How does self-performance expectation foster breakthrough creativity in the employee's cognitive level? An application of self-fulfilling prophecy

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ABSTRACT

Drawing on self-fulfilling prophecy theory and status boundary condition, the aim of this research is to test if promotion focus motivation mediates the employees' self-performance expectations towards breakthrough creativity. Besides, this paper also examines whether status stability significantly moderates the relationship between self-performance expectations and promotion focus motivation. The author conducted a longitudinal study and surveyed 380 staff in China with 102 immediate supervisors. In the first phase of data collection, including self-reported measures of team members' self-performance expectation and promotion focus motivation and status stability in the group. In the second phase of time, supervisors rated their team members' breakthrough creativity. Confirmatory factor analysis is conducted to test the reliability and validity of data. Also, hierarchical linear modeling is used to test the hypothesis. The bootstrapping process was adopted to calculate the indirect effect. The results were in line with the expected conceptual framework, Self-performance expectations and promotion focus motivation are found positive to predict breakthrough creativity. Besides, having more stability in status makes the employee more promotion focus, which brings breakthrough creativity from the cognitive level. Supervisors should organize sensitivity training to make them realize what is anticipated from them. Also, a simple nurturing will mobilize the existing cognitive pressure to achieve breakthrough creativity while investing in lower organizational resources. Finally, this model will deliver new insight into employees’ motives towards breakthrough creativity, considering the influence of boundary condition and self-performance expectations in the organization.

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Introduction

Organizations are facing severe challenges in adopting disruptive technologies and breakthrough innovations, which is the key to survive in the fierce competition (Mullen, 2019). By keeping hiring new employees with updated expertise and knowledge to bring breakthrough creativity is becoming impossible due to the high recruitment & search costs. Therefore, for organizations, one of the feasible ways should be motivating their existing employees to become capable of thinking out of the box. Breakthrough creativity refers to the radical development of primary and fresh thoughts by an individual or the group (Tan et al., 2019), which is becoming more and more crucial to organizational uniqueness, efficiency, and existence in the international bazaar. Such fresh thoughts are the output of both the innovation climate and employees’ self-beliefs in the organization (Carmeli & Schaubroeck, 2007). According to the theory of planned behavior, beliefs that are held by employees about their Self-performance expectations have a strong influence on bringing brand new ideas in the workplace. Then, employees' willingness to attain in the breakthrough creativity process requires intense involvement of his self-expectations. Employees' self-performance expectations are derived from their knowledge-skill-attitude (KSA) for what he has assigned. Hence, optimum utilization of KSA improves employees thinking capacity from typical creativity to breakthrough creativity. For this reason, performance expectation is believed to be one of the most fundamental predictors of breakthrough creativity in the organization (Teng et al., 2019).

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Researchers have shown mounting attention for discovering the properties of Self-performance expectations on employees' breakthrough creativity (Morgenroth et al., 2015). Performance expectation explains that one's effort will lead to an anticipated outcome, which would be based on self-efficacy, experience, and the nature of goal (J. Berger et al., 1972; P. L. Berger & Luckmann, 1991). Once developed, Self-performance expectations will shape individuals’ behavior in a self-fulfilling fashion. As a result, the greater the performance expectation of an individual, the higher he/she will perform better (Anderson et al., 2001). According to the theory of self-fulfilling prophecy (SFP), an organization can bring a radical change of employees’ cognition and output by establishing Self-performance expectations from them (Jussim et al., 1996). Self-fulfilling prophecy demonstrated that a supervisor’s keen expectations of subordinates, advance subordinates’ performance towards breakthrough creativity (D. Eden & Kinnar, 1991). In contrast, individuals’ Self-performance expectations may also lead to breakthrough creativity, which is supported by the Galatea effect, another type of SFP (D. Eden & Kinnar, 1991).

The Galatea effect is a performance gain achieved by raising subordinates' expectations about their performance. Individuals have their own set of ‘self-performance expectations’ (D. Eden & Kinnar, 1991) at the same time; their supervisors’ expectations influence them. Previous studies show that employees having high-Self-performance expectations bring a radical improvement in performance (Shelly, 2001). Therefore, in the era of breakthrough innovation, individuals’ self-expectations might play a vital role in bringing breakthrough creativity in his/her cognition. The test of the Galatea hypothesis, which is derived from SFP, confirmed that raising subordinates’ self-expectations boosted substantial creativity in the organization (Turner, 2009). However, in the age of breakthrough innovation, the Galatea effect did not yet use to assess the relationship between employees’ performance expectation and breakthrough creativity.

