

Taking a Functional Approach to Volunteering: Explaining Volunteer Congruence and Work
Engagement

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in
partial fulfillment of the requirements for the degree of

Master of Science

In

Psychology

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14th of November, 2024

Blacksburg, VA

Keywords: Volunteer Work, Work Recovery, Work Engagement, Psychological Detachment,
Mastery Experiences

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Abstract

Using the functional approach to volunteering as a basis, I investigated the implications of volunteer motivation congruence (i.e., a match between motivations to volunteer and the satisfaction of those motivations) for work recovery and downstream work engagement. I focused on career and understanding-based volunteer motives and psychological detachment and mastery recovery experiences. This was evaluated using a cross-sectional survey with a sample ($N = 119$) of employees with past volunteering experience. I found that psychological detachment was higher when career motives were greater than career motive satisfaction. Agreement between motives and satisfaction for both career and understanding motivations was also found to be more important than disagreement for predicting mastery experiences. Neither recovery variable (detachment and mastery experiences) was found to predict work engagement. No hypothesized indirect effects of the work recovery variables on the relationship between volunteer congruence and work engagement were supported. Overall, the results show a novel pattern of findings that encourages future research on volunteer motivation congruence and recovery experiences.

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General Audience Abstract

Many American employees also participate in volunteer work outside of their jobs. However, it is important to investigate whether this is beneficial for recovering from work stress since volunteering may be additionally taxing. Within this study, I look at whether a match between a person's motivations to volunteer and the satisfaction of those motivations predicts recovery from work. I additionally look at whether that work recovery subsequently predicts engagement at work. Specifically, I focused on career and understanding-based volunteer motivations. I also focused on the work recovery experiences of psychological detachment from work and mastery experiences. I looked at these relationships using results from 119 participants who took a single survey. I found that psychological detachment was higher when career motives were greater than career motive satisfaction (in other words when the career motives were left unsatisfied). Neither recovery variable (detachment and mastery experiences) was found to predict work engagement.

Acknowledgements

I want to express my gratitude to everyone who has supported me throughout the process of writing this thesis. Thank you to Dr. Calderwood for your guidance throughout this entire process, your advice has been instrumental in being able to complete this project. I also want to thank Dr. Hickman and Dr. Hsu for their help and guidance as my committee members. I couldn't have written this thesis without the help of all three members of my committee. I want to thank my parents and brother who have supported me not only throughout this process but also throughout my entire life. I want to give a special thanks to my close friends Erin Stipulkoski, Lauren Abbitt, and Noah Gil for all the happy moments they have brought to my life. I also want to give a special shoutout to the other members of the WSR Lab Fiyinfunjah Dosumu and Yena Cho for patiently listening to me as I solved problems while working on this thesis and I hope to continue working with them both for many years to come.

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Introduction

According to a relatively recent estimate from the U.S Bureau of Labor Statistics (2016), 24.9% of the U.S. population and 27.2% of employed Americans participate in volunteer activities. Therefore, it is worth studying the consequences of employee volunteering in order to see how it affects these individuals, and the organizations that they work for. Rodell et al. (2016) define employee volunteering as “employed individuals giving time during a planned activity for an external nonprofit or charitable group or organization” (p. 57). In general, volunteering has been found to have positive associations with better self-reported health, lowered risk of depression, and higher levels of work engagement and satisfaction (Pfeffer et al., 2022). However, it is still unknown how the congruence (i.e., match) of motivations to volunteer and satisfaction of those motivations (i.e., whether volunteers got what they wanted out of volunteering) associates with work recovery (the process of recovering from work stressors away from work; Sonnentag & Geurts, 2009) and work engagement (affective-motivational experiences at work characterized by vigor, dedication, and absorption; Schaufeli & Bakker, 2004). I sought to expand upon the evidence that employee volunteering is beneficial to both individuals and their employers by (1) investigating the relationship between volunteering and work recovery and (2) explaining the relationship of volunteering and work engagement through a work recovery lens.

Using the functional approach to volunteering as a theoretical basis (Clary et al., 1998), I examine the relationship between employee volunteering and work engagement. The functional approach to volunteering suggests that people can have different motivations for volunteering, and satisfying those motivations can lead to increased satisfaction with their volunteering experience. Specifically, I look at whether the congruence of volunteering motives and volunteering outcomes (what you want out of volunteering vs. what you get out of volunteering) predicts work

engagement through the recovery experiences of psychological detachment from work (ceasing to mentally and physically engage with work; Sonnentag & Fritz, 2007) and mastery experiences (participating in learning and skill development activities outside of work; Sonnentag & Fritz, 2007). Psychological detachment from work and mastery experiences are the points of emphasis in my theorizing because I posit that these specific recovery experiences are particularly likely to be involved when employees volunteer to fulfill needs left unfulfilled by their primary job.

This Master's thesis contributes to the literature on volunteering by synthesizing the functional approach to volunteering with work recovery theorizing. Volunteering is one of many activities that employees can participate in outside of work. However, unlike some other activities performed during leisure time, volunteer work can be demanding itself (Kinzel & Nanson, 2000; Mojza et al., 2010) and therefore it is important to investigate how volunteering can relate to work recovery because of the possibility that volunteer work could introduce additional stressors or further tax a volunteer's cognitive and energetic resources. In line with this reasoning, Mojza et al. (2010) suggested that either the type of activity or the perception of the activity could affect volunteering's relationship with work recovery experiences. By looking at this relationship through the functional approach to volunteering (Clary et al., 1998), I investigate whether the congruence of volunteering motivation with volunteering outcomes predicts whether volunteering will lead to recovery experiences (i.e., psychological detachment and mastery) that support work engagement. Work recovery has been shown to predict work engagement (e.g., Kühnel et al., 2009; Park et al., 2021), which would theoretically connect volunteering and work engagement as well since volunteering is expected to be connected with work recovery within my developed theoretical framing.

In addition, no previous studies have looked at the relationships between volunteer motivations, work recovery, and work engagement through a congruence lens. Congruence of volunteer motivations and motive satisfaction has been used to predict various outcomes including burnout (Morse et al., 2020), as well as satisfaction with volunteer work, positive and negative emotions, and intentions to continue volunteering (Stukas et al., 2009). However, congruence of volunteer motivations has not been used to predict work engagement. By approaching the relationship between volunteering and work engagement through a congruence lens, I aim to further expand understanding of how and when volunteer motivation congruence, work recovery experiences, and work engagement relate together. This congruence approach advances the literature by providing knowledge of situations in which volunteering promotes recovery experiences and work engagement.

While previous work has looked at interrelationships of volunteering, work engagement, and work recovery in a piecemeal fashion (e.g., Mojza et al., 2010; Caligiuri et al., 2013; Sonnentag, 2003), to date researchers have not investigated the overarching connections underpinning these relationships. Understanding how these constructs are interrelated will help provide a more complete understanding of the benefits of volunteering. This has practical implications as it can lead to employees being better able to choose volunteer roles that will be beneficial to them. Specifically, I look at whether the recovery experiences of psychological detachment and mastery experiences mediate the relationship between volunteer congruence and work engagement.

In the study reported in this thesis, I specifically focus on the volunteer congruence of the career and understanding functions of volunteering. Career functions refer to the motivation to volunteer in order to benefit one's career (Clary et al., 1998). Understanding functions refer to the

motivation to volunteer in order to learn more about the world and gain new skills and abilities (Clary et al., 1998). I focus on these functions as they are more relevant to the employment context than the other functions (values, social, protective, and enhancement) included within the volunteer functions framework, which are described later. The career function is the most directly related to the employment context as volunteers are motivated to volunteer to support their career within the scope of this volunteer function. In the understanding function, the knowledge and skills that a volunteer could be motivated to gain could help them at work as well. As the reported study is focused on employed volunteers and the benefits volunteering has on their work experiences, the relevance to the employment context is important. The proposed model of these relationships between volunteer congruence of motives and work engagement can be seen in Figure 1.

In this thesis, I will first introduce relevant concepts (the functional approach to volunteering, work recovery, and work engagement) in the literature review. I will then develop the justification for the hypotheses explaining the interrelationships of the congruence of volunteer motivations, work recovery experiences, and work engagement. Finally, I will describe the study conducted to test these relationships and then discuss its results.

Literature Review

The Functional Approach to Volunteering

One of the central ideas of functionalism refers to the notion that different people can perform the same behavior for different reasons (Clary et al., 1998). The functional approach to volunteering adapts this concept to volunteering by proposing that people can volunteer for different reasons. Clary et al. (1998) identified six motivational functions of volunteering. The values function refers to altruistic concerns. The career function refers to when volunteering is done to benefit one's career. The understanding function refers to the desire to gain knowledge

about the world as well as skill development. The social function refers to when there is social pressure to help. The protective function refers to reducing one's guilt and own personal problems. The enhancement function refers to improving one's self-esteem. These functions are intended to generally apply to all types of volunteer activities, though it is possible that people who participate in specific volunteer activities may have additional motives to volunteer specific to those activities (e.g., Omoto & Snyder, 1995). The functional approach to volunteering states that volunteers' abilities to satisfy their personal goals or motivations for volunteering is important, and that people will be more satisfied with their volunteer work and will be more likely to keep volunteering when their goals are met (Clary et al., 1998).

Clary et al. (1998) focused on the implications of the functional approach to volunteering for volunteer recruitment. Except for the social function, these authors found that participants responded most favorably to volunteer recruitment brochures that were targeted towards volunteer motivations the participants rated as most important to them. They also found that participants that perceived that their motivations to volunteer were met by their volunteer experience were more satisfied with their volunteer experience and more likely to continue volunteering. Morse et al. (2020) provide an illustrative example of a study that evaluated the congruence between volunteer motivations and the satisfaction of those motivations. Specifically, these authors looked at whether congruence predicted burnout symptoms of volunteers. These authors found that congruence of motivations only predicted less burnout for the understanding and value functions. They also found that participants who had low motivation for enhancement and social functions, but reported high satisfaction of those functions, showed less burnout than participants who showed congruence for the enhancement and social functions.

I investigate the volunteer congruence of the career and understanding functions specifically in the following study. I focus on the career function due to its relevance to employed volunteers, and the potential likelihood that this function will therefore be associated with subsequent work behaviors. Based on the mean values of importance reported in past empirical studies, the career function is not typically seen as the most important motivation for employed volunteers (e.g., 2.94 on a 7-point scale; Zappalà & McLaren, 2004). However, I am still focusing on this function because motivations related to one's career are expected to have more relevance to downstream work engagement relative to other potential functions. The understanding function is being investigated because of its relevance to skill building, which is also relevant to the skill building aspect of mastery experiences, therefore potentially drawing connection between this aspect of volunteering and this particular recovery experience. The skills that are developed within volunteer experiences may also be utilized at the workplace, which also makes the understanding function of volunteering more relevant to the context of employment than other motivational functions of volunteering. Additionally, the understanding function has consistently been viewed as one of the most important volunteer motivations for employed volunteers (e.g., Breitsohl & Ehrig, 2017; Zappalà & McLaren, 2004), with the understanding function typically ranking as the second most important volunteering motives function behind the values function.

While employed volunteers may still be motivated to volunteer by the other four functions of volunteering (values, social, protective, and enhancement), to constrain the focus of the project, I am focusing on the career and understanding functions because of the more direct relevance to the employment context that is the focus of this study. I intend to expand the functional approach to the domain of work recovery, positing that the congruence between volunteers' personal

motivations, specifically career and understanding motivations, for volunteering and the satisfaction of those motivations may promote work recovery.

Work Recovery

Work recovery occurs when an employee regains resources that have been lost while at work (Sonnentag & Zijlstra, 2006), leading to a reduction of physical and psychological strain. Resources are defined by Hobfoll (1989) as "...objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (p. 516). Within the work recovery literature, the Effort-Recovery Model (Meijman & Mulder, 1998) states that employees use up their resources when expending effort (i.e., at work) in response to work stressors, and that these resources can be restored once the work stressors that caused the resources to be used up are no longer being experienced. The processes of losing and gaining resources within the Effort-Recovery Model parallels the resource loss and gain processes from Conservation of Resources Theory (Hobfoll, 1989), which states that people will try to both maintain and increase their resources, but experience stress when those resources are lost and unable to be replenished.

Based on a synthesis of these two theories, Sonnentag and Fritz (2007) identified four recovery experiences: (1) psychological detachment from work, (2) mastery experiences, (3) control, and (4) relaxation. Being psychologically detached from work involves no longer working and no longer thinking about work. Mastery experiences refers to participating in activities outside of work that can provide learning opportunities which leads to the development of new resources. Control refers to being able to choose what actions to take during leisure time. Relaxation is a state of low activation and increased positive affect (Stone et al., 1995). Each of these recovery

experiences has been found to be relevant to work well-being criteria, such as work engagement, across numerous empirical studies (Kühnel et al., 2009; Park et al., 2021; Headrick et al., 2022).

In the following studies, I will be focusing on the recovery experiences of psychological detachment from work and mastery experiences. As relaxation is associated with low activation (Stone et al., 1995), it is unlikely to be relevant to volunteering. More specifically, following Rodell et al.'s (2016) definition of employee volunteering, employee volunteers are “giving time during a planned activity” (p.57), which means the volunteer should be actively participating in some sort of helping activity and therefore is unlikely to experience relaxation while volunteering. Additionally, as mentioned by Mojza et al. (2011), specific tasks during the volunteer experience may involve different levels of control or obligation to perform them, but employees still have control in ultimately deciding whether to spend their leisure time volunteering, despite potential structural and temporal demands of volunteering. Therefore, control is less likely to be relevant to volunteering¹. In contrast, there has been previous empirical support relating psychological detachment from work and mastery experiences to both volunteering (e.g., Mojza et al., 2010; Mojza et al., 2011) and work engagement (e.g., Headrick et al., 2022) that may usefully be considered through a congruence lens, which I elaborate on below.

