

# Cognitive Flexibility Promotes Creativity for Securely (but not Fearfully) Attached People<sup>1)</sup>

## 애착유형과 창의성을 높이는 인지적 경로 간의 상호작용 연구

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### 〈 Abstract 〉

As creativity is a crucial attribute for companies' survival and innovative success, many firms encourage and implement ways to promote employee creativity. Previous studies in the dual pathway to creativity model have shown that creativity can be enhanced when either the cognitive flexibility or cognitive persistence path is triggered. Although individuals have different personal traits, prior research has rarely investigated whether one pathway is more effective for a certain personality in promoting creativity than the other. Using attachment theory, we examined the influence of attachment style on the degree of the impact of each path on creativity. Specifically, we hypothesized that securely attached people would show higher creativity only when they use the cognitive flexibility path. Data from the US support our hypothesis. Our research highlights that the link between cognitive flexibility and creativity is salient when securely attached people use the cognitive flexibility path because of the strong fit between secure attachment and flexible thinking.

Key words: Creativity, Knowledge management, Dual pathway to creativity model, Attachment theory

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## 1. Introduction

Creativity - defined as the production of novel and useful ideas (Amabile, 1983) - is essential for companies' survival, effectiveness, and innovation (Amabile, 1996; Shalley et al., 2004; Beak & Han, 2008; Lee & Choi, 2015). Because creativity is based largely on ordinary cognitive activities (Dietrich, 2004; Runco, 2014), the literature on creativity has focused on multiple cognitive processing as the key mechanism for creativity (e.g., De Dreu et al., 2008; Smith et al., 1995). In particular, the dual pathway to creativity model (De Dreu et al., 2008) suggests there are two qualitatively distinct cognitive pathways to creativity: cognitive flexibility (using broad cognitive categories and switching them flexibly) and cognitive persistence (focused exploration of a few cognitive categories and effortful ideation) (De Dreu et al., 2011; Nijstad et al., 2010). The dual pathway to creativity model proposes that creativity can be promoted when either flexible or persistent cognitive processing is triggered. The current research adds to the model by demonstrating that the fit between personal traits and the processing path increases creativity.

To develop our hypothesis, we rely on attachment theory (Bowlby, 1982) as our theoretical foundation. The theory proposes that individuals can build a secure base by interacting with their caregivers (e.g., parents). When people have a secure base, they can comfortably and confidently explore the environment; however, if that base is not stable, exploration is interrupted (Ainsworth et al., 1978; Bowlby, 1982; Mikulincer et al., 2011). There are four adult attachment styles: secure, anxious, avoidant, and fearful. The present research focuses on

secure style (feeling secure in intimacy and independency) and fearful style (being preoccupied with security or rejecting close relationships) because fearful attachment is the most contrary style to secure attachment (Bartholomew & Horowitz, 1991). We expect that because secure attachment has a stronger fit with flexible thinking, cognitive flexibility will increase creativity for securely attached individuals but not fearfully attached individuals.

## 2. Past Literature

### 2.1. The Dual Pathway to Creativity Model

The dual pathway to creativity model explicates cognitive-level procedures that expand the range of exploration to develop creative ideas. The model suggests two cognitive processing paths: the cognitive flexibility path and the cognitive persistence path (De Dreu et al., 2008; Nijstad et al., 2010). Each cognitive pathway stands for the distinct direction of exploring materials, insights, and concepts to achieve creativity. Cognitive flexibility represents wide exploration across categories, whereas cognitive persistence represents in-depth exploration within a few categories.

Specifically, cognitive flexibility refers to the process of altering different perspectives and thoughts easily and finding creative ideas through broad and comprehensive search and consideration (Nijstad et al., 2010). Such flexible thinking facilitates the examination of a wider range of information without repressing the investigation of seemingly inappropriate but potentially effective materials to produce novel and useful ideas. For example,

when people change their attention flexibly to achieve a boundless goal (Friedman & Förster, 2001; Miron-Spektor & Beenen, 2015) or feel free to investigate a broader scope of information (Baas et al., 2008; De Dreu et al., 2008; Galinsky et al., 2008), they can achieve creative outcomes.

