

**Understanding Individual Differences in Faking: The Role of Ability to Fake and  
Motivation to Fake**

by

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A dissertation submitted to the Graduate Faculty of  
Auburn University  
in partial fulfilment of the  
requirements for the Degree of  
Doctor of Philosophy

Auburn, Alabama  
March 5, 2017

Keywords: faking, motivation to fake, ability to fake,  
ATIC, predictive validity

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## Abstract

Research on applicant faking has indicated that faking on personality tests may deteriorate the quality of hiring decisions and affect the validity of personality tests. In order to understand the occurrence of faking, scholars have attempted to explore the psychological process of applicant faking. The general idea is that the ability to fake and the motivation to fake should be two important antecedents of faking. In the current study, the ability to fake is operationally defined as the ability to identify the dimensions being measured in a personality test (i.e., ability to identify criteria (ATIC)). The motivation to fake (i.e., applicant test-taking motivation) is defined based on Valence, Instrumentality and Expectancy (VIE) theory.

Study 1 was conducted to explore the nomological framework of ATIC in personality tests, as well as the role of the frame-of-reference on the nature of ATIC ratings. Study 1 found that: (a) ATIC ratings in personality tests were related to verbal, numerical and abstract reasoning ability, but not associated with the construct of self-monitoring; (b) the frame-of-reference had an impact on the ATIC scores such that ATIC scores were higher in a specific personality measure than in a general big five measure; and (c) ATIC ratings across two personality measures also yielded an apparent pattern of cross-measure consistency. Study 2 was conducted to examine the role of the ability to fake and the motivation to fake on faking behavior and the criterion-related validity of personality scores. Results showed that (a) ATIC was not a predictor of faking and it worked to increase the predictive validity of personality scores; whereas (b) the motivation to fake was a predictor of faking and it suppressed the predictive

validity of personality scores on GPA. The contributions, practical implications, and future research directions were discussed.

## Acknowledgments

This dissertation is a major milestone in my academic career. I have many people to thank who helped me get here. Without them, I would not have accomplished so much at Auburn University. First, I am grateful to my advisor Dr. Jinyan Fan for his support. In the past five years, Dr. Jinyan Fan taught me valuable research experience. As an important role model, he taught me the high standards, work ethic and rigor in research during my tenure at Auburn University. He is a very caring advisor and is always willing to provide his support to me.

Second, I wish to thank other members of my committee. Dr. Daniel Svyantek, thank you for your kind support. You are so caring and approachable to graduate students and I can feel that you wish every student success. Dr. Alejandro Lazarte, I greatly appreciate your suggestions in the data analyses and research designs of my research. I have learned a great amount of statistical and experimental design knowledge from you. I believe this store of knowledge will help me become a professional researcher in the I/O field in the future. Dr. Jesse Michel, I also greatly appreciate your help in my research projects. As a young professor, your enthusiasm in your research motivates me a lot. You, as another role model, show me how to strive to become a professional researcher in the future.

Third, I would like to thank my parents, my husband and my son. My parents always encouraged me to achieve my best in my studies and career. They taught me the discipline of hard work and being down-to-earth. My husband, David, is always there to support and

encourage me during my rainy days. Without him, I would not have so much enthusiasm and confidence in my studies and research. My 1-year old son, Aiden, is a lovely and active baby. His smile provides me with many psychological resources to cope with various stressors.

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## **Introduction**

Personality tests have been widely used as a selection tool since meta-analytical studies have supported the predictive validity of personality scores on job performance (Barrick & Mount, 1991). Personality yields stronger predictive power than cognitive abilities on particular performance criteria, for instance, contextual performance. Unlike cognitive ability tests, personality tests result in little racial adverse impact (e.g., Sackett, Schmit, Ellingson, & Kabin, 2001). However, the utility of personality tests may be weakened by applicant faking (e.g., Rothstein & Goffin, 2006). Faking is defined as the tendency to deliberately distort responses in a positive light, which is also referred to as response distortion, response bias, social desirability, impression management, and intentional distortion (McFarland & Ryan, 2000; Fan et al., 2012). Recently, empirical studies have shown that faking occurs in real application settings (e.g., Donovan, Dwight, & Schneider, 2014), impacts the quality of hiring decisions (e.g., Fan et al., 2012; Mueller-Hanson, Heggstad, & Thornton, 2003) and reduces the validity of personality scores (e.g., Lanyon, Goodstein, & Wershaba, 2014).

The concern of faking is accompanied by individual differences in faking (McFarland & Ryan, 2000; Mueller-Hanson, Heggstad, & Thornton, 2006). That is, some applicants fake more than others do. If we assumed all applicants faked on a personality test at exactly the same level, faking would not be a problem: The hiring decisions based on personality scores and the predictive validity of personality scores on job performance criteria would not be influenced by the constant level of faking (McFarland & Ryan, 2000). Actually, due to individual differences in faking on personality tests, the ranking order of applicants should be largely altered by faking (e.g., Rosse, Stecher, Miller, & Levin, 1998). In other words, fakers are more likely to rise to the top of an applicant list and thus to be hired (Fan et al., 2012). In the same vein, different

applicants introduce different levels of bias in their personality scores, which would, in turn, result in reduced predictive validity of their personality scores on performance (Lanyon et al., 2014).

In order to counter and control faking behavior, faking scholars have attempted to establish faking frameworks that clarify the distal and proximal antecedents of faking behavior (e.g., Ellingson & McFarland, 2011; McFarland & Ryan, 2000, 2006). This attempt could facilitate our understanding about why faking occurs and how to detect and counter faking. However, only a few empirical studies have attempted to empirically test the psychological process of faking. In what follows, I will briefly introduce several conceptual frameworks of faking.

## **Conceptual Frameworks of Faking Behavior**

### **Extant Models of Faking Processes**

Many scholars have built faking models to assist in our understanding of faking behavior. The earliest faking model is established by Snell, Sydell and Lueke (1999). In this model, the structure of faking consists of two separate proximal antecedents: the ability to fake and the motivation/intention to fake. That is, in order to fake successfully on a personality test, applicants must be motivated and be able to distort their answers. Snell et al. (1999) emphasized dispositional factors, such as mental ability, self-monitoring and emotional intelligence, were related to an applicant's ability to fake. That is, people with high mental ability, emotional intelligence and self-monitoring were good at test-taking strategies and knew how to distort their scores in a positive light. Some experiential factors (e.g., having knowledge of constructs being measured) were especially important to determine whether an applicant was able to fake. Besides the individual-level antecedents of the ability to fake, test characteristics such as item type, item

format and item scoring, also affected an individual's ability to fake on a personality test. An applicant's motivation to distort his or her responses was believed to be influenced by demographic factors (e.g., age and gender), dispositional traits (e.g., integrity, Machiavellianism, Manipulativeness, and locus of control), and perceptual factors (e.g., fairness, attitudes toward faking, expectations for success, and importance of the outcome).

McFarland and Ryan (2000) suggested that the intention to fake was a proximal determinant of faking behavior, and the ability to fake moderated the relationship between the intention to fake and faking behavior. Specifically, the relationship between the intention to fake and faking behavior might be strengthened or weakened by an applicant's ability to fake. McFarland and Ryan (2000) argued that beliefs toward faking was an important antecedent of the intention to fake, such that people who believed that faking was wrong would have low intention to fake. People's belief toward faking was likely affected by their values, moral codes, and religious beliefs. Similar to Snell et al. (1999), McFarland and Ryan (2000) proposed that an individual's knowledge of constructs was positively associated with his or her ability to fake. They also updated this faking framework by integrating the original model with the theory of planned behavior (McFarland & Ryan, 2006). In this new model, (a) the attitude toward faking, subjective norm, and perceived behavior control were antecedents of the intention to fake, (b) the intention to fake predicted faking behavior, and (c) this intention to fake - faking behavior relationship was moderated by the ability to fake.

Mueller-Hanson et al. (2006) built a faking framework based on the work of Snell et al. (1999) and McFarland and Ryan (2000). In their model, the intention to fake was the proximal antecedent of faking behavior. They differentiated the intention to fake from the motivation to fake and proposed that the intention to fake should be predicted by both the ability to fake and

the motivation to fake. Additionally, the motivation to fake was determined by belief in the importance of faking, perceived behavioral control, perceived subjective norms, and some dispositional characteristics such as Machiavellianism and lack of rule-consciousness.

Another faking model proposed by Goffin and Boyd (2009) did not include the objective ability to fake. Instead, Goffin and Boyd argued that perceived ability to fake was a more influential antecedent of faking than the objective ability to fake. This perceived ability to fake had an impact on faking behavior through the motivation to fake. Being closely related to the concept of faking self-efficacy, the perceived ability to fake was predicted by dispositional factors including social astuteness, cognitive abilities and skills, and perceived knowledge of personality traits, as well as several contextual factors such as item type and item format (e.g., forced-choice item and item transparency). The motivation to fake was predicted by dispositional factors such as self-monitoring, Machiavellianism, and integrity, and contextual factors such as job desirability and “perception that faking will have negative consequences”.

Most recently, Ellingson and McFarland (2011) argued that the motivation to fake was a key factor of faking behavior and the ability to fake moderated the relationship between the the motivation to fake and faking behavior. Similar to other scholars, Ellingson and McFarland assumed that people with high cognitive ability, emotional intelligence and self-monitoring would have high ability to fake. That is, these people were adept at recognizing situational cues and organizational expectations, and thus could regulate their behaviors to meet the situational demands (i.e., faking successfully). One important contribution made by Ellingson and McFarland was their endeavor to use the valence, instrumentality and expectancy (VIE) theory to distinguish three aspects of the motivation to fake. The valence aspect of the motivation to fake referred to the desirability of a particular job opportunity over other possible options. The

instrumentality aspect of the motivation to fake referred to the belief that high scores on a personality test could lead to high possibility of being hired. The expectancy aspect of the motivation to fake indicated the confidence and expectation of faking successfully on a personality test. According to the VIE theory, people who valued the job opportunity, believed that high test scores led to high possibility of being hired and felt confident in their ability to fake successfully on a selection test were highly motivated to fake.

### **The Role of Ability to Fake and Motivation to Fake**

Most human behavior is a function of both willingness/motivation and ability to perform. This equation also applies to faking behavior. Faking scholars have proposed the driving role of the ability to fake and the motivation to fake on faking behavior, as well as some distal antecedents that affect these two proximal factors (e.g., Ellingson & McFarland, 2011; Snell et al., 1999). However, only two studies have been done to date to empirically test the mechanisms underlying faking behavior, specifically, testing the emergence of faking from the lens of both the ability and motivation to fake.

