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Effect of Context on Performance Approach Orientation

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We proposed and tested a theoretical model that argues that different work contexts influence the relationship between performance approach orientation and work performance. Across three studies and three different types of work performance, results consistently supported a theorized interaction between performance approach orientation and rewarding climate. Two self-rating studies showed generally similar interactions, with some important differences in the significance of the simple slopes. Larger differences emerged between the self-rating and a supervisor rating study. The present research supports a model in which type of work (part time vs. full time), rewarding climate, the criterion of performance (supervisor vs. self-rating), and type of work performance are important contextual components of a model relating performance approach orientation to work performance.

Over the past few decades, research on achievement motivation has increasingly focused on goal orientation (e.g., Izadikhah & Jackson, 2011; Payne, Youngcourt, & Beaubien, 2007). Goal orientations are competence-relevant conceptualizations of motivation related to the achievement of success or the avoidance of failure (Yeo, Sorbello, Koy, & Smillie, 2008). Despite a large body of research in this area, knowledge on the nature and impact of goal orientation, particularly performance goal orientation, has been hampered by ambiguities and inconsistencies in the definitions, dimensions, and conceptualization of goal orientation (Hafsteinsson, Donovan, & Breland, 2008). We extend this literature by examining interac-

tions between performance approach orientation and situational cues in predicting different types of work performance across three different subject groups.

As researchers suggested, the most widely used approach to goal orientation is the three-factor model, in which three types of goal orientation are proposed: mastery approach, performance approach, and performance avoidance orientations (Yeo et al., 2008). The focus of mastery approach orientation is on learning, self-improvement, and developing competence (Pintrich, Conley, & Kempler, 2004). The focus of performance approach orientation is on outperforming others, demonstrating competence, and a concern for norm-based standards of improve-

ment (e.g., Dowson, McNerney, & Nelson, 2006). Whereas performance approach orientation focuses on the attainment of competence relative to others, performance avoidance orientation focuses on avoiding the perception of incompetence relative to others. Performance avoidance orientation focuses on trying to avoid looking incompetent and involves moving away from undesirable end states (Elliot, McGregor, & Gable, 1999).

The current research focuses specifically on developing a model of how performance approach orientation predicts work performance. Performance approach orientation is grounded in the need for achievement and represents regulation toward positive potential outcomes (Urdan, 2004; Wolters, 2004). This deserves further research because of inconsistencies reported by prior research (Urden & Mestas, 2006). On one hand, performance approach orientation positively relates to motivational indices representing persistence (Middleton & Midgley, 1997), academic self-concept (Pajares, Britner, & Valiante, 2000), effort expenditure (Elliot et al., 1999), job performance (VandeWalle, Cron, & Slocum, 2001), and performance attainment (Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000). On the other hand, performance approach orientation has been related to negative processes and outcomes such as test anxiety and an unwillingness to seek help with schoolwork (Elliot & McGregor, 1999). It has also been shown to be unrelated to some adaptive variables such as deep processing (Elliot et al., 1999; Harackiewicz et al., 2000) and intrinsic motivation (Church, Elliot, & Gable, 2001; Harackiewicz et al., 2000), which are usually related to performance improvement.

Performance Approach Orientation and Rewarding Climate

Midgley, Kaplan, and Middleton (2001) reviewed the literature and stated that performance approach goals are associated with adaptive patterns of learning but noted that, in other studies, these goals have been unrelated or negatively related to the same outcomes. With their studies, they argued that there is a need to consider for whom and under what circumstances performance goals are useful. We agree that it is important to investigate everyday situations, explore results from different subject populations, and consider the role of personal and situational characteristics as

moderators of the relationship between this construct and performance (Hafsteinsson et al., 2008). Therefore, the present research examined the moderating effect of a rewarding workplace climate in the prediction of three different types of work performance across three markedly different samples.

Climate is the most representative feature of work and plays a substantial role in determining work outcomes (Stringer, 2002; Patterson, Warr, & West, 2004). It has been argued that to accurately predict performance in the workplace, perceptions of different dimensions of work environment (conceptualized as psychological climate) must be taken into account (Stringer, 2002). One component of psychological climate likely to interact with the approach tendencies of performance goal orientation in the prediction of work performance is rewarding climate. Rewarding climate is one of the critical aspects of psychological climate, which has been the focus of much previous research (e.g., Bartol & Srivastava, 2002; Roch & McNall, 2007). What makes the concept of psychological climate influential is that it is defined as both a set of organizational characteristics and a range of peoples' realizations of those characteristics (Stringer, 2002). Reward in the workplace consists of salary, benefits, promotion, bonuses, and appraisal results.

As noted earlier, performance approach orientation is a potentially positive process generally related to successful achievement of tasks. We predicted that the availability of extrinsic rewards would reinforce this process, such that greater reward would strengthen the relationship between performance approach orientation and performance. We expected people to be more likely to want to outperform others if an external reward was at stake. Because performance approach orientation is concerned with external evaluation and appraisals, we expected people with high performance approach orientation to have better work performance in high-rewarding climates.

Types of Work Performance

In addition to investigating the moderating role of climate, the present research considered different types of work performance. Work performance consists of specific behaviors within a job description (the traditional perspective of work performance) but also takes into account the changing nature of work and organizations and the interdependence and

uncertainty of work systems (Viswesvaran & Ones, 2000). In addition, there is increasing agreement that work performance is multidimensional (Rotundo & Sackett, 2002). Therefore, in the current research performance was measured according to proficiency, adaptivity, and proactivity, incorporating both formalized and nonformalized aspects of three types of work performance (individual, team, and organizational performance).

