. I expect that altruism and self-enhancement goals will be positively related to both their level and growth. In these cases, higher levels of altruism and self-enhancement goals should make these members more open to information and efforts that portray the organization as distinctive and

prestigious. This information will receive increased processing (and perhaps biased processing) so that it leads to an evaluation of the organization that is consistent with their goals (e.g. my organization is considered prestigious because it protects our nation). Additionally, they should be more open to relationships with other members that facilitate their goal. Those who do not have significant altruism or self enhancement goals may perceive this same information and influence efforts as incongruent or irrelevant to their goals (Figure 11.3).

# 11.2.2 Goal Influence (Time\_1) on Identification Growth

I expect the effects of membership goals on the level of identification to be consistent with the hypotheses and results from the earlier essays, with altruism and self-enhancement having positive effects on the level of identification and pay and future employment goals having a negative effect on the level of identification. The effects of individual membership goals on identification growth are less clear and merit greater discussion.

I expect that both altruism and self-enhancement membership goals have substantial effects on the growth of identification, but not within the sampled periods. I expect identification growth associated with these intrinsic membership goals will occur weeks to months prior to the sampled periods while the individual is gathering information and making the membership decision. In other words, individuals who decide they will enlist for reasons of altruism or self-enhancement will experience growth in identification early in the process as they come to believe the membership will provide a route to selfless service (altruism goals) or self-concept and character enhancement.

This growth should occur prior to either sampled period and will therefore be reflected as differences in their level of identification at time\_1. Therefore, intrinsic goals will have no association with identification growth during the measured period (t1 to t2).

Pay and future employment membership goals had a negative influence on identification in previous sections. Accordingly, I expect these two membership goals to have a negative effect on the level of identification in this essay. I also expect economic goals to be negatively related to identification growth. If a New Soldier enters the Army for future employment, but is happy with his current identity and is indifferent to the notion of serving the nation, it is likely that a very overt organizational effort to change how he thinks and behaves, and how he thinks of himself (e.g. basic training), could be perceived as a threat to self consistency and a sense of control, and lead to either psychological or behavioral efforts to restore this freedom (Dillard and Shen 2005). This is also consistent with arguments that desire for selfcontinuity (Kunda 1999) partially accounts for the favorability of an organization's perceived characteristics and organizational identification (Dutton et al. 1994). When the organization is selected based on its objective utility but is not viewed as self-enhancing or is threatening to the person's sense of self-continuity, a psychological state of reactance<sup>23</sup> would be expected, resulting in counterarguing<sup>24</sup> (Petty and Cacioppo 1986), ego protection<sup>25</sup> (Brown and Starkey 2000), and the biased processing of persuasive messages and evidence<sup>26</sup> (Fleming and Petty, 2009; Lord, Ross, and Lepper 1979; Petty and Cacioppo 1986). Additionally, previous

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<sup>&</sup>lt;sup>23</sup> Reactance: The psychological state hypothesized to occur when a freedom is eliminated or threatened, with the threat resulting in reactance, and reactance leading to attempts to restore the freedom (Brehm and Brehm, 1981).

<sup>&</sup>lt;sup>24</sup> Counterarguing: Effective means of resisting counter-attitudinal message when ability and motivation to elaborate are high (Petty and Cacioppo, 1996).

<sup>&</sup>lt;sup>25</sup> Ego Protection: The self is protected by ego defenses, with individuals maintaining self-esteem by not questioning existing self-concepts. In practice, this means that individuals engage in learning activities and employ information and knowledge conservatively to preserve their existing concepts of self (Brown and Starkey 2000).

<sup>&</sup>lt;sup>26</sup> Biased Processing/Assimilation: Predisposed processing of persuasive messages to preserve existing schema and self-concept (Fleming and Petty 2009; Petty and Cacioppo 1986).

research has shown that organizational identification growth was negatively related to the employees' intention to leave the organization in the future (Wan-Huggins et al. 1998). Given that the future employment goal signals intent to leave, I expect the goal will have a negative effect on identification growth.

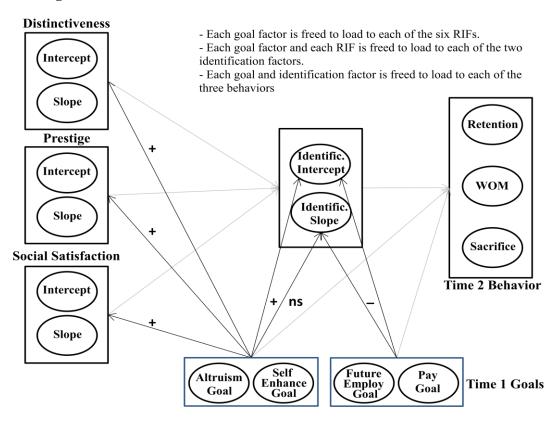


Figure 11.3 Goal Effects (Time\_1) on RIFs and Identification Growth

# 11.2.3 Individual Membership Goal Influence (Time\_1) on Behavior (Time\_2) and Total Effects

I do not expect any changes from previous essays in the way individual membership goals effect behavior. Accordingly, I expect the altruism goal to have a modest direct, positive effect on behavior. Self-enhancement should affect identification primarily through its indirect effect (no direct effect on behavior). Both future employment and pay should have negative effects on identification. I do expect that the

use of time\_2 behaviors in lieu of time\_1 behaviors may diminish association strength slightly relative to the previous essays.

Table 11.1 summarizes the growth hypotheses from this chapter. It does not itemize hypotheses from previous essays. In terms of their total effects, I expect altruism to have substantial positive effects on all behaviors. Self-enhancement will also have positive total effects, but less than altruism. Lastly, both pay and future employment will have negative total effects, with the negative effects of future employment being greater in magnitude.

**Table 11.1 Latent Growth Hypotheses for Current Soldiers** 

Hypothesis	Relationship	Positive or Negative
$ m H_{1a-c}$	Prestige, Distinctiveness, and Social Satisfaction Growth (t1 to t2 $\Delta$ ) $\rightarrow$ Identification Growth t1 to t2 $\Delta$ )	+
$ m H_{2a-c}$	Prestige, Distinctiveness, and Social Satisfaction Level (t1)  → Identification <i>Growth</i> note: this will reflect a lagged effect from earlier RIF growth	+
H <sub>3a-c</sub>	Identification <i>Growth</i> (t1 to t2 $\Delta$ ) $\rightarrow$ Retention, WOM, and Sacrifice (level at t2)	+
$\mathbf{H}_{4 ext{a-c}}$	Identification <i>Level</i> (t1)→Retention, WOM, and Sacrifice (t2)	+
$\mathbf{H}_{5 ext{a-f}}$	Altruism and Self-Enhancement (t1) $\rightarrow$ Prestige, Distinctiveness, and Social Satisfaction <i>Growth</i> (t1 to t2 $\triangle$ )	+
H <sub>6a-b</sub>	Altruism and Self-Enhancement(t1)→ Identification <i>Growth</i>	none
$ m H_{7a-b}$	Pay and Future Employment(t1) $\rightarrow$ Identification <i>Growth</i> (t1 to t2 $\Delta$ )	-

This table only includes hypotheses where one or more of the variables involve growth. All hypotheses that do not contain growth (e.g. prestige level → identification level) are unchanged from the previous essays.

# CHAPTER XII: RESEARCH METHODOLOGY AND RESULTS

This chapter uses two-wave panel data samples from the Future and New Soldier cohorts and applies latent growth model methodology to identify and better understand the level, growth, and variation of key relational constructs. Furthermore, it seeks to identify the causes and consequences of growth and explore the results of these analyses using the structural equation methodology introduced and used in Essay I. The chapter begins with a brief discussion of the two samples, followed by an introduction to the latent growth modeling methodology. It then presents the latent growth model results for organizational identification and its three antecedents, referred to as relationship inducing factors or RIFs. These growth models are then integrated into the identification model developed in the first two essays to discover potential causes and consequences of their level, growth, and variation within the model. This is done in two steps. First, the latent growth factors for the three relationship inducing factors are used as antecedents of the identification latent growth factors. In the second step, three pro-organizational behaviors are included as consequences of identification latent growth factors. The chapter concludes by integrating individual membership goals to explore their effects on all the latent growth factors and the three behaviors.

#### 12.1 The Panel Samples

Two cohorts/lifecycle stages were selected for sampling, the Future and New Soldier cohorts. These cohorts were selected because they are currently at points in the membership lifecycle where 1) change is likely to occur and 2) the change is expected to occur in a relatively short span of time (2-3 months), which facilitates the collection of two-wave data.

# 12.1.1 Future Soldier Sample

The first sample was drawn from Future Soldiers who had already enlisted and were awaiting their initial entry report dates. Future Soldiers were surveyed several months before reporting for initial entry training (as discussed in Essay II) and received a web-based survey through their Army email address. Response rates and issues with the time\_1 survey were discussed in detail in Essay II. The time\_1 survey resulted in 781 usable responses and a usable response rate of 42%. These 781 Future Soldiers were contacted in the month prior to reporting for Army active duty and asked to complete a second survey. This resulted in 377 responses, from which 32 responses were incomplete and removed, resulting in 345 usable time\_2 surveys. All 345 time\_2 surveys were matched to their corresponding time\_1 survey to create a two-wave panel of 345 respondents representing 42% of the original sample from time\_1. The average time between the time\_1 and time\_2 surveys was three month and ranged from a minimum of two to a maximum of four months.