Psychological Detachment from Work

Psychological detachment from work involves being physically away from work and ceasing to think about work (Sonnentag & Fritz, 2007). There is support for the idea that many employees choose to volunteer in order to fulfill their needs that have not been met by their primary

¹ There is existing literature on involuntary volunteerism, also known as mandatory volunteerism or “voluntolding,” where individuals feel pressured to participate in volunteer experiences since they perceive it as mandatory (e.g., Stukas et al., 1999). Employees may feel pressured to participate in volunteer experiences sponsored by their place of work (e.g., Zappalà & McLaren, 2004), undermining their perceptions of control. However, I focus on non-organizationally sponsored volunteering, so this is outside the scope of this study.

jobs (e.g., Grant, 2012; Rodell, et al., 2016). Fulfilling needs while volunteering that have not been met by their work may allow the volunteer to then stop thinking about these needs. This therefore allows them to psychologically detach from work because they would no longer be ruminating over the lack of fulfillment of their needs at work so that they can more strongly disengage from thinking about work. Because employees' motivations to volunteer may be based on fulfilling these unfulfilled needs, I predict that higher congruence between Clary et al.'s (1998) motives of volunteering and the satisfaction of these motives for the understanding and career functions positively predicts higher psychological detachment from work.

While volunteer congruence has yet to be investigated in relation to psychological detachment, there is more general evidence to link aspects relevant to volunteering to psychological detachment. The empirical evidence to support this idea has been mixed, as Mojza et al. (2010) found that the time spent on volunteer work activities was positively related to both mastery experiences and community experiences, but not with psychological detachment from work. These authors reason that different volunteer work activities may be more conducive to psychological detachment than others, and that workers who perform volunteer work that is related to their jobs may be less able to psychologically detach from their work. However, Mojza et al. (2011) did find that psychological detachment from work positively related to the amount of time spent volunteering in a day-level study, where participants completed two surveys daily (one after work, one before going to bed). Therefore, the relationship between volunteering and psychological detachment warrants further study, and has the potential to be better understood through the volunteer congruence lens developed in this thesis.

Mastery Experiences

Mastery experiences occur when an employee challenges themselves and learns new skills in an area that is different from their work. Similar to psychological detachment from work, employees may volunteer in order to fulfill their needs to develop and gain skills that they are unable to fulfill at work (e.g., Grant, 2012; Rodell, et al., 2016), leading to these mastery experiences. Similar to the logic outlined for psychological detachment, because employees' motivations to volunteer may be based on these unfulfilled needs, I predict that higher congruence between an employee's motives to volunteer and the satisfaction of these motives for the understanding and career functions predicts higher mastery experiences.

As with psychological detachment from work, volunteer congruence has yet to be investigated in relation to mastery experiences, but there is more general evidence to link aspects relevant to volunteering to mastery experiences. As previously mentioned, Mojza et al. (2010) found that the time spent on volunteer work activities was positively related to mastery experiences. Mastery experiences were also positively related to the time spent volunteering in a day-level study where participants completed a survey after work and a survey before bed each day (Mojza et al., 2011). As prior research has indicated that there is a relationship between volunteering efforts and mastery experiences, it is expected that there will also be a relationship for the related concept of congruence of volunteer motivations and mastery experiences.

Following the above reasoning regarding the potential relevance of volunteer congruence to the specific recovery experiences of psychological detachment and mastery, I propose that:

Hypothesis 1: Volunteer congruence of the career function will be positively related to (a) psychological detachment from work and (b) mastery experiences.

Hypothesis 2: Volunteer congruence of the understanding function will be positively related to (a) psychological detachment from work and (b) mastery experiences.

Work Engagement

Work engagement is defined by Schaufeli and Bakker (2004) as an employee having positive affective-motivational experiences at work marked by vigor, dedication, and absorption. Vigor refers to having high energy and investing that energy into work. Dedication refers to enthusiasm for and feeling inspired by work. Absorption refers to fully immersing oneself within work. Another conceptualization of work engagement was developed by Kahn (1990). This view placed more emphasis on how engagement was about personal investment into a role. I draw arguments from both perspectives of work engagement, though the overall focus is on work engagement as an affective-motivational experience as conceptualized by Schaufeli and Bakker (2004).

Work engagement has been associated with positive outcomes such as reduced turnover intentions (Schaufeli & Bakker, 2004), job satisfaction, and mental well-being (Pfeffer et al., 2022). There has also been evidence that too much work engagement can have negative implications. For example, Halbesleben et al. (2009) found a positive relationship between work engagement and work interference with family. Dolan et al. (2012) provide a useful review of past findings demonstrating that work engagement is associated with negative consequences including burnout. However, Shimazu et al. (2018) found that high work engagement did not have any negative relations with job performance and was only negatively related to psychological distress in the short-term. Halbesleben (2010) also found that work engagement has been associated with better performance, more commitment, and reduced turnover intention. In general, despite some of these mixed findings regarding its consequences, work engagement is seen as being positively relevant to employee well-being (e.g., Sonnentag, 2003; Demerouti et al., 2001).

Sonnentag (2003) explored how recovery in general (rather than more specific recovery experiences) relate to all three components of work engagement. She argued that recovery is related to vigor as recovered individuals will be more able to put in effort and also be more resilient in the face of stressors. She also suggested that recovery is related to dedication because recovered individuals will have the resources to dedicate themselves to their work. Finally, Sonnentag also argued in initial exploration of the implications of recovery for work engagement that recovery is related to absorption because recovered individuals will be better able to immerse oneself in their work since they will be able to concentrate. I suggest that satisfying one's motivations to volunteer will allow the volunteer to recover from work through the recovery experiences of psychological detachment from work and mastery experiences. This recovery will in turn predict the volunteer's ability to be able to return to work with increased vigor, dedication, and absorption, such that the recovery experiences will mediate the relationship between congruence of volunteer motivations and work engagement. Headrick et al.'s (2022) found in a meta-analysis that mastery experiences (as well as relaxation and, to a lesser extent, control) were positively linked to work engagement, which provides evidence that this specific recovery experience is related to work engagement. However, psychological detachment from work was negatively linked to work engagement in the meta-analysis. In the following paragraph, I elaborate on why I still predict that psychological detachment from work will be positively related to work engagement despite this finding.

Psychological detachment from work could help the volunteer replenish their lost resources and therefore let them return to work with increased energy for work engagement. The reasoning for this idea of there being a relationship between psychological detachment from work and work engagement comes from Kahn's (1990) identification of utilizing physical, psychological, and emotional resources as a requirement for work engagement. As the resources used at work can be

recovered by no longer using those same resources according to the Effort-Recovery Model (Meijman & Mulder, 1998), psychological detachment would lead to a recovery of those psychological resources needed for work engagement. As noted, Headrick et al.'s (2022) meta-analysis did not support a positive relationship between psychological detachment from work and work engagement. However, the authors acknowledged that this could be a result of statistical artifacts since psychological detachment from work was found to be highly interrelated with the other recovery experiences. They also suggested that the relationship between psychological detachment from work and work engagement could be a curvilinear one. Additionally, psychological detachment from work was positively related to work engagement at the day-level in the meta-analysis. This suggests that more research on the relationship between psychological detachment from work and work engagement is justified. Despite the results observed by Headrick et al. (2022), I still predict that there will be a positive relationship between psychological detachment from work and work engagement based on the theoretical foundations of these variables present in the recovery literature and evidence of complexities in understanding their relationship in past empirical research.

Hypothesis 3: Psychological detachment from work will be positively related to work engagement.

Mastery experiences could also help the volunteer build up new resources that allows them to return to work with increased energy for increased work engagement. Mastery experiences have been shown to be positively associated with work engagement. For example, Park et al. (2021) found mastery experiences to be positively related to all three facets of work engagement (vigor, dedication, and absorption), with the strongest relationship being between mastery experiences and vigor. In post-hoc analyses, Park et al. (2021) also found that the relationship between mastery

experiences and vigor was stronger than the relationships between vigor and the other recovery experiences (psychological detachment from work, control, and relaxation), suggesting mastery experiences are potentially relatively more important for employees' vigor than alternative recovery experiences. Accordingly, I expect that:

Hypothesis 4: Mastery experiences will be positively related to work engagement.

Based on the preceding arguments, volunteer congruence, work recovery, and work engagement could be interrelated, but further investigation of exactly how they are interrelated is necessary. Previous work has shown that there is only a small effect size for the direct effects of volunteering on work engagement (e.g., Pfeffer et al., 2022), therefore looking at how mediator variables connect these constructs could be more appropriate. I predict that the relationship between volunteer congruence and work engagement is mediated by work recovery. Following the functional approach to volunteering, volunteer congruence is theorized to promote the work recovery experiences of psychological detachment from work and mastery experiences. This is because volunteers may be motivated to fulfill needs that are not met by their primary jobs (e.g., Grant, 2012; Rodell, et al., 2016). The fulfillment of these needs not satisfied at work should lead to increased recovery experiences. These recovery experiences then lead to increased work engagement as the building up of resources through recovery required for work engagement will allow employees to return to work with increased energy.

Hypothesis 5: The relationship between volunteer congruence of the career function and work engagement will be mediated by (a) psychological detachment from work and (b) mastery experiences.

Hypothesis 6: The relationship between volunteer congruence of the understanding function and work engagement will be mediated by (a) psychological detachment from work and (b) mastery experiences.

Method

I initially planned to use a four-wave longitudinal study to evaluate my hypotheses. However, major issues with fraudulent participants and a very slow pace of participant recruitment prevented me from being able to effectively implement this design. The initial attempt to use this four-wave methodology to test my hypotheses is described in the appendix as a pilot study. To reduce specific issues which arose in this pilot study, the study procedure was adapted so that the study could be conducted through Prolific, a crowd-sourcing website frequently used for research purposes in the social sciences. In comparison to other crowd-sourcing methods such as using MTurk and Qualtrics, Prolific has been shown to yield higher data quality (e.g., participants had a higher likelihood of passing attention checks, having a unique IP address, following instructions; Douglas et al., 2023)². The study was adapted to include a single time point assessment of all focal variables, given the logistical difficulties in obtaining precise dates of volunteer experiences on Prolific in light of the anonymity of participants' responses and the corresponding restrictions this anonymity entails in terms of interacting directly with individual participants. As a further way to account for this change, I adapted the study measures to focus on not just current volunteer experiences, but also past volunteer experiences, to provide a wider range of volunteer experiences and corresponding timelines that could be considered by participants. Participants were compensated with \$3 for completing the survey. This is a reduction of what was initially proposed to reflect the reduced scope of effort (i.e., one survey instead of four surveys) and to better align

²CloudResearch was also found to have high quality data, but was not used as Prolific yields comparably high quality data and was estimated to be less expensive for the current study.

with typical compensation rates on the Prolific platform (i.e., a \$20 compensation on Prolific would be considered quite large for a single 15-minute survey relative to other opportunities available on the research participation platform).

Sample

One hundred and fifty participants were recruited through Prolific. Prolific was also used to screen participants so that all participants were full-time employees, were fluent in English, resided in the United States, and were not currently a student.³ Participants were excluded from all subsequent analyses if they reported that they had never participated in a volunteer experience before ($n = 13$) or had not volunteered within the past 10 years ($n = 15$). While recall worsens as time goes on (e.g., Clarke et al., 2008), volunteer motivations are considered to be temporally stable (e.g., Breitsohl & Ehrig, 2017; Clary et al., 1998), so a relatively longer duration cut-off point for these retrospective reports is appropriate. The 10-year cut-off was ultimately chosen because it was around this point where participants more frequently started to refer to volunteering as part of a different stage of their life (e.g., when they were in college, when they were at a previous job) and because one participant mentioned not remembering their volunteer experience well at this point. One participant was excluded for survey incompleteness and one participant was removed because although they answered “Yes” when asked whether they volunteered, when asked to describe their volunteer experience they wrote “No current volunteering experiences.” One participant was also removed for a suspected lack of effort due to a combination of leaving the majority of the demographic questions blank and for choosing the same response option for the last three measures of the survey. According to Huang et al. (2012), it is unlikely that a participant would take less than 2 seconds per item when completing a survey. Because of this, a

³Prolific can automatically screen participants using pre-screening qualifiers and does not allow other screening questions that they have not provided to be used within the scope of a single cross-sectional survey.

cut-off of 4.5 minutes was established as a point of suspicion for random responding. If any survey had been completed in less than 4.5 minutes, then that survey would not have been used. However, no participants had to be removed for this reason. The application of these data screening steps resulted in a final sample size of 119 participants⁴. Demographic information about the participants included in the final sample can be viewed in Tables 1 – 2

Measures

Volunteer Functions Inventory and Environmental Affordances

The congruences between the understanding and career volunteer motives and the motive satisfaction for these indicators are the predictor variables for this study. Congruence was measured using the understanding and career subsets of the Volunteer Functions Inventory (VFI; Clary et al., 1998) and the environmental affordances measure from Stukas et al. (2009). The VFI measures motivational functions, and the environmental affordances measure assesses the satisfaction of these same motivational functions. Both the VFI and the environmental affordances measure use a 7-point Likert-type scale.

