

How motivational orientations are related to ambidexterity

Motivational
orientations

Marjolein C.J. Caniëls

*Department of Management, Science and Technology,
Open University The Netherlands, Heerlen, The Netherlands, and*

Marcel F. van Assen

TIAS, Tilburg University, Tilburg, The Netherlands

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Abstract

Purpose – Whereas many studies address ambidexterity at the organizational level, much less is known about individual level ambidexterity. Moreover, there is a lack of thorough understanding of how motivational orientations are related to individual level ambidexterity. Yet, it is crucial to have an understanding of what motivates employees who perform explorative and exploitative activities. This study aims to empirically test the link between the constellation of motivational orientations of employees and their ambidexterity.

Design/methodology/approach – The authors use polynomial regression analysis and surface response analysis to analyze data from 103 employees employed in one Dutch organization. Polynomial regressions allow for analyzing linear and nonlinear direct and interactive effects between different motivational orientations in relation to individual level ambidexterity.

Findings – For individual ambidexterity, it is important to have an assessment orientation that is balanced with a locomotion orientation. Alternatively, people high on only locomotion orientation or only assessment orientation are also ambidextrous.

Originality/value – Insights into the motivational orientation of employees in relation to ambidexterity help to advance the theoretical understanding of how employees may enhance their individual ambidexterity.

Keywords Ambidexterity, Regulatory focus, Assessment orientation, Locomotion orientation

Paper type Research paper

Introduction

Ambidexterity is often conceptualized at the organizational level. It refers to the balance between an organization's explorative and exploitative activities (March, 1991). Increasingly, scholars have called for studies that investigate individual level ambidexterity (Prieto and Pilar Pérez Santana, 2012; Junni *et al.*, 2013; Caniëls *et al.*, 2017), that is, the way in which employees balance their explorative and exploitative activities. In recent times, it has become more and more important for employees to be ambidextrous, as employees are expected to be widely employable (Van der Heijden *et al.*, 2015). Understanding about how ambidextrous behavior emerges will shed light on how organizations can encourage and manage ambidextrous behavior of employees. Furthermore, it provides insights about how



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organizations can deal with the seemingly paradoxical goal of ambidexterity (Lewis and Smith, 2014; Papachroni *et al.*, 2015).

Studies have shown that people's motivation to undertake certain activities is determined by their regulatory focus (Higgins *et al.*, 2003), also labeled motivational orientation (Kruglanski *et al.*, 2000). Two key dimensions of regulatory focus are distinguished in the literature, namely locomotion orientation and assessment orientation. Locomotion orientation refers to an individual's tendency to move away from a current state to a new state that may still be unknown (Kruglanski *et al.*, 2000). It is a preference for change. In contrast, assessment orientation denotes an individual's tendency to compare the current state to a desired state (Higgins *et al.*, 2003). It is a preference for making comparisons and optimization.

For organizations, it is crucial to have an understanding of the motivational orientation of employees who are required to be ambidextrous. Prior studies have suggested that undertaking ambidextrous behavior to pursue seemingly conflicting goals simultaneously poses a self-regulatory challenge (Jasmand *et al.*, 2012; Sok *et al.*, 2016; Tuncdogan *et al.*, 2015). It involves switching from the efficient execution of activities (Benner and Tushman, 2003) to unconstrained creativity for the renewal of procedures, processes or products by integrating exploitative and explorative activities toward an ambiguous goal through self-regulation (Bledow *et al.*, 2009; Tuncdogan *et al.*, 2015; Johannessen *et al.*, 2017). In our study, we follow this reasoning and argue that employees' motivational orientations are related to their ambidextrous behavior.