#### 12.1.2 New Soldier Sample

The second sample was drawn from New Soldiers receiving integration, socialization, and initial entry training. Essay II includes a detailed review of the response issues for this survey. Essay II also includes a demographic summary of both the Future and New Soldier samples. As discussed in Essay II, most New Soldiers were surveyed within the first seven days of arriving to their administrative reception station, where they prepared for initial training by receiving uniforms and haircuts and completing administrative and medical processing. The initial surveying process resulted in 646 completed surveys.

For consistency, New Soldiers received a paper-based time\_2 survey through their chain of command, just as they did for the time\_1 survey. The average time between the time\_1 and time\_2 surveys was just over two months and ranged from just under two months to just over three months. Almost 700 time\_2 surveys were received, indicating that some individuals who had not taken the time\_1 surveys were administered the time\_2 surveys. Approximately half of the time\_2 respondent did not include their roster number, which is an administrative number being used by the unit and enabled the time\_1 and time\_2 surveys to be matched. This appears to have resulted from their drill sergeants efforts to protect their anonymity. Though well intentioned, it resulted in a portion of the potential panel data becoming two cross-sectional samples from the beginning and end points of basic training. Unmatched data from the time\_2 survey was not analyzed as part of this dissertation. From the 489 time\_2 surveys that included roster numbers, only 242 were matched to time\_1 surveys. This is likely because some of those who included roster numbers did not take the time\_1 survey. An additional 15

time\_2 surveys were incomplete, mostly due to skipped pages. This resulted in a usable sample of matched time\_1 and time\_2 data of 227 respondents, which represents 35% of the original time\_1 sample.

#### 12.2 Latent Growth Methodology

Latent growth modeling (LGM) is a technique that expands the application of structural equation modeling by using panel data from two or more observations to study growth and heterogeneity in a sample. LGM estimates each individual's growth slope and intercept. From this information, the mean trajectory and level (slope and intercept) for the sample and the extent of differences between individuals is determined (variance). Growth at the aggregate level is identified by a significant positive or negative mean slope. Trends at the individual level are identified through the variance term, with significant variance indicating heterogeneity in the collection of individual slopes. Hence, it is possible to have growth at the aggregate level, heterogeneity at the individual level, both, or neither. This is important because a lack of growth at the aggregate level may otherwise conceal growth and decline among subsets of individuals that could be identified and related to other variables (Steenkamp and Baumgartner 2000).

Additionally, growth parameters (slope and intercept) can be used as antecedent variables to explain variation among other factors.

The most basic latent growth model involves one variable measured at two points, which allows the intercept and slope factors to be determined. Additional observations enable the inclusion of additional parameters (e.g. a quadratic or acceleration factor).

This essay uses two observations and latent growth model with intercept and slope

factors only (Figure 12.1). The intercept factor is a constant for any given individual and has the same interpretation as a straight line intercepting the vertical axis. This factor provides information about the mean of a collection of intercepts and the level of variance of those intercepts. The slope factor represents the individual's growth (in this case from time\_1 to time\_2) and provides information about the mean of the individual slopes and their level of heterogeneity among the sample (Duncan, Duncan, Strycker, Li, Alpert 2006). These two factors are allowed to covary. In this study, the observed scores and their error variance was set using the item parceling technique and the scales discussed in Essay II. This means the observed score for the focal construct (e.g. identification) is derived my taking the mean of all the items included in the scale and the error variance is based on the overall scale reliability and the mean score's variance.

To identify the model, the regression coefficients relating the intercept factor to the observed mean scores at time\_1 and time\_2 are set to 1 and the regression coefficients relating the slope factor to the observed mean scores at time\_1 and time\_2 are set to 0 and 1, respectively. Thus, the intercept factor can be interpreted as the initial point of measurement and the slope factor can be interpreted as a difference score between the time\_1 and time\_2 observations (Duncan et al. 2006). The error variance is set using the construct's alpha reliability and the variance of the parceled item. Specifically, error variance is set to  $(1-\alpha)$  \* variance. The next section presents the latent growth models and results using this model (Figure 11.1).

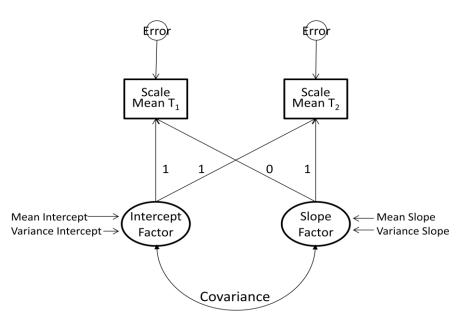


Figure 12.1 The Latent Growth Model

#### 12.3 Individual Construct Latent Growth Models

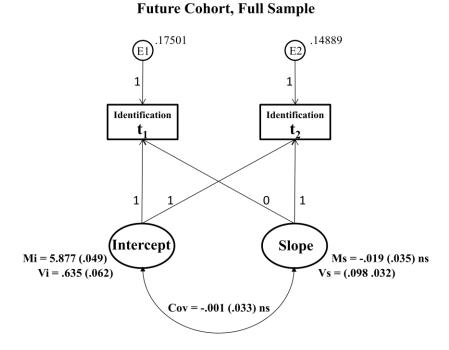
This analysis develops and uses four latent growth models: identification, distinctiveness, prestige, and social satisfaction. These factors were selected because they function as antecedents to either identification, behavior, or both

#### 12.3.1 Identification Latent Growth Models

Identification represents the core measure of relationship quality for this study. As such, the level and growth of identification is of key importance for this study. Figures 12.2 through 12.4 provide a representation of the identification LGM and estimates for each of its parameters and their variances for the Future Soldier and New Soldier cohorts. These models (as well as the other LGMs in this section) are saturated, with perfect fit, so no further discussion of model fit is included in this section. Latent means are identified as Mi (mean intercept) and Ms (Mean slope). Their variances are

represented by Vi and Vs, respectively. Looking at Figure 12.2, which represents the Future Soldier identification LGM, it can be seen that the intercept mean and variance are significant, while the mean for the slope is not. Slope variance, however, is significant. Furthermore, the covariance is not significant. The nonsignificant mean slope suggest that in aggregate, identification does not grow within these individuals during the months just prior to reporting for basic training. The significant variance of the mean slope indicates there is significant heterogeneity within the sample, and that some individuals experienced growth in identification, while others experienced a decline. The significant variance does not reveal why individuals differ, but it provides the opportunity for further analysis with antecedent variables to identify the source of this heterogeneity. The nonsignificant covariance indicates there is no relationship between a Future Soldier's identification with the Army at the time of enlistment and his subsequent change in identification with the Army.

Figure 12.2 Identification Latent Growth Model (Future Soldier, Full Sample)



The mean for time\_1 identification is 5.88 on a seven-point scale. Additionally, 50 of the 345 individuals had mean identification scores of 7.0, meaning they reported 7 for all five identification items. Given this, there is concern that growth may be masked by a ceiling effect among these high-identifiers. To test for this possibility, a second identification LGM is estimated using a sample that includes only Future Soldiers with mean identification scores of 6.0 or lower at time\_1 (n=183). Estimates from Figure 12.3, show that without the high-identifiers the slope mean is now significant (.141 (.051)), variance is .150 (.050), the intercept mean (5.214 (.053)) and variance (.332 (.053)) are both lower, and the covariance is significant (.093 (.037)). These results demonstrate that in aggregate, individuals that are not already highly identified experience significant growth in identification between time\_1 and time\_2. The significant variance again suggests meaningful heterogeneity that can be explored in subsequent analysis. The positive covariance indicates that a Future Soldier's identification with the Army at the time of enlistment is positively related to his or her subsequent change in identification with the Army. Because the focus of this essay is to explain change within the identification framework, the sample without the highidentifiers is used in subsequent analysis of the Future Soldier sample.

Figure 12.3 Identification Latent Growth Model (Future Soldier, Identification  $\leq$ 6)

Future Cohort, Identification ≤6

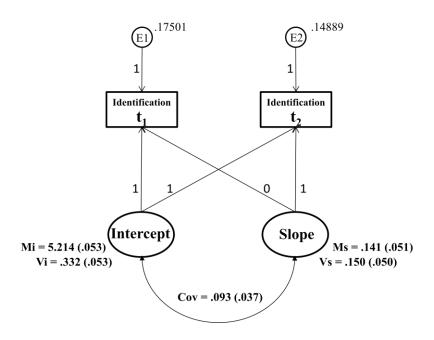


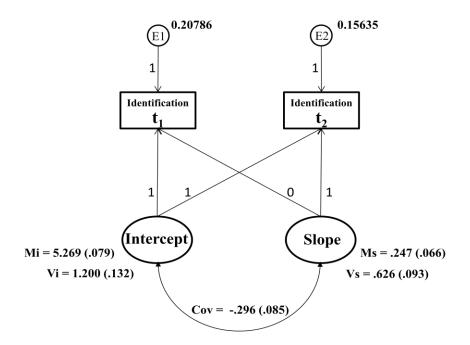
Figure 12.4 represents the New Soldier identification LGM. Like the Future Soldier identification LGM with the high-identifiers removed, the slope mean and variance, the intercept mean and variance, and the covariance are all significant. This result was present whether high-identifiers were removed or not.<sup>27</sup> Consequently, the full New Soldier sample is used in all subsequent analyses of the Current Soldier sample. As expected, there is greater growth of identification among the New Soldiers than either of the Future Soldier samples (.247 (.066) versus .141 (.051)). Furthermore, there is greater variance in both the mean intercept and the mean slope within the New Soldier sample, suggesting individuals at this stage of the membership lifecycle are more varied in both their initial level of identification and their rate of growth. The negative covariance

<sup>27</sup> This sample may not suffer from a ceiling effect because the mean identification intercept of New

Soldiers is lower than the full Future Soldier cohort, which provides more room for reporting identification growth. It may also be a product of the greater growth that is likely during this period.

indicates that a Future Soldier's identification with the Army at the time of enlistment is negatively related to his or her subsequent change in identification with the Army.

