

# UC Santa Barbara

## UC Santa Barbara Electronic Theses and Dissertations

### Title

A Structured Transition: Structure's Role in Facilitating Belonging During Employment Transition

### Permalink

<https://escholarship.org/uc/item/4zx94603>

### Author

Gibbs, W. Connor

### Publication Date

2023

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Santa Barbara

A Structured Transition:

Structure's Role in Facilitating Belonging During Employment Transition

A Thesis submitted in partial satisfaction of the  
requirements for the degree Master of Arts  
in Psychological & Brain Sciences

by

W. Connor Gibbs

Committee in charge:

Professor David K. Sherman, Chair

Professor Heejung S. Kim

Professor Daniel Conroy-Beam

December 2023

The thesis of W. Connor Gibbs is approved.

---

Heejung S. Kim

---

Daniel Conroy-Beam

---

David K. Sherman, Committee Chair

September 2023

A Structured Transition:  
Structure's Role in Facilitating Belonging During Employment Transition

Copyright © 2023

by

W. Connor Gibbs

## ACKNOWLEDGEMENTS

W. Connor Gibbs is responsible for this manuscript's conceptualization, data analysis for all studies, writing and editing of the manuscript, and general project administration. In terms of specific studies, I (WCG) have been responsible for study material development, data collection and curation for Studies 2, 4, Supplemental Study 1, and Supplemental Study 2. I would like to acknowledge the contribution of collaborators who assisted in data collection and conceptualization. David K. Sherman assisted with conceptualization, study material development for Studies 1, 2, 4, Supplemental Study 1, and Supplemental Study 2; as well as funding acquisition, project supervision, and manuscript review. Lauren Ortosky assisted with study material development and data collection and curation for Study 1. Jason Dempsey assisted with study material development and data collection and curation for Study 2. Daniel F. Perkins and Nicole R. Morgan assisted with study material development and data collection and curation for Study 3. Aaron C. Kay assisted with study material development for Study 4.

This research was supported by an unrestricted gift to support research on social psychological factors leading to underemployment of military veterans by Amazon Scholars & Academic Relations. W. Connor Gibbs was supported in this work by a National Science Foundation Graduate Research Fellowship.

## ABSTRACT

### A Structured Transition:

Structure's Role in Facilitating Belonging During Employment Transition

by

W. Connor Gibbs

Employment transitions necessitate a degree of uncertainty, which may present a challenge to succeeding and belonging at a new organization. The present research explores whether the perception of a higher degree of organizational structure can facilitate transitioning employees' occupational self-efficacy and sense of belonging in a new work environment. We focus on military veterans, who face significant challenges during their separation from military service and transition to civilian employment. We conducted four studies with military veteran participants (two of which also included civilian participants): two using simple correlational methods, one using a three-year longitudinal design with transitioning veterans, and one using an experimental methodology with veterans and civilians. Across the studies, we find consistent evidence that when transitioning employees perceive greater structure at their organization, this facilitates increased feelings of occupational self-efficacy which, in turn, promotes greater feelings of belonging at work. Successful employment transitions are facilitated, we suggest, when people perceive greater structure in their environment. The results are discussed in the context of compensatory control theory, and addressing the challenges of transitioning employees, and in particular, transitioning military veterans.

## **I. Introduction**

In John Steinbeck's *East of Eden*, he describes the experience of a military veteran returning home:

“Adam was discharged in 1885 and started to beat his way home...It is a hard thing to leave any deeply routine life, even if you hate it...And Adam knew he could not go home...‘I just couldn't stand it. Didn't have no place to go. Didn't know nobody. Wandered around and pretty soon I got in a panic like a kid, and first thing I knowed I'm begging the sergeant to let me back in—like he was doing me a favor.’” (Steinbeck, 1957, p. 63-66)

Transitions challenge people's ability to predict and control their environments. However, the narratives and beliefs that individuals hold as they work through these transitions can impact their motivations and transition outcomes (MacLean & Elder, 2007; McAdams et al., 2001). As Steinbeck noted (1957), “it is a hard thing to leave any deeply routine life” and thus, transitioning from the military to civilian life and the workforce is an acute example where loss of environmental structure and routine can exacerbate employment transition challenges. Yet, the success of a transition is also a function of what situation people are transitioning into. When an organization provides a significant degree of structure, people may be less likely to feel lost (“in a panic like a kid”) and more likely to feel as though they can succeed and achieve their goals. In the present work, we sought to examine the relationship between perceived structure during employment transitions and transition outcomes, with a particular focus on transitioning employees who have served in the military (Shepherd et al., 2021).

### *A. Transitions as a Threat to Personal Control*

Employment transitions, such as when people begin their first career after completing their education or military service, can act as an external threat to people's experience of personal control. For example, during their transition to civilian employment, military veterans report experiencing anxiety as a result of their civilian employers' lack of a clearly defined onboarding process (Dexter, 2020). More generally, employment transitions require navigating opaque hiring processes (e.g., application review, interviews, assessment testing, hiring decisions) that candidates often have little control over. Likewise, once an individual finds a new place of employment, they frequently lack control over their work environment, job responsibilities, and expectations. When college graduates transition to the workforce, they are required to adapt their identities, responsibilities, relationships, lifestyles, and level of independence to their new employment status (Hettich, 2010), setting an expectation of adversity for many graduates (Murphy et al., 2010). With major life transitions come a series of epistemic challenges, and transitioning into the workforce is a prime example (Schlossberg, 2011).

When people have experiences that are stressful, chaotic, and unpredictable, such as may occur during employment transition, they engage in a myriad of coping strategies. Research and theorizing on compensatory control has focused on how people strive to perceive the world as orderly, where all events follow clear cause and effect relationships, and how these perceptions may aid them in their ability to cope with an otherwise chaotic perception of the world (Kay et al., 2008; Lerner, 1980). Wanting to perceive the world as non-random and orderly is argued to be a fundamental human motive (Jost, 2018; Lerner, 1980; Presson & Benassi, 1996; Seligman, 1975). Compensatory control theory (CCT; Kay et al., 2008,



2009) argues that this perception that the world is structured and orderly facilitates the development of feelings of personal control – defined as “an individual’s belief that [they] can personally predict, affect, and steer events in the present and future” (Kay et al., 2009, p. 264). CCT goes on to argue that when individuals perceive a lack of personal control, like following an external threat to their control such as employment transition, they engage in psychological processes to reinforce their foundational perception that the world is orderly, rebuilding the foundation upon which personal control and individual goal pursuit may be developed.

In this paper, we explore the implications of this theorizing for the experience of employment transition, with a particular focus on those who are making the transition from the military to their first post-military work experience. We examine whether people respond to the potential lack of personal control they experience during an employment transition by drawing on their perceptions of the new workplace, and in particular, being attuned to and impacted by the amount of structure they perceive as a potential strategy to compensate for a relative lack of control they may experience (Kay et al., 2008; Landau et al., 2015). The experience of structure in initial employment varies widely between veterans as a function of where they work, how the workplace is constructed, and their perceptions of that structure. In this research, we seek to better understand the implications of this variation on the perceived success of individual employment transitions, as it may have implications for how best to structure environments to promote transitional success.

### ***B. Military Veterans as a Focal Group for Occupational Research***

Although it may be the case that sources of structure provided by an employer are beneficial to all transitioning employees by facilitating their goals, in this research we

explore whether structured employment environments are particularly beneficial to those who have been socialized to expect a structured work environment (e.g., military veterans). For those in the military, they are exposed to a near continuous reminder that their world is regimented, structured, and hierarchical (Ahern et al., 2015). Military service provides structure through daily routine and a clear hierarchy of command, including the clarifying and simplifying of tasks that generates a system of opportunities to excel and a regular pathway of advancement (Soeters, 2018; Moore, 2017; Ahern et al., 2015). Becoming socialized to expect such order and structure from one's environment may make military veterans particularly reliant on structure in their environment to facilitate the pursuit of their goals after being discharged.

Fostering success among transitioning military veterans has long been a goal of both private industry and the government (Ainspan & Saboe, 2020), and yet, there persists a wide range of challenges facing transitioning veterans (Shepperd et al., 2021). According to the United States Department of Labor, 200,000 military veterans transition to civilian life every year (U.S. Department of Labor, 2023). United States (U.S.) military veterans report that beginning a civilian career can be challenging. Forty percent of veterans describe their transition to civilian employment as “difficult” or “very difficult” (Shiffer & Maury, 2015). Likewise, research based on analyses of veteran and civilian LinkedIn users reveals that underemployment, defined as working an hourly wage job while having a bachelor's degree or higher, is a significant and increasing issue for veterans (Boatwright & Roberts, 2020). Whereas in 2010 veteran underemployment was at roughly 11% and civilian underemployment was at about 12%, in 2019, civilian underemployment remained at about 12%, while veteran underemployment rose sharply to roughly 34% (Boatwright & Roberts,

2020). Moreover, women veterans have an underemployment rate 18% higher than civilian women and 22% higher than veterans overall (Boatwright & Roberts, 2022).

Military veterans beginning their civilian careers face numerous, complex challenges including transitioning from a military culture to a civilian culture (Cooper et al., 2016), adapting to new social dynamics (Shepherd et al., 2021), and maintaining psychological health after potential trauma experiences (Keeling et al., 2018; Mobbs & Bonanno, 2018). Each of these factors represent significant challenges to veterans as they pursue their goals in their new, civilian employment.

Adding to these challenges is the stark contrast between the extent of structure found within military service relative to civilian life. In contrast to military life, civilian life can be far less structured as a result of its variety and lack of routine. Upon discharge and a return to civilian culture, veterans' environments are likely to become significantly less structured, exacerbating the loss of structure and control veterans face during transition and presenting difficulties adapting to their new reality (Shepherd et al., 2021). Not only must veterans cope with a loss of personal control inherent to transitions themselves, they must also adapt to a new environment with less structure, order, and predictability than to which they were accustomed.

We propose that how military veterans subjectively construe this loss of environmental structure, that may mark the start their civilian lives, may be a key psychological driver of some of the occupational challenges they face when transitioning (Kay & Gibbs, 2022). This loss of structure may make it more challenging for veterans to shore up their foundational belief in an orderly and predictable world in such a way that enables them to pursue their goals (Landau et al., 2015). As a result, in the present research we sought to explore the

relationship between perceived structure in a new employment environment and key transition outcomes among military veterans and civilians (i.e., non-veterans). This line of research has implications for organizational theorists and employers by exploring how the amount of structure in a work environment can impact those who are transitioning into it.

### *C. Structure as Control Compensation*

Our central premise is that because employment transitions represent periods of low personal control, transitioning employees may look for sources of structure within their new work environments as a means of building (or rebuilding) that sense of control. In the present work, we define workplace structure as any element of one's employment that provides or imposes some degree of order or predictability, including elements such as corporate rules and expectations, work routines, and hierarchical leadership. Such sources of structure may help transitioning employees compensate for feelings of low personal control and maintain their perception that the world is orderly and predictable. Past research has shown that sources of organizational support, such as alternative scheduling and support from one's supervisor and coworkers, is associated with greater perceived control (Thompson & Prottas, 2006), highlighting how systems within one's employment environment may facilitate the development of personal control. By helping to satisfy one's core motivation to perceive the world as orderly, non-random, and potentially controllable (Kay et al., 2010), perceiving greater structure in one's new work environment may lead to a more successful employment transition. By contrast, if new employees transitioning from a different career subjectively construe their new work environment as lacking structure, predictability, and order, the transition may be particularly difficult.

Such responses would be consistent with compensatory control theory, which explains how and why, during periods of low personal control, individuals come to rely on control compensation strategies to help them strengthen their perceptions of an orderly and predictable world. For example, individuals in states of low personal control turn to external agents they see as benevolent as sources of control and structure in their life, such as God or the government (Kay et al., 2008, 2009, 2010; cf. Hoogeveen et al., 2018), and this helps them to maintain a global perspective that the world is orderly and predictable, which can then enable effective goal pursuit. Indeed, simply being exposed to world events that are seen as highly structured (e.g., the earth's orbit around the sun, the tides of the oceans, and variations in traffic congestion throughout the day) lead to increased motivation and action towards one's goals (Kay et al., 2014). When one feels a lack of control, being reminded that the world follows a consistent pattern with clear cause and effect helps individuals see that their efforts toward their goals are not in vain. This could help to rebuild feelings of control and motivation to pursue one's goals. In the employment context, then, we examine whether pursuing one's goals in the workplace – to do well and to fit in at work - is facilitated when people see their employment as relatively structured, compared to relatively lacking structure.

#### ***D. Key Transition Outcomes***

In the present work, we focus on two key outcomes that are relevant to pursuing employment related goals: occupational self-efficacy and sense of belonging in the workplace. We reason that if individuals struggle to perceive structure during potentially control-threatening career transitions, then it may be particularly challenging for them to effectively perform in their jobs and feel as though they belong in the workplace.

Occupational self-efficacy “refers to the competence that a person feels concerning the ability to successfully fulfill the tasks involved in [their] job” (p. 239, Rigotti et al., 2008). Occupational self-efficacy has been shown to promote both work performance and intrinsic motivation (Çetin & Aşkun, 2018), as well as commitment to one’s organization and work engagement (Liu & Huang, 2019). Prior research has demonstrated that providing external structure to individuals can improve their self-efficacy related to pursuing goals (Friesen et al., 2014). Individuals who perceived their work environment as having greater procedural justice and being more hierarchical reported a greater sense of self-efficacy in their work (Friesen et al., 2014). We theorize that transitioning to an organization that one perceives as more structured will be positively associated with occupational self-efficacy whereas transitioning to an organization that one perceives as less structured would lead people to feel less efficacy in the workplace. To the extent that people are able to draw upon their subjective construal of structure in their work environments (e.g., more rigid hierarchy, fixed routines, clearer expectations), it will, we predict, facilitate their pursuit of occupational goals, including successfully executing in their work performance, thus exhibiting occupational self-efficacy.