A limitation of existing studies, however, is that we know very little about the separate and combined effects of locomotion and assessment orientation on ambidexterity. Yet, conceptual developments in business studies have suggested that entrepreneurial success requires activities that combine aspects of locomotion and assessment orientation (Brockner *et al.*, 2004). Empirical work on motivational orientations by Jasmand *et al.* (2012) and Sok *et al.* (2016) merely used the interaction of locomotion and assessment orientation, or use only one motivational orientation (Kauppila and Tempelaar, 2016). In this way information about all possible combinations of locomotion and assessment orientation are disregarded. We propose that different constellations of locomotion and assessment orientations may have a unique effect on individual ambidextrous behavior. Specifically, we argue that locomotion and assessment orientations can be congruent, or incongruent. In the latter situation, a discrepancy occurs between orientations, and one orientation may dominate the other. Such constellations of motivational orientations may have a unique effect on individual ambidexterity.

This study draws on regulatory mode theory (Kruglanski *et al.*, 2000) and aims to shed light on the impact of regulatory focus on individual ambidexterity. By a survey among 103 employees of one large organization, the study tests the link between various constellations of motivational orientations and self-reported ambidextrous behavior. By doing this, the study increases current understanding about what drives individual ambidexterity.

This study contributes to our understanding of the microfoundations of ambidexterity (Felin *et al.*, 2015) which is important in the light of management of organizations (Filippini *et al.*, 2012). Individual employees lay the basis for organizational ambidexterity. Our study addresses a limitation of current ambidexterity research, namely its focus on the organizational level. Thereby, it contributes to studies that advocate the importance of an individual level of analysis as compared to the organizational level (Prieto and Pilar Pérez Santana, 2012; Caniels *et al.*, 2017). Also, it adds to the contemporary debate on how to stimulate ambidexterity (Papachroni *et al.*, 2015).

Furthermore, this paper extends previous research by investigating constellations of motivational orientations of employees in relation to individual ambidexterity. Until now, we know very little about the outcomes of motivational orientations with respect to ambidexterity. Existing studies are few and are limited in that they do not fully capture the separate and combined effects of both locomotion and assessment orientation on individual ambidexterity. We use polynomial regression analysis and surface response analysis to analyze our data. Polynomial regressions allow for analyzing linear and nonlinear direct and interactive effects. To the best of our knowledge this technique has not yet been widely applied in regulatory focus research or ambidexterity research (see for recent exceptions [Fu et al., 2015](#); [Caniëls and Veld, 2016](#); and [Lee et al., 2017](#)), while being particularly appropriate in this context.

Theoretical background and hypotheses

Ambidexterity

Ambidexterity is typically studied at the organization level ([Benner and Tushman, 2002](#); [Heracleous and Wirtz, 2014](#); [Günzel et al., 2018](#)) or at the business unit-level ([Gibson and Birkinshaw, 2004](#)). Yet, studies in various fields, among others organizational learning ([Vera and Crossan, 2004](#)) and technological innovation ([Tushman and O'Reilly, 1996](#)) have indicated that organizational level ambidextrous activities originate from the exploration and exploitation activities of employees. However, ambidexterity at the individual level of analysis is under-researched ([Jummi et al., 2013](#); [Mom et al., 2007](#)), and understanding about factors that influence employees' ambidexterity is still scarce ([Prieto and Pilar Pérez Santana, 2012](#); [Caniëls et al., 2017](#)). Current research in this field predominantly considers organizational contextual factors that may be related to individual level ambidexterity, such as work context ([Mom et al., 2015](#)), knowledge inflows ([Mom et al., 2007](#); [Caniëls et al., 2017](#)), culture of empowerment ([Caniëls et al., 2017](#)) or human resource practices and social climate ([Prieto and Pilar Pérez Santana, 2012](#)). A limitation of these studies is that they overlook individual dispositions of employees, such as motivational orientation. Yet, for organizations, it is crucial to have an understanding of the motivation of employees that propels them to undertake ambidextrous activities. There is a need for studies that examine how individual ambidextrous behavior emerges, as this will shed light on how organizations can stimulate and inspire ambidextrous behavior of employees.