Overall, the combination of significant variance in the intercepts, the positive mean slopes, and the significant variance in these slopes in both latent growth models (Figures 11.3 and 11.4) suggest that individuals are joining (Future Soldiers) and entering active duty (New Soldiers) with significant differences in their levels of identification and then developing identification at different rates.



**Figure 12.4 Identification Latent Growth Model (New Soldier)** 

#### 12.3.2 Distinctiveness Latent Growth Models

The next several sections examine LGM for the three relational antecedents (RIFs) of identification: perceptions of distinctiveness and prestige and social satisfaction. Figures 11.5 through 11.7 depict two LGM models for each of these constructs: one for the Future Soldier sample (left side) and one for the New Soldier

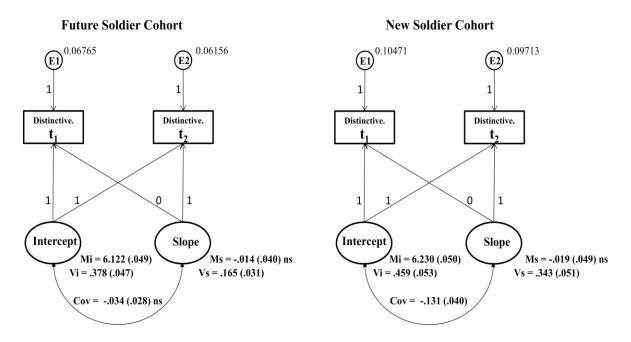
sample (right side). It would not be surprising to find that some future and new members begin to perceive the organization as more distinctive or believe it is perceived as more prestigious by others. In fact, communicating the distinctive history, culture, and mission of the Army and building camaraderie are two of the indirect objectives of basic training. Significant LGM parameters or variance for any of these six factors (three latent constructs with two growth parameters per construct) will provide the opportunity to explore their effect on identification level and growth in subsequent analyses. Stated another way, previous identification models in Essay I and II used distinctiveness, prestige, and social satisfaction as antecedents of identification, but it may now be possible to use both the mean intercept and mean slope factors for each of these latent constructs, creating six predictors of identification level and identification growth.

The two models in Figure 12.5 examine the growth of perceived distinctiveness among the Future Soldier<sup>28</sup> and New Soldier cohorts and depict the distinctiveness LGM estimates for these two groups. Results show that both the level and its variance are significant among both cohorts, but the mean slopes for both cohorts fails to reach significance (-.014 (.040) and -.019 (.049)). The variance for the mean slope factor for both cohorts is significant, so despite the absence of aggregate growth in either cohort, the presence of significant variance for both the intercept and the slope in both cohorts provides the opportunity to use these latent constructs as predictors of identification level and growth. The negative covariance found in the New Soldier cohort indicates that the slope tends to decrease as the intercept or initial level of perceived distinctiveness increases.

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<sup>&</sup>lt;sup>28</sup> This Future Soldier sample has the high-identifiers removed (those with identification scores above 6.0). This sample is used throughout when referring to the Future Soldier sample unless stated otherwise.

**Figure 12.5 Distinctiveness Latent Growth Models** 



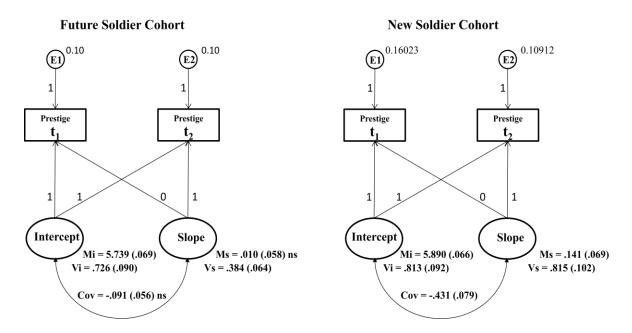
Overall, the results indicate that individuals are joining (Future Soldiers) and entering the organization (New Soldiers) with significant differences in their perceptions of organizational distinctiveness. Changes in the perception of distinctiveness are also occurring at different rates, with individuals experiencing increasing perceptions of distinctiveness being offset by individuals with declining perceptions of distinctiveness and resulting in no aggregate improvement in perceived distinctiveness. The lack of growth in the New Soldier sample fails to provide support for Hypotheses 1a.

## 12.3.3 Prestige Latent Growth Models

The two models in Figure 11.6 show the LGM estimates for the beliefs of the Future and New Soldiers that the Army is perceived as prestigious by referent others. Results show that both the level and its variance are significant among both cohorts (mean intercepts equal 5.74 and 5.89 for the Future and New Soldier cohorts), but only the mean growth rate for New Soldiers achieves significance (.141 (.069)). The variance

for the mean slope factors for both cohorts is significant, so despite the absence of aggregate growth in the Future Soldier cohort, the presence of significant variance may still prove to be predictive of identification growth. The negative covariance found in the New Soldier cohort indicates that as the initial level of perceived distinctiveness increases the slope of growth tends to decrease.

**Figure 12.6 Prestige Latent Growth Model** 



Overall, the results indicate that Future Soldiers are joining the organization with significant differences in their beliefs that the Army is perceived as prestigious. Changes in those beliefs are also occurring at different rates, so that individuals experiencing increasing beliefs that the Army is perceived as prestigious are being offset by individuals with declining beliefs. New Soldiers going through basic training are also entering the Army with different levels of perceived prestige, but unlike the Future Soldiers, they are experiencing aggregate growth in the beliefs that the Army is perceived

as prestigious, with this rate of this change varying significantly within the cohort.

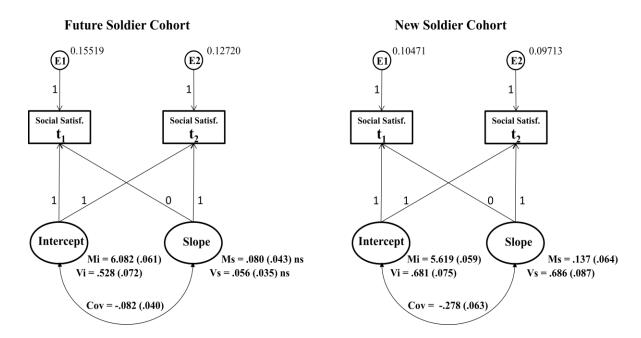
Growth in prestige among the New Soldier sample provides support for Hypothesis 1b

#### 12.3.4 Social Satisfaction Latent Growth Models

The social satisfaction latent growth models in Figure 12.7 show the estimates for the expected social satisfaction of Future Soldiers and the experienced social satisfaction of New Soldiers. Results show that both the intercept means and their variance are significant among both cohorts (6.08 (.061) and 5.62 (.059) for the Future and New Soldier cohorts, respectively). The story for the mean slopes and their variance is quite different, with only the mean growth rate and the variance for the New Soldier cohort achieving significance (mean slope = .080 (.043) for Future Soldiers compared to .137 (.064) for New Soldiers). This suggests that the slope factor for Future Soldiers provides insufficient change and variation to be predictive of identification. The negative covariance found in both cohorts indicates that higher levels of initial social satisfaction are associated with decreased growth in social satisfaction.

Overall, the results indicate that Future Soldiers are joining the organization with significant differences in their expectations of social satisfaction associated with the Army. No aggregate change in expectations of social satisfaction is occurring, and this is relatively consistent across the cohort. New Soldiers going through basic training are also entering the Army with different levels of social satisfaction, but unlike the Future Soldiers they do experience aggregate growth in social satisfaction (supporting Hypothesis 1c), as well as significant differences in the individual rates of social satisfaction growth within the cohort.

Figure 12.7 Social Satisfaction Latent Growth Model



## 12.4 Growth across the Identification Process

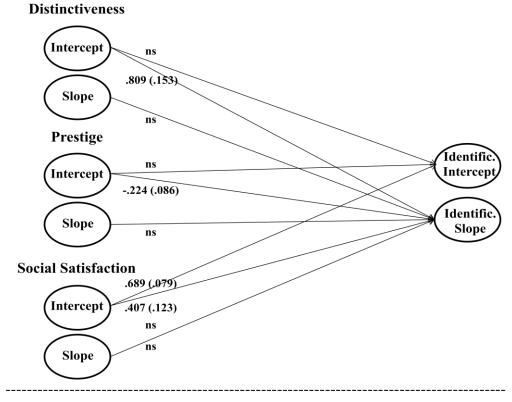
This section uses the latent growth models discussed in the previous sections to examine their effects in a structural equation model. Two models are tested. The first model looks at the three relationship inducing factors (distinctiveness, prestige, and social satisfaction) and identification. The first model uses the level and growth information from time\_1 and time\_2 data for the three relationship inducing factors to test their causal relationship with the level and growth of identification. The second model expands this first model to include three pro-organizational behaviors and explore their relationship to identification level and growth.

