

Promoting transfer of hybrid training: Interaction of task-contingent conscientiousness and supervisor support

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Abstract

Research on training has accumulated knowledge of factors influencing transfer of training. However, little is known about how these factors interact to impact training activity level and training transfer. Based on recent advances in the contingency approach to personality, we examine person-situation interaction by testing how task-contingent conscientiousness influences trainees to utilize supervisor support differently during training and transfer. We situate the current investigation in hybrid management training courses where a field sample of employees ($N = 200$) first attended required in-person workshops and then received voluntary online modules. Results show that task-contingent conscientiousness moderated both the linkage between supervisor support and training activity level and the linkage between training activity level and transfer of training. Specifically, for trainees with higher task-contingent conscientiousness, supervisor support tended to have a stronger association with training activity level, and training activity level tended to translate into more transfer of training. Our findings provide unique insights into when supervisor support may be more beneficial depending on trainees' individual differences. We discuss the theoretical and practical implications of this research.

KEYWORDS

hybrid (in-person and online) learning, person–situation interaction, supervisor support, training transfer

1 | INTRODUCTION

Cumulative research has provided important insights on variables that impact training transfer. Researchers have identified trainee individual characteristics (e.g., personality traits) and contextual factors (e.g., supportive work environment) as antecedents to training outcomes (Baldwin et al., 2017; Blume et al., 2010; Burke & Hutchins, 2007; Cheng & Hampson, 2008). For example, research has demonstrated that the support trainees receive from their work environment contributes to how well they transfer newly acquired knowledge and skills to the workplace (Huang et al., 2015; Hughes et al., 2020). An individual characteristic that has received significant research attention in the training literature is conscientiousness (i.e., the general tendency to be hardworking, organized, and dependable). Conscientiousness tends to be associated with better learning and transfer, and among personality traits, has been shown to have one of the strongest correlations with training transfer (Blume et al., 2010; Colquitt et al., 2000). In addition to the direct effects of trainee and contextual factors, researchers have also noted that these factors may interact to influence learning and training transfer (Baldwin & Ford, 1988; Colquitt et al., 2000; Gully & Chen, 2010), which is consistent with the person–situation interactionist perspective (Blume et al., 2019; Gully & Chen, 2010; Hatstrup & Jackson, 1996; Tett & Burnett, 2003).

In their review of interactions between trainee characteristics and treatments (i.e., training design features and situational factors), Gully and Chen (2010; p. 48) note, “...research has focused on either mediating learning processes (e.g., information processing, and self-regulation) or proximal learning outcomes (e.g., knowledge acquisition) as the dependent variables, and the majority of this research has focused on training design features (e.g., training goal frame or instructions) as the situational moderators, as opposed to the situational factors not specifically tied to training (e.g., leader support, and group climate).” They suggest that future research should include more distal outcomes, such as training transfer and examine contextual factors such as the broader context of trainees. We answer this call for research and aim to bridge this knowledge gap by investigating a person–situation interaction and its effect on transfer of training.

There is an emerging evidence that a supportive environment may exert a differential influence on trainees depending on other factors. For instance, research suggests that supervisor support interacts with training transfer design (Chauhan et al., 2017), learning barriers (Martins et al., 2019), and felt responsibility for training transfer (Freitas et al., 2019). In addition, supervisor support may also interact with trainee individual differences (Colquitt et al., 2000). For example, Salamon et al. (2021) found that supervisor support interacted with trainees' level of voluntary participation. They showed that supervisor support facilitated trainee motivation and transfer to a larger extent when training participation was less voluntary. Nevertheless, additional research is needed to understand how trainee characteristics interact with contextual features from the work environment to influence training activity and training transfer (Blume et al., 2019).

One issue that arises from the reliance on the trait approach to assessing trainee individual differences is that by emphasizing how individuals typically behave across various situations, the trait approach does not account for the possibility that people have characteristically distinct tendencies in responding to similar situational cues (Fleeson, 2007; Ford & Oswald, 2003). Task-contingent conscientiousness is premised on the notions that personality *state* can express the underlying personality trait at a given moment (Fleeson, 2001), and that personality as a whole can be viewed not simply in terms of the trait (i.e., the average of states across various situations), but also in terms of how a person habitually elevates his–her state personality in response to situational cues. Task-contingent conscientiousness refers to one's tendency to elevate their state conscientiousness (e.g., becoming more hardworking,

organized, and dependable at the moment) in response to demanding tasks, and this tendency is distinct from one's trait conscientiousness (Minbashian et al., 2010; Minbashian et al., 2018). People with high task-contingent conscientiousness adjust their state conscientiousness as needed by the task at hand, thus adapting better to increasing task demands (Minbashian et al., 2010), including adaptively transferring newly acquired skills (Huang & Bramble, 2016). An analogy to high task-contingent conscientiousness is a vehicle that dynamically adjusts the number of cylinders used (e.g., using V4 for everyday driving but kicking into V8 when dealing with tougher conditions), whereas low task-contingent conscientiousness is fixed, with the vehicle staying at its preset level (e.g., always using V4). The tendency to modulate one's input depending on features of the task makes task-contingent conscientiousness a particularly relevant trainee characteristic that can interact with contextual factors.

We focus on supervisor support as a key contextual factor that interacts with task-contingent conscientiousness to affect training transfer. Supervisor support has consistently been shown to be a critical contextual factor that enhances learning and transfer (e.g., Brinkerhoff & Montesino, 1995; Burke & Hutchins, 2007; Hughes et al., 2020). Blume et al. (2010) found that support (peer and supervisor) had a positive correlation ($r = 0.21$) with training transfer. They also found that supervisor support may have a somewhat stronger relationship ($r = 0.31$) with transfer than does peer support ($r = 0.14$), although these meta-analytic relationships were based on small sample sizes (Blume et al., 2010). Consistent with prior research that has viewed support as a multidimensional construct (Ford et al., 2018; Russ-Eft, 2002), we conceptualize supervisor support broadly as consisting of three dimensions. These include *direct assistance* (e.g., helping employees with transfer tasks), *guidance* (e.g., offering advice and relevant information), and *emotional support* (e.g., empathizing with employees about difficulties in transfer). This broad conceptualization enables us to examine the strength and clarity of the signal the supervisor sends to the employee about the importance of training transfer, which can activate higher effort levels in high task-contingent conscientiousness trainees, thus exerting stronger impact on learning and transfer.