This view of work performance is conceptualized as the interdependence and uncertainty of work systems in which individuals should initiate behaviors within the changing nature of work (Ilgen & Hollenbeck, 1991). Explicitly, it represents the extent to which jobs are seen as unformalized and lacking in standard criteria such that individuals need self-directed action to anticipate or initiate change in the work system across individual, team, and group types. Therefore, Griffin, Neal, and Parker (2007) developed a model of work role performance involving different types of performance. Within their model of work role performance, they cross-classified three levels at which role behaviors can contribute to effectiveness (individual, team, and organization). These three types of work performance are labeled core task performance, work team performance, and organizational performance.

Core task performance consists of specific behaviors that contribute to individual effectiveness. It does not measure behavior in a team or social context but reflects the degree to which an employee works in his or her role as an individual. Work team performance is reflected whenever individuals work in a team and specifies how behaviors contribute to team effectiveness rather than individual effectiveness. Work team performance is not usually specified in job descriptions and consequently is more discretionary and less likely to be monitored by management. Items in this subscale index the extent to which individuals coordinate work with other organization members, help others perform their tasks, and respond constructively to team changes (e.g., a new team member). Finally, organizational performance consists of behaviors that contribute to organization effectiveness rather than individual or team effectiveness. The subscale measuring organizational performance contains items assessing whether individuals talk about the organization in positive ways (defending the organi-

zation's reputation) and whether individuals participate in committees or make suggestions to improve the overall efficiency of the organization and cope with changes in the way the organization operates. Compared with core task performance, organizational performance is also more discretionary (see Chan, 1998; Griffin et al., 2007).

Current Research

Midgley and colleagues (2001) reported that they were unable to find clear patterns to explain inconsistent findings related to performance approach orientation. This suggests the presence of possible moderating factors, which often occur when there are unexpectedly weak or inconsistent relationships between a predictor and outcome variables across studies (Baron & Kenny, 1986). To obtain a clearer understanding of the relationship between performance approach orientation and work outcomes, we explored the moderating effect of contextual cues. Moreover, it seems that the relationship between performance goal orientation and outcome varies across participant populations and different contexts. For example, in education, performance goal has been found more facilitative in competitive learning environments than in noncompetitive learning environments (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Pintrich, 2000a). To further explore this variability, the present research used three separate samples.

In terms of measurements of goal orientation applicable to work contexts, the two best-known measurements are Button, Mathieu, and Zajac's (1996) scale and VandeWalle's (1997) scale. However, Hafsteinsson et al. (2008) recently critiqued both of them and identified poor item-level properties. For example, the Button et al. scale contains 8-item subscales that consider only performance goal orientation and learning goal orientation. In addition, the measure was developed using confirmatory factor analysis across three samples of college students and one organizational sample. Button et al. reported only moderate fit of the data to the model. Furthermore, the lack of fit was reported to be more severe in another study by Jagacinski and Duda (2001), who found that fit indices were below acceptable cutoff values for a two-factor model. Some empirical research reported weak psychometric properties for this measure (e.g.,

see Brett & Atwater, 2001; Hafsteinsson, Donovan, & Breland, 2007). Additionally, inconsistent findings (e.g., VandeWalle & Cummings, 1997) suggested that the measurement properties of this scale may be problematic. In view of these limitations, Jackson developed a new goal orientation questionnaire (see Izadikhah & Jackson, 2011), and this was used in the current research. Construct evidence in favor of the measure is presented in Izadikhah and Jackson.

In line with the literature, we developed and tested a model in which performance approach orientation had different relationships to work performance according to different types of work. We predicted that people would tend to report higher work performance in rewarding climates (Hypothesis 1) because rewarding climates can be expected to extrinsically motivate (Deci, Koestner, & Ryan, 1999). We predicted that employees with high performance approach orientation would tend to show higher performance levels than those with low performance approach orientation (Hypothesis 2). This is because of their high need to be superior and to demonstrate their competence. This view of the role of performance approach orientation is generally in accord with the literature, which holds that performance approach orientation is a positive process related to positive outcomes (Urdu, 2004; Wolters, 2004).

However we also expected that in full-time jobs, employees with high performance approach orientation would be likely to report better work performance in a high-rewarding climate than a low-rewarding climate (Hypothesis 3). This is because full-time employees are more likely to want to achieve success within their organization and therefore are more likely to want to compete for success. We considered how well the results would be replicated in two groups of part-time and full-time employees and whether the pattern of the interactions would be the same with the two groups.

We also considered whether performance approach orientation could be a stronger predictor in some types of work than others. For example, according to Mischel's (1977) perspective, individual differences are better predictors of performance in weak situations than in strong situations. Strong situations are defined as situations in which behavioral cues are salient, appropriate behaviors are clearly defined, and adequate incentives to engage in prescribed behav-

iors exist. Weak situations are those in which such information is absent, the meaning of the situation is unclear, and appropriate behavior in response to a situation is unclear (Mischel, 1977; Snyder & Ickes, 1985). This suggests that the relationship between performance approach orientation and performance will be strongest in the absence of a rewarding climate (Hypothesis 4) and where work is more discretionary, such as organizational and team performance as opposed to core performance (Hypothesis 5). We expected core task performance to be less relevant to performance approach orientation because it entails individual tasks. Team performance, on the other hand, provides the chance to be both collaborative and competitive. Therefore, because there are not precise and clear indications about performing appropriately in low-rewarding climates, we expected individual differences to play a more significant role in determining the types of work that are more discretionary and optional (see Snyder & Ickes, 1985).

Another perspective is that the competitive nature of high performance goal orientation is likely to lead to low supervisor-rated performance. In contrast to self-rated performance, we expected supervisors to view competitiveness as impeding success. From this perspective, low staff competitiveness will be valued by supervisors, and the effects of individual differences are more likely to be apparent in weak situations. Our final hypothesis was that low performance approach orientation would predict supervisor rated performance in a low-rewarding climate (Hypothesis 6).