Motivational orientation

Regulatory focus theory distinguishes between two dimensions of motivational orientation: locomotion orientation and assessment orientation ([Kruglanski et al., 2000](#)). Locomotion orientation refers to an individual's tendency to move away from a current state to a new state that may still be unknown ([Kruglanski et al., 2000](#)). A locomotion orientation refers to an individual's tendency to move away from a current state in directions that may still need to be determined. It is associated with a preference for change and movement without first weighing all options ([Higgins, et al., 2003](#)). Locomotors have a desire to seek novel opportunities in the environment and to disengage from a current activity in order to explore other activities ([Higgins, et al., 2003](#)). Though this concurs with explorative behavior, a locomotion orientation does not impede exploitative behavior. In fact, a locomotion orientation may even encourage exploitative behavior. In this respect, [Pierro et al. \(2006\)](#) found that a locomotion orientation corresponds with engagement in activities that induce high intrinsic motivation, which in turn results in the investment of high efforts during goal pursuit. In other words, locomotors can be highly intrinsically involved in explorative as well as exploitative activities.

In contrast, an assessment orientation is associated with a desire for order and predictability (Higgins, *et al.*, 2003) and a discomfort with uncertainty and ambiguity (Kruglanski *et al.*, 2000). Since exploitative activities emphasize execution and stability and are hence rather predictable (March, 1991), it is expected that a person who exclusively has a high degree of assessment orientation will prefer to display exploitative behavior. Due to an aversion to uncertainty and ambiguity, such a person will not swiftly exhibit explorative behavior (Jasmand *et al.*, 2012), unless a critical evaluation of options indicates it as the best way forward to reach a specific goal (Higgins, *et al.*, 2003).

From an individual difference perspective, regulatory mode theory assumes that individuals can independently score low or high on each orientation (Higgins, *et al.*, 2003; Kruglanski, *et al.*, 2000). Hence, a preference for change and progress (locomotion) is independent of a preference for critical evaluation and comparison (assessment). When combining a locomotion orientation with an assessment orientation three types of situations emerge:

- (1) a congruence situation, where locomotion and assessment orientations are equally (un)favorable;
- (2) an incongruence situation, where the locomotion orientation outweighs the assessment orientation; and, finally,
- (3) an incongruence situation, where a locomotion orientation is less prevalent than employees' assessment orientation.

Studies have shown that a high locomotion orientation combined with a high assessment orientation leads to superior self-regulation during difficult, ambiguous, and challenging circumstances (Kruglanski *et al.*, 2000; Pierro *et al.*, 2006). Accordingly, employees with both high level of locomotion and high level of assessment orientation are expected to exhibit ambidextrous behavior (Jasmand *et al.*, 2012; Sok *et al.*, 2016). They will exhibit explorative as well as exploitative behavior. Because of their high locomotion orientation, they do not see any obstacles to perform seemingly opposing activities to pursue ambiguous and ambidextrous goals, while their high assessment orientation ensures that their behavior is optimally directed towards the integration of all activities to realize their goals. Hence, an assessment orientation will guide high-locomotion-oriented employees to purposefully spend time on various activities to pursue ambiguous goals (Avnet and Higgins, 2003). We therefore hypothesize:

- H1.* In situations of congruence, individual ambidexterity increases as employees score high on both orientations simultaneously, and decreases as the employees score low on both orientations simultaneously.

Locomotors are comfortable with dealing with variability and frequent changes from state to state (Kruglanski *et al.*, 2000) and are therefore more willing to swiftly perform explorative and exploitative activities simultaneously. An employee, whose locomotion orientation outweighs assessment orientation, will show explorative behavior with a 'can do' mentality. However, this does not imply that an employee does not exhibit exploitative behavior, as locomotors also have a high focus on task performance and task efficiency (Higgins *et al.*, 2003; Katz-Navon *et al.*, 2016). Hence, employees whose locomotion orientation dominates over their assessment orientation are expected to expose explorative, as well as exploitative behavior, and hence be ambidextrous to a high degree. We, therefore, hypothesize that the more a person's locomotion orientation outweighs a person's assessment orientation, the higher is the person's ambidexterity.