Although creativity has been discussed at diverse levels in organizations, little is known about how breakthrough creativity take shape in employees’ cognitive level (Oliver et al., 2019). Even though contemporary studies (Madjar et al., 2002; Tierney & Farmer, 2002, 2004) that focus on employee creativity have discussed the impact of social context, peer groups and supervisors expectations on employees’ creative behavior, how employees’ self-Performance expectations influence breakthrough creativity remains a puzzle (Tierney & Farmer, 2004), because creativity and breakthrough creativity are two different concepts. But in organizations, evidence shows that employees are often motivated to bring breakthrough creativity due to that it helps improving performance rating and increasing the probability of moving upward in the hierarchy. Why are performance ratings and moving upward related to breakthrough creativity? We argue that employees’ promotion focus motivation therein may play a critical role between performance expectation and breakthrough creativity because promotion links to formal status striving. In contrast, employees who involve in the status competition will become more emotional and risk-taking. Therefore, employees having lower status stability will take risks to develop brand new ideas to get the formal promotion, whereas, employees having higher status stability will take more risk to retain his impression.

Based on the evidence mentioned above, logic, and reasoning, this study thus aims to explore the following two questions:

RQ1: How employees’ self-performance expectations affect breakthrough creativity through promotion focus motivation?

RQ2: In what condition will employees’ self-performance expectations lead to desirable breakthrough creativity?

We aim to make three inputs as theoretical contributions from the above two questions. First, this study is based on a conceptual framework combining literature on employees’ breakthrough creativity, and perform combinations should allow us to address how an employee's promotion focus motivation can bring breakthrough creativity in his thoughts. Second, with its suggested links among Self-performance expectations, promotion focus motivation, and status stability, which has incorporated as the status competition in the organization, may provide helpful insight for the organization. Third, this current study will test an expanded version of the Galatea effect of self-fulfilling prophecy, which will answer how employee’s views of their Self-performance expectations bring breakthrough creativity within his boundary. Some researchers (J. M. Keller, 2008) suggest that employees performance expectation and, end behavior is mediated by promotion focus motivation. Therefore, the fourth and final findings will help the managers to set new performance standards and motivational tactics to bring breakthrough creativity from the employee by bringing positive results for the employee and the organization as well.

**Literature Review**

**Theoretical background:**

Self-fulfilling prophecy (SFP) at an organization is theorized based on intra and interpersonal expectancy effects (D. Eden & Kinnar, 1991). The interpersonal influence shows an increase in performance that results from increasing supervisors’ expectations about their subordinates’ performance in the organization. Whereas the supervisors’ expectations are the key to generating the interpersonal effect, which is the outcome of subordinates’ Self-performance expectations.

The galatea effect of SFP defines this situation. The galatea or intra-personal fact explains that assistants can produce extraordinary results by increasing their Self-performance expectations at work. In the organization, many managers and supervisors convey their expectations to their subordinates through the job description and job demand. However, the intra-personal or galatea effect can be shaped autonomously, bypassing the supervisor and uplifting subordinate’s self-performance expectations through some
represents other than the supervisor. In some cases, it is useful to utilize the Galatea effect where supervisor expectations are ambiguous or when an organization has a self-managed team.

The SFP is decisively well-known in educational psychology (Rosenthal, 1987), military settings (D. Eden & Zuk, 1995) and have emphasized on unemployed or trainee (D. Eden & Aviram, 1993). One research has found in old-fashioned corporate structure among marketing executives (Sutton & Woodman, 1989) did not support the self-fulfilling prophecy. Several meta-analyses (McNatt, 2000) supported the rationality of the SFP framework, and the practical connotation of the Galatea effect in both individual and organizational level have already been mentioned (D. Eden, 1992). Therefore, applied to the breakthrough creativity context, this theory will respond to the question, “How an employees’ self-expectation is linked with breakthrough creativity in a hierarchical organizational setting.” There is another vigorous issue that has a stronghold on employees’ cognition is known as regulatory focus motivation (Wallace et al., 2016).

The regulatory focus would certainly influence positively or negatively in individuals' breakthrough creativity cognition. From the literature of ‘regulatory focus motivation,’ it is found that there are two types of motivation on individuals' cognitive regulation (i.e., promotion focus and prevention focus). Promotion focus motivation stimulates employees towards the improvement of his/her position in financial of non-financial perspective, whereas, prevention focus motivation suggests individuals to hold or defend his/her current position from declining (Higgins, 1997). As organizations are confronting the era of the fourth industrial revolution, they have to bring brand new products and services to hold their feet on the market. To do so, employees are the nucleus of bingining breakthroughs for the organization. Therefore, organizations like apple inc, Microsoft inc, alphabet have introduced ‘idea generation’ as the leading scale for the promotion of an employee. It has spread signals among the employees of the fourth industrial revolution that ‘think out of the box and bring new wine in the new bottle’, otherwise stay in the same payscale/grade. Finally, these two theories (SFP and Regulatory focus) have helped us to develop a model on breakthrough creativity in the context of fourth industrial revolution.

