THE EFFECTS OF PROACTIVE PERSONALITY, COLLECTIVISM, AND CONSCIENTIOUSNESS ON TRAINING MOTIVATION

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Presented to

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By

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THE ROLE OF PROACTIVE PERSONALITY, COLLECTIVISM, AND CONSCIENTIOUSNESS AS PREDICTORS OF LEARNING MOTIVATION AND TRAINING TRANSFER INTENTIONS

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ABSTRACT

Given the growing value placed on personal initiative at work, increasingly diverse workforce, and mixed conclusions about trainee conscientiousness, it is imperative to examine how trainee proactive personality, collectivism, and conscientiousness influence motivation to learn and subsequent transfer intentions during training. I propose a conditional, indirect process model where proactive personality interacts with collectivism and conscientiousness to influence transfer intentions partially through their effects on motivation to learn. Integrating the "Initiative Paradox" (Campbell, 2000) and motivation-based, resource-based, and trait theories, I predict that the positive relationship between trainee proactive personality and training motivation variables is enhanced by their collectivism and hindered by their conscientiousness. Results of analyses on data collected from a culturally diverse sample of engineers were largely consistent with my arguments showing that trainee proactive personality had a positive effect on transfer intentions partially through motivation to learn and that this relationship is buffered by conscientiousness. However, support for the hypothesized bolstering effect of trainee collectivism was not found. Ultimately, several practical and research implications are suggested serving to grow our understanding of the importance of trainee differences for successful training transfer.

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Introduction

In 2012, U.S. organizations spent approximately \$164 billion and an average of 30.3 hours per employee on training and development (ASTD, 2013). Unfortunately, research suggests that only 10-13% of those expenditures actually resulted in changed work behavior among trainees once back on the job (Curry, Caplan, & Knuppel, 1994). A leading reason trainees often fail to modify their behavior is their low motivation during the training process (Clark, Dobbins, & Ladd, 1993). For, even with the ideal training design and learning and transfer environments, training cannot be effective if the employees are not motivated to learn nor committed to behavior change. In tandem with the reality of training programs becoming increasingly technical requiring advanced expertise in specific areas and thus increasingly selective as to who gets trained (Cascio, 1995), individual differences in motivation is of rising interest among training scholars and practitioners. Thus, scholars have come to a consensus that trainee characteristics and motivation are and continue to be the most important antecedents to training transfer (Colquitt, LePine, & Noe, 2000; Mathieu, Tannenbaum, & Salas, 1992; Noe & Schmitt, 1986).

Prior training literature has outlined the motivational process in an overarching model showing that both pre- and post-training motivation is crucial for the effectiveness of all training programs (Colquitt et al., 2000). Theoretically, this model demonstrates how trainee dispositional characteristics directly and indirectly impact different aspects of their motivation at each phase of the training process. Empirical tests of this model have provided great insights for training and motivation theory, resulting in a temporally anchored archetype of training motivation consisting of motivation to learn and motivation to transfer, in that order (Al-Eisa, Furayyan, & Alhemoud, 2009; Rowold, 2007). These revelations about the sequence of trainee

motivation are also important to practitioners because effective training programs require trainees to establish high degrees of motivation to learn and to transfer as early as possible (Goldstein & Ford, 2002; Seyler, Holton, Bates, Burnett, & Carvalho, 1998). For instance, if trainee characteristics that significantly influence training motivation are identified, practitioners could use these factors to design trainee selection, training initiatives, and pre- and post-training interventions. A number of studies show that all of these practices improve motivation to learn and transfer intentions, as well as foster positive training outcomes such as better performance among trainees (Cannon-Bowers, Salas, Tannenbaum, & Mathieu, 1995; Salas & Cannon-Bowers, 2001).

Traditional training research focused on methods and contextual factors that maximize trainee motivation and transfer behaviors (Tannenbaum & Yukl, 1992). While this research made great strides and remains important, several prominent and relatively recent training reviews have highlighted the need to examine how individual differences relate to training effectiveness (Campbell, 1988; Colquitt et al., 2000; Tannenbaum & Yukl, 1992). Because training outcomes often vary between trainees, examining individual characteristics could yield important findings that would be of value to both research and practice. Preexisting trainee traits and orientations are crucial because they create differences in self-set goals and cognitive constructions of environments, both of which greatly impact learner motivation (Kanfer & Ackerman, 1989). Together with the increasing workforce diversity, selectivity of training programs, and use of cheaper alternative self-paced training methods, trainee characteristics are more influential for the return on investment (ROI) of training programs than they ever have before (Brown, 2001; Simon & Werner, 1996; Tannenbaum & Yukl, 1992). Given the prominence of trainee learning motivation and transfer intentions, identifying employees who are predisposed to have higher

motivation coming into training is of upmost importance (Salas & Cannon-Bowers, 2001). Accordingly, this study focuses on how trainee proactive personality, collectivism, and conscientiousness impact training motivation.

One trait indicative of a tendency to be motivated is proactive personality (Bateman & Crant, 1993). Managers value workers with high levels of proactive personality because they identify and act upon opportunities, show initiative and take action to solve problems, and persevere until they bring about meaningful change (Crant, 1996; Grant, Parker, & Collins, 2009). Moreover, they tend to be intrinsically motivated and invest considerable effort into their jobs (Joo & Lim, 2009). Proactive personality has implications for training because learning requires immense personal investment of cognitive, emotional, and behavioral engagement (Fredricks, Blumenfield, & Paris, 2004). Additionally, the continuously changing business climate demands quick and innovative problem solving lending to an increase in highly technical jobs and therefore trainings (Campbell, 2000). Thus, it is important to examine how proactive personality affects training outcomes and the conditional nature of this relationship (Seibert, Crant, & Kraimer, 1999).

Although proactive personality shows promise as a helpful individual difference in training, some research indicates that proactive employees sometimes need help directing their focus and subsequent behaviors to elicit positive outcomes. That is, proactive employees can sometimes cause negative outcomes because they are misguided and unaware of important environmental signals (Campbell, 2000). One area in need of further empirical research and that could help explain trainees' success at guiding their behaviors toward learning are culturally based individual differences (Yang, Wang, & Drewry, 2009). This research is needed to help organizations face the increasingly common challenge of training culturally diverse employees

who hold different perspectives, learning styles, and social expectations toward training (Littrell & Salas, 2005; Salas & Cannon-Bowers, 2001). Additionally, this research is called for given the limited understanding of how intercultural differences influence trainee motivation. This gap is likely due to the challenges that come with measuring trainees that have yet to undergo acculturation and the lack of training transfer theory that includes such cultural based trainee characteristics. However, in light of this narrow framework, I submit that intercultural differences among trainees manifests in differing mental schemas that impact important training outcomes. As is the case for expatriate training, cultural differences among trainees can impact a variety of aspects within the training process from how they are motivated to learn to how they transfer their learned knowledge back to the job (Rogers & Spitzmueller, 2009). These cultural based individual differences are reflective of different value systems which manifest in diverse perspectives regarding what is and is not important (Hofstede & Hofstede, 2001). Thus, I posit that the cognitive schemas characteristic of a popular culturally based individual difference, collectivism, will impact the relationship between proactive personality and training outcomes partially through its effect on trainee motivation. It is expected that an employees' collectivistic orientation impacts their motivation to learn during training due to the differing internal and external cues and values such an orientation elicits. Given the increase in expenditures by multinational companies to develop their culturally diverse workforces, it is important to examine how collectivism, proactive personality, and their contingent relationship impacts the training process.

Another individual difference that has plagued the training community for its surprising influence on training outcomes is trainee conscientiousness (Colquitt et al., 2000). Although typically referred to as the key personality trait in positively predicting job performance (Barrick

& Mount, 1991; Behling, 1998; Tett, Jackson, & Rothstein, 1991; Mount & Barrick, 1995; Salgado, 1997) and training proficiency (Barrick & Mount, 1991), conscientiousness as one of the Big Five personality traits, has received mixed conclusions among training scholars. This is possibly due to the confluence of a lack of theory regarding the trait's role in training and the somewhat counterintuitive findings from previous training research. For instance, the metaanalysis by Colquitt et al. (2000) showed that although conscientiousness is positively related to training self-efficacy and motivation to learn, it was not significantly related to either declarative knowledge or skill acquisition. Taking a closer look, Major, Turner, and Fletcher (2006) longitudinally examined the Big Five personality traits, their lower order factors, proactive personality, and motivation to learn among employees going through a web-based training at a financial services firm. As expected, conscientiousness was positively related to proactive personality and motivation to learn. However, dutifulness, one of the six lower order factors of consciousness reflecting one's strict adherence to their ethical principles and moral obligations (Costa & MacCrae, 1992), was found to be negatively related to proactive personality and motivation to learn. Thus, given the abundance of organizational research exhibiting the advantages of employing workers high in conscientiousness, these counterintuitive findings regarding trainee conscientiousness suggest there is a need to further investigate how this trainee personality trait impacts training outcomes.

The overarching goal of this study is to explain the process by which proactive personality, collectivism, and conscientiousness influence beliefs regarding learning and transferring organizational training. In doing so, I merge the literature on various motivation based theories and the theoretical frameworks of proactive personality, collectivism, and conscientiousness to describe how these individual differences impact components of the

motivation process for trainees. In the spirit of constructive replication, I first discuss why motivation to learn relates to transfer intentions. Second, I introduce proactive personality as a crucial individual difference predictor of training motivation outcomes. Third, I propose a psychological process whereby proactive personality influences transfer intentions partly through its effects on motivation to learn. Fourth, collectivism and conscientiousness are presented as critical trainee individual differences that conditionally affect how proactive personality relates to training motivation outcomes. Subsequently, I discuss the methods by which I empirically test these relationships and report the results of those analyses. Lastly, I provide a discussion on the practical and theoretical implications, limitations to this present study, and potential future directions.