McFarland and Ryan (2006) are among the first who have tried to examine the effect of several factors on faking behavior. In their study, undergraduate students were told to imagine they were taking a personality test for applying for a job they desired, and those who scored in the top 15% on the test would receive twenty dollars. The measure of faking behavior was derived for each personality dimension by subtracting the score received in the honest condition from the score received in the high motivation condition. After participants completed a personality test, they were asked to report their intention to fake or not on the personality test. An example item of the intention to fake measure was “I would lie on a selection test”. McFarland and Ryan found that an individual’s intention to fake (which was predicted by attitude toward

faking and perceived behavioral control) was associated with faking behavior on conscientiousness, extraversion, agreeableness, and emotional stability dimensions.

They also manipulated participants' level of ability to fake by providing some participants with information about the constructs being measured on a personality test, while others did not receive such information. They found that this manipulation moderated the relationship between the intention to fake and faking behavior on neuroticism, openness to experience, and conscientiousness such that there was a weaker relationship between the intention to fake and faking behavior when individuals were given the knowledge about what the personality test was assessing. This result might be due to fact that when participants were explicitly informed of the measured constructs of a personality test, even if they had low intention to fake, they found a reason to fake on the personality test.

Mueller-Hanson et al. (2006) also conducted a lab study to examine their faking model. Undergraduate students were asked to imagine applying for their dream job and then completed a personality test in order to obtain this dream job. Faking behavior was also operationalized as the difference scores between personality in the honest condition and in the simulated application condition. Mueller-Hanson et al. measured the intention to fake in the same way as McFarland and Ryan (2006). After they completed a personality test, participants indicated the extent to which they would like to fake or lie on the personality test. Different from McFarland and Ryan (2006), Mueller-Hanson et al. measured the ability to fake by asking participants to indicate the "right" response of personality items that enabled them to achieve the best score possible. If a participant chose an option in the keyed direction, his or her answer was rated as correct. Mueller-Hanson et al. (2006) found that the ability to fake was not associated with faking behavior, whereas the intention to fake was positively related to the level of faking.



In summary, these two empirical studies have shown that the intention to fake is a determinant of faking, whereas the ability to fake yields inconsistent results. These two studies have suffered from some limitations. First, the motivation technique used to simulate a job application setting is less desirable. In both studies, undergraduate students were asked to imagine applying for their dream job. Faking generated by this technique may not be comparable to faking that occurs naturally in the real job application contexts. For instance, some researchers found that instructed faking technique used in a lab led to higher levels of faking than the real job opportunities in the field (Schrader & Osburn, 1977). Second, the measure of the intention to fake used is less applicable in real job application contexts. Participants were directly asked whether they would lie or fake on a selection test (McFarland & Ryan, 2006; Mueller-Hanson et al., 2006). Undergraduate students, who only imagine applying for a job position while no real job positions are available, are likely to admit their faking intention. However, it is doubtful that real job applicants would admit their intention to fake on a selection test if they are applying for a job position. Thus, a more nuanced and less transparent measure of the motivation to fake is required. Finally, the definition of the ability to fake is unclear and the measurement of the ability to fake is under-developed. McFarland and Ryan (2006) manipulated participants' ability to fake by informing their knowledge of constructs being measured in a personality test. Mueller-Hanson et al. (2006) attempted to develop a direct method to measure the ability to fake. The little attention paid to the measurement of the ability to fake limits empirical studies on the ability to fake. Because of the lack of measurement, researchers may find it difficult to assess individuals' ability to fake in order to test the effects of the ability to fake systematically.

In order to examine the psychological process underlying faking behavior, one of the goals of my research is to figure out a good operational definition of the ability to fake, and good

measures for both the ability to fake and the motivation to fake. The second goal is to examine whether the ability to fake and the motivation to fake predict faking in a simulated job application setting. Different from the motivation technique used by McFarland and Ryan (2006) and Mueller-Hanson et al. (2006), I used deception to make undergraduate students believe that they were being considered for a real job opportunity while completing a personality test. According to previous studies, the deception technique should boost the realism of lab faking studies (e.g., Ellingson, Heggstad, & Makarius, 2012). I am aware of no study that has examined how the ability to fake and the motivation to fake influence the predictive validity of personality scores on performance criteria. If the motivation and ability to fake are important determinants of faking (i.e., response bias) on a personality test, they are quite likely to have an impact on the criterion-related validity of personality scores. Therefore, the third major goal of the current study is to examine whether the ability to fake and the motivation to fake moderate or suppress the predictive validity of personality scores on academic performance (see Figure 1).

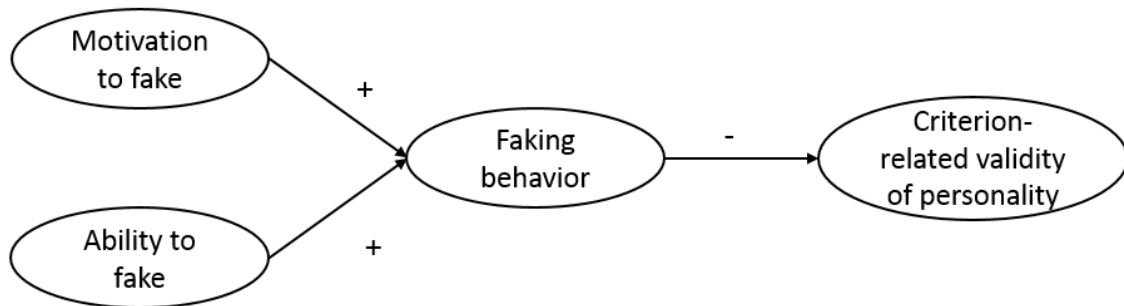


Figure 1. Theoretical Model of Motivation/Ability to Fake

## **Ability to Fake**

Little attention has been paid to measuring individual differences in the ability to fake in the faking area. Only Mueller-Hanson et al. (2006), as mentioned above, developed a measure of the ability to fake. Some researchers adopted an instructed faking method to make an inference about an individual's ability to fake. In the instructed faking method, test-takers are instructed to fake on a personality test as good as possible. They also complete the same personality test in an honest manner. The score differences between personality in the instructed faking setting and in the honest setting are regarded as the level of faking. It is assumed that, since all the participants are instructed to fake, they should have a similar level of motivation to fake. In this way, the level of faking should be largely attributed to the ability to fake (e.g., McFarland & Ryan 2000; Mersman & Shultz, 1998; Zickar & Robie, 1999). This method, however, is less accurate because the assumption that all participants have a similar level of motivation to fake is debatable. In addition, this method only alludes to the ability to fake, instead of measuring the ability to fake directly. Another limitation arises because test-takers should complete the same personality test twice under two different settings.

The lack of adequate measures of the ability to fake hinders researchers' effort to test the real relationship between the ability to fake and faking behavior. Figuring out a good measure of the ability to fake, thus, is an important step in understanding the psychological process of applicant faking. In order to find a valid and viable measure of the ability to fake, a good operational definition is needed. Snell et al. (1999) stated that people with high ability to fake were good at "choosing more appropriate responses" or "recogniz(ing) which dispositions and/or job behaviors are being measured in the selection test" (p. 223). Frei, Snell, McDaniel, and Griffith (1999) defined the ability to fake as both the ability to identify personality traits that

were associated with good job performance and the ability to figure out what a personality test was measuring (cited by Mueller-Hanson et al., 2006). Similarly, Mueller-Hanson et al. (2006) defined the ability to fake as knowledge of obtaining a desirable score on a personality test. Most recently, Ellingson and McFarland (2011) proposed that an individual's ability to fake was his or her capability for discerning correct responses and performing the expected behavior.

Overall, the definition of the ability to fake is the ability to understand what a personality test is measuring and to figure out the correct direction to fake good on personality items. That is, this definition is related to the idea of test-takers' knowledge of constructs being measured on a personality test (e.g., Goffin & Boyd, 2009; McFarland & Ryan, 2000, 2006; Snell et al., 1999). The more knowledgeable a test-taker is about what a personality test is measuring and what the desirable traits a specific job are requiring, the more capable he or she is of distorting his or her responses on personality items in the positive light (McFarland & Ryan, 2000; Mueller-Hanson et al., 2006). Using an instructed faking method to infer individuals' ability to fake, Frei (1997) found that the knowledge of constructs being measured on a selection inventory was associated with the ability to fake.

The knowledge of constructs being measured is closely associated with the concept of ability to identify criteria (ATIC) on selection procedures. ATIC is defined as an individual's ability to decipher performance criteria in selection procedures, such as job interviews, assessment centers, and personality tests (Jansen et al., 2013; Kleinmann et al., 2011). More specifically, ATIC in a personality test indicates individual's ability to decipher the dimensions of personality items (König, Melchers, Kleinmann, Richter, & Klehe, 2006). Klehe et al. (2012) believed that ATIC in personality tests represented a substantial component of the ability to fake, and studies on ATIC could open the black box of the nature of the ability to fake mentioned in

faking models. Accordingly, I operationally defined the ability to fake as ATIC in personality tests, that is, individuals' ability to decipher the constructs or dimensions of personality tests.

### **What is Ability to Identify Criteria (ATIC)?**

In personnel selection procedures such as interviews and assessment centers, applicants should first try to identify the criteria that are used to evaluate their performance and then behave accordingly (König et al., 2006). It is expected that job applicants who are more capable of identifying the criteria should have better test performance, such as obtaining higher assessment center scores and interview scores (Kleinmann, 1993; Jansen et al., 2013). Studies have shown a point-to-point correspondence between candidates' behavior in selection procedures such as job interviews and assessment centers, and their future work-related behaviors. This behavioral consistency pattern is partly due to the stable situational assessment ability-ATIC (Jansen et al., 2013). Specifically, people with high ATIC are able to decipher the situational cues and demands in both selection and working settings. In this case, ATIC serves as a common variance between test performance on selection procedures and job performance. Therefore, ATIC is one of the mechanisms that explain the predictive power of selection procedures (Jansen et al., 2013). Statistically, after controlling ATIC in a regression model, the relationship between test performance on a selection procedure and job performance should be reduced (see Figure 2). In summary, ATIC studies focusing on interviews and assessment centers have found three general patterns of results: (1) ATIC is related to performance on these selection procedures, (2) ATIC is related to job performance, (3) ATIC (partially) explains the predictive validity of selection procedures (Figure 2).