**Empirical studies and Hypothesis Development**

**Self-Performance Expectation:**

Employees’ performance expectation is first discussed in the expectation states theory of motivation developed by Berger et al., (1972). Expectation states theory explains how an individuals’ performance expectation is emerged in a group as well as in the organization. This theory clarifies that each employee has two types of characteristics, one is diffuse, and another is specific. Diffuse types of symptoms represent individual employees' demographic status, such as; gender, age, race and ethnicity, social and family values. On the other hand, specific characteristics signify knowledge, skills, and ability to perform the particular types of assignments. In this study, we will focus on particular attributes of expectation where individuals' specific capacity or capability will be treated as the source of performance expectation. Self - efficiency is about investing in the ability to organize and execute the action courses needed to achieve the desired outcomes (Cantrall et al., 2003). It's not about how many gifts you have, but about the convictions of an individual about what they and he can do under a variety of circumstances (Bandura, 1999). Creativity is a high - risk endeavor, and people who contribute to new and useful ideas need to choose appropriate tasks. Here, self - efficacy leads to the initial choice of tasks you are prepared to undertake (Spreitzer, 1995). Those who have higher automatic productivity would continue not only to take more complicated actions, but also to address solving problems in a more creative and non-patterned fashion(Carmeli & Schaubroeck, 2007). As Bandura (1994) suggested, people with a good deal of faith are focused on tough tasks rather than ignoring as challenges to be overcome.

Self-efficacy is different from self-expectations (C. Eden, 2004). A person may anticipate many imaginative actions from him or herself due to the strong standards expressed by others. However, such a person is not necessarily also efficacious concerning creative behavior at a given point in time. An example may be the well-established author who struggles from the "writer's block." She or he hopes to be able to compose creatively; however, her or his success is hampered by a nagging feeling of not meeting the expectations she or he has set for herself or himself (Carmeli & Schaubroeck, 2007). Therefore, we anticipate the degree of creative self - efficacy to assess to what extent creative behavior positively influences self - expectations. This reflects the findings of Hirschfield et al. (2008) research. In a field experiment, they observed that intentionally increasing expectations contributed to consistently higher performance among the more productive individuals.

**Promotion Focus Motivation:**

Generally, employees possessing lower self-capabilities are familiar with disappointing occasions, which demoralize their actions by emphasizing shortfalls in capabilities (Culp, 2019). This situation makes employees’ confidence weaker and negatively motivates them to attain their targets by striking their cognition. We know that the prime purpose of human cognition is to anticipate the probability of actions and to use necessary methods to regulate those actions in their day to day life (Bandura, 1993). Generally, an employee requires a high sense of self-capability to search and select relevant, predictive, and operational information among the random sources of data. Finally, it can be stated that the higher the self-performance expectation, the more active the individual is in his/her cognition and effectiveness in the work plan.

Therefore, Self-performance expectations act as an essential antecedent of the employees’ intention to perform, which leads an employee to choose an appropriate self-regulation system. Several findings from previous research demonstrate the connection
between Self-performance expectations and self-regulation systems (J. Keller & Bless, 2008). Here self-regulation system is discussed based on self-regulatory focus philosophy that represents the promotion and prevention focus motivation of the employee. According to the regulatory focus philosophy, performance expectation, and an individuals’ self-regulation system is activated in a special occasion like creativity (Petrou et al., 2018). In the framework of this study, performance, expectation, and self-regulation are placed as the antecedents of breakthrough creativity, which is rarely present in the existing works.

Regulatory focus theory suggests that performance expectations and the mode of self-regulation have either positive or negative relationships in a given situation (Byron et al., 2018). Moreover, individuals with positive Self-performance expectations about themselves usually anticipate promotion in the organization by achieving the promotion standards of the organization. On the other hand, individuals with negative Self-performance expectations often fear to suffer the existing position that leads them to become conservative and more prevention focus in the actions. As the consequence, they focus in dodging disaster and acute drop in the performance. Therefore, they adopt prevention focus motivation to face the threatening situation. Likewise, positive performance expectation is connected with the challenges of missing probable gains. On this occasion, positive performance expectation in combination with pressure leads the employee towards promotion focus motivation (J. L. Smith et al., 2009).

**Breakthrough Creativity**

Breakthrough Creativity is the generation of ideas, approaches, and the birth of inventive new ideas. Creativity scholar Ciardi (1956) explained creativity as the “inventively gifted recombination of existing substance into something new.” Other researchers of creativity define breakthrough creativity as an action to solve challenges in a new way (Titus, 2007).

According to Garcia and Calantone (2002) “creativity can be stated depending on their newness, one is continuous or incremental and second is discontinuous or breakthrough.” In this research, we emphasis on breakthrough creativity, which is the primary concern for an organization to compete in today’s competitive market. A multi-dimensional breakthrough technology paradigm is debated less commonly than the resources of creativity and innovation literature (Puech & Durand, 2017). Market advancements are defined as providing consumers with significantly better goods based on current technology frameworks, whereas technological advances introduce entirely new technologies, without actually enhancing customer benefits considerably. (Tellis et al., 2009).

Employees have positive Self-performance expectations work hard to promote their performance. By introducing new ideas, products, or work method employee attempts to improve his performance. In this regard, the focal employee will take the risk to bring changes in the organization by proposing and implementing novel ideas that are contrary to existing ways of doing things (Shalley et al., 2004).