Motivation to Learn and Transfer Intentions

I assert that transfer intentions, one's motivation and committed effort toward transferring what is learned during training back to the job (Al-Eisa et al., 2009), are positively influenced by a trainee's motivation to learn, the extent to which trainees are motivated to acquire knowledge and understand the material in a training program (Noe & Schmitt, 1986). One model driving this hypothesis is Baldwin and Ford's (1988) seminal model of training transfer. Their model prescribes trainee characteristics (e.g. personality, ability, generic work motivation), training design factors (e.g., training content, sequencing of content), and work environment characteristics (e.g., social support, opportunity to use new skills and knowledge) as three categories of the most important antecedents to transfer. Since the publication of Baldwin and Ford's influential manuscript, subsequent renditions of the model have been drafted and empirically tested, resulting in an understanding that the relationship between these predictors

and training transfer are reconciled by a complex and iterative training motivation process (see Foxon, 1993; Kontoghiorghes, 2002).

Although transfer intentions has surprisingly received little attention by the empirical training literature (Al-Eisa et al., 2009), a great amount of theoretical work has established its importance as the key training motivation variable through developing multidimensional process models tracking phases of training transfer, as illustrated in Figure 1. Transfer intentions, the endpoint of the motivational process, has been identified as the most crucial phase of the overarching transfer process for its anticipated capacity to determine the level at which one can successfully transfer their learning back to the workplace (Foxon, 1993; Noe, 1986). Although commonly confused with motivation to transfer, a *desire* to use the knowledge and skills learned in training on the job (Noe, 1986; Holton, Bates, & Ruona, 2000), transfer intentions is a related but distinct and broader construct that reflects one's behavioral motivation. Ajzen (1991) theorizes that an individual's intentions capture the valence of one's motivation to engage in a specific behavior. For instance, a trainee may hold aspirations to transfer their learnings from training back to their job (i.e., motivation to transfer), but these aspirations may be subjugated by alternative goals given low allegiance to transfer. Thus, transfer intentions is understood as one's *commitment* to initiate transfer and encompasses one's motivation to transfer (i.e., desire to initiate transfer) (Al-Eisa et al., 2009).

In an attempt to delineate transfer intention's place in the application process of training transfer, a series of empirical studies of policemen and policewomen undertaking training for a computerized information system were conducted. In their first study, Machin and Fogarty (2003) posited and empirically supported the idea that goal/behavioral intentions (i.e., transfer intentions), which refers to the specification of a desired end-state that results in the commitment

to realize the wish or desire (Gollwitzer, 1993), are temporally preceded by trainee characteristics (e.g., attitude, perceived behavioral control) and followed by implementation intentions, the specification of situational cues that trigger planning and goal-directed actions. These implementation intentions are considered to be the first stage of post-training transfer which occurs directly after the formation of transfer intentions (Gollwitzer, 1993). In an earlier study on the formation of implementation intentions, Garling and Fujii (1999) assessed and supported a structural equation model showing that goal/behavioral intentions (i.e., transfer intentions) causally increases the likelihood that a certain behavior is performed. Extending this model, these authors examined products of goal/behavioral and implementation intentions finding that they are direct antecedents of goal orientation and goal initiation, both of which were earlier found by to predict transfer maintenance and generalization behavior (Machin & Fogarty, 2004). Thus, transfer intentions are understood to be one's cognitive representation of their willingness to perform transfer behaviors and is considered the most proximal antecedent to actual training transfer.

Additionally, scholars have come to a consensus that trainee motivation to learn is one of the most important antecedents to training transfer (Colquitt et al., 2000; Mathieu et al., 1992; Noe & Schmitt, 1986). It is often defined as the energizing/intensity, directing, and maintenance/persistence components of learning directed behavior in training contexts (Colquitt et al., 2000; Steers & Porter, 1975). Thus, learning motivation is understood as a force that influences enthusiasm toward scholarship, a stimulus that guides the trainee to master the training content, and an impetus to preserve interest in learning (Noe & Schmitt, 1986). Unsurprisingly, several empirical studies have supported the importance of trainees' motivation to learn for training effectiveness. For instance, research shows that motivation to learn is a

direct antecedent to one's willingness to participate and exert effort in training (Chuang, Liao, & Tai, 2005; Noe & Wilk, 1993), learning, skill acquisitions, and transfer (Cheng & Ho, 2001; Colquitt et al., 2000). Thus, transfer behavior is contingent on trainees' motivation to learn (Seyler et al., 1998).

Logically, motivation to learn occurs before transfer intentions. Temporal motivation theory states that individuals are motivated in a temporally linear fashion such that perceived utility of a given activity increases exponentially as the deadline nears (Lord, Diefenforff, Schmidt, & Hall, 2010). Thus, because learning has to occur before transfer, trainees are first motivated to learn and then motivated to initiate transfer. Additionally, this temporal ordering is supported by Vroom's (1964) expectancy theory that submits one will be more motivated (e.g., motivated to transfer, a major factor of transfer intentions as discussed earlier) if they believe their efforts will lead to improved performance. Provided that a trainee understands that learning in training would improve their ability to use the training content back on the job and thus that their transfer efforts would lead to successful transfer, motivation to learn precedes transfer intentions. That is, because successful learners possess high levels of motivation to learn, and successful learners feel better able to transfer training, one's intention to transfer is contingent on their prior learning and thus motivation to learn (Holton, 1996; Yamnill & McLean, 2001). Moreover, motivation to learn has shown consistent positive correlations with self-efficacy, an attribute of perceived behavioral control and antecedent to transfer (Wiethoff, 2004). Longitudinal empirical studies of these two interrelated aspects of trainee motivation confirm their theoretical temporal positioning whereby an employee's motivation to learn enhances one's motivation to engage in training transfer actions (Al-Eisa et al., 2009; Machin & Fogarty, 1997;

Rowold, 2007; Tai, 2006; Warr, Allan, & Birdi, 1999). Therefore, motivation to learn should serve as the premise for which one exhibits positive beliefs toward the training transfer process.

H1: Motivation to learn is positively related to transfer intentions.

Proactive Personality

Managers highly regard workers that intentionally and directly engage in behaviors to improve work processes (Crant, 1996; Grant et al., 2009). However, individuals differ in the extent to which they tend to take action to impact their circumstances (Bateman & Crant, 1993). Thus, Bateman and Crant (1993) established the proactive personality trait and defined it as the tendency to be relatively unconstrained by situational forces and to take action to change one's environment. Further descriptions of proactive personality include the tendency to be selfdevelopment focused (Antonacopoulou, 2000), behave more confidently, actively work to control one's environment, seek out information (Kammeyer-Mueller & Wanberg, 2003), transform the organization's mission(s), find and solve problems, and feel responsible to impact the world around oneself (Seibert et al., 1999). Additionally, individuals with proactive personalities tend to set high standards and acquire all available resources to meet those standards (Crant, 1996). In contrast, employees low in proactive personality pass up opportunities, fail to take initiative, and passively adapt to their environments (Crant & Bateman, 2000). Thus, in the context of training where the goal is to improve employees' work situations, proactive personality poses as an important antecedent to motivation to learn and subsequent training transfer intentions.

Positive outcomes of proactive personality include objective and subjective career success (Crant, 1995; Seibert et al., 1999), entrepreneurial intentions (Crant, 1996), innovation, political knowledge, career initiative, career progression (i.e., increase in salary and promotions),

and career satisfaction (Seibert, Kraimer, & Crant, 2001) even when controlling for relevant variables (e.g., demographics, human capital, motivational, organizational, and industry). Additionally, research shows that proactive personality accounts for significant amounts of variance in managers' charismatic leadership above and beyond that explained by the Big Five personality traits, in-role behavior, and social desirability (Crant & Bateman, 2000). Thus, proactivity is understood as an instrumental trait that is part of a group of behaviors responsible for impacting one's environments (Crant, 1996).

Although there is abundant research dedicated to examining individual differences as inputs to the training process (e.g., self-efficacy, cognitive ability), research attention to the role of proactive personality in the training literature has been very limited (i.e., Bertolino, Truxillo, & Fraccaroli, 2011; Major et al., 2006). Furthermore, given the importance of taking the "constellation approach," understood as the examination of the influence of interactions between various personality variables on performance related outcomes (Hogan, Hogan, & Roberts, 1996; Organ, 1996; Witt, Burke, Barrick, & Mount, 2002), even less is known about the interaction between proactive personality and other individual difference factors. However, prior studies on the role of proactive personality in the training domain provide initial evidence supporting that proactive personality predicts motivation to learn above and beyond the Big Five traits and demographic variables such as gender (Major et al., 2006) and age (Bertolini et al., 2011). Based on these early findings, examination of proactive personality's role in the training process is warranted.

Research indicates that proactive personality is a unique and distinct compound personality trait that is a prominent predictor of a variety of important work outcomes (Fuller & Marler, 2009). According to Hough and Schneider (1996), "compound personality traits are

comprised of basic personality traits that do not all covary" (p. 57). These authors suggested that the criterion-related validity of compound or emergent personality variables is likely to exceed that of basic personality traits. Moreover, Fuller and Marler (2009) conducted a meta-analytical review of proactive personality concluding that proactive personality is a stronger predictor of job performance than any of the Big Five traits or the Big Five collectively. Lastly, factor analysis and reliability estimates of proactive personality across three different samples have supported the trait's unidimensionality and the scale's discriminant, convergent, and criterion validity (Bateman & Crant, 1993). Based upon this framework, researchers have examined proactive personality's influence on a variety of important work outcomes.

Research utilizing resource frameworks support a partial-mediation model whereby distal factors, such as personality variables, are assumed to operate at each phase of the training process (Colquitt et al., 2000). This has come about due to the increased understanding that the transfer process is fluid whereby resource consumption and development fluctuates incessantly across all stages of task activity (Kanfer & Ackerman, 1989). The resource perspective theorizes that individual differences impact one's resource capacity which affects how resources are allocated in training (Colquitt et al., 2000). For instance, Colquitt and colleagues (2000) conducted a meta-analytical path analysis to compare the robustness of a fully mediated model to that of a partially mediated model of training motivation linking a number of trainee factors (i.e., locus of control, conscientiousness, anxiety, age, pre-training self-efficacy, valence) and training outcomes (i.e., declarative knowledge, skill acquisition, post-training self-efficacy, and reactions). The results of several regression analyses and Hunter and Hamilton's (1992) missing link analysis supported the partially mediated model showing that the distal trainee factors explained variance in the training outcome variables above and beyond that explained by

motivation to learn. Thus, because resource allocation is important for learning and transfer (Colquitt et al., 2000), a partially mediated model connecting the individual difference, proactive personality, and the last stage of the training motivation process, transfer intentions, seems appropriate.