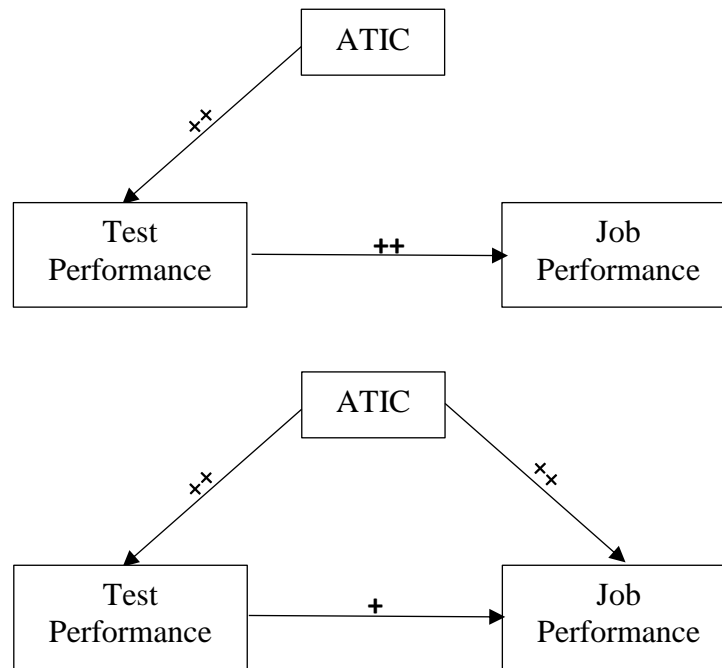


Figure 2. ATIC, Test Performance, and Job performance  
 (Note. The Relationship between Test Performance is partially due to the ATIC)

Later research has applied the construct of ATIC in personality tests (König et al., 2006). A personality test is also an evaluative situation in which applicants strive to look for situational demands (e.g., expectations of hiring organizations and constructs being measured in a personality test), and respond it according to these situational demands. Just as stated by König et al. (2006), “whether, in a personality inventory, applicants discern the targeted dimension or not should also be important because if they do discern it they can activate information or memories of past behavior that are relevant for the given construct” (p. 370). ATIC in personality tests is specifically defined as test-takers’ ability to understand the dimensions being measured by personality items.

An investigation by König et al. (2006) is the lone study that has measured ATIC in personality tests. In this study, participants were either recent or prospective university graduates who attended in a two-day application training program. During the application training, participants completed an integrity test and an ATIC measure concerning all of the integrity subscales. They found that participants' ATIC scores were weakly to moderately correlated with their integrity scores (test performance). The integrity test, however, is not a typical personality test used in the I/O field. In fact, no research has applied ATIC in a personality test with a big-five factor structure. The nature of ATIC in personality tests is largely unknown.

### **What is the Nomological Network of ATIC in Personality Tests?**

One of the goals of my research is to scrutinize the nomological network of ATIC in personality tests. ATIC is conceptualized as a context-specific component of general ability, not a trait (Kleinmann et al., 2011). The link between ATIC in assessment centers/interviews and cognitive ability is well established by previous studies (Jansen et al., 2013; Kleinmann et al., 2011). For instance, there is evidence that ATIC in job interviews is more strongly associated with verbal than nonverbal ability (Melchers et al., 2009). Researchers have suggested that people with high cognitive ability can comprehend and understand information provided by each question or exercise in selection procedures more easily (Kleinmann et al., 2011).

ATIC is also conceptualized as a socially relevant construct within the umbrella of social competence variables (Jansen et al., 2011; Kleinmann et al., 2011). Scholars have suggested that ATIC seems to be related to self-monitoring and social understanding (Griffin, 2014; Kleinmann et al., 2011). Self-monitoring refers to the extent to which a person monitors and controls his/her behavior according to how this behavior is perceived by others (Snyder, 1974). However, no research has supported the significant correlation between ATIC and self-monitoring (Kleinmann

et al., 2011). In the faking literature, researchers have also proposed that self-monitoring, cognitive/mental ability, and emotional ability can increase individuals' ability to fake (McFarland & Ryan, 2006; Snell et al., 1999). That is, people with high self-monitoring can capture social cues in selection procedures and understand what performance criteria are expected in selection procedures (Kleinmann et al., 2011).

In sum, ATIC in personality tests may be associated with cognitive ability and self-monitoring. Accordingly, I propose the following hypotheses.

*Hypothesis 1: ATIC scores should be positively related to cognitive ability.*

*Hypothesis 2: ATIC scores should be positively related to self-monitoring.*

ATIC is a measurement-specific construct such that a person would have different ATIC scores corresponding to different selection procedures. One important feature of selection procedures that may inflate an individual's ATIC is transparency of the selection tools (Griffin, 2014). In the faking area, researchers also argued that item transparency could affect the ability to fake (Goffin & Boyd, 2009). Personality items can become more transparent by adding the frame-of-reference such as "at school" and "at work" (Hunthausen, Truxillo, Bauer, & Hammer, 2003) because a specific frame-of-reference on a personality item (e.g., at school, at work) can make it easier for test-takers to decipher the dimensions being measured in personality tests. Accordingly, we may argue that test-takers' ATIC scores in a specific personality test (a personality test with a specific frame-of-reference) should be larger than their ATIC scores in a general personality test. It may be assumed that the evaluated dimensions of a transparent personality test are so obvious that even test-takers with low cognitive ability and self-monitoring would obtain high ATIC scores. In this case, the relationships between ATIC and cognitive ability/self-monitoring should be moderated by the frame-of-reference such that the



relationships between ATIC and cognitive ability/self-monitoring are lower in a specific personality test than those in a general personality test. Accordingly, I propose the following hypotheses:

***Hypothesis 3:** Participants should have higher ATIC scores in a specific personality test than in a general personality test.*

***Hypothesis 4:** The relationship between ATIC and cognitive ability should be moderated by the frame-of-reference such that cognitive ability should be more related to ATIC in a general personality test than ATIC in a specific personality test.*

***Hypothesis 5:** The relationship between ATIC and self-monitoring should be moderated by the frame-of-reference such that self-monitoring should be more related to ATIC in a general personality test than ATIC in a specific personality test.*

### **ATIC and Faking on Personality Tests**

Test-takers may engage in four steps while completing a personality test: comprehension, retrieval, judgment, and response (Tourangeau, Rips, & Rasinski, 2000). At the comprehension step, test-takers need to read, interpret, and understand a particular personality item. The most important aspect at this process is to identify what is being measured. At the retrieval step, test-takers search item-relevant information from their long-term memories in order to answer the personality item. Following the retrieval step, the judgment stage involves test-takers making judgments about whether their own personalities, according to their memories, fit the description of the personality test. Finally, at the response step, test-takers decide how to reply to the specific personality item. They may answer the personality item according to their memories or try to tailor their answer based on their assumptions of what is being measured. People with high ATIC are more capable of understanding the personality dimensions measured during the

comprehension process. They then search their memories to discover accurate cues for the particular personality dimensions at the retrieval step. At the judgment and response steps, however, people with high ATIC may respond on personality tests in two opposite ways: providing accurate responses or distorting their responses (König et al., 2006). In other words, ATIC may or may not serve as an antecedent of faking.

The first possibility is that ATIC is a predictor of faking. That is, test-takers with high ATIC are more adept at distorting their personality scores in a positive light because they understand what is measured in personality tests. Researchers in ATIC field have consistently proposed this assumption. For instance, Jansen et al. (2013) expected that ATIC might help test-takers to manage impressions (i.e., faking) on personality tests in evaluative contexts. Kleinmann et al. (2011) proposed that ATIC might be a prerequisite for impression management because individuals needed to decipher the performance criteria in selection contexts before they could manage their impressions successfully. Klehe et al. (2012) stated that people with high ATIC might provide a response on a particular personality item in accordance with their construal of what an ideal employee looks like. Overall, ATIC of a personality test may serve as a predictor of applicant faking (see Figure 1). That is, people with high ATIC are more aware of personality dimensions being measured in personality tests as well as which dimensions are job desirable. In this case, they are able to exaggerate their personality traits in a job desirable direction. Therefore, we may observe a positive relationship between ATIC and faking behavior.

The other possibility is that ATIC is not a predictor of faking (i.e., response bias). Instead, ATIC may enhance the accuracy of personality scores. Specifically, test-takers with high ATIC have more accurate interpretation of personality traits, and if they respond on personality tests in line with their assumptions, they should provide accurate responses. In plainer terms,

test-takers can accurately reflect their personality traits on a personality test only if they understand the personality items (e.g., with high ATIC). This is partially supported by Jansen, Lievens and Kleinmann (2011). They found that ATIC scores moderated the agreeableness trait and assessment center ratings on consideration of others (i.e., a facet of agreeableness). That is, the agreeableness trait was more strongly related to behavior ratings on consideration of others for people who had high ATIC. Similarly, they found that ATIC scores moderated the conscientiousness trait and assessment center ratings on organizing and planning (i.e., a facet of conscientiousness): the conscientiousness trait was more strongly related to ratings of organizing and planning for people with high ATIC. Common sense might suggest that people with high agreeableness receive high ratings on a facet of agreeableness such as considerations of others, and people with high conscientiousness receive high ratings on a facet of conscientiousness such as organizing and planning. Jansen et al.'s (2011) results have indicated that this common sense is only right among people who have high ATIC, because only people who are able to understand situational demands in selection procedures can perform in accordance with their real personality characteristics. Conversely, an individual with low ATIC does not know what dimensions a particular exercise are measuring and may perform in an inaccurate way. Thus, ATIC is a prerequisite for people to respond accurately.

There is a lack of empirical studies focusing on ATIC in personality tests as well as the relationship between ATIC and faking on personality tests. In the faking area, the extant two studies focusing on the ability to fake have yielded inconsistent results: McFarland and Ryan (2006) found that participants being told about the personality dimensions being measured were more likely to fake even if they were less motivated to fake. On the other hand, Mueller-Hanson et al. (2006) did not confirm the relationship between the ability to fake and faking behavior.

Overall, ATIC may either be predictive of faking behavior or not. Thus, I propose the following research question:

*Research Question 1: Is ATIC a predictor of faking behavior on personality tests?*

### **ATIC and Predictive Validity of Personality Scores**

ATIC's role in the criterion-related validity of selection procedures such as job interviews and assessment centers makes it an important concept to consider in selection research (Jansen et al., 2013). Scholars in both ATIC and faking area have emphasized the cognitive constructs underlying applicants' ability to fake (or ATIC). ATIC as a stable component of ability plays a role not only in selection contexts (enhancing selection performance) but also in job contexts (enhancing job performance) (Jansen et al., 2013). In this case, ATIC should boost the predictive validity of selection procedures. No empirical studies, however, have examined these effects of ATIC in personality tests on the criterion-related validity of personality scores.