For the VFI, both the understanding and career functions subscales are 5-item measures, and the response scale ranges from 1 = *not at all accurate* to 7 = *extremely accurate*. A sample item from the career scale is “Volunteering can help me to get my foot in the door at a place where I would like to work,” and from the understanding scale is “Volunteering lets me learn things through direct, hands on experience.” Cronbach’s alpha estimates for the understanding and career functions for this study were $\alpha = 0.79$ and $\alpha = 0.89$, respectively. The 5-item subscales for the other volunteer functions (values, social, protective, and enhancement) were also administered within

⁴The power analysis conducted before the study estimated a sample size of 123 participants would be sufficient to detect an anticipated medium sized effect. A revised power analysis conducted with G*Power (Faul et al., 2009) using the obtained sample size of 119 found the power to be 0.79 for a medium effect size of 0.25, suggesting that the obtained sample size may be very slightly underpowered relative to the proposed sample size.

the survey for exploratory purposes. Cronbach's alpha estimates for the other subscales were $\alpha = 0.85$ (values), $\alpha = 0.86$ (social), $\alpha = 0.84$ (protective), and $\alpha = 0.83$ (enhancement). The validity of this scale was originally established by Clary et al. (1998) using confirmatory and exploratory factor analyses. These authors also cross-validated the measure using samples with both salient and less salient volunteer motivations.

For the environmental affordances measure, both the understanding and career functions subsets are 2-item measures, and the response scale ranges from 1 = *not at all accurate* to 7 = *extremely accurate*. A sample item from the Career subscale is "I made new contacts that might help my business or career," and from the Understanding subscale is "My volunteerism has allowed me to think about my life in new ways." The inter-item correlation for the understanding scale for this study was $r = 0.44$ ⁵ and for the career scale it was $r = 0.63$. As with the VFI, the 2-item subscales for the other volunteer functions (values, social, protective, and enhancement) were also administered within the survey for exploratory purposes. Inter-item correlations were $r = 0.41$ (values), $r = 0.35$ (social), $r = 0.57$ (protective), and $r = 0.81$ (enhancement)⁶. How the measure was originally validated was not reported in detail in the original measure development study, but the measure was developed from the well-validated VFI (Stukas et al. 2009). This measure was chosen despite each subscale only having two items because it was created by some of the same authors as the VFI and was used for a similar purpose as for this study.

Psychological Detachment and Mastery Experiences

⁵Since the inter-item correlation for the understanding scale was on the lower side, a one-factor model was extracted from the scale to examine the factor loadings and make sure that each item loaded on the intended single-extracted factor. The loading for both items were estimated at 0.848.

⁶As there is disagreement over whether Cronbach's alpha estimates or inter-item correlations are more appropriate for a two-item scale (e.g., Eisinga et al., 2012), I include the Cronbach's alpha estimates for the environmental affordances measure here: $\alpha = 0.77$ (career), $\alpha = 0.61$ (understanding), $\alpha = 0.57$ (values), $\alpha = 0.52$ (social), $\alpha = 0.73$ (protective), $\alpha = 0.89$ (enhancement).

Psychological detachment and mastery experiences are modeled as mediator variables in the current study. The 4-item psychological detachment from work subscale and the 4-item mastery experiences subscale of the Recovery Experiences Questionnaire from Sonnentag and Fritz (2007) were used to operationalize these variables. These constructs were measured using a 7-point Likert scale ranging from 1 = *strongly disagree* and 7 = *strongly agree*. A sample item from the psychological detachment from work subscale is “I forget about work” and the Cronbach’s alpha estimate was $\alpha = 0.82$. A sample item from the mastery experiences subscale is “I seek out intellectual challenges” and the Cronbach’s alpha estimate was $\alpha = 0.84$. The subscales for relaxation ($\alpha = 0.90$) and control ($\alpha = 0.87$) over leisure time were also included for exploratory purposes.

Sonnentag and Fritz (2007) found that the Recovery Experiences Questionnaire measure has good construct validity by using a cross-validation approach and by empirically evaluating the nomological network of the constructs encompassed within the measure. These authors also established content validity and that the measure had at least good reliability (except for the calibration sample for mastery experiences which was moderate) when following the internal consistency reliability guidelines from Ponterotto and Ruckdeschel (2007).

Work Engagement

Work engagement is the dependent variable for this study. This construct was measured using the 9-item Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006), which consists of the three subscales of vigor, dedication, and absorption and was developed from the 17-item Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002). The response scale ranges from 1 = *never* to 7 = *always*. A sample item for the vigor scale is “At my work, I feel bursting with energy.” A sample item for the dedication scale is “I am enthusiastic about my job.”

A sample item for the absorption scale is “I feel happy when I am working intensely.” The measure was validated using confirmatory factor analyses and was also shown to have good internal consistency and test-retest reliability (Schaufeli et al., 2006). The Cronbach’s alpha estimated for the full measure in the current study is $\alpha = 0.94$.

Exploratory Measures

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988), the Work-Family Conflict Scale (Carlson et al., 2000), a satisfaction with work–family balance scale (Valcour, 2007), and a subjective job stress scale (Motowidlo et al., 1986) were administered as exploratory measures that could be relevant to volunteering, work recovery, work engagement, or the inter-relationships of these constructs.

The PANAS (Watson et al., 1988) is a 20-item measure and uses a 5-point Likert-type scale ranging from 1 = *very slightly or not at all* to 5 = *extremely*. Cronbach’s alpha estimate for the positive affect scale was $\alpha = 0.92$ and for the negative affect scale was $\alpha = 0.91$.

The Work-Family Conflict Scale (Carlson et al., 2000) is an 18-item measure and uses a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. This measure consists of six 3-item sub-scales: time-based work interference with family ($\alpha = 0.88$), time-based family interference with work ($\alpha = 0.84$), strain-based work interference with family ($\alpha = 0.88$), strain-based family interference with work ($\alpha = 0.87$), behavior-based work interference with family ($\alpha = 0.73$), and behavior-based family interference with work ($\alpha = 0.83$). Carlson et al. (2000) established the measure’s reliability, construct validity, and factor structure invariance.

The satisfaction with work–family balance scale (Valcour, 2007) is a 5-item measure and uses a 5-point Likert scale ranging from 1 = *very dissatisfied* to 5 = *very satisfied*. Cronbach’s alpha was estimated at $\alpha = 0.96$.

The subjective job stress scale (Motowidlo et al., 1986) is a 4-item measure and uses a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Cronbach's alpha was estimated at $\alpha = 0.89$.

Positive affect and negative affect were included in case they could predict different motivations to volunteer. Whether or not someone has children has been found to be related to volunteering. For example, Cornwell and Warburton (2014) found that employees with household children were more likely to volunteer on weekdays. Therefore, the work-family conflict and satisfaction with work-family balance measures were included to potentially further investigate how family dynamics, particularly those related to work, can affect volunteering behavior. Similar to positive and negative affect, subjective job stress was included as an exploratory measure because of the possibility that increased subjective job stress could predict different motivations to volunteer.

Analysis Plan

The data were analyzed using polynomial regression with response surface analysis following the guidelines set by Shanock et al. (2010). Analyses were conducted in MPlus Version 8.7 (Muthén & Muthén, 1998 – 2017) from congruence analysis syntax adapted from Su et al. (2019). Separate analyses were computed for the congruence of the career and understanding functions as predictors of psychological detachment from work and mastery experiences. The exploratory variables (positive affect, negative affect, work-family conflict, satisfaction with work-family balance, subjective job stress) that could covary with at least one of the focal variables were used as statistical controls. It is also possible that someone who is currently volunteering would have different and/or stronger motivations to volunteer than someone who has stopped volunteering, so whether someone was an active volunteer at the time of the study was also

controlled for. To statistically control for these variables, in a first step, the control variables were entered before entering the terms for the polynomial regression analysis in the next step. To interpret the results, the response surface was graphed three-dimensionally, and the surface test values were considered. The response surface pattern was created using the slope and curvature of two lines. The congruence line represents when the two predictor variables (the career or understanding motivations and motive satisfaction) are in agreement, while the incongruence line represents when the two predictors are in disagreement. In combination, the congruence and incongruence lines reflect situations of fit and misfit, respectively, between the volunteer motive and satisfaction variables.

The polynomial regression equation for each analyzed congruence variable as a predictor of a given recovery experience is: $Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e$. Z represents the outcome variable (detachment or mastery experiences), X represents the VFI score, and Y represents the EA scores. b_1 represents the unstandardized regression coefficient for the VFI score, b_2 represents the unstandardized regression coefficient for the environmental affordances score, b_3 represents the unstandardized regression coefficient for the centered VFI scores squared, b_4 represents the unstandardized regression coefficient for the cross-product of the centered environmental affordances and centered VFI scores, and b_5 represents the unstandardized regression coefficient for the centered environmental affordances score squared. The surface test values are a_1 , a_2 , a_3 , and a_4 . a_1 , which is the congruence slope, is equal to $b_1 + b_2$. a_2 , which is the congruence curvature, is equal to $b_3 + b_4 + b_5$. a_3 , which is the incongruence slope, is equal to $b_1 - b_2$. a_4 , which is the incongruence curvature, is equal to $b_3 - b_4 + b_5$ (Shanock et al., 2010). The scores on the VFI and environmental affordance measures were grand-mean centered prior to entry in the polynomial regression equation, following recommendations from Nestler et al. (2019).

If a_1 is significant, there is a linear relationship along the line of congruence as it relates to the outcome variable (either psychological detachment from work or mastery experiences). If a_2 is significant, then the relationship along the line of congruence is nonlinear. A significant negative a_3 means that when the VFI score is lower than the environmental affordances score, the work recovery experience in question (psychological detachment or mastery) is higher. A significant positive a_3 means that when the VFI score is higher than the environmental affordances score, the work recovery experience is higher. A significant negative a_4 means that as discrepancy between the VFI score and environmental affordances score increases, the work recovery experience in question decreases, while a significant positive a_4 means that as the discrepancy increases, the work recovery experience in question increases. I expected to find a significant positive a_1 and a significant negative a_4 for each of the hypothesized relations between volunteer motivation congruence and recovery experiences. I made no specific predictions about the direction of discrepancy (a_3), but investigated the nature of these discrepancies for exploratory purposes. Based on my theorizing, I further expected that these hypothesized relationships will be linear (e.g., a nonsignificant a_2), rather than non-linear. Table 3 shows how support for each of my hypotheses was evaluated using the response surface terms.

The mediation analysis to evaluate whether psychological detachment from work and mastery experiences mediate the relationship between volunteer motivation congruence and work engagement was conducted using the block variable approach (Edwards & Cable, 2009). Using this method, a block variable was created by multiplying the polynomial coefficients of the VFI score and the environmental affordances score by the raw data (i.e., solving the polynomial regression equation for the predicted score of each participant on the recovery experience in question). The polynomial regression was then recomputed to obtain the regression coefficient for

the block variable, which was used as the path coefficient in the computation of the indirect effect. This path coefficient was then multiplied by the path from the mediators (psychological detachment from work or mastery experiences) to work engagement to obtain the estimated indirect effect. A bias-corrected bootstrapped confidence interval was used to interpret the statistical significance of the estimated indirect effect coefficients (MacKinnon et al., 2004).

Results

Bivariate Correlations

The correlation matrix can be seen in Table 4. Some notable findings from an examination of these bivariate correlations are that nearly all the volunteer motives are positively correlated with each other, except for the career motive and values motive measures of which there was no evidence that these functions were correlated. The satisfaction of the volunteer motives measures were also all positively correlated with one another. All of the work-family conflict subscales were also inter-correlated.

If any of the exploratory variables were to correlate with any of the focal variables (career motives, career motive satisfaction, understanding motive, understanding motive satisfaction, mastery experiences, detachment, work engagement), I had planned to use that variable as a statistical control in the subsequent analyses. Because each exploratory variable did correlate with at least one of the study focal variables, each of the measured exploratory variables was included as a statistical control.

Career Motivation Congruence

For congruence to positively predict work recovery, each of the polynomial regressions equations would need to yield a statistically significant positive congruence slope (a_1) and a

statistically significant negative incongruence curvature (a_4) coefficient. The full results of each of the polynomial regression analyses can be seen in Tables 5 – 8.

For the polynomial regression for career motivation congruence and psychological detachment, neither the congruence slope ($a_1 = -0.051, p = 0.530$), nor the incongruence curvature ($a_4 = -0.019, p = 0.941$), were statistically significant. Therefore, Hypothesis 1a was not supported. However, the incongruence slope was statistically significant ($a_3 = 0.486, p = 0.020$). This indicates that, for the career motive of volunteering, while neither the agreement nor disagreement between the career motivation and satisfaction of this motive was observed to relate to detachment linearly, psychological detachment was higher when the career motive was higher than the satisfaction of this motive. The congruence curvature was not statistically significant, so there is no evidence of a nonlinear relationship across the line of congruence for this relationship ($a_2 = 0.016, p = 0.711$). The response surface graph for career motivation congruence and psychological detachment can be seen in Figure 2. I note that, when looking just at individual predictors, career motive satisfaction negatively co-varied with psychological detachment ($B = -0.268, p = 0.015$). These findings are suggestive of the possibility that satisfying career motives through volunteering may be harmful to psychological detachment from work.