In our previously published research with similar subject groups we found evidence of interactions between mastery approach orientation and rewarding climate in predicting work performance (Izadikhah & Jackson, 2011). Results indicated that mastery approach orientation positively and consistently predicted self- and supervisor ratings of work performance in high-rewarding climates. Evidence from the self-rating and supervisor rating studies, across three types of work performance, suggested that best performance was generally and consistently related to high mastery approach orientation and high-rewarding climate.

In accord with the literature on performance approach orientation (i.e., Midgley et al., 2001), we investigated a model of the moderating role of rewarding climate on the relationship between performance

approach orientation and work performance across three different types of work performance (in all studies), across different types of workers for whom the significance of work varied (part time in Study 1, full time in Study 2, and part time and full time in Study 3), and work performance as judged by self-ratings (Studies 1 and 2) and supervisor ratings (Study 3). Hypothesis 3 related only to full-time workers in Study 2, and Hypothesis 6 related only to supervisor ratings in Study 3. The other hypotheses can be applied across the studies.

STUDY 1

In the first study we aimed to test pertinent hypotheses using self-ratings of work performance in a sample of young part-time employees from various organizations.

METHOD

Participants

Four hundred twenty-nine part-time workers (23% in production, 31% in service, 24% in education, 19% in administration, and 3% in other industries) participated in this study. They were also in tertiary education and were required to work more than 16 hours per week. The average age of participants was 19.78 years (range 17–34, $SD = 4.32$); 71% were female.

Procedure

Participants completed a number of electronically administered questionnaires in a room, under the direct supervision of a researcher. Participation was voluntary and anonymous, and all participants received course credit in return for participation. The study followed American Psychological Association ethical guidelines and received clearance from the University of Queensland School of Psychology ethics committee.

Measures

All measurements were based on a 5-point Likert-type response scale ranging from 5 (*strongly agree*) to 1 (*strongly disagree*).

Performance Approach Orientation

Jackson's goal orientation questionnaire (JGOQ) is a new measurement that assesses mastery approach, performance approach, and performance avoidance

orientations. Exploratory and confirmatory factor analysis and evidence for concurrent, convergent, and content validity of JGOQ were presented in Izadikhah and Jackson (2011). Internal consistency of subscales in JGOQ were .87 for performance approach orientation (six items), .88 for mastery approach orientation (seven items), and .79 for performance avoidance orientation (five items). An example item for performance approach orientation is "Outperforming my peers motivates me."

Rewarding Climate

The 118-item Occupational Climate Questionnaire (OCQ; Furnham & Gunter, 1993) was used to measure rewarding climate. The original questionnaire assesses 15 dimensions of organizational climate (e.g., innovation, relationships, responsibility, reward). The reward scale includes 10 items that assess the degree to which the organization is rewarding. Confirmatory factor analysis supports the construct validity of this measurement (see Levine & Jackson, 2002). Example items for rewarding climate are "In my organization good work is appropriately recognized" and "In my organization the appraisal process rewards those who work hard."

Work Performance

The 31-item Work Performance Questionnaire (Griffin, Neal, & Parker, 2007) consists of three subscales assessing the following:

1. Core task performance, assessed by the individual task behaviors subscale, includes items such as "Thinking about how you have carried out your core job over the past 6 months, to what extent have you: Ensured your core tasks are completed properly? Adjusted to new equipment, processes or procedures in your core tasks? Initiated a better way of doing your core tasks?"
2. Work team performance is indexed by items such as "Thinking about your role in your work unit over the past 6 months, to what extent have you: Coordinated your work with team members? Responded constructively to changes in the way your team works? Developed new and improved methods to help your work unit perform better?"
3. Organizational performance is assessed with items such as "Thinking about your contribution to the organization over the past 6 months, to what extent have you: Talked

about the organization in positive ways? Fitted in with changes in the way the organization operates? Come up with the ways of increasing efficiency within the organization?"

Griffin and colleagues (2007) reported support for the external validity of their questionnaire using supervisor ratings from 32 organizations and self-ratings from employees in two organizations.

Data Analysis

In all three studies, to test for the moderating effect of rewarding climate on performance approach orientation in the prediction of work performance, hierarchical moderated multiple regression analyses were conducted. We used mean centered variables to reduce the potential for multicollinearity between predictors and the interaction term. Assumptions required to use regression analysis were met. To control for potential confounding effects of gender and age, these were entered into the regression equations at Step 1. In Step 2, the two predictors, performance approach orientation and rewarding climate, were entered. In Step 3, the performance approach orientation \times rewarding climate interaction term was entered. All variables within each step were entered simultaneously. The effect sizes reported in this article are all in the acceptable range of effect sizes for interactions, which is approximately R^2 change = .01 to .03 (see Champoux & Peters, 1987). Study 3 used data from the same participant group in Study 2 of our previous work (Izadikhah & Jackson, 2011).

RESULTS

Means, standard deviations, alpha coefficients, and correlations between variables are shown in Table 1.

Alpha coefficients were all greater than .7. The three types of work performance were intercorrelated, and there were also significant positive correlations between performance approach orientation and the measures of work performance. Rewarding climate also had significant positive correlations with three types of work performance.

Using the hierarchical moderated multiple regression models described earlier, gender, but not age, was a significant predictor of three types of work performance. Results showed significant effects of gender (with women scoring better than men) in predicting work team performance, $\beta = .108, t = 2.22, p = .02$, and organizational performance, $\beta = .090, t = 1.96, p = .05$, but not core task performance, $\beta = .076, t = 1.20, ns$. Conversely, age was not a significant predictor of work performance across any type: $\beta = .004, t = .085, ns$ for work team performance; $\beta = -.034, t = -.76, ns$ for organizational performance; and $\beta = .032, t = 0.49, ns$ for core task performance, respectively.