One goal of our study is to better understand how these factors impact training activity level since the activity levels of trainees is likely to influence training outcomes and transfer. We situate our investigation in hybrid training programs that utilized online voluntary activities to supplement required in-person instruction. It is critical to understand how trainees' engagement in optional opportunities for learning and practice (Orvis et al., 2009) can translate into transfer because of the shift in training delivery modes precipitated by the COVID-19 global pandemic (ATD Report, 2021). While there have been a few studies that have recognized the importance of training activity level, more focus, and examination will be useful. For example, Sitzmann and Weinhardt (2019) contend that assessing training utilization is important in evaluating training effectiveness. They point out that attrition or partial attrition (e.g., skipping some lessons) can influence training outcomes. Relatedly, we are interested in how training practice or the training activity level of trainees influences transfer. In a lab study, Ford et al. (1998) examined whether individuals spent their time practicing the skills that are important for task performance. Activity level was defined as the number of times the individual chose to practice key task skills. They found that activity level predicted both knowledge learning outcomes and skill learning outcomes, which predicted transfer performance at the end of the training. Brown (2001) also examined the practice level or the number of practice activities that trainees performed. Although the study did not examine transfer, Brown (2001) found that the practice level predicted the knowledge gained in training. Subsequently, Brown (2005) demonstrated that the time trainees spent on e-learning led to higher supervisor ratings of performance improvement. We extend this research on training activity level to a field setting where trainees have choices regarding how much effort to invest in training tasks. To address this research gap, we examine how training activity levels influence transfer (Brown, 2001; Sitzmann & Weinhardt, 2019).

Our study sheds new light on how different categories of predictors (e.g., trainee and situational characteristics) interact to influence the transfer of training. We address this person-situation interaction by drawing from recent advances in personality research to examine how task-contingent conscientiousness interacts with supervisor support to predict training activity level and transfer. We also include another common predictor of transfer, motivation to transfer, in our model since research has demonstrated its positive impact on training transfer (Blume et al., 2010; Gegenfurtner et al., 2009). In summary, the purpose of our study is to investigate the interactive effects of trainee

characteristics and contextual factors on training transfer (Blume et al., 2019; Colquitt et al., 2000; Gully & Chen, 2010). Our aim is to contribute to the literature by better understanding how person–situation interactions and training activity levels contribute to increasing the transfer of training.

2 | HYPOTHESIS DEVELOPMENT

Researchers have traditionally defined training transfer as the use of newly acquired skills and/or the effectiveness in applying the skills from training (Blume et al., 2010; Grossman & Salas, 2011; Yelon et al., 2014). Baldwin et al. (2017; p. 24) expand on this definition and underscore transfer as involving “a series of choices that trainees make to discard, maintain, apply, or modify trained knowledge and skills in their work context”. Consistent with this perspective, we define training transfer as trainees' choices, efforts, and effectiveness in adopting and applying the trained knowledge and skills at work. Figure 1 gives an overview of the hypotheses examined in our study.

2.1 | Supervisor support

Supervisor support has consistently been shown to be an important predictor of transfer of training (Blume et al., 2010; Burke & Hutchins, 2007; Hughes et al., 2020). In their meta-analytic investigations, Blume et al. (2010) found that support from supervisor and peers had a positive correlation ($\rho = 0.21$) with training transfer, while Hughes et al. (2020) found that supervisory support had a correlation of 0.48. Supervisor support is expected to signal to trainees that the training is important and to influence their actions (Govaerts et al., 2017; Govaerts & Dochy, 2014).

Supervisors can support employees to participate in training and help promote subsequent transfer in various ways. Ford et al. (2018) reviewed research from training and other disciplines and suggested three dimensions of supervisor support: instrumental support, informational support, and affective support. Following this conceptualization, we propose that supervisors can support training transfer by directly assisting employees with learning requirements and transfer tasks, guiding them on how to maximize the training opportunity to achieve work-related goals, and offering emotional support throughout the training and transfer process. Therefore, we expect trainees with

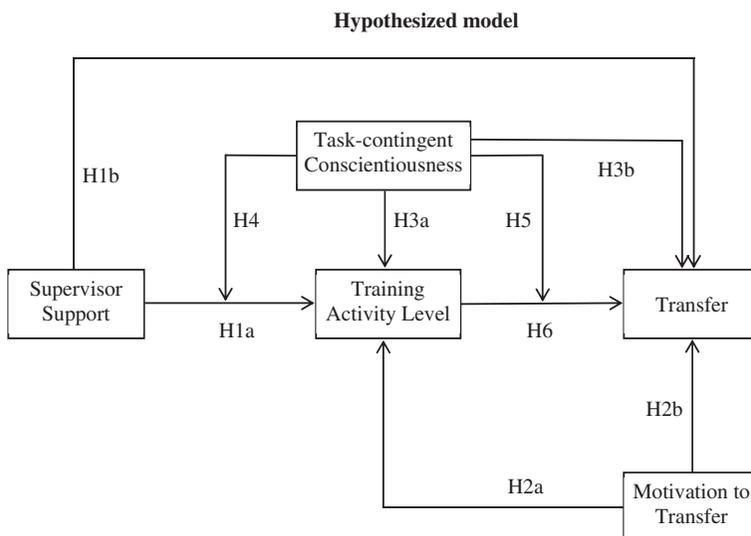


FIGURE 1 Hypothesized model

higher supervisor support to be more committed to the training and have higher training activity levels (Ford et al., 1998) as they progress throughout the training. In other words, supervisor support is expected to increase trainees' engagement in learning and applying their training.

Hypothesis 1. Supervisor support is positively related to trainee (a) training activity level and (b) transfer.

2.2 | Motivation to transfer

If trainees are not motivated, they might choose not to apply the newly learned skills into practice (Baldwin & Ford, 1988). On the other hand, highly motivated trainees will actively strive for possibilities to transfer what they have learned in training into practice (Gegenfurtner et al., 2009). Past research has shown that trainees' motivation to learn and motivation to transfer training has demonstrated a moderately strong relationship with training transfer (Blume et al., 2010; Burke & Hutchins, 2007; Gegenfurtner et al., 2009). Colquitt et al. (2000) also found that training motivation explained incremental variance in training outcomes beyond the effects of individual characteristics. In addition, higher levels of motivation to transfer are expected to cause trainees to increase their training activity level. This could occur due to higher trainee intentions to transfer translating into trainees devoting more attentional resources and effort into the training process (Colquitt et al., 2000; Gegenfurtner, 2013; Kanfer & Ackerman, 1989). Therefore, we hypothesize:

Hypothesis 2. Motivation to transfer is positively related to (a) training activity level and (b) transfer.

2.3 | Task-contingent conscientiousness

Personality is another key trainee characteristic that can influence training and transfer (Baldwin & Ford, 1988). The predominant trait approach to personality focuses on individuals' typical behavioral tendency across various situations. As a commonly studied personality trait in the training literature, conscientiousness describes people who are generally organized, responsible, hardworking, and achievement striving (Costa & McCrae, 1992; Goldberg, 1992; Moon, 2001). Thus, a conscientious trainee is likely to stay focused in the training context, engage in training activities, and strive toward meeting training requirements. Consistent with this expectation, Blume et al. (2010) found a moderate correlation between conscientiousness and transfer ($\rho = 0.28$) in their meta-analytical study.