The effect of ATIC on the criterion-related validity of personality scores is a highly disputed topic (Klehe et al., 2012). On the one hand, applicants with high ATIC are better at answering a personality test in a more positive light (see Figure 1). Faking, in nature, would reduce the accuracy of personality responses because (1) applicants deliberately distort their responses that are inconsistent with their typical and plausible behavior (Ellingson & McFarland, 2011) and (2) they fake at different levels with some introducing more bias in their scores than others (McFarland & Ryan, 2000). Therefore, when faking occurs, the predictive validity of personality scores should be reduced. Overall, ATIC as a proximal factor of faking should reduce the predictive validity of personality scores on job or academic performance (see Figure 1). Statistically, ATIC may work as a suppressor or a moderator of the predictive validity of personality scores. One possibility is that ATIC may suppress the predictive validity of

personality scores such that the predictive power of personality scores on performance criteria increases when we partial out the ATIC component (i.e., treated as a bias). The other possibility is that ATIC may moderate the relationship between personality scores and performance such that personality scores have higher predictive power on job or academic performance among people with lower ATIC.

On the other hand, ATIC may increase the predictive validity of personality scores in two ways. First, applicants with high ATIC may respond on a personality test more accurately because of their better understanding of personality dimensions being measured. ATIC serves as an ability to enhance the accuracy of personality scores, which may, in turn, boost the predictive validity of personality scores on job performance or academic performance. Statistically, ATIC moderates the relationship between personality scores and academic performance such that test-takers' personality scores can predict their job or academic performance better when their ATIC ratings are high. Second, ATIC, as a component of specific ability and social effectiveness, may increase both personality scores (a type of selection performance) and job performance in a plausible range, and thus serve as a common variance of personality scores and job performance. ATIC reflects people's ability to perform how an organization or a setting expects the candidates to behave (Klehe et al., 2011). People with high ATIC can decipher the performance criteria in personality tests as well as in real job or academic performance evaluation settings, and thus show better responses or behaviors in both settings. This corresponds to the behavioral consistency pattern (see Figure 2), which supports that ATIC contributes to the criterion-related validity of personality tests. Statistically, if we control the ATIC in a regression model, the relationship between personality scores and GPA may decrease significantly (see Figure 2).

No empirical studies, however, have focused on the role of ATIC in personality tests on the predictive validity of personality scores (either as a suppressor or a moderator). The current study will be the first study to examine this effect. Accordingly, I propose the following research question:

***Research Question 2:*** Should ATIC reduce or increase the predictive validity of personality scores?

### **The Measurement of ATIC**

The first ATIC measure was developed by Kleinmann (1993) in an assessment center. This measure was to assess whether test-takers understood which performance criteria were assessed in a particular AC exercise. Nowadays, researchers have developed ATIC measures in different selection procedures including job interviews, assessment centers and personality tests. The measurement of ATIC usually involves two steps: assumptions writing and assumptions rating. As for the assumptions writing process, after taking a selection test, test-takers are asked to fill out an ATIC questionnaire. In this questionnaire, they need to write down several assumptions about what have actually been assessed in the previous selection procedures. They may receive instructions as follows:

You have completed the exercises. Probably, you have thought about what the exercises were assessing. What assumptions did you have during the exercises about what the exercises were intended to assess? Please write down your assumptions (Kleinmann et al., 2011).

Participants may be invited to write down up to three assumptions for each exercise. They can also choose to write down nothing if they do not have any assumptions. After candidates complete the questionnaire, then follows the assumptions rating process. In this step,

researchers can either rely on trained raters (subjective matter experts) or test-takers themselves to rate the degree to which each assumption in each exercise corresponds to the keyed performance dimension using a scale from *0 = no fit* to *3 = fits completely* (Jansen et al., 2013). For each performance dimension, the highest rating is adopted as the ATIC score. Finally, the overall ATIC score is obtained by averaging ATIC ratings across different performance dimensions.

The only ATIC measure in personality tests (e.g., an integrity test) was developed by König et al. (2006). After taking a personality test, test-takers were presented three items (i.e., an item triplet) for each personality subscale and were invited to write down up to two assumptions for each of the triplets. König et al. (2006) created the item triplets based on two selection criteria: (1) all the items selected in the triplets had to be phrased in the same direction based on the subscale name (i.e., no reverse-coded item was included); and (2) all the items were the most typical ones for the personality subscale. After test-takers wrote down assumptions for all the triplets, they were introduced to the dimensions of the personality test. For each of their assumptions, they should indicate which integrity dimension it corresponds the most and then rate the degree to which this assumption corresponds to this endorsed dimension on a scale from *1 = fits somewhat* to *4 = fits completely*. Ratings of assumptions corresponding to the correct dimensions were used as ATIC scores. If none of the assumptions was linked to the consensually determined dimension, a score of zero was assigned. The highest ratings among different assumptions of the same triplet was regarded as the score. The overall ATIC score was the mean rating across all item triplets.

No ATIC measure, however, has been developed in personality inventories with the big-five structure (aka., measuring openness to experience, conscientiousness, extroversion,

agreeableness, and emotional stability dimensions). I developed an ATIC measure in general big-five personality tests mainly based on König et al.'s (2006) method except that I relied on trained raters (rather than test-takers themselves) to rate the fit of test-takers' assumptions to the determined personality dimensions. ATIC is a selection-specific measure. I included two personality tests in the current study: a general big-five personality test with five subscales and a school-specific conscientiousness measure with three subscales. The ATIC measure thus consisted of eight item triplets with each triplet corresponding to each subscale of these two personality tests (see Appendix G).

### **Motivation to Fake**

Ellingson and McFarland (2011) adopted the VIE theory to understand the motivation to fake in a more nuanced way. Based on the VIE theory, the motivation to fake has three proximal components: valence, instrumentality and expectancy. Valence indicates whether an individual values a specific second-level outcome, for instance, being hired or receiving a promotion. In an application setting, valence is the anticipated attractiveness of obtaining a particular job. Instrumentality refers to the degree to which an individual believes that good performance on a selection test (i.e., the first-level outcome) can lead to a second-level outcome. Specifically, in an application situation where job applicants respond on personality tests in order to apply for a job position, instrumentality refers to the degree to which these job applicants believe that their personality scores are associated with their possibility of being hired. Expectancy refers to the extent to which an individual believes that he or she is capable of successful faking and obtaining a high score on a selection test (Ellingson & McFarland, 2011).

The valence and instrumentality dimensions of the motivation to fake are the focus of current study. I did not consider the expectancy dimension in the current study because



expectancy is highly similar to the ability to fake. It is difficult to differentiate the constructs of expectancy and the ability to fake. Ellingson and McFarland (2011) argued that some of the antecedents (e.g., knowledge of constructs) that determined expectancy might also affect the ability to fake. As for the valence and instrumentality dimensions, it is believed that an individual should be motivated to fake when he/she believes that getting a higher personality score ensures a higher opportunity of being hired (i.e., high instrumentality) and the job position provided is important and attractive (i.e., high valence). The motivation to fake is similar to the concept of test-taking motivation mentioned in Arvey, Strickland, Drauden, and Martin (1990) and Sanchez, Truxillo and Bauer (2000). Test-taking motivation is defined as an individual's motivation to do well on a selection test (Arvey et al., 1990; Sanchez et al., 2000). The test-taking motivation measure is well-developed according to the VIE theory by Sanchez et al. (2000) and consists of valence, instrumentality and expectancy subscales. The valence subscale measures the desirability of the targeted job positions. The instrumentality subscale measures the extent to which an individual believes that high personality scores could lead to high possibility of being hired. Research has found that applicants usually have higher test-taking motivation than incumbents (Chan, Schmitt, Deshon, Clause, & Delbridge, 1997; Sanchez et al., 2000). Additionally, a plenty of evidence has shown that test-taking motivation is positively related to test performance on different selection tests such as work samples, situational judgment tests, and written exams (Arvey et al., 1990; Chan et al., 1997; Sanchez et al., 2000). In the following section, the terms of motivation to fake and test-taking motivation are used interchangeably.

### **Motivation to Fake and Faking**

Motivation to fake, being denoted as test-taking motivation, may or may not be predictive of faking. On the one hand, just as assumed by some faking scholars, job applicants with high

test-taking motivation may fake on personality tests in order to win a job offer because they value the job positions provided (i.e., high valence) and believe that high personality scores can enhance their chance of obtaining the job positions (i.e., high instrumentality) (Ellingson & McFarland, 2011). In this case, test-taking motivation (both valence and instrumentality dimensions) is related to faking and thus introduces a bias into personality scores. Because of response bias induced by test-taking motivation, the predictive validity of personality scores on performance criteria should be reduced. Specifically, test-taking motivation should suppress or moderate the predictive validity of personality scores. Test-taking motivation may work as a suppressor of the predictive validity of personality scores such that the predictive power of personality scores on performance criteria should increase when partialling out the test-taking motivation factor (i.e., treated as a bias). Alternatively, Test-taking motivation may work as a moderator of the relationship between personality scores and performance such that the personality scores should have higher predictive power of job or academic performance among people with lower test-taking motivation than those with higher test-taking motivation.

On the other hand, people with high test-taking motivation may be more likely to exert much effort on a selection test and reduce their careless responses. The higher accuracy of personality scores may result in a higher criterion-related validity of personality scores on performance criteria. In contrast, people with low test-taking motivation may respond on a personality test carelessly because they do not value the job opportunities provided and thus do not take relevant selection tests seriously. Because of their careless responses, their personality scores should have lower predictive power on performance criteria. Partially supporting the above arguments, Schmit and Ryan (1992) have found a higher predictive validity of personality scores on GPA among college students with high test-taking motivation. Therefore, in the

current study, test-taking motivation may also moderate the relationship between personality scores and job or academic performance such that personality scores should have higher predictive power on job or academic performance among people with higher test-taking motivation.

Overall, similar as ATIC, test-taking motivation may either cause faking or not and may thus have two opposite effects on the criterion-related validity of personality scores.

Accordingly, I propose the following two questions:

***Research Question 3:** Is test-taking motivation a predictor of faking behavior on personality tests?*

***Research Question 4:** Should test-taking motivation reduce or increase the predictive validity of personality scores?*

### **ATIC Moderates the Motivation to Fake- Faking Behavior Link**

Several faking scholars have argued that there should be an interaction between the motivation and ability to fake on faking behavior (e.g., McFarland & Ryan, 2000; Ellingson & McFarland, 2011). An individual may be motivated to fake, but does not have enough ability to distort their answers in a positive light. This is illustrated by Ellingson and McFarland (2011), “a person may be motivated to fake a test, but if they do not have sufficient ability to do so, then they will not be able to change their scores accordingly.” (p. 325). Accordingly, the ability to fake should be an important moderator of the relationship of the motivation to fake and faking behavior such that the relationship between the motivation to fake and faking behavior should be strengthened by the motivation to fake. McFarland and Ryan (2006) conducted the lone study to examine this moderating effect, but found the opposite effect: there was no relationship between the intention to fake and faking behavior when test-takers were informed of the knowledge of

personality dimensions in a personality test, whereas there was a positive relationship between the intention to fake and faking behavior when test-takers were not informed of the knowledge. More empirical studies are needed to clarify this interaction effect. Due to the lack of empirical studies focusing on this effect, I propose the following research question.