Prediction of Work Performance From Performance Approach Orientation and Rewarding Climate

In the prediction of work team performance, both performance approach orientation, $\beta = .110, t = 2.22, p = .02$, and rewarding climate, $\beta = .117, t = 2.34, p = .02$, exerted significant main effects. There was also a significant performance approach orientation \times rewarding climate interaction in the prediction of work team performance, $\beta = -.121, t(420) = -2.44, p = .01, R^2 = .043, R^2$ change = .014. Simple slopes analysis (Aiken & West, 1991) showed that in low-rewarding climates, performance approach orienta-

TABLE 1. Descriptive Statistics and Correlations Between Performance Approach Orientation, Rewarding Climate, and Work Performance, Study 1

	<i>M</i>	<i>SD</i>	Alpha	1	2	3	4
Performance approach orientation	22.45	3.76	.84				
Rewarding climate	27.24	5.18	.89	.24**			
Team performance	39.83	6.73	.88	.34**	.14**		
Organizational performance	30.43	6.23	.87	.31**	.25**	.56**	
Core task performance	41.15	6.32	.88	.26**	.19**	.52**	.54**

* $p < .05$. ** $p < .01$.

High scores represent high performance orientation, high-rewarding climate, and high performance.

tion was a significant predictor of work team performance, $\beta = .386, t(420) = 3.88, p < .001$, whereas in a high-rewarding climate, performance approach orientation was not a significant predictor, $\beta = .031, t = .31, ns$ (Figure 1a).

In the prediction of organizational performance, both performance approach orientation, $\beta = .190, t = 4.29, p < .001$, and rewarding climate, $\beta = .270, t = 6.02, p < .001$, as main effects were significant. There was also a significant performance approach orientation \times rewarding climate interaction, $\beta = -.109, t(420) = -2.45, p = .01, R^2 = .112, R^2$ change = .011. The interaction is shown in Figure 1b. Simple slopes analysis showed that in low-rewarding climates, performance approach orientation was a significant predictor of organizational performance, $\beta = .479, t = 6.77, p < .001$, but not in high-rewarding climates, $\beta = .095, t = 1.09, ns$ (Figure 1b).

In the prediction of core task performance there were significant main effects for both performance approach orientation, $\beta = .106, t = 1.63, p = .04$, and rewarding climate, $\beta = .119, t = 1.79, p = .03$. There was a significant performance approach orientation \times rewarding climate interaction, $\beta = -.129, t(420) = -1.95, p = .04, R^2 = .067, R^2$ change = .015, (Figure 1c). Simple slopes analysis shows that in low-rewarding climates, performance approach orientation was a significant positive predictor of core task performance, $\beta = .47, t = 3.40, p < .00$, whereas in high-rewarding climates performance approach orientation did not predict core task performance, $\beta = -.005, t = -.04, ns$ (Figure 1c).

DISCUSSION

Examination of Figure 1 shows similar relationships across the three types of work performance. The significant interactions indicate that performance approach orientation predicts work performance differently in low- and high-rewarding climates. We found support for our hypotheses. In support of Hypothesis 1, we found that employees working in high-rewarding climates reported better work performance than those who worked in low-rewarding climates. In line with Hypothesis 2 we found that employees with high performance approach orientations showed higher performance levels than those with low performance approach orientations. Also, we found that the rela-

tionship between performance approach orientation and work performance was stronger in low-rewarding climates than in high-rewarding climates (Hypothesis 4) and where work was more discretionary, such as organizational and team performance as opposed to core performance (Hypothesis 5). Hypotheses 3 and 6 did not apply to this study.

The significant effect of performance approach orientation in low- but not high-rewarding climates is in line with Mischel's (1977) perspective of weak and strong situations. The present findings reflect

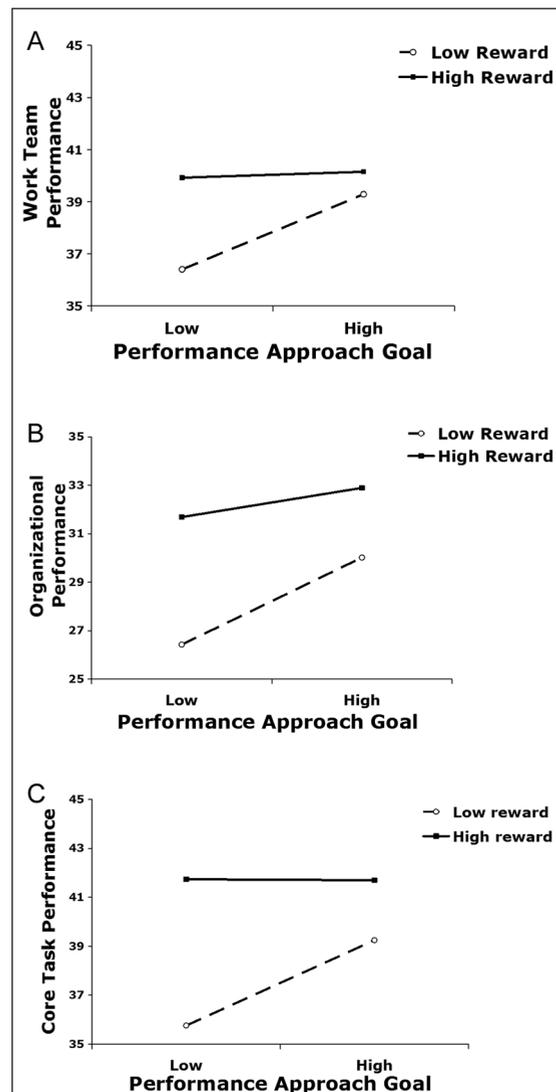


FIGURE 1. Predicting (a) work team performance, (b) organizational performance, and (c) core task performance from the interaction between performance approach orientation and rewarding climate, Study 1

Mischel's perspective by revealing that high-rewarding climate performance approach orientation does not exert a significant effect on work performance. In low-rewarding climates there is a significant difference between high and low performance approach orientation in work performance. Rewarding high-performance behaviors involves identifying and providing incentives to engage in such behaviors. Rewarding climate represents operationalization of situational strength; therefore, in such a situation it is the climate rather than individual differences that drives high performance. In contrast, in low-rewarding climates (weak situation), the absence of extrinsic incentives allows individual differences in performance approach orientation to influence work performance. Similarly, Mullins and Cummings (1999) found that weak situations strengthen the impact of individual differences on outcome variables such as the likelihood of changes in strategy.