A laboratory experiment done by Crowe and Higgins (1997) originates that the employees having promotion focus cognition exceed their counterparts, those who hold prevention-induced cognition in the tasks which require creative insight and idea generation. Therefore, promotion-focused employees remain more investigative to solve existing problems in a new way, which introduces breakthrough creativity by chasing for standards and improvements. An individual who models promotion-focused behavior evokes a consistent focus in self that boosts breakthrough creativity (Anwar et al., 2019).

**Hypothesis 1:** Employees’ performance expectation has an indirect positive relationship with their breakthrough creativity via promotion focus motivation.

**Status Stability as Boundary Condition**

On this occasion, an employee with different status characteristics develops different expectations from both himself and others, which is supported by the expectation states theory (Correll & Ridgeway, 2006). Therefore, An employee holding higher status in hierarchy gain higher performance expectation and lower status show relatively lower performance expectation (Bendersky & Shah, 2012b). In this study, we focus on employees who have positive Self-performance expectations. According to the self-regulation theory, on this occasion employee will try hard either for improvement (related to promotion focus) or for preventing his position. During this time, employees’ place in the organizational hierarchy will influence the relationship between performance expectation and promotion focus motivation of the employee.

The status hierarchy provides opportunities and restrictions over organizational tangible and intangible resource utilization among employees (Boen & Vanbeselaere, 2001). Higher status employees have the chance to utilize corporate resources to attain their assignments. However, lower status employees become restricted to increase their performance due to supply constrain, which is supported by the resource-based view theory (Clarke & MacDonald, 2019). On the whole, upper-status employees are likely to practice the existing methods of work and avoid risk while making work strategy (de Lange et al., 2008). This helps upper-status employees to hold their position in the hierarchy.

From the above discussion, it has found that either “diffuse” or “specific status” has a substantial impact on an employee’s Self-performance expectations. Expectation states theory reveals that such status develops employees’ future Self-performance expectations in the organization. Therefore, upper-status employees are expected to cultivate higher performance expectations which lead them towards promotion centric motivation (Brockner et al., 2004). According to previous findings of status stability, it has also found that employees with lower status try hard to improve their position by any means (Bendersky & Shah, 2012a). It seems that both the lower and upper-status employees want to improve their standing to sustain in the status competition of the organization.
Hypothesis 2: Status stability moderates the positive relationship between employee’s performance expectation and promotion focus motivation such that the link is amplified when the employee’s promotion focus motivation is strong.

Figure 1: Theoretical Framework

A theoretical framework concluding the relationship predicted in the above three hypotheses is presented in Figure 1. This model shows that performance expectation affects breakthrough creativity through the promotion focus motivation and status stability influence the linkage.

Research and Methodology

Sampling and Data Collection

Participants consisted of employees and their immediate supervisors within large companies located in China mainland. A broad range of industries has been covered, which includes manufacturing, banking, consumer service, and educational institution. All the participants were asked to complete a two-stage survey, with a lag of two months between Time 1 and Time 2. In the meantime, all questionnaires were coded for matching the same respondents from a different period. Among preliminary established groups, 102 leaders and 380 group members agreed to contribute to the survey. Two distinct questionnaires have been developed for individuals and supervisors. Respondents were well informed that they would remain anonymous, and the information provided by the supervisor and employees would not be transformed. Respondents return the finished questionnaires in sealed envelopes.

A total of 412 supervisor-subordinate combined questionnaires within 94 groups were collected where the response rate was 80.54%. Finally, we obtained 380 participating employees matched with the 90 supervisors. The average team size was 4.22. The proportion of male and female among the leaders were 61.56% and 38.44% respectively. The average age was 34.81 years (SD=7.35), with an average tenure of 10.41 years (SD = 6.91). The educational levels of 80.22 % supervisors were undergraduate degree or above, where 54.5% had bachelor degrees, 25.5% had graduate degrees, and 2.1% had a doctoral degree. Among the 380 subordinates, 62.16% were male, and the average age was 28.51 years (SD=6.12), with the average work tenure of 5.82 years (SD = 5.35). The educational level of the employees was the undergraduate degree or above.

Measurements

We have collected data from the two different sources (i.e., supervisor and subordinates) to reduce the common method bias (MacKenzie & Podsakoff, 2012). In this research, supervisors reported employees' breakthrough creativity. Employees were informed to report their Self-performance expectations, status stability, and promotion focus motivation.

Self-Performance expectation: We used a three-point scale to evaluate the participant's creative expectations for this study in particular (Carmeli & Schaubroeck, 2007). The elements are "I want myself to be creative at work," "Creativity at work is essential to me," and "I really would be dishonest if I weren't creative at work."

Promotion focus motivation: The nine-item measures (α = .85) introduced by Neubert et al. (2008) to evaluate the promotion focus behavior of employees. The variable consists of, “I take chances at work to maximize my goals for advancement,”

Breakthrough Creativity: We take the scale of four items (α =.89) of breakthrough creativity from the creative breakthrough model (CMB) developed by Titus (2007). Sample items are “Employees innovations make our prevailing product line obsolete,” “Employees regularly search for a new approach to address new needs of the market.”