We further reasoned that greater organizational structure could lead to a greater sense of belonging at that organization. One of the basic human motivations is the need to belong (Baumeister & Leary, 1995; Gere & MacDonald, 2010), and in organizational contexts, this may manifest itself as feelings of being a respected and esteemed member of the workforce and connected to one’s coworkers and the larger organization (Brockner & Sherman, 2019). This feeling of belonging in the workplace might be augmented or attenuated to the extent one is performing efficaciously at work. In employment settings, individuals are often

initially evaluated by their ability to perform their job well, incentivizing the prioritization of being an efficacious and successful employee. Current employees may thus be hesitant to develop close social connections with a new employee who performs poorly at their job. Likewise, poor job performance may elicit negative feelings from one's manager and coworkers, contributing to a perceived lack of belonging in a new employment setting. Moreover, inadequate job performance (among students) has been shown to have detrimental impacts on one's sense of belonging (Walton et al., 2015). Because of the prioritization of one's performance in employment contexts, we predicted that, in workplace settings, one's sense of belonging to that community would depend on how one performs on the job, which we operationalized as occupational self-efficacy.

Research across a number of employment domains supports this connection between efficacy and belonging in the workplace. Among student teachers, self-efficacy beliefs were associated with a greater sense of belonging due to the comradery and support these teachers receive from their coworker network (Bjorklund et al., 2020). Additionally, nearly 60% of employees report that being recognized for one's accomplishments (a proxy for self-efficacy) makes them feel like they belong at an organization, making this the single largest contributor to an overall sense of workplace belonging (Huppert, 2017). As such, greater perceived structure may be associated with greater belonging at an organization to the extent people experience greater occupational self-efficacy. More formally, we predict that the relationship between increased perceived organizational structure and greater belonging at the workplace will be mediated by increases in occupational efficacy.

### *E. Overview of Studies*

Across a series of four studies, we test how perceived organizational structure during times of employment transition may impact, or be associated with, occupational self-efficacy and sense of belonging. Study 1 tested, using a sample of military veterans and civilians (i.e., non-veteran former students with some level of college education) who reflected on their transitions to their first jobs, whether greater perceived organizational structure was associated with increased occupational efficacy and belonging at work. Study 2 (preregistered) tests the robustness and generalizability of the previous findings by examining the proposed relationship at veterans' current employers, as opposed to previous employers, using narrower single item measure of our key variables. Study 3 (preregistered) examines the directionality of the relationship between occupational self-efficacy and sense of belonging by using three-year longitudinal data collected among a sample of veterans leaving military service (also see Perkins et al., 2019, 2022; Morgan et al., 2022, 2018; Richardson et al., 2019; and Vogt et al., 2018, 2019 for additional research using this longitudinal data). Finally, Study 4 (preregistered) experimentally tests how manipulating perceived structure influences transition outcomes. See Tables 1 and 2 for demographic information of all studies.

Together these studies illustrate the different ways that structure may support key factors critical to veterans' civilian employment transition success. Data, syntax, supplemental materials, and all measures for all studies are available on the Open Science Framework (<https://osf.io/zvfdc/>).



### ***F. Analytic Plan***

Throughout the analyses reported in this paper, we will utilize control variables, notably age, gender, and race. As indicated in Table 1, the veteran and civilian samples in both Studies 1 and 4 differ on these demographic characteristics. As such, in Study 1, these covariates will be used to help account for between group differences between veterans and civilians. Additionally, in Studies 1, 2, and 3 (correlational designs), covariates will be used to help isolate effects of the psychological predictor, perceived control, on the outcomes above and beyond the impact of the individual differences captured by the covariates. Finally, in Study 4, due to its experimental design, we will report findings from analyses without covariates included, and footnote any changes in results caused by the inclusion of covariates.

**Table 1**  
***Personal Demographics***

		Study 1		Study 2	Study 3	Study 4	
		Veterans ( <i>N</i> = 149)	Civilians ( <i>N</i> = 101)	Veterans ( <i>N</i> = 497)	Veterans ( <i>N</i> = 2,964)	Veterans ( <i>N</i> = 200)	Civilians ( <i>N</i> = 200)
Gender	Male	62.4%	71.0%	80.5%	87.7%	76.0%	34.0%
	Female	37.6%	29.0%	15.7%	12.3%	22.5%	64.0%
	Transgender Male	-	-	-	-	0.5%	0.5%
	Nonbinary/Gender Non-conforming	-	-	1.21%	-	1.0%	1.5%
	Prefer not to answer/Did not respond	-	-	2.61%	-	-	-
12	Age [ <i>M</i> ( <i>SD</i> )]	33.7(8.07)	33.1(7.75)	N/A <sup>1</sup>	35.8(9.35)	42.9(11.3)	38.5(11.6)
Ethnicity	African American/Black	10.7%	9.0%	11.9%	7.2%	4.5%	4.5%
	Asian American/Asian	4.03%	4.0%	7.04%	3.2%	1.5%	5.0%
	European American/White	72.5%	75.0%	56.9%	74.4%	85.5%	82.0%
	Hispanic American/Latino	6.04%	9.0%	-	10.8%	2.5%	1.5%
	Native American or Pacific Islander	4.03%	3.0%	8.11%	-	1.0%	-
	Multi-Racial	2.68%	-	12.3%	3.4%	2.5%	2.0%
	Other	-	-	8.65%	0.9%	2.5%	5.0%

*Note.* The demographics of the veteran and civilian samples for each study. In Studies 1, 2, and 3, all participants were from the U.S. In Study 4, participants were recruited predominantly from the U.S. and United Kingdom (U.K.). The veteran sample of Study 4 was 58.0% from the U.S., 40.5% from the U.K., and 0.5% from another country. The civilian sample of Study 4 was 90.0% from the U.K., 3.0% from the U.S., 7.0% from another country).<sup>2</sup>

<sup>1</sup>Age data was not collected continuously. Median age range for Study 2 was “41-45 years old”.

<sup>2</sup>This disparity in the proportion of each sample that is from the U.S. and U.K. is due to the time in which data collection began and the available sample of participants on Prolific. There is a large number of U.S. and U.K. civilians on Prolific, this resulted in participation slots for the civilian sample filling up quickly. Because data collection began in the late evening Pacific Standard Time (early morning Greenwich Mean Time), U.K. civilians were able to claim a majority of participation slots before U.S. civilians. On the other hand, there were relatively few U.S. and U.K. veterans on Prolific that were eligible for this study (i.e., had not participated in any previous studies). As such, participation slots for the veteran sample filled up less quickly, which allowed for more U.S. veterans to participate.

**Table 2**  
***Military Demographics***

		Study 1	Study 2	Study 3	Study 4
Branch of Service	Air Force	16.8%	12.3%	21.8%	22.7%
	Army	51.7%	26.4%	26.4%	42.8%
	Coast Guard	1.3%	1.2%	-	0.5%
	Marine Corps	8.7%	15.1%	14.4%	6.7%
	National Guard or Reserves	6.7%	5.8%	18.9%	1.0%
	Navy	14.8%	17.3%	18.4%	25.8%
	More than one branch	-	21.9%	-	0.5%
Years in Service [ <i>M(SD)</i> ]		N/A <sup>1</sup>	-	-	8.60(6.97)
Years Since Discharge [ <i>M(SD)</i> ]		N/A <sup>2</sup>	11.3(8.44)	-	12.8(11.0)

*Note.* The demographics of the veteran and civilian samples for each study.

<sup>1</sup> Years in service data was not collected continuously. Median years in service range for Study 1 was “5-9 years”.

<sup>2</sup> Years since discharge data was not collected continuously. Median years since discharge for Study 1 was “4 years”.

## **II. Study 1**

The aim of Study 1 was to examine both veterans' and civilians' retrospective assessments of the start of their civilian careers using a quasi-experimental design. After graduation, former students face a significant transition out of the education system and into the workforce (for discussion, see Murphy et al., 2010). Similar to veterans' start to civilian employment, former students beginning their careers face a threat to their feeling of control as they can face what may be an opaque hiring process, a new work environment, job responsibilities, and expectations. Because of this, we predict perceiving greater organizational structure will be associated with positive transition outcomes for both veterans and civilians. However, sampling both veterans and civilians who have completed at least some amount of college allows us to explore possible between-group variability in the magnitude of the predicted relationships between the two groups.

Our primary predictions center on the relation between perceived structure in the first place of employment for veterans and civilians. First, having been socialized to expect more structure in their environment, we predicted organizational structure may be more strongly associated with beneficial outcomes for veterans compared to civilians. Second, to the extent that one's belonging in the workplace is predicated on one's job performance, we predicted

that occupational self-efficacy would mediate the relationship between perceived organizational structure and sense of belonging.

### ***A. Method***

Studies 1, 2, and 4 received Institutional Review Board approval from the University of California, Santa Barbara.

#### **1. Participants**

A sample of 149 U.S. military veterans and 101 civilians were recruited using Amazon Mechanical Turk (see Table 1 for sample demographics). Our target sample size was at least 100 veterans and 100 civilians as this would have provided 80% power for detecting an effect ( $r$ ) as small as 0.20. No data was examined prior to the completion of data collection. Our final sample size provided 80% power for detecting an effect ( $r$ ) as small as 0.18. All participants were compensated \$1.00 for their participation.

#### **2. Measures**

Consenting participants completed an online survey examining “factors that may influence how people view different job opportunities.” To focus on a particular place of employment, all participants were asked to think about the first place that they were employed (after military or college). Specifically, veteran participants were asked about their “experience in the very first organization where [they] worked after the military.” Civilian participants were asked about their “experience in the very first organization where [they] worked after completing [their] education.”

##### **a. Perceived Organizational Structure**

All participants’ perceptions of structure at their first civilian or post-education organization were measured using five items adapted from Friesen et al. (2014). We are

using perceptions of structure as a proxy for the actual structure present in participants' employment. The five items were "The rules in this organization were clear," "This organization provided a clear and structured mode of life," "This organization provided a consistent routine," "This organization provided a well-ordered life with regular hours," and "There was a very clear hierarchy in this organization." All items were measured on seven-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scores of the five items were averaged to generate a composite,  $M = 5.23$ ,  $SD = 1.11$ ,  $\alpha = 0.85$ .

b. Occupational Self-Efficacy

Participants' sense of efficacy at their civilian or post-education workplace was measured using a six-item scale adapted from the short form Occupational Self-Efficacy Scale (Rigotti et al., 2008). The six items were "When I was confronted with a problem in my job, I was usually able to find several solutions," "Whatever came my way in my job, I felt that I could usually handle it," "My past experiences prepared me well for my occupational future at that job," "I could remain calm when facing difficulties in my job because I could rely on my abilities," "I met the goals that I set for myself at that job," and "I felt prepared for most of the demands in my job." All items were measured on seven-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scores of the six items were averaged to generate a composite,  $M = 5.38$ ,  $SD = 1.04$ ,  $\alpha = 0.90$ .

c. Sense of Belonging

Participants' sense of belonging at their first civilian organization was measured using a three-item scale adapted from the Sense of Social and Academic Fit scale (Walton & Cohen, 2007). The three items were "I felt like I belonged at that organization," "I fit in well at that organization," and "I felt comfortable at that organization." All three items were measured

on seven-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scores of the three items were averaged to generate a composite,  $M = 4.99$ ,  $SD = 1.35$ ,  $\alpha = 0.89$ .

## ***B. Results***

### **1. Veteran Status on Self-Efficacy & Belonging**

We first examined whether veterans and civilians differ in the degree of reported self-efficacy and belonging at their first employer. Veterans ( $M = 5.46$ ,  $SD = 1.07$ ) and civilians ( $M = 5.26$ ,  $SD = 0.99$ ) reported equivalent levels of occupational self-efficacy,  $t(248) = 1.47$ ,  $p = 0.14$ . Likewise, veterans ( $M = 5.05$ ,  $SD = 1.38$ ) and civilians ( $M = 4.90$ ,  $SD = 1.30$ ) reported equivalent levels of belonging,  $t(248) = 0.86$ ,  $p = 0.39$ .

### **2. Perceived Structure Predicts Occupational Self-Efficacy**

We next examined whether participants' sense of how structured the workplace was at their first place of employment after transitioning was associated with increased workplace efficacy, and whether that varied by veteran status. We conducted a hierarchical linear regression to examine whether veteran status moderated the association between perceived organizational structure and occupational self-efficacy. We entered veteran status (1 = veteran and 0 = civilians) and mean-centered perceived organizational structure as predictors at Step 1 and their interaction as an additional predictor at Step 2. Age, gender (0 = male, 1 = non-male), and race (0 = European American/White, 1 = non-European American/White) were also included as covariates in both steps<sup>1</sup>. Occupational self-efficacy was entered as the outcome variable. From Step 1, there was a significant main effect of perceived organizational structure,  $\beta = 0.59$ ,  $b = 0.56$ ,  $SE = 0.05$ ,  $t(242) = 11.60$ ,  $p < 0.001$ , 95% CI for

---

<sup>1</sup> Unless otherwise noted, the same covariates were included in all additional analyses across all studies.



$b = [0.46, 0.65]$ . Participants who perceived greater structure at their first civilian organization reported feeling greater self-efficacy in their work. The main effect of veteran status was not significant,  $\beta = -0.08$ ,  $b = -0.18$ ,  $SE = 0.11$ ,  $t(242) = 1.64$ ,  $p = 0.10$ , 95% CI for  $b = [-0.39, 0.03]$ . From Step 2, the main effect of perceived organizational structure was not qualified by a significant interaction between perceived organizational structure and veteran status,  $\beta = -0.03$ ,  $b = -0.04$ ,  $SE = 0.10$ ,  $t(241) = 0.40$ ,  $p = 0.69$ , 95% CI for  $b = [-0.24, 0.16]$ . Perceived organizational structure was associated with greater workplace efficacy, and this relationship was equally strong for veterans and civilian, see Figure 1.