Additionally, the present findings extend the line of thinking that performance goals are more facilitative in competitive learning environments (e.g., see Harackiewicz et al., 2002; Midgley et al., 2001). Importantly, participants in Study 1 were mostly part-time employees. Part-time workers are generally less likely to stay with an organization for a long period of time and are also less likely to see their current jobs as part of a future career. Therefore, there is less chance that workers will perceive the work environment in competitive terms. Even in high-rewarding climates, they will still not be competing for career advancement and other long-term goals. Further discussion of this follows the second study.

STUDY 2

Study 1 considered how performance approach orientation interacts with rewarding climate for part-time employees whose jobs are likely to be a secondary concern and less of a priority in their lives. Study 2 provides a picture of the role of performance approach orientation and climate in predicting work performance using the same set of variables but with a homogeneous group of employees working full time from a single organization. This is an important expansion of Study 1 because this type of work is likely to play significantly different role in the lives of the Study 2 sample. Therefore, we expected greater dif-

ferences between the results for part-time and full-time employees, because of the significance of work in the lives of full-time employees and the competitive nature of work for these workers.

METHOD

Participants

Participants were 92 full-time security officers from one organization (71% male). They worked in a security institute providing security and welfare to inmates. The average age was 51.24 (range 26–61, $SD = 4.17$).

Measures and data analysis were the same as in Study 1.

RESULTS

Using the same hierarchical moderated multiple regression models as Study 1, in predicting the three types of work performance, neither gender nor age effects were significant. In the prediction of work team performance, performance approach orientation was significant, $\beta = .444$, $t = 4.64$, $p < .001$, rewarding climate was significant, $\beta = .138$, $t = 1.44$, $p = .03$, and there was also a significant performance approach orientation \times rewarding climate interaction, $\beta = -.210$, $t(86) = -2.18$, $p = .03$, $R^2 = .240$, R^2 change = .042. Simple slopes analysis revealed that performance approach orientation was a significant positive predictor of work team performance both in low-rewarding climates, $\beta = .385$, $t = 4.40$, $p < .001$, and in high-rewarding climates, $\beta = .204$, $t = 1.84$, $p = .04$ (Figure 2a, Table 2).

In the prediction of organizational performance, both performance approach orientation, $\beta = .564$, $t = 6.43$, $p < .001$, and rewarding climate, $\beta = .163$, $t = 2.01$, $p = .03$, were significant, and there was also a significant performance approach orientation \times rewarding climate interaction, $\beta = -.207$, $t(86) = -2.34$, $p = .02$, $R^2 = .360$, R^2 change = .041 (Figure 2b). Simple slopes analysis shows that in both low-rewarding climates, $\beta = .402$, $t = 5.94$, $p < .001$, and high-rewarding climates, $\beta = .378$, $t = 3.36$, $p = .001$, performance approach orientation was a significant positive predictor of organizational performance.

In the prediction of core task performance, performance approach orientation, $\beta = .560$, $t = 6.33$, $p < .001$, but not rewarding climate, $\beta = .057$, $t = 0.65$, ns , was significant. There was also a significant per-

TABLE 2. Descriptive Statistics and Correlations Between Performance Approach Orientation, Rewarding Climate, and Work Performance, Study 2

	<i>M</i>	<i>SD</i>	<i>Alpha</i>	1	2	3	4
Performance approach orientation	22.10	4.23	.82				
Rewarding climate	22.50	5.63	.86	.19*			
Team performance	44.95	6.56	.91	.21*	.15*		
Organizational performance	34.95	5.60	.90	.32**	.18*	.54**	
Task performance	40.39	5.50	.88	.27**	.16*	.51**	.53**

* $p < .05$. ** $p < .01$.

High scores represent high performance orientation, high-rewarding climate, and high performance.

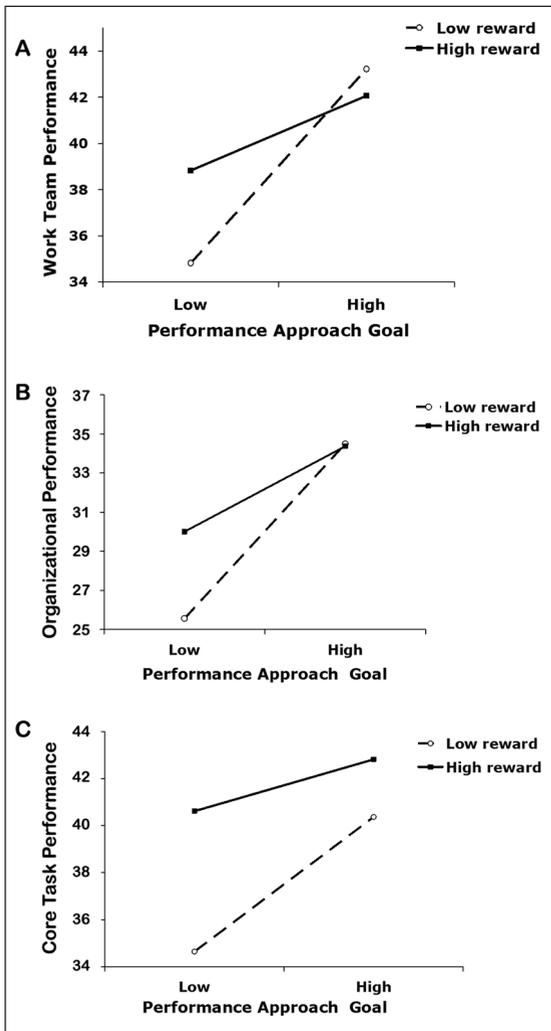


FIGURE 2. Predicting (a) work team performance, (b) organizational performance, and (c) core task performance from the interaction between performance approach orientation and rewarding climate, Study 2