***Research Question 5:** Is there any interaction effect between ATIC and test-taking motivation on faking behavior?*

## Overview of the Present Research

The present research consists of two studies. Study 1 was conducted to examine the nomological network of the ability to identify criteria (ATIC) in personality tests, as well as the moderating role of the frame-of-reference on ATIC ratings. The second study is my focal study that explored the effects of the ability to fake and the motivation to fake on faking behavior and the criterion-related validity of personality scores. In Study 2, participants completed two baseline personality tests before coming to our lab (at Time 1), and then completed these personality tests again in the lab setting (at Time 2). A deception method designed by Ellingson et al. (2012) was used to simulate a job application setting at Time 2. Specifically, undergraduate students were made to believe that they could apply for an internship position in a leadership company. This experimental manipulation has been proven to engender experimental realism successfully. The difference personality scores between the baseline setting (Time 1) and the simulated application setting (Time 2) were regarded as direct indicators of faking (McFarland & Ryan, 2006; Mueller-Hanson et al., 2006). However, it is important to note that, the baseline test setting (Time 1) was different from the simulated application test setting (Time 2) in the way that the baseline tests were online surveys and participants could complete them anywhere, whereas the application personality tests were completed in a controlled and quiet lab setting. In this case, the difference personality scores between these two settings could be attributed to two factors including (a) the levels of faking, which were induced by our manipulation, and (b) different testing environments between the baseline (Time 1) and the lab settings (Time 2). In plainer terms, these score differences did not only reflect the levels of faking but also the biases induced by some situational confounds.

Study 1 provided an opportunity to observe the score biases caused by different testing settings. Similar to the Study 2, participants first completed the same online personality tests at Time 1. Instead of deceiving them at Time 2, I directly asked them to complete the same sets of personality tests honestly in the lab setting. Additionally, they also completed an ATIC measure, a self-monitoring measure, and a cognitive ability test honestly in the lab setting. Study 1 thus resembles a control condition for Study 2. Overall, Study 1 serves three purposes: (a) to figure out the level of situational biases on personality scores induced by different testing settings at Time 1 and Time 2; (b) to scrutinize the nomological network of the construct of ATIC in personality tests; and (c) to examine the role of the frame-of-reference of personality items on ATIC ratings and the relationships between ATIC and cognitive ability/self-monitoring.

## Study 1

### Participant and Procedures

Participants were 102 undergraduate students from a large university in the Southeastern United States. Except for one missing data, all of the participants' ages were from 18 to 22 years, with the mean age of 18.81 years, and 88 (87.1%) were females and 82 (82%) were Caucasians. As for the participants' class level, the majority of them were freshmen (60.4%) and sophomores (22.8%).

The Department of Psychology at this university used a web-based system, SONA, to recruit participants for psychology studies, and provided extra credit hours to students for participating in psychology studies. All of the undergraduate students who were taking one or more psychology courses that offered extra credits for research participation could automatically receive an SONA account and choose to participate in any studies posted on the SONA system. In this study, participants were recruited via this SONA system.

The study consists of two sessions: a baseline assessment through an online survey (the Mass Screening section) and a lab session. It is important to note that the Mass Screening online survey and the lab session were independent studies shown on the SONA system. The Mass Screening contained survey items from several researchers in the Psychology Department. Participants were rewarded with half an hour of research credit for completing the Mass Screening questionnaire. The personality items (a general big-five personality measure and a school-specific conscientiousness measure) in the current study were added in the Mass Screening as the baseline personality measures. Only students who had participated in the Mass Screening could sign up for the lab study. In the lab session, all the participants were required to complete a diversion task in which participants were asked to analyze content that was

commonly found on resumes and then judged whether the specific content represented some types of abilities, work styles, or cross-functional skills. After the diversion task, participants were instructed to answer the same personality measures embedded in the Mass-screening honestly. Additionally, they also responded on an ATIC measure, a self-monitoring measure, and a cognitive ability test after completing the personality measures.

## **Measures**

**International Personality Item Pool (IPIP).** The 50-item IPIP (Goldberg, 1992) was used as one general measure of personality traits. It measured the big five dimensions of personality: extroversion, conscientiousness, openness to experience, agreeableness, and emotional stability. Participants needed to complete this measure twice in the Mass Screening baseline setting (Time 1) and in the lab setting (Time 2). An example item was “I make plans and stick to them”. This personality scale used a 7-point Likert scale from (1) *strongly disagree* to (7) *strongly agree*.

**School-specific Conscientiousness Measure.** The 24-item school-specific conscientiousness measure (Schmit, Ryan, Stierwalt, & Powell, 1995) assessed three dimensions of conscientiousness: achievement striving, competitiveness, and self-discipline. Participants needed to complete this measure twice in the baseline setting (Time 1) and in the lab setting (Time 2). An example item was “I work hard to accomplish my academic goals (e.g., completing homework, making grades, etc.)”. All the items were rated on a 7-point Likert scale from (1) *strongly disagree* to (7) *strongly agree*.

**Measurement of ATIC.** After completing two personality measures in the lab, test-takers were invited to fill out a questionnaire to assess their assumptions about what had actually been assessed in personality tests. They received the following instruction:



You might have noticed that some items have some similarities. Below we provide sets of items. For each set, we present three example items that share similarities and which you have already responded to during the assessment. We would like you to tell us your assumption(s) about these items. That is, for instance, *what personality characteristic(s)/trait(s) three personality items are trying to measure?*

Afterwards, they were shown eight item triplets, which correspond to five subscales in the IPIP-50 measure (i.e., openness to experience, conscientiousness, extroversion, agreeableness and emotional stability) and three subscales in the school-specific conscientiousness measure (i.e., achievement striving, competitiveness, and self-discipline). They were asked to write down up to three assumptions regarding each triplet.

Two trained raters (doctorate students in I/O psychology) examined each participant's assumption for every personality subscale and rated the degree to which each of the assumptions fitted the target personality dimension. These ratings were made on a scale from *0 = not fit* to *3 = fits completely*. For the same dimension, if there were more than two assumptions resulting in two different ratings for ATIC, the highest fit rating was endorsed. To illustrate this rating process, suppose that one participant wrote down three assumptions for the triplet targeting the conscientiousness dimension. Each rater evaluated these three assumptions based on how close or fit these assumptions were to the conscientiousness dimension. The highest score would be taken as their ATIC rating on this dimension. If the raters' ratings on the same personality dimension differed by more than a point, they discussed and came to an agreement. Two trained raters' ATIC ratings on each personality dimension were averaged as the final ATIC rating of a particular personality dimension.

Finally, the ratings on openness to experience, conscientiousness, extroversion, agreeableness and emotional stability were averaged to compute the overall ATIC scores on the

IPIP measure (ATIC\_BF). The ratings on self-discipline, competence, and achievement striving were averaged to compute the overall ATIC scores on the school-specific conscientiousness measure (ATIC\_SC).

**Self-monitoring Scale (Snyder, 1974).** The 25-item self-monitoring scale assessed the extent to which individuals monitored and managed their images and behaviors in social situations. Responses with higher scores indicated higher self-monitoring skills. An example item was “I guess I put on a show to impress or entertain people”. This measure was implemented in the lab setting (at Time 2). All the items were rated on a 7-point Likert scale from (1) *strongly disagree* to (7) *strongly agree*.

**Cognitive Ability Test.** This cognitive ability test measured verbal ability (25 items), numerical ability (15 items) and abstract reasoning ability (20 items) (Pace, 2011). Answering each item correctly earned test-takers 1 point. Therefore, the full scores for verbal ability, numerical ability and abstract reasoning ability were 25, 15 and 20, respectively. Higher scores indicated higher cognitive ability. This measure was only implemented in the lab setting (at Time 2).

## **Results**

In order to figure out the score biases caused by different test settings, paired-samples *t*-tests were used to compare participants’ personality scores at Time 1 with their personality scores at Time 2, some personality dimensions including extroversion, agreeableness, conscientiousness, and emotional stability, showed no significant score changes from Time 1 to Time 2 (see Table 1). I only found significant score differences across time in openness to experience ( $d = .33$ ) and school-specific conscientiousness ( $d = .21$ ) (see Table 1).

Table 1

*Personality Score Difference between the Baseline Setting and the Lab Setting*

	The Baseline Setting (Time 1; $n = 101$ )			The Lab Setting (Time 2; $n = 102$ )			<i>t</i> -tests	$d_w$
	Mean	<i>SD</i>	$\alpha$	Mean	<i>SD</i>	$\alpha$		
Openness	4.77	.72	.75	4.99	.88	.81	$t(100) = 3.33, p < .01$	.33**
Conscientiousness	4.82	1.09	.88	4.79	1.14	.87	$t(100) = -.39, p = .70$	-.04
Extroversion	4.20	1.03	.86	4.30	1.08	.85	$t(100) = 1.58, p = .12$	.15
Agreeableness	5.36	.80	.75	5.40	.95	.83	$t(100) = .61, p = .54$	.05
Emotional Stability	4.55	.88	.80	4.46	1.15	.87	$t(100) = -1.27, p = .21$	-.13
Sch.Conscient	4.93	.96	.92	5.08	.93	.93	$t(100) = 2.06, p < .05$	.21*

*Note.* One participant's personality scores at Time 1 were missing and only 101 participants were remained in paired-samples *t*-tests. Sch.Conscient = school-specific conscientiousness.  $d_w$  = within-subject effect size.

\*  $p < .05$ , \*\*  $p < .01$ .

Hypothesis 1 predicted that ATIC scores should be positively related to cognitive ability. According to Table 2, ATIC ratings in the general big five personality measure were significantly correlated with verbal ability ( $r = .25, p < .05$ ), numerical ability ( $r = .26, p < .05$ ) and abstract reasoning ability ( $r = .32, p < .01$ ), whereas ATIC ratings in the school-specific conscientiousness measure were positively but not significantly correlated with verbal ability ( $r = .20, p = .08$ ), numerical ability ( $r = .13, p = .24$ ), and abstract reasoning ( $r = .17, p = .14$ ). Thus, hypothesis 1 was partially supported. Hypothesis 2 stated that ATIC scores should be positively related to self-monitoring. Contrary to this prediction, self-monitoring was not significantly correlated with ATIC\_BF ( $r = .11$ ) and ATIC\_SC ( $r = -.08$ ). These results were consistent with previous research (Kleinmann et al., 2011). For instance, Klehe et al. (2011) found a low correlation between ATIC and self-monitoring,  $r = -.08$ . Thus, hypothesis 2 was not supported.