Distinct from trait conscientiousness, task-contingent conscientiousness emphasizes self-regulation of state conscientiousness in response to task cues (Huang & Ryan, 2011; Minbashian et al., 2010). When faced with a challenging task, people with high task-contingent conscientiousness can elevate their state conscientiousness (i.e., become more conscientious than they typically are) and devote more effort and attention to deal with the demands at hand. Collecting data from a field sample of company managers, Minbashian et al. (2010) found that task-contingent conscientiousness explained incremental variance in adaptive performance above and beyond trait conscientiousness. In a laboratory setting, Huang and Bramble (2016) demonstrated that task-contingent conscientiousness, but not trait conscientiousness, directly facilitated adaptive transfer of a complex training task.

Participation in training programs and application of trained knowledge and skills to the job can present competing demands for employees' resources, thus making task-contingent conscientiousness particularly relevant as it can provide additional resources for employees to adapt. Engaging in training consumes employees' attentional resources and can take away time for regular work tasks. Further, when applying trained knowledge and skills to work, trainees often need to modify accustomed ways of working, monitor subsequent work performance, and adjust efforts to maintain transfer (Blume et al., 2019), all of which demand personal resources. Trainees with high versus low

task-contingent conscientiousness may respond differently when dealing with these demands for resources. Trainees with high task-contingent conscientiousness should be better able to increase effort and attentional resources to meet training and transfer demands. This expectation is consistent with the notion that task-contingent conscientiousness enables individuals to adapt when the situation requires additional effort (Huang & Bramble, 2016; Minbashian et al., 2010). In contrast, trainees with low task-contingent conscientiousness are likely to maintain their habitual effort levels, regardless of the additional demands for their effort due to training activities and transfer. Thus, we hypothesize that:

Hypothesis 3. Task-contingent conscientiousness is positively related to (a) training activity level and (b) transfer.

2.4 | Interaction between task-contingent conscientiousness and supervisor support

From the complementary person-environment fit perspective (Cable & Edwards, 2004), individuals can provide assets that the environment does not possess and vice versa (Gully & Chen, 2010). Personal and contextual factors can thus have joint effects on training outcomes (Colquitt et al., 2000). For example, Salamon et al.'s (2021) found that supervisor support facilitated trainee motivation and transfer to a larger extent when training participation was less voluntary. Wilson et al. (2013) suggested that supervisor support is particularly important for trainees with low conscientiousness because supervisor support provides a compensatory mechanism to ensure learning and transfer. Given task-contingent conscientiousness is activated by contextual features, we expect supervisor support to be a salient contextual factor that interacts with task-contingent conscientiousness to influence training activity level. That is, depending on how individuals typically regulate their state conscientiousness in response to task challenges, supervisor support may have a differential impact on their training activity level.

For individuals with high task-contingent conscientiousness, supervisor support will likely play a critical role in how much effort they allocate to the training tasks. Strong supervisor support sends a clear signal to them about the importance of engaging in the training. This strong signal, coupled with their tendency to selectively allocate effort when called for by the situation, leads to greater engagement in learning activities. However, when supervisor support is low, the scarcity of support sends another signal that training activities are optional or less important, allowing these trainees to withhold effort. In contrast, trainees with low task-contingent conscientiousness tend to maintain a relatively stable level of state conscientiousness regardless of situational contingencies. As a result, supervisor support may have weaker sway on these individuals because they tend not to adjust their effort level based on situational cues. Thus, we propose that:

Hypothesis 4. Task-contingent conscientiousness will moderate the relationship between supervisor support and training activity level, such that the relationship will be stronger when trainees have higher task-contingent conscientiousness.

2.5 | Interaction between task-contingent conscientiousness and training activity level

We further expect task-contingent conscientiousness to interact with training activity level to affect transfer. When trainees widely and deeply engage in training activities, they are more likely to benefit from them (Brown, 2001) and find training to be effective (Sitzmann & Weinhardt, 2019). The acknowledgment of merits of training can serve as an impetus for applying trained knowledge and skills to work. However, trainees cannot accomplish this task without the capacity and personal resource that are essential to devoting additional efforts to daily work. Transfer of training is a challenging task because trainees need to put consistent efforts in applying and maintaining trained skills over

time in different work contexts. The Dynamic Transfer Model (Blume et al., 2019) suggests that after training, individuals apply trained skills to the job in initial attempts, evaluate outcomes of transfer performance, and integrate feedback to guide future transfer actions. In other words, trainees need to adapt their newly acquired skills to the work environments through trial and error. This iterative, self-regulatory process consumes individual's cognitive resources (Baumeister et al., 1998; Kanfer & Ackerman, 1989).

High task-contingent conscientiousness can supply the necessary resource for training activity to translate to training transfer. For individuals with high task-contingent conscientiousness, the challenges they encounter during transfer attempts will lead them to elevate their resource input for transfer. This could include being more thorough in applying trained skills, proactively evaluating the discrepancy between transfer performance and expected outcomes, as well as adjusting future actions in training transfer (Blume et al., 2019). As a result, engagement in training will more readily result in training transfer actions for these trainees with elevated personal resources to deal with such demands. In contrast, for low task-contingent conscientiousness trainees, the connection between training engagement and subsequent transfer may not be as strong. Thus, we hypothesize that:

Hypothesis 5. Task-contingent conscientiousness will moderate the relationship between training activity level and transfer, such that the relationship will be stronger when trainees have higher task-contingent conscientiousness.

2.6 | Task-contingent conscientiousness moderates the indirect effect of supervisor support on transfer

Considering the proposed effect of supervisor support and the moderating role of task-contingent conscientiousness in influencing the training and transfer process discussed in the above hypotheses, we also expect that task-contingent conscientiousness will influence the indirect effect of supervisor support on training transfer via training activity level. Supervisor support promotes training activity level and training transfer, not only because it provides essential help to trainees, but also since it makes trainees more committed to training. Training activity level was also found to predict transfer performance (Ford et al., 1998). It is important to note that both supervisor support and training activity level may serve as situational cues that call for elevated efforts in training transfer: supervisor support suggests the importance of training, and training activity level reflects interest in training. Task-contingent conscientiousness is especially relevant here as it addresses the capacity to regulate personal resources as responses to situational needs. Trainees with high task-contingent conscientiousness are thus more likely to embrace training requirements, engage in training activities, and utilize personal resources for training and transfer. Therefore, we hypothesize that:

Hypothesis 6. Task-contingent conscientiousness will moderate the indirect effect from supervisor support to transfer via training activity level, such that the indirect effect will be stronger for trainees with higher task-contingent conscientiousness.

3 | METHOD

We examine our research model using two-waves of data from 200 management trainees who worked for two European companies ($n_s = 87$ and 113 , respectively). Trainees attended a hybrid (i.e., blended in-person and online components), midlevel ($n = 118$) or advanced ($n = 82$) management training course. All trainees participated in the in-person components, but they varied in the degree to which they completed the optional online modules. Advanced management training was targeted toward senior-level managers, although the topics covered in both

courses were similar and included a discussion of the role of a leader, coaching and feedback, situation-based leadership, conflict management, and team development. The advanced course also included a strategic component, such as discussing strategic organizational goals.