Although proactive personality has not been widely examined in the training literature, I assert that proactivity personality, as an individual difference, has important implications for learning and training transfer. Given that learning demands personal investment in the form of cognitive, emotional, and/or behavioral engagement, the motivation to learn that is often lacking in training settings may be offset by inducing a proactive personality mindset. Thus, trainees high in proactive personality may have enhanced motivation to learn because they feel unconstrained by situational forces allowing them to invest personal resources without fear of retribution so as to be able to experiment, fail, and learn in the training domain. Additionally, this orientation is likely to enhance one's commitment to transferring one's learnings back to his or her job given their tendency to feel responsible for improving their work situations and continued motivation. Given that employees high in proactive personality are relatively confident in their behaviors and actively seek to change their environments (Alarcon, Eschleman, & Bowling, 2009), I make the following predictions.

H2a: Proactive personality is positively related to motivation to learn.
H2b: Proactive personality is positively related to transfer intentions.
H2c: The positive relationship between proactive personality and transfer intentions is partially mediated by motivation to learn.

Collectivism

Collectivism is defined as the subordination of personal goals to the goal of the collective (Triandis, Brislin, & Hui, 1988). Given that trainees believe the goal of their group (i.e., work team and/or organization) is to have a successful training program that develops individuals and subsequently improves team and/or organizational performance, a trainee's level of collectivism seems like an individual difference that has important implications for their motivation in the training domain.

Of the various factors used to distinguish cultures, the individualism-collectivism (I-C) constructs are the most popular and concise way to empirically examine cultural variation (Kim, Triandis, Kagitcibasi, Choi, & Yoon, 1994). Although preliminary work on these constructs have been cross-cultural whereby individual scores are aggregated to the country level, there is ample evidence indicating that a distinction between individualism and collectivism exists within cultures as an individual difference (Moorman & Blakely, 1995). Hui and Triandis (1986) suggest that cultures labeled as individualistic or collectivistic are simply cultures where the majority of their population scores higher on that corresponding individual difference. In fact, the preponderance of research focused on I-C is at the individual level irrespective of Hofstede's (1980) initial concentration at the country level (Oyserman, Coon, & Kemmelmeier, 2002). In accordance with this robust conclusion, this study examines collectivism as an individual difference.

Moreover, this study continues the recent trend of research considering I-C as two unique constructs that vary to different extents within individuals (Li & Aksoy, 2007). Originating from ecology, collectivism evinces a philosophy characterized by group goals and attention to external processes whereby social norms are paramount to self-standards (Triandis, 2001). People with

collectivistic orientations consider themselves to be malleable and work toward accomplishing communal objectives. However, individualism reflects a philosophy that emphasizes rights over duties, concern for oneself and immediate family, personal autonomy, self-fulfillment, and a selfidentity based on self-accomplishments (Hofstede, 1980). Additionally, individualism is indicative of a tendency to consider oneself as fixed and work toward manipulating one's environments (Triandis & Suh, 2002). In summation, collectivism and individualism represent two non-orthogonal philosophies emphasizing two different key elements to human life, social relationships and independence, respectively. Thus, similar to how cultures are deemed individualistic or collectivistic, individuals are categorized into one of these two categories based on differing valences in their adherence to the two different philosophies.

Why would one's I-C differentially impact their goals in training? The leading research in this area suggests that it is the cognitive construals and self-concepts determined by the I-C constructs that influence cognitions, emotions, and motivations (Markus & Kitayama, 1991). Collectivists hold self-construals characterized by interdependence and self-concepts demarcated by the goals of those around them, and individualists hold self-construals characterized by independence and self-concepts stemming from personal interests. Thus, collectivists tend to adapt their self-identities appropriately around the needs and goals of the group, while individualists tend to maintain a self-identity across situations and are motivated by their need to differentiate themselves from others in their groups (Rogers & Spitzmueller, 2009). I argue that how individuals define and identify themselves relative to their groups and peers plays a meaningful role in the learning process given that learning involves socially derived expectations regarding specific behaviors (Littrell & Salas, 2005). Additionally, given that learning requires an alteration of oneself and one's knowledge, skills, and/or abilities, the differences between

these two self-construals likely influences the extent to which one is able to be successfully trained. Overall, it seems that self-construals thriving on independence (i.e., individualists) are related to self enhancement behaviors (e.g., impression management) while self-construals demarcated by the steady focus on one's interdependence (i.e., collectivists) guide behaviors toward improving their knowledge, skills, and/or abilities to help out the collective good.

Moreover, the differing goals these dispositions elicit may differentially influence motivations in training. Moorman and Blakely (1995) studied differences between these two orientations on organizational citizenship behaviors. They concluded that individualists consider their personal interests more important than the group's interests, continuously lookout for themselves, and place more value in the attainment of personal goals as opposed to group goals. Conversely, collectivists greatly value group membership and seek to benefit the group even at personal expense (Wagner, 1992). Underlying this explanation is the assumption that the motivational effect of maximizing personal gain explains differences in job performance as a function of one's I-C (Earley, 1993). In accordance with the economic paradigm of agency theory (Fama & Jensen, 1983), personal gains for individualists can come from social loafing because their pursuit of self-interests (e.g., reducing stress, managing impressions of themselves, and getting promoted) may not align with organizational-interests and therefore may be best acquired by doing the bare minimum, engaging in impression management behaviors, and not taking risks (e.g., boasting to one's supervisor about a fancy but nonessential skill they learned during training). For collectivists, personal gains can stem from the success of their ingroup (i.e., a group whose members share common interests and traits and are concerned for each other's welfare; Triandis, 1988) because their pursuit of group-interests (e.g., organizational and training success) may align with their self-interests and thus may be best pursued by challenging

themselves (e.g., learning a new technique). Provided trainees believe they are ingroup members of their organizations, it is likely that intentions for collectivists are to learn and transfer new skills. Therefore, the following predictions are made.

H3a: Collectivism is positively related to motivation to learn.H3b: Collectivism is positively related to transfer intentions.

Proactive Personality and Collectivism

Although proactive personality is positively related to a number of desired work and training outcomes, activation of this trait may be associated with negative outcomes if the person is not also considering the collective good of his/her organization. Increasingly competitive work environments have forced supervisors to explicitly and implicitly encourage proactivity by placing more complex demands on their subordinates without specific instructions (Campbell, 2000; Frese & Fay, 2001). I propose that employees rely on their collectivistic orientation for guidance in the training process whereby their motivations and intentions are positioned toward learning and transferring, respectively.

In an attempt to outline role-expansion mechanisms that implicitly define the proverbial proactive employee, Campbell (2000) uncovered potential drawbacks of increased proactivity among workers and coined the term, the "Initiative Paradox." This theory suggests that employees are increasingly expected to use independent judgment and initiative, and simultaneously think and act in perfect alignment with organizational goals (Campbell, 2000, p. 57). However, because idiosyncratic expectations held by the employee, supervisor, and institution are inevitable, an employee's actions will sometimes result in unfortunate surprises for the manager and/or firm. Campbell (2000) offers several solutions to this paradox, but the overarching theme focuses on creating a shared sense of commitment and responsibility to and

ownership of the unit, its goals, and its processes. This shared philosophy among organizational stakeholders regarding the type, degree, and conditions where personal initiative is expected should subsequently minimize the likelihood of undesired results from the manager's and/or firm's perspective.

Considering the "Initiative Paradox," collectivists may be rightly tuned to activate their proactive personality in training. The implementation of a large training initiative naturally sends signals to workers that their learning and transfer are organizationally important (Baldwin & Magjuka, 1991). However, proactive employees who commonly engage in behaviors beyond which are prescribed by their supervisors and organizations may miss these signals and/or judge them to be trivial if they do not also make it a priority to align their own goals with those of their collective. This in turn could result in proactive trainees who, instead of being appropriately focused on learning and transfer, are concentrated on proactive behaviors such as managing impressions, finishing the training as fast as possible, and working at job tasks during training. However, collectivists may be more receptive and adopting of the cues pointing toward the importance of learning and transferring. The core element of collectivism is the idea that group membership and social relationships bind and mutually obligate individuals whereby expectations are based on ascribed statuses (Oyserman et al., 2002). For instance, they refrain from using personal emotion and judgment to maintain in-group harmony and also, to a large extent relative to individualists, derive life satisfaction from carrying out social roles and attached obligations (Markus & Kityama, 1991). Together, these philosophies promote the likelihood of establishing a shared interest in the training program and expectation that the training deserves one's best effort (Oyserman et al., 2002). Thus, trainees who are high in proactive personality may avoid the paradox of misguided training motivation if they are also

high in collectivism and therefore focus their naturally high need for achievement toward learning and transferring.

Alternatively, the tenets of the theory of planned behavior (TPB), an extension of the theory of reasoned action (TRA), support the prediction that collectivism would enhance the positive relationship between proactive personality and training motivation outcomes (Ajzen & Fishbeing, 1980). TPB suggests that personal attitudes, subjective norms, and perceived behavioral control regarding a certain behavior shape an individual's behavioral intention. For example, in training contexts, personal attitudes may be a trainee's perceived training utility, subjective norms may be a trainee's perceptions of peer trainees' penchant of the impending training, and perceived behavioral control might be a trainee's confidence in their ability to learn and transfer the training content. Moreover, as defined by the theory, behavioral intentions are a person's readiness and commitment to perform a certain behavior (Ajzen & Fishbein, 1980), and it is the behavioral intention that interacts with actual behavioral control to be the most proximal antecedent to actual behaviors (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Thus, transfer intentions is relatively important given that the only theorized empirically supported phenomenon blocking transfer intentions from becoming actual behaviors are completely out of the control of the trainee.

Recently, Ajzen (2011) addressed numerous critiques of his TPB including the commonly cited limitation of the theory's inattention of personal background factors. In his review, Ajzen (2011) writes that personal factors such as personality traits and broad life values influence intentions and behaviors through their effects on the theory's more proximal predictors (i.e., attitudes, subjective norms, and perceived behavioral control). To a great extent, literature on the TPB has not directly addressed how individual differences play out in the model.