H2. The more employees' locomotion orientation exceeds their assessment orientation, the higher employees' ambidexterity is.

In contrast, an assessment orientation is related to intolerance of uncertainty and an intolerance of ambiguity facilitating standardization and exploitation, while impeding exploration. Assessment oriented individuals depend on others (Pham and Avnet, 2004) and prefer guidance and confirmation of others (Petrou *et al.*, 2016). Employees whose assessment orientation dominates over their locomotion orientation will only exhibit exploratory behavior if they are being evaluated and praised for that behavior; or when after a detailed evaluation of possible routes towards a goal they deem exploratory activities to serve their purpose best (Higgins, *et al.*, 2003). We, therefore, hypothesize that the more a person's assessment orientation exceeds the locomotion orientation, the lower is the person's ambidexterity.

H3. The more employees' assessment orientation exceeds their locomotion orientation, the lower employees' ambidexterity is.

Note that these hypotheses altogether support the idea that a high level of locomotion orientation is associated with a high level of ambidexterity, irrespective of the level of assessment orientation. This suggestion is in line with previous research on locomotion and assessment orientations that did not examine various constellations of both orientations (e.g. Kauppila and Tempelaar, 2016; Jasmand *et al.*, 2012; Sok *et al.*, 2016).

Method

Sample and procedure

Similar to Jasmand *et al.* (2012), our target respondents are employees from a large Dutch service organization, whose daily work consists of contacting and helping customers. They are assessed on their productivity and efficiency in dealing with customer problems. Although "easy" problems have standardized solutions, many problems require high levels of expertise on part of the service provider as well as ingenuity and exploration of new ideas to solve a problem. Employees have a high level of autonomy.

Data were gathered via an online questionnaire. In total 138 employees received the questionnaire. After one week, a reminder was automatically sent by mail. In addition, the respondents were reminded by their supervisors to complete the questionnaire. The cover letter explained the relevance of the study and emphasized privacy and anonymity of respondents and the fact that the data will only be used for academic research. In total 112 (81.2 per cent response rate) questionnaires were filled in. After removing incomplete forms, we were left with 103 (74.6 per cent response rate) usable responses. Of these respondents, 50.5 per cent were female; the average age was 43.4; the average tenure was 15.0 years; and 37.9 per cent of respondents have a bachelor degree.

Measures

Multiple-item scales, closely following previous studies, were used to measure each construct. Unless otherwise reported the construct variables were measured on seven-point scales ranging from 1 (totally disagree) to 7 (totally agree). We provided verbal labels for the scales and avoided using bipolar numerical scale values (e.g. -3 to +3) in order to reduce acquiescence bias (Kulas *et al.*, 2008). The employee survey covered the following construct variables.

Ambidexterity. We used the eleven-item measure of Mom *et al.* (2007), which assesses the extent to which individual respondents have performed explorative (five items) and

exploitative (six items) activities within the past year. One item was left out from our construct (“activities primarily focused on achieving short-term goals”) as our analyses showed that this item caused a decrease in scale reliability. In addition, a confirmatory factor analysis (CFA) identified this item as untrustworthy. This reduced the exploitative activities subscale to five items, making the number of items used for exploitative activities equal to the number of items used for explorative activities. A sample item of an explorative activity is “In the last year I was engaged in focusing on strong renewal of products/services or processes”. A sample item of an exploitative activity is “In the last year I was engaged in activities of which it is clear to me how to conduct them”. A confirmatory factor analysis (CFA) showed that a two-factor model ($\chi^2/\text{df} = 1.675$; CFI = 0.954; TLI = 0.939; RMSEA 0.084) fitted the data better than a one-factor model ($\chi^2/\text{df} = 9.01$; CFI = 0.480; TLI = 0.331; RMSEA 0.280). The constructs of exploration and exploitation both demonstrated good internal reliability (respectively $\alpha = 0.868$ and $\alpha = 0.882$). Consistent with previous ambidexterity studies (Cao *et al.*, 2009; Gibson and Birkinshaw, 2004), we operationalized ambidexterity by multiplying the weighted averages of exploration and exploitation and dividing the result by seven.