For the polynomial regression for career motivation congruence and mastery experiences, the congruence slope was statistically significant ($a_1 = 0.149, p = 0.035$), but the incongruence curvature was not ($a_4 = 0.064, p = 0.803$). This indicates that while mastery experiences increased as the agreement between the career motive and motive satisfaction increased, I did not have evidence to suggest that disagreement between the career motive and motive satisfaction related to mastery experiences. Therefore, Hypothesis 1b was partially supported, as congruence between career motivation and career motivation satisfaction associated with higher mastery experiences,

but there was no evidence that an incongruence between this motivation and motivation satisfaction co-varied with reduced mastery experiences. The congruence curvature was not statistically significant, meaning there is no evidence of a nonlinear relationship ($a_2 = -0.043, p = 0.332$). The incongruence slope was also not statistically significant ($a_3 = 0.273, p = 0.138$), thus there is no indication in the data that the direction of discrepancy between career motives and career motive satisfaction predicts mastery experiences. The response surface graph for career motivation congruence and mastery experiences can be seen in Figure 3.

Based on the response surface analysis (Figure 3) for career congruence and mastery experiences, I suspected that there may be a curvilinear relationship between career motivation satisfaction and mastery experiences. However, there was no evidence of this when tested with a hierarchical multiple regression (R^2 Change = 0.006, $p = 0.358$).

Understanding Motivation Congruence

For the polynomial regression for understanding motivation congruence and psychological detachment, neither the congruence slope ($a_1 = -0.084, p = 0.569$) nor the incongruence curvature ($a_4 = 0.205, p = 0.517$) were statistically significant. Hypothesis 2a was thus not supported. There was no indication in the data of a nonlinear relationship along the line of agreement ($a_2 = -0.140, p = 0.158$). The incongruence slope was also not statistically significant ($a_3 = 0.058, p = 0.842$), so there was also no evidence that the direction of discrepancy between the understanding motive and understanding motive satisfaction associates with psychological detachment from work. The response surface graph for understanding motivation congruence and psychological detachment can be seen in Figure 4.

For the polynomial regression for understanding motivation congruence and mastery experiences, the congruence slope was statistically significant ($a_1 = 0.312, p = 0.038$), but the

incongruence curvature was not ($a_4 = -0.234, p = 0.432$). This indicates that while mastery experiences increased as the agreement between the understanding motive and motive satisfaction increased, there was no evidence that disagreement between the understanding motives and motive satisfaction related to mastery experiences. This means that Hypothesis 2b was partially supported. The congruence curvature was not statistically significant, meaning there is no indication of a nonlinear relationship linking understanding motivation congruence to mastery experiences ($a_2 = 0.063, p = 0.588$). The incongruence slope was also not statistically significant ($a_3 = -0.004, p = 0.985$), meaning that there is no evidence that the direction of discrepancy between the understanding motive and understanding motive satisfaction relates to mastery experiences. The response surface graph for understanding motivation congruence and mastery experiences can be seen in Figure 5.

Mediation Test Results

The full results of the mediation models can be seen in Tables 9 – 12. To evaluate Hypotheses 3 and 4, the results from these mediation models were examined in line with the block variable approach⁷. The block variables (referred to as “congruence block” in Tables 9 – 12) were calculated by solving the polynomial regression equation for the predicted recovery experience score of each participant. The block variable encompasses all of the surface test values, and because of this the direct path from the block variable cannot be interpreted in a straightforward fashion. There was no evidence that psychological detachment predicted work engagement in either the career congruence model ($B = -0.109, p = 0.24$) or the understanding congruence model

⁷These relationships were additionally tested using linear regression. When no statistical controls were used, for psychological detachment, there was no evidence that detachment predicted work engagement ($B = 0.057, p = 0.51$). There was evidence that mastery experiences predicted work engagement when no statistical controls were used ($B = 0.390, p < 0.01$). However, this relationship between mastery experiences and work engagement did not hold up with the statistical controls included ($B = 0.073, p = 0.42$).

($B = -0.135, p = 0.13$), meaning that there was no support for Hypothesis 3. I also did not observe mastery experiences to predict work engagement in the career congruence model ($B = 0.125, p = 0.20$) or the understanding congruence model ($B = 0.106, p = 0.30$), so Hypothesis 4 was unsupported.

To evaluate Hypotheses 5 and 6, the block variable mediation approach was used. There was no evidence of an indirect effect of career motive congruence on work engagement through psychological detachment ($B = -0.108, p = 0.30, 95\% C.I. = [-0.38, 0.05]$), thus Hypothesis 5a was not supported. There also was no evidence of an indirect effect of career motive congruence on work engagement through mastery ($B = 0.125, p = 0.22, 95\% C.I. = [-0.07, 0.34]$), and so Hypothesis 5b was not supported. There was no evidence of an indirect effect of understanding motive congruence on work engagement through detachment ($B = -0.136, p = 0.20, 95\% C.I. = [-0.45, 0.01]$), meaning that Hypothesis 6a was not supported. There was no evidence of an indirect effect of understanding motive congruence on work engagement through mastery ($B = 0.106, p = 0.34, [-0.08, 0.37]$), therefore Hypothesis 6b was also unsupported.

Discussion

To summarize the results, I found that there was statistical evidence that the majority of volunteer motives were intercorrelated and that the satisfaction of volunteer motives were also intercorrelated. Psychological detachment was higher when the career motive scores were greater than the career satisfaction scores. Career motive satisfaction also predicted lower psychological detachment. Higher mastery experiences were predicted when the agreement between the volunteer motivations (for both career and understanding) was increased.

Theoretical Implications

The results demonstrated an interesting pattern of findings that both theoretically and practically enriches understanding of the implications of volunteering for work recovery. The correlations indicated that the majority of the volunteer motives and volunteer motive satisfaction were intercorrelated. This suggests that if a participant is motivated to volunteer, they are likely motivated for more than one reason. Also, it means that if a volunteer experience is able to satisfy a volunteer motive, it may be likely to satisfy other motives as well. It is worth noting here that the functional approach to volunteering is rooted in the notion that different people have different motives for volunteering (Clary et al., 1998). However, this approach does not exclude the possibility that people can have multiple motives and that the same volunteer experience can satisfy multiple motives (Houle et al., 2005). Therefore, this pattern of results is consistent with the functional approach to volunteering.

For the polynomial regression between career motivation congruence and psychological detachment from work, the pattern of results shows that psychological detachment is higher when the career motivations were present but relatively unfulfilled by the volunteer experience when it occurred. Career motive satisfaction also predicted less psychological detachment. This suggests that while it is fine to be motivated to volunteer for career-related reasons, if that motivation is satisfied it could be harmful to one's ability to detach from work. The satisfaction of career motives would mean that the volunteer experience included some sort of benefit to the volunteer's career (Clary et al., 1998). However, receiving this benefit to one's career could then cause that volunteer to start thinking about their career, leading to them being unable to detach from work. This has important implications for how we may view volunteering because it may mean that it is better to leave some motivations unsatisfied for better work recovery outcomes, when historically satisfying motivations was seen as a positive experience (e.g., Clary et al., 1998). This also has an important

implication for recovery theorizing. While not always explicitly stated, research on psychological detachment from work tends to be focused on detaching oneself from negative aspects of work such as stressors or job demands (e.g., Sonnentag, 2012; Karabinski et al., 2021). However, the results of this study illuminate the importance of disengaging from activities that are beneficial for work as well.

For both polynomial regressions that predicted mastery experiences, only the agreement between the motive and satisfaction scores predicted mastery experiences, while the discrepancy between these scores did not. This indicates that for mastery experiences, the satisfaction of the career and understanding motivations can promote work recovery through having mastery experiences, but that dissatisfaction of one's volunteer motives is not necessarily harmful to this recovery experience. One explanation for these results is that the fulfillment of the career and understanding motivations would directly lead to mastery experiences because learning new skills or gaining new resources is a part of fulfilling both motivations, and mastery experiences are characterized by activities outside work that can lead to developing new resources through learning opportunities (Sonnentag & Fritz, 2007). This leads to the idea that volunteering experiences that satisfy the understanding motivation to volunteer are particularly helpful for promoting mastery experiences for work recovery.

In contrast to expectations, there was no evidence obtained that psychological detachment positively predicted work engagement. Headrick et al.'s (2022) meta-analysis found that psychological detachment negatively predicted work engagement, and they suggested that it is possible that there may be a curvilinear relationship between psychological detachment and work engagement. While the results from this study are different from what was found in their meta-analysis, they similarly support the idea that the relationship between psychological detachment

and work engagement requires further examination. Shimazu et al. (2016) did previously find a curvilinear relationship between psychological detachment and work engagement such that work engagement was highest at moderate levels of detachment. They suggested this is because at low levels of detachment, employees are unable to fully recover from work, whereas at high levels of detachment it may take longer to engage again in work, and I agree with this reasoning. There was also no evidence that mastery experiences predicted higher work engagement in this study. However, others have found a positive relationship between mastery experiences and work engagement (e.g., Headrick et al., 2022) and so future investigation into mastery experiences within the volunteering context may be needed.

There was no evidence to support any of the hypothesized mediating effects of the recovery experiences on the relationship between volunteer congruence and work engagement. No direct effects of volunteer congruence on work engagement were supported either. This points to the possibility that volunteer congruence for career and understanding motives do not predict work engagement through detachment or mastery experiences, although it is possible that another mediator may be involved. Notably, positive affect was found to predict work engagement in all four of the mediation models, albeit only within the role of a statistical control variable. This is in line with previous findings that positive affect predicts work engagement (e.g., Thian et al., 2015). It may therefore be worth further investigating positive affect as a potential mediator instead, especially as previous works has found positive affect to be a mediator for work engagement in the past (e.g., Wang et al., 2017).

Practical Implications

The results lead to two main suggestions for employees seeking to use volunteer work to recover from their primary jobs. First, while there could be some general benefits to striving to

improve one's career through volunteering, it is better that they do not focus overly on these benefits while volunteering to fully detach from work during volunteer experiences. Second, employees should seek out volunteer opportunities that will allow them to develop new skills and learn new things (e.g., fulfilling the understanding motivation to volunteer), to recover from work through mastery experiences. Both suggestions can be fulfilled by choosing volunteer experiences that are unrelated to one's primary job. By doing so, employed volunteers can detach from work by having an experience that is unrelated to their job. At the same time, they can learn new skills that they would not have had the opportunity to develop at their primary job.

The agreement between motives and motive satisfaction for both the career motivational function and the understanding motivational function predicted mastery experiences. While there was no evidence that mastery experiences predicted the work outcome investigated in this study (work engagement), mastery experiences have been linked to other beneficial work outcomes such as job performance and organizational citizenship behaviors (Headrick et al., 2020). Because of this, employers may want to consider recommending that their employees to participate in volunteer experiences that meet their motivational needs so that they can have mastery experiences that promote beneficial outcomes at work. Though, again, it may be best not to overly focus on satisfying career benefits to avoid impairment of psychological detachment from work.

Limitations and Future Directions

One limitation of this study is that this method of analysis does not consider whether the satisfaction of some motivations can make up for a lack of satisfaction of other volunteer motives. Thus, one future direction of research would be to investigate whether different balances of motivational satisfaction are beneficial. Since people can have multiple motives for volunteering within the functional approach to volunteering (Houle et al., 2005), one way to address this could

be to measure participants' different motives for volunteering. Then, investigate what the outcomes are when differing numbers of their motives are satisfied (e.g., when one motive is satisfied vs. when all motives are satisfied). This is crucial for career motivations as it was found that when satisfaction of the career motivation was higher than career motives, lower psychological detachment from work was predicted. So, knowing if satisfying other motives could make up for any potential negative associations with satisfying career motivations would be particularly helpful. Additionally, investigating ways in which the fulfilment of career motivations could be beneficial, despite it potentially interfering with the psychological detachment process would also be helpful.

Only two volunteer motivations and two recovery experiences were focused on within this study, but further investigation into other motivations and recovery experiences would be welcomed for increased understanding of the relationship between volunteering and recovery. In this study, congruence between the volunteer motives and volunteer motive satisfaction for both career and understanding motives predicted mastery experiences, so one possibility would be to see if volunteer congruence for the other volunteer motivational functions also predicts mastery experiences. Another possibility would be to see whether volunteer congruence for any of the motivational functions predicts relaxation or control, which are the other recovery experiences proposed by Sonnentag and Fritz (2007) that were not explored beyond their use as control variables within this study.

Another limitation is that the inter-item correlation for the understanding environmental affordances subscale was a bit small (0.44). For this reason, future studies should consider using different ways to measure the satisfaction of volunteer motives. Alternatively, the development of

a new measure of the satisfaction of the motives outlined by the functional approach to volunteering (Clary et al., 1998) that uses more than two items per subscale is also encouraged.

The study is also limited by its cross-sectional nature as causality cannot be established, and I would suggest that future research examine these relationships longitudinally. An attempt was made to conduct this study longitudinally (refer to the appendix for more information about this pilot study), but ultimately was not feasible due to the slow recruitment of non-fraudulent participants. Based on the lessons I have learned from the pilot study; I have a few suggestions for more feasible ways to conduct a longitudinal study on volunteering motivations. The first suggestion would be to use a crowd-sourcing platform, such as Prolific, to quickly recruit participants for multiple surveys. However, a large budget would be needed to utilize this option that may not be possible for researchers. The second, less costly suggestion would be to work closely with a single large volunteer organization. The volunteer organization would be able to help distribute the survey to their volunteers, and the organization could benefit from the conclusions based on their volunteers' data. Bauer and Lim (2019) utilized this strategy cross-sectionally, so I recommend a similar approach but done in a longitudinal fashion.