However, indirect and direct references have been made regarding the benefit of future studies including such variables like the commonly cited "sufficiency" and "past behavior/habit" limitations. The critiques of the original TPB concern the theory's lack of predictive power and suggest that expanding the model's list of predictors beyond the three prescribed belief-value products to include additional variables that reflect past behavior/habit (e.g., individual difference variables) would enhance the prediction of intentions and behaviors (Ajzen, 2001; Armitage & Conner, 1999; Conner, Warren, Close, & Sparks, 1999). In general, these research directives were met with great success; the addition of personal factors such as self-identity (Armitage & Conner, 1999), personal and moral norms (Harland, Staats, & Wilke, 1999), and personality traits (Courneya, Bobick, & Schinke, 1999) improved the prediction of behavior above and beyond the three prescribed predictors in the theory. Therefore, if personality traits and orientations to a large extent explain consistent behavior across different domains of life, it seems that they also influence our attitudinal, normative, and control beliefs regarding certain behaviors.

Using the ontological and nomological underpinnings of proactive personality and collectivism, I submit that together, these two individual differences can explain trainees' attitudinal, normative, and control beliefs regarding performing in an impending training. Specifically, I posit that a trainee's level of proactive personality will illuminate their level of positive affect toward and perceived control over the training transfer process while a trainee's level of collectivism will also help explain one's attitudes and additionally their perceived subjective norms toward training. According to trait activation theory, situations that accommodate one's personality produce positive feelings toward that environment and in turn, increase activation of the obliged personality trait(s) (Tett & Burnett, 2003). Employees high in

proactive personality generally relish problem solving and navigating their way through work situations and feel unconstrained by situational forces (Bateman & Crant, 1993). Thus, training programs, which typically require trainees to engage in problem solving and control the usage of their personal resources, may be the perfect medium to accommodate proactive employees. This alignment of situation (i.e., training) and personality (i.e., proactive personality) factors is theorized to subsequently promote positive feelings toward and perceived behavioral control in that situation among those high in that personality trait.

Additionally, given that collectivists have interdependent self-construals and selfconcepts based on group goals, their perceived subjective norms of a training program are likely to influence their own attitudes toward that program. For instance, a collectivist's perceived subjective norms concerning a training initiative, as informed by their peers, managers, and organization through signals such as massive amounts of money and time dedicated to the initiative, should result in an adopted belief that training is valuable to the organization, and therefore the training is valuable to them. Thus, it is likely that collectivists hold positive subjective norms regarding training, due to various organizational signals, and subsequently engage in groupthink and consider the impending training to be beneficial. Ultimately, I posit that proactive personality is the basis for which one shows enduring enthusiasm in the learning and transfer process while collectivism ensures that this zeal is aligned with the objectives signaled by organizational stakeholders regarding the training program.

H4a: The positive relationship between proactive personality and motivation to learn is moderated by an individual's level of collectivism such that collectivism has an enhancing effect on the proactive personality-motivation to learn relationship.

H4b: The positive direct relationship between proactive personality and transfer
intentions is moderated by an individual's level of collectivism such that collectivism has
an enhancing effect on the proactive personality-transfer intentions relationship.
H4c: The positive indirect relationship between proactive personality and transfer
intentions through motivation to learn is conditional and based on one's level of
collectivism, such that the relationship between proactive personality and transfer
intentions is stronger among people high than low on collectivism.

Conscientiousness

Conscientiousness is considered by some to be "the most important trait-motivation variable in the work domain" (Barrick, Mount, & Strauss, 1993, p. 721). It is one of the Big Five personality traits and is defined as a tendency to show self-discipline, act dutifully, and ambitiously aim for achievement (Costa & McCrae, 1992). Conscientious individuals have also been described as thorough, organized, purposeful, and hardworking (Major et al., 2006; McCrae & Costa, 1987; Rowold, 2007). Ultimately, conscientiousness is a personality trait that illustrates the way in which individuals control, regulate, and direct their impulses (Costa & McCrae, 1992). Meta-analytical evidence shows that conscientiousness is a positive predictor of job performance across a variety of occupations which is supplemented by research linking it to goal commitment and self-set goal setting (Barrick & Mount, 1991; Barrick et al., 1993; Gellatly, 1996). Considering these prescriptive behavioral tendencies and cognitive schemas, it is not surprising that managers and organizations alike appreciate workers high in conscientiousness.

Training research has made great strides in contextualizing conscientiousness as a trainee characteristic. For instance, conscientiousness is the only factor of the Big Five personality traits that research has consistently found to be positively related to motivation to learn (Colquitt &

Simmering, 1998; Colquitt et al., 2000). Additionally, research shows that trainee conscientiousness is predictive of a number of positive training variables such as training proficiency, learning self-efficacy, and transfer outcomes including transfer intentions (Barrick & Mount, 1991; Burke & Hutchins, 2007; Martocchio & Judge, 1997; Naquin & Holton, 2002). Together, these empirical studies among others show that the behavioral, cognitive, and affective characteristics associated with being conscientious serve as personal resources that help trainees learn and transfer their training back to their jobs. Supplementing these empirically derived conclusions are a number of well-developed theories explaining why conscientious individuals tend to be the most motivated workers and trainees.

Conscientiousness is hypothesized to be positively related to motivation to learn and transfer intentions because of the differing mental schemas, values, and expectations the personality trait elicits. Taking the need-motive-value perspective, which posits that personality, values, and motives drive between-person differences in motivation (Kanfer, 1991), it is theorized that one's personality impacts their construction of their environments as well as one's goals and outlooks (Colquitt et al., 2000). Thus, for example, conscientiousness is related to training motivation because of the disparate goals and outlooks of conscientious versus unconscientious trainees. Similarly, Colquitt and Simmering (1998) proposed and supported a model of training transfer based on Vroom's (1964) expectancy theory where conscientiousness impacted training outcomes through affecting trainees' valuation of training content (i.e., expectancy). Rationale for the conscientiousness-valence relationship hypothesis stems from the understanding that the personality trait subsumes the more specific facet of need for achievement which has been positively linked to goal commitment and self-set challenging goals (Barrick et

al., 1993). In addition, the conscientiousness-expectancy relationship hypothesis can be explained theoretically by considering the antecedents to self-efficacy. Empirical research shows that self-efficacy is largely impacted by one's assessment of their own personal resources and constraints (Colquitt & Simmering, 1998). Because people high in conscientiousness likely perceive themselves as hardworking and diligent (McCrae & Costa, 1987), they tend to perceive that their resources far outweigh their constraints. Additionally, self-efficacy is driven in part by one's analysis of task requirements such that ambiguous task requirements decreases one's level of confidence in their ability to perform the task successfully. However, because conscientious workers tend to more accurately assess task requirements due to being organized and thorough, they typically have more confidence in meeting those requirements (Barrick & Mount, 1991). Thus, conscientiousness is considered to be an important trainee characteristic for its instrumentality in enhancing behaviors and mindsets conducive for training effectiveness.

In summation and according to a number of well supported training models, conscientiousness impacts training motivation variables through its positive effect on selfefficacy, perceived value of training outcomes, and job/career outlooks (e.g., Baldwin & Magjuka, 1997; Martocchio, 1992; Noe, 1986; Noe & Schmitt, 1986; Quinones, 1985). More specifically, in considering Vroom's expectancy theory (1964), conscientiousness is likely to enhance motivation to learn because trainees high in this trait typically have high levels of confidence that their efforts in training will lead to them mastering the training content (i.e., valence). Whereas conscientiousness is likely to be a driver of transfer intentions due to its association with a high valuation of training outcomes (i.e., expectancy). Additionally, the conscientiousness-transfer intentions relationship is supported by research showing that personality traits operate at all stages of functioning, particularly when behaviors have personally

meaningful outcomes such as in training (Naylor, Pritchard, & Ilgen, 1980). Thus, conscientiousness impacts transfer intentions not only due to its association with goal commitment, largely a cognitive based phenomenon, but also because of the behavioral aspects of the trait that increase one's training transfer self-efficacy such as being organized and purposeful. Given that conscientiousness is a trait known for its prominent role in helping individuals control, regulate, and guide behavioral and cognitive impulses and thus subsequently facilitate training motivation, this study seeks to confirm that conscientious trainees are also more motivated to learn and transfer their learning back to their jobs.

H5a: Conscientiousness is positively related to motivation to learn.H5b: Conscientiousness is positively related to transfer intentions.

Proactive Personality and Conscientiousness

Although the training literature has made great strides in contextualizing trainee conscientiousness, there are a number of unanswered questions regarding how the personality trait influences important training variables. For instance, although a number of empirical studies and theories show that conscientiousness is positively correlated with a number of positive training outcomes, several meta-analyses and reviews report that some of these conclusions are based off analyses that don't take into account the multidimensionality of the trait or its interaction with other individual differences (Colquitt et al., 2000; Major et al., 2006). Thus, in light of the great amount of research distinguishing conscientiousness as the key personality trait in predicting positive training and work outcomes, several training studies have risen concern about fully accepting the trait as invariably beneficial for trainees.

A number of studies show that conscientiousness can paradoxically act as a challenge to a learner's ability to absorb new information and transfer their learnings back to their jobs. For

instance, the meta-analysis by Colquitt et al. (2000) found that conscientiousness was not significantly related to skill acquisition or declarative knowledge, and when controlling for motivation to learn and cognitive ability, conscientiousness actually had negative effects on those training outcomes. Subsequent research has also found evidence showing that conscientiousness has negative relationships with motivation to learn, learning, and transfer when the training content focuses on skills and behaviors associated with the personality trait (e.g., self-leadership behaviors, self-set goal setting, organization) (Stewart, Carson, & Cardy, 1996).

Several other researchers have tried to understand the processes underpinning these relatively counterintuitive results. For example, Martocchio and Judge (1997) tested and supported a mediation model showing that conscientiousness was negatively related to learning through self-deception. Thus, because conscientious trainees tend to ignore minor criticisms, discount failures, avoid negative thoughts (Sackeim & Gur, 1979), and hold artificially inflated perceptions of self-accomplishments (Paulhus & Reid, 1991), they make external selfattributions to protect their self-images and therefore engage in avoidant coping behaviors that distract from the training tasks at hand (Martocchio & Dulebohn, 1994; Martocchio & Judge, 1997). Furthermore, Kanfer and Ackerman (1989) showed that trainees high in conscientiousness are more focused on imminent task completion compared to developing new skills and thus engage in more self-regulatory activity that distracts from their on-task attention (Burke & Hutchins, 2007). Supporting these theoretical models, Major et al. (2006) found that trainee dutifulness, one of six facets of conscientiousness representing one's strict adherence to their ethical principles and obligations, had a negative and significant relationship with both proactive personality and motivation to learn.