Locomotion and assessment orientation. In accordance with Jasmand *et al.* (2012), we used a shortened form of Higgins *et al.* (2003) regulatory focus scale to assess locomotion and assessment orientation. Each subscale contained three items. An example item of locomotion is “I feel excited just before I am about to reach a goal”. An example item of assessment is: “I often critique work done by myself or others”. We conducted a two-factor CFA to examine the distinctiveness of the two-factor model. The two-factor fitted the data well ($\chi^2/\text{df} = 1.441$; $p = 0.096$; CFI = 0.970; TLI = 0.943; RMSEA 0.064), also compared to the one factor model ($\chi^2/\text{df} = 11.420$; $p = 0.000$; CFI = 0.251; TLI = -0.348; RMSEA = 0.309). The constructs of both orientations yielded good internal reliability (respectively $\alpha = 0.842$ and $\alpha = 0.724$).

Controls. We assessed the usual controls variables, including age, gender, tenure and education level. Age and tenure were measured in years. Gender was measured as a dichotomous variable coded as 1 for female and 0 for male.

Results

Table I shows the means, standard deviations and correlations between the main variables in our study. There are interdependencies among control variables. As expected, there is a high correlation between age and tenure (0.721). Furthermore, education level correlates negatively with age, tenure and gender.

Variables	Mean	SD	1	2	3	4	5	6
1. Ambidexterity	3.60	1.05						
2. Locomotion orientation	4.54	1.20	0.242*	(0.842)				
3. Assessment orientation	4.28	1.05	0.011	-0.027	(0.724)			
4. Age	43.44	9.27	-0.070	0.152	-0.221*			
5. Gender	0.50	0.502	0.156	0.200*	0.090	0.104		
6. Tenure	14.97	10.50	0.074	0.134	-0.210*	0.721**	-0.002	
7. Education level	3.59	1.32	-0.040	-0.209*	0.144	-0.457**	-0.247*	-0.344**

Notes: Two-tailed Pearson correlation; $N = 103$; Internal reliabilities (alpha coefficients) are given in parentheses on the diagonal; * $p < 0.05$; ** $p < 0.01$

Table I.
Means, standard deviations and correlations

Regarding our core variables of interest, i.e. ambidexterity, locomotion and assessment orientation, we find that locomotion orientation negatively correlates with gender. However, this correlation is below .3. Hence, we conclude that the control variables do not structurally associate with any of the main variables. Following the advice of Becker (2005), we have left the control variables out of our further regression analyses. As polynomial regression analysis requires several degrees of freedom, leaving out irrelevant control variables increases the power of our tests.

Table II presents the results of our polynomial regression model. M1 shows the results for a model consisting of locomotion and assessment orientations. We find that locomotion is positively and significantly associated with individual ambidexterity. Adding an interaction effect between locomotion and assessment orientation in M2 shows that locomotion orientation is still positively and significantly related to individual ambidexterity. However, there is no evidence of an interaction effect. The polynomial regression analysis (M3) reveals a weakly significant higher order effect. We use surface analysis to further investigate our hypotheses.

H1 proposes that in situations of congruence between locomotion and assessment orientation, individual ambidexterity increases as employees score high on both orientations simultaneously, and decreases as employees score low on both orientations simultaneously. The results in Table II (M3) support this hypothesis (slope $a_1 = 0.318; p = 0.033$).