Each course had 3–4 in-person learning modules, with each module consisting of between one to two days of training. An instructor provided learning content and facilitated the trainees' learning experience. In addition to the in-person modules, trainees had the option to complete additional training activities via e-learning. There were approximately 4–6 weeks between each learning module in which trainees could apply their training, and the total duration of the course was about 3–4 months. The sample was composed of 69% males, and 41% of participants were advanced-level trainees.

Two surveys were administered, with approximately one month between each survey. The first survey was administered 1–2 months into the course and assessed trainees' motivation to transfer, task-contingent conscientiousness, and demographic information. The second survey assessed trainee's perceived supervisor support for transfer, as well as their transfer of course material learned in training. All survey responses were based on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

3.1 | Measures

3.1.1 | Task-contingent conscientiousness (TCC)

Task-contingent conscientiousness ($\alpha = 0.77$) was assessed with six items from Huang and Bramble (2016) that assessed participants' behavioral tendency when dealing with difficult tasks, relative to other tasks. An example item is, "When faced with difficult tasks, I tend to work harder on them than on other tasks."

3.1.2 | Motivation to transfer

Motivation to transfer was measured with six items ($\alpha = 0.71$) adapted by Huang et al. (2017) from Bell and Ford (2007) and Warr et al. (1999). An example item is, "I intend to apply what I learn from the program to my work."

3.1.3 | Training activity level

Participants' training activity level was captured objectively as the proportion of training tasks completed by the end of the training, which was recorded automatically on the training platform. These tasks were given online via the e-learning module and were not part of the in-person training sessions. Tasks-activities were encouraged but not mandatory. They included completing e-learning modules and assigned activities to practice and apply course content (e.g., meeting with a manager to discuss progress or giving feedback to an employee). Depending on the program, there were 31–37 tasks available for trainees to complete. Training activity level was calculated as a percentage of tasks available that were completed and could range from 0 (*no tasks completed*) to 1 (*all tasks accomplished*).

3.1.4 | Supervisor support for transfer

Supervisor support for transfer was measured with an 18-item instrument developed in this study. The scale focused on three dimensions of supervisor support for training transfer, including *direct assistance* ($\alpha = 0.90$), *guidance* ($\alpha = 0.91$), and *emotional support* ($\alpha = 0.92$), with 6 items measuring each dimension (see Appendix A). Participants were

asked to indicate the support they have received from their supervisors to apply the training to the workplace. Sample items include: (My supervisor) “Set goals with me around applying what was trained to the job” (direct assistance); “Gave me some tips on how to get the most out of the training” (guidance); “Gave me encouragement to continue to apply training to the job” (emotional support).

We performed a confirmatory factor analysis (CFA) to examine the factor structure of the supervisor support measure. According to our conceptualization, supervisor support for transfer is a superordinate factor that influences the three lower level factors. Thus, we examined a second-order factor solution, with the three hypothesized first-order factors. This model yielded reasonable fit to the data: $\chi^2 = 294.79$, $df = 132$; CFI = 0.93; TLI = 0.92; RMSEA = 0.088. We examined an alternative solution where all items loaded on the same underlying factor. This single-factor model yielded poor fit to the data: $\chi^2 = 417.02$, $df = 135$; CFI = 0.87; TLI = 0.86; RMSEA = 0.115.

3.1.5 | Training transfer

Training transfer was measured with six items developed in this study that assessed trainees' use ($\alpha = 0.82$) and effectiveness ($\alpha = 0.77$) of transfer (Blume et al., 2010), with three items for each dimension (see Appendix A). Specifically, participants evaluated whether they used the knowledge and skills learned from training program and whether their work effectiveness improved because of the training (Blume et al., 2010). Sample items include: “[I] Applied the knowledge and skills from the training program when performing my job (use)”; “My quality of work has improved due to what I learned in the program (effectiveness)”.

We applied second-order CFA to examine the expected factor structure of training transfer that had two first-order factors (i.e., use and effectiveness of transfer). Specifically, we modeled use and effectiveness with 3 items, respectively, and fixed the factor loadings of use and effectiveness on training transfer to be 1, while freely estimating the variance of the second-order factor (i.e., training transfer).¹ The model showed excellent fit to the data: $\chi^2 = 9.11$, $df = 8$; CFI = 1.00; TLI = 0.99; RMSEA = 0.030. In contrast, an alternative model that used a single-factor solution where all 6 items loaded on the same latent factor showed poor fit to the data: $\chi^2 = 68.14$, $df = 9$; CFI = 0.83; TLI = 0.72; RMSEA = 0.205.

3.1.6 | Control variables

To rule out potential confounding factors,² we controlled for participants' gender (Male = 1; Female = 0), company, and level of management training (Advanced = 1; Midlevel = 0).

4 | RESULTS

We first used Little's (1998) missing completely at random (MCAR) test to examine the pattern of missing data at the item level. The results supported MCAR: $\chi^2(138) = 157.59$, $p = 0.12$. We present descriptive statistics in Table 1. As expected, overall supervisor support and its subdimensions (i.e., direct assistance, guidance, and emotional support) were significantly associated with training transfer. Although emotional support was positively associated with training activity level, overall supervisor support and its other two subdimensions were not significantly correlated with it. As for task-contingent conscientiousness, its nonsignificant correlation with supervisor support is consistent with the conceptual argument that they are distinct drivers of training transfer. In addition, task-contingent conscientiousness was not significantly associated with training activity level and training transfer (we will return to the implications of this finding in Section 4).

TABLE 1 Descriptive statistics for study variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	0.69	0.47	–												
2. Company	0.44	0.50	–0.06	–											
3. Advanced training	0.41	0.49	–0.06	0.15*	–										
4. Support—overall	3.77	0.78	0.02	–0.06	–0.10	0.96									
5. Support—direct assist	3.73	0.82	0.02	–0.10	–0.06	0.94**	0.90								
6. Support—guidance	3.47	0.90	0.10	–0.08	–0.13	0.94**	0.85**	0.91							
7. Support—emotional support	4.12	0.80	–0.07	0.01	–0.08	0.91**	0.79**	0.77**	0.92						
8. Motivation to transfer	4.50	0.45	–0.08	0.06	0.05	0.24**	0.25**	0.21**	0.21*	0.71					
9. Task-contingent Consc.	4.06	0.51	0.03	0.09	–0.04	–0.07	–0.13	–0.08	0.02	0.05	0.77				
10. Training activity level	0.83	0.23	–0.03	–0.11	0.18*	0.12	0.10	0.08	0.16**	0.02	0.01	–			
11. Transfer—overall	4.13	0.47	0.04	0.02	–0.04	0.55**	0.52**	0.51**	0.51**	0.47**	–0.06	0.06	0.82		
12. Transfer—use	4.24	0.53	0.05	0.06	–0.08	0.44**	0.41**	0.42**	0.41**	0.44**	–0.04	–0.05	0.87**	0.82	
13. Transfer—effectiveness	4.02	0.55	0.01	–0.03	0.01	0.52**	0.50**	0.46**	0.48**	0.37**	–0.06	0.15	0.88**	0.52**	0.77

Note: $N = 157$ – 200 ; for variables 1–3 and 8–10, $N = 200$; for variables 4–7 and 11–13, $N = 157$. Reliability scores are reported in italics along the diagonal. Gender is a dichotomous variable (Male = 1; Female = 0). Company is a dummy coded variable to represent the two companies where data were collected. Advanced training indicates whether the training was advanced management training (Advanced = 1; Midlevel = 0). Support, Supervisor support for transfer; Consc., conscientiousness. * $p < 0.05$; ** $p < 0.01$.