Another theory explaining the challenges faced by conscientious trainees in the training process is that this personality trait elicits a preference for planned rather than spontaneous behavior (Costa & McCrae, 1992). LePine, Colquitt, and Erez (2000) showed that low conscientiousness is associated with more adaptability in facing task difficulties commonly found in training. Thus, conscientiousness is associated with being less flexible in allocating cognitive resources which facilitates subsequent hesitation and anxiety when entering domains that present new challenges like in training. Researchers have called for further investigation of the multidimensionality of conscientiousness in training contexts, particularly the differential impacts of the dutifulness component (i.e., resolve to self-monitor during self-development) and achievement component (i.e., desire to attain and enact training goals) on training motivation (Herold, Davis, Fedor, & Parsons, 2002; Major et al., 2006). Additionally, scholars suggest that because the correlations between conscientiousness and training outcomes seem to be highly dependent on moderator factors, particularly other individual differences (Burke & Hutchins, 2007; Colquitt et al., 2000), this study considers the relationships between proactive personality, conscientiousness, and their interaction in predicting motivation to learn and transfer intentions.

Although proactive personality and conscientiousness are significantly and positively related, there is evidence suggesting that they have differential impacts on training motivation variables. Major et al. (2006) helped in clarifying this by showing that two facets of conscientiousness (i.e., dutifulness and achievement orientation) were significantly but differentially related to both proactive personality and motivation to learn. Specifically, dutifulness had negative relationships with the two training variables while achievement orientation had positive relationships with them. Thus, while proactive personality may have positive implications for trainees' motivation to learn and transfer intentions, conscientiousness

may inhibit the positive effects of proactive personality during training. Proactive trainees may be inclined to seek out information and take initiative, however, being overly cautious and detailoriented (i.e., overly dutiful) may weaken their efforts. Thus, when a trainee is high in conscientiousness and proactive personality, it is predicted that the benefits of proactive personality for trainees will be reduced.

H6a: The positive relationship between proactive personality and motivation to learn is moderated by an individual's level of conscientiousness such that conscientiousness has a buffering effect on the proactive personality-motivation to learn relationship.
H6b: The positive direct relationship between proactive personality and transfer intentions is moderated by an individual's level of conscientiousness such that conscientiousness has a buffering effect on the proactive generated of conscientiousness relationship.

H6c: The positive indirect relationship between proactive personality and transfer intentions through motivation to learn is conditional and based on one's level of conscientiousness, such that the relationship between proactive personality and transfer intensions is weaker among people high than low on conscientiousness.

Control Variables

Alternative individual differences such as age, individualism, gender, and tenure with the organization have influences on training motivation that may obscure the relationships of focus in this study (Colquitt et al., 2000; Tharenou, 1997). In regard to age and job tenure, scholars have shown they have negative relationships with training participation and learning (Martocchio, 1994; Tharenou, 2001) due to increased fear of failure (Colquitt et al., 2000) and lower levels of perceived return on investment (Tharenou, 1997). Moreover, empirical evidence

shows that women and men differ in the extent to which they engage in challenging tasks (De Pater, Van Vianen, Fischel, & Van Ginkel, 2009). However, gender effects on training outcomes remains equivocal (Colquitt et al., 2000). Lastly, scholars have shown that individualism, a unique but strong correlate of collectivism, impacts training motivation (Rogers & Spitzmueller, 2009). Accordingly, I controlled for age, tenure, gender, and individualism.

Method

Participants and Procedure

The data used for this study was collected as part of an applied research project that sought to investigate training implications of differences and similarities in culture, ability, personality, and training motivation among a culturally diverse group of 369 trainees participating in 22 different technical engineering courses at a large multinational oil and energy company. During the training program, I-C, conscientiousness, proactive personality, and demographic information were assessed. Immediately following training, trainees responded to scales assessing their transfer intentions and motivation to learn. All of the participants had a bachelor's degree or higher, 65% of the participants were under the age of 35, 22% of the participants were female (i.e., 78% male), and the total sample had an average of 3.9 years of experience with the organization. Moreover, given the multinational nature of the organization, the sample represents an internationally diverse group of trainees: 35% from the U.S., 25% from Nigeria, 10% from Canada, and 30% from a mixture of other nations (Qatar, Russia, Guinea, Columbia, India, and Angola).

Measures

Reliability estimates are provided in Table 2. Respondents responded to all items using a 5-point Likert-type scale (1 = Strongly disagree, 5 = Strongly agree). High scores represent high levels of the constructs.

Proactive personality. An abridged 6-item (e.g., "I actively attack problems") version of Frese, Fay, Hilburger, Leng, and Tag's (1997) initiative scale was used to assess participants' proclivity for proactivity. The measure has been found to possess adequate inter-rater, test-retest (i.e., stability), and scale reliabilities, as well as construct validity (see Fay & Frese, 2001; Frese et al., 1997). Additionally, Fay and Frese (2001) found evidence that their initiative scale is equivalent to the more commonly cited and proprietary proactive personality scale (r = .96) developed by Bateman and Crant (1993). Cronbach's alpha in the present study was .84.

Collectivism and individualism. A subset of eight items from Hofstede's (1980) measure of individualism (four items) and collectivism (four items) was utilized. A sample item measuring individualism is, "My personal identity, independent of others, is important to me." A sample item measuring collectivism is, "I feel good when I cooperate with others." Cronbach's alphas in the current study for the collectivism and individualism scales were .75 and .66, respectively.

Conscientiousness. To assess trainees' levels of conscientiousness, I used an adapted 6item scale developed by Goldberg (1999). Sample items included, "I pay attention to details" and "I like order." Cronbach's alpha in the present study was .80.

Motivation to learn. The 6-item (e.g., "I would like to improve my skills") Noe and Schmitt (1986) measure of motivation to learn was used to assess trainees' desire to acquire knowledge from the training course. Cronbach's alpha in the current study was .80.
Transfer intentions. To assess the extent to which trainees are committed to apply the knowledge obtained from training to the job, a 5-item measure of intent to transfer was developed to address the specificity of the training situation for the given organization. A sample item included "I will apply the techniques I have acquired as soon as I return to my job." Cronbach's alpha in the current study was .89.

Demographic Variables. Participants self-reported their age, gender, and tenure.

Results

In order to test the discriminant validity of the study variables, I conducted a series of confirmatory factor analyses and report the results in Table 1. First, I compared the hypothesized five-factor model to a four-factor model which combined proactive personality and conscientiousness as a single factor. The main goal of this first set of confirmatory factor analyses was to determine the distinctiveness of proactive personality and conscientiousness given that they both reflect achievement-striving orientations. As shown in Table 1, the results of the chi-square difference test indicated that proactive personality and conscientiousness are distinct factors. Next, I tested the four-factor model against a two-factor model that combined proactive personality, conscientiousness, and collectivism as one factor and motivation to learn and transfer intentions as the other. This model comparison was conducted primarily to show the distinctiveness of this study's individual difference variables and training motivation variables. The results of this comparison, which are illustrated in Table 1, showed that the three individual difference variables are distinct from the training motivation factors. Lastly, we tested the twofactor model against a one-factor model that combined all study variables The chi-square difference tests revealed: (1) the five-factor model as a better fit than the four-factor model, the (2) four-factor model as a better fit than the two-factor model, and the (3) two-factor model as a

better fit than the one-factor model. Thus, according to Hu and Bentler's (1999) recommendations for fit index cutoff criteria, the five-factor model treating the variables as distinct had the most satisfactory RMSEA, CFI, and TLI values. Based on the results of the confirmatory factor analyses, I treated the variables as distinct constructs in subsequent analyses.

Table 2 shows the means, standard deviations, reliabilities, and correlations. To test the hypotheses, I employed Hayes' (2013) "PROCESS" macro for SPSS. The macro provides a single instruction that expands automatically within SPSS into a set of instructions to perform the user-specified conditional process analysis (Hayes, 2013) to test moderation and/or mediation models, following procedures recommended by Edwards and Lambert (2007) and Preacher, Rucker, and Hayes (2007). Markedly, PROCESS implements a bootstrapping procedure that provides confidence intervals of direct, indirect, and total effects, which also takes into consideration the conditional effect of any moderators designated in the model design. Given that indirect effects are not normally distributing, the bootstrapping method is preferable over other procedures such as the causal step approach and the Sobel test (Edwards & Lambert, 2007; Hayes, 2013; Preacher & Hayes, 2008). Ultimately, the bootstrapping procedure produces *k* number of resamples for the indirect effect and provides bootstrapped confidence intervals of the effect to determine significance.

I utilized PROCESS "model 10" to test the proposed moderated partial mediation model and centered all predictors before creating the interaction terms. "Model 10" specifies two different regression models which together provide the needed information to calculate the full structural model (see Figure 4). Additionally, this structural model was chosen over the similar PROCESS "model 8" because it takes into account both moderator factors and their interaction terms at the same time for both regression models, unlike "model 8," which would have required

distinct analyses of two separate moderated mediation hypotheses. Thus, "model 10" was considered to be statistically and conceptually more robust. As presented in Table 3, the first model calculated path a (Figure 2) with motivation to learn as the criterion variable, and the second model calculated path b (Figure 2) with transfer intentions as the criterion variable. Moreover, this macro produced 1,000 bootstrap sample means and estimated the conditional indirect effects of collectivism and conscientiousness at their respective means and +1/-1 standard deviations (see Table 4). Preacher et al. (2007) suggested moderated mediation is present if the interaction terms from the first and/or second model (proactive personality x collectivism and proactive personality x conscientiousness) are statistically significant, and if zero is excluded in the 95% confidence intervals associated with the indirect effect.

Findings

Supporting Hypothesis 1 and previous studies exploring the training motivation process (e.g., Machin & Fogarty, 2003), motivation to learn was positively related to transfer intentions (B = .40, SE = .12, p < .001) (Table 3). Thus, the data showed that trainees who desired to learn in the training program were also generally committed to transferring their learning back to their jobs. Additionally, consistent with Hypothesis 2a, proactive personality was positively related to motivation to learn (B = .39, SE = .05, p < .001) (Table 3). Also shown in Table 3 and consistent with Hypothesis 2b, proactive personality was positively related to transfer intentions at stage two of the mediation (B = .27, SE = .10, p < .01). Noteworthy, there was a short time lag between the measurements of proactive personality and the two training motivation variables, making the case for a causative effect where training motivation is preceded by a proactive disposition. These findings—proactive personality significant at both stages and motivation to learn significant at stage two—suggest partial mediation in support of hypothesis 2c.