formance approach orientation \times rewarding climate interaction, $\beta = -.232$, $t(85) = -2.67$, $p = .009$, $R^2 = .361$, R^2 change = .053 (Figure 2c). Simple slopes analysis showed that in both low-rewarding climates, $\beta = .769$, $t = 5.57$, $p < .001$, and high-rewarding climates, $\beta = .295$, $t = 2.14$, $p = .03$, performance approach orientation was a significant positive predictor of core task performance.

DISCUSSION

Results of Study 2 with full-time employees generally corresponded to the results from Study 1. That is, significant interactions emerged between performance approach orientation and rewarding climate in predicting three different types of work performance, and people reported higher work performance in rewarding climates (Hypothesis 1). Additionally, employees with high performance approach orientations showed higher performance levels than those with low performance approach orientations (Hypothesis 2).

A new finding in this study is that performance approach orientation also predicts work performance in both high-rewarding climates and low-rewarding climates (in partial support of Hypothesis 3). Study 1 included part-time employees, whereas in this study the sample consisted of full-time employees working in a single organization. We predicted that the context of employment would influence the competitive nature of the work type. We thought full-time employees would be more able and willing to compete and achieve success than others and outperform their peers to attain long-term success such as promotion. Consequently, compared with part-time employees

(e.g., Study 1), full-time employees were thought to be more likely to be motivated to work harder and compete with one another for promotions and good appraisals. However, our results indicate that full-time employees are competitive at both high and low rewards and potentially more competitive when rewards are low. If Hypothesis 3 is applied to the part-time workers of Study 1, then again performance approach orientation generally has a stronger relationship at low reward than high reward.

This result provides more support for Hypothesis 4 than Hypothesis 3, which specified that the relationship between performance approach orientation and work performance is stronger in a low-rewarding climate than in a high-rewarding climate. This is again in line with Mischel's (1977) notion of weak and strong situations, as explained in Study 1; in weak situations, individual differences are likely to exert significantly more influence on behavior than strong situations. There was also support for Hypothesis 5 because we found more evidence in favor of discretionary work (organizational and team performance) as opposed to core performance.

STUDY 3

In the first two studies we investigated the effect of performance approach orientation on different types of work performance. However, the results of these two studies were based on participants' self-ratings of work performance. To avoid relying on data from a single source, Study 3 obtained data on performance ratings from participants' immediate supervisors. The aim of this study was to investigate how supervisors evaluate employees' performance approach orientations in low- and high-rewarding climates. This study aimed to determine whether supervisors reported that performance approach orientation—trying to demonstrate abilities, look more capable, and do better than others—has the potential to improve employee performance.

METHOD

Participants

One hundred seventeen participants were recruited for this study (63% female). Thirty-four percent worked full time, and the remaining 66% worked part

time; mean age was 29.23 years old, with a range of 17–46 ($SD = 4.58$). Part-time workers were in tertiary education and from a multitude of different organizations. All worked more than a year in their organizations. Part-time workers were in production (16%), service (27%), administration (18%), education (19%), and other industries (20%). In terms of number of hours of work, 6% worked between 20 and 24 hours, 84% worked between 16 and 20 hours, and the rest were unspecified. Full-time employees were recruited from an architecture company, a hospital (nurses and staff), and a university (staff).

Procedure

Questionnaires were electronically administered under the direct supervision of a research assistant. Once the participants completed the questionnaires regarding their goal orientation and rewarding climate of their organization, they were asked to provide the e-mail address of their immediate work supervisor. Supervisor names and details were not saved during this process. Supervisor and participant questionnaires were matched by a computer-generated numeric code.

Measures

Participants completed the same questionnaires as in Studies 1 and 2, with the exception of self-reported measures of work performance. Instead, the three work performance rating scales were adapted for use by supervisors. In this study we used supervisors' ratings of work team (e.g., "John responded constructively to changes in the way his team works"), organizational ("John fitted in with changes in the way his organization operates"), and core task performance (e.g., "John initiated a better way of doing his core tasks").

Data Analysis

As in Study 1, hierarchical moderated multiple regression was used to test for moderating effect of performance approach orientation and rewarding climate on the three indexes of supervisor work performance.

RESULTS

Using the same hierarchical moderated multiple regression models as Studies 1 and 2, in predicting the three types of work performance, neither gender nor age effects were significant. In the prediction of

work team performance, performance approach orientation was significant, $\beta = -.132$, $t = -1.26$, $p = .02$, and rewarding climate was not significant, $\beta = .063$, $t = 0.67$, *ns*. There was also a significant performance approach orientation \times rewarding climate interaction in the prediction of work team performance, $\beta = .156$, $t(113) = 1.63$, $p = .02$, $R^2 = .033$, R^2 change = .029. As shown in Figure 3a, simple slopes analysis showed that in low-rewarding climates, performance approach orientation was a significant negative predictor of work team performance, $\beta = -.141$, $t = -1.13$, $p = .03$. However, high-rewarding climate performance approach orientation was not a significant predictor of work team performance, $\beta = .033$, $t = 0.15$, *ns* (Figure 3a, Table 3).