Hypothesis 3 predicted that participants should have higher ATIC scores in a specific personality test (ATIC\_SC) than in a general personality test (ATIC\_BF). There was a high

correlation between ATIC\_BF and ATIC\_SC ( $r = .52$ ) which reflected the consistency of ATIC ratings across different personality measures. Despite this, paired-samples  $t$ -test showed that ATIC\_SC ratings were significantly higher than ATIC\_BF ratings ( $t(101) = 2.71, p < .01$ ). These results supported that ATIC ratings on two personality measures were similar but ATIC ratings in the specific personality measure were higher than those in the general personality measure because the school-specific conscientiousness measure was more transparent than the general IPIP-50 measure. Thus, hypothesis 3 was supported.

Hypothesis 4 and 5 stated that the specific frame-of-reference in a personality test should moderate the relationships between ATIC and cognitive ability/self-monitoring such that cognitive ability and self-monitoring should be more related to ATIC scores in a general personality test than ATIC scores in a specific personality test. As shown in Table 2, ATIC\_BF did correlate more strongly with three aspects of cognitive ability and self-monitoring than ATIC\_SC. I tested the hypothesis 4 and 5 based on the test of the difference between two dependent correlations with one variable in common developed by Lee and Preacher (2013). Unfortunately, all the correlation differences did not reach the level of significance. Specifically, the test of the difference in correlations of two ATIC ratings with verbal ability, numerical ability, abstract reasoning, and self-monitoring were  $z = .43$  ( $p = .66$ ),  $z = 1.11$  ( $p = .27$ ),  $z = 1.30$  ( $p = .19$ ), and  $z = 1.59$  ( $p = .11$ ), respectively.

Table 2

*Descriptive Statistics and Correlations among ATIC, Cognitive Ability, and Self-monitoring*

	Mean	SD	1.	2.	3.	4.	5.	6.
1. ATIC_BF	1.86	.55	(.95)					
2. ATIC_SC	2.01	.61	.52**	(.96)				
3. Verbal Ability	17.38	3.5	.25*	.20	-			
4. Numerical Ability	7.59	3.5	.26*	.13	.49**	-		
5. Abstract Reasoning	12.51	4.42	.32**	.17	.49**	.52**	-	
6. Self-monitoring	3.93	.59	.11	-.08	-.03	-.18	.13	(.65)

*Note.* ATIC\_BF = ATIC in the general big five personality measure (IPIP-50), ATIC\_SC = ATIC in the school-specific conscientiousness measure. Values in parentheses are ICC (2) for ATIC ratings or reliability for the self-monitoring measure.

\*  $p < .05$ , \*\*  $p < .01$ .

**Discussion**

Study 1 showed that personality scores did not differ too much across situations on conscientiousness, extroversion, agreeableness, and emotional stability. However, participants did rate themselves higher on openness to experience and school-specific conscientiousness in the lab setting than in the baseline setting. As for the nomological network of ATIC, ATIC in general personality test was positively related to three aspects of cognitive ability, but not self-monitoring. When completing personality tests, test-takers do not need to interact with other people, and thus do not require much social abilities such as cooperation and communication. Thus, it is understandable that ATIC scores are not associated with self-monitoring, which is one component of social competence. ATIC in personality tests is more an ability-related construct than a social competence-related construct. ATIC in the school-specific conscientiousness measure, however, was not significantly related to three aspects of cognitive ability and self-monitoring skill.

Additionally, a specific frame-of-reference provides more cues and information about a

personality test to participants and makes them earn higher ATIC ratings in this specific personality test, just as shown in Study 1. There is also a tendency for the strength of relationships between ATIC and cognitive ability/self-monitoring to decrease in a specific personality test, as compared to a general personality test. However, this change tendency does not reach the level of significance.

## Study 2

### Participants

Participants were 205 undergraduate students from a large university in the Southeastern United States. All of the participants were 18 years or older. Among all the participants, 149 (72.7%) were females, 118 (57.6%) were freshmen, 59 (28.8%) were sophomores, 13 (6.3%) were juniors, and 15 (7.3%) were senior students. As for the ethnicity, 172 (83.9%) were Caucasians, 20 (9.8%) were African Americans, and others were Hispanics and Asians. The mean age of these students was 19.4 years.

### Procedures

Similar to Study 1, participants were also recruited through the SONA system. The study consisted of two sessions: a baseline personality assessment at Time 1 (the Mass Screening section), and a simulated application setting at Time 2 (the lab setting). Figure 1 showed that participants completed the online personality surveys including the IPIP-50 measure (a big five personality measure) and a school-specific conscientiousness measure at Time 1.

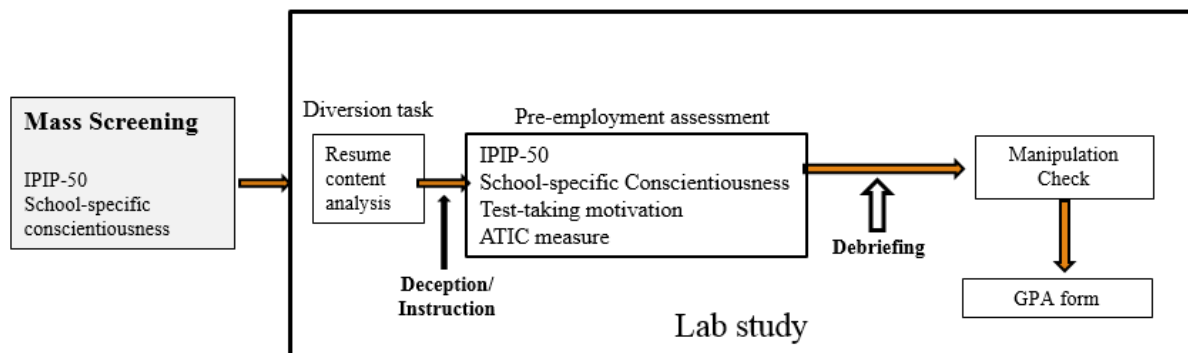


Figure 3. The Procedure of Study 2

(Note. The deception is provided to the deception group and the instruction is provided to the control group)

In the simulated application setting, all the participants were invited to do two parts of questionnaires in a lab setting. The measurement and procedures were similar to Ellingson et al.'s (2012) study. For the first part of the survey, identical to Study 1, participants analyzed content that was commonly found on resumes and then judged whether the specific content represented some types of abilities, work styles, or cross-functional skills. Participants were told that this part of the survey was the primary task in the study but this in fact was a diversion task. Immediately after participants completed the first survey, one experimenter came to the lab and provided deception to participants (See Appendix A for deception script). The experimenter told these participants that a CEO of a company called InSat Corporation asked him or her for help to validate a pre-screening assessment for hiring college students into a paid summer internship program at Insat Corporation. The participants were also told that InSat Corporation needed a group of college students to try this pre-employment assessment. For those who completed this assessment, InSat Corp. would provide them with two benefits: (a) a \$50 cash drawing; and (b) an earlier consideration for the paid summer internship program if they performed well on the assessment. The nature of the internship position and the remuneration were also provided to participants. The information was as follows:

In case you want to know a little bit more about this paid summer internship program, you will be paid at the rate of \$15/hour, and may earn up to \$8,000 for the whole summer. In the program, the majority (about 70%) of the work you will do are basic clerical, for example, working with Microsoft office software, sending and receiving emails, organizing files, setting up meetings, and taking memos for meetings. However, you will also get a chance to work in the higher ends, such as selling ideas to potential clients, working in a team to come up business plans, and conducting basic level data analysis. InSat has written up an introduction to their paid summer internship program and you can find more details about it on the first page of the pre-employment assessment.



After the deception, participants completed the pre-employment assessment. A mock logo of InSat Corp. was placed on the top left screen to add realism. The job descriptions were provided before personality tests.

Thank you for your willingness to help us develop our pre-employment assessment for our Summer Internship Program. We have openings in the program. At the end of this part, you'll be asked to indicate if you would like us to contact you about a position. If you select "yes", we'll take a close look at your responses to these questions and evaluate them given our needs. Please write down your name here first.

Here is a brief description of the summer internship program: InSat Corporation's Summer Internship Program offers college students excellent development opportunities involving real-world job experience. The program consists of multiple paid summer internships, and placements will be available in various areas such as: human resource management, marketing, leadership development, technology, etc. Through a series of rotating assignments, young professionals receive focused development and a mentor. When screening for the Summer Internship Program, we are interested in selecting college students from a variety of backgrounds who are hardworking and detail-oriented, sociable, and able to work well with others, bright and open-minded, and able to tolerate stress. In addition, they need to have some basic skills and broad knowledge background.

Afterward, participants started to complete the pre-employment assessment, which contained personality inventories, a ATIC measure and an applicant test-taking motivation scale. The personality inventories and ATIC measure were the same as those used in Study 1. Participants also needed to indicate whether they wanted to apply for the internship position by checking a "Yes" or "No" box and to write down his or her email address. Ninety three out of 205 (45.4%) students were interested in the summer internship program and had written down their email addresses. After participants finished the pre-employment assessment, they were invited to complete the ATIC questionnaire and the applicant test-taking motivation scale. Finally, they were fully debriefed of the purpose and nature of the study, as well as the reason why we chose to use the deception method to simulate the application setting (See Appendix B for debriefing script). Participants were notified that they had the choice to withdraw their data

from further analysis without any penalty. Finally, they were invited to indicate whether they believed the cover story told by the experimenter at the very beginning and 189 out of 203 (93.1%) participants said that they believed the cover story.

At the end of study, participants were required to sign the grade point average (GPA) form to allow me access to this information from the University Registrar. The whole study was conducted in one semester. After this semester, all participants' cumulative GPAs were obtained.

## **Measures**

**Personality Tests.** The IPIP-50 and school-specific conscientiousness measures were the same personality inventories administered in Study 1.

**Applicant Test-taking Motivation.** Items about the valence and instrumentality dimensions in Valence, Instrumentality, Expectancy Motivation Scale (VIEMS) developed by Sanchez et al. (2000) were selected to measure applicants' test-taking motivation. There were three items measuring the valence dimension. An example item was as follows: "I would like to be hired for this job". Four items measured the instrumentality dimension. An example item was as follows: "If I do well on this pre-employment test, I think I can have a good chance of being hired." This survey used a 7-point Likert scale from (1) *strongly disagree* to (7) *strongly agree*. Since the correlation between valence and instrumentality was .79 in the current study, which indicated that they were similar concepts. Therefore, I averaged scores on these two dimensions to create overall test-taking motivation scores.