# 12.4.1 Relationship Inducing Factors Intercept and Slope Effects on Identification Slope and Intercept Factors

This section uses mean and slope latent growth factors for perceptions of distinctiveness and prestige and social satisfaction to model their effect on the identification slope and intercept latent growth factors. It should be noted that the slope

of the three relationship inducing factors is not allowed to affect the intercept of identification. Doing so would create a model where time\_2 data included in the slope factor would be used to explain the level of identification which is based on time 1 data. Demographics and control variables were also included. Figure 12.8 and Table 12.1 provide the unstandardized estimates with their standard errors for the Future Soldier and New Soldier cohorts. Using Future Soldier data, four of the nine hypothesized relationships are significant, and the model has a chi-square of 26.5, with 32 df, an RMSEA of 0.00, and a CFI of 1.00. One of the most notable results is the lack of any effect from any of the slope factors from distinctiveness, prestige or social satisfaction on either the identification slope or intercept factors. This may be attributable to the lack of significant growth in any of these three constructs, though there is significant variance in both the distinctiveness and prestige slope factors. Also worth mentioning is the negative effect of prestige on the identification slope factor (-.224 (.086)). The expected social satisfaction intercept factor, on the other hand, had a positive relationship with the identification slope factor (.407 (.123)) and a sizeable positive effect on the identification intercept factor (.689 (.079)). It is also interesting that the distinctiveness, prestige, and social satisfaction intercept factors have such a strong effect on the identification slope factor. Not depicted in the model are two control variables (combat arms specialty and 'other race' that are have significant effects on the identification intercept factor (.107 (.045)) and the identification slope factor (.386 (.164)), respectively. The model explains considerable variance in the identification slope and intercept factors, with squared multiple correlations of .693 and .521.

Figure 12.8 RIF Intercept and Slope Effects on Identification Slope and Intercept Future Soldier Cohort



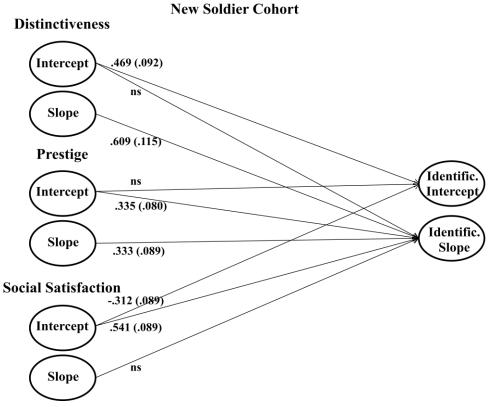


Figure 12.8 also depicts the relationships using the New Soldier data. In this model six of nine hypothesized relationships are significant, with five of the nine being in the expected direction. The chi-square for this model was 55.5, with 33 df, an RMSEA of 0.55 and a CFI of .974. Like the Future Soldier cohort, social satisfaction intercept factor has a strong positive effect on the identification intercept factor (.541 (.089)), but surprisingly has a negative association with the identification slope factor (-.312 (.089)). The prestige intercept factor had no effect on the identification intercept factor, but both the prestige intercept and slope factors had positive effects on the identification slope factor. This is quite different from the Future Soldier sample where the effect on the identification slope factor was negative or absent. Distinctiveness effects are paired with their corresponding identification factor, with the distinctiveness intercept having a positive effect on the identification intercept (.469 (.092)) and the distinctiveness slope having a positive effect on the identification slope factor (.609 (.115)).

A number of control and demographic variables were significant. Being female had a positive effect on the intercept factor (.498 (.256), as did the number of months spent in the in the partial membership stage (e.g. the number of months between enlistment and reporting for active duty). The level of education had an opposite effect and was negatively related to the level of identification. Lastly, the number of children was positively related to identification growth, a surprising finding given that identification with the Army could complete with identification as a parent. Squared multiple correlations for the slope and intercept show this Future Soldier version explains more variance in both identification slope factor and the identification intercept factor than the New Soldier model (.693 and .521 versus .439 and .424, respectively). Both of

these models are overwhelmingly better than a model that uses only time\_1 information on prestige, distinctiveness, and social satisfaction to explain the level and growth of identification. For comparison, the squared multiple correlations for the identification slope and intercept factors using only time\_1 data for distinctiveness, prestige, and social satisfaction are .117 and .629 for the Future Soldier sample and .043 and .418 for New Soldiers. This indicates that while time\_1 information is sufficient to explain the level of identification, information on the growth of the distinctiveness, prestige, and social satisfaction is required to adequately explain identification growth.

Table 12.1 Relationship Inducing Factors and Control Variable Effects on Identification LGM Factors

Relationship	Future Soldier Cohort	New Soldier Cohort
Distinctive. Intercept → Ident. Intercept	ns	.469 (.092)
Distinctive. Intercept → Ident. Slope	.809 (.153)	ns
Distinctive. Slope → Ident. Slope	ns	.609 (.115)
Prestige Intercept → Ident. Intercept	ns	ns
Prestige Intercept → Ident. Slope	224 (.086)	.335 (.080)
Prestige Slope → Ident. Slope	ns	.333 (.089)
Soc Sat Intercept → Ident. Intercept	.689 (.079)	.541 (.089)
Soc Sat Intercept → Ident. Slope	.407 (.123)	312 (.089)
Soc Sat Slope → Ident. Slope	ns	ns
Gender→ Ident. Intercept	ns	.498 (.255)
Number Children→ Ident. Intercept	ns	.161 (.068)
Education→ Ident. Intercept	ns	116 (.044)
Combat Arms → Ident. Intercept	.105 (.045)	ns
Months in since enlist. → Ident. Slope	ns	.058 (.025)
Other Race→Ident. Slope	.309 (.151)	ns

All estimates are unstandardized.

## 12.4.2 RIFs and Identification Slope and Intercept Effects on Behaviors

It is particularly important to understand the effects of identification level and growth on member behaviors. This section expands the previous model to include proorganizational behaviors and better understand the effects of identification level and growth on retention, WOM, and sacrifice in the two cohorts. The analysis was limited to three behaviors to ensure stability in the model, given the smaller sample sizes. Table 12.2 and Figure 12.9 show the unstandardized estimates for this model. Both samples result in acceptable model fit. Chi-square for the Future Soldier cohort was 125.6, with 73 df, RMSEA was .063, and CFI was .945, with 7 of the 15 hypothesized relationships being significant. Among the New Soldier cohort 12 of the 15 hypothesized effects were significant and the model chi-square was 149.9 with 83 df, RMSEA was .060 and CFI was .950. The difference in degrees of freedom is due to the retention of different significant control variables in each model.

Effects from the latent growth factors from distinctiveness, prestige, and social satisfaction on the level and growth of identification are configurally the same as the previous model and can be reviewed in Table 12.2 in the top section labeled "Relationship Inducing Factor  $\rightarrow$  Identification." Each of the three behaviors was predicted by at least one of the identification factors for each cohort. The primary difference between the two cohorts is in the effects from the identification slope factor. While the effects from the identification intercept and slope factors were significant and positive for all three behaviors in the New Soldier sample, only the effects of the identification intercept factor were significant and positive for the Future Soldier sample. Differences in the effects of identification growth on behavior between the cohorts may

be due to disparity in the growth factor magnitudes and their level of variance, which are both substantially larger among the New Soldier cohort. Squared multiple correlations for retention, WOM, and sacrifice were .113, .397, and .109 for the Future Soldier cohort and .485, .318, and .619 within the New Soldier cohort. The lower explained variance for retention and sacrifice among Future Soldiers is not surprising given they are somewhat more removed from considering if they will remain in the Army and understanding what sacrificing behaviors entails.

This analysis demonstrates that both the level and growth of identification explain behavior, particularly among New Soldiers. This is an important finding given that previous research using other relational constructs (e.g. commitment and trust) has found that the slope factor was substantially more predictive of behavior than the intercept factor (Palmatier 2008). These findings suggest that for identification, both the level and the growth are important to understanding the identification-behavior relationship. In fact, among the New Soldier cohort, all six of the intercept behavior and slope behavior relationships were strongly positive.

Lastly, demographics and control variables have a number of interesting effects on behavior, particularly among the New Soldier sample. Being female among the Future Soldier cohort seems to increase WOM. Whereas being female among the New Soldier cohort seems to increase the intention to remain with the organization, while also reducing the willingness to make sacrifices for the organization. The willingness to sacrifice also increases with greater education but decreases with greater age among the New Soldier cohort. Finally, enlisting for a combat specialty appears to reduce the intention of remaining with the organization among the New Soldier cohort. Overall,

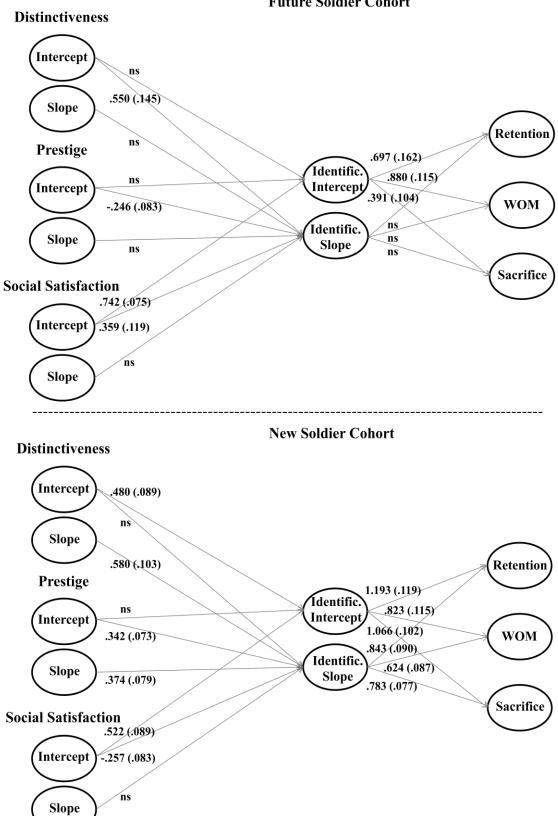
these results indicate that while demographics influence the level of a number of constructs, they do not seem to have a substantial effect on growth.