Status stability: Status stability of one’s current position was measured with three items on a seven-point scale from the research of Hays and Bendersky (2015). The sample items are “As an employee, I feel powerful in my position,” “As an employee, I feel safe in my position” (α=0.88), “I feel like an employee, and my position is legitimate.”
Control variables: In this study, we treated age, gender, education, and organizational tenure variables as the control variable. We also control employees' demography and creative self-efficacy as it has a significant influence on employees' creative cognition (Zhang & Bartol, 2010).

Analysis strategies:

We use AMOS 25.0 to assess the validity and reliability of the construct. To test hypotheses, we use hierarchical linear modeling by incorporating MPlus 8.4 analytical software.

Results and Analysis

Primary analysis

We conducted a CFA to assess the discriminant validity of the four constructs. Self-performance expectations, promotion focus motivation, status stability, and breakthrough creativity. We also have chosen five parameters to calculate model fitness, according to Bagozzi and Yi (1988) (χ², χ²/df, GFI, AGFI, and RMSEA). Using the Farh et al. (2007) process, we evaluated and contrasted four alternative models to the four-factor baseline model. The results showed that the four-factor model matched more thoroughly than the other ones. The findings also showed that the four variables were very different from each other. This four-factor model performed better than did any alternative three-factor (e.g., combining status stability and combining promotion focus and supervisor rated breakthrough creativity) or two-factor (joining all employee-reported variables) models (chi-square difference tests, all p < .001). The indicators are found to be significantly loaded on their corresponding latent variables (all p < .01). Finally, the confirmatory factor analysis confirms the convergent and discriminant validity of the current research variables. “Table 1” reports descriptive statistics, and correlations for all variables. “Table 2” represented the measurement properties of the four-factor model. “Table 3” shows Cronbach’s α, variance extracted, and the scale of internal consistency reliabilities. The value of Cronbach’s α was above 0.7 and .05 (Hairet al., 1998).

Table 1: Means, standard deviations, and correlations among study variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>35.43</td>
<td>7.11</td>
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<td></td>
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<td>2. Sex</td>
<td>.49</td>
<td>.71</td>
<td>.07</td>
<td></td>
<td></td>
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<tr>
<td>3. Tenure</td>
<td>6.09</td>
<td>5.49</td>
<td>.50***</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Education</td>
<td>2.74</td>
<td>.69</td>
<td>-.12</td>
<td>-.14</td>
<td>-.09</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Self-Performance expectation</td>
<td>4.73</td>
<td>.87</td>
<td>-.22**</td>
<td>.01</td>
<td>.03</td>
<td>.26**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Status stability</td>
<td>4.26</td>
<td>.40</td>
<td>.12</td>
<td>-.06</td>
<td>.07</td>
<td>-.01</td>
<td>.08</td>
<td></td>
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<tr>
<td>7. Promotion focus</td>
<td>4.83</td>
<td>.95</td>
<td>-.03</td>
<td>-.29**</td>
<td>.19*</td>
<td>.08</td>
<td>.25**</td>
<td>.28**</td>
<td></td>
</tr>
<tr>
<td>8. Breakthrough Creativity</td>
<td>5.00</td>
<td>1.21</td>
<td>.04</td>
<td>-.27**</td>
<td>.12</td>
<td>.17*</td>
<td>.29***</td>
<td>.32***</td>
<td>.69***</td>
</tr>
</tbody>
</table>

Note: N = 380. Two-tailed test. Age and tenure in years; sex (male = 0, female = 1); education (high school = 1, bachelor’s degree = 2, graduate degree = 3). *p < .05. **p < .01. ***p < .001.

Table 2: Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>X²(df)</th>
<th>X²/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMSEA</th>
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<tbody>
<tr>
<td>Hypothesized</td>
<td>7,814.89(1,190)</td>
<td>6.567</td>
<td>0.782</td>
<td>0.745</td>
<td>0.067</td>
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<tr>
<td>One-factor a</td>
<td>5,321.407(1,154)</td>
<td>4.611</td>
<td>0.823</td>
<td>0.811</td>
<td>0.055</td>
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<tr>
<td>Two-factor b</td>
<td>5,027.237(1,144)</td>
<td>4.397</td>
<td>0.859</td>
<td>0.822</td>
<td>0.056</td>
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<tr>
<td>Three-factor c</td>
<td>4,189.078(1,144)</td>
<td>3.667</td>
<td>0.861</td>
<td>0.856</td>
<td>0.049</td>
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<tr>
<td>Four-factor d</td>
<td>2,763.186(1,144)</td>
<td>2.415</td>
<td>0.912</td>
<td>0.897</td>
<td>0.039</td>
</tr>
</tbody>
</table>

Note: Goodness-of-fit index is GFI. Adjusted goodness-of-fit index is AGFI. Root mean square error of approximation is RMSEA. a = performance expectations, promotion focus, status stability and breakthrough creativity are combined; b = the two-factor model performance expectations + status stability (combined), promotion focus + breakthrough creativity (combined); c = performance expectations + status stability (combined), promotion focus and breakthrough creativity; d = performance expectation, status stability, promotion focus and breakthrough creativity.
Table 3: Measurement Properties