### 3. Perceived Structure Predicts Sense of Belonging

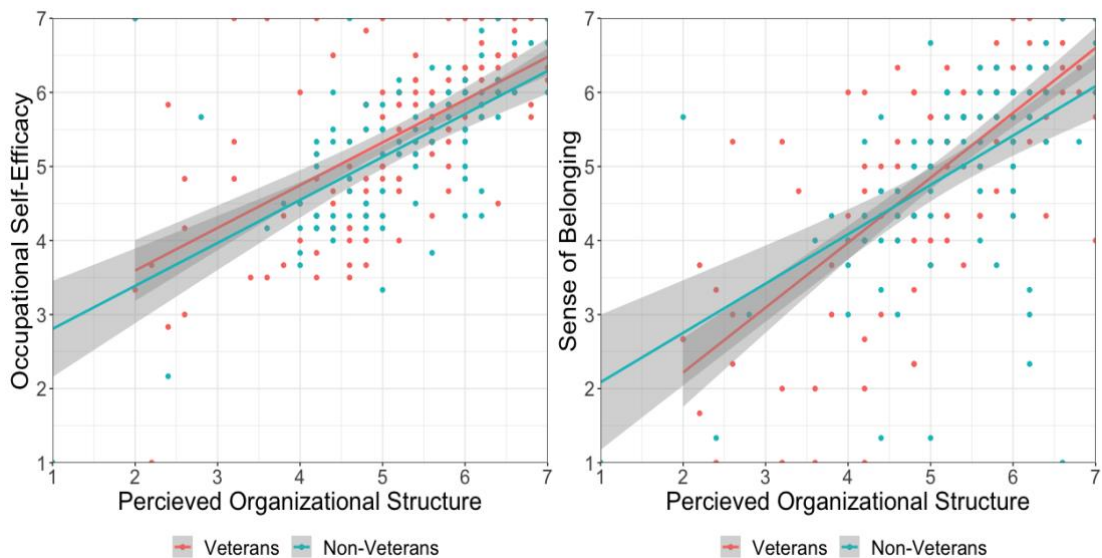
Next, we examined whether perceived organizational structure was associated with belonging at the workplace, and whether this relationship varied as a function of veteran status. We conducted a hierarchical linear regression to examine whether veteran status moderated the association between perceived organizational structure and sense of belonging. We entered veteran status (1 = veteran and 0 = civilian) and mean-centered perceived organizational structure as predictors at Step 1 and their interaction as an additional predictor at Step 2. Sense of belonging was entered as the outcome variable. From Step 1, there was a significant main effect of perceived organizational structure,  $\beta = 0.64$ ,  $b = 0.78$ ,  $SE = 0.06$ ,  $t(242) = 13.02$ ,  $p < 0.001$ , 95% CI for  $b = [0.66, 0.90]$ . Participants who perceived greater structure at their first civilian organization reported feeling a greater sense of belonging in that workplace. The main effect of veteran status was not significant,  $\beta = -0.05$ ,  $b = -0.12$ ,  $SE = 0.13$ ,  $t(242) = 0.93$ ,  $p = 0.36$ , 95% CI for  $b = [-0.39, 0.14]$ .

Importantly, from Step 2, the main effect of perceived organizational structure was qualified by a significant interaction between perceived organizational structure and veteran

status,  $\beta = -0.13$ ,  $b = -0.27$ ,  $SE = 0.13$ ,  $t(241) = 2.13$ ,  $p = 0.03$ , 95% CI for  $b = [-0.52, -0.02]$ .

Perceived organizational structure was more strongly associated with sense of belonging among veterans ( $b = 0.87$ ,  $SE = 0.07$ ,  $t(241) = 11.92$ ,  $p < 0.001$ ) compared to civilians,  $b = 0.60$ ,  $SE = 0.10$ ,  $t(241) = 5.80$ ,  $p < 0.001$ . While perceiving organizational structure in one's first place of employment was associated with a greater feeling of belonging among all participants, this relationship was significantly stronger for military veterans compared to civilians, see Figure 1.

**Figure 1**



*Note.* Perceived organizational structure predicting occupational self-efficacy ( $b_{\text{veterans}} = 0.57$ ,  $b_{\text{civilians}} = 0.53$ ) and sense of belonging ( $b_{\text{veterans}} = 0.87$ ,  $b_{\text{civilians}} = 0.60$ ).

#### 4. Occupational Self-Efficacy Mediates Perceived Structure & Sense of Belonging Relationship

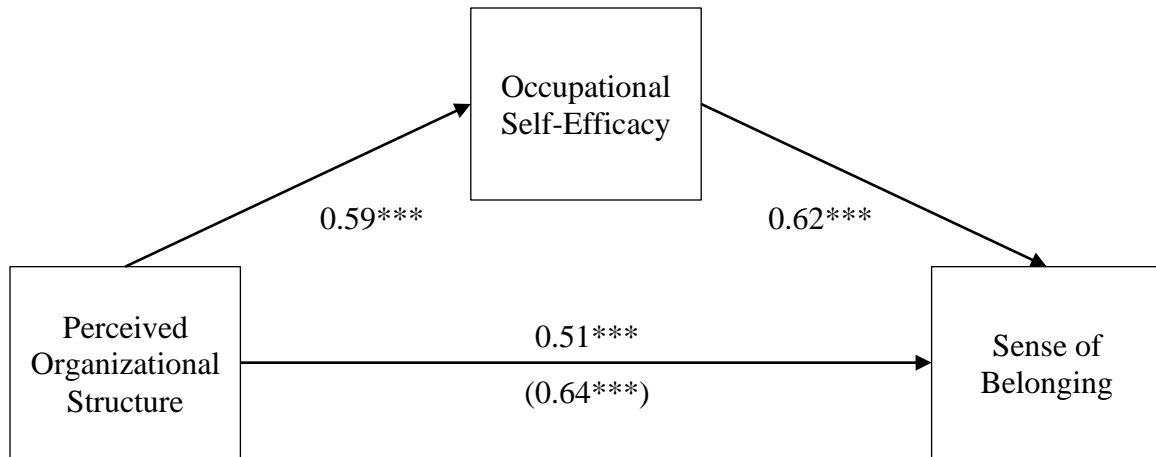
Finally, we tested a mediational model where perceived organizational structure predicted sense of belonging, mediated through occupational self-efficacy using ordinary least squared regression. We first regressed sense of belonging on perceived organizational

structure (mean-centered). There was a significant main effect of perceived structure,  $\beta = 0.64$ ,  $b = 0.78$ ,  $SE = 0.06$ ,  $t(243) = 13.01$ ,  $p < 0.001$ , 95% CI for  $b = [0.66, 0.90]$ . Second, we regressed occupational self-efficacy on perceived organizational structure (mean-centered). Once again there was a significant main effect of perceived structure,  $\beta = 0.59$ ,  $b = 0.56$ ,  $SE = 0.05$ ,  $t(243) = 11.53$ ,  $p < 0.001$ , 95% CI for  $b = [0.46, 0.65]$ . Finally, we regressed sense of belonging on occupational self-efficacy. There was a significant main effect of self-efficacy,  $\beta = 0.62$ ,  $b = 0.68$ ,  $SE = 0.07$ ,  $t(244) = 9.48$ ,  $p < 0.001$ , 95% CI for  $b = [0.54, 0.82]$ . A bootstrap confidence interval (based on 5,000 samples) for the standardized indirect effect,  $\beta = 0.31$ ,  $SE = 0.08$ , did not include zero, 95% CI for  $\beta = [0.16, 0.46]$ , providing evidence consistent with the proposed mediation model<sup>2</sup>. Perceived organizational structure was associated with sense of belonging partially as a result of its relationship with occupational self-efficacy. However, even after controlling for occupational self-efficacy, there remained a significant (though reduced) direct association between perceived organizational structure and belonging,  $\beta = 0.51$ ,  $b = 0.63$ ,  $SE = 0.07$ ,  $t(242) = 8.60$ ,  $p < 0.001$ , 95% CI for  $b = [0.48, 0.77]$ . See Figure 2 for a visual depiction of the model.

---

<sup>2</sup> This mediational relationship was consistent for both veterans ( $\beta = 0.31$ ,  $SE = 0.10$ , 95% CI for  $\beta = [0.12, 0.50]$ ) and non-veterans,  $\beta = 0.31$ ,  $SE = 0.12$ , 95% CI for  $\beta = [0.10, 0.59]$ .

**Figure 2**



*Note.* Path coefficients are standardized regression coefficients. The total effect relating perceived organizational structure to belonging is shown in parentheses. The model also included age, gender, and race as covariates. \*\*\* $p < 0.001$ , \* $p < 0.05$

### ***C. Discussion***

Study 1 provides evidence of a positive relationships between organizational structure, occupational efficacy, and belonging. People who perceived greater organizational structure also felt a greater sense of belonging at those first organizations as they were transitioning, and they felt more efficacious in their jobs, whereas people who saw their organization as less structured, felt less efficacious and belonging. Study 1 also provides initial evidence that the relationship between organizational structure and sense of belonging may be particularly strong for veterans in their career transition, as reflected in the veteran status by structure interaction in predicting belonging. A preliminary analysis was conducted with a subset of participants who indicated their perceived structure in both the military (for veterans) and their education (for civilians). Veterans decreased in perceived structure from the military to their first civilian job ( $p = 0.03$ ) whereas civilian students non-significantly increased in their perceived structure from their education to their first post-graduation job ( $p = 0.29$ ),

resulting in a marginally significant veteran status by context interaction,  $F(1, 178) = 3.27, p = 0.07, \eta^2 = 0.01$  (see Study 1 Supplemental Analysis in supplemental materials for full results). A structured environment may thus be particularly effective at reminding veterans of a sense of a community they experienced as part of their previous military experience, promoting stronger person-environment fit (Kristof-Brown et al., 2005). This similarity to one's previous work environment may have, in turn, supported a feeling of belonging in veterans' new civilian work.

Finally, Study 1 shows support for the hypothesized mediational relationship between perceived structure, efficacy, and belonging. Occupational self-efficacy appears to partially mediate the relationship between perceived organizational structure and sense of belonging such that structure is associated with greater efficacy, which in turn predicts greater belonging. The relationship between organizational structure and occupational efficacy was consistent for veterans and civilians, and so there was no moderation of the mediation.

Taken together, these findings provide initial support for our theorizing that transitioning to an environment that provides greater structure will be associated with more positive psychological outcomes, specifically greater self-efficacy and, in turn, greater belonging. Given the correlational nature of the findings, it is important to note that we cannot make definitive statements that efficacy led to workplace belonging rather than belonging leading to greater workplace efficacy (we return to this issue with a longitudinal study in Study 3).

Study 1 additionally supports the notion that individuals who have been socialized to expect significant structure in their work environment (i.e., military veterans) will respond more positively to structured civilian work environments as perceived organizational

structure was more strongly associated with sense of belonging among veterans compared to civilians. It is important to note, however, that there is a great deal of heterogeneity among military veterans that may contribute to differences in the impact of structure on workplace outcomes. In an effort to investigate how heterogeneity among veterans and their military experience may influence how post military employment structure predicts efficacy and belonging, we conducted an additional correlational study with a sample of 340 veterans (which we report in supplemental materials). Recruiting a sample of veterans with significant variability in military experience, including branch and era of service, as well as service role (e.g., Administrative, Support, Logistics; Combat Operations, Infantry, Pilot), we found consistent evidence for the influence of perceived structure on self-efficacy and belonging. This suggests that regardless of the nature of a veterans' military experience, their perception of their own work performance in a new civilian position and their sense of belonging in their new workplace is associated with the amount of structure they perceive in their new work environment. A full description of this study and findings is included in supplemental materials (see Supplemental Study 1). In Study 2, we utilized a unique data collection opportunity to examine the relationship between perceived structure, efficacy, and belonging at veterans' *current* employers (as opposed to previous employers).

### **III. Study 2**

In Study 1, participants were asked to reflect on their transition out of the military/education system and into civilian employment. Consequently, participants had to retrospectively consider how much efficacy and belonging they felt when they began the new jobs that they transitioned into. Study 2 examines whether the differential effects of structure impact participants' occupational outcomes similarly at their *current* job. Study 2

was conducted in collaboration with VetsinTech and Center for a New American Security (CNAS). VetsinTech provides re-integration services to current and returning veterans, specializing in connecting veterans to opportunities in the technology sector. CNAS is an independent, bipartisan, nonprofit think tank that develops national security and defense policies. Because of the nature of data collection, participants responded to single-item measures of the key constructs of perceived organizational structure, occupational self-efficacy, and sense of belonging in their current civilian work. We chose these items based on their clarity and face validity. This study enabled us to replicate the findings of the previous studies with an additional large sample, pre-register our analytic plan, and examine the robustness of the mediational relationship observed in the prior samples.

In Study 2, then, we explore whether military veterans' occupational efficacy and sense of belonging may continue to be associated with their perceptions of organizational structure well past their initial transition. As such, we explore the relationship between perceived organizational structure and sense of belonging and occupational self-efficacy, as well as the previously established mediational model, among a sample of veterans considering their current organization. In sum, In Study 2 (preregistration available at [https://aspredicted.org/JWM\\_DGH](https://aspredicted.org/JWM_DGH)), we test the proposed model's generalizability beyond the employment transition context using a correlational design.