In the prediction of organizational performance, performance approach orientation, $\beta = -.141$, $t = -1.89$, $p = .002$, as a main effect was significant but not rewarding climate, $\beta = .107$, $t = 1.23$, *ns*. There was also a significant performance approach orientation \times rewarding climate interaction in the prediction of organizational performance, $\beta = .209$, $t(113) = 2.38$, $p = .006$, $R^2 = .035$, R^2 change = .040 (Figure 3b). Simple slopes analysis showed that in a low-rewarding climate, performance approach orientation was a significant negative predictor of organizational performance, $\beta = -.213$, $t = -2.65$, $p = .009$, but not in high-rewarding climates, $\beta = .076$, $t = 0.43$, *ns*.

In the prediction of core task performance, approach orientation was significant, $\beta = -.135$, $t = -1.73$, $p = .02$, but not rewarding climate, $\beta = .067$, $t = .718$, *ns*. There was a significant performance approach orientation \times rewarding climate interaction in the prediction of core task performance, $\beta = .234$, $t(113) = 2.41$, $p = .01$, $R^2 = .039$, R^2 change = .047 (Figure 3c). Simple slopes analysis showed that in low-rewarding climates, performance approach orientation was a significant negative predictor of core task performance, $\beta = -.254$, $t = -2.24$, $p = .02$, but not in high-rewarding climates, $\beta = .014$, $t = 0.06$, *ns*.

DISCUSSION

Results of Study 3 showed that supervisor ratings provide additional support for the interaction between performance approach orientation and rewarding climate in predicting three types of work performance. Thus, according to supervisor ratings, the

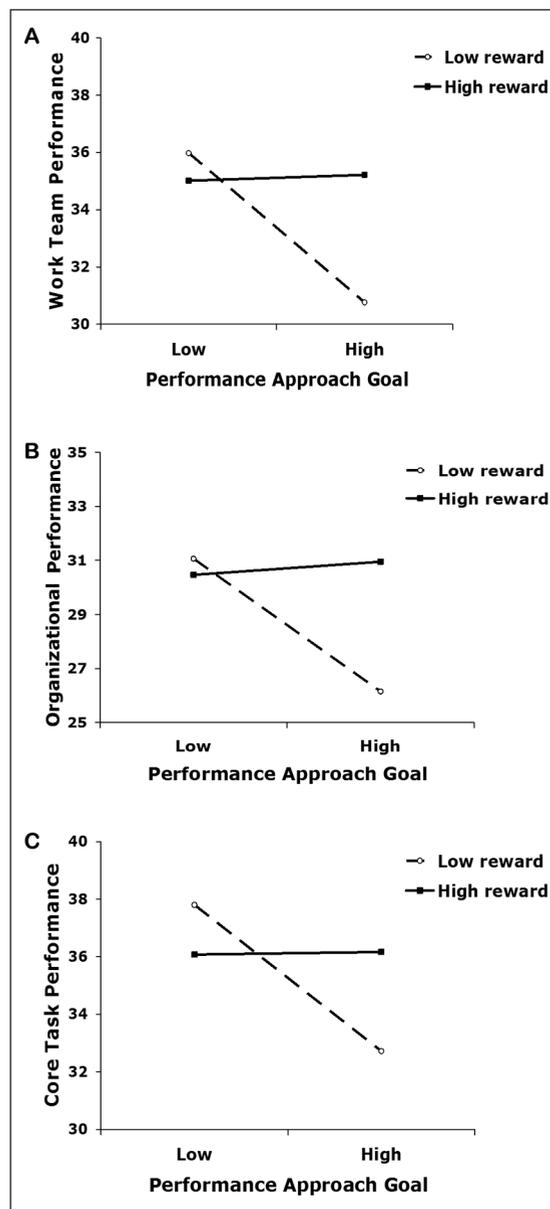


FIGURE 3. Predicting supervisor's ratings of (a) work team performance, (b) organizational performance, and (c) core task performance from the interaction between performance approach orientation and rewarding climate, Study 3

effect of performance approach orientation on performance varied between low- and high-rewarding climates. According to supervisor ratings and in line with the two other studies, people reported higher work performance in rewarding climates (Hypothesis 1). Contrary to Hypothesis 2, supervisors did not rank employees with high performance approach

TABLE 3. Descriptive Statistics and Correlations Between Performance Approach Orientation, Rewarding Climate, and Supervisor Ratings of Work Performance, Study 3

	<i>M</i>	<i>SD</i>	<i>Alpha</i>	1	2	3	4
Performance approach orientation	20.15	4.76	.83				
Rewarding climate	21.44	4.27	.85	.18*			
S team performance	44.58	7.18	.86	.21*	.13		
S organizational performance	35.99	6.14	.87	.23*	.15	.62**	
S task performance	45.82	6.46	.79	.19*	.14	.57**	.61**

Note. *S* = Supervisor ratings.

p* < .05. *p* < .01.

High scores represent high performance orientation, high-rewarding climate, and high performance.

orientations as better performers than those with low performance orientations. Furthermore, in support of Hypothesis 3 and according to Mischel's (1977) perspective, we found that the relationship between performance approach orientation and performance was strongest in the absence of a rewarding climate. However, contrary to findings in Study 1 and Study 2, employees with high performance approach orientations were seen as performing significantly worse than those with low performance approach orientations in low-rewarding climates. These results suggest that supervisors do not see positive potential in performance approach orientation in predicting work performance. Given that performance approach orientation is characterized by striving to outperform others and establishing competence compared with others, these results suggest that these strategies may not be viewed positively by supervisors. Supervisors may prefer less external reference standards of evaluation and consequently more absorption or concentration at work.