On the other hand, cognitive persistence refers to the cognitive effort to focus on a few categories and investigate ideas in systematic ways to find uncommon but useful ideas (Baas et al., 2013). Cognitive persistence is helpful for enhancing creativity because the prolonged search of a few cognitive categories ensures a thorough inspection of common ideas which leads to the realization of unusual ideas (Nijstad et al., 2010). In this process, narrow categories can be changed into novel outcomes by adding other components. Because such incremental and detail-oriented exploration is demanding, the persistence pathway requires energy sources, such as time, engagement, or working memory capacity to maintain focused attention and endurance until creative ideas are produced (Baas et al., 2013; De Dreu et al., 2012).

Past research suggests that creativity emerges generally through one dominantly activated path, while it is theoretically possible to be creative using both the flexibility and persistence paths (Nijstad et al., 2010). These cognitive processes are incompatible and inherently contradict each other (Nijstad et al., 2010) because distractedly wandering (flexibility path) and concentrating on a certain concept (persistence path) are bisected (Evans, 2008; Evans & Stanovich, 2013). Thus, asking individuals in creative processes to use one of the two pathways effectively induces them to adopt the assigned cognitive process. Although past studies have demonstrated the effect of two

cognitive pathways on creativity, further investigation concerning the fit between personal traits and the pathways is required to better understand the dual pathway to creativity model (Nijstad et al., 2010). Personal traits determine not only individuals' inclination and decisions in general situations (Higgins, 2000; Higgins et al., 2003), but also the cognitive processes used to generate creative ideas (De Dreu et al., 2008, 2011; Roskes et al., 2012). Because many personal traits affect individuals' preferences for using a particular cognitive processing path, we attempted to expand the dual pathway to creativity model by demonstrating whether there is a fit between personal traits and the cognitive processing path, which then influences individual creativity.

Thus, our research aims to find personal traits that influence the association between the two cognitive pathways and creativity. Our central thesis is that because cognitive functioning strategy depends on personal traits (Higgins et al., 2003), the activation of each cognitive pathway increases creativity only when a particular personal trait is compatible with each pathway. In sum, our aim is to elucidate whether and how a personal trait creates a strong or weak fit with the flexibility and persistence pathways to creativity. Our approach is unique, as most prior research has examined personal traits that directly activate the cognitive process, and then enhance creativity (De Dreu et al., 2008; De Dreu et al., 2011; Roskes et al., 2012). To investigate a personal trait that generates the fit, we rely on attachment theory, which is one of the most fundamental theories of personality development.

## 2.2. Attachment Theory

As people grow up, they encounter many challenges that require them to be competent enough to live on their own. Attachment theory (Bowlby, 1982) explains how we become viable by describing innate human behavioral systems - the attachment system and the exploration system. Early in life, individuals need caregivers who can protect them from danger; later, in their journey through life, people seek information about the world, and often take risks while exploring potentially threatening environments (Boon, 1994). Exploratory behavior is necessary for human development because it helps us learn about our environment and gives us the confidence and competence to stand on our own, away from caregivers (Ainsworth & Bell, 1970). One of the core propositions of attachment theory is that exploration is optimal when individuals have a secure base, which is formed through positive interactions with caregivers and refers to caregivers' support for our exploration, e.g., making us feel confident exploring environments and comfortable returning to caregivers when we face negative events and need support (Feeney, 2004; Feeney & Van Vleet, 2010; Hazan & Shaver, 1990).

By experiencing several lifetime events and interacting with others, individuals form mental representations regarding interpersonal closeness and rejection. Specifically, there are two dimensions of attachment: attachment anxiety and attachment avoidance (Brennan et al., 1998). The anxiety dimension involves the fear of rejection from relationship partners and the excessive need for assurance from others. The avoidance dimension involves a reluctance to pursue or maintain intimacy and an unwillingness to trust others

(Johnstone & Feeney, 2015; Lee & Thompson, 2011). People with a temporary secure attachment state score low on both anxiety and avoidance dimensions. They do not worry that their relationship partners will leave, and feel comfortable with close relationships and states of independence (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2003). In contrast, people with a temporary fearful attachment state score high on both anxiety and avoidance dimensions. They desire extreme intimacy with their partners but simultaneously fear this closeness and pursue self-reliance (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2003; Rua et al., 2019). We compare the two opposing attachment styles - secure attachment (low in both anxiety and avoidance dimensions) vs. fearful attachment (high in both anxiety and avoidance dimensions) - to examine the distinct role of individual traits when fitting them to the two cognitive processing styles (flexibility vs. persistence).