### ***A. Method***

#### **1. Participants**

A sample of 497 U.S. military veterans were recruited by VetsinTech and CNAS (see Table 1 for sample demographics). No data analyses were conducted prior to the completion of data collection. This sample size of 497 participants provided 80% power for detecting an

effect ( $r$ ) as small as 0.13. Participation was on a voluntary (i.e., no compensation) basis among people invited to participate by VetsinTech.

## 2. Measures

Consenting participants completed an online survey examining “technology-related skills gained during their time in service and their perceptions of a future career or experience in the technology sector.”

### a. Perceived Organizational Structure

Participants’ perception of structure at their current organization was measured using a single item, “My current organization provides a clear and structured everyday life.” This item was measured on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

### b. Occupational Self-Efficacy

Participants’ sense of being efficacious at their current workplace was measured using a single item, “Whatever comes my way in my job, I can usually handle it.” This item was measured on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

### c. Sense of Belonging

Participants’ sense of belonging at their current organization was measured using a single item, “I feel like I belong at my current organization.” This item was measured on a seven-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

## ***B. Results***

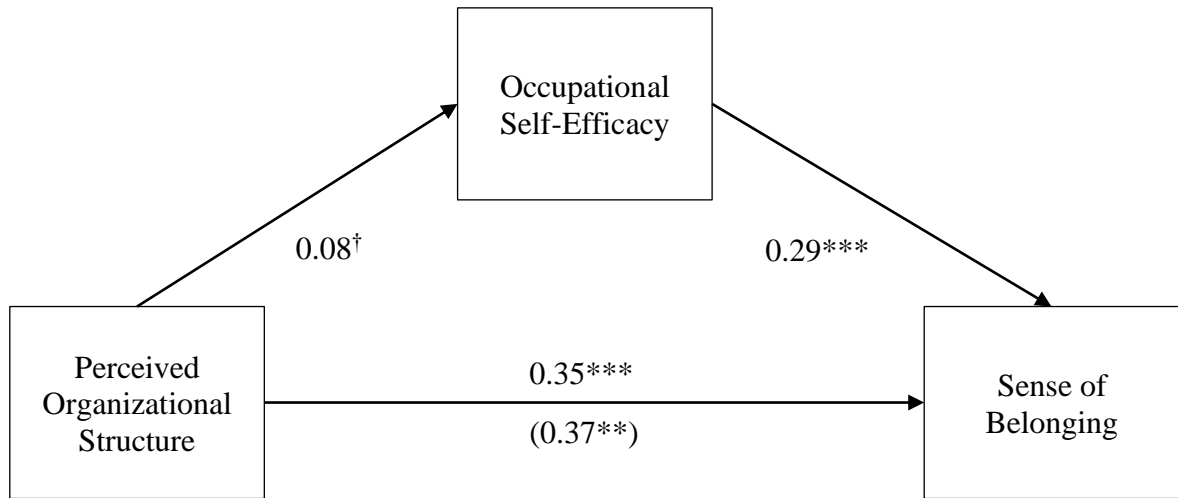
We tested the proposed mediational model where perceived organizational structure at veterans’ current employer predicted sense of belonging, mediated through occupational self-efficacy. Ordinary least squared regression was used. We first regressed sense of



belonging on perceived organizational structure (mean-centered) controlling for age (0 = over 50 years old, 1 = under 50 years old), gender (0 = male, 1 = non-male), and race (0 = White/Caucasian, 1 = non- White/Caucasian). There was a significant main effect of perceived structure,  $\beta = 0.37$ ,  $b = 0.38$ ,  $SE = 0.04$ ,  $t(492) = 8.93$ ,  $p < 0.001$ , 95% CI for  $b = [0.29, 0.46]$ . Participants who perceived greater structure in their current employer reported a greater sense of belonging in their workplace. Second, we regressed occupational self-efficacy on perceived organizational structure (mean-centered; with the same covariates as in the previous analysis). There was a marginally significant main effect of perceived structure,  $\beta = 0.08$ ,  $b = 0.04$ ,  $SE = 0.02$ ,  $t(492) = 1.84$ ,  $p = 0.07$ , 95% CI for  $b = [-0.003, 0.09]$ . Participants who perceived greater structure in their current employer reported feeling greater efficacy in their work. Finally, we regressed sense of belonging on occupational self-efficacy (with the same covariates as in the previous analyses). There was a significant main effect of self-efficacy,  $\beta = 0.29$ ,  $b = 0.54$ ,  $SE = 0.08$ ,  $t(492) = 6.51$ ,  $p < 0.001$ , 95% CI for  $b = [0.38, 0.70]$ .

A bootstrap confidence interval (based on 5,000 samples) for the standardized indirect effect,  $\beta = 0.02$ ,  $SE = 0.01$ , did not include zero, 95% CI for  $\beta = [0.001, 0.06]$ , providing evidence consistent with the proposed mediation model. Perceived organizational structure is associated with sense of belonging partially as a result of its relationship with occupational self-efficacy. However, even after controlling for occupational self-efficacy, there remained a significant (though reduced) direct association between perceived organizational structure and belonging,  $\beta = 0.35$ ,  $b = 0.35$ ,  $SE = 0.04$ ,  $t(491) = 8.72$ ,  $p < 0.001$ , 95% CI for  $b = [0.27, 0.43]$ . See Figure 3 for a visual depiction of the model.

**Figure 3**



*Note.* Path coefficients are standardized regression coefficients. The total effect relating perceived organizational structure to belonging is shown in parentheses. The model also included age, gender, and race as covariates. \*\*\* $p < 0.001$ , † $0.05 < p < 0.10$

### ***C. Discussion***

Study 2 demonstrated positive associations between veterans' perceived structure in their current civilian organization and sense of belonging as well as occupational efficacy. Study 2 additionally provides evidence consistent with the hypothesized mediational relationship, finding that perceived structure at veterans' current organization is associated with greater occupational self-efficacy, which in turn promotes a greater sense of belonging. These results suggest that providing a structured work environment to veterans, who have been socialized to expect continued structure in their employment, past their initial transition to a civilian employer continues to be associated with certain beneficial outcomes. Likewise, if structure does not continue to be provided to veterans in their civilian work, this is associated with more detrimental outcomes (reduced belonging and efficacy).

Studies 1 and 2 are both correlational and either retrospective (Studies 1) or cross-sectional (Study 2) in design. Thus, from these studies we cannot make strong claims about whether occupational self-efficacy mediates the relationship between perceived structure and sense of belonging or if sense of belonging mediates the relationship between structure and efficacy. That is, does occupational self-efficacy predict belonging or does belonging predict efficacy? As previously discussed, we theorized that efficacy predicts belonging and not the reverse because during one's transition to a new job, one's social relationships are likely to be more influenced by one's job performance (than the reverse). Despite this speculation, the evidence thus far is limited to support this directional claim. Study 3, a three-year longitudinal study, presents the opportunity to examine the relationship between efficacy and belonging, in a large sample of veterans over time as they exit the military and begin civilian employment. That is, Study 3 can provide the ability to test for the directionality of the relationship between efficacy and belonging during veterans' transition to civilian employment. This longitudinal dataset has previously been used in a variety of investigations related to veterans' transition to civilian work, including explorations of the effectiveness of employment program content on job attainment and advancement (Perkins et al., 2019, 2022; Morgan et al., 2022; also see Morgan et al., 2018; Richardson et al., 2019; and Vogt et al., 2018, 2019).

#### **IV. Study 3**

In Study 3 (preregistration available at [https://aspredicted.org/F37\\_FSG](https://aspredicted.org/F37_FSG)), we focus on the two outcomes of efficacy and belonging and examine their relationship with each other using a three-year longitudinal design. As previously discussed, we predict that a new employee's sense of belonging at an organization will depend on their job performance and

thus their feeling of self-efficacy in their work. The current study tests the directionality of this relationship by tracking veterans' occupational self-efficacy and sense of belonging in their civilian work. We hypothesize that veterans' self-efficacy early in their transition (0-3 months after separating from the military) will predict their future belonging at work (6-9 months post separation), while controlling for baseline levels of belonging. In an exploratory analysis of the persistence of the observed effects, we also investigate the relationship between efficacy and belonging beyond veterans' initial transition to civilian work by assessing that relationship over veterans' first two and a half years at a civilian employer.

#### ***A. Method***

Study 3 received Institutional Review Board approval from Pennsylvania State University.

##### **1. Participants**

A sub-sample of 2,964 U.S. military veterans was used from The Veterans Metrics Initiative (TVMI) database (see Table 1 for sample demographics). In order to be included in the current analyses, participants had to have complete data for our key variables and had not changed organizations between waves one and two of data collection. These inclusion criteria were required to ensure occupational efficacy and belonging were not unduly influenced by additional employment transitions past participants' initial transition to civilian work. Data was collected between 2016 and 2019. This sample size of 2,964 participants provided 80% power for detecting an effect ( $r$ ) as small as 0.05. All participants were compensated with a \$5 pre-incentive in cash and a \$20 Amazon.com gift card at the completion of the survey at Wave 1 of data collection. Gift card amounts increased by \$5 for every wave of thereafter (\$25 at Wave 2, \$30 at Wave 3, etc.).

## 2. Measures

Consenting participants completed an online survey examining “Veterans’ experiences as they transition from military to civilian life.” This survey was initially given to veterans within three months of their separation from the military. Participants were then given an opportunity to complete the survey five additional times with six-month intervals between each opportunity (see Table 2 for data collection timeline). Our confirmatory analysis was conducted on data collected during wave one and two of data collection, while our exploratory analysis uses data from all six waves of data collection. Participants were asked about their “primary work” over the initial three months post discharge or the previous six months between surveys. Because Study 3 is an analysis of an existing data set, the measures of efficacy and belonging differed from the prior studies (which also provides an opportunity to generalize the findings).

**Table 2**  
*Timeline of TVMI Data Collection*

Time Sense Military Discharge	Data Collection Wave
0-3 Months	Wave 1
6-9 Months	Wave 2
12-15 Months	Wave 3
18-21 Months	Wave 4
25-27 Months	Wave 5
31-33 Months	Wave 6

*Note.* Timeline of The Veterans Metrics Initiative data collection.

### a. Occupational Self-Efficacy

Participants’ sense of being efficacious at their new work was measured using four items. Participants were asked “Over the last 3 [6] months, please indicate how often you

completed your work when expected. (for example, attending work regularly, completing tasks on time),” “Over the last 3 [6] months, please indicate how often the quality of your work was excellent,” “Over the last 3 [6] months, how satisfied have you been with your ability to advance your vocational goals in your current role,” and “Over the last 3 [6] months, how satisfied have you been with your ability to apply your skills and knowledge to your work.” All items were measured on a 1 (*Never/Very dissatisfied*) to 5 (*Most or all of the time/Very satisfied*). The scores of the four items were averaged to generate a composite, see Table 3 for descriptive statistics and reliability measures.

b. Sense of Belonging

Participants’ sense of belonging at their new place of work was measured using three items. Participants were asked “Over the last 3 [6] months, please indicate how often you maintained positive relationships with others in your work setting. (for example, avoiding conflict when possible, being patient with coworkers),” “Over the last 3 [6] months, how satisfied have you been with how much your work contributions are valued,” and “Over the last 3 [6] months, how satisfied have you been with your work environment (for example, people you work with, work setting).” All items were measured on a 1 (*Never/Very dissatisfied*) to 5 (*Most or all of the time/Very satisfied*). The scores of the three items were averaged to generate a composite, see Table 3 for descriptive statistics and reliability measures.

c. Paygrade

Service member paygrade corresponds to a participants’ specific rank. Participants indicated their paygrade on their last day of military service using the following options: “E1-E4,” “E5-E6,” “E7-E9,” “W1-W5,” “O1-O3,” and “O4-O7+.” “E” indicates an enlisted

rank, “W” indicates a warrant officer rank, and “O” indicates an officer rank. Higher numbers indicate higher rank within each grouping (enlisted, warrant officer, or officer).

**Table 3**  
*Descriptive Statistics & Reliability of Measures Across Waves*

	Occupational Self-Efficacy			Sense of Belonging		
	<i>M</i>	<i>SD</i>	$\alpha$	<i>M</i>	<i>SD</i>	$\alpha$
Wave 1 (Confirmatory)	4.50	0.59	0.70	4.45	0.65	0.70
Wave 1 (Exploratory)	4.57	0.54	0.70	4.55	0.59	0.69
Wave 2 (Confirmatory)	4.32	0.64	0.71	4.17	0.75	0.67
Wave 2 (Exploratory)	4.43	0.57	0.72	4.30	0.66	0.67
Wave 3 (Exploratory)	4.37	0.59	0.72	4.30	0.72	0.75
Wave 4 (Exploratory)	4.40	0.60	0.71	4.33	0.70	0.73
Wave 5 (Exploratory)	4.36	0.61	0.70	4.26	0.73	0.73
Wave 6 (Exploratory)	4.35	0.62	0.72	4.26	0.73	0.74

*Note.* All measures used a 1-5 scale. Confirmatory statistics describe the sample of participants who did not change jobs between waves one and two ( $N = 2,964$ ). Exploratory statistics describe the sample of participants who did not change jobs between waves one and six ( $N = 936$ ).