Collectively, these findings indicate that variance in transfer intentions is largely explained by shared and unique aspects of motivation to learn and proactive personality.

Moreover, consistent with Hypotheses 3a and 3b, collectivism was positively related to motivation to learn (r = .51, p < .001) and transfer intentions (r = .31, p < .001) (Table 2). Thus, when trainees valued their group belongingness, they also tended to be enthusiastic about learning and dedicated to transferring their learning back to their jobs. Also noteworthy is that collectivism predicted variance in both motivation to learn (B = .20, SE = .05, p < .001) and transfer intentions (B = .23, SE = .09, p < .05) above and beyond that explained by the other study variables. However, contradicting Hypotheses 4a and 4b, the proactive personality x collectivism cross product term was not significant at either stage one (B = -.03, SE = .05, p = n.s.) or stage two (B = -.09, SE = .10, p = n.s.) (Table 3). Therefore, I also did not find support for Hypothesis 4c, which predicted that collectivism would moderate the proposed partial mediation.

Moreover, as shown in Table 3 and in support of Hypothesis 6a, the proactive personality x conscientiousness cross product term was significantly related to motivation to learn (B = -.13, SE = .06, p < .05). That is, the positive relationship between proactive personality and motivation to learn was stronger among those low rather than high in conscientiousness (Figure 2). However, there was also a positive correlation between conscientiousness and motivation to learn (Hypothesis 5a) (r = .34, p < .001; Table 2). Thus, the positive relationships that both proactive personality and conscientiousness have with motivation to learn are altered when considering their interaction. Moreover, the proactive personality x conscientiousness cross product term was not significantly related to transfer intentions (Hypothesis 6b) (B = .17, SE = .12, p = n.s.; Table 3). However, as shown in Table 2 and in support of the bivariate link

suggested by Hypothesis 5b, conscientiousness was positively related to transfer intentions (r = .24, p < .001). Presented in Table 4 are the upper and lower limits of the bootstrap estimates showing the conditional indirect effect of conscientiousness on transfer intentions through motivation to learn at mean levels of collectivism for employees with low (-1 SD), average, and high (+1 SD) levels of conscientiousness. Therefore, Hypothesis 6c, which predicted that conscientiousness would moderate the proposed partial mediation, was supported.

Discussion

The purpose of this paper was twofold: first, to substantiate past research showing the importance of the process by which motivation to learn influences transfer intentions; second, to examine the role that proactive personality, collectivism, and conscientiousness have in the training transfer process. Specifically, by applying motivation-based, resource-based, and trait theories, I proposed a conditional, indirect process model where proactive personality interacts with collectivism and conscientiousness to influence transfer intentions partially through their effects on motivation to learn. Additionally, I attempted to extend the theoretical reach of the TPB by exploring how individual differences (proactive personality and collectivism), and not the traditional three belief-value products (i.e., subjective norms, perceived behavioral control, attitude toward behavior), help explain transfer intentions.

In support of Hypothesis 1 and supporting existing research, this study found a positive relationship between motivation to learn and transfer intentions. In line with Baldwin and Ford's (1988) famous model of training transfer, I found support for my argument that trainees' motivation to learn enhances one's participation, effort, and positive attitude during training, which in turn increases their dedication toward successfully using their learning once back on their job. Additionally, the results support the instrumentality component of expectancy theory

which suggests that workers will feel a greater sense of efficacy and preparedness for the next goal (i.e., transfer) when they meet performance expectations regarding learning in training. Because trainees with high levels of motivation to learn are more likely to successfully learn (i.e., meet performance expectations) than their counterparts, they will also likely be more confident and equipped to transfer their learning back to the job. Thus, trainees with high levels of motivation to learn likely engage in more transfer behaviors due to their heightened sense of learning and thus ability to transfer. Overall, this finding serves to strengthen the growing consensus that motivation to learn is a leading determinant of positive training outcomes.

In agreement with the limited research on proactive personality in training, this study demonstrates the importance that this personality trait has in explaining motivation to learn (Hypothesis 2a) and transfer intentions (Hypothesis 2b). Additionally, based on the results of this study, I found support for the assertion that proactive personality positively influences transfer intentions partially through its effects on motivation to learn (Hypothesis 2c). These findings imply that trainees who are inclined to take action to improve themselves and their circumstances - regardless of any contextual forces – use training as a means to fulfill their desires. Specifically, trainees high in proactive personality likely have a heightened desire to learn and thus commitment to transfer their learning because they are self-development and achievement oriented and feel responsible for improving their organizations. Extending this rationale and using the resource perspective, I proposed that proactive trainees have heightened capacities to allocate resources because they feel unconstrained by situational forces and therefore feel free to experiment and fail, behaviors conducive to learning. This increased sense of control over personal resources, which operates at each phase in training, likely provides trainees the ability to appropriately attend to the challenges faced in the training transfer process.

Additionally, I hypothesized that trainees' collectivism would strengthen the relationships between proactive personality and this study's outcome variables, motivation to learn (Hypothesis 4a) and transfer intentions (Hypothesis 4b). I described how trainees high in proactive personality may be misguided and engage in behaviors undesirable to the organization. However, using the TPB, which suggests behaviors are a function of perceived behavioral control, subjective norms, and attitudes toward a specific behavior, and the Initiative Paradox (Campbell, 2000), which proposes that the inevitable idiosyncratic expectations held by workers, supervisors, and the institution will sometimes lead to unfortunate surprises for the manager and/or firm, I theorized how collectivism would act as a guiding force in the transfer process. Specifically, I posited that when a trainee is high on proactive personality and also has an interdependent self-construal whereby the collective goal (e.g., successful training transfer) is prioritized over one's own individual goal/s, they proactively engage in behaviors desirable to the organization (e.g., transfer behaviors). Considering the components of motivation, I proposed that proactive personality explains the intensity and persistence aspects of motivation whereas collectivism explains the directional aspect of motivation. Support for these propositions was not found. However, results did show a positive main effect of collectivism on motivation to learn (Hypothesis 3a) and transfer intentions (Hypothesis 3b). Thus, these findings suggest that the effect of one's proactive personality on their motivation to learn and subsequent transfer intentions does not depend on his/her collectivistic orientations. Rather, it seems that proactive personality and collectivism have independent positive roles in the prediction of training motivation.

Finally, I examined conscientiousness as a potential moderator of the direct relationships between proactive personality and both training motivation variables, as well as the indirect

effect of proactive personality on transfer intentions. Hypothesis 6a and Hypothesis 6c, positing that the positive relationship between proactive personality and motivation to learn is buffered by conscientiousness and that this moderation plays out in the indirect proactive personality-transfer intentions relationship, respectively, were supported. However, Hypothesis 6b, predicting that conscientiousness would weaken the direct relationship between proactive personality and transfer intentions, was not supported. These findings support previous discussions about the differential relationships between various lower-order facets of conscientiousness and training motivation. For example, Busato, Prins, Elshout, and Hamaker (2000) discussed how conscientiousness is positively related to negative fear of failure (i.e., habitual feelings of worry, unpleasant tension, and lack of confidence about future performance) and can therefore limit the extent to which other motivation-prompting learner characteristics (e.g., proactive personality) influence one's desire to learn. Additionally, past studies have shown that trainees high in conscientiousness engage in more self-regulatory behaviors and therefore are more aware of their knowledge base (Steel, 2007). This understanding of one's own knowledge is then continuously revamped and drawn upon to determine one's motivation and course of action in the task at hand (e.g., training) (Boekaerts & Corno, 2005). Furthermore, these processes theoretically occur more often for people high in proactive personality given that, by definition, they engage in more activities for change. Thus, a trainee high in both proactive personality and conscientiousness, although high on need for achievement and perseverance, may succumb to the debilitating effects of a more salient understanding of the discrepancy between their current and expected expertise in the training material.

A related but alternative explanation for these findings concerns the nomological space captured by the personality measures used in this study. For instance, it is understood that there

is some overlap between the information captured by proactive personality and conscientiousness such as the tendency to be ambitious and have a high need for achievement. However, as reflected by this study's findings, it seems that at least some aspect/s of conscientiousness seem to counteract the strong motivational benefits of a proactive orientation. For instance, a person high in proactive personality may have a tendency to elicit change without much concern of situational forces; but combined with high levels of conscientiousness, the person may be very deliberative and exacting and therefore represent a highly enthusiastic but conflicted worker when presented with foreign challenges like those encountered in training. In fact, Steel (2000) discussed and empirically showed how components of conscientiousness are strongly reminiscent of procrastination, often considered an antonym of proactivity. Thus, I suggest that when looked at as a product with proactive personality in the prediction of motivation to learn, the beneficial components of conscientiousness for trainees may be subsumed by proactive personality, allowing the weaker but detrimental components of conscientiousness to exert their injurious effects. Past research has called for more research exploring the differences in the beneficial (e.g., need for achievement) and detrimental components (e.g., dutifulness) of conscientiousness for trainees' motivation. Therefore, I suggest that in the future when researchers examine trainee conscientiousness, they should explore, or at the very least discuss, the potential differential relationships between this personality trait's components and training motivation. In summation, the results of this study show that proactive personality may be a more important determinant of training success than conscientiousness and that at least some of the components of conscientiousness may inhibit trainees motivationally.