Table 12.2 Relationship Inducing Factors and Control Variable Effects on Identification LGM and Behavior Factors

		Future Soldier	New Soldier
_	Distinctive. Intercept → Ident. Intercept	Ns	.480 (.089)
ng tior	Distinctive. Intercept → Ident. Slope	.550 (.145)	Ns
Relationship Inducing Factor → Identification	Distinctive. Slope → Ident. Slope	Ns	.580 (.103)
nd itif	Prestige Intercept → Ident. Intercept	Ns	Ns
p I der	Prestige Intercept → Ident. Slope	246 (.083)	.342 (.073)
shi V I	Prestige Slope → Ident. Slope	Ns	.374 (.079)
ion r -	Soc Sat Intercept → Ident. Intercept	.742 (.075)	.522 (.089)
elat icto	Soc Sat Intercept → Ident. Slope	.359 (.119)	257 (.083)
Fa	Soc Sat Slope → Ident. Slope	Ns	Ns
<b></b>	Ident. Intercept→Retention	.697 (.162)	.843 (.090)
n C	Ident. Intercept→WOM	.880 (.115)	.624 (.087)
atic rs	Ident. Intercept→Sacrifice	.391 (.104)	.783 (.077)
ific vio	Ident. Slope→Retention	Ns	1.193 (.119)
Identification≯ Behaviors	Ident. Slope→WOM	Ns	.823 (.115)
Pe Be	Ident. Slope→Sacrifice	Ns	1.066 (.102)
	Gender→ Ident. Intercept	Ns	.555 (.250)
	Number Children→ Ident. Intercept	Ns	.117 (.060)
S	Education→ Ident. Intercept	Ns	110 (.043)
vi 10	Combat Arms→ Ident. Intercept	.095 (.040)	Ns
ha	Months in since enlist. → Ident. Slope	Ns	.051 (.024)
ΛÃ	Other Race→Ident. Slope	.315 (.152)	Ns
oles	Combat Arms→Retention	Ns	507 (.217)
riał on 2	Gender→Retention	Ns	1.039 (.430)
Va atic	Gender→WOM	.473 (.141)	Ns
rol	Gender→Sacrifice	Ns	844 (.334)
Control Variables≯ Identification and Behaviors	Age→Sacrifice	Ns	036 (.016)
S E	Education→Sacrifice	Ns	.159 (.068)

All estimates are unstandardized.

Figure 12.9 Identification Slope and Intercept on Time\_2 Behavior
Future Soldier Cohort



## 12.5 Goal Influence on Latent Growth and Behavior within the Identification Model

This section shifts focus to examine the effect of individual membership goals on the factors within the identification model. The structure of the discussion parallels the structure of the identification model, looking first at the effects of membership goals on the level and growth of the relationship inducing factors. It then examines the influence of membership goals on the slope and intercepts of identification. Lastly, it examines the effect of membership goals on the three pro-organizational behaviors. While the discussion occurs in three sections, the estimation of these effects occurs within a single model (Figure 12.10). Because individual membership goal scales measure the respondents' reasons for initially choosing the membership, the measurement is made at time\_1, at the point closest to the actual decision, and no slope factor is used.

The model estimated using the Future Soldier sample had a chi-square of 186.7 with 128 df, with an RMSEA of .050 and CFI of .952, while the New Soldier sample had a chi-square of 213.4 with 136 df, an RMSEA of .050, and a CFI of .957. The degrees of freedom differ due to the removal of different nonsignificant control variables.<sup>29</sup> For both samples, roughly a third of the 32 membership goal paths were significant (9 for Future Soldiers and 12 for New Soldiers). The model explains considerable variation in identification intercept and slope factors and all three behaviors, particularly with the New Soldier cohort, which had squared multiple correlations of .509, and .589 for the identification slope, and .350, .525, and .655 for the WOM, retention, and sacrificing factors. The additional variance explained by the inclusion of membership goals (Table 12.3) is modest relative to the improvement observed in the cross-sectional data.

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<sup>&</sup>lt;sup>29</sup> Nonsignificant control variables were eliminated to maintain a more optimal item-to-sample size ratio, given the smaller sample sizes used in these analyses.

Table 12.3 Squared Multiple Correlations for the New Soldier Cohort

	Identification Model	Goal-Identification Model
Identification Slope	.453	.509
Identification Intercept	.414	.589
WOM	.318	.350
Retention	.485	.524
Sacrifice	.619	.655

Table 12.4 depicts the estimates for the effects of individual membership goals in three sections: Membership Goals → Relationship Inducing Factors (Slope and Intercept), Membership Goals → Identification (Slope and Intercept), and Membership Goals → Behaviors.

Figure 12.10 Goal Effects on RIF and Identification Growth

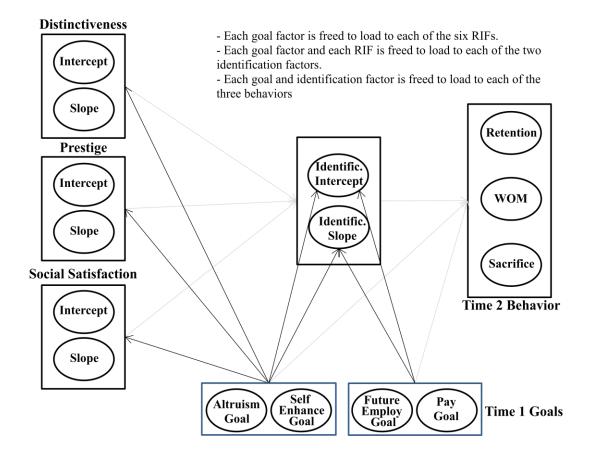


Table 12.4 Membership Goals Effects on RIF Slope and Intercept Factors, Identification Slope and Intercept Factors, and Behaviors

		Future Soldier	<b>New Soldier</b>
	Altruism → Distinctive. Intercept	.261 (.050)	.209 (.047)
	Altruism → Distinctive. Slope	ns	.089 (.041)
ors	Altruism → Prestige Intercept	.402 (.067)	.295 (.047)
act	Altruism → Prestige Slope	ns	ns
₩ Eg E	Altruism → Social Satisf. Intercept	.303 (.049)	.298 (.048)
Membership Goals → Relationship Inducing Factors (Slope and Intercept)	Altruism → Social Satisf. Slope	113 (.042)	ns
roa ndu terc	Self-Enhance → Distinctive. Intercept	.117 (.041)	.153 (.039)
p C p In	Self-Enhance → Distinctive. Slope	ns	ns
shi shi nd	Self-Enhance → Prestige Intercept	ns	ns
ber ion e a	Self-Enhance → Prestige Slope	ns	ns
elat lop	Self-Enhance → Social Sat. Intercept	.126 (.037)	.172 (.041)
<b>Z S S</b>	Self-Enhance → Social Sat. Slope	ns	ns
	Altruism→ Ident. Intercept	.196 (.051)	.542 (.065)
↑ oc	Altruism→ Ident. Slope	ns	229 (.058)
oals Sloj	Self-Enhance→Ident Intercept	ns	ns
of G	Self-Enhance → Ident. Slope	ns	ns
ship atio	Pay→ Ident. Intercept	ns	.144 (.056)
Membership Goals → Identification (Slope and Intercept)	Pay→ Ident. Slope	ns	209 (.055)
eml enti d L	Future Job→ Ident. Intercept	ns	ns
an Id	Future Job→ Ident. Slope	ns	ns
	Altruism→ Retention	ns	ns
	Altruism→ WOM	ns	ns
iors	Altruism→ Sacrifice	ns	ns
ıav	Self Enhancement → Retention	ns	ns
Bek	Self Enhancement → WOM	ns	ns
$\uparrow$	Self Enhancement → Sacrifice	ns	ns
als	Pay→ Retention	ns	.207 (.084)
9	Pay→ WOM	ns	.200 (.082)
hip	Pay→ Sacrifice	ns	ns
ers	Future Job→ Retention	153 (.081)*	ns
Membership Goals ≯Behaviors	Future Job → WOM	ns	ns
Æ	Future Job → Sacrifice	166 (.051)	ns

All estimates are unstandardized.

<sup>\*</sup> Future Job > Retention was significant at .057

## 12.5.1 Goals Effects on RIF and Identification Intercept and Slope Factors and Behavior

This section examines the effects of membership goals on the level and growth of the three relationship inducing constructs and identification and its effect on time\_2 behavior. Figure 12.10 depicts these relationships and Tables 12.4 presents individual membership goal effects within the full model. In general, the intrinsic individual membership goals seem to have their greatest effect on the relationship inducing factors, with the effects of altruism being more pervasive than the effects of the self-enhancement goal. The effect from both intrinsic membership goals is either primarily or exclusively on the intercept factor of the three relationship inducing factors, with little or no effect on their growth. Squared multiple correlations for the six RIF slope and intercept factors (which are affected only by altruism and self-enhancement) support this conclusion, with the largest squared multiple correlations for the intercept factors being .345 and greatest value for the slope factors being .067. Overall, individual membership goals seem to have substantial effect on the level of the relationship inducing factor but not on their growth.