### ***B. Results***

#### 1. Confirmatory Analysis: Wave 1 Efficacy Predicts Wave 2 Belonging

We first examined whether participants’ feelings of self-efficacy at the beginning of their civilian work predicts their sense of belonging at work six months later. We conducted a hierarchical linear regression to examine whether self-efficacy at wave 1 predicts belonging at wave 2, controlling for wave 1 belonging. We entered mean-centered occupational self-efficacy at wave 1 as the predictors at Step 1. Wave 1 sense of belonging was added at Step 2. Finally, age, gender, race, military branch, and paygrade were added at

Step 3 as covariates. Sense of belonging at wave 2 was entered as the outcome variable. From Step 3, even after controlling for wave 1 belonging, as well as the other covariates, self-efficacy at time 1 remained a significant predictor of belonging at wave 2,  $\beta = 0.18$ ,  $b = 0.23$ ,  $SE = 0.03$ ,  $t(2945) = 7.29$ ,  $p < 0.001$ , 95% CI for  $b = [0.17, 0.29]$ . Feeling greater efficacy in one's new civilian work predicts greater feelings of belonging at work six months later.

## 2. Exploratory Long-Term Analysis: Random Intercept Cross-Lagged Panel Model

To explore the reciprocal relationship between occupational self-efficacy and sense of belonging throughout veterans' transition to civilian employment, we used a random-intercept cross-lagged panel model (RI-CLPM; see Mulder & Hamaker, 2021; Hamaker et al., 2015). This modeling approach includes both cross-lagged coefficients between time points and autoregressive coefficients. The cross-lagged coefficients indicate how differences between participants' relative score on one variable at one time point predicts differences between participants on a second variable at a subsequent time point. As an example, in the present study a positive cross-lagged path from self-efficacy at wave 1 to belonging at wave 2 would indicate that participants with higher-than-average occupational self-efficacy at wave 1 would be predicted to have a greater sense of belonging at work at wave 2, controlling for differences in belonging at wave 1<sup>3</sup>. To aid in comparing between time points, our interpretation focuses on standardized regression coefficients. Additionally, the sample was further reduced to 936 participants for this analysis as participants were required to have not changed jobs at any time after their initial transition to work after leaving the military. When specifying our structural model, we freely estimated all structural

---

<sup>3</sup> Age, gender, and race were not included as covariates in this analysis.

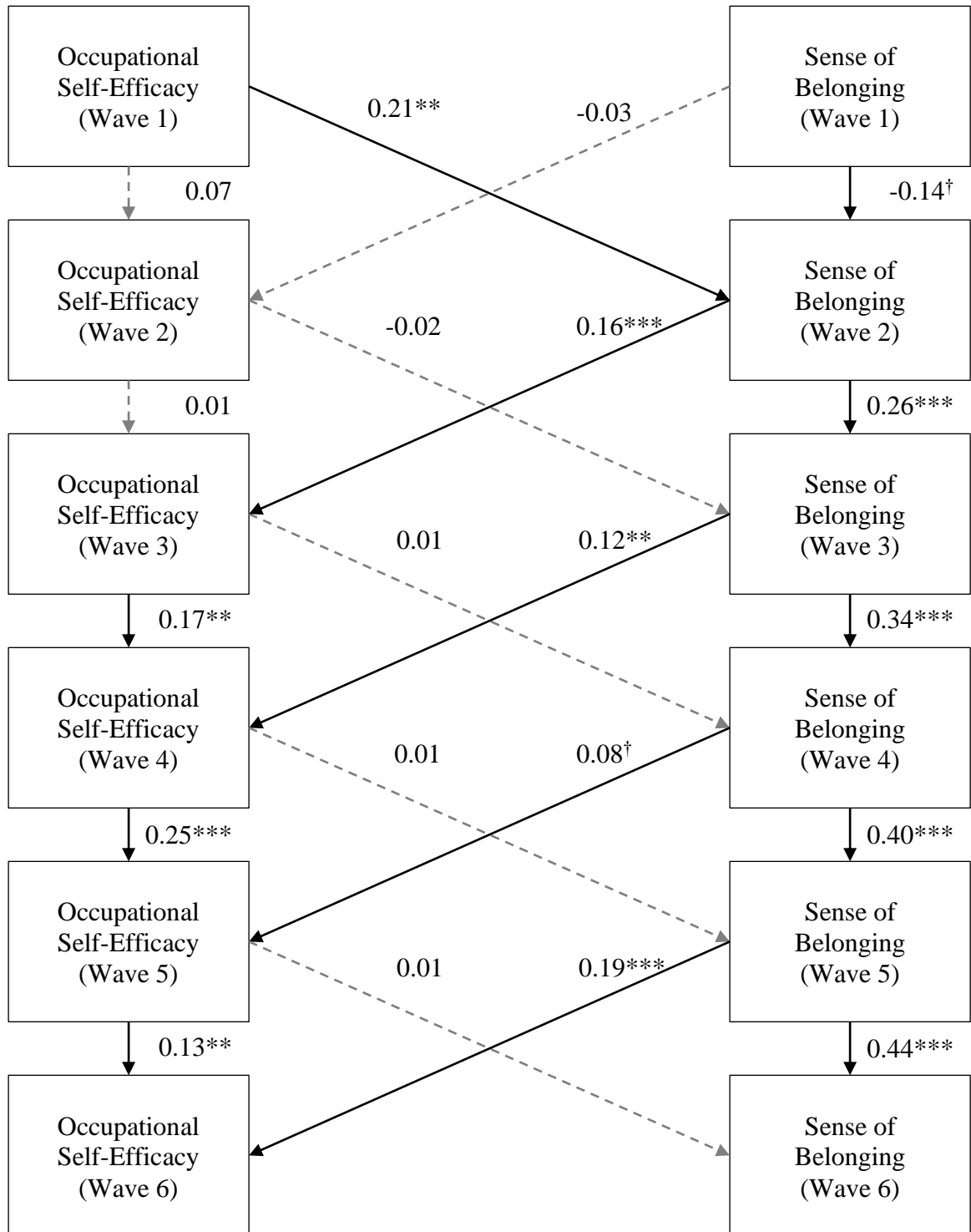


coefficients and used maximum likelihood estimation. The model reached reasonable levels of fit in line with standard recommendations,  $\chi^2(37, 936) = 184.27, p < 0.001, CFI = 0.98, TLI = 0.97, RMSEA = 0.065, SRMR = 0.067$  (Hu & Bentler, 1999; Braun et al., 2021).

Figure 4 presents standardized regression coefficients from the six waves of data collection. Key to the current investigation, and converging with the previous analysis, participants with higher-than-average occupational self-efficacy at wave 1 were predicted to have higher sense of belonging at work at wave 2. However, sense of belonging at wave 1 was not significantly predictive of wave 2 self-efficacy. These results are in line with the theorized directionality of self-efficacy leading to belonging during employment transition.

Interestingly, analyses reveal that this pattern reverses beyond wave 2. All other self-efficacy to belonging cross-lagged coefficients are nonsignificant while the belonging to self-efficacy coefficients are significant (or marginally significant in the case of wave 4 to wave 5). This suggests that after wave 2 (6-9 months after separating from the military), and having established one's initial level of competence and self-efficacy in the workplace, having a greater sense of belonging at work predicts greater future occupational self-efficacy among veterans and not the reverse.

**Figure 5**



*Note.* Visually simplified random intercept cross-lagged panel model. Path coefficients are standardized regression coefficients. \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , † $0.05 < p < 0.10$

### *C. Discussion*

Study 3 draws on a three-year longitudinal study among veterans transitioning out of the military. It thus avoids some of the retrospective issues in Studies 1 and 2 and provides a unique data set that has yielded important insights in other research on the effectiveness of employment program content on job attainment and advancement (Perkins et al., 2019, 2022; Morgan et al., 2022). For the present purposes, Study 3 provides evidence consistent with our theorizing; at the beginning of veterans' transition to civilian employment, greater self-efficacy in one's work predicts future belonging at work. Likewise, a lack of efficacy in one's work predicts less belonging in the future. Yet, and importantly for the mediational pathways we hypothesized, the reverse relationship did not hold – initial belonging did not predict efficacy at work.<sup>4</sup>

Study 3 additionally suggests an interesting time course to the relationship between efficacy and belonging. After an initial period of adjustment to one's new civilian work environment, the relationship between efficacy and belonging changed. During veterans' transition to civilian employment, it appears that their sense of belonging is partially influenced by their belief that they can perform well in their new job. However, after some time has passed and the veterans have potentially integrated themselves and adjusted to their new work environment, efficacy in their work is no longer a significant predictor of belonging. In fact, belonging becomes a significant predictor of occupational self-efficacy. We speculate that this may be the case because after one has demonstrated their ability to do

---

<sup>4</sup> It is important to acknowledge the criteria used for including participants in the analyses of Study 3 may have biased our final sample given the length of time participants would have needed to remain with their same civilian employer after military separation (see Supplemental Table 2 for a comparison of full and sub-sample demographics).

their job well and earned the respect of their colleagues, one's sense of belonging at an organization may be less driven by work performance. Additionally, if an individual feels a strong sense of belonging to their work community after transitioning, this may motivate them to want to perform their job well (increasing efficacy), in a manner consistent with belonging interventions that promote success in work and school (Walton & Cohen, 2007, 2011). By contrast, if one does not feel like they belong at an organization after transitioning (after a period of time), this may demotivate them from wanting to perform well at their job (decreased efficacy).

Together these findings provide support for the theorized directional relationship between efficacy and belonging during employment transitions. These results additionally provide insight into the relationship between occupational outcomes beyond employees' initial transition period. It is important to note that Study 3 did not assess perceived structure due to the constraints of the data set. Thus, while it is useful to understand the relationship between the key outcome variables of efficacy and belonging, it did not advance knowledge of how structure influences these outcomes. In Study 4, we experimentally investigate the role of perceived structure in predicting these transition outcomes.

## **V. Study 4**

Studies 1 and 2 explored the correlational relationship between structure, efficacy, and belonging in the workplace. Study 3 investigated the directionality of the relationship between efficacy and belonging, longitudinally. Each of these studies focused on the value of perceived structure during transitions, as we theorized that employees' subjective construal of greater structure at work would lead to more positive transition outcomes. Now, in Study 4 (preregistration available at [https://aspredicted.org/Y5S\\_2CW](https://aspredicted.org/Y5S_2CW)), we attempted to

simulate the employment transition experience by asking participants to think about a potential new work environment using an experimental design. We then assessed how participants anticipate their level of efficacy and belonging would be at this new work environment as a function of the new job that emphasizes structure (vs. does not emphasize structure). We hypothesized that participants would report greater anticipated occupational self-efficacy and sense of belonging in the job when it emphasizes greater structure. Likewise, we hypothesized that military veterans would report greater efficacy and belonging after reading the job description that emphasizes structure (vs. does not emphasize structure) compared to civilians.

### ***A. Method***

#### **1. Participants**

An international sample of 200 military veterans were recruited from Prolific (172) and through snowball sampling on LinkedIn<sup>5</sup> (28) and 200 civilians were recruited using Prolific (see Table 1 for sample demographics and nationality information). No data was examined prior to the completion of data collection. Our final sample size provided 80% power for detecting an effect ( $r$ ) as small as 0.14. Participants recruited through Prolific were compensated between \$3.25 and \$5.00 for their participation while participants recruited through snowball sampling were not compensated, that is, they participated as volunteers.

#### **2. Measures**

Consenting participants completed an online survey examining “factors that may influence how people view different job opportunities and experiences.” To keep the survey

---

<sup>5</sup> We turned to LinkedIn when it became difficult to obtain the desired sample size from Prolific.

concrete and engaging, and to remind participants what organization they were evaluating, participants provided the initials of their current civilian employer. Likewise, civilian participants were asked to provide the initials of the school/university they most recently attended. These initials were used to personalize the wording of some items.

Following this, participants were given a series of writing prompts where they were asked to reflect on their previous experiences in the military or in the education system. Veterans responded to “Please describe your job in the military” and “Please describe your favorite memory of being in the military.” These questions were intended to remind veteran participants of their veteran status. Civilians responded to “Please describe any academic activities at [YY; Participant Provided School/University Initials]” and “Please describe your favorite memory of being at YY.”

a. Perceived Organizational Structure Manipulation

Next, all participants were asked to imagine they were starting a new job at “Company GC,” a fictitious company participants were told was in a different industry from that of their current employer. Participants were then randomly assigned to read one of two welcome emails from their supposed new manager. One email was designed to emphasize the structured nature of the fictitious new job, saying “You will be expected to facilitate communication between the client and GC, answer questions the client may have, and help to ensure that we are meeting the client's expectations. This is in keeping with the service-delivery nature of our company.” The other condition’s description was designed to not emphasize structure, saying “As this is a new client, we are not entirely certain what you can expect this job to entail. There are no specific expectations for your role at this point. This is

in keeping with the free-flowing nature of our company.” These emails were used to manipulate participants perception of structure in this fictitious job.

b. Occupational Self-Efficacy

Next, participants reported their anticipated sense of efficacy in the job using three-items adapted from the short form Occupational Self-Efficacy Scale (Rigotti et al., 2008). The three items were: “I can handle whatever comes my way in this job at Company GC.,” “I would be able to remain calm when facing difficulties in this job at Company GC because I can rely on my abilities,” and, “I feel prepared for my occupational future at Company GC.” All items were measured on seven-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scores of the three items were averaged to generate a composite,  $M = 5.19$ ,  $SD = 1.25$ ,  $\alpha = 0.87$ .

c. Sense of Belonging

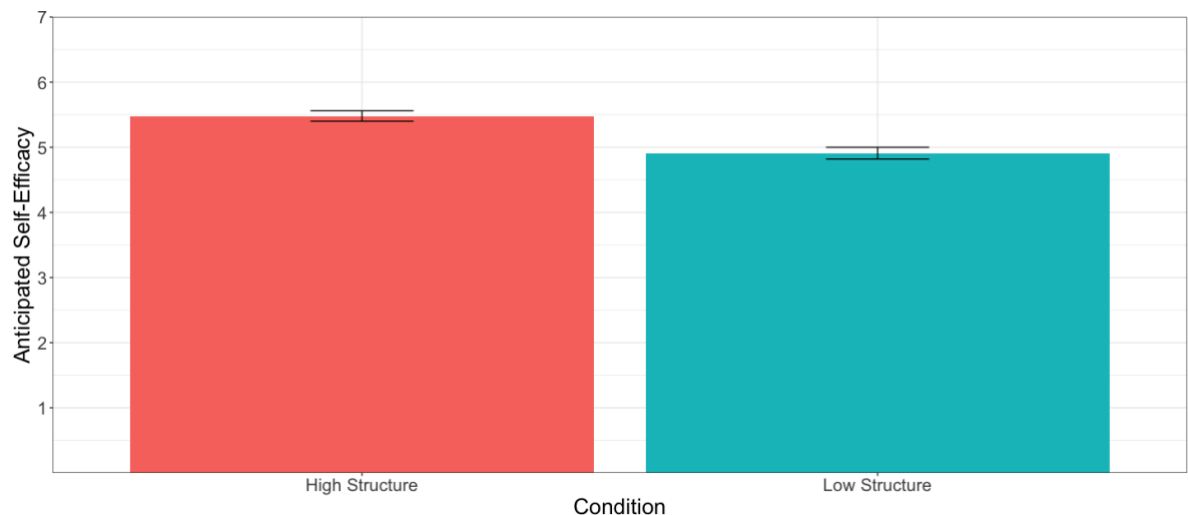
Then, participants reported their anticipated sense of belonging at the fictitious company using a three-items adapted from the Sense of Social and Academic Fit scale (Walton & Cohen, 2007). The three items were “I would feel like I belong at Company GC,” “I would fit in well at Company GC,” and “I would feel comfortable at Company GC.” All three items were measured on seven-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scores of the three items were averaged to generate a composite,  $M = 4.63$ ,  $SD = 1.29$ ,  $\alpha = 0.93$ .