Importantly, attachment style can change because mental representation is constantly affected and thus revised by multiple interactions with different others (Baldwin, 1992; Kwon & Kwon, 2014). Such different memories about different others create distinct mental representations in one's memory system - called "relational schema" (Baldwin, 1992). Thus, a strong situational cue (e.g., experimental priming) can momentarily activate a particular relational schema, which can be different from an individual's dispositionally most dominant relational schema, and then influence subsequent cognition, emotion, and behavior (Gillath et al., 2008; Lee & Thompson, 2011). In other words, attachment style is a trait and state variable. Empirical studies have documented evidence that state attachment can be primed according to situational cues (e.g.,

Baldwin et al., 1996; Mikulincer & Shaver, 2001). For example, Lee and Thompson (2011) induced temporary attachment states by asking their study's participants to recall a certain type of situation before a simulated business negotiation. The authors demonstrated that the temporarily induced attachment state affected the negotiation outcome. Another example showed that asking participants to recall and write about a situation in which they felt comfortable and secure led them to behave less unethically (Chugh et al., 2014).

### 2.3. Attachment and Cognitive Processing

Considering that exploratory behaviors involve acquiring and processing information or knowledge about environments, prior studies have revealed the effect of exploration on cognitive processing related to attachment style (Mikulincer & Shaver, 2003). People who enjoy interpersonal closeness and do not worry about rejection - "the securely attached" - explore the world confidently because they have a secure base on which they can rely when they are endangered. As a result, secure individuals tend to establish new information structures and be flexible in accepting new data (Mikulincer, 1997; Mikulincer et al., 2011). Moreover, when they feel things are going well, they loosen cognitive processing and explore unusual associations (Mikulincer & Sheffi, 2000; Schwartz & Bohner, 1996). In contrast, people who avoid interpersonal closeness and worry about rejection - "the fearfully attached" - focus too much on caregiver's availability, so their exploration is hindered by a preoccupation with relationships (Mikulincer & Sheffi, 2000). Because of their high concern for rejection and negative experiences

in relationships, they show diminished flexible processing (Mikulincer et al., 2003). Moreover, due to their high resistance to closeness, fearfully attached people intentionally ignore and reject affective or relational cues and avoid accepting information they believe interferes with their self-reliance. This tendency leads to rigid and closed cognitive processing, and rarely allows such people to loosen cognitive processing (Green-Hennessy & Reis, 1998; Mikulincer, 1997; Mikulincer & Sheffi, 2000).

### 3. Hypotheses

We propose that distinct cognitive strategies of secure versus fearful attachment style uniquely influence the impact of the flexibility/persistence cognitive pathways on creativity -because the degree of fit between attachment and cognitive processing will vary. According to fit theory (Higgins et al., 2003), individuals who experience a strong fit between personal disposition and experimental manipulation engage more in a task and perform better than those who experience a weak fit (De Dreu et al., 2011). From this perspective, we suggest that not everyone can improve creativity through a cognitive flexibility or persistence pathway. Rather, a certain pathway can promote creativity when it is implemented by those whose attachment style fits the particular pathway.

Specifically, we predict that because securely attached people are good at making novel cognitive structures, are open to new data (Mikulincer, 1997), and explore unusual associations (Schwartz & Bohner, 1996), they will experience a fit with flexible cognitive processing, which involves loosening information processing and flexible switching

among different categories. In contrast, we expect fearfully attached people are unlikely to experience a fit with flexible cognitive processing, as they may possess a steep cognitive hierarchy (Mikulincer & Sheffi, 2000), demonstrate cognitive closure, and experience restricted cognitive processing (Green-Hennessy & Reis, 1998; Mikulincer, 1997; Mikulincer & Sheffi, 2000) all of which are detrimental to flexible thinking. Thus, we hypothesize that the cognitive flexibility pathway will promote creativity for securely attached people and not fearfully attached others.

On the other hand, we expect attachment style to have little or no impact on the link between the cognitive persistence pathway and creativity. Specifically, persistent processing is unlikely to increase securely attached individuals' creativity because their information-processing style is strongly aligned with flexible switching among multiple categories and developing unusual cognitive structures. Because flexible and persistent cognitive processes contradict each other (Nijstad et al., 2010), we expect that persistent cognitive processing will not promote the creativity of securely attached people. Moreover, persistent processing is unlikely to facilitate creativity for fearfully attached people. Our explanation is that persistent processing involves significant effort, and thus requires abundant mental resources for deep thinking. Because fearfully attached people spend their mental resources on a continuous preoccupation with relationships and defensive reactions to affective and relational cues (Mikulincer & Shaver, 2003), they have insufficient resources remaining for persistent thinking. This constraint is likely to prevent fearfully attached people from conducting focused and effortful cognitive processing. Thus, we expect only a

match between secure attachment and flexible thinking to create a fit and thus promote creativity. That is, we predict the combined effect of secure attachment and cognitive flexibility on creativity.