Originality and Impact on Research

This study is unique in several ways. First, this study is the third ever to examine proactive personality in the training context. Given that proactive personality poses as an important individual difference in influencing training outcomes, it seems to be an important training input not yet adequately understood by training practitioners or scholars. Second, this study is the first of its kind to assess the relationship between proactive personality and transfer intentions. By showing how proactive personality increases transfer intentions, this study suggests that future research is warranted to further examine this personality trait in training contexts. Third, this study is the first to use data from participants spanning multiple nations and backgrounds when assessing proactive personality. Therefore, the data on proactive personality in this study inherently controls for a variety of culturally related phenomena. Fourth, this study is the first to examine the interactions of collectivism and conscientiousness with proactive personality. The findings show that the commonly lauded personality trait, conscientiousness, weakens the positive effect of proactive personality on training outcomes and that collectivism, although beneficial for training outcomes, does not seem to conditionally impact the positive relationship of proactive personality and training motivation. These findings enrich the training literature given the importance of trainee characteristics for training outcomes and the increasingly diverse global workforce. Lastly, I proposed and tested an extension to the TPB that conceptually replaced the theory's traditional three belief-value predictors (i.e., subjective norms, perceived behavioral control, attitude toward behavior) with two individual differences (i.e., proactive personality and collectivism). Although this study did not find support for their proposed interactive effects in predicting motivation to learn and transfer intentions, a

framework for how to explain individual differences as drivers of belief-value based motivational forces was set up and exemplified.

Practical Implications

The results of this study have several important implications for practice. One contribution of this study is its recommendations for selecting people into training. Selecting employees for training is common practice among organizations, and organizations are increasingly turning toward alternative self-paced training methods (Brown, 2001; Simon & Werner, 1996). Hence, I propose that organizations could benefit from this study's results by selecting employees for training who possess high levels of proactive personality and collectivism. Although conscientiousness was found to buffer the positive effect of proactive personality on training motivation in this study, it would be too hasty to propose that organizations select employees for training with low levels of the trait given that its bivariate correlation with both training motivation variables was positive and significant. Such a proposal would require additional research investigating the facets of conscientiousness in combination with proactive personality in predicting training motivation. Rather, at this juncture, it is only suggested that organizations may be better off selecting trainees based on their proactive personality rather than their conscientiousness. If selection for training is not practical or feasible, important stakeholders such as supervisors, managers, and/or trainers could allot more time and attention to trainees low in proactive personality and collectivism and high in conscientiousness. Such attention may provide those trainees with the additional motivation they need to acquire knowledge, skills, and abilities during training and to transfer their learning back to the job.

Additionally, given that dispositional characteristics (e.g., proactive personality,

collectivism, and conscientiousness) can be elicited in certain circumstances (Li, Liang, & Crant, 2010; Tett & Burnett, 2003), champions of training should seek to create conditions conducive to activating trainees' proactivity and interdependent self-construals and neutralizing their cognitive inflexibility. An increasingly popular training design method that could help with the latter is error management training (EMT). EMT could improve training outcomes because of its explicit encouragement for learners to make errors and learn from them (Keith & Frese, 2008). This may subsequently permit conscientious trainees to increase their training motivation by reducing their naturally occurring fear of failure and error avoidance. Additionally, high levels of group cohesion and pronounced organizational cultures could enhance trainees' sense of interdependence and therefore promote the priority of firm goals (e.g., successful transfer). As shown in this study, this increase in one's collectivistic orientation is likely to lead to improved training outcomes.

Limitations and Future Directions

As with any other study, this research is not without limitations. Notably, our use of self-report, single source data could potentially lead to inflated and/or deflated inter-correlations among the measured variables (Williams & Brown, 1994). However, self-report measures are not necessarily inferior to reports by others (Conway & Lance, 2010). Additionally, because our data was collected at two different time points, the potential for systematic measurement bias was lessened. Future training research should examine proactive personality with multisource data. This could help establish a more robust verification of the findings in this study. One way to substantiate our findings using multisource data is to collect data from trainees' supervisors and/or training instructors. Another way to establish the results of our study is to use more

"objective" measures of the study variables, such as using a behavioral inventory to assess proactive personality and collectivism or behavioral measures of speed, performance, and choice to assess motivation to learn and transfer intentions (cf. Elliot & Thrash, 2002). These alternative measurement methods may lend additional support to the findings of this study.

The second limitation of this study was the specific sample of participants, which consisted of workers in the engineering field going through technical training programs. These skills are inherently different to training "soft" skills such as leadership or customer service. Because personality traits impact how we communicate and perceive our environments (Barrick & Mount, 1991), our understanding of trainee proactive personality, collectivism, and conscientiousness would benefit from future studies on "soft" skill trainings. Relatedly, the sample consisted of workers in the engineering field, which may have subjected this study to unintentional gender and age biases among others. Because our questionnaires supplemented surveys already in circulation examining the effectiveness of the training, no systematic sampling method was employed. Unfortunately, because engineering is a male-dominated profession, and training in energy and engineering companies is largely directed toward younger workers, our sample primarily consisted of young males. Therefore, future studies would benefit from instituting a sampling that corrects for this limitation given evidence of age's interaction with proactive personality (Bertolini et al., 2011) in predicting motivation to learn and the small positive correlation (r = 0.14) between males and proactive personality found in this study and elsewhere (e.g., Seibert et al., 1999).

Another future direction to this study is a more thorough clarification of collectivism in predicting training motivation variables. Recently, a great amount of research in culturally based individual differences has been supportive of a four-factor conceptualization of I-C stemming

from the call to more narrowly study the constructs' attributes (cf. Triandis & Gelfand, 1998). The four factors are: vertical collectivism, horizontal collectivism, vertical individualism, and horizontal individualism. The addition of the vertical/horizontal aspects to these important culturally based individual difference constructs regards the extent to which one is oriented toward equality (horizontal) or hierarchical status (vertical) (Singelis, Triandis, Bhawuk, & Gelfand, 1995). Thus, if collectivists direct their proactive personalities toward transfer intentions because of their concern for group members' equality, it may be the horizontal aspect of the I-C concepts that is important. Empirical evidence indicates that horizontal individualism interacts with management support at low levels of the organizational hierarchy to predict intrapreneurship (Abraham, 1997). Additionally, vertical collectivism has been found to be positively related to organizational commitment (Abraham, 1997). Examining the attributes of the I-C constructs may provide a more clear understanding about the nature of their interactions with proactive personality to explain the training transfer process. Additionally, different culturally based individual differences such as masculinity/femininity and uncertainty avoidance may potentially interact with proactive personality to predict important training outcomes. Because culturally based differences are guides of socially appropriate behavior (Wagner, 1995), it may be that various cultural variables, other than collectivism, help in orienting one's proactivity toward transfer behaviors.

Another way future research could expand upon this current study is to examine how a trainee's goal orientations impact the relationship between his/her proactive personality and training outcomes. Stemming from Locke and Latham's (2002) goal setting theory, goal orientation is understood as the cognitive framework a learner uses to interpret and guide responses to situations of achievement and failure (Dweck, 1986; Dweck & Leggett, 1988). Goal

orientation is typically examined under the dual typology conceptualizing goals as mastery (learning)- and performance-oriented (Button, Mathieu, & Zajac, 1996). While learning-goal orientation is associated with a focus on increasing learning and/or task competence, seeking challenges, and perseverance (Dweck & Legget, 1988), performance-goal orientation is accompanied by an interest in demonstrating task competence through gaining positive judgments of competence and behaviors such as avoiding challenges and reducing effort following failure. Although there is a healthy amount of research showing the larger positive effects of a learning-goal orientation, due to its motivation inducing attributes, than performancegoal orientation (e.g., Payne, Youngcourt, & Beaubien, 2007), little research has examined how the effects of such orientations on training outcomes differ depending on other individual differences. Given the strong effect that both goal orientation and proactive personality have on feedback-seeking behaviors and overall training motivation (Crant, 2000), research considering their joint influence is likely a worthwhile endeavor.

Lastly, future research may benefit from taking the interactionist perspective and examining how contextual factors influence the relationships between individual differences and training outcomes. Previous research indicates that training contexts such as the work environment and training design have an immense impact on training effectiveness (Clark et al., 1993). For instance, Quiñones (1995) conducted an experiment and found that how training is framed during assignment (assigning trainees to training for poor [remedial] or superior [advanced] performance) indirectly influences motivation to learn through its effects on selfefficacy and fairness perceptions. Thus, pre-training transfer climates and training support systems may enhance the positive effects of proactive personality and collectivism and accentuate (buffer) the positive (negative) aspects of conscientiousness among workers in

training. Similarly, training systems involving a great amount of learner control during training (e.g., web-based training), could strengthen the effects that trainee differences have on training outcomes. This is because high amounts of learner control allow for pronounced learner characteristics. In fact, it may be that training design variables and work environment variables are the important moderators of the relationships between trainee differences and training outcomes (Colquitt et al., 2000).

Conclusion

The cultural landscapes, employee training trends, and use of individual assessments to guide training selection and management practices supporting training are all changing rapidly as a function of the zeitgeist. To address the limited research surrounding these issues and abate the confusion that is the "transfer problem," I proposed and tested a new model of training motivation whereby individual difference factors (i.e., proactive personality, collectivism, and conscientiousness) influence transfer intentions directly and partially through their effects on motivation to learn. Through merging personality, resource-based, and motivation-based theories, I described potential psychological processes that could explain why and how a worker's proclivity for proactivity, independently and interactively with their collectivism and conscientiousness, influences their desire to learn (i.e., motivation to learn) and subsequent commitment to transfer (i.e., transfer intentions). Results of this conditional process analysis using data collected from a culturally diverse sample of engineers participating in a technical training program showed general support for the proposed model. Specifically, this study provided supplemental support for Hypothesis 1, which referred to the positive relationship between motivation to learn and transfer intentions. More novel though, Hypothesis 2a-2c, describing the proposed partial mediation, was supported while controlling for age, tenure,

gender, conscientiousness, collectivism, and individualism. The strength of proactive personality as a positive predictor of desirable training outcomes was striking and should prelude organizational and scholarly interest in the trait as a means to improving the abysmal "transfer problem."

Trainee collectivism and conscientiousness were also hypothesized to have direct positive relationships with both motivation to learn (Hypotheses 3a and 5a, respectively) and transfer intentions (Hypotheses 3b and 5b, respectively) due to their self-development-based attributes. All four of these hypotheses were supported. Thus, trainees who have a tendency to adapt their self-identities appropriately around the needs and goals of their group (i.e., collectivists; Rogers & Spitzmueller, 2009) and are able to control, regulate, and direct their impulses (conscientiousness; Costa & McCrae, 1992) likely have a greater chance at successfully completing the training transfer process.