**B. Results**

To test if anticipating working at a more (vs. less) structured job leads to greater anticipated efficacy and belonging at that job, and if this relationship is stronger for military veterans, a two-way multivariate analysis of variance (MANOVA) was conducted.

Experimental condition and veteran status were used to predict anticipated occupational self-efficacy and sense of belonging. While results of the MANOVA reveal a non-significant interaction between condition and veteran status,  $F(2, 396) = 2.30, p = 0.102$ , it did indicate significant main effects of both condition,  $F(2, 396) = 12.99, p < 0.001$ , and veteran status,  $F(2, 396) = 26.47, p < 0.001$ , using Pillai Test Statistic for  $F$  approximation. A follow-up ANOVA revealed significant main effects of both condition,  $F(1, 396) = 24.13, p < 0.001, \eta^2 = 0.051$ , and veteran status,  $F(1, 396) = 40.62, p < 0.001, \eta^2 = 0.087$  on anticipated efficacy. Participants in the high structure condition anticipated greater efficacy at the fictitious company compared to those in the low structure condition, see Figure 6, while veteran participants overall anticipated greater efficacy at the fictitious company compared to civilian participants, see Figure 7.

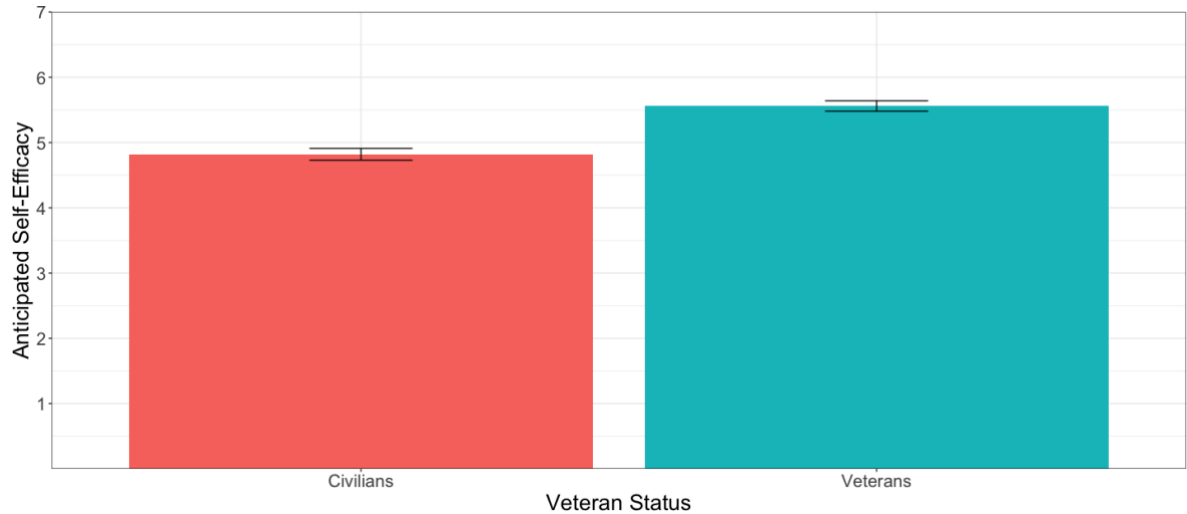
**Figure 6**



*Note.* Error bars represent one standard error.



**Figure 7**



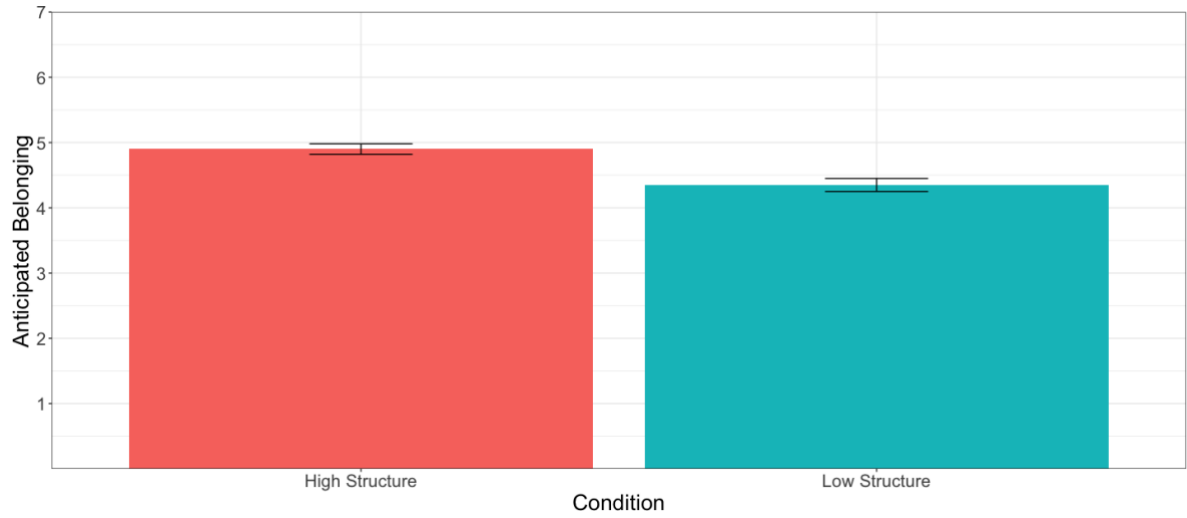
*Note.* Error bars represent one standard error.

A follow-up ANOVA revealed a significant main effect of condition,  $F(1, 396) = 19.30$ ,  $p < 0.001$ ,  $\eta^2 = 0.046$ , and a marginally significant main effect of veteran status,  $F(1, 396) = 3.43$ ,  $p = 0.065$ ,  $\eta^2 = 0.008$ , on anticipated belonging. Participants in the high structure condition anticipated greater belonging at the fictitious company compared to those in the low structure condition, see Figure 8, while veteran participants overall anticipated marginally greater belonging at the fictitious company compared to civilian participants, see Figure 9.<sup>6</sup>

---

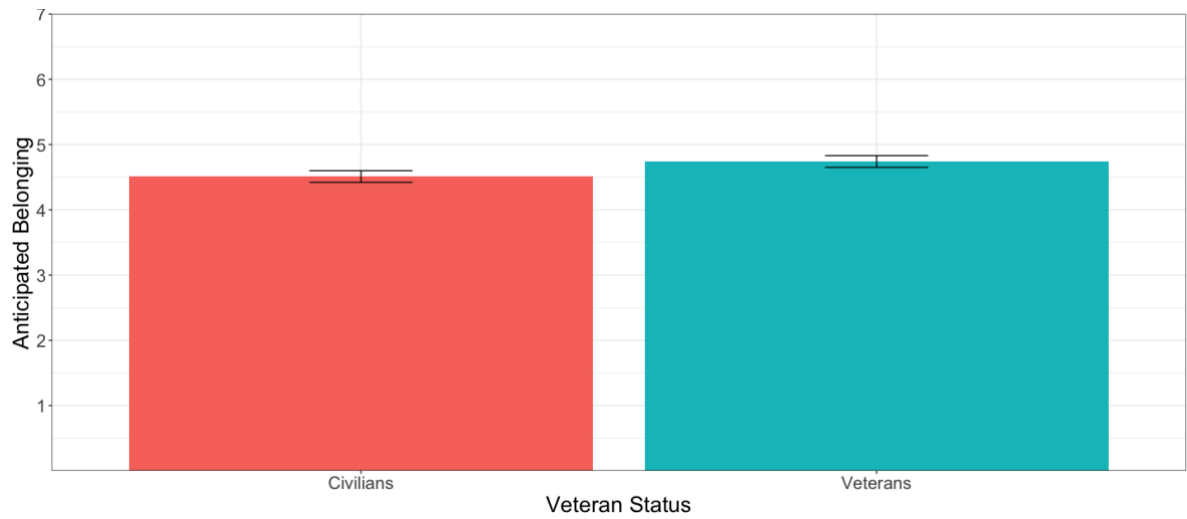
<sup>6</sup> All results remain significant after controlling for perceived job freedom, company warmth, company competence, as well as demographics such as age, gender, race, and country participants were from. See Study 4 Supplemental Analyses in supplemental materials for a complete reporting of these results.

**Figure 8**



*Note.* Error bars represent one standard error.

**Figure 9**



*Note.* Error bars represent one standard error.

### ***C. Discussion***

Study 4 expanded on the correlational findings of Studies 1 and 2 by experimentally investigating the specific role of *perceived* organizational structure in supporting the

development of key employment outcomes by manipulating participants' perceptions of structure at a hypothetical new job. In line with our theory and predictions, participants in the high structure condition reported significantly greater anticipated efficacy and belonging in the hypothetical job compared to those in the low structure condition.

Counter to our hypothesis, we also observed that the high structure condition seemed to be slightly more impactful for increasing civilians' anticipated efficacy compared to veterans. One possibility is that this may have been the result of a ceiling effect among the veteran sample. That is, there was a significant main effect of veteran status on both efficacy and belonging such that veterans, collapsing across experimental condition, reported greater anticipated efficacy and belonging compared to civilians. Thus, the effect of the experimental condition may have been constrained by the veterans' overall higher levels of efficacy.

Why might veterans have had higher overall anticipated efficacy and belonging than civilians? There are several possible reasons. First, while the veteran sample was predominantly from both the U.S. and United Kingdom (U.K.; 58.0% from the U.S., 40.5% from the U.K., 0.5% from another country), the civilian sample was predominantly from only the U.K (90.0% from the U.K., 3.0% from the U.S., 7.0% from another country). It's possible this difference may have contributed to the higher level of anticipated efficacy and belonging among the veteran participants, though the main effect of veteran status persisted despite controlling for the country from which participants were sampled. An alternative explanation may be linked to the amount of time the veterans in our sample have spent out of military service. Our sample of veterans have spent, on average, 12.79 years ( $SD = 11.03$ ) out of service. As such, it's likely these veterans have gone through at least one, if not

several, career transitions. This experience of having gone through previous transitions may have taught these veterans that despite the challenges they may face, they will eventually be successful. This may have resulted in the veterans reporting higher anticipated efficacy and belonging overall, because of their previous experience and success with employment transitions.

Despite the veteran status main effect findings, Study 4 clearly provides evidence of perceived employment structure causing anticipated efficacy and belonging during a career transition. We conducted a second experimental study (see Supplemental Study 2) among veterans ( $N = 209$ ) and civilians ( $N = 200$ ) intended to test the causal relationship between perceived structure and transition outcomes. Although this study has inferential limitations which we note in the supplemental materials, it showed that manipulating participants to perceive their current employer as more highly structured increased reported occupational self-efficacy and sense of belonging.

## **VI. General Discussion**

Drawing from compensatory control theory (Kay et al., 2008, 2009; Landau et al., 2015), we sought to investigate how structure provided by an employer, as perceived by the employee, could help compensate for the uncertainty involved in employment transitions, leading to improved transition outcomes in the form of occupational self-efficacy and sense of belonging, especially among transitioning military veterans. Using correlational designs, Studies 1 and 2 provide evidence that perceiving greater structure at one's new employer is associated with greater self-efficacy which, in turn, is associated with greater belonging. Study 3, using a longitudinal design, provides additional evidence for the directionality of the relationship between efficacy and belonging during employment transition. Finally,

using an experimental design, Study 4 provides evidence that perceiving greater structure in one's new work environment facilitates increased feelings of occupational self-efficacy and sense of belonging.

### ***A. Expanding Social Psychology's Contribution to Military & Veteran Spaces***

In recent years there have been increasing calls for social psychologists and organizational behavior researchers to apply their theoretical knowledge to the context of veterans' transition to, and experiences in, civilian contexts as a means of helping to tackle important applied issues while testing theories in novel ways (Shepherd et al., 2021). The present research represents one effort to do so through a multifaceted exploration of veterans' transition to civilian employment. We investigated veterans' transition longitudinally from immediately after separation from service to several years post-service. We also tested theory experimentally among international samples of veterans, providing causal evidence for the role perceived employment structure plays in facilitating occupational self-efficacy and sense of belonging during veterans' transition to civilian employment.