<table>
<thead>
<tr>
<th>Factors</th>
<th>Standardized loading</th>
<th>t-value</th>
<th>Cronbach’s $\alpha$</th>
<th>CR</th>
<th>AVE</th>
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</thead>
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<td>Self-Performance expectations</td>
<td></td>
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<tr>
<td>SPE1</td>
<td>0.804</td>
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<td>SPE2</td>
<td>0.773</td>
<td>5.343</td>
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<td>SPE3</td>
<td>0.767</td>
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<td>SPE4</td>
<td>0.701</td>
<td>4.647</td>
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<td>Status stability</td>
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<td>0.755</td>
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<td>0.705</td>
<td>0.560</td>
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<td>0.721</td>
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<tr>
<td>SS2</td>
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<tr>
<td>SS3</td>
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<td>5.210</td>
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<td>SS4</td>
<td>0.789</td>
<td>5.366</td>
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<td>Promotion focus</td>
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<td>0.810</td>
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<td>PF1</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PF2</td>
<td>0.803</td>
<td>5.825</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF3</td>
<td>0.801</td>
<td>4.987</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF4</td>
<td>0.854</td>
<td>6.100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF5</td>
<td>0.788</td>
<td>5.465</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breakthrough Creativity</td>
<td></td>
<td>0.821</td>
<td></td>
<td>0.788</td>
<td>0.583</td>
</tr>
<tr>
<td>BC</td>
<td>0.820</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>0.800</td>
<td>6.255</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>0.794</td>
<td>5.891</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>0.783</td>
<td>5.954</td>
<td></td>
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</tr>
</tbody>
</table>

Notes: $CR=\text{Composite reliability}; AVE=\text{Average variance extracted}$

Results of Hierarchical Linear Modeling Analysis

We operate a sequence of hierarchical linear modeling (HLM) to analyze the interconnection of the employees within the similar work division who were evaluated by the same supervisor (Zyphur et al., 2019). The ratio of between-group variance for the promotion focus motivation and breakthrough creativity was 48.6% and 40.4% of the total variance, correspondingly. Both of them produce significant ($p < .001$) results in the analysis. Thus indicates the necessity of a multilevel analytic procedure to reflect the nested data structure.

The moderated mediation hypotheses are calculated to suit the statistical significance of the indirect effect of the performance expectation on breakthrough innovation through promotion emphasis at multilevel organizational hierarchy (Preacher et al., 2007). The bootstrapping procedure is used to assess the significance of the indirect impact. The potential effects of employees’ age, gender, education, and company tenure is controlled in the analyses of hypothesis testing (Bernerth & Aguinis, 2016).

Main and Indirect Effects of the Performance Expectation:

Following the theory of Self-fulfilling prophecy, we suggested that employees’ self-performance expectations boost their promotion focus motivation in cognitive level. The performance expectation is absolutely related to promotion focus ($\gamma = .30, p < .01$; Model 1 of Table 2). That promotion focus motivation mediates the effect of the performance expectation on breakthrough creativity. The performance expectation shows a significantly positive effect on breakthrough creativity ($\gamma = .36, p < .05$), which becomes insignificant ($\gamma = .09, p > .05$) when promotion focus motivation is acquaint with the equation ($\gamma = .61, p < .001$; see Model 5 in Table 2).
These relational patterns offer supporting evidence to the mediation by promotion focus based on the procedure of M. B. Smith et al. (2016). To avoid the problem of asymmetric and non-normal distributions while calculating mediating effects, we used a bootstrapping procedure (Hayes & Preacher, 2014; MacKinnon et al., 2007). The results of bootstrapping reveals that the performance expectation has a significant indirect effect through promotion focus on breakthrough creativity; point estimate = .25, p < .01, 95% confidence interval (CI) [.07, .43].

Table 4: Results of hierarchical linear modeling

<table>
<thead>
<tr>
<th>Variables</th>
<th>Promotion focus motivation (First stage dependent variable)</th>
<th>Breakthrough creativity (Second stage dependent variable)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>M2</td>
</tr>
<tr>
<td><strong>Control variables:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Gender</td>
<td>-.40***</td>
<td>.40***</td>
</tr>
<tr>
<td>Tenure</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Education</td>
<td>-.02</td>
<td>-.01</td>
</tr>
<tr>
<td><strong>Independent variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Performance expectation</td>
<td>.30**</td>
<td>.26**</td>
</tr>
<tr>
<td><strong>Mediating variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion focus motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Moderating variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status stability</td>
<td>.19</td>
<td>.45</td>
</tr>
<tr>
<td>Self Performance expectation × Status stability</td>
<td>.41*</td>
<td></td>
</tr>
<tr>
<td>Pseudo-R²</td>
<td>.12</td>
<td>.20</td>
</tr>
</tbody>
</table>