We then used *Mplus* Version 8.4 (Muthén & Muthén, 1998-2019) for model testing with full information maximum likelihood estimation (FIML) applied to the full sample ($N = 200$). Before testing our hypotheses, we assessed the measurement model that included all survey measures. Given the model complexity relative to the modest sample size, we adopted the item-to-construct balance approach (Little et al., 2002; Williams & O'Boyle Jr., 2008) to create item parcels to evaluate the measurement model. Specifically, we created three parcels each for supervisor support (i.e., direct assistance, guidance, and emotional support), task-contingent conscientiousness, and motivation to transfer; and we compiled two parcels for training transfer (i.e., use and effectiveness) with equal loadings. The measurement model, which included 4 hypothesized factors (i.e., supervisor support, motivation to transfer, task-contingent conscientiousness, and training transfer), yielded excellent fit to the data, $\chi^2 = 49.46$, $df = 39$; CFI = 0.99; TLI = 0.98; RMSEA = 0.037. We also explored two alternative models. First, we examined whether motivation to transfer and training transfer tapped the same underlying construct. Modifying parcels for motivation to transfer and training transfer as joint indicators for one latent factor yielded inferior fit to the data, $\chi^2 = 92.37$, $df = 41$; CFI = 0.94; TLI = 0.92; RMSEA = 0.079. Second, we evaluated whether the data could be alternatively represented by two latent factors corresponding to the two measurement occasions. For this model, we loaded parcels for task-contingent conscientiousness and motivation to transfer onto one latent factor (Time 1) and those for supervisor support and transfer onto another latent factor (Time 2). The model showed poor fit to the data, $\chi^2 = 301.42$, $df = 43$; CFI = 0.70; TLI = 0.62; RMSEA = 0.173. Therefore, we adopted the hypothesized measurement model as basis for further hypothesis testing.

Our structural model included two interaction terms between task-contingent conscientiousness and (a) supervisor support and (b) training activity level. Creating latent interactions would require a much larger sample size than the current data, considering the need to ensure a reasonable ratio of observations to parameters in structural equation models (Kline, 2015). To maximize this ratio, we used observed scores for all but one of the variables when evaluating the hypothesized model, with the exception that transfer was a latent factor indicated by two subscales of use and effectiveness with equal loadings fixed at 1. To inspect a significant interaction, we followed the conventional approach (Aiken & West, 1991; Cohen et al., 2003) to create low (-1 SD) and high ($+1$ SD) groups around the mean on the moderator.

The results for our hypothesized model are presented in Figure 2. The model showed excellent fit to the data: $\chi^2 = 13.07$, $df = 11$; CFI = 0.99; TLI = 0.97; RMSEA = 0.031. Hypothesis 1 stated that supervisor support is

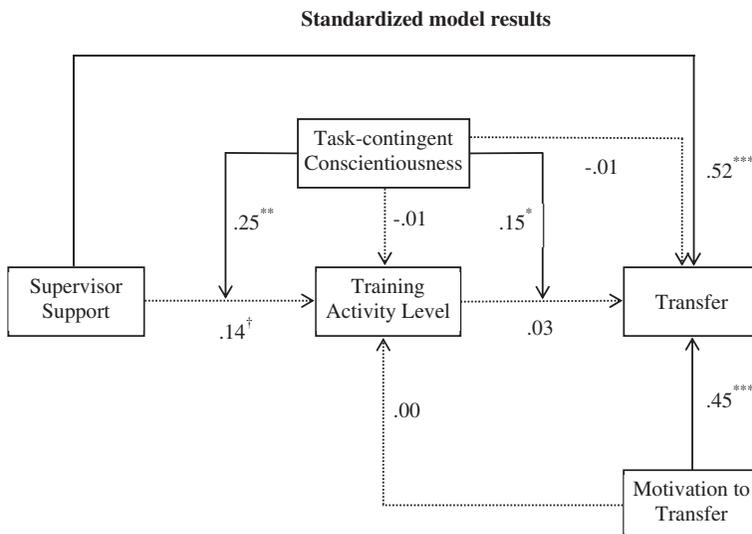


FIGURE 2 Standardized model results. Note: $N = 200$. We controlled for the effect of gender, company, and advanced training on training activity level and training transfer. Control variables are not included in the figure for simplicity. $^{\dagger} p < 0.10$; $* p < 0.05$; $** p < 0.01$; $*** p < 0.001$

positively related to (a) training activity level and (b) training transfer. The results showed that supervisor support was significantly related to training transfer ($\beta = 0.52, p < 0.001$) but not to training activity level ($\beta = 0.14, p = 0.07$). Thus, Hypothesis 1 was partially supported. Hypothesis 2 predicted that motivation to transfer is positively related to (a) training activity level and (b) training transfer. We found that motivation to transfer was significantly related to training transfer ($\beta = 0.45, p < 0.001$) but not to training activity level ($\beta = 0.00, p = 0.96$), so Hypothesis 2 was also partially supported. As for Hypothesis 3 regarding the direct effects of task-contingent conscientiousness on (a) training activity level and (b) training transfer, we did not find evidence in support of the hypothesis, $\beta = -0.01$ and -0.01 , respectively, $ps > 0.80$. Thus, Hypothesis 3 was not supported by the current data.

We proceeded to test Hypothesis 4 pertaining to the moderating role of task-contingent conscientiousness in influencing the relationship between supervisor support and training activity level. Supporting the hypothesis (see Figure 3), task-contingent conscientiousness strengthened the association between supervisor support and training activity level ($\beta = 0.25, p < 0.01$). Next, we examined Hypothesis 5 about the moderating role of task-contingent conscientiousness in the association between training activity level and training transfer. This hypothesis was also supported (see Figure 4): In the presence of the positive yet nonsignificant main effect of training activity level on training transfer ($\beta = 0.03, p = 0.71$), task-contingent conscientiousness accentuated this association ($\beta = 0.15, p < 0.05$), such that it is more positive for trainees with higher task-contingent conscientiousness.