**Measurement of ATIC.** This is the similar measure used in Study 1. After completing two personality measures in the lab, test-takers were invited to fill out a questionnaire to assess their assumptions about what had actually been assessed in personality tests. They received the following instruction:

You might have noticed that some items have some similarities. Below we provide sets of items. For each set, we present three example items that share similarities and which you have already responded to during the assessment. We would like you to tell us your assumption(s) about these items. That is, for instance, *what personality characteristic(s)/trait(s) three personality items are trying to measure, and how they are related to the summer internship position at InSat Corporation?*

Afterwards, they were shown eight item triplets and were asked to write down up to three assumptions regarding each triplet. Two trained raters (doctorate students in I/O psychology) examined each participant's assumption for every personality subscale and rated the degree to which each of the assumptions fitted the target personality dimension on a scale from 0 = *not fit* to 3 = *fits completely*. For the same dimension, if there were more than two assumptions resulting in two different ratings for ATIC, the highest fit rating was endorsed. If the raters' ratings on the same personality dimension differed by more than one point, they discussed and came to an agreement. Two trained raters' ATIC ratings on each personality dimension were averaged as the final ATIC rating of a particular personality dimension. The ATIC ratings on openness to experience, conscientiousness, extroversion, agreeableness and emotional stability were averaged to result in the overall ATIC scores on the IPIP measure (ATIC\_BF). The ratings on self-discipline, competence, and achievement striving were averaged to compute the overall ATIC scores on the school-specific conscientiousness measure (ATIC\_SC).

**Faking Behavior.** Generally, faking is defined as job applicants' deliberate response distortion on personality tests in order to increase their chance of being hired (Fan et al., 2012). According to this definition, the difference in personality scores between the baseline and the application settings should be regarded as a direct indicator of faking (McFarland & Ryan, 2000; Mueller-Hanson et al., 2006). In Study 1, I found that participants' personality scores on the openness to experience and the school-specific conscientiousness dimensions increased

significantly from the baseline setting to the lab setting. Such differences captured situational biases caused by different testing environments of the baseline and the lab settings. In order to rule out these situational biases caused by testing settings, I equated all the difference scores in Study 2 before conducting subsequent analyses based on the following methods. First, I adjusted the baseline scores of Study 2 by adding the averaged difference scores between the baseline and the application contexts in Study 2. To make it clearer, the equation is: Adjusted baseline scores in Study 2 = Raw baseline scores in Study 2 + (Mean Lab condition (Time 2) in Study 1 – Mean Baseline condition (Time 1) in Study 1). Second, the level of faking was calculated by subtracting the adjusted baseline scores from the personality scores in the simulated application setting. Overall, the equation for the adjusted difference scores is: Adjusted difference scores = Simulated application scores in Study 2 – Raw baseline scores in Study 2 - (Mean Lab condition (Time 2) in Study 1 – Mean Baseline condition (Time 1) in Study 1). One concern of difference scores, however, is their low reliabilities. According to Table 4, only difference scores on openness to experience, emotional stability, and school-specific conscientiousness dimensions achieved adequate reliabilities.

## **Results**

**1. Does Faking Occur?** I compared the baseline personality scores in Study 1 and Study 2. There was no score differences in extroversion, conscientiousness, emotional stability, openness to experience and school-specific conscientiousness between participants in two studies; whereas only agreeableness scores were higher in Study 1 than those in Study 2 (see Table 3). These results indicated that there was little initial or pre-existing personality differences between participants in Study 1 and Study 2. However, in the lab settings (at Time 2), participants who were deceived of an internship position (in Study 2) had significantly higher

personality scores than those responded honestly (in Study 1) across all personality dimensions (see Table 3). These results indicated that faking did occur in the simulated application setting.

I also used repeated  $t$ -tests to compare personality scores at Time 1 and Time 2 in Study 2. Results showed that personality scores on the big five dimensions increased significantly from the baseline setting (Time 1) to the simulated application setting (Time 2): extroversion scores,  $t(204) = 12.48, p < .01, d = .89$ ; agreeableness scores,  $t(204) = 14.94, p < .01, d = 1.04$ ; conscientiousness scores,  $t(204) = 14.07, p < .01, d = .99$ ; emotional stability scores,  $t(204) = 9.77, p < .01, d = .68$ ; and openness to experience,  $t(204) = 12.95, p < .01, d = .89$ . Similarly, school-specific conscientiousness scores had increased significantly from Time 1 to Time 2 with  $t(204) = 9.00, p < .01, d = .69$ . Overall, all above results supported that the deception manipulation in Study 2 was effective, that is, participants did fake in the simulated application setting in Study 2.

Table 3

*Personality Score Differences between Study 1 and Study 2 across Two Settings*

	<i>The Baseline Setting</i>							<i>The Lab Setting</i>						
	Study 2 ( <i>n</i> = 205)			Study 1 ( <i>n</i> = 101)				Study 2 ( <i>n</i> = 205)			Study 1 ( <i>n</i> = 102)			
	Mean	<i>SD</i>	$\alpha$	Mean	<i>SD</i>	$\alpha$	$d_b$	Mean	<i>SD</i>	$\alpha$	Mean	<i>SD</i>	$\alpha$	$d_b$
Openness	4.76	.77	.83	4.77	.72	.75	-.01	5.38	.80	.83	4.99	.88	.81	.46**
Conscientiousness	4.72	.96	.83	4.82	1.09	.88	-.10	5.44	.96	.86	4.79	1.14	.87	.62**
Extroversion	4.31	.99	.83	4.20	1.03	.86	.11	4.98	1.02	.86	4.30	1.08	.85	.65**
Agreeableness	5.04	.87	.74	5.36	.80	.75	-.38**	5.79	.85	.83	5.40	.95	.83	.43**
Emotional Stability	4.54	1.07	.84	4.55	.88	.80	-.01	5.13	1.03	.86	4.46	1.15	.87	.61**
Sch.Conscient	5.08	.90	.91	4.93	.96	.92	.16	5.50	.88	.92	5.08	.93	.93	.46**

*Note.* One participant's personality scores in Study 1 at Time 1 were missing. Sch.Conscient denotes the school-specific conscientiousness.  $d_b$  is the between-subject effect size.

\*  $p < .05$ , \*\*  $p < .01$ .

Table 4

*Descriptive statistics and Correlations for Various Variables*

	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
1. Age	19.40	2.08	-																							
2. Gender	.27	.45	-.00	-																						
3. Motivation	3.49	.91	.00	-.08	(.89)																					
4. ATIC_BF	1.56	.69	-.02	-.06	.09	(.96)																				
5. ATIC_SC	1.74	.85	.05	-.10	.08	.69**	(.97)																			
6. Open_t1	4.76	.77	.05	.12	.00	.14*	.08	(.83)																		
7. Conscien_t1	4.72	.96	-.07	-.00	.01	.15*	.10	.07	(.83)																	
9. Extro_t1	4.31	.99	.01	.04	.11	.10	-.04	.36**	-.01	(.83)																
9. Agree_t1	5.04	.87	.15*	-.14*	.06	.02	.05	.27**	.26**	.32**	(.74)															
10. Emo.Stab_t1	4.54	1.07	.18**	.40**	-.07	.07	.02	.26**	.09	.33**	.13	(.84)														
11. Sch.Cons_t1	5.08	.90	.02	-.02	.08	.17*	.07	.24**	.63**	.06	.26**	.12	(.91)													
12. Open_t2	5.38	.80	.07	.13	.17*	.22**	.20**	.61**	.04	.19**	.19**	.12	.24**	(.83)												
13. Conscient_t2	5.44	.96	-.00	-.04	.30**	.18*	.11	.02	.71*	.03	.21**	.04	.55**	.27**	(.86)											
14. Extro_t2	4.98	1.02	.06	-.03	.30**	.05	-.07	.19**	-.05	.72**	.25**	.16*	.10	.34**	.19**	(.86)										
15. Agree_t2	5.79	.85	.06	-.21**	.32**	.10	.10	.08	.18*	.23**	.65**	-.02	.19**	.37**	.40**	.45**	(.83)									
16. Emo.Stab_t2	5.13	1.03	.19**	.33**	.14	.08	.05	.23**	.12	.25**	.14*	.66**	.19**	.37**	.33**	.40**	.23**	(.86)								
17. Sch.Cons_t2	5.50	.88	.08	-.07	.32**	.19**	.10	.18*	.48**	.10	.25**	.05	.77**	.39**	.69**	.31**	.45**	.35**	(.92)							
18. Open_ad	.41	.69	.02	.02	.19**	.10	.15*	-.40**	-.03	-.18*	-.09	-.14*	.02	.48**	.29**	.18**	.33**	.17*	.25**	(.80)						
19. Conscien_ad	.75	.73	.09	-.05	.39**	.04	.02	-.07	-.38**	.05	-.07	-.06	-.11	.30**	.38**	.32**	.30**	.28**	.28**	.42**	(.46)					
20. Extro_ad	.56	.76	.08	-.10	.26**	-.07	-.04	-.21**	-.06	-.34**	-.08	-.20**	.06	.21**	.21**	.41**	.30**	.22**	.28**	.48**	.36**	(.46)				
21. Agree_ad	.71	.71	-.10	-.08	.32**	.10	.06	-.23**	-.10	-.12	-.44**	-.18*	-.08	.21**	.23**	.22**	.39**	.10	.22**	.49**	.44**	.46**	(.37)			
22. Emo.Stab_ad	.68	.87	.00	-.09	.25**	.01	.03	-.04	.03	-.11	.01	-.46**	.07	.28**	.34**	.27**	.30**	.37**	.35**	.38**	.42**	.51**	.34**	(.52)		
23. Sch.Cons_ad	.28	.60	.09	-.07	.35**	.03	.04	-.09	-.23**	.07	-.01	-.11	-.36**	.21**	.20**	.31**	.37**	.23**	.31**	.34**	.57**	.32**	.45**	.40**	(.63)	
24. GPA	3.10	.62	-.11	.09	-.09	.26**	.20**	.17*	.23**	-.00	.05	.11	.45**	.12	.13	-.05	.02	.11	.38**	-.05	-.14*	-.06	-.04	-.00	-.11	-

*Note.* Gender: 1 = male, 0 = female. Motivation is the average of valence and instrumentality. ATIC\_BF = ATIC in the IPIP-50 measure, a big five personality measure. ATIC\_SC= ATIC in the school-specific conscientiousness measure. Extro = Extroversion. Agree = Agreeableness. Conscient = Conscientiousness. Emo.Sta = Emotional Stability. Open = Openness to experience. Sch.Cons = School-specific Conscientiousness. t1 = The baseline setting, t2= The simulated application setting. ad = Adjusted difference scores. The equation for the adjusted difference scores is:

Adjusted difference scores = Simulated application scores in Study 2 – Raw baseline scores in Study 2 - (Mean<sub>Lab condition (Time 2) in Study 1</sub> – Mean<sub>Baseline condition (Time 1) in Study 1</sub>). The following formula was used to calculate the reliability of the difference scores:  $r_{da} = (\sigma_a^2 - \sigma_{ed}^2) / \sigma_a^2$ , where  $\sigma_{ed}^2 = \sigma_h^2(1 - r_{hh}) + \sigma_a^2(1 - r_{aa})$ , with  $h$  representing the measure in the baseline condition and  $a$  in the simulated application setting, and  $\sigma_a^2$  representing the variance of the difference scores (McFarland & Ryan, 2006).