**Note:** N = 380.
*p < .05. **p < .01. ***p < .001. Two-tailed test. Mediation Moderated by Status Stability

Hypothesis 2 claims that status stability moderates the indirect effect of performance expectations. We observed two conditions of moderated mediation hypothesis (Preacher et al., 2007): (a) the relationship between the performance expectation and status stability in predicting promotion focus and (b) the different levels of indirect effects of the performance expectation on breakthrough creativity via promotion focus that is depending on the employees status stability. A simple slope analysis is conducted to probe further significant interaction of this study (Wei et al., 2009). From the “Model 3” of table 2, status stability displayed a significant interference with the performance expectation in predicting promotion focus motivation (γ = .41, p < .05). When an employee's status stability is high (1 SD higher than the mean), the regression lines of performance expectation and promotion focus was positively and significantly (b = .58, p < .01) related. This relationship converted insignificant (b = -.18, p > .05) when status stability was low (1 SD below then the mean). Shown in figure 2.

![Figure 2: The relationships between self-performance expectations and status stability in predicting Promotion focus motivations.](image-url)
Bootstrapping for indirect effect analysis

The bootstrapping process helps us to find out the moderated mediation influence of performance expectation on breakthrough creativity through promotion focus, which is modified by employees’ status stability. ‘Table 3’ presents the outcomes of the bootstrapping procedure, where all the control variables involved as covariates. The indirect effect of the performance expectation on breakthrough creativity through promotion focus motivation was significant when status stability was high: PE = .34, p < .01, 95% CI [.16, .57]. Nonetheless, status stability produces low point estimation (0.01, p > .05, 95%), CI [-.36, .32], which shows an insignificant relationship when status stability was low. Finally, these patterns approve hypothesis 2.

Table 5: Conditional indirect effect

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Mediator variable</th>
<th>Dependent variable</th>
<th>Moderator variable</th>
<th>Moderator level</th>
<th>Conditional indirect effect</th>
<th>SE</th>
<th>z</th>
<th>p</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Performance Expectation</td>
<td>Promotion Focus</td>
<td>Breakthrough creativity</td>
<td>Status Stability</td>
<td>M(M-1SD)</td>
<td>.01</td>
<td>.18</td>
<td>.07</td>
<td>&gt;.05</td>
<td>-.36</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>.18</td>
<td>.11</td>
<td>1.65</td>
<td>&gt;.05</td>
<td>-.04</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H(M+1SD)</td>
<td>.34</td>
<td>.10</td>
<td>3.32</td>
<td>&lt;.01</td>
<td>.16</td>
<td>.57</td>
</tr>
</tbody>
</table>

Post Hoc Analysis

The robustness of this research found out by relating a post hoc inspection of these empirical findings. We have verified the investigation when the “control variables” are excluded in the multilevel calculations (Bemerth & Aguinis, 2016). The result remained consistent with the previous findings except for the moderating effect of status stability between the relationship of performance expectation and promotion focus and converted to statistically insignificant with the control variable in the analysis.

Second, we tested the status stability as the moderator of promotion focus, and breakthrough creativity assumed that the employees’ motivation to promote or upgrade his position is stable in the status competition within the organization. This additional analysis results showed no significance (y = 0.6 and -0.01, respectively; p > 0.05). Thus, the positive moderating effect of status stability had a significant effect only on the interaction between the performance expectation and promotion focus motivation for an individual in this model.

Implications of the Study

Theoretical Implications

We clarify our contribution to the existing research in the following manner. Extending the self-fulfilling theory, we regard self-performance expectations as a self-fulfilling object and empirically explore the optimistic side of the self-fulfilling process. Instead of merely investigated behavioral outcomes, we define self-fulfilling as a means of stimulating individuals' self-belief and expectations. Previous studies found self-fulfilling as a situational variable that increases and decreases in response to changing environments where such expectations are known as state-expectancy (Chen et al., 2019). Over the years, there has been a significant shift to situational conceptualization. Pinder (1984), a scholar of ‘work motivation,’ argues that people without adequate training possess low expectancy perception and fragile motivation to perform.

This research also provides further provision for earlier studies (Atwater & Carmeli, 2009) investigating the role of performance expectation in terms of general ‘self-efficacy’ and breakthrough creativity. The existing research expands this prior effort by introducing these associations in a hierarchical context by elucidating the effect of employees’ status stability and performance expectation views. Since the study is conducted in the empirical setting, it also enhances the previous research of the laboratory setting (Redmond et al., 1993). We tried to find subtleties among Self-performance expectations, promotion focus motivation to predict employees’ breakthrough creativity in the highly competitive organizational settings. Furthermore, the study delivers practical assistance about the proposition, “the general self-efficacy beliefs influence regulatory focus and fills the need for more studies examining performance expectation for cognitively complex tasks like breakthrough creativity” (Gist & Mitchell, 1992). Finally, the inclusion of employees' performance expectation insight offers a further representation of the links among the old-style self-fulfilling mechanisms like “Pygmalion” and “Galette” effect with the impact of employees' cognitions related to the process. This seems to be absent, but a crucial link between the general Pygmalion process and the ‘breakthrough creativity’ in the fourth industrial work settings.