Variables	Individual ambidexterity		
	M1 Beta (<i>p</i> -value)	M2 Beta (<i>p</i> -value)	M3 Beta (<i>p</i> -value)
<i>Step 1</i>			
Locomotion (L)	0.243** (0.014)	0.206* (0.029)	0.272** (0.006)
Assessment (A)	0.017 (0.859)	0.012 (0.905)	0.031 (0.757)
<i>Step 2</i>			
Interaction L × A		- 0.011 (0.152)	
<i>Step 3</i>			
L ²			0.181‡ (0.079)
A ²			0.022 (0.835)
L × A			-0.119 (0.224)
<i>Congruence</i>			
<i>Shape along L = A line</i>			
Slope: $a_1 = b_1 + b_2$			0.318** (0.033)
Curvature: $a_2 = b_3 + b_4 + b_5$			0.094 (0.567)
<i>Incongruence</i>			
<i>Shape along L = -A line</i>			
Slope: $a_3 = b_1 - b_2$			0.258‡ (0.082)
Curvature: $a_4 = b_3 - b_4 + b_5$			0.312‡ (0.060)
F value	3,134	2,259	2,537
R ²	0.059	0.082	0.116
Adjusted R ²	0.040		0.070

Table II.
Regression summary for locomotion and assessment orientation in relation to individual ambidexterity

Notes: $N = 103$; ‡ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; standardized beta coefficients are reported, *p*-values between brackets; a_1 and a_2 represent the slope of each surface along the L = A line, while a_3 and a_4 represent the slope of each surface along the L = -A line, where $b_1, b_2, b_3, b_4,$ and b_5 are the unstandardized coefficients on L, A, L², LxA, and A², respectively

M3 also shows a positive relationship for *incongruence* situations (slope $a3 = 0.258$; $p = 0.082$), significant at the 0.10 level. Interestingly, we also observe significance on the 0.10 level of the curvature along the line of incongruence (curvature $a4 = 0.312$; $p = 0.060$). Taking into account the graphical illustration of the response surface analysis (Figure 1), this pattern of results suggests that the more employees' locomotion orientation exceeds their assessment orientation, the higher is their ambidexterity. When we start at the midpoint of the response surface in Figure 1, and we follow the line of incongruence towards the optimum point in the right backward corner, we see that we move upward and hence individual ambidexterity is increasing along this part of the incongruence line. This finding supports H2.

Additionally, the results suggest that the more employees' assessment orientation exceeds their locomotion orientation, the higher is their ambidexterity. This can be seen when we move from the midpoint of the surface along the line of incongruence towards the left front corner of Figure 1. This part of the incongruence line is also sloping upward. Notably, this finding is in contrast with H3, which suggested that employees' ambidexterity would decrease when assessment orientation dominates locomotion orientation.

In sum, we find that individual ambidexterity is high in either one of three cases:

- (1) high locomotion – high assessment;
- (2) high locomotion – low assessment; and
- (3) low locomotion – high assessment.

Discussion

In this study, we examined the relationship between (in)congruence of motivational orientations and self-reported ambidextrous behavior. In our sample, we find that there are three constellations of locomotion and assessment orientations that are positively associated with individual ambidexterity, namely (1) situations of congruence, where employees score high on both orientations simultaneously (supporting H1); (2) situations of incongruence, where employees' locomotion orientation exceeds assessment orientation (supporting H2); and (3) situations of incongruence, where employees' assessment orientation exceeds locomotion orientation (contrasting H3). Figure 2 illustrates these situations.

Theoretical implications

Our data suggest that employees with a high locomotion orientation together with a high assessment orientation are also highly ambidextrous. These findings illustrate the relevance of the regulatory mode concept to our understanding of how individual motivational concerns are related to ambidextrous behavior. The link demonstrated here between