It is worth noting that the relationships may be expressed differently between a cross-sectional design and a longitudinal one. When volunteer motives and motivation satisfaction are measured simultaneously as in a cross-sectional design, it is possible that knowing whether the motives were satisfied may influence how participants report their original motives to volunteer. Within this study, there was a large amount of intercorrelation between the motives and motive satisfaction which supports this possibility. In a longitudinal design, the volunteer motives and satisfaction of the motives could be measured separately, reducing this possible influence. Similarly, measuring psychological detachment and work engagement separately may also be

preferred. It seems counterintuitive to expect that a state of detachment and engagement could be held at the same time, therefore it would make sense to measure them at different times as well. This would potentially help disentangle the complicated relationship between work engagement and psychological detachment that has been previously found within the literature (e.g., Headrick et al., 2022; Shimazu et al., 2016).

There may also be differences between measuring relationships in the short-term in comparison to the long-term. In the short-term, relationships may be more variable. In the long-term, however, they may be more stable and based on overall trends. For example, one bad experience of volunteering may have a negative impact on recovery in the short-term, but if overall the volunteering experiences have been positive for that participant volunteering may overall be beneficial for that participant. This further supports the idea that a similar study should be conducted longitudinally in order to parse out these relationships.

The data was also self-reported. While self-report data is convenient and has its uses, causality often cannot be demonstrated and other reasons for the results than what was hypothesized can exist (Spector, 1994). So, future studies that use more objective or other-reported data are encouraged. Using objective job outcome indicators (e.g., promotional history, measures of output) or objective health and well-being indicators (e.g., number of hospitalizations, frequency of illness) could be a solution to this. Examples of other-reported data that could be used include having volunteer coordinators and/or work supervisors report information about their volunteers or employees respectively.

Finally, as previously mentioned, further investigation into psychological detachment's relationship with work engagement as a possible curvilinear relationship is also recommended based on the results of this study and Headrick et al.'s (2022) meta-analysis.

Conclusion

In summary, the results from this study suggest that volunteering experiences that satisfy career motivations to volunteer may undermine detachment from work, and thus employees may want to seek out volunteer opportunities that are unrelated to their primary job. Additionally, I found that satisfying the volunteer motivations of both the career and understanding predicted higher mastery experiences. There was no evidence that psychological detachment or mastery experiences predicted work engagement. Finally, I also found that there was no support for mastery experiences or psychological detachment as mediators for the relationship between volunteer congruence and work engagement. The findings that satisfying career volunteer motives could be harmful to detachment from work, while satisfying both career and understanding volunteer motives can be beneficial to mastery experiences, are particularly novel findings that I hope spark future research into volunteering and its implications for work recovery.

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Tables**Table 1***Continuous Demographic Information*

<i>Continuous Variables</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Age	119	37.24	9.98
Work Hours/Week	119	41.12	7.10
Total Children	119	0.96	1.20
Children at Home	119	0.76	1.00

Table 2*Categorical Demographic Information*

<i>Categorical Variables</i>	<i>N</i>	<i>Categories</i>	<i>Frequency</i>
Gender	119	Male	33.6%
		Female	66.4%
Race	119	White	68.1%
		Black or African American	14.3%
		Asian	9.2%
		American Indian / Alaska Native	0.8%
		More than one race	4.2%
		Other	3.4%
		Ethnicity	118
		Not Hispanic or Latino	88.2%
Religion	119	Christianity	51.3%
		Judaism	2.5%
		Islam	0.8%
		Buddhism	2.5%
		Spiritual	4.2%
		Agnostic	10.9%
		Atheist	11.8%
		No Religion	14.3%
		Other	0.8%
		Prefer not to answer	0.8%
Salary	118	Salaried Employee	67.2%
		Wage Employee	31.9%
Yearly Income	119	20,000-39,999	11.8%
		40,000-59,999	19.3%
		60,000-79,999	34.5%
		80,000-99,999	12.6%
		100,000-119,000	5.9%
		120,000+	13.4%
		Prefer not to answer	2.5%
Marital Status	118	Single, never married	29.4%
		Living with someone as a couple, but not married	20.2%
		Married	45.4%
		Divorced	2.5%
		Widowed	0.8%
		Other	0.8%
Active Volunteer	119	Previous Volunteer	61.3%
		Active Volunteer	38.7%

Table 3*Support for Hypotheses*

Hypotheses		Support
1a	Volunteer congruence of the career function will be positively related to psychological detachment from work.	A significant positive a_1 and significant negative a_4 for career function congruence and psychological detachment from work
1b	Volunteer congruence of the career function will be positively related to mastery experiences.	A significant positive a_1 and a significant negative a_4 for career function congruence and mastery experiences
2a	Volunteer congruence of the understanding function will be positively related to psychological detachment from work.	A significant positive a_1 and a significant negative a_4 for understanding function congruence and psychological detachment from work
2b	Volunteer congruence of the understanding function will be positively related to mastery experiences.	A significant positive a_1 and a significant negative a_4 for understanding function congruence and mastery experiences
3	Psychological detachment from work will be positively related to work engagement.	Significant regression coefficient for psychological detachment and work engagement
4	Mastery experiences will be positively related to work engagement.	Significant regression coefficient for mastery experiences and work engagement
5a	The relationship between volunteer congruence of the career function and work engagement will be mediated by psychological detachment from work.	Significant indirect effect of volunteer congruence of the career function on work engagement through psychological detachment from work
5b	The relationship between volunteer congruence of the career function and work engagement will be mediated by mastery experiences.	Significant indirect effect of volunteer congruence of the career function on work engagement through mastery experiences

6a	The relationship between volunteer congruence of the understanding function and work engagement will be mediated by psychological detachment from work.	Significant indirect effect of volunteer congruence of the understanding function on work engagement through psychological detachment from work
6b	The relationship between volunteer congruence of the understanding function and work engagement will be mediated by mastery experiences.	Significant indirect effect of volunteer congruence of the understanding function on work engagement through mastery experiences

Table 4

Correlation Matrix of Study Variables

	<i>M</i>	<i>S.D.</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1 VFI Career	3.90	1.55	(0.89)	-	-	-	-	-	-	-	-	-	-	-	-
2 VFI Unders	5.57	0.99	0.53**	(0.79)	-	-	-	-	-	-	-	-	-	-	-
3 VFI Values	6.05	0.83	0.02	0.49**	(0.85)	-	-	-	-	-	-	-	-	-	-
4 VFI Social	4.50	1.35	0.53**	0.59**	0.32**	(0.86)	-	-	-	-	-	-	-	-	-
5 VFI Protect	4.32	1.39	0.55**	0.52**	0.36**	0.53**	(0.84)	-	-	-	-	-	-	-	-
6 VFI Enhance	5.03	1.23	0.45**	0.56**	0.39**	0.55**	0.73**	(0.83)	-	-	-	-	-	-	-
7 EA Career	3.97	1.67	0.89**	0.46**	0.04	0.49**	0.54**	0.46**	(0.63)	-	-	-	-	-	-
8 EA Unders	5.35	1.18	0.34**	0.64**	0.50**	0.45**	0.60**	0.53**	0.49**	(0.44)	-	-	-	-	-
9 EA Values	5.49	1.08	0.17	0.47**	0.61**	0.28**	0.32**	0.46**	0.29**	0.52**	(0.41)	-	-	-	-
10 EA Social	3.62	1.40	0.54**	0.46**	0.21*	0.51**	0.50**	0.54**	0.57**	0.44**	0.42**	(0.35)	-	-	-
11 EA Protect	4.36	1.52	0.43**	0.45**	0.28**	0.39**	0.86**	0.67**	0.49**	0.60**	0.30**	0.46**	(0.57)	-	-
12 EA Enhance	5.10	1.54	0.27**	0.34**	0.39**	0.39**	0.72**	0.81**	0.36**	0.53**	0.39**	0.51**	0.69**	(0.81)	-
13 Detachment	5.07	1.25	0.05	0.10	0.05	-0.01	-0.07	0.01	-0.09	-0.06	0.11	-0.01	-0.11	-0.07	(0.82)
14 Mastery	5.05	1.07	0.29**	0.31**	0.08	0.40**	0.27**	0.19*	0.28**	0.32**	0.14	0.32**	0.21*	0.16	0.11
15 Relaxation	5.71	0.95	0.24**	0.27**	0.19*	0.05	0.11	0.01	0.23*	0.15	0.26**	0.10	0.03	-0.04	0.40**
16 Control	5.73	0.97	0.11	0.21*	0.15	-0.01	-0.05	-0.08	0.06	0.11	0.06	0.06	-0.06	-0.10	0.40**
17 Engagement	4.46	1.17	-0.04	0.02	0.08	0.11	0.04	0.03	0.06	0.07	-0.05	0.01	-0.03	0.01	0.06
18 WFB	3.92	0.98	0.35**	0.10	0.23*	0.35**	0.10	0.23*	0.35**	0.10	0.23*	0.35**	0.10	0.23*	0.35**
19 SJS	3.00	1.08	0.03	0.07	-0.02	-0.02	0.05	0.04	0.09	0.14	-0.02	0.15	0.19*	0.04	-0.34**
20 PA	3.30	0.77	0.05	0.09	0.04	0.19*	0.07	0.13	0.17	0.19*	0.09	0.22*	0.10	0.10	0.10
21 NA	1.60	0.64	0.16	0.11	-0.01	0.04	0.21*	0.10	0.20*	0.13	0.01	0.03	0.25**	0.06	-0.12
22 TBWIF	2.18	1.13	0.20*	0.11	0.03	0.09	0.23*	0.11	0.19*	0.06	0.04	0.20*	0.29**	0.11	-0.24**
23 TBFIW	2.01	1.01	0.13	-0.05	-0.19*	0.11	0.18	0.07	0.19*	0.02	-0.08	0.05	0.23*	0.05	-0.07
24 SBWIF	2.44	1.10	0.23*	0.13	0.08	0.10	0.26**	0.15	0.28**	0.18	0.14	0.18*	0.34**	0.10	-0.20*
25 SBFIW	2.06	1.04	0.19*	0.11	-0.08	0.22*	0.30**	0.27**	0.21*	0.12	0.10	0.19*	0.35**	0.16	-0.01
26 BBWIF	2.36	0.88	0.10	-0.05	-0.22*	0.03	0.21*	0.10	0.02	-0.08	-0.17	0.10	0.26**	0.10	-0.04
27 BBFIW	2.42	0.99	0.13	-0.08	-0.22*	0.08	0.21*	0.16	0.05	-0.08	-0.14	0.15	0.24**	0.16	-0.04

	14	15	16	17	18	19	20	21	22	23	24	25	26	27
14 Mastery	(0.84)													
15 Relaxation	0.21*	(0.90)	-	-	-	-	-	-	-	-	-	-	-	-
16 Control	0.25**	0.61**	(0.87)	-	-	-	-	-	-	-	-	-	-	-
17 Engagement	0.35*	0.10	0.23**	(0.94)	-	-	-	-	-	-	-	-	-	-
18 WFB	0.12	0.11	0.30**	0.42**	(0.96)	-	-	-	-	-	-	-	-	-
19 SJS	0.01	-0.20*	-0.20*	-0.27**	-0.62**	(0.89)	-	-	-	-	-	-	-	-
20 PA	0.42**	0.08	0.16	0.60**	0.25**	-0.22*	(0.92)	-	-	-	-	-	-	-
21 NA	-0.14	0.04	-0.14	-0.40**	-0.45**	0.24**	-0.23*	(0.91)	-	-	-	-	-	-
22 TBWIF	-0.06	-0.10	-0.32**	-0.26**	-0.65**	0.45**	-0.11	0.40**	(0.88)	-	-	-	-	-
23 TBFIW	0.11	-0.10	-0.26**	0.05	-0.33**	0.14	0.09	0.25**	0.50**	(0.84)	-	-	-	-
24 SBWIF	0.06	0.00	-0.24**	-0.26**	-0.68**	0.54**	-0.16	0.42**	0.74**	0.57**	(0.88)	-	-	-
25 SBFIW	0.04	-0.08	-0.21*	-0.10	-0.33**	0.17	-0.07	0.37**	0.40**	0.71**	0.56**	(0.87)	-	-
26 BBWIF	-0.09	-0.20*	-0.31**	-0.21*	-0.35**	0.15	-0.11	0.26**	0.43**	0.32**	0.42**	0.46**	(0.73)	-
27 BBFIW	-0.08	-0.17	-0.31**	-0.23*	-0.36**	0.21*	-0.11	0.35**	0.44**	0.38**	0.41**	0.49**	0.80**	(0.83)

* p-value < 0.05

** p-value < 0.01

Note. $N = 119$. Internal Consistency Reliabilities on the Diagonal. Abbreviations: VFI = Volunteer Functions Inventory, indicates volunteer motives, EA = Environmental Affordances, indicates satisfaction of volunteer motives, Unders = Understanding, Protect = Protective, Enhance = Enhancement, WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work.