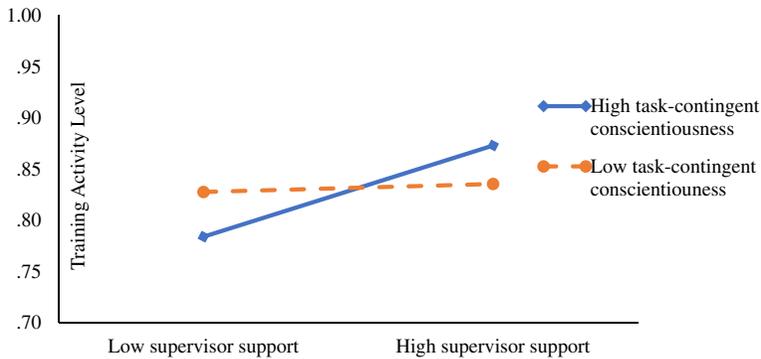


FIGURE 3 Task-contingent conscientiousness moderates the relationship between supervisor support and training activity level

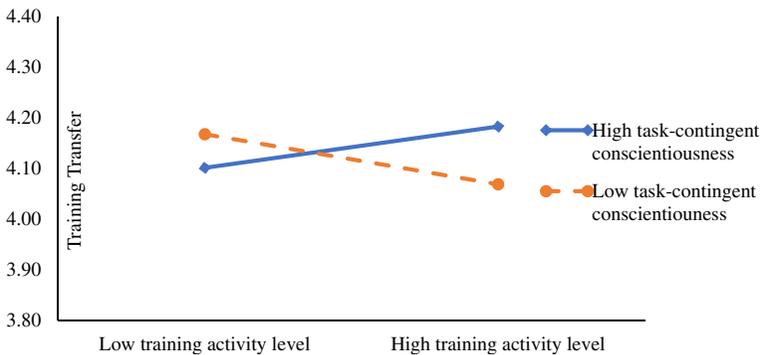


FIGURE 4 Task-contingent conscientiousness moderates the relationship training activity level and training transfer

TABLE 2 Confidence intervals for unstandardized moderated indirect effect of supervisor support

	Lower 2.5%	Estimate	Upper 2.5%
+2 SD TCC: Support → Activity → Transfer	0.003	0.073	0.207
+1 SD TCC: Support → Activity → Transfer	−0.003	0.025	0.081
+0 SD TCC: Support → Activity → Transfer	−0.007	0.002	0.022
−1 SD TCC: Support → Activity → Transfer	−0.005	0.004	0.029
−2 SD TCC: Support → Activity → Transfer	−0.006	0.030	0.110

Note: $N = 200$. Bootstrapping = 5000.

Abbreviations: Activity, training activity level; Support, supervisor support for transfer; TCC, task-contingent conscientiousness; Transfer, training transfer.

Finally, we used 5000 bootstrapped samples (see Hayes, 2009) to test the moderated indirect effect of supervisor support on training transfer via training activity level (Hypothesis 6). We followed the approach recommended by Muller et al. (2005) to test the first and second stage moderated mediation model because the moderated mediation index in this model is a non-linear function of the moderator (i.e., task-contingent conscientiousness) and cannot be directly tested with a significance test (Hayes, 2015). The results are presented in Table 2. We only found support for the moderated indirect effect when task-contingent conscientiousness was at +2 SD, which indicated that people with a high-level of task-contingent conscientiousness would be more likely to translate supervisor support into training transfer through training activity level. Therefore, Hypothesis 6 received limited support from the present data.

5 | DISCUSSION

5.1 | Research implications

Numerous studies following Baldwin and Ford's (1988) model of training transfer have provided empirical evidence of a wide range of predictors to transfer of training, including cognitive ability, self-efficacy, motivation, training design, knowledge or learning outcomes, transfer climate, and support (e.g., Blume et al., 2010; Colquitt et al., 2000; Huang et al., 2015; Hughes et al., 2020). However, we know little about how different categories of predictors (e.g., trainee and situational characteristics) have interactive effects on transfer of training. In this study, we addressed this knowledge gap and our findings discussed below support the notion of person–situation interaction that influences training and transfer (Blume et al., 2019; Colquitt et al., 2000; Gully & Chen, 2010). First, the adaptive tendency of adjusting individual effort levels in response to situational cues seems to play a role both during training and after training. We found that task-contingent conscientiousness interacted with supervisor support such that, when they receive supervisor support, those higher in task-contingent conscientiousness tended to have higher training activity levels and higher transfer of training. These findings suggest that trainees with the capacity to regulate personal resources will be better able to utilize workplace resources (i.e., supervisor support) and translate training outcomes into work performance.

While we did not find significant main effects of task-contingent conscientiousness, which is a departure from the findings by Minbashian et al. (2010) and Huang and Bramble (2016), these nonsignificant effects offer new insight into how and when task-contingent conscientiousness may drive adaptive responses. From a methodological perspective, the main effect of a centered predictor in a moderated regression model represents the average effect of the predictor across the range of the moderator variable (Cohen et al., 2003). It is also important to note that the moderation hypothesis is supported when the interaction term is significant, regardless of the significance of the

main effect (Baron & Kenny, 1986). From a theoretical perspective, the discrepant findings on the main effects point to a need to refine the current understanding of task-contingent conscientiousness, especially in the presence of its significant interaction with training activity. Both Minbashian et al. (2010) and Huang and Bramble (2016) captured adaptive outcomes within a laboratory setting, where participants received explicit task cues to maximize performance on the task at hand. In contrast, in the field setting, whether task-contingent conscientiousness can lead to higher training activity level and transfer could depend on contextual cues (in our study, supervisor support). Thus, our findings regarding task-contingent conscientiousness provide a clearer picture of its potential role in realistic settings where contextual features such as supervisor support can play an important moderating role to activate task-contingent conscientiousness (Tett & Burnett, 2003). Future research may benefit from considering how contingent units of personality and the corresponding trait domain (e.g., task-contingent conscientiousness and conscientiousness) jointly affect trainees' personalized transfer processes. Our results also suggest that engagement at higher activity levels during training does not necessitate training transfer. This finding is consistent with the understanding of training transfer as a challenging task, which is recognized both in research (e.g., Ford et al., 2018) and practice (e.g., Beer et al., 2016). Examining trainees' task-contingent conscientiousness and the demands of the task environment may provide a missing piece of the puzzle on the inconsistent effects of activity level on transfer: As the current results indicate, training activity level more positively translated into transfer for trainees with higher task-contingent conscientiousness. Thus, scholars interested in the association between training activity level and transfer may wish to assess both trainees' task-contingent conscientiousness and the environmental support for transfer.

Our study adds to existing findings that supervisor support interacts with other factors and can potentially act as a complement or supplement to improve training outcomes (Cable & Edwards, 2004; Gully & Chen, 2010). Gully and Chen (2010; p. 48) state, "Complementary fit occurs when the environment compensates for an individual's weakness or shortcomings ... In contrast, supplementary fit exists when the environment adds to the individuals something the individuals already possess, or vice versa.". Our findings in Figure 3 examining training activity level suggest that supplementary fit may exist between supervisor support and task-contingent conscientiousness since supervisor support appears to increase the level of training activity level for trainees with higher TCC. Colquitt et al. (2000; p. 700) also suggest that "Perhaps positive climates could magnify individual difference effects in the same manner as high levels of autonomy and discretion...". In considering person-situation interactions in the training literature, supervisor support has recently been examined in several studies (Chauhan et al., 2017; Freitas et al., 2019; Martins et al., 2019; Salamon et al., 2021). For example, Chauhan et al. (2017) found that supervisor support had a larger impact on transfer when trainees had more positive perceptions of the training design (i.e., the effectiveness of the trainer in delivering content in a way that helped trainee apply it to their job). We believe using a supplementary-complementary fit perspective to continue examining these person-situation interactions is appropriate given that a supportive work environment is an important contextual factor that can interact with both training design characteristics and trainee individual differences to influence training outcomes (Gully & Chen, 2010; Huang et al., 2015; Hughes et al., 2020).