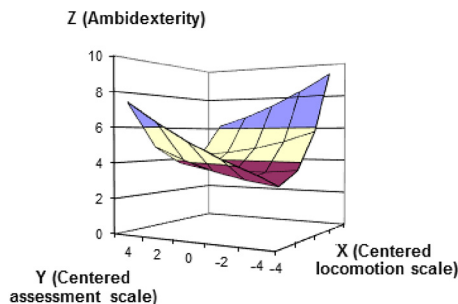


Figure 1.
Response surface of
ambidexterity as
predicted by
locomotion and
assessment
orientation

congruence in motivational orientation and individual ambidexterity (*HI*) attests to the idea posed in recent conceptual studies that individuals can experience high or low levels on both foci simultaneously (Higgins and Cornwell, 2016; Kuntz *et al.*, 2017) and that this can lead to positive individual outcomes (Jasmand *et al.*, 2012; Sok *et al.*, 2016). This finding is in line with theoretical developments in the field of entrepreneurship, which suggest that “entrepreneurial success requires a judicious combination of promotion- [i.e. locomotion] and prevention-focused [i.e. assessment-focused] activities” (Brockner *et al.*, 2004). In every job, there are aspects that require a locomotion orientation, e.g. finding solutions for problems, generating alternative ways to tackle complications. And similarly, every job contains aspects that require an assessment orientation, e.g. diligent managing risks.

Interestingly, our results provide evidence for a U-curve relationship between incongruence in motivational states and individual ambidexterity. In support of *H2*, the results suggest that the more employees’ locomotion orientation exceeds their assessment orientation, the higher is their ambidexterity. Additionally, in contrast to what we expected in *H3*, we also found that the more employees’ assessment orientation exceeds their locomotion orientation, the higher is their ambidexterity. This pattern of findings suggests that either orientation is positively associated with ambidexterity. However, intermediate levels of regulatory focus are associated with the lowest levels of ambidexterity. Apparently, employees differ greatly in motivational orientation and each orientation can be beneficial for individual ambidexterity as long as individuals are fully dedicated to this orientation. A positive association between locomotion orientation and ambidexterity is in line with recent empirical research that suggested that individuals with a strong locomotion orientation excel in multitasking and like to advance towards several objectives at the same time (Pierro *et al.*, 2013). On the other hand, a positive association between assessment orientation and ambidexterity is in line with regulatory mode theory (Kruglanski *et al.*, 2000) that suggests that individuals with a strong assessment orientation want to optimize their current activities, which may include exploitation as well as exploration. In particular, assessment oriented employees will undertake exploratory activities when these serve their purpose to increase certainty and stability (Higgins, *et al.*, 2003).

Given these findings, it will be interesting to further assess how individuals can influence or stimulate their motivational orientation. Individuals’ motivational orientation depends on dispositional and situational factors (Brockner and Higgins, 2001; Brockner *et al.*, 2004). Furthermore, we measured the orientations as trait-like factors. However, they could also be conceived of as states that can be induced by certain situational factors. Future research may want to explore factors that induce a particular motivational orientation. Psychological studies have shown that motivational orientation can be shaped and influenced by framing and priming (Brockner and Higgins, 2001; Roney *et al.*, 1995). For example, a recent study by

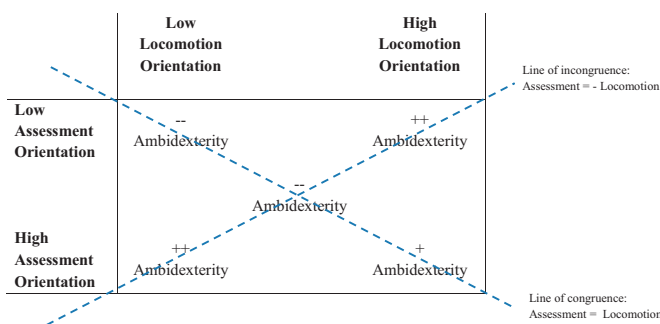


Figure 2. Configurations of locomotion versus assessment orientation that are associated with high levels of ambidexterity

Liu and Li (2017) showed that incremental reward primed promotion focus in individuals, whereas decremental reward induced prevention focus.