## 4. Methods

### 4.1. Participants and Procedure

One hundred and fifty-nine participants were recruited via Amazon's Mechanical Turk (see Buhrmester et al., 2011, for more on this research platform). The experiment had a 2 (attachment manipulation: secure vs. fearful) x 3 (cognitive processing manipulation: flexibility, persistence, control) between-participants design. Participants were randomly assigned to one of six conditions. They first responded to the attachment manipulation and cognitive processing manipulation, and then took a creativity test.

To identify careless responses, we included an instructed response item (i.e., "Please ignore the question below about how you are feeling and instead check only the 'none of the above' option as your answer") at the end of the study (Oppenheimer et al., 2009). Twenty-three participants who did not check proper answers to this question were excluded from our analysis. Also, we ruled out three non-native speakers of English because our creativity measure (described below) requires an advanced level of English fluency. As a result, 133 participants (53 males, 80 females; mean age = 34.67, SD = 11.33) were analyzed. The ethnic composition was White (82.7%), African American (5.3%), Hispanic (4.5%), Asian (3.8%), Native American (1.5%), and other ethnicities (2.3%).

## 4.2. Manipulations and Measures

**Attachment manipulations.** We attempted to induce state attachment style, implementing a manipulation that has been used effectively in previous studies (Baldwin et al., 1996; Chugh et al., 2014; Mikulincer et al., 2002). Participants were asked to read one of the following passages according to their attachment-manipulation conditions. Specifically, participants in the secure attachment condition read the following instruction:

Please think about a time in which you interacted with a specific relationship partner (e.g., your dating partner, close friend, spouse, or a family member). In particular, recall a situation in which you were secure in the relationship and comfortably dependent on that person and comfortable having him or her depend on you. You did not worry about that person getting too close to you. And when you were in need or in difficult times, he or she was there to help you. You felt very accepted and supported.

Participants in the fearful attachment condition read the instruction as follows:

Please think about a time in which you interacted with a specific relationship partner (e.g., your dating partner, close friend, spouse, or a family member). In particular, recall a situation in which you were uncomfortable getting close to that person. You wanted an emotionally close relationship, but you found it difficult to trust him or her completely, or to depend on that person. You sometimes worried that you would be hurt if you allowed yourself to become too close to him or her.

After reading the paragraph, participants were asked to

take a moment and write an initial of the specific partner's name and details of the memory.

**Cognitive flexibility/persistence manipulations.** Prior research (Goncalo & Staw, 2006) showed that a simple instruction such as “be creative” successfully enhanced the creativity level of participants compared to those who were not similarly instructed. We adapted this approach to induce flexible or persistent cognitive processing. First, all participants received the following instruction:

Each of the problems below consists of three “clue” words. For each problem, think of a fourth word that relates to each of the other three “clue” words. (Example: Elephant - Lapse - Vivid; answer: Memory)

One third of the participants were randomly assigned to the cognitive flexibility condition and read the following instruction:

Please think flexibly across broad and distant ideas, approaches, and sets remote from three “clue” words. (Example: Elephant - Lapse - Vivid; answer: Memory)

Another third of the participants were randomly assigned to the cognitive persistence condition and read the following:

Please think thoroughly and systemically through an in-depth exploration of ideas, approaches, and sets relevant to three “clue” words. (Example: Elephant - Lapse - Vivid; answer: Memory)

The remaining third of the participants were randomly assigned to the control condition. They received only the

common instruction (given to all the participants).