Besides the above findings, this research also sheds light on the possible moderating effect of status stability on employees' self-performance expectations and the promotion focus motivation. Status competition theory suggests that the status fluctuation can perform a crucial role in reinforcing the impact of performance expectation on promotion focus motivation and, our empirical findings confirm this proposition. A possible explanation for this finding is, “higher status stability might reduce the absence of supplementary resources to perform where the employee feels comfortable to exert new ideas through breakthrough creativity.” However, lower
status stability in the organizational hierarchy makes an employee incompetent to bring ‘breakthrough creativity,’ which is supported by the RBV (resource-based view) model.

Practical Implications

The study addresses several matters to be observed by active executives regarding the self-fulfilling prophecy and its application. Our findings propose when creativity is supreme, the employee should be conscious of the expectations they hold on themselves, which shape their creative thoughts. Such cognitions are particularly crucial in modern organizations where the employee keep low expectations for their creativity (Khorakian & Sharifirad, 2019). Though other factors may take part, our findings point out that the employees’ self-beliefs and hierarchical position stimulate or suffocate their creative effort in the organization. This fact conceivably well-matched among the workforce who blame organizational hierarchy as a barrier for breakthrough creativity (Cheng Colin, 2013). Thus an employee’s sense of mastery for breakthrough creativity is highly related to that employee’s understandings of both self-expectation and self-regulation in a stable hierarchical organization. However, it is challenging for the supervisors to bring breakthrough creativity of their employees unless they are self-motivated. Therefore, the supervisor must take the necessary steps to make their subordinates understand their own expectation. Consequently, we recommend to establish a strong communicative channel among supervisors and subordinates to exchange expectations which will bolster employees’ intrinsic motivation towards breakthrough creativity.

Conclusions

Additional research is required to validate the context where both intra and interpersonal expectancies for breakthrough creativity are most significant. Here, we try to focus the application of self-fulfilling prophecy on the employees’ self-performance expectations to initiate breakthrough creativity at the cognitive level. The influence of workgroup and non-work-related members’ expectations has a significant impact on the employees’ creativity has been proved by previous research (Shao et al., 2019). For that reason, it conveys a favorable impression to assess the consequence of multiple factors for breakthrough creativity within the self-fulfilling agenda. Existing research on the Self-fulfilling prophecy (Bandura, 1993) has also elucidated the employees’ status stability in the organization (Jury et al., 2019). Personal attributes in self-fulfilling settings may have an impact on employee breakthrough creativity (Benoit et al., 2019). However, employees could be vulnerable to the self-fulfilling process while linking their attributes with breakthrough creativity. Breakthrough creativity remains context-specific, and the link between employees’ performance expectation and breakthrough creativity produce a different result in a different context (Sosa & Kayrouz, 2019; Tierney & Farmer, 2004). As a result, future research on breakthrough creativity should include contextual factors as an essential variable. Although the objective of this study was to scrutinize what might disclose when an employee holds positive Self-performance expectations in stable hierarchical settings, it is also vital to investigate how breakthrough creativity is derived.

Further investigation may clarify “how employees lower Self-performance expectations and volatile hierarchical settings stimulate employees’ breakthrough creativity in the age of fourth industrial revolution.” Familiarizing breakthrough creativity among the employees of different levels is the puzzling and multifaceted phenomenon in the organizations of the fourth industrial revolution. Breakthrough creativity has several antecedents that are from both the individual level and organizational level (Chai & Menon, 2019). The application of a Self-fulfilling prophecy helps us to understand the impact of an employee’s self-performance expectations in the promotion focus motivation and how they lift breakthrough creativity in the highly stable hierarchical organization.

Acknowledgement

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References


Appendix

Scale items

Self-performance expectations; adapted from Farmer, Tierney & Kung-McIntyre (2003)
1. I expect that I will be the high performer in the organization
2. I expect myself as a change maker.
3. I would probably be disappointed by myself if I was not creative at work
4. I expect myself to bring the breakthroughs to solve new challenges.

Status Stability; adapted from Hays and Bendersky (2015)
1. As an employee, I feel safe in my status.
2. I know my status is legitimate, and no one can destroy it.
3. My status is the signal of my capacity though I fail to achieve the goals
4. I do not feel pressure or threat from lower rank employees.

Promotion focus; adapted from Neubert et al. (2008)
1. I take chances to at work to maximize my goals for advancement
2. I take the risk at work to achieve success
3. If I get an opportunity to solve new problems, I try hard to bring a breakthrough solution for it.
4. The chance of advancement is important to me.
5. I am motivated by expectation and ambitions no matter the consequence is.

Breakthrough Creativity; adapted from Titus (2007)
1. The employee has an intrinsic motivation to discover the new ideas.
2. The employee is free from functional fixedness
3. Employee’s innovations make our comprehensive product line obsolete.
4. Employee’s regularly searched for a new approach to address the unique needs of the market.