We did not expect to see support for Hypothesis 3 because this study included both part-time and full-time employees. We did not find support for Hypotheses 4 and 5 in this study. Supervisors appear to not be able to distinguish between the three types of work performance.

Hypothesis 6 was supported in this study. That is, low performance approach orientation predicted supervisor-rated performance in a low-rewarding climate. Harackiewicz, Barron, and Elliot (1998) and Pintrich (2000a, 2000b) suggested that distractions fostered by concentrating on comparisons between

oneself and others or the negative judgments formed by others could bring about negative outcomes. Work performance in the current research is understood in terms of the uncertainty with which people should initiate behaviors within the changing nature of work across individual, team, and group contexts. Work performance is also seen as unformalized and lacking in standard criteria with regard to predictability in inputs, processes, or outputs of work systems. More specifically, work performance is a multidimensional and complex behavior; considering the key factors such as uncertainty and interdependence, supervisors seem unlikely to value competition between employees as a practical or functional source of motivation to improve this behavior.

GENERAL DISCUSSION

In accordance with suggestions derived from the literature, we used three different studies to test a theoretical model describing the moderating effect of rewarding climate on performance approach orientation in the prediction of work team, organizational, and core task performance. Several important improvements in the present research included the use of several different participant groups, different work performance types, the incorporation and comparison of both self- and supervisor ratings of these work performance types, and finally the use of a new measure of goal orientation that was developed to overcome the weakness of current goal orientation measures.

There are several important similarities and differences across the three studies and between self- and supervisor ratings. For example, in the prediction

of three types of work performance, results consistently suggested significant interactions between performance approach orientation and rewarding climate. In Studies 1 and 2, people showed better work performance in high-rewarding climates (Hypothesis 1), and employees with high performance approach orientations showed higher performance levels than those with low performance approach orientations (Hypothesis 2).

Additionally, employees with high performance approach orientations in Study 2 who were full-time workers worked better in high-rewarding climates (Hypothesis 3), but we also found stronger effects in low-rewarding climates. These results are consistent with research in education, which demonstrated that performance goals are more facilitative in a competitive context (Midgley et al., 2001). In this case, the environment may be more competitive when resources are scarce than when they are abundant.

Furthermore, in both studies performance approach orientation was a stronger predictor of work performance in low-rewarding climates (Hypothesis 4). As stated previously, this finding verifies that in weak situations, performance approach orientation is likely to exert significantly more influence on behavioral outcomes. Moreover, in Studies 1 and 2 it was generally found that the relationship between performance approach orientation and performance was a little stronger where work is more discretionary and optional, such as in organizational and team performance as opposed to core performance (Hypothesis 5). Our findings regarding team and organizational activities were again in line with Mischel's (1977) perspective (also see Snyder & Ickes, 1985).

A potential limitation of the first two studies was the use of self-ratings of work performance. To address this, the third study used supervisor ratings of work performance, which provides the possibility of testing how supervisors rate work performance of according to performance approach orientation in low-and high-rewarding climates. As in Study 1, there was no significant association between performance approach orientation and work performance in high-rewarding climates. However, in low-rewarding climates, performance approach orientation was negatively associated with work performance. This evidence suggests that, from the supervisor's perspective, there is less benefit in performance ap-

proach orientation in relation to work performance outcomes. We think the failure to find evidence of a positive effect of performance approach orientation in the prediction of work performance is best explained in terms of supervisors being generally unimpressed by competitive people because they may be seen as disruptive to colleagues. Our results suggest that performance approach orientation has some negative influences on performance.

In conclusion, generally similar results with two self-rating studies demonstrated that considering moderating factors in performance approach orientation research helps clarify how consistent or inconsistent results emerge in different participant groups. Two self-rating studies demonstrated the positive potential of performance approach orientation in predicting work performance. Evidence from the self-rating studies across three types of work performance suggests that best performance was consistently related to high performance approach orientation and generally high-rewarding climate. However, the results depend on both the type of work environment and the type of employment (part-time or full-time employment). This is similar to the findings of Harackiewicz et al. (2002) and Pintrich (2000a), who argued that performance goals are more successful strategies in competitive learning environments than in noncompetitive learning environments. These results were challenged by supervisors' ratings of work performance. Supervisors have a different perspective and generally do not see any positive potential in performance approach orientations.

In our previous work regarding mastery approach orientation, evidence from the self- and supervisor rating studies, across three types of work performance, suggested that best performance was related to high mastery approach orientation in high-rewarding climates. According to supervisors' ratings, mastery approach orientation did not predict work performance in low-rewarding climates. In the current research supervisor ratings suggested that performance approach orientation does not predict work performance in high-rewarding climates and negatively predicts work performance in low-rewarding climates. With self-ratings, only employees with high performance approach orientations who had full-time jobs had better work performance in high-rewarding climates. Nonetheless, the supervisors' perspective is

in line with the initial debate in the literature concerning the potential beneficial outcomes of performance approach orientation (see Urdan & Mestas, 2006). So, in the real world, the perspectives of Midgley et al. (2001) might be weighted to suggest the downside effect of performance approach goals.

Our studies recognize the potential biases of both self- and supervisor ratings of worker performance but also recognize that each provides a different and informative perspective. Self-ratings can be biased from a desire to present well, but self-ratings are also potentially informative due to self-insight. Supervisor ratings, on the other hand, can be more objective but may suffer from biases in terms of what behaviors employees are willing to present and what supervisors perceive as being relevant to the job.

In summary, the present research supports a theorized model in which type of work (part time vs. full time), rewarding climate, and the criterion of performance (supervisor vs. self-rating) relate performance approach orientation to work performance.

NOTES

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