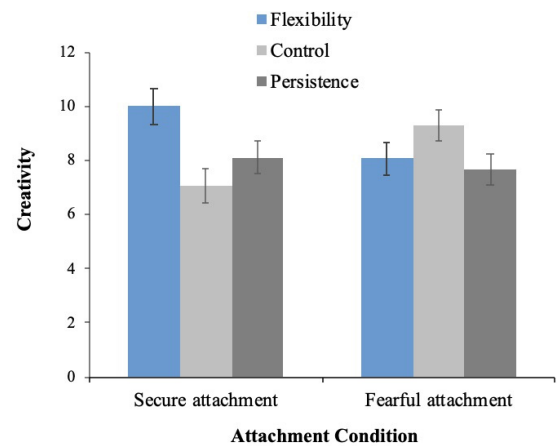
**Creativity measure.** To measure creativity, we asked the participants to complete the Remote Association Test (RAT; Mednick, 1962), which measures the ability to associate words that seem to be unrelated and is popularly used to measure general creativity in extensive creativity research (Cushen & Wiley, 2012; Fong, 2006; Jung & Lee, 2015; Storm et al., 2011). Participants were asked to find the fourth word which related to the other three “clue” words. For example, when the three given words are “surprise,” “wrap,” and “care,” the answer is “gift.”

## 5. Results

A 2 (attachment manipulation: secure, fearful) x 3 (cognitive processing manipulation: flexibility, persistence, control) ANOVA on creativity showed that an interaction effect was not significant,  $F(2, 127) = 2.110, p = .125, \eta_p^2 = .032$ . Regardless of the significance of the interaction term, subsequent planned comparisons can test whether our data support the hypotheses by comparing specific experimental conditions. The planned comparisons showed there was a significant effect within the secure attachment condition: As predicted, the cognitive flexibility group displayed higher creativity ( $M = 10.00, SD = 1.12$ ) than the control (baseline) group ( $M = 7.04, SD = 1.00$ ) within the secure attachment group,  $F(2, 127) = 1.969, p = .05, \eta_p^2 = .030$ . However, this pattern was not observed within the fearful attachment group (cognitive flexibility group:  $M = 8.08, SD = 0.98$  vs. control group:  $M = 9.30, SD = 1.04; p > .30$ ). These results support our hypothesis that cognitive flexibility promotes creativity for securely

attached individuals and not for fearfully attached people.

We also conducted additional analyses to understand whether there is a match between secure attachment and cognitive persistence. As expected, there was no difference in creativity between the cognitive persistence and control groups (cognitive persistence group:  $M = 8.11, SD = 1.15$  vs. control group:  $M = 7.04, SD = 1.00; p = .49$ ) within the secure attachment group. Likewise, there was no difference in creativity between the two groups within the fearful attachment group (cognitive persistence group:  $M = 7.65, SD = 1.12$  vs. control group:  $M = 9.30, SD = 1.04; p = .28$ ). Taken together, as shown in Figure 1, our results suggest that there is a match between secure attachment and cognitive flexibility (but not cognitive persistence), and that this match promotes creativity.



〈Figure 1〉 Interactive effect of attachment priming and cognitive processing path on creativity

## 6. General Discussion

The current research intended to experimentally investigate whether there are more suitable cognitive



processing paths to creativity, depending on attachment style. We hypothesized that cognitive flexibility would promote higher creativity for securely attached people and not for fearfully attached people because secure attachment creates a fit with cognitive flexibility. Data supported this hypothesis by showing that secure-attachment-primed individuals scored higher in the creativity task when they were asked to think flexibly than when they were not exposed to a specific instruction regarding cognitive processing. There was no significant difference in the level of creativity between fearfully attached people who thought flexibly and those who were not provided with any processing instruction. In sum, our research offers initial empirical evidence showing there is a stronger fit between some personal traits and the dual (flexible/persistent) pathways to creativity than other personal traits. That is, flexible processing - which has been found to increase creativity in general - should be encouraged for securely attached people, whereas the same processing can dampen fearfully attached individuals' creativity. Our research makes novel contributions to the creativity literature and attachment theory.

### 6.1. Theoretical Contributions

The present study extends the dual pathway to creativity model by providing empirical evidence showing the importance of fit between personal traits and cognitive processing. The dual pathway to creativity model has focused mostly on theorizing personal traits assumed to relate to either pathway, but lacks empirical evidence. For example, Baas and colleagues (2013) suggested several personal traits (e.g., positive/negative

affectivity, power, and extraversion) might be associated with either pathway. Our work offers empirical evidence elucidating a new set of personal traits and cognitive processing. Our data highlight that creativity is improved not just by triggering either path (the flexibility or persistence path) but by eliciting a relevant "fit" path - that is, a flexibility path for securely attached people. In doing so, we shed light on the importance of finding more novel matches between personal traits and dual pathways to creativity.