Table 5*Polynomial Regression Results for Career Congruence and Psychological Detachment*

	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	95% <i>CI</i> s
Intercept	1.66	1.53	1.08	0.28	-1.39, 4.62
Statistical Controls					
Active Volunteer	-0.25	0.23	-1.079	0.28	-0.73, 0.20
Relaxation	0.35	0.17	2.078	0.04	0.02, 0.68
Control	0.22	0.17	1.319	0.19	-0.09, 0.56
WFB	0.10	0.16	0.617	0.54	-0.20, 0.43
Stress	-0.17	0.16	-1.092	0.28	-0.47, 0.14
PA	0.08	0.17	0.495	0.62	-0.28, 0.39
NA	-0.09	0.21	-0.434	0.67	-0.51, 0.33
TBWIF	-0.09	0.15	-0.622	0.53	-0.40, 0.19
TBFIW	0.05	0.20	0.254	0.80	-0.33, 0.43
SBWIF	-0.03	0.20	-0.166	0.87	-0.42, 0.38
SBFIW	0.13	0.16	0.804	0.42	-0.20, 0.43
BBWIF	0.08	0.20	0.356	0.72	-0.32, 0.48
BBFIW	0.07	0.20	0.356	0.72	-0.35, 0.44
Polynomial Terms					
VFI Career (X)	0.22	0.11	1.915	0.06	-0.02, 0.43
EA Career (Y)	-0.27	0.11	-2.441	0.02	-0.49, -0.06
X ²	-0.06	0.08	-0.780	0.44	-0.25, 0.08
XY	0.02	0.13	0.140	0.89	-0.23, 0.26
Y ²	0.06	0.08	0.744	0.46	-0.09, 0.23
Response Surface Terms					
<i>a</i> ₁	-0.05	0.08	-0.628	0.53	-0.21, 0.11
<i>a</i> ₂	0.02	0.04	0.371	0.71	-0.07, 0.10
<i>a</i> ₃	0.49	0.21	2.330	0.02	0.07, 0.89
<i>a</i> ₄	-0.02	0.25	-0.074	0.94	-0.52, 0.48

Note. $N = 119$. $R^2 = 0.36$. Unstandardized Coefficients are reported. Abbreviations: VFI = Volunteer Functions Inventory, indicates volunteer motives, EA = Environmental Affordances, indicates satisfaction of volunteer motives, WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work, a_1 = congruence slope, a_2 = congruence curvature, a_3 = incongruence slope, a_4 = incongruence curvature

Table 6*Polynomial Regression Results for Career Congruence and Mastery Experiences*

	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	95% <i>CI</i> s
Intercept	1.45	1.36	1.064	0.29	-1.49, 3.83
Statistical Controls					
Active Volunteer	0.06	0.16	0.368	0.71	-0.28, 0.35
Relaxation	0.05	0.12	0.378	0.71	-0.21, 0.27
Control	0.11	0.13	0.862	0.39	-0.15, 0.34
WFB	0.10	0.16	0.630	0.53	-0.20, 0.41
Stress	0.13	0.13	1.015	0.31	-0.11, 0.39
PA	0.58	0.15	3.962	<0.01	0.32, 0.89
NA	-0.13	0.18	-0.729	0.47	-0.49, 0.21
TBWIF	-0.15	0.12	-1.267	0.21	-0.35, 0.10
TBFIW	0.07	0.15	0.510	0.61	-0.20, 0.36
SBWIF	0.23	0.15	1.561	0.12	-0.07, 0.51
SBFIW	0.01	0.13	0.044	0.97	-0.22, 0.28
BBWIF	-0.09	0.18	-0.484	0.63	-0.43, 0.27
BBFIW	0.00	0.16	-0.003	1.00	-0.31, 0.32
Polynomial Terms					
VFI Career (X)	0.21	0.11	1.961	0.05	0.02, 0.43
EA Career (Y)	-0.06	0.09	-0.703	0.48	-0.23, 0.11
X ²	-0.14	0.09	-1.551	0.12	-0.25, 0.09
XY	-0.05	0.13	-0.428	0.67	-0.33, 0.15
Y ²	0.15	0.06	2.337	0.02	0.03, 0.27
Response Surface Terms					
<i>a</i> ₁	0.15	0.07	2.108	0.04	0.01, 0.29
<i>a</i> ₂	-0.04	0.05	-0.969	0.33	-0.14, 0.04
<i>a</i> ₃	0.27	0.18	1.484	0.14	-0.06, 0.65
<i>a</i> ₄	0.06	0.26	0.250	0.80	-0.32, 0.65

Note. $N = 119$. $R^2 = 0.44$. Unstandardized Coefficients are reported. Abbreviations: VFI = Volunteer Functions Inventory, indicates volunteer motives, EA = Environmental Affordances, indicates satisfaction of volunteer motives, WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work, a_1 = congruence slope, a_2 = congruence curvature, a_3 = incongruence slope, a_4 = incongruence curvature

Table 7*Polynomial Regression Results for Understanding Congruence and Psychological Detachment*

	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	95% <i>CI</i> s
Intercept	2.56	1.68	1.525	0.13	-0.65, 5.94
Statistical Controls					
Active Volunteer	-0.35	0.23	-1.505	0.13	-0.82, 0.10
Relaxation	0.30	0.19	1.576	0.12	-0.05, 0.69
Control	0.24	0.18	1.286	0.20	-0.12, 0.61
WFB	0.08	0.16	0.504	0.61	-0.23, 0.41
Stress	-0.20	0.16	-1.243	0.21	-0.53, 0.10
PA	0.02	0.16	0.131	0.90	-0.31, 0.33
NA	-0.15	0.20	-0.750	0.45	-0.57, 0.24
TBWIF	-0.15	0.16	-0.934	0.35	-0.46, 0.15
TBFIW	0.00	0.21	0.006	1.00	-0.39, 0.41
SBWIF	0.00	0.21	0.001	1.00	-0.43, 0.41
SBFIW	0.14	0.17	0.819	0.41	-0.21, 0.45
BBWIF	-0.02	0.22	-0.070	0.94	-0.43, 0.42
BBFIW	0.19	0.21	0.938	0.35	-0.20, 0.58
Polynomial Terms					
VFI Unders (X)	-0.01	0.18	-0.072	0.94	-0.37, 0.34
EA Unders (Y)	-0.07	0.14	-0.499	0.62	-0.35, 0.21
X ²	-0.12	0.12	-0.977	0.33	-0.36, 0.13
XY	-0.17	0.17	-1.032	0.30	-0.47, 0.19
Y ²	0.15	0.13	1.156	0.25	-0.12, 0.40
Response Surface Terms					
<i>a</i> ₁	-0.08	0.15	-0.569	0.57	-0.38, 0.21
<i>a</i> ₂	-0.14	0.10	-1.412	0.16	-0.31, 0.09
<i>a</i> ₃	0.06	0.29	0.199	0.84	-0.50, 0.63
<i>a</i> ₄	0.21	0.32	0.649	0.52	-0.45, 0.80

Note. $N = 119$. $R^2 = 0.34$. Unstandardized Coefficients are reported. Abbreviations: VFI = Volunteer Functions Inventory, indicates volunteer motives, EA = Environmental Affordances, indicates satisfaction of volunteer motives, Unders = Understanding, WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work, a_1 = congruence slope, a_2 = congruence curvature, a_3 = incongruence slope, a_4 = incongruence curvature

Table 8*Polynomial Regression Results for Understanding Congruence and Mastery Experiences*

	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	95% <i>CI</i> s
Intercept	1.41	0.09	0.901	0.37	-2.03, 4.16
Statistical Controls					
Active Volunteer	0.15	0.18	0.837	0.40	-0.21, 0.49
Relaxation	0.05	0.13	0.376	0.71	-0.22, 0.28
Control	0.13	0.14	0.917	0.36	-0.14, 0.39
WFB	0.13	0.16	0.783	0.43	-0.19, 0.45
Stress	0.12	0.12	1.026	0.31	-0.10, 0.37
PA	0.43	0.16	2.657	0.01	0.14, 0.79
NA	-0.20	0.19	-1.071	0.28	-0.59, 0.13
TBWIF	-0.18	0.13	-1.362	0.17	-0.43, 0.09
TBFIW	0.18	0.15	1.164	0.24	-0.12, 0.48
SBWIF	0.24	0.16	1.525	0.13	-0.06, 0.54
SBFIW	-0.05	0.14	-0.317	0.75	-0.32, 0.24
BBWIF	-0.12	0.18	-0.682	0.50	-0.48, 0.23
BBFIW	0.12	0.16	0.745	0.46	-0.19, 0.47
Polynomial Terms					
VFI Unders (X)	0.15	0.14	1.080	0.28	-0.13, 0.43
EA Unders (Y)	0.16	0.12	1.270	0.20	-0.10, 0.39
X ²	-0.10	0.12	-0.843	0.40	-0.32, 0.12
XY	0.15	0.16	0.918	0.36	-0.19, 0.46
Y ²	0.01	0.13	0.085	0.93	-0.22, 0.30
Response Surface Terms					
<i>a</i> ₁	0.31	0.15	2.071	0.04	0.02, 0.61
<i>a</i> ₂	0.06	0.12	0.542	0.59	-0.18, 0.25
<i>a</i> ₃	-0.00	0.22	-0.019	0.99	-0.43, 0.44
<i>a</i> ₄	-0.23	0.30	-0.785	0.43	-0.78, 0.40

Note. $N = 119$. $R^2 = 0.38$. Unstandardized Coefficients are reported. Abbreviations: VFI = Volunteer Functions Inventory, indicates volunteer motives, EA = Environmental Affordances, indicates satisfaction of volunteer motives, Unders = Understanding, WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work, a_1 = congruence slope, a_2 = congruence curvature, a_3 = incongruence slope, a_4 = incongruence curvature

Table 9*Mediation Results for Career Congruence and Psychological Detachment*

Predictor	Psychological Detachment					Work Engagement				
	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>
Intercept	-5.05	1.54	9.186	<0.01	-8.05, -2.05	0.58	0.11	6.032	<0.01	-3.09, 3.07
Statistical Controls										
Active Volunteer	-0.25	0.22	-1.132	0.26	-0.70, 0.16	0.04	0.20	0.214	0.83	-0.46, 0.43
Relaxation Control	0.35	0.15	2.278	0.02	0.05, 0.65	0.05	0.11	0.433	0.67	-0.16, 0.30
WFB	0.22	0.16	1.392	0.16	-0.09, 0.53	0.14	0.11	1.243	0.21	-0.09, 0.35
SJS	0.10	0.15	0.653	0.51	-0.18, 0.42	0.29	0.15	1.926	0.05	0.00, 0.59
PA	-0.17	0.15	-1.160	0.25	-0.46, 0.12	0.02	0.12	0.200	0.84	-0.23, 0.24
NA	0.08	0.16	0.497	0.62	-0.26, 0.37	0.69	0.13	5.426	<0.01	0.43, 0.93
TBWIF	-0.09	0.21	-0.446	0.66	-0.49, 0.33	-0.40	0.21	-1.918	0.06	-0.82, -0.01
TBFIW	-0.09	0.14	-0.666	0.51	-0.37, 0.17	-0.05	0.12	-0.410	0.68	-0.29, 0.19
SBWIF	0.05	0.19	0.269	0.79	-0.32, 0.41	0.22	0.14	1.608	0.11	-0.05, 0.48
SBFIW	-0.03	0.20	-0.173	0.86	-0.41, 0.36	-0.02	0.16	-0.103	0.92	-0.34, 0.29
BBWIF	0.13	0.15	0.846	0.40	-0.17, 0.42	0.03	0.15	0.183	0.86	-0.25, 0.31
BBFIW	0.08	0.20	0.432	0.67	-0.31, 0.47	0.01	0.16	0.084	0.93	-0.32, 0.33
BBFIW	0.07	0.19	0.370	0.71	-0.33, 0.43	-0.04	0.13	-0.337	0.74	-0.28, 0.24
Focal Variables										
Congruence Block	0.99	0.30	3.291	<0.01	0.39, 1.57	-0.21	0.25	-0.855	0.39	-0.75, 0.24
Detachment	-	-	-	-	-	-0.11	0.09	-1.174	0.24	-0.30, 0.06
Model Statistics										
Indirect Effect	-	-	-	-	-	-0.11	0.10	-1.048	0.30	-0.38, 0.05
<i>R</i> ²	0.36	0.07	5.466	<0.01	-	0.52	0.07	5.47	<0.01	-

Note. *N* = 119. Unstandardized Coefficients are reported. The indirect effect applies to the full model. Abbreviations: WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work

Table 10

Mediation Results for Career Congruence and Mastery Experiences

Predictor	Mastery Experiences					Work Engagement				
	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>
Intercept	-5.04	1.23	-4.096	<0.01	-7.60, -2.76	1.12	0.08	7.868	0.39	-1.67, 3.49
Statistical Controls										
Active Volunteer	0.06	0.16	0.392	0.70	-0.25, 0.36	0.08	0.22	0.345	0.73	-0.33, 0.53
Relaxation Control	0.05	0.11	0.402	0.69	-0.19, 0.25	0.03	0.12	0.232	0.82	-0.19, 0.26
WFB	0.11	0.12	0.928	0.35	-0.13, 0.32	0.09	0.12	0.760	0.45	-0.15, 0.30
SJS	0.10	0.15	0.658	0.51	-0.19, 0.39	0.28	0.15	1.918	0.06	-0.01, 0.57
PA	0.13	0.12	1.078	0.28	-0.10, 0.35	0.03	0.12	0.302	0.76	-0.20, 0.25
NA	0.58	0.13	4.46	<0.01	0.35, 0.86	0.64	0.13	4.745	<0.01	0.36, 0.89
TBWIF	-0.13	0.18	-0.756	0.45	-0.48, 0.20	-0.35	0.20	-1.701	0.09	-0.76, 0.03
TBFIW	-0.15	0.11	-1.380	0.17	-0.33, 0.09	-0.03	0.13	-0.215	0.83	-0.28, 0.22
SBWIF	0.07	0.14	0.541	0.59	-0.19, 0.34	0.20	0.14	1.454	0.15	-0.07, 0.48
SBFIW	0.23	0.14	1.608	0.11	-0.07, 0.50	-0.02	0.16	-0.127	0.90	-0.35, 0.30
BBWIF	0.00	0.12	0.035	0.97	-0.21, 0.27	0.02	0.14	0.129	0.90	-0.25, 0.30
BBFIW	-0.08	0.17	-0.486	0.63	-0.43, 0.26	0.01	0.16	0.082	0.94	-0.33, 0.33
	-0.00	0.25	-0.003	1.00	-0.30, 0.30	-0.06	0.13	-0.492	0.62	-0.29, 0.23
Focal Variables										
Congruence Block	1.00	0.20	4.954	<0.01	0.59, 1.39	-0.26	0.24	-1.081	0.28	-0.80, 0.16
Mastery	-	-	-	-	-	0.13	0.10	1.283	0.20	-0.09, 0.30
Model Statistics										
Indirect Effect	-	-	-	-	-	0.13	0.10	1.219	0.22	-0.07, 0.34
<i>R</i> ²	0.44	0.06	7.013	<0.01	-	0.51	0.08	6.864	<0.01	-