These findings are in line with research on the customization or personalization of training transfer. Yelon and colleagues found that trainees would decide on efforts regarding training transfer based on situational cues, such as experience in training, supportive work conditions, and trained knowledge-skill types (Yelon et al., 2013; Yelon et al., 2014; Yelon & Ford, 1999). Trainees are also more likely to practice and transfer the knowledge they found credible and skills they viewed as practical or easier to apply to the job (Yelon et al., 2004). It is likely that trainees in our study were more likely to complete the optional exercises that they found credible and applicable to their jobs. More work is needed to understand why trainees completed some exercises but not others, and to investigate whether the variance was due to work conditions (e.g., support and time pressures on the job), perceptions related to the applicability of the exercises for their job, their training experience, or other factors.

Our findings suggest that supervisor support may generate different reactions within people with distinct adaptive tendencies. Earlier work by Maurer and Tarulli (1994) showed that supervisor support is valued differently by different employees, and our study suggests that task-contingent conscientiousness may be a key factor that causes

employees to be more or less responsive to supervisor support. As Figure 3 illustrates, when trainees are high in task-contingent conscientiousness, they tend to be engaged at higher activity levels in the training program when they receive more training support from their supervisors. In contrast, trainees with low task-contingent conscientiousness generally stay at a relatively stable degree of training activity level regardless of receiving high or low supervisor support. In addition, it may seem counter-intuitive that with lower supervisor support (left part of Figure 3), low task-contingent conscientiousness trainees appeared to present higher levels of training activity than high task-contingent conscientiousness trainees. However, such an observation is consistent with the adaptive tendency behind task-contingent conscientiousness (Minbashian et al., 2010). This could be due to high task-contingent conscientiousness trainees capturing the situational cues of low supervisor support, causing them to perceive the training to be less important or demanding, and leading them to conserve their efforts in training. Therefore, trainees with different capacities of responding to situational cues may adopt different strategies in dealing with situational demands (see Tett & Burnett, 2003; Tett & Guterman, 2000). This resonates with the findings in Minbashian et al.'s (2018) study, where they demonstrated that there were unique types of individuals who reacted differently in conscientious behaviors due to handling task demands through unique affective processes.

Finally, after training, high and low task-contingent conscientiousness trainees continued to present differences in training transfer. As illustrated in Figure 4, high task-contingent conscientiousness trainees showed higher level of training transfer when they had engaged more with the training, but people with low task-contingent conscientiousness had lower-level of training transfer when they had engaged more with the training. This is likely because high engagement in training activities would consume a lot of personal resources (e.g., time and attention) at work (Hobfoll, 1989), and low task-contingent conscientiousness trainees may tend to conserve personal resources for alternative work tasks after training or delay transfer of training to prevent resource depletion (Tyler & Burns, 2009). However, this should not be viewed as an adaptive response to situational cues since these individuals would likely be withholding effort due to a lack of resources rather than proactively managing challenges and demands. In other words, they may be attempting to just get by instead of thriving (see Griffin & Hesketh, 2003). In contrast, high task-contingent conscientiousness trainees may be able to continue dealing with new demands and challenges from training transfer and apply trained knowledge and skills to work practices. In addition, our findings showed that when the situation offered less support for training, high task-contingent conscientiousness may further restrain allocation of resources to transferring training. In this case, these trainees may exhibit an even lower-level of training transfer than low task-contingent conscientiousness individuals.

5.2 | Practical implications

Our findings also contribute to the practice of improving training effectiveness in organizations. First, organizations can intervene and should encourage supervisors to provide essential training support to employees. Our study suggests that supervisor support may function as a situational cue that prompts individuals to engage in training activities, especially for those who are high in task-contingent conscientiousness and have an adaptive tendency in allocating personal resources. For trainees who were high on task-contingent conscientiousness, the percentage of training activities completed was higher by nine percent, depending on the level of supervisor support received. Regardless, supervisor support represents an important job resource that helps employees take advantage of training opportunities to improve work performance and facilitate career development. A more nuanced discussion of how to best support trainees may be helpful to supervisors, which could include training supervisors on how to support the trainee before, during, and after the training experience. This may be particularly important when trainees are given voluntary exercises or activities. For example, supervisors could be given ways to provide each type of support (i.e., direct assistance, guidance, emotional support) and asked to create a 'support plan' for their trainees.

Second, although our study shows that supervisor support may not influence trainees' engagement in training ($\beta = 0.14$, $p = 0.07$), supervisor support still promotes transfer of training ($\beta = 0.52$, $p < 0.001$), and thus managers

should strive to provide similar levels of support across employees regardless of their tendencies in task-contingent conscientiousness. However, managers may need to recognize that their support to trainees can yield varying outcomes at different stages of training and transfer. In fact, there may be cases where supervisors provide appropriate levels of support but do not see much training transfer. While recognizing that trainees will make choices in applying their training (Baldwin et al., 2009; Blume et al., 2019), supervisors may need to individualize their support and determine why certain trainees find it more challenging to transfer their training. For example, it may be related to the trainee and his–her ability to handle increased demands. In this case, supervisors may need to be patient and help the trainee manage his–her time and resources.

Third, organizations may need to adapt their strategies of promoting training activity and transfer with regards to employees' tendency of adjusting personal efforts. For example, for employees with high task-contingent conscientiousness who are more adaptive to training requirements, properly increasing training demands and difficulties would attract their attention and motivate them to transfer trained knowledge and skills back to jobs. For those who are less adaptive, designing training tasks to be less demanding could reduce potential conflicts of resources between training and work, increasing the likelihood of engagement in training activities and transfer. In general, the person–situation interactionist perspective indicates that managers should consider both the trainee and situation or work context (Blume et al., 2019; Tett & Burnett, 2003). Other trainee individual differences may require different supervisor support strategies, and this consideration may also influence the trainee selection or evaluation process.

5.3 | Limitations and future research

Several limitations of our study provide grounds for future research. First, except for training activity level, other study variables were self-reported, so our findings could potentially be influenced by common method bias (Podsakoff et al., 2003). However, we collected data from two-waves of surveys, thus mitigating the severity of potential common method bias. More importantly, the key hypotheses in this study test interaction effects, and research suggests that although interaction effects can be severely deflated by method bias, they are unlikely to be artifacts of it (Podsakoff et al., 2012; Siemsen et al., 2010).