Through this multi-faceted exploration of veterans' transition to civilian employment, we were able to provide insight on an important applied issue, and in so doing, examine how compensatory control theory can be applied to understand real world challenges by exploring connections between control compensation processes and transition outcomes.

### ***B. Implications for Compensatory Control Theory***

The present research builds on previous theorizing that applies compensatory control theory (Kay et al., 2008) to the experience of military veterans (Shepherd et al., 2021; Kay

& Gibbs, 2022) and the experience of the workplace (Friesen et al., 2014). The present studies contribute to compensatory control theory in three ways. First, belonging is a central motivating factor in people's lives (Baumeister & Leary, 1995; Gere & MacDonald, 2010), and yet, it has not been considered in relation to models of compensatory control, which are built on the fundamental motive to perceive the world as ordered (Jost, 2018; Lerner, 1980; Presson & Benassi, 1996; Seligman, 1975). The present studies provide initial evidence that variables that compensate for personal control (perceived structure) are related (and in Study 4, causally) to belonging. Given the centrality of belonging to performance and well-being (Walton & Cohen, 2007, 2011, Walton et al., 2012) this is an important theoretical development. Second, CCT research has only recently begun to explore how one's environment shapes control compensation behavior (theoretically in Gibbs et al., 2023; empirically in Ma et al., 2023). Ma et al. (2023) investigated how tight vs loose cultural contexts shape control compensation processes. By focusing on veterans, who have experience in tight cultures (i.e., the military), the present work expands on our understanding of how a structured environment may compensate for low control to promote beneficial outcomes. Finally, CCT research has broadly focused on the phenomena of low control while theorizing about the implicit of specific real-world manifestations of low control. The compensatory control process has rarely been investigated in the context of a specific form of lost control. The present research does this by focusing on life transitions, specifically employment transitions.

### *C. Open Questions & Future Directions*

The present set of studies raise important applied and theoretical questions to understand the experience of workplace transitions in general, and for military veterans in particular.

We briefly highlight a selection of such questions here.

First, while these studies demonstrate the importance of general perceived structure in facilitating positive employment transition outcomes, they do not provide insight into the specific forms of structure that best facilitate these outcomes. The measure of structure used in the current studies combines multiple facets of organizational structure including hierarchy, role responsibilities/routine, and organization policies/rules (Friesen et al., 2014; Wolthuis et al., 2022). Each of these specific forms of structure may contribute to the development of improved transition outcomes in disparate ways. For example, while specification of role responsibilities may be particularly beneficial for developing occupational self-efficacy, clarity surrounding organizational culture and policies may be more beneficial for the development of one's sense of belonging. Likewise, recent theoretical work on CCT has suggested that depending on an individual's cultural worldview, different compensatory responses to low control may be particularly beneficial (Gibbs et al., 2023). As such, it may be the case that the specific form of organizational structure that is most beneficial during employment transitions may vary between populations (e.g., between veterans and civilians). Future research would benefit from investigating the nuanced influence of specific forms of organizational structure on employment outcomes.

Second, the present studies focused specifically on employees' *perception* of structure at their organization and, in Study 4, hypothetical organizations. It was found that

manipulation of perceived structure was sufficient to influence anticipated occupational efficacy and belonging. This research leaves an open question about the role of *actual* structure provided by organizations in facilitating positive employment outcomes. It may be the case that organization structure, separate from perceptions of structure, can lead to improved outcomes. However, it is likely there is an important, yet unexplored, connection between actual structure provided by organizations and employees' subjective construal of structure in facilitating employment outcomes. It may be that actual structure provided by organizations only results in improved transition outcomes for employees to the extent employees recognize the structure provided by an employer. Future work should investigate this interplay between actual and perceived organizational structure and its impact on employment outcomes.

Third, throughout each of the studies presented, a strong relationship between occupational self-efficacy and sense of belonging was observed. Study 3 provided evidence in line with the idea that during veterans' initial transition to civilian employment (i.e., 3-9 months after separation from the military), self-efficacy supports the development of belonging in the workplace. However, Study 3 also provides evidence in line with the idea that after veterans' initial transition (i.e., after 9 months of separation), the relationship between efficacy and belonging changes such that belonging predicts increased occupational self-efficacy. This dynamic relationship between efficacy and belonging through veterans' transition to civilian employment leaves many unanswered questions and deserves further investigation. For example, over time does the relationship between efficacy and belonging become recursive, efficacy leading to belonging, leading to more efficacy? Likewise, might interventions designed to strengthen organizational structure during employment transitions



be paired with interventions designed to secure feelings of belonging to mutually improving workplace efficacy and belonging?

Finally, while the samples used in the present studies provide unique benefits, they also present important limitations. Each sample provided a reasonably diverse sample of military veterans and across studies asked about veterans past, present, and hypothetical future careers. Observing evidence of the theorized relationship between structure, efficacy, and belonging across each of these contexts among diverse samples provides convergent validity to the proposed model. Despite this, our theoretical predicants focus on the employment transition window, and only Study 3 included longitudinal data collection during employment transition, and even then, only among a sample of transitioning veterans. To understand the processes at play during employment transitions more acutely, robust longitudinal studies, measuring both perceived and actual employment structure as well as sampling both transitioning veterans and civilians, should be conducted. Longitudinal data from both veterans and civilians experiencing employment transition would allow for a better understanding of the challenges both groups face, what challenges are unique to each group, and how structure may play a role in improving transition outcomes over time.

#### ***D. Conclusion***

Transitioning to a new job presents significant challenges, especially for individuals who have recently concluded their time serving their country in the military (Schlossberg, 2011; Shepherd et al., 2021). Yet, an organization's onboarding process presents a unique opportunity to intervene and provide resources and support to not only help transitioning employees face the challenges their transitions present, but to also promote greater success in their new jobs. In a recent discussion, the directors of Walmart's military programs shared

insights from their practices around hiring and retaining military veterans, noting the value of an organized onboarding process that communicates important elements of the structure provided by Walmart and employees' specific jobs (Eiler et al., 2021). The research presented in this paper supports this onboarding approach. Across four studies with varying methodologies, we have provided evidence of the important role that organizational structure plays in facilitating occupational self-efficacy and sense of belonging among transitioning employees, focusing on military veterans. As organizations seek to benefit from the unique abilities and skillsets veterans possess, and to improve the transition outcomes of all new hires, the research presented here argues for careful consideration of the structure organizations provide their employees and the benefits this may bring.

## References

1. Ahern, J., Worthen, M., Masters, J., Lippman, S. A., Ozer, E. J., & Moos, R. (2015). The challenges of Afghanistan and Iraq veterans' transition from military to civilian life and approaches to reconnection. *PLoS ONE*, *10*.  
<https://doi.org/10.1371/journal.pone.0128599>
2. Ali, J., & Avison, W. R. (1997). Employment transitions and psychological distress: The contrasting experiences of single and married mothers. *Journal of Health and Social Behavior*, *38*, 345-362. <https://doi.org/10.2307/2955430>
3. Axt, J. R., Landau, M. J., & Kay, A. C. (2020). The psychological appeal of fake-news attributions. *Psychological Science*, *31*, 848-857.  
<https://doi.org/10.1177/0956797620922785>
4. Baldwin, M. L., & Marcus, S. C. (2014). The impact of mental and substance-use disorders on employment transitions. *Health Economics*, *23*, 332-344.  
<https://doi.org/10.1002/hec.2936>
5. Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529. <https://doi.org/10.1037/0033-2909.117.3.497>
6. Bjorklund, P., Daly, A. J., Ambrose, R., & van Es, E. A. (2020). Connections and Capacity: An Exploration of Preservice Teachers' Sense of Belonging, Social Networks, and Self-Efficacy in Three Teacher Education Programs. *AERA Open*.  
<https://doi.org/10.1177/2332858420901496>
7. Boatwright, M., & Roberts, S. (2020). *Veteran opportunity report: Understanding an untapped talent pool*. Retrieved from the LinkedIn website:  
<https://socialimpact.linkedin.com/content/dam/me/linkedinforgood/en-us/resources/veterans/LinkedIn-Veteran-Opportunity-Report.pdf>
8. Boatwright, M., & Roberts, S. (2022). *Women Veteran opportunity report: Understanding women veterans as an overlooked talent pool*. Retrieved from the LinkedIn website:  
<https://socialimpact.linkedin.com/content/dam/me/linkedinforgood/en-us/resources/veterans/Woman-Veteran-Opportunity-Report.pdf>
9. Borus, J. F. (1975). The reentry transition of the Vietnam veteran. *Armed Forces & Society*, *2*(1), 97-114. <https://doi.org/10.1177/0095327X7500200107>
10. Braun, L., Göllner, R., Rieger, S., Trautwein, U., & Spengler, M. (2021). How state and trait versions of self-esteem and depressive symptoms affect their interplay: A longitudinal experimental investigation. *Journal of Personality and Social Psychology*, *120*(1), 206-225. <https://doi.org/10.1037/pspp0000295>

11. Brockner, J. & Sherman, D. K. (2019). Wise interventions in organizations. *Research in Organizational Behavior*, 29, 100-135. <https://doi.org/10.1016/j.riob.2020.100125>
12. Çetin, F. & Aşkun, D. (2018). The effect of occupational self-efficacy on work performance through intrinsic work motivation. *Management Research Review*, 41, 186-201. <https://doi.org/10.1108/MRR-03-2017-0062>
13. Coll, J. E., Weiss, E. L., Yarvis, J. S., & Oh, H. (2011). No one leaves unchanged: Insights for civilian mental health care professionals into the military experience and culture. *Social Work in Health Care*, 50(7), 487-500. <https://doi.org/10.1080/00981389.2010.528727>
14. Cooper, L., Caddick, N., Godier, L., Cooper, A., & Fossey, M. (2016). Transition from military into civilian life: An exploration of cultural competence. *Armed Forces & Society*, 44, 156-177. <https://doi.org/10.1177/0095327X16675965>
15. Dexter, J. C. (2020). Human resources challenges of military to civilian employment transitions. *The Career Development International*, 25(5), 481-500. <https://doi.org/10.1108/CDI-02-2019-0032>
16. Ehrhart, M. G., & Klein, K. J. (2001). Predicting followers' preferences for charismatic leadership: The influence of follower values and personality. *The Leadership Quarterly*, 12, 153-179. [https://doi.org/10.1016/S1048-9843\(01\)00074-1](https://doi.org/10.1016/S1048-9843(01)00074-1)
17. Eiler, S., Nygren, R., Olivarez, S., & Profit, G. M. (2021). Veteran hiring and retention. In N. D. Alinspan & K. N. Saboe (Eds.), *Military veteran employment* (pp. 171-188). Oxford University Press, New York, NY. <https://doi.org/10.1093/OSO/9780190642983.003.0009>
18. Friesen, J. P., Kay, A. C., Eibach, R. P., & Galinsky, A. D. (2014). Seeking structure in social organization: Compensatory control and the psychological advantages of hierarchy. *Journal of Personality and Social Psychology*, 106, 590-609. <https://doi.org/10.1037/a0035620>
19. Gąsiorowska, A., & Zaleskiewicz, T. (2021). Trading in search of structure: Market relationships as a compensatory control tool. *Journal of Personality and Social Psychology*, 120, 300–334. <https://doi.org/10.1037/pspi0000246>
20. Gere, J., & MacDonald, G. (2010). An update of the empirical case for the need to belong. *The Journal of Individual Psychology*, 66, 93-115.
21. Gibbs, W. C., Kim, H. S., Kay, A. C., & Sherman, D. K. (2023). Who needs control? A cultural perspective on the process of compensatory control. *Social and Personality Psychology Compass*, 17(2), e12722. <https://doi.org/10.1111/spc3.12722>

22. Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93, 108-124. <https://doi.org/10.1037/0021-9010.93.1.108>
23. Grant, A. M., & Gino, F. (2010). A little thanks goes a long way: Explaining why gratitude expressions motivate prosocial behavior. *Journal of Personality and Social Psychology*, 98, 946-955. <https://doi.org/10.1037/a0017935>
24. Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., Bouwsema, M., & Collier, P. (1992). Sense of belonging: A vital mental health concept. *Archives of Psychiatric Nursing*, 6, 172-177. [https://doi.org/10.1016/0883-9417\(92\)90028-H](https://doi.org/10.1016/0883-9417(92)90028-H)
25. Hajjar, R. M. (2014). Emergent Postmodern US Military Culture. *Armed Forces & Society*, 40, 118–145. <https://doi.org/10.1177/0095327X12465261>
26. Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. P. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods*, 20(1), 102-116. <https://doi.org/10.1037/a0038889>
27. Hedley, D., Cai, R., Uljarevic, M., Wilmot, M., Spoor, J. R., Richdale, A., & Dissanayake, C. (2018). Transition to work: Perspectives from the autism spectrum. *Autism*, 22, 528-541. <https://doi.org/10.1177/1362361316687697>
28. Hettich, P. I. (2010). College-to-workplace transitions: Becoming a freshman again. In T. W. Miller (Ed.), *Handbook of stressful transitions across the lifespan; Handbook of stressful transitions across the lifespan* (pp. 87-109, Chapter xxiii, 691 Pages). Springer Science + Business Media, New York, NY. [https://doi.org/10.1007/978-1-4419-0748-6\\_5](https://doi.org/10.1007/978-1-4419-0748-6_5)
29. Hoogeveen, S., Wagenmakers, E., Kay, A. C., & Van Elk, M. (2018). Compensatory control and religious beliefs: a registered replication report across two countries. *Comprehensive Results in Social Psychology*, 3, 240-265. <https://doi.org/10.1080/23743603.2019.1684821>
30. Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
31. Huppert, M. (2017). Employees Share What Gives Them a Sense of Belonging at Work. Retrieved from <https://business.linkedin.com/talent-solutions/blog/company-culture/2017/employees-share-what-gives-them-a-sense-of-belonging-at-work>