The second section within Table 12.4 presents the direct effects of individual membership goals on the level and growth of identification. The effect of the altruism goal on the level of identification was substantial for both cohorts (Future Soldier = .196 (.051), Current Soldier = .542 (.065)), though its effect on the slope was negative among the Current Soldiers (-.229 (.058)) and absent among the Future Soldiers. Pay was the only other membership goal with effects on identification, and had a positive effect on the level of identification (.144 (.056)) and a negative effect on identification growth

(-.209 (.055)). Neither the self-enhancement nor the future employment goals had a direct effect on either the level or growth of identification.

In the third section of Table 12.4 membership goals had a limited direct effect on behavior. In the case of the Future Soldiers, only the future employment goal had any direct effect, reducing the likelihood of retention in the organization and willingness to make sacrifices for the organization (-.153 (.081) and -.166 (.051), respectively). Within the New Soldier cohort, it was only the pay goal that had a direct effect on behavior, increasing the likelihood of retention (.207 (.084)) and providing positive WOM about the organization (.200 (.082). As an additional check, I removed the highest identifiers (those with a mean score above 6.5) for the New Soldier sample. Results from this sample are very similar to those in Table 12.4, except that the future job goal becomes negatively associated with retention, WOM, and sacrificing.

## 12.5.2 RIF→Identification→Behavior Estimates with the Inclusion of Membership Goals

Table 12.5 mirrors Table 12.2 in its structure but shows the estimates for these relationships in a model that includes individual membership goals. As was found in the cross-sectional analyses in previous essays, the identification model is quite robust to the inclusion of individual membership goals. Specifically, this analysis demonstrates that same significant RIF slope and intercept factors from Table 12.2 continue to be significant when membership goals are included in the model. The two exceptions are that in the model using individual membership goals the distinctiveness slope →identification slope relationship is significant for Future Soldiers and the social satisfaction intercept → identification slope relationship fails to reach significance in the New

Soldier cohort. Additionally, the pattern of significant relationships between the identification slope and intercept factors and behavior are configurally unchanged, except that the unexpected negative relationship between the identification slope factor and WOM becomes nonsignificant. Lastly, the pattern and magnitude of the demographic and control variables remains essentially unchanged in the New Soldier cohort, but the effects of having a combat arms specialty on the identification level and the effects of being in the 'other race' category on identification growth both become nonsignificant. Overall, the effects observed in the identification model remain consistent even with the inclusion of membership goals, especially among the New Soldier cohort.

Table 12.5 Relationship Inducing Factors and Control Variable Effects on Identification LGM and Behavior Factors (when Membership Goal are Included)

		Future Soldier	New Soldier
		Cohort	Cohort
_	Distinctive. Intercept → Ident. Intercept	ns	.264 (.086)
Relationship Inducing Factor → Identification	Distinctive. Intercept → Ident. Slope	ns	Ns
uci ica	Distinctive. Slope → Ident. Slope	.627 (.150)**	.482 (.100)
ndı ıtif	Prestige Intercept → Ident. Intercept	ns	
ip I der	Prestige Intercept → Ident. Slope	279 (.086)	.355 (.066)
ishi	Prestige Slope → Ident. Slope	ns	.396 (.075)
ion r -	Soc Sat Intercept → Ident. Intercept	.611 (.084)	.174 (.071)
elat	Soc Sat Intercept → Ident. Slope	.375 (.121)	ns**
<b>X E</b>	Soc Sat Slope → Ident. Slope	ns	ns
<b></b>	Ident. Intercept→Retention	.692 (.159)	.787 (.089)
no	Ident. Intercept→WOM	.860 (.111)	.582 (.085)
ati rs	Ident. Intercept→Sacrifice	.428 (.101)	.783 (.074)
ific vio	Ident. Slope→Retention	ns	1.305 (.126)
Identification≯ Behaviors	Ident. Slope→WOM	ns**	.886 (.121)
E &	Ident. Slope→Sacrifice	ns	1.103 (.102)
	Gender→ Ident. Intercept	ns	.484 (.225)
	Number Children→ Ident. Slope	ns	.125 (.058)
S	Education→ Ident. Intercept	ns	103 (.039)
ViOi	Combat Arms→ Ident. Intercept	ns**	ns
ha	Months in since enlist. → Ident. Slope	ns	.024 (.022)
Λå	Other Race→Ident. Slope	ns**	ns
oles	Combat Arms→Retention	ns	487 (.215)
rial	Gender→Retention	ns	1.141 (.420)
Va] atic	Gender→WOM	.427 (.141)	ns
Control Variables→ Identification and Behaviors	Gender→Sacrifice	ns	825 (.329)
onti	Age→Sacrifice	ns	034 (.015)
ZE ZE	Education→Sacrifice	ns	.142 (.067)

All estimates are unstandardized.

<sup>\*\*</sup> change in significance/nonsignificance relative to the model without individual membership goals

## 12.5.3 Total Effects of Membership Goals and Latent Growth Factors

This section looks at the total effects of the constructs in the full model.

Particularly important are the total effects on identification (a key measure of relationship quality) and membership behaviors, because both are telling of the individual-organization relationship and valuable to the organization. Furthermore, because this section captures effects that accumulate throughout the breadth of the model it is arguably the most important and informative in understanding the full magnitude of individual membership goal effects. Of the two sample cohorts, the New Soldier sample provides the best assessment of the model and the key relationship between membership goals, identification, and behavior because it samples the period where the organization expects the greatest change to occur. Furthermore, as fully participating members, their responses are now based more on their experiences than their expectations.

Tables 12.6 and 12.7 show the unstandardized total effects from both cohorts. Results provide support for the arguments made in previous essays and suggest that the altruism goal is the most valuable to organizations in terms of its association with both identification and its effect on pro-organizational behavior. The effect of self-enhancement on the level of identification and behavior is relatively small but consistently positive. Pay has mixed effects, with both modest positive and negative effects on both behavior and identification for the New Soldier sample and no effect within the Future Soldier sample. The negative total effects for the future employment goal on sacrificing and retention within the Future Soldier cohort, combined with its negative association with all three behaviors among the New Soldiers sample with highest-identifiers removed (not depicted), suggest it may be the least beneficial to the

organization. The total effects of the four membership goals using the New Soldier sample (Table 12.6) supports the conclusion from the earlier essays that having the altruism membership goal appears to provide greater value to the organization than either the pay or future employment goals. Additionally, Table 12.6 reinforces the point that both the identification slope and intercept factors have strong effects on behavior.

**Table 12.6 New Soldier Total Effects** 

	Altruism	Self Enhance.	Pay	Future Job	Ident Inter	Ident Slope	Dist. Inter	Dist. Slope	Prest Inter	Pest Slope	SocSat Int	SocSat Slp
Retention	.403	.055	.047	_	.787	1.305	.208	.629	.464	.517	.422	-
WOM	.305	.041	.099	-	.582	.886	.154	.427	.315	.351	.525	-
Sacrifice	.417	.055	118	-	.783	1.103	.207	.531	.392	.437	.262	-
Ident. Inter.	.649	.070	.144	-			.264		-		.611	
Ident. Slope	082	-	209	-			-	.482	.355	.396	.375	-
Dist. Inter.	.209	.153	-	-								
Dist. Slope	.086	-	-	-								
Prest. Inter.	.295	-	-	-								
Prest. Slope	-	-	-	-								
Soc Sat Intercept	.298	.172	-	-								
Soc Sat Slope	-	-	-	-								

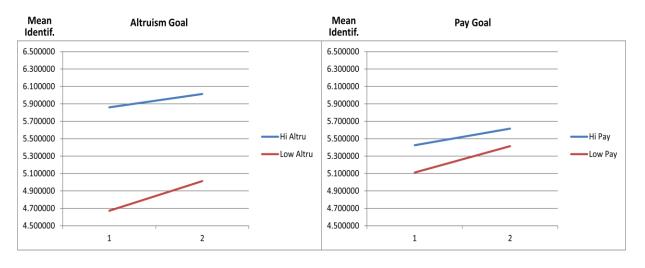
**Table 12.7 Future Soldier Total Effects** 

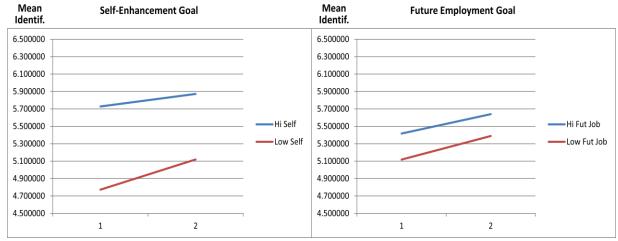
	Altruism	Self Enhance.	Pay	Future Job	Ident Inter	Ident Slope	Dist. Inter	Dist. Slope	Prest Inter	Pest Slope	SocSat Int	SocSat Slp
Datantian	264						Н	I	P			<b>S</b> 2
Retention	.264	.053	-	153	.692	-	-	-	-	-	.422	-
WOM	.328	.066	-		.860	-	-	-	-	-	.525	-
Sacrifice	.163	.047	-	166	.428	-	-	-	-	-	.262	-
Ident. Inter.	.382	.077	-	-			_		-		.611	
Ident. Slope	.002	-	-	-			-	.627	279	-	.375	-
Dist. Inter.	.261	.117	-	-								
Dist. Slope	-	-	-	-								
Prest. Inter.	.402	-	-	-								
Prest. Slope	-	-	-	-								
Soc Sat Intercept	.305	.126	-	-								
Soc Sat Slope	113	-	1	-								

## 12.6 Goals Effects Differences by Median-Split Goal Groups

As a way to understand and visualize the relationship of membership goals with identification level and growth, I used the New Soldier sample to plot identification growth slopes based on the sample being split into high and low groups for each of the four membership goals. In the first step, I created median split samples for each of the four individual membership goals (e.g. a high-altruism sample and a low-altruism sample), creating a total of eight samples. Using these samples, the level and growth of identification was estimated for each new sample. A line graph was then used to depict the level and slope of identification for the high and the low groups for each goal (Figure 12.11).