Second, our study variables were measured only at two-time points, which prevents causal inferences in the current two-stage moderated mediation model. While our findings provide initial evidence of the moderating role of task-contingent conscientiousness in training and transfer, a longitudinal approach to investigating how task-contingent conscientiousness interacts with supervisor support would reveal more information on the process. For example, Huang et al. (2017) investigated the within-person trajectory of training transfer and factors (e.g., level and variability of mastery orientation) that explained between-person variability in the change pattern over time. Similarly, future studies may use repeated measures of training outcome variables to examine the interindividual difference in intraindividual variability of training transfer. Moreover, future studies can also apply a more nuanced view to understand the within-person mechanisms of dynamic training transfer. Blume et al. (2019) proposed that trainees would engage in an iterative, self-regulatory cycle of dynamic transfer process where individuals constantly monitor work behaviors and performance after training and integrate such feedback in making decisions on future transfer actions. This direction of research may also benefit from considering whether contingency in personality traits (e.g., conscientiousness and task-contingent conscientiousness) would explain individualized transfer processes.

Third, our study only focused on the interaction between trainee characteristics and contextual factors, leaving unknown other possible interactions. Other contextual factors could include open (e.g., leadership) versus closed (e.g., computer software) skills (Yelon & Ford, 1999), since the type of skill trained could interact with trainee characteristics (e.g., learning goal orientation more important for open skill training) or even other contextual factors (e.g., more supervisor support required for open skills) (Blume et al., 2010). When examining the environment–transfer relationship, Blume et al. found a higher correlation for open skills (0.26) than for closed skills (0.04). Baldwin and Ford's (1988) systematic review of the training transfer literature highlighted an additional factor: training design.

While some research has been done in this area (e.g., lower-ability learners seem to benefit from more structure in training, whereas higher-ability learners benefit from less structure and more self-guided exploration), little is known about whether training design would interact with many other trainee characteristics and contextual factors to influence transfer of training (Gully & Chen, 2010). For instance, would training design features function as situational cues to trigger individual adaptive tendencies in allocating resources? Would supervisor support be more effective with intensive, short training versus multi-module training over longer periods of time? For example, Dahlin et al. (2018) proposed that the opportunity, motivation, and ability to learn are major mechanisms for learning from errors and failures. Combining it with our research findings, future research could explore whether the design of error management training (Keith & Frese, 2008) would be more salient to trainees higher in task-contingent conscientiousness.

Fourth, our sample of managers may have been especially aware of the importance of supervisor support since they were also supervisors and in contact with their own managers. This could have made them sensitive to supervisor support and could potentially limit the generalizability to non-manager populations.³ We also acknowledge that we assume a uniform high-level of task demands for (busy) managers who are also participating in training, so this may influence the generalizability to other samples. In addition, while we would have liked to collect additional measures (e.g., perceived training relevance; peer support) to better fit the findings into the broader context of the training transfer literature, we were limited in survey length given our sample of busy managers and the company's desire to avoid long surveys. Therefore, caution should be exercised in the generalization of the results of this study to other populations and future research is needed for this purpose.

Fifth, although the internal consistency reliabilities of our focal measures were above the typical acceptable threshold (Nunnally & Bernstein, 1994), three variables had reliabilities in the .70s (i.e., motivation to transfer, task-contingent conscientiousness, and transfer). After ascertaining that the lower reliabilities were not due to problematic items, we came to realize the presence of range restriction in our data. As Furr and Bacharach (2014; p. 151) noted, "All else being equal, the greater the variability among people in a group with respect to the psychological attribute that is being measured, the larger the reliability coefficient". More importantly, because range restriction attenuates observed associations, our current findings could be lower estimates than their true values in the population.

Finally, our study did not find supportive evidence that trainees who engaged at higher activity levels in optional online modules yielded greater training transfer in general. We considered two possible reasons behind. First, our current measure of training engagement was based on an objective indicator of training activity level for each task; without being able to assess whether trainees completed task activities with a high or low-quality outcome, our measure may be too coarse to capture the degree to which trainees were engaged throughout the training. Second, our current measure only focused on the optional part of the training, whereas an assessment of overall training engagement in both the required in-person components and optional online components would better reflect trainees' activity level. Future research could qualitatively assess training activity (e.g., quality in completing training activities) in addition to a quantitative assessment. In reference to a widely used measure of the construct of work engagement (see Schaufeli et al., 2006) that includes three dimensions of engagement (i.e., vigor, dedication, and absorption), future studies could develop a psychometrically validated measure of training engagement by adapting engagement measures from other organizational research domains. Alternatively, developing a training engagement measure based on the training engagement theory (see Sitzmann & Weinhardt, 2018) is also recommended.

6 | CONCLUSION

The present study provides initial evidence of how the interaction between trainee characteristics (i.e., task-contingent conscientiousness) and situational factors (i.e., supervisor support) influences training and transfer. Adding to the strong main effect of supervisor support, the significant interactive effects provide a more nuanced view. For trainees with higher task-contingent conscientiousness, supervisor support tended to have a stronger

association with training activity level, and training activity level tended to translate into more transfer of training. The situational contingency approach provides unique insights for understanding how individuals regulate personal resources to meet the demands of training and transfer. We encourage future research along these lines to add to our understanding in this area.

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ENDNOTES

¹ For the purpose of scaling–identification, it is necessary and common to add parameter constraints in a second-order factor structure when there are only two first-order factors (e.g., Edmondson et al., 2010; Gignac, 2006; Grothe et al., 2005; Williams, Eaves, & Cox, 2002).

² The pattern of results did not differ without these control variables.

³ We thank an anonymous reviewer for this point.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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APPENDIX A: MEASURES

A.1 | Supervisor support for transfer

Rate your level of agreement that your supervisor did the following:

A.1.1. | Direct assistance

1. Helped me prepare to get the most out of the training
2. Set goals with me around applying what was trained to the job
3. Helped organize my work or social context to maximize opportunities to apply the training
4. Gave me feedback on how I was doing with meeting the goals for the training program
5. Followed up with me to find out whether my initial attempts to apply knowledge or skills from training were successful
6. Provided me with the necessary time and resources so I could apply the training

A.1.2. | Guidance

7. Explained how the organization would benefit from my applying the training program
8. Made it clear what was expected of me relevant to the training
9. Gave me some tips on how to get the most out of the training
10. Referred me to other sources to get advice for applying the training
11. Suggested what she–he would do in a similar situation when trying to apply what I learned
12. Told me the best way to apply training to the job

A.1.3. | Emotional support

13. Expressed respect for my competency acquired during training
14. Openly listened to me talk about the challenges in applying the training to the job
15. Told me how he–she felt in similar situations to the ones that I was facing around applying training
16. Showed interest in how things were going relevant to applying the training

17. Gave me encouragement to continue to apply training to the job
18. Recognized the challenges faced when applying training

A.2 | Training transfer items

Rate your level of agreement about the impact of the program on your work:

A.2.1. | Use

1. Applied the knowledge and skills from the training program when performing my job
2. Used the knowledge and skills from the program to influence or assist others
3. Used the knowledge and skills to deal with my interpersonal relationships at work

A.2.2. | Effectiveness

4. My quality of work has improved due to what I learned in the program
5. My job behavior has become more effective from applying the program learning
6. My skills have gotten better as a function of the program