Note. *N* = 119. Unstandardized Coefficients are reported. The indirect effect applies to the full model. Abbreviations: WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work

Table 11*Mediation Results for Understanding Congruence and Psychological Detachment*

Predictor	Psychological Detachment					Work Engagement				
	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>
Intercept	-5.08	1.71	-2.970	<0.01	0.93, 1.33	-0.20	1.45	-0.138	0.89	0.54, 1.00
Statistical Controls										
Active Volunteer	-0.35	0.22	-1.579	0.11	-0.79, 0.09	0.02	0.20	0.114	0.91	-0.37, 0.43
Relaxation Control	0.30	0.18	1.720	0.09	-0.03, 0.66	0.06	0.12	0.526	0.60	-0.16, 0.30
WFB	0.24	0.17	1.369	0.17	-0.11, 0.57	0.13	0.12	1.100	0.27	-0.11, 0.35
SJS	0.08	0.15	0.538	0.59	-0.20, 0.40	0.29	0.15	1.930	0.05	0.00, 0.60
SJS	-0.20	0.15	-1.328	0.18	-0.50, 0.09	0.02	0.12	0.148	0.88	-0.24, 0.23
PA	0.02	0.16	0.136	0.89	-0.32, 0.31	0.72	0.12	5.869	<0.01	0.47, 0.94
NA	-0.15	0.20	-0.784	0.43	-0.55, 0.23	-0.39	0.21	-1.850	0.06	-0.80, 0.01
TBWIF	-0.15	0.14	-1.031	0.30	-0.44, 0.12	-0.07	0.12	-0.546	0.59	-0.32, 0.17
TBFIW	0.00	0.19	0.015	0.99	-0.36, 0.37	0.21	0.14	1.523	0.13	-0.05, 0.49
SBWIF	0.00	0.19	-0.002	1.00	-0.38, 0.38	0.01	0.16	0.033	0.97	-0.31, 0.33
SBFIW	0.137	0.15	0.901	0.37	-0.16, 0.42	0.04	0.15	0.244	0.81	-0.24, 0.32
BBWIF	-0.01	0.19	-0.070	0.94	-0.38, 0.37	-0.00	0.17	-0.023	0.98	-0.35, 0.31
BBFIW	0.19	0.19	1.018	0.31	-0.20, 0.54	-0.04	0.14	-0.312	0.76	-0.30, 0.24
Focal Variables										
Congruence Block	1.01	0.40	2.547	0.01	0.18, 1.73	0.14	0.38	0.371	0.71	-0.64, 0.85
Detachment	-	-	-	-	-	-0.14	0.09	-1.530	0.13	-0.33, 0.02
Model Statistics										
Indirect Effect	-	-	-	-	-	-0.14	0.11	-1.270	0.20	-0.45, 0.01
<i>R</i> ²	0.34	0.07	4.746	<0.01	-	0.52	0.07	7.244	<0.01	-

Note. *N* = 119. Unstandardized Coefficients are reported. The indirect effect applies to the full model. Abbreviations: WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work

Table 12

Mediation Results for Understanding Congruence and Mastery Experiences

Predictor	Mastery Experiences					Work Engagement				
	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>	<i>B</i>	<i>S.E.</i>	<i>z</i>	<i>p</i>	<i>95% CIs</i>
Intercept	-5.05	1.32	-3.832	<0.01	-7.85, -2.65	1.03	1.34	0.767	0.44	0.53, 1.10
Statistical Controls										
Active Volunteer	0.15	0.17	0.868	0.39	-0.19, 0.47	0.06	0.21	0.266	0.79	-0.33, 0.49
Relaxation Control	0.05	0.12	0.412	0.68	-0.19, 0.28	0.03	0.12	0.265	0.79	-0.19, 0.27
WFB	0.13	0.12	1.004	0.32	-0.12, 0.35	0.09	0.12	0.738	0.46	-0.16, 0.30
SJS	0.13	0.16	0.824	0.41	-0.17, 0.44	0.28	0.15	1.876	0.06	-0.02, 0.56
SJS	0.12	0.11	1.068	0.29	-0.09, 0.35	0.04	0.12	0.343	0.73	-0.20, 0.26
PA	0.43	0.15	3.000	<0.01	0.17, 0.75	0.69	0.14	5.012	<0.01	0.42, 0.95
NA	-0.20	0.18	-1.101	0.27	-0.57, 0.13	-0.33	0.20	-1.611	0.11	-0.75, 0.05
TBWIF	-0.18	0.12	-1.548	0.12	-0.39, 0.08	-0.02	0.13	-0.145	0.89	-0.28, 0.24
TBFIW	0.18	0.15	1.213	0.23	-0.12, 0.46	0.17	0.14	1.249	0.21	-0.10, 0.45
SBWIF	0.24	0.14	1.686	0.09	-0.05, 0.51	-0.02	0.17	-0.106	0.92	-0.35, 0.31
SBFIW	-0.05	0.14	-0.334	0.74	-0.30, 0.23	0.03	0.15	0.229	0.82	-0.25, 0.32
BBWIF	-0.12	0.17	-0.727	0.47	-0.46, 0.22	0.03	0.17	0.149	0.88	-0.31, 0.36
BBFIW	0.12	0.15	0.828	0.41	-0.17, 0.42	-0.10	0.13	-0.750	0.45	-0.33, 0.19
Focal Variables										
Congruence Block	1.00	0.34	2.974	<0.01	0.34, 1.66	-0.29	0.30	-0.955	0.34	-0.88, 0.29
Mastery	-	-	-	-	-	0.11	0.10	1.048	0.30	-0.11, 0.29
Model Statistics										
Indirect Effect	-	-	-	-	-	0.11	0.11	0.954	0.34	-0.08, 0.37
<i>R</i> ²	0.38	0.07	5.643	<0.01	-	0.51	0.08	6.689	<0.01	-

Note. *N* = 119. Unstandardized Coefficients are reported. The indirect effect applies to the full model. Abbreviations: WFB = Satisfaction with Work-Family Balance, SJS = Subjective Job Stress, PA = Positive Affect, NA = Negative Affect, TBWIF = Time-Based Work Interference with Family, TBFIW = Time-Based Family Interference with Work, SBWIF = Strain-Based Work Interference with Family, SBFIW = Strain-Based Family Interference with Work, BBWIF = Behavior-Based Work Interference with Family, BBFIW = Behavior-Based Family Interference with Work

Figures

Figure 1

Model of the Proposed Volunteer Congruence and Work Engagement Relationship

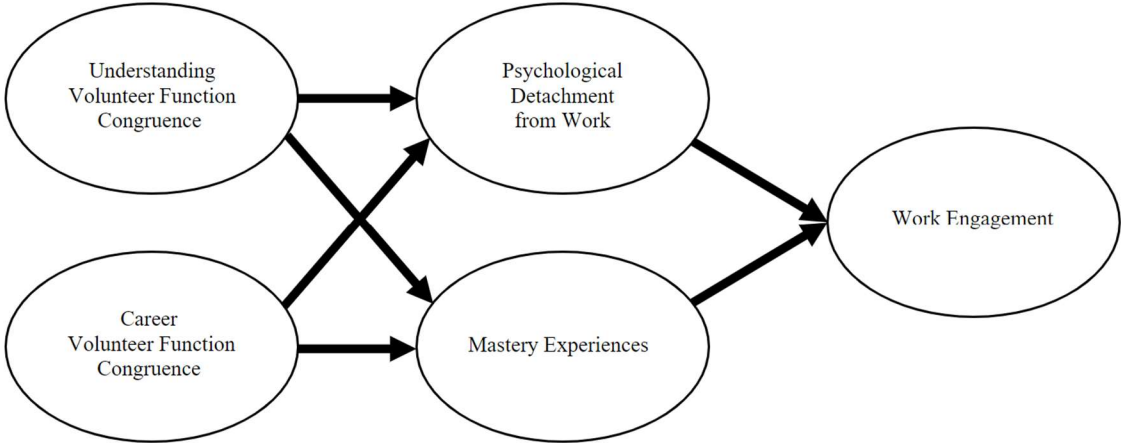
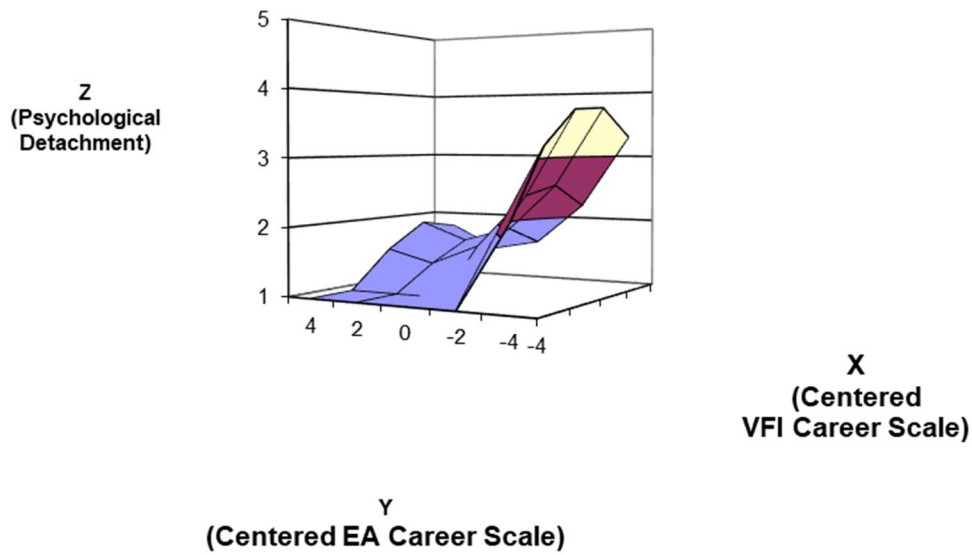


Figure 2

Response Surface Analysis for Career Motivation Congruence and Psychological Detachment

**Detachment as Predicted by
Career Motivation Congruence**

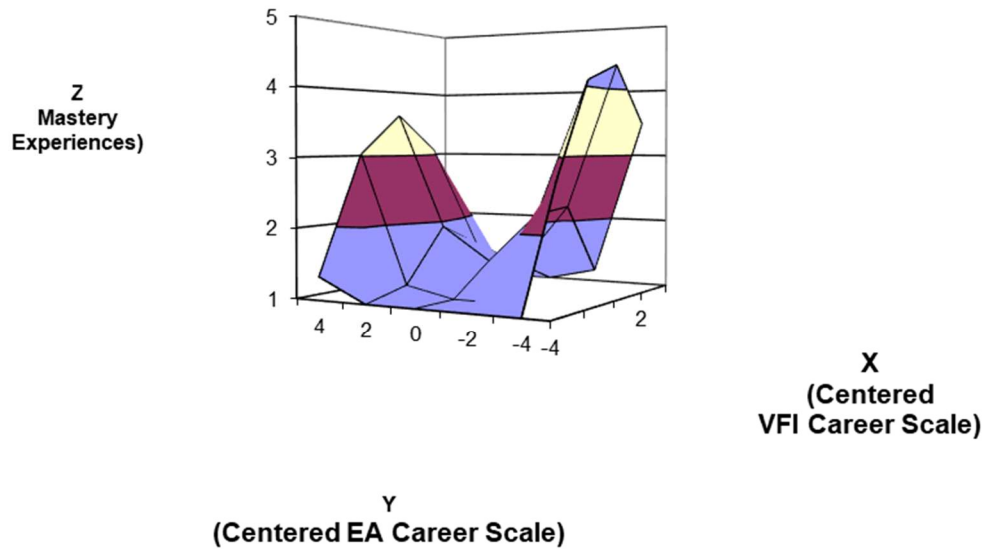


Note. VFI = Volunteer Functions Inventory, Career Motives. EA = Environmental Affordances, Career Motive Satisfaction

Figure 3

Response Surface Analysis for Career Motivation Congruence and Mastery Experiences