Figure 12.11 Identification Level and Growth by Membership Goal Median Split





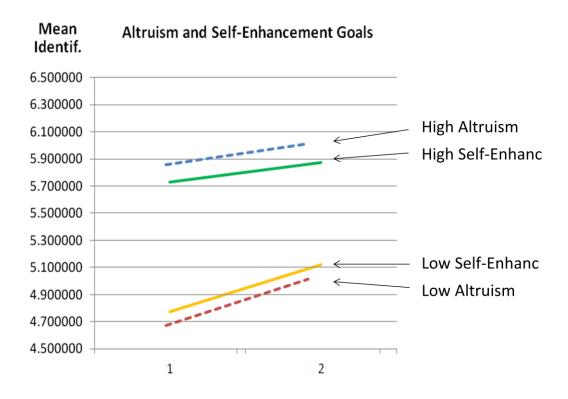
Examination of this figure provides a number of interesting observations. First, the difference in the level of identification between those with high- and low-altruism membership goals is substantial. While both groups experienced growth in identification, those with low-altruism goals have such low initial identification that they never come close to reaching the initial level of identification found among the high-altruism group. In fact, they are the lowest identifiers of any median split membership goal group and remain that way even after completing integration, socialization, and training. Quite simply, they start with low levels of identification, and after some modest growth, they

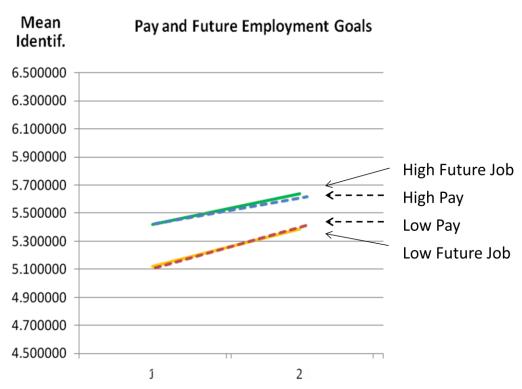
are still less identified with the organization than any other group. Though being in the low-altruism goal does not appear to inhibit identification growth, the growth is never sufficient to compensate for their much lower level of identification at time\_1. The high-altruism group, by contrast, begins more identified than any other group and continues to grow more identified at a modest rate. Indeed, only the high-self enhancement group ever reaches a level of identification at time\_2 that is equivalent to the high-altruism group at time\_1.

The story for the high- and low-self enhancement groups is quite similar to that of the high- and low-altruism groups, with the low-self enhancement group having identification that is almost as low as the low-altruism group. The same is true when comparing the high-self enhancement and the high-altruism groups. In fact, by looking at Figure 12.12 it is clear that the two high groups (high altruism and high self enhancement) are almost identical in their growth rates and are only slightly offset in their levels of identification. This similarity is mirrored in the two low groups, with the low altruism and low self enhancement having very similar identification levels and slopes.

The story for both the pay and the future employment groups are very similar to each other, with high-pay and high-future employment groups being essentially the same and the low-pay and low-future employment groups being essentially the same in terms of identification level and growth (Figure 12.12). While there is significant difference in level of identification between the high-pay/high-future job groups and the low-pay/low-future job groups, this difference is small relative large gap between the high and low altruism/self-enhancement groups.

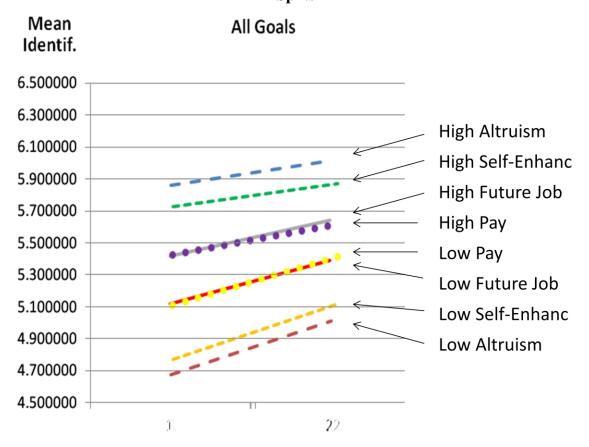
Figure 12.12 Identification Level and Growth by Membership Goal Median Split





Looking at Figure 12.13, which depicts all goal slopes in a single image, several things appear clear. First, the membership goals do not seem to inhibit or promote growth. All the groups appear to experience growth at a similar rate. Furthermore, moderation analysis based on high-low median split by goal type did not identify significant differences in their identification slopes. Second, the reason the person enlisted (their membership goal) seems to substantially influence the level of identification to so considerably that even a powerful integration, socialization, and training interventions do not change their relative level. Third, there are four groups of clusters among the eight sub-groups that are associated with the level of identification. From most identified to least identified, these clusters are: 1) high salience altruism and self enhancement goals, 2) high salience pay and future employment goals, 3) low salience pay and future employment goals, and 4) low salience altruism and self enhancement goals. In general, it would appear to be most important for organizations to recruit those with strong altruism and self-enhancement goals and avoid those who score low on these goals. Fourth, integration, socialization, and training program (basic training) appears to be effective at inducing greater identification. Lastly, having strong membership goals appears to increase the level of identification with the organization. Regardless of why they joined, feeling strongly about that goal (e.g. being in one or more of the high-goal groups) is associated with higher identification.

Figure 12.13 Identification Level and Growth for all Membership Goal Median Splits



## 12.7 Test for Causal Predominance

The two-wave panel data is used to provide additional evidence for the causal predominance suggested by cross-sectional results in Essays I and II. This analysis uses a structural model that takes measures of each latent construct at two points in time and models causal paths from the latent variables at time\_1 to the latent variables at time\_2 (Byrne 1998). This analysis tests the hypothesis that a latent variable at time\_1 causes another latent variable at time\_2. For example, I expect identification at time\_1 to cause word-of-mouth referral behavior at time\_2, but I must rule out that providing word-of-mouth referrals at time\_1 makes the member more identified at time\_2.

Table 12.8 shows the estimates from the structural model used in Essay I using relationship inducing factors, economic satisfaction (pay and job satisfaction), and membership goals from time\_1, identification at time\_2, and behaviors from time\_2. I use the full Future Soldier sample (n=345) to maximize sample size. The result are conclusive, showing that every expected relationship was significant an in the expected direction except for self-enhancement→prestige, while model fit remained reasonable with an RMSEA of .064.

Table 12.8 Effects of Time\_1 Goals and Identification Antecedents in Identification and Behaviors at Time\_2

Relationship		Estimate	S.E.
Self-Enhance→	Soc Sat	.183	.039
Self-Enhance →	Prestige	$.085^{\mathrm{ns}}$	.059
Self-Enhance →	Dist	.150	.037
Altruism <b>→</b>	Soc Sat	.320	.047
Altruism <b>→</b>	Prestige	.459	.070
Altruism <b>→</b>	Dist	.343	.044
Dist→	Identification	.347	.141
Soc Sat→	Identification	.454	.147
Prestige→	Identification	191	.076
Econ Goals→	Identification	106	.049
Self-Enhance →	Identification	.129	.061
Altruism <b>→</b>	Identification	.360	.076
Econ Goals→	Econ Sat	.769	.048
Identification→	Pro-Org Behavior	.387	.051
Econ Goals→	Pro-Org Behavior	502	.121
Altruism <b>→</b>	Pro-Org Behavior	.154	.053
Econ Sat→	Pro-Org Behavior	.672	.142

Replacing identification at time\_1 with identification at time\_2 to test the causal relationship between identification at time\_1 and behavior at time\_2, shows that the identification > pro-organization path remains significant (.331 (.080)) without creating any major changes in other paths estimates. By using time\_2 perceptions of

distinctiveness and prestige and all three forms of satisfaction (social, pay, and future employment), I am able test their relationship with time\_1 goals. Table 12.9 shows that all seven of these relationships remain significant and suggest that individuals' membership goals at time\_1 do have influence on their perceptions and satisfaction at time\_2.

To test for reverse causation, the paths from pro-organizational behavior to identification, from economic satisfaction to pro-organizational behavior, and from identification to relationship inducing factors were reversed. Additionally, the necessary changes in ordering were made (e.g. using time\_1 behaviors and time\_2 relationship inducing factors and economic satisfaction). The model was run using identification at time\_1 and again with identification at time\_2. While all the paths continued to be significant (except for pro-org behaviors  $\rightarrow$  economic satisfaction), model fit dropped greatly to an RMSEA of .154 and a CFI of .440 ( $\chi^2$ =1704.0, 186 df). When time\_2 identification was used RMSEA was .155 and CFI was .434 ( $\chi^2$ =1714.72, 186 df). Overall, there is substantial support for the causal ordering of the full structural model and substantial evidence to refute reverse causation.