The final sets of hypotheses referred to the moderating effects of collectivism and conscientiousness on the proactive personality-motivation to learn and proactive personality-transfer intentions relationships. However, of these six hypotheses (Hypotheses 4a-4c and 6a-6c), only two of them were supported. Specifically, support for the hypothesized bolstering effect of trainee collectivism on the proactive personality-motivation to learn relationship (Hypothesis 4a), proactive personality-transfer intentions relationship (Hypothesis 4b), and proposed mediation (Hypothesis 4c) was not found. However, I did find that conscientiousness buffered the positive effect that proactive personality had on motivation to learn (Hypothesis 6a) and that this contingency also played out in the mediation (Hypothesis 6c). Thus, this study suggests that training performance is likely highest for those high in proactive personality but also low in conscientiousness. These somewhat counterintuitive findings provide even more doubt

surrounding the use of a conscientiousness score as a sole individual difference predictor of training performance. Additionally, they provide support for the propositions indicating that trainees high in conscientiousness, who engage in self-regulatory behaviors and elicit preferences for planned rather than spontaneous allocation of cognitive resources (typically expected in learning domains) (Costa & McCrae, 1992), may cripple themselves in training when they also have high levels of proactive personality. For, trainees high in proactive personality and conscientiousness may overly engage in self-regulatory behaviors and subsequently become distracted by immediate task demands; they may also experience anxiety as a result of simultaneously trying to plan learning activities and attend to foreign cognitive demands. Ultimately, the hypotheses and findings in this study open the door for theoretical and criterion expansion regarding the role that proactive personality and other individual differences play in the training transfer process.

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Table 1. Confirmatory Factor Analyses of Nested Models

Model	df	χ^2	χ²diff	RMSEA	CFI	TLI
Five-factor model	340	942.48		0.05	0.92	0.90
Four-factor model	344	1345.95	403.47*	0.06	0.86	0.83
Two-factor model	349	2785.24	1439.29*	0.10	0.66	0.60
One-factor model	350	3422.26	637.02*	0.11	0.57	0.50

Note. N = 704. *df* = degrees of freedom, RMSEA = root mean square error of approximation, CFI = comparative fit index, TLI = Tucker-Lewis index. *p < .05

Variables	М	SD	1	2	3	4	5	6	7	8	9
1. Proactive Personality	3.92	0.57	0.84								
2. Collectivism	4.09	0.67	0.34**	0.75							
3. Individualism	3.66	0.65	0.19**	0.37**	0.66						
4. Conscientiousness	3.78	0.61	0.51**	0.25**	0.37**	0.80					
5. Gender ^a	1.74	0.44	0.14*	0.07	0.12*	-0.02					
6. Motivation to Learn	4.30	0.78	0.57**	0.51**	0.16**	0.34**	0.11	0.80			
7. Transfer Intentions	4.01	0.21	0.38**	0.33**	0.08	0.24**	-0.37	0.45**	0.89		
8. Job Tenure	3.86	5.45	-0.11	-0.10	-0.08	-0.12*	-0.01	-0.23**	-0.07		
9. Age	30.25	9.17	-0.20**	-0.03	-0.06	-0.08	0.05	-0.26**	-0.16**	0.61**	

Table 2. Study Variable Means, Standard Deviations, and Intercorrelations

Note. Reliability estimates (Cronbach's alpha) are presented in the diagonal. M = mean, SD = standard deviation. ^a 1 = female, 2 = male. *p < .05. **p < .01.
	Motivation to Learn (Mediator Variable Model)					
Predictor	В	SE	Т	LLCI	ULCI	
Constant	4.32***	0.19	22.90***	3.95	4.70	
Proactive Personality	0.39***	0.05	8.11***	0.29	0.48	
Conscientiousness	0.06	0.04	1.31	0.19	-0.03	
Collectivism	0.20***	0.05	4.34***	0.11	0.29	
Proactive Personality	-0.13*	0.06	-2.07***	-0.25	-0.01	
*Conscientiousness						
Proactive Personality	-0.03	0.05	-0.52	-0.13	-0.08	
*Collectivism						
Individualism	-0.02	0.04	-0.38	-0.10	0.06	
Age	0.00	0.00	-0.48	-0.01	0.00	
Tenure	-0.01	0.01	-1.68	-0.02	0.00	
Gender ^a	0.06	0.05	1.12	-0.04	0.16	
Transfer Intentions (Dependent Variable Model)						
Predictor	В	SE	Т	LLCI	ULCI	
Constant	3.06***	0.63	4.89***	1.83	4.30	
MTL	0.40***	0.12	3.35***	0.16	0.63	
Proactive Personality	0.27**	0.10	2.63**	0.07	0.46	
Conscientiousness	0.02	0.08	0.29	14	0.18	
Collectivism	0.23*	0.09	2.54***	0.05	0.41	
Proactive Personality	0.17	0.12	1.50	-0.06	0.40	
*Conscientiousness						
Proactive Personality	-0.09	0.10	-0.93	-0.29	0.11	
*Collectivism						
Individualism	-0.07	0.08	-0.93	-0.22	0.08	
Age	-0.01	0.01	-1.70	-0.02	0.00	
Tenure	0.01	0.01	1.42	-0.01	0.03	
Gender ^a	-0.19*	0.10	-1.98*	-0.39	0.00	

Table 3. Results of Study Variables Regressed on Motivation to Learn and Transfer Intentions

Note. N = 259. Bootstrapped 95% confidence intervals were constructed using 1000 resamples. Proactive Personality and Conscientiousness were mean centered. MTL = Motivation to Learn. LLCI = Lower Limit Confidence Interval. UCLI = Upper Limit Confidence Interval. For the Mediator Variable model, $R^2 = 0.50$, F(9/249) = 28.04. For the Dependent Variable Model, $R^2 = 0.26$, F(10/248) = 8.79.

^a 1 =female, 2 =male.

p < .05. p < .01. p < .001.

Mediator	Conscien	ntiousness	Collectivism	В	Boot SE	Boot LLCI	Boot ULCI
MTL	-0.61 (-1 SD)		-0.56(-1 SD)	0.19*	0.06	0.08	0.33
MTL	0.00 (Mean)		-0.56(-1 SD)	0.16*	0.06	0.07	0.29
MTL	0.61 (+1 SD)		-0.56(-1 SD)	0.13*	0.05	0.05	0.26
MTL	-0.61 (-1 SD)		0.00 (Mean)	0.19*	0.07	0.07	0.33
MTL	0.00 (Mean)		0.00 (Mean)	0.16*	0.05	0.06	0.27
MTL	0.61 (+1 SD)		0.00 (Mean)	0.12*	0.05	0.05	0.23
MTL	-0.61 (-1 SD)		0.56 (+1 SD)	0.18*	0.07	0.06	0.34
MTL	0.00	(Mean)	0.56 (+1 SD)	0.15*	0.06	0.05	0.27
MTL	0.61 (+1 SD)		0.56 (+1 SD)	0.12*	0.05	0.04	0.22
Index of Moderated Mediation [†]							
Moder	ator	Index	Boot SE	3	Boot	t LLCI	Boot ULCI
Conscienti	ousness	-0.10*	0.04		-().17	-0.03
Collectivis	m	-0.04	0.03		-(0.09	0.02

Table 4. Conditional Indirect Effects of Proactive Personality on Transfer Intentions at Low (-1 SD), Average (Mean), and High (+1sd) Levels of Conscientiousness and Collectivism with Index of Independently Generated Indices of Moderated Mediation

Note. N = 259. Bootstrapped 95% confidence intervals were constructed using 1000 resamples. Proactive Personality and Conscientiousness were mean centered. MTL = Motivation to Learn. LLCI = Lower Limit Confidence Interval. UCLI = Upper Limit Confidence Interval. [†]Output generated from separate analyses of the two proposed moderated mediations. *Values that do not contain 0 within the intervals yield significant effects at the 95% confidence level.

Table 5. Simple Mediation Process: Proactive Personality \rightarrow Motivation to Learn \rightarrow Transfer Intentions

Simple Mediation	В	SE	Boot LLCI	Boot UCLI
Indirect Effect	0.24*	0.07	0.11	0.41
Direct Effect	0.31*	0.10	0.12	0.50
Total Effect	0.55*	0.08	0.40	0.71

Bootstrapped 95% confidence intervals were constructed using 1000 resamples. Covariates included individualism, age, tenure, and gender. *Values that do not contain 0 within the intervals yield significant effects at the 95% confidence level.

Figure 1. The Training Motivation Process





Figure 2. Interaction between Proactive Personality and Conscientiousness: Stage One of the Mediation (Hypothesis 2c)





Figure 4. Proposed Structural Model



Covariates = Individualism, age, tenure, and gender.

Appendix A

Proactive Personality

- 1. I actively attack problems
- 2. Whenever something goes wrong, I search for a solution immediately
- 3. Whenever there is a chance to get actively involved, I take it
- 4. I take initiative immediately even when others do not
- 5. I use opportunities quickly in order to attain my goals
- 6. Usually I do more than I am asked to do

Appendix B

Individualism-Collectivism

- 1. I would rather depend on myself than others (Individualism)
- 2. My personal identity, independent of others, is very important to me (Individualism)
- 3. It is important to me that I do my job better than others (Individualism)
- 4. Wining is very important to me (Individualism)
- 5. If a coworker gets a reward, I feel very proud (Collectivism)
- 6. I feel good when I cooperate with others (Collectivism)
- 7. Parents and children must stay together as much as possible (Collectivism)
- 8. It is my duty to take care of my family, even when I have to sacrifice what I want (Collectivism)

Appendix C

Conscientiousness

- 1. I am always prepared
- 2. I pay attention to details
- 3. I get chores done right away
- 4. I like order
- 5. I follow a schedule
- 6. I am exacting in my work

Appendix D

Motivation to Learn

- 1. I try to learn as much as I can from "organization"
- 2. I believe that I tend to learn more from "organization" than others
- 3. I am usually motivated to learn skills emphasized in training
- 4. I would like to improve my skills
- 5. I am willing to exert extra effort at "organization" to improve my skills
- 6. Participating in training is not a high priority for me (reverse coded)

Appendix E

Transfer Intentions

- 1. I plan to implement what I learned on the job
- 2. I will apply what I learned in this training program within the next few weeks
- 3. I will seek opportunities to practice what I learned this week on my job
- 4. I intend to share knowledge I gained this week with others in my team
- 5. I will apply the techniques I have acquired as soon as I return to my job