Our work adds to attachment theory by demonstrating a new cognitive aspect of attachment. For decades, many scholars have investigated the influence of attachment on relational outcomes (e.g., Brennan & Shaver, 1995; Cassidy, 1994; Kobak et al., 1993; Wei et al., 2005), but few studies have focused on the influence of attachment on exploration (e.g., Feeney & Van Vleet, 2010; Lee & Thompson, 2011; Mikulincer et al., 2011). Our research extends this focus on exploration by revealing how secure attachment influences the link between flexible thinking (which has been considered as enhancing creativity) and creativity. The current research documents that creativity enhancement can be explained from the perspective of the fit between secure attachment and cognitive processing (i.e., flexible thinking), rather than mood regulation, which has been the focus of prior research on attachment.

To the best of our knowledge, this study is the first to examine the role of fearful attachment in creativity. Prior research has rarely investigated the influence of fearful attachment (Mikulincer et al., 2011; Mikulincer & Sheffi, 2000). Previous research has asserted that it is difficult to establish a robust relationship between fearful attachment and other constructs because of its unpredictable

responses to stimuli (Main & Hesse, 1990; Mikulincer & Shaver, 2003; Simpson & Rholes, 2002). In this respect, our null finding on fearful attachment should be interpreted with caution as it may reflect people's limited mental resources (our reasoning) or unpredictability in general (prior research).

## 6.2. Limitations and Future Research

We conducted only one study using an online platform. To support our prediction more rigorously and generalize the findings to the workplace, it would be useful to conduct additional laboratory experiments or field surveys in the workplace. For example, future research would likely achieve more consistent results in different contexts by using multiple manipulations and measurements and recruiting diverse employee samples. Accordingly, our prediction could be demonstrated more uncompromisingly.

To induce a particular cognitive processing mode, we followed previous studies that showed the effectiveness of making participants follow verbal instructions (i.e., "be creative"; Goncalo & Staw, 2006). We used a direct instruction (e.g., "please think flexibly across broad and distant ideas...") to prime participants' cognitive processing in the experiment, which could potentially cause the demand characteristics. To avoid these potential issues, future researchers could use creativity tasks designed to measure participants' cognitive processes, rather than priming them using instructions. For example, by using an idea-generation task, researchers can evaluate participants' cognitive flexibility and persistence by coding their responses to idea-generation tasks. That is, researchers can examine participants' actual levels of cognitive processing

used in response to task instructions - i.e., think flexibly or persistently while generating ideas.

Our data show the significant difference between the cognitive flexibility condition and the control condition for securely attached people, which is consistent with our prediction; however, it is odd there was no significant difference between the flexibility condition and the persistence condition for securely attached people. One explanation is the lack of power of our sample. Our data revealed that the observed power of the secure attachment condition is .40, which is relatively low. To increase the power to .80, we should have collected 295 participants, as opposed to the 133 participants we had in our final sample. Future research could collect enough samples and confirm the exact difference in creativity level between cognitive flexibility and persistence conditions for securely attached people.

## 6.3. Practical Implications

Our research offers several useful implications for managers to promote employee creativity. Given that creativity is important for solving difficult problems (Runco, 2004), numerous tasks in the workplace require creative ideas. Our results suggest fairly simple methods to increase employee creativity. Leading employees who are not good at flexible thinking to take on tasks that require flexible thinking will not generate satisfactory outcomes. Instead, aligning employees' personal traits with specific task instructions can promote their creativity. Our findings suggest an intervention that facilitates employee creativity. Specifically, managers should lead securely attached people to think flexibly. As we demonstrated,

managers can give securely attached employees simple instructions, such as “think flexibly,” to promote their creativity. Moreover, when hiring people for a creative project, organizations should look for secure individuals who can accomplish tasks that require flexible thinking. In a similar vein, when looking for suitable people to take on creative tasks, managers should consider employees’ attachment style and give such tasks to secure people with task instructions that encourage flexible thinking. By using these methods properly, workplace creativity can be readily improved.

## 7. Conclusion

In an increasingly dynamic and competitive environment, creativity is a critical factor for companies’ successful performance and innovations. Our findings suggest that the cognitive flexibility (rather than cognitive persistence) path is more effective for securely attached individuals in promoting creativity. Ultimately, leaders can help their employees enhance their creativity by understanding how different attachment styles (i.e., secure vs. fearful attachment) interact with the two important paths for creativity (i.e., cognitive flexibility vs. cognitive persistence).