Managerial implications

Our study reveals some interesting issues for managerial practice, since different combinations of locomotion and assessment can lead to ambidextrous behavior. Our results show that individual orientations must be measured and made visible in order to facilitate and stimulate ambidextrous behavior. As a result, individual preferences should be taken into account in target setting and performance feedback. Employees with a predominant assessment orientation should not be rushed, but provided time to balance explorative and exploitative behavior. Management should facilitate ambidextrous behavior of these employees by creating a safe environment in which they are allowed to experiment and get information and feedback faster so that they can easily and quickly evaluate and compare alternatives. In contrast, activities of employees with a predominant locomotion orientation must be monitored and, if necessary, adjusted by providing feedback on ambidextrous performance. Employees with a high degree of locomotion orientation and assessment orientation hardly need any supervision in achieving their ambidextrous goals.

The question then becomes how this can be achieved in practice. Others studies have shown that efforts by human resource management in the form of mentoring trajectories or career coaching may help in achieving and strengthening certain motivational orientations in employees (Shepherd and Williams, 2018; Verbruggen *et al.*, 2007). Furthermore, the way in which organizational norms and values are communicated is likely to influence motivational orientation. For example, when managers use language that is associated with ideals and visions, then this may prime employees towards a locomotion orientation (Brockner and Higgins, 2001; Brockner *et al.*, 2004). Alternatively, an emphasis on mutual responsibilities is likely to reinforce the status quo and give rise to assessment orientation in employees (Brockner *et al.*, 2004).

Our findings also provide direction to facilitating team ambidexterity, as the measurement and clarification of individual preferences offers the team the opportunity to have a clear dialogue how the team may effectively allocate explorative and exploitative tasks.

Limitations and future research

This study harbors several limitations, each of which gives rise to future research directions. The first limitation pertains to our data. This study uses self-reported measurements, which may induce common method bias into our results. However, it has been shown that measurements by managers turn out to give similar results as objective workplace behavior measurements (Ng and Feldman, 2012). Nevertheless, we undertook several procedural remedies to limit the risk on various biases (Podsakoff *et al.*, 2003). Respondents' evaluation apprehension and social desirability bias were reduced by our guarantee of respondents' anonymity and our plea for honest answers (Podsakoff *et al.*, 2003). Future studies may employ objective data about ambidextrous behavior of employees or resort to supervisor ratings to control for the risk for common method bias. Relatedly, our data are cross sectional in nature and therefore we cannot infer causation. Although from a theoretical perspective it is logical to assume that regulatory focus determines behavior, including ambidextrous behavior, further investigation of the hypothesized relationships within our study is warranted. Further study may want to employ a longitudinal, process-oriented perspective, such as taken by Heracleous and Wirtz (2014), to get a grip on how organizations and their employees built ambidextrous capabilities over time.

Second, the goodness of fit of our measures is only just adequate and our value for RMSEA (0.08) represents just a reasonable error of approximation in the population. Due to

our small sample size in many cases, the statistics are significant only for p -value less than 0.10, while a cut off 0.05 p -value is generally accepted for rejecting the null hypothesis. Future studies that employ a larger sample size may show whether the relations we find are truly robust. Relatedly, our sample was highly homogenous, pertaining to the members of one single organization, which limits the extent to which we can generalize our findings. It would be worthwhile for future studies to try to replicate this study in other settings to investigate whether our results are robust and apply to a broader population.

Finally, our model explains only a limited percentage of variance in employees' ambidexterity. Future studies may want to incorporate other factors that may be relevant to explaining the relationship between regulatory foci and individual ambidexterity. In this respect, [Caniëls *et al.* \(2018\)](#) have shown that employees' mindsets interact with leadership style and that mindsets have to match perceived leadership style for optimal work outcomes. In addition, organizational contextual factors, specifically organizational culture, may influence individual ambidexterity ([Caniëls *et al.*, 2017](#)). For instance, a knowledge sharing culture may interact with the regulatory focus of employees in determining ambidexterity. Future studies may want to incorporate these and other variables into a comprehensive model to fully capture the antecedents of individual ambidexterity.

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Corresponding author

Marjolein C.J. Caniels can be contacted at: marjolein.caniels@ou.nl

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