**Mastery Experiences as Predicted by
Career Motivation Congruence**

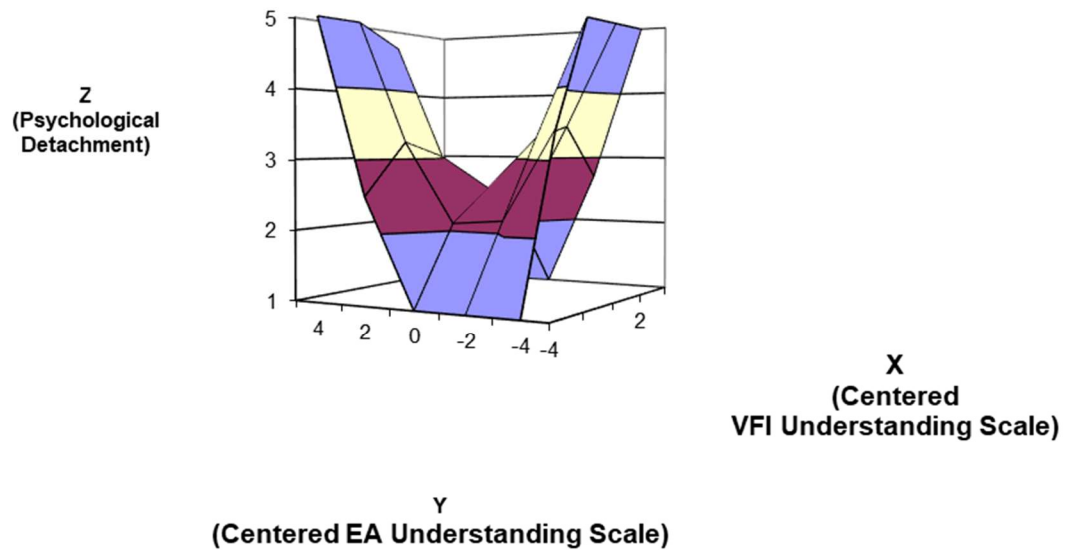


Note. VFI = Volunteer Functions Inventory, Career Motives. EA = Environmental Affordances, Career Motive Satisfaction

Figure 4

Response Surface Analysis for Understanding Motivation Congruence and Psychological Detachment

Detachment as Predicted by Understanding Motivation Congruence

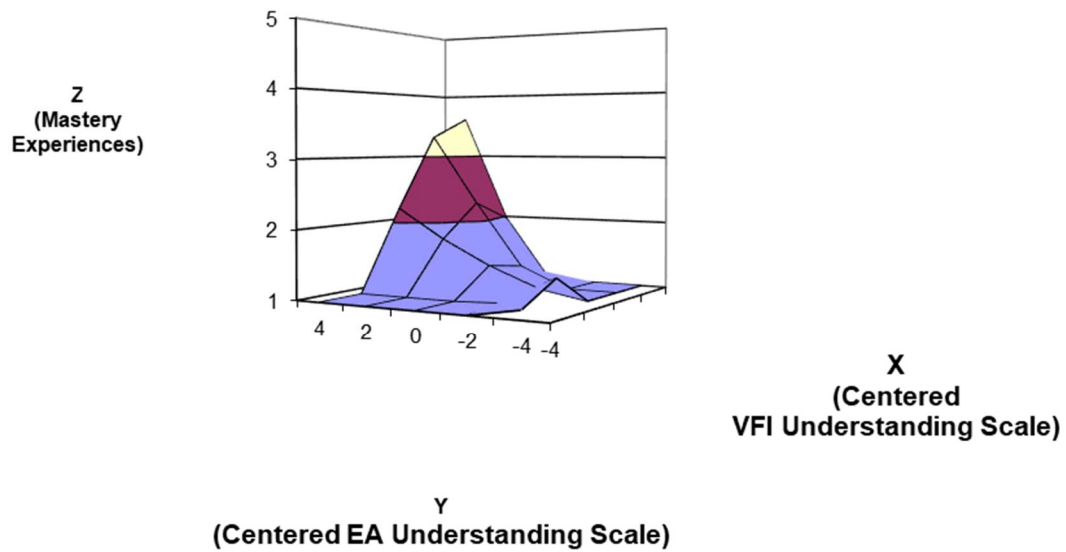


Note. VFI = Volunteer Functions Inventory, Understanding Motives. EA = Environmental Affordances, Understanding Motive Satisfaction

Figure 5

Response Surface Analysis for Understanding Motivation Congruence and Mastery Experiences

Mastery Experiences as Predicted by Understanding Motivation Congruence



Note. VFI = Volunteer Functions Inventory, Understanding Motives. EA = Environmental Affordances, Understanding Motive Satisfaction

Appendix

Pilot Study

A pilot study was initially conducted to pilot test a longitudinal methodology that consisted of four surveys over an approximately 6-week survey period.

Method

Procedure and Sample

Participants were recruited using a combination of social media, snowball sampling, and flyers. We also contacted local and national volunteer organizations to request their assistance in distributing our recruitment materials to their volunteers. For compensation, participants were given \$8 for completing the first survey, and \$4 for each of three subsequent surveys that they completed, which totals up to a maximum of \$20. This compensation was provided in the form of an Amazon gift card upon the completion of the study.

Data was collected using a four-wave time-lagged survey design. An overview of the timeline of the survey distribution is shown in Figure B1. Attention checks were included within the surveys by including questions where a specific response must be chosen (e.g., “Please select extremely accurate”). Participants who failed more than one attention check in a single survey’s data were removed from the study. Each survey took approximately 10 minutes to complete.

To participate, interested participants emailed our lab email to indicate their interest in participating in the study. If they did not provide it within their email, participants were then asked to provide the date that they would next be volunteering. If they responded with a volunteer date that was within two weeks of when their reply was received, they were then sent a link to take the first survey. If they responded with a volunteer date that was more than two weeks away (but within the expected length of the study’s data collection period), then they were informed that they

would be emailed the link to the first survey within two weeks of their volunteer date. That email would then be scheduled to be sent to them two weeks before their volunteer date. For all participants, surveys 2-4 were scheduled to be sent to them at specified time intervals described in the following paragraph.

The first survey was taken within two weeks before participants took part in a volunteer experience. This timing was selected so that the survey could be taken relatively close to when the participants volunteered but also gave a longer window of time for recruiting potential participants. This first survey began with several screening questions. Participants were required to volunteer within two weeks of beginning the study, work and reside in the United States for the purpose of compensating them for the study with gift cards, and to be employed since I specifically examined how volunteering is related to recovery from work. The participants' volunteer experience must have been for a non-profit or charitable organization. This is so what was considered a volunteer experience was in line with the definition of employee volunteering from Rodell et al. (2016), which is "employed individuals giving time during a planned activity for an external nonprofit or charitable group or organization" (p. 57). Students were excluded to avoid creating a lack of clarity surrounding recovery from work with recovery from school, as recovery from work specifically is one of the focal points of the study. Participants were also required to be over the age of 18 and to be comfortable reading and writing in English. If they did not meet these criteria, they were unable to continue with the survey.

The rest of the first survey included questions about demographic information, volunteer motivations measured by the Volunteer Functions Inventory (VFI; Clary et al., 1998), work recovery, work engagement, and a set of exploratory measures (described subsequently). A question was also included that asks whether participants have previously volunteered to use that

variable as a statistical control. If they answered yes, participants were additionally asked to provide information about the nature of their previous volunteering experience in 1-2 sentences. The participants were asked to report when they would be participating in their upcoming volunteer experience to make sure that the date provided in their email earlier was still accurate. Participants were asked to identify their occupation as an extra check that the participants were employed.

The other three surveys included the environmental affordances measure (whether volunteer motivations have been met), work recovery experiences measures, a work engagement measure, and the exploratory measures. The second survey was meant to be taken within 48 hours of the participants' volunteer experience so that the experience was still salient, however I allowed an extra 24-hour grace period to account for unforeseen circumstances and to increase the likelihood of having a complete set of data for each participant. In the second survey, participants were asked to describe the type of volunteer work that they participated in for both exploratory purposes and as a check to make sure that they completed a volunteer experience between taking the first and second survey. They were asked to describe the organization that they volunteered for as well as their volunteer role and tasks in 2-3 sentences. This was used as a check to confirm that the participant completed a volunteer activity and to look at the variation of volunteer experiences included in the study. Participants were also asked to report when the volunteer experience took place to confirm that it took place when the participant said it would in their email and first survey.

The third survey was taken at least two full weeks after the second survey and was sent so that enough time had passed to see if the implications of volunteering are of a longer duration. Once the survey was received, the participant had 48 hours to complete it. The fourth survey was taken at least two full weeks after the third survey was distributed, and once the survey was

received the participants had 48 hours to complete it. I also gave an extra 24-hour grace period for both the third and fourth surveys. In both the third and fourth survey, participants were asked whether they participated in another volunteer experience since completing the previous surveys. If they said yes, they were asked the same question to describe their volunteer experience as in the second survey. Participants were paid as long as they completed the survey, even if their survey completion fell outside of the requested survey window.

There was a high rate of responses suspected of being from fraudulent responders and/or bots that responded to the study, so substantial screening for fraudulent participants was conducted. Most fraudulent responders were identified during the initial email exchange that took place before participants were sent the surveys (through suspicious email addresses or the same/similar emails sent from multiple different email addresses during a short time period). IP address screening (i.e., many of the fraudulent participants were found to be using the same IP address), was used to screen out any remaining fraudulent participants that did end up receiving surveys ($n = 25$). Once a fraudulent participant was identified, they were not sent any further surveys and did not receive compensation. Ultimately, due to the number of fraudulent participants and the slow pace of recruitment of legitimate participants, the pilot study was halted, and I pivoted to the study described in the main text of the Master's thesis.

After screening for bots and fraudulent responders, the final sample for the pilot study was 18 participants. The full demographic data of these participants can be viewed in Tables B1 – B2.

Measures

The VFI (Clary et al., 1998) was used to measure volunteer motives and the environment affordances measure (Stukas et al., 2009) was used to measure volunteer motive satisfaction, as was the case in the main study. The Recovery Experiences Questionnaire (Sonnetag & Fritz,

2007) was again used to measure recover experiences and the 9-item Utrecht Work Engagement Scale (Schaufeli et al., 2006) was again used to measure work engagement. In addition, the surveys included the following exploratory measures: the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale (MOAQ-JSS; Cammann et al., 1983), the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988), a workplace anxiety measure (McCarthy et al., 2016), the Work-Family Conflict Scale (Carlson et al., 2000), a satisfaction with work–family balance scale (Valcour, 2007), and a subjective job stress scale (Motowidlo et al., 1986).

As the MOAQ-JSS and workplace anxiety measures are the only measures included in the main study that are not already included in the methodology description for the main study reported in this Master’s thesis, I will describe these measures further here. The MOAQ-JSS (Cammann et al., 1983) is a three-item measure that uses a 7-point Likert scale ranging from 1 = strongly disagree and 7 = strongly agree. A sample item is “All in all, I am satisfied with my job.” The workplace anxiety measure (McCarthy et al., 2016) is an 8-item measure that uses a 5-point Likert scale ranging from 1 = strongly disagree and 5 = strongly agree. A sample item is “I am overwhelmed by thoughts of doing poorly at work.”

Results and Discussion

The sample size upon concluding the pilot study ($N = 18$) was determined to be too small to provide a meaningful evaluation of my hypotheses and so the analyses to evaluate the hypotheses were not conducted in this pilot sample. Instead, I focused on the descriptive and qualitative data that was collected within this pilot data. Because of this, I also include relevant information from surveys taken outside of the window given to take the surveys (i.e., surveys taken more than 72 hours after the email was sent).

Despite the small sample size, participants reported a diverse range of previous volunteer experiences in the pilot study. Of all the volunteer experiences described by participants, the most

common were providing food (e.g., through food drives, food banks; $n = 4$), tutoring or teaching ($n = 4$), church-sponsored activities ($n = 4$), charity shops ($n = 3$), animal care ($n = 3$), and environmental cleanups ($n = 3$). A majority of the participants reported having multiple previous volunteer experiences ($n = 12$), suggesting that it is common for people who volunteer to volunteer with multiple different organizations.

Of the 18 participants, 12 of them participated in at least one other volunteering experience over the course of the 6-week study period, potentially suggesting that people who volunteer may do so with some frequency. Of these 12 participants, nine of them volunteered at the same place, meaning that volunteers may often volunteer with the same organizations across multiple repeated volunteer experiences. This means, together with the previous finding that many of the volunteers also volunteered with different organizations, that volunteers may volunteer at the same organization in the short-term, but multiple organizations in the long-term.

While the data collected from this pilot study was unable to be used in quantitative analyses to test my hypotheses, the descriptive and qualitative information provided by the participants helps provide a clearer picture of how volunteers choose to spend their time.

Table A1*Pilot Continuous Demographic Information*

<i>Continuous Variables</i>	<i>M</i>	<i>SD</i>
Age	44.72	12.70
Work Hours/Week	40.17	5.00
Total Children	1.33	1.50
Children at Home	0.44	0.70

N = 18

Table A2*Pilot Categorical Demographic Information*

<i>Categorical Variables</i>	<i>Categories</i>	<i>Frequency</i>
Gender	Male	5.6%
	Female	94.4%
Race	White	77.8%
	Black or African American	5.6%
	Asian	5.6%
	Native Hawaiian or Other Pacific Islander	5.6%
	More than one race	5.6%
	Ethnicity	Hispanic or Latino
	Not Hispanic or Latino	94.4%
Religion	Christianity	72.2%
	Buddhism	5.6%
	Spiritual	5.6%
	Agnostic	11.1%
	No Religion	5.6%
Salary	Salaried Employee	83.3%
	Wage Employee	16.7%
Yearly Income	0-19,999	5.6%
	20,000-39,999	11.1%
	40,000-59,999	33.3%
	60,000-79,999	22.2%
	80,000-99,999	5.6%
	100,000-119,000	5.6%
	120,000+	11.1%
	Prefer not to answer	5.6%
Marital Status	Single, never married	11.1%
	Living with someone as a couple, but not married	11.1%
	Married	66.7%
	Divorced	5.6%
	Separated	5.6%
Volunteered Before	Yes	88.9%
	No	11.1%

N = 18

Figure A1

Timeline for Survey Distribution for Pilot Study