32. Jost, J. T. (2018). A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *British Journal of Social Psychology*, 58, 263-314. <https://doi.org/10.1111/bjso.12297>
33. Kay, A. C., Gaucher, D., Napier, J. L., Callan, M. J., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, 95, 18-35. <https://doi.org/10.1037/0022-3514.95.1.18>
34. Kay, A. C., & Gibbs, W. C. (2022). Inequality, military veteran transitions, and beyond: Compensatory control theory and its application to real world social justice problems. *Social Justice Research*, 35, 56-61. <https://doi.org/10.1007/s11211-021-00385-w>
35. Kay, A. C., Laurin, K., Fitzsimons, G. M., & Landau, M. J. (2014). A functional basis for structure-seeking: Exposure to structure promotes willingness to engage in motivated action. *Journal of Experimental Psychology: General*, 143, 486–491. <https://doi.org/10.1037/a0034462>
36. Kay, A. G., Shepherd, S., Blatz, C. W., Chua, S. N., & Galinsky, A. D. (2010). For God (or) country: The hydraulic relation between government instability and belief in religious sources of control. *Journal of Personality and Social Psychology*, 99, 725-739. <https://doi.org/10.1037/a0021140>
37. Kay, A. C., Whitson, J. A., Gaucher, D., & Galinsky, A. D. (2009). Compensatory control: Achieving order through the mind, our institutions, and the heavens. *Current Directions in Psychological Science*, 18, 264-268. <https://doi.org/10.1111/j.1467-8721.2009.01649.x>
38. Keeling, M., Kintzle, S., & Castro, C. A. (2018). Exploring U.S. veterans' post-service employment experiences. *Military Psychology*, 30, 63-69. <https://doi.org/10.1080/08995605.2017.1420976>
39. Keinan, G. (2002). The effects of stress and desire for control on superstitious behavior. *Personality and Social Psychology Bulletin*, 28, 102– 108. <https://doi.org/10.1177/0146167202281009>
40. Ki, M., Kelly, Y., Sacker, A., & Nazroo, J. (2013). Poor health, employment transitions and gender: Evidence from the British Household Panel Survey. *International Journal of Public Health*, 58, 537-546. <https://doi.org/10.1007/s00038-012-0437-y>
41. Kofta, M., Soral, W., & Bilewicz, M. (2020). What breeds conspiracy antisemitism? The role of political uncontrollability and uncertainty in the belief in Jewish

- conspiracy. *Journal of Personality and Social Psychology*, 118, 900-918.  
<https://doi.org/10.1037/pspa0000183>
42. Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person supervisor fit. *Personnel Psychology*, 58, 281–342.  
<https://doi.org/10.1111/peps.2005.58.issue-2>
43. Landau, M. J., Kay, A. C., & Whitson, J. A. (2015). Compensatory control and the appeal of a structured world. *Psychological Bulletin*, 141, 694-722.  
<http://dx.doi.org/10.1037/a0038703>
44. Lerner, M. J. (1980). *The belief in a just world: A fundamental delusion*. Plenum Press, <https://doi.org/10.1007/978-1-4899-0448-5>
45. Liu, E., & Huang, J. (2019). Occupational self-efficacy, organizational commitment, and work engagement. *Social Behavior and Personality: An International Journal*, 47, 1-7. <https://doi.org/10.2224/sbp.8046>
46. Ma, A., Axt, J., & Kay, A. C. (2019). A control-based account of stereotyping. *Journal of Experimental Social Psychology*, 84, 13.  
<https://doi.org/10.1016/j.jesp.2019.103819>
47. Ma, A., Savani, K., Liu, F., Tai, K., & Kay, A. C. (2023). The mutual constitution of culture and psyche: The bidirectional relationship between individuals' perceived control and cultural tightness–looseness. *Journal of Personality and Social Psychology*, 124, 901–916. <https://doi.org/10.1037/pspa0000327>
48. MacLean, A., & Elder, G. H., Jr. (2007). Military service in the life course. *Annual Review of Sociology*, 33, 175-196.  
<https://doi.org/10.1146/annurev.soc.33.040406.131710>
49. Maslow, A. (1954). *Motivation and Personality*. New York: Harper.
50. McGarry, R., Walklate, S., & Mythen, G. (2015). A sociological analysis of military resilience: Opening up the debate. *Armed Forces & Society*, 41(2), 352–378.  
<https://doi.org/10.1177/0095327X13513452>
51. Mobbs, M. C., & Bonanno, G. A. (2018). Beyond war and PTSD: The crucial role of transition stress in the lives of military veterans. *Clinical Psychology Review*, 59, 137-144. <https://doi.org/10.1016/j.cpr.2017.11.007>
52. Moore, B. L. (2017) Introduction to *Armed Forces & Society*: Special issue on women in the military. *Armed Forces & Society*, 43(2). <https://doi.org/10.1177/0095327X17694909>

53. Morgan, N. R., Davenport, K. E., Aronson, K. R., McCarthy, K. J., Bleser, J. A., & Perkins, D. F. (2022). The relationship between veterans' employment program component use and career advancement over time. *Journal of Veterans Studies*, 8(1), 147–163. <http://doi.org/10.21061/jvs.v8i1.281>
54. Morgan, N. R., Davis, K. D., Richardson, C., & Perkins, D. F. (2018). Common components analysis: An adapted approach for evaluating programs. *Evaluation and Program Planning*, 67, 1-9. <https://doi.org/10.1016/j.evalprogplan.2017.10.009>
55. Mulder, J. D., & Hamaker, E. L. (2021). Three extensions of the random intercept cross-lagged panel model. *Structural Equation Modeling*, 28(4), 638-648. <https://doi.org/10.1080/10705511.2020.1784738>
56. Murphy, K. A., Blustein, D. L., Bohlig, A. J., & Platt, M. G. (2010). The college-to-career transition: An exploration of emerging adulthood. *Journal of Counseling & Development*, 88(2), 174-181. <https://doi.org/10.1002/j.1556-6678.2010.tb00006.x>
57. Neuberg, S. L., & Newsom, J. T. (1993). Personal need for structure: Individual differences in the desire for simpler structure. *Journal of Personality and Social Psychology*, 65, 113-131. <https://doi.org/10.1037/0022-3514.65.1.113>
58. O'Keeffe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal*, 47, 605-613.
59. Park, I., Veliz, P. T., Ingersoll-Dayton, B., Struble, L. M., Gallagher, N. A., Hagerty, B. M., & Larson, J. L. (2020). Assisted living residents' sense of belonging and psychosocial outcomes. *Western Journal of Nursing Research*, 42, 805-813. <https://doi.org/10.1177/0193945920906181>
60. Perkins, D. F., Aronson, K. R., Morgan, N. R., Bleser, J. A., Vogt, D., Copeland, L. A., Finley, E. P., & Gilman, C. (2020). Veterans' use of programs and services as they transition to civilian life: Baseline assessment for the veteran metrics initiative. *Journal of Social Service Research*, 46(2), 241-255. <https://doi.org/10.1080/01488376.2018.1546259>
61. Perkins, D. F., Davenport, K. E., Morgan, N. R., Aronson, K. R., Bleser, J. A., McCarthy, K. J., Dawne Vogt, D., Finley, E. P., Copeland, L. A., & Gilman, C. L. (2022). The influence of employment program components upon job attainment during a time of identity and career transition. *International Journal for Educational and Vocational Guidance*. <https://doi.org/10.1007/s10775-022-09527-1>
62. Presson, P. K., & Benassi, V. A. (1996). Illusion of control: A meta-analytic review. *Journal of Social Behavior & Personality*, 11, 493-510.



63. Rausch, M. A. (2014). Contextual career counseling for transitioning military veterans. *Journal of Employment Counseling*, 51(2), 89-96. <https://doi.org/10.1002/j.2161-1920.2014.00044.x>
64. Reitz, A. K., Luhmann, M., Bleidorn, W., & Denissen, J. J. A. (2022). Unraveling the complex relationship between work transitions and self-esteem and life satisfaction. *Journal of Personality and Social Psychology*, 123(3), 597–620. <https://doi.org/10.1037/pspp0000423>
65. Richardson, C. B., Morgan, N. R., Bleser, J. A., Aronson, K. R., & Perkins, D. F. (2019). A novel approach for evaluating programs designed to serve military veterans: Using an adapted common components analysis. *Evaluation and Program Planning*, 72, 145-151. <https://doi.org/10.1093/milmed/usz129>
66. Rigotti, T., Schyns, B., & Mohr, G. (2008). A Short Version of the Occupational Self-Efficacy Scale: Structural and Construct Validity Across Five Countries. *Journal of Career Assessment*, 16, 238–255. <https://doi.org/10.1177/1069072707305763>
67. Schlossberg, N. K. (2011). The challenge of change: The transition model and its applications. *Journal of Employment Counseling*, 48(4), 159-162. <https://doi.org/10.1002/j.2161-1920.2011.tb01102.x>
68. Seligman, M. E. (1975). Helplessness: On depression development and death. In *A series of books in psychology*. WH Freeman.
69. Shepherd, S., Sherman, D. K., MacLean, A., & Kay, A. C. (2021). The challenges of military veterans in their transition to the workplace: A call for integrating basic and applied psychological science. *Perspectives on Psychological Science*. <https://doi.org/10.1177/1745691620953096>
70. Shiffer, C. O., & Maury, R. O. (2015) Military Family Lifestyle Survey Comprehensive Report. *Blue Star Families*. Retrieved from [https://bluestarfam.org/wp-content/uploads/2016/04/bsf\\_2015\\_comprehensive\\_report.pdf](https://bluestarfam.org/wp-content/uploads/2016/04/bsf_2015_comprehensive_report.pdf)
71. Soeters, J. (2018). Organizational Cultures in the Military. In: Caforio, G., Nuciari, M. (Ed.) *Handbook of the Sociology of the Military*. Handbooks of Sociology and Social Research. Springer, Cham. [https://doi.org/10.1007/978-3-319-71602-2\\_13](https://doi.org/10.1007/978-3-319-71602-2_13)
72. Stanley, M. L., & Kay, A. C. (2022). Belief in divine moral authority satisfies the psychological need for structure and increases in the face of perceived injustice. *Journal of Experimental Social Psychology*, 101, 1-14. <https://doi.org/10.1016/j.jesp.2022.104302>

73. Stanley, M. L., Marsh, E. J., & Kay, A. C. (2020). Structure-seeking as a psychological antecedent of beliefs about morality. *Journal of Experimental Psychology: General*, *149*, 1908-1918. <https://doi.org/10.1037/xge0000752>
74. Steinbeck, J. (1957). *East of Eden*. Penguin Books.
75. Thomas, C., Benzeval, M., & Stansfeld, S. A. (2005). Employment transitions and mental health: An analysis from the British household panel survey. *Journal of Epidemiology and Community Health*, *59*, 243-249. <https://doi.org/10.1136/jech.2004.019778>
76. Thomas, C., Benzeval, M., & Stansfeld, S. (2007). Psychological distress after employment transitions: The role of subjective financial position as a mediator. *Journal of Epidemiology and Community Health*, *61*, 48-52. <https://doi.org/10.1136/jech.2005.044206>
77. Thompson, C. A., & Prottas, D. J. (2006). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology*, *11*(1), 100-118. <https://doi.org/10.1037/1076-8998.10.4.100>
78. Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, *7*, 349-361. [https://doi.org/10.1207/s15327957PSPR0704\\_07](https://doi.org/10.1207/s15327957PSPR0704_07)
79. U.S. Department of Labor. (2023) *Transition Assistance Program*. Retrieved from <https://www.dol.gov/agencies/vets/programs/tap#>
80. Vogt, D., Perkins, D. F., Copeland, L. A., Finley, E. P., Jamieson, C. S., Booth, B., Lederer, S., & Gilman, C. L. (2018). The Veterans Metrics Initiative study of US veterans' experiences during their transition from military service. *BMJ Open*, *8*(6), e020734–e020734. <https://doi.org/10.1136/bmjopen-2017-020734>
81. Vogt, D., Taverna, E. C., Nillni, Y. I., Tyrell, F. A., Booth, B., Perkins, D. F., Copeland, L. A., Finley, E. P., & Gilman, C. L. (2019). Development and validation of a tool to assess military veterans' status, functioning, and satisfaction with key aspects of their lives. *Applied Psychology: Health and Well-Being*, *11*(2), 328-349. <https://doi.org/10.1111/aphw.12161>
82. Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, *92*, 82-96. <https://doi.org/10.1037/0022-3514.92.1.82>
83. Walton, G. M., Murphy, M. C., & Ryan, A. M. (2015). Stereotype threat in organizations: Implications for equity and performance. *Annual Review of*

*Organizational Psychology and Organizational Behavior*, 2, 523-550.  
<https://doi.org/10.1146/annurev-orgpsych-032414-111322>

84. Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331, 1447-1451. <https://doi.org/10.1126/science.1198364>
85. Walton, G. M., Cohen, G. L., Cwir, D., & Spencer, S. J. (2012). Mere belonging: The power of social connections. *Journal of Personality and Social Psychology*, 102, 513–532. <https://doi.org/10.1037/a0025731>
86. Wolthuis, F., Hubers, M. D., van Veen, K., & de Vries, S. (2022). The concept of organizational routines and its potential for investigating educational initiatives in practice: A systematic review of the literature. *Review of Educational Research*, 92, 249–287. <https://doi.org/10.3102/00346543211051424>