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## 저 자 소 개



### 김 예 강 (Ye Kang Kim)

현재 한국직업능력연구원에서 연구원으로 재직 중이다. KAIST 기술경영학부에서 경영학 박사 학위를 취득하였다. 주요 관심 분야는 창의성, 잡크래프팅, 관계갈등, 감정 등이다. 지금까지 Organizational Behavior and Human Decision Processes, American Journal of Psychology, 협상연구 등 주요 국내외 학술지에 논문을 발표하였다.



### 심 소 현 (So-Hyeon Shim)

현재 University of Hong Kong 경영대학 매니지먼트 및 전략 전공 조교수로 재직 중이다. Kellogg School of Management, Northwestern University 에서 조직행동 전공으로 박사 학위를 취득하였다. 주요 관심 분야는 리더십, 조직실패, 창의성, 위계질서 및 다양성 등이다. Academy of Management Journal, International Journal of Human Resource Management 등 주요 학술지에 논문을 발표하였다.



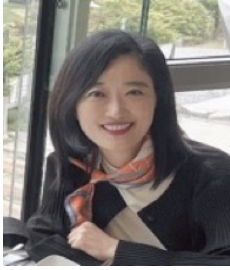
### 서 성 지 (Seong-Jee Seo)

현재 블록크래프터스(주)에서 마케팅 매니저로 근무하고 있다. KAIST 기술경영전문대학원에서 경영학 박사 학위를 취득하였다. 주요 관심 분야는 창의성, 애착, 협상 등이다. 지금까지 American Journal of Psychology, Group Decision and Negotiation 등 주요 학술지에 논문을 발표하였다.



### 김 태 현 (Tae Hyun Kim)

현재 KAIST 기술경영학부 박사과정 재학 중이다. KAIST 학부 및 석사를 졸업하였으며, 농업회사법인 만나씨이에이 주식회사에서 선임연구원으로 근무하고 있다. 주요 관심 분야는 창의성, 용서, 리더십, 감정 등이다. 지금까지 Journal of Applied Social Psychology, 협상연구 등 학술지에 논문을 발표하였다.



### 이 수 진 (Sujin Lee)

현재 KAIST 기술경영학부 교수로 재직 중이며, 한국협상학회 연구부회장, <협상연구> 편집위원장, KAIST 학생정책처장직을 수행하고 있다. 미국 Cornell University 존슨경영대학원에서 박사 학위를 받았다. M.I.T. 슬론 경영대학원 방문학자, Northwestern University 켈로그경영대학원 방문조교수를 역임했다. 연구분야는 팀창의성, 창의혁신조직, 국제협상, 메타버스 조직이다. KAIST 우수강의대상 및 미국 Academy of Management 갈등관리분야 Best Empirical Paper Award를 수상했다. Organizational Behavior and Human Decision Process, Personality and Social Psychology Bulletin, Journal of Experimental Social Psychology 외 다수의 논문을 출판했다.



〈 국문초록 〉

# 애착유형과 창의성을 높이는 인지적 경로 간의 상호작용 연구

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창의성이 조직의 성장과 발전에 중요하다는 점에서, 많은 기업들이 조직원의 창의성을 높이기 위한 방안들을 모색하고 있다. Dual pathway to creativity model 에 관련된 기존 연구에 따르면, 창의성은 두 가지 경로(인지적 유연성 혹은 인지적 지속성)를 통해 향상된다고 알려져 있다. 그러나, 이 두 가지 경로가 어떻게 활성화 되는지 이해하는데 있어서 조직원의 개인적 특질이 고려되어야 함에도 불구하고, 유연성과 지속성 중 어느 경로가 특정 성격에 더 효과적인 인지에는 대해서는 거의 논의된 바가 없다. 본 논문에서는, 애착 이론에 근거하여, 개인이 가진 애착 유형이 두 가지 인지적 경로에 어떤 영향을 미치는지 살펴보았다. 구체적으로, 안정 애착을 가진 개인이 (인지적 지속성이 아닌) 인지적 유연성 경로를 사용했을 때, 창의성이 향상된다고 예측하였다. 미국 피험자를 대상으로 한 온라인 실험은 본 연구의 가설을 지지하고 있다. 본 연구의 결과는, 조직 내 창의성 향상에 있어서 안정 애착이 (인지적 지속성이 아닌) 인지적 유연성과 더 적합하다는 점을 시사하고 있다.

주제어: 창의성, 지식경영, 창의성과 관련된 이중 경로 모델, 애착 이론

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