Table 12.9 Effects of T\_1 Goals on at Time\_2 Perceptions and Satisfaction

Relationship	·	Estimate	S.E.
Self-Enhance→	Soc Sat	.178	.041
Self-Enhance →	Prestige	.138	.061
Self-Enhance →	Distinct	.149	.039
Altruism <b>→</b>	Soc Sat	.304	.050
Altruism <b>→</b>	Prestige	.485	.074
Altruism→	Distinct	.393	.048
Econ Goals→	Econ Sat	1.276	.086

## CHAPTER XIII: DISCUSSION AND MANAGERIAL IMPLICATIONS

## 13.1 Organizational Perceptions, Social Satisfaction, and Identification Growth

Results from the distinctiveness, prestige, social satisfaction, and identification latent growth models suggest that deliberate organizational efforts can create growth in these areas, with prestige and social satisfaction both increasing among New Soldiers. While there was no growth in the perception of distinctiveness, the intercept mean for this construct was already significantly higher than the other two factors (6.230 on a 7-point scale). These results are not surprising, given the organization's substantial investment of time, effort, and resources towards enhancing its image, building camaraderie, and developing the individual-organization relationship.

It is clear from identification latent growth models that New Soldiers become significantly more identified between time\_1 and time\_2, as do those Future Soldiers that are not already highly identified with the organization. This study explored how the level and growth of relationship inducing factors influences the level and growth of identification. It was expected that both the level and the growth of the relationship inducing factors would have a positive effects on identification growth. These hypotheses were largely substantiated, with only the effect of social satisfaction growth not demonstrating evidence of the expected effect on identification growth. In general, the model suggests that both the level and growth rate of perceptions of distinctiveness

and prestige and the level of social satisfaction are important to achieving identification growth, with the model explaining over 50% of the variance in both the level and the growth of identification for both cohort samples. Nevertheless, it is the growth of the relationship inducing factors that have the greatest effect on identification growth. In fact, a model that uses only time\_1 distinctiveness, prestige, and social satisfaction information explains far less variance in the identification growth than the model that includes growth factors for distinctiveness, prestige, and social satisfaction. Lastly, the results from this study provide support to previous essays that indicate distinctiveness, prestige, and social satisfaction all contribute to the level of identification.

## 13.2 Effects of Identification Level and Growth on Behavior

Identification growth and level both had a positive effect on all three behaviors and these effects were substantial in their magnitude. In fact, among the New Soldier cohort, all six of the intercept→behavior and slope→behavior relationships were strongly positive. This is important because research involving other relationship quality constructs (e.g. commitment and trust) indicate that construct growth has greater influence on relational outcomes than does construct level (Palmatier 2008). Why would the construct level appear to be more influential for identification than among other relationship quality constructs? One possibility is that people have a desire for self-continuity and a desire for congruence between their self-concept and their behavior (Dutton et al. 1994). Strong, stable identification with the organization provides both a sense of self-continuity and the basis for selecting and enacting self-concept congruent behaviors, so that even stable identification levels would provide a strong impetus to

behave in a way that reflects and supports that identification. Given this, it would not be surprising to find that unlike commitment, identification may continue to be predictive of behavior even during a period of relationship maturity and stable identification levels. If true, it would mean that identification may have a very different lifecycle and different dynamic effects than other relational constructs that lose predictive power as they reach relational maturity.

## 13.3 The Role of Membership Goals in Identification Growth and Behavior?

The effects of individual membership goals can be summarized as follows. First, individual membership goals primarily influence the levels of the other constructs, rather than their growth. Second, they were more important than expected in influencing the level of relationship inducing factors, but less important than expected in their direct effects on identification growth and time\_2 behaviors. Third, despite the influence of intrinsic membership goals being primarily on the level of the relationship inducing factors, these goals still had significant indirect effect on identification growth and time\_2 behavior. This occurred because the level of the relationship inducing factors had significant effects on identification growth. Lastly, the total effects of membership goals continued to follow the patterns established in previous essays, with altruism having the most positive and consistent effect on identification and behavior. The future employment goal, which was associated with decreased identification in previous essays, is related to reduced sacrificing, WOM, and retention behaviors in this essay, and appears to be the least valuable and most problematic membership goal.

The analysis of identification latent growth models using median split samples based on membership goal scores of New Soldiers provided particularly illuminating information. In short, identification growth was ubiquitous and essentially the same regardless of membership goal type or its level (high or low). In other words, there was consistent growth regardless of the individual's membership goals or its salience. However, the differences in the level of identification based on membership goal type were substantial, particularly when comparing altruism and self-enhancement membership goals with pay and future employment membership goals. Individuals with high salience intrinsic membership goals were substantially more identified than those with high salience economic goals. This relationship is reversed among the low goal salience samples, with those having low salience intrinsic membership goals being much less identified than those with low-salience economic goals. The level of identification also varied substantially within the goals type based on its level of salience (high or low). This was particularly true for altruism and self-enhancement, where individuals having highly salient intrinsic goals were much more identified than those with low salience intrinsic goals.

It appears from this analysis that the reason the person joins (their membership goal) has a strong influence on their level of identification, and that these differences continue to exist even after they complete integration, socialization, and training and even after they experience significant identification growth. For example, even after experiencing identification growth, the average person with strong pay or future employment goals fails to reach the level of identification (time\_2) that a member with strong altruism goals experiences at time\_1, and they barely reach the initial level of

those with strong self-enhancement goals. Given that all groups are growing at similar rates, the substantial gap in identification level based on membership goal are essentially unchanged at the end of the integration, socialization, and training period. This situation is even more pronounced when comparing the high and low intrinsic goal groups. Those who lack strong altruism and self-enhancement goals are by far the least identified and never become as identified as the average individual joining for reasons of pay or future employment. This creates a situation where the eight membership goal groups (four goals and two levels for each goal) vary from most identified to least identified in the following order: high altruism, high self-enhancement, high future employment, high pay, low pay, low future employment, low self-enhancement, and low altruism. Based on this, it appears that having strong membership goals increases the level of identification with the organization. Regardless of why a person joins, feeling strongly about their reason for joining (e.g. being in one or more of the high-goal groups) seems to be associated with higher identification.

#### 13.4 Managerial Implications and Recommendations

This study demonstrates that 1) increasing the perceptions of distinctiveness and prestige and 2) maintaining higher levels of social satisfaction will lead to substantial growth in identification. This is critical because both the level and the growth of identification promote pro-organizational behaviors. While all managers should try to increase identification, it is unrealistic to expect identification to increase indefinitely. Because the level of identification affects behaviors, managers can still benefit from identification-based relationships that have reached maturity and stable identification

levels. This likely occurs because, unlike other relational construct, identification is related to the self-concept and people desire to maintain a consistent self-concept and to maintain self-behavior congruence. This suggests that identification will influence behaviors even when its growth rate slows or stalls, and that the long-term value of identification may be quite high.

Managers can also learn from the organizational example provided in the current empirical context. The U.S. Army operates on the premise that issues of low identification or commitment, incongruous values, and issues of character among its new members can be remedied through the integration, socialization, and training that each new member goes through. Consequently, they take an econometric approach to recruiting, selecting marketing approaches that most effectively induce membership with the most efficient use of resources in terms of advertising, direct sales/recruiting, and promotions (benefits, cash bonuses, skill training, and educational benefits).

The findings from the current essay indicate that this premise is myopic and problematic in several ways, and the results of this essay provide a number of important lessons for managers and marketers in the membership business. First, while this study found that membership goals did not inhibit or promote identification growth, it clearly demonstrated that individuals' identification varied significantly based on their type and their salience. Those having strong altruism and self-enhancement goals had the highest identification, while those with weak altruism and self-enhancement goals had the lowest identification, even lower than those with strong economic goals.

Second, this essay clearly shows that individuals with weak membership goals, regardless of the goal type (intrinsic or economic), tend to have lower organizational

identification. Those individuals who lack strong membership goals (e.g. those who join because they have no better options) may provide even less value than those who have strong, but primarily economic goals.

Third, managers and membership marketers should be excited by the effectiveness of the Army's integration, socialization, and training program at increasing identification among the New Soldier cohort. Not only was there aggregate growth, but it was surprisingly uniform and comprehensive. While the organization's success at increasing identification is impressive and important, it's equally important to recognize that because all eight membership goal groups experienced similar growth, those least identified groups remained just as low relative to the other groups, even after the organization's integration, socialization, and training efforts. In fact, the growth of identification among the low altruism and self-enhancement groups was never sufficient to compensate for their substantially lower initial identification levels.

Based on these findings, managers should actively seek to increase the perceptions of organizational distinctiveness and prestige and promote social satisfaction in order to grow and then maintain high levels of identification with the organization. While managers should also understand that while they should strive to develop increased identification, there is also value in maintaining high levels of identification once identification has reached a period of slow growth or no growth.

Managers should also recognize that even if they are effective at developing increased prestige and distinctiveness, and ultimately increasing identification in their organizations, the type of individual membership goals present in their organization may have an even greater effect. It is therefore important that managers understand that when

they use individual membership goals to segment the market and develop marketing actions, they are also influencing the membership goals present in their organization. Consequently, they are affecting the level of organizational identification and proorganizational behaviors within their organization, possibly to a point where efforts to promote identification cannot offset initial low levels of identification associated with some membership goals. Managers should therefore pursue a balanced approach that seeks to induce the membership of individuals with goals associated with the greatest identification, while also pursuing efforts to increase and maintain identification within it current membership.

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