\*  $p < .05$ , \*\*  $p < .01$ .

**2. Can the Ability to Fake and the Motivation to Fake Predict Faking?** Similar to the results of Study 1, the correlation between ATIC in the general big five personality measure (ATIC\_BF) and ATIC in the school-specific conscientiousness (ATIC\_SC) in Study 2 was .69 and ATIC ratings in the specific measure was higher than those in the general measure ( $t(204) = 3.89, p < .01$ ).

As for the correlations between ATIC/test-taking motivation and faking, only ATIC\_SC was correlated with difference scores on openness to experience, while test-taking motivation was positively related to difference scores on openness to experience, conscientiousness, extroversion, agreeableness, emotional stability, and school-specific conscientiousness. Regression models were also used to test the role of applicant test-taking motivation and ATIC on faking behavior. As shown in Table 5, the interaction effect between the motivation to fake and ATIC\_BF on difference scores of school-specific conscientiousness was significant: the relationship between the motivation to fake and difference scores was stronger among people with lower ATIC (see Figure 4).

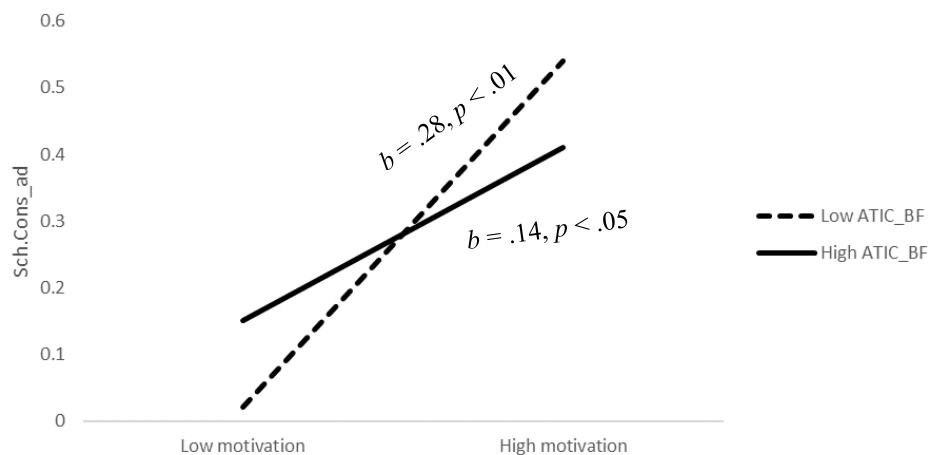


Figure 4. ATIC × Motivation Interactive Effect on Faking on School-specific Conscientiousness (Note. Sch.Cons\_ad is the adjusted difference score of school-specific conscientiousness. ATIC\_BF is the ATIC rating corresponds to the general big five personality measure)



Simple slope analyses showed that the effect of ATIC\_BF on faking was not significant either among people with high motivation to fake ( $\beta = -.10, t(201) = -1.23, p = .22$ ) or among people with low motivation to fake ( $\beta = .09, t(201) = 1.22, p = .22$ ). Therefore, the effect of ATIC\_BF on faking was negligible. These results might be explained by high transparency of the school-specific conscientiousness measure. That is, people did not need to have high ability to fake in order to fake successfully on the transparent school-specific conscientiousness measure. Therefore, the ability to fake did not play much role in predicting faking but the motivation to fake was the main predictor of faking behavior.

For other personality dimensions, the interaction effects were not significant (see Table 5). The main effects showed that the motivation to fake was a predictor of difference scores on openness, conscientiousness, extroversion, agreeableness, emotional stability, and school-specific conscientiousness while ATIC\_BF did not predict these difference scores.

Table 5

*Regression Models Involving ATIC\_BF on Difference Scores of Personality*

Steps	Predictors	Open_ad			Conscien_ad			Extro_ad			Agree_ad			Emo.Sta_ad			Sch.Cons_ad		
		$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
Step 1			.00			.01			.02			.02			.01			.01	
	Age	.02			.09			.08						.00				.09	
	Gender	.02			-.05			-.09						-.09				-.07	
Step 2			.04	.04*		.16	.15**		.09	.07**		.12	.10**		.07	.06**		.13	.12**
	Age	.02			.09			.08						-.00				.09	
	Gender	.04			-.02			-.08						-.08				-.04	
	Motivation	.18**			.39**			.26**						.25**				.34**	
	ATIC_BF	.09			.00			-.10						-.02				-.00	
Step 3			.05	.00		.16	.00		.10	.01		.12	.00		.07	.01		.15	.02*
	Age	.02			.09			.07						-.01				.10	
	Gender	.03			-.02			-.08						-.07				-.05	
	Motivation	.26			.39**			.09						.11				.58**	
	ATIC_BF	.24			.01			-.42						-.27				.44 <sup>†</sup>	
	Motivation × ATIC_BF	-.18			-.01			.39						.31				-.53*	

*Note.* Gender: 1 = male, 0 = female. ATIC\_BF is the ATIC in the IPIP-50 measure. Motivation = Test-taking motivation. Extro = Extroversion. Agree = Agreeableness. Conscient = Conscientiousness. Emo.Sta = Emotional stability. Open = Openness to experience. Sch.Cons = School-specific conscientiousness. ad = Adjusted difference scores.

\*  $p < .05$ , \*\*  $p < .01$ .

Table 6

*Regression Models Involving ATIC\_SC on Difference Scores of Personality*

Steps	Predictors	Open_ad			Conscien_ad			Extro_ad			Agree_ad			Emo.Sta_ad			Sch.Cons_ad		
		$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
Step 1			.00			.01			.02			.02			.01			.01	
	Age	.02			.09			.08			-.10			.00			.09		
	Gender	.02			-.05			-.09			-.08			-.09			-.07		
Step 2			.05	.05**		.16	.15**		.08	.07**		.12	.10**		.07	.06**		.13	.12**
	Age	.01			.09			.08			-.11			-.00			.09		
	Gender	.05			-.02			-.09			-.05			-.07			-.04		
	Motivation	.18*			.39**			.26**			.31**			.24**			.34**		
	ATIC_SC	.14†			-.02			-.07			.03			.01			-.00		
Step 3			.06	.01		.16	.00		.11	.02*		.12	.00		.07	.01		.14	.01
	Age	.02			.09			.07			-.10			-.01			.10		
	Gender	.04			-.02			-.07			-.06			-.07			-.05		
	Motivation	.33			.34*			-.01			.38**			.12			.48**		
	ATIC_SC	.44			-.13			-.63*			.19			-.27			.29		
	Motivation × ATIC_SC	-.36			.12			2.14*			-.18			.32			-.34		

*Note.* Gender: 1 = male, 0 = female. ATIC\_SC is the ATIC in the school-specific conscientiousness measure. Motivation = Test-taking motivation. Extro = Extroversion. Agree = Agreeableness. Conscient = Conscientiousness. Emo.Sta = Emotional stability. Open = Openness to experience. Sch.Cons = School-specific conscientiousness. ad = Adjusted difference scores.

\*  $p < .05$ , \*\*  $p < .01$ .

We found that the interaction effect between the motivation to fake and ATIC\_SC on difference scores of extroversion was significant such that the relationship between the motivation to fake and faking behavior was stronger among people with higher ATIC\_SC (see Figure 5). Simple slope analyses showed that the effect of ATIC\_SC on faking was in general negative with  $\beta = -.20$ ,  $t(201) = -2.29$ ,  $p < .05$  among people with low motivation to fake and  $\beta = .08$ ,  $t(201) = .98$ ,  $p = .32$  among people with high motivation to fake (see Figure 5). People with high ATIC\_SC actually faked less when they had low motivation and their faking was mainly driven by their motivation to fake, whereas people with low ATIC\_SC did not increase their faking levels as their motivation to fake increased. This partially supported the idea that ATIC was a prerequisite for applicant faking.

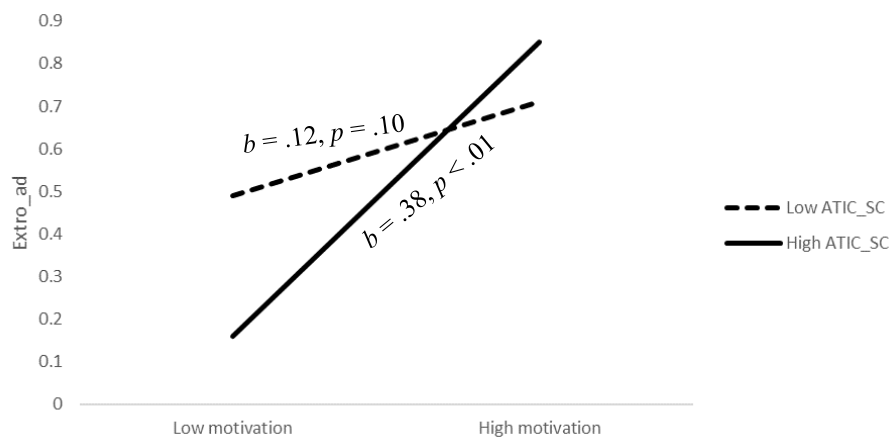


Figure 5. ATIC × Motivation Interactive Effect on Faking on Extroversion  
 (Note. Extro\_ad is the adjusted difference score of extroversion. ATIC\_SC is the ATIC rating corresponds to the specific conscientiousness personality measure)

For other dimensions, the interaction effects were not significant (see Table 6). The main effects were that the motivation to fake was a predictor of difference scores on openness, conscientiousness, extroversion, agreeableness, emotional stability and school-specific

conscientiousness, whereas ATIC\_SC did not significantly predict these difference scores (only marginally predict the difference scores on openness to experience).

Research question 1 and 3 asked whether ATIC and test-taking motivation were predictors of faking (i.e., being denoted as difference scores). Research 5 asked whether there was an interaction effect between ATIC and test-taking motivation on faking behavior. The general answers for these questions should be: there was limited evidence supporting the interaction effect between ATIC and test-taking motivation on faking behavior; ATIC could not predict faking behavior; and test-taking motivation was a strong predictor of faking on all personality dimensions.

**3. ATIC and Predictive Validity of Personality Scores.** Table 4 shows that correlation coefficients between personality dimensions and GPA are all bigger in the baseline setting than those in the simulated application setting. Specifically, the correlations between openness to experience and GPA were .17 ( $p < .05$ ) and .11 ( $p > .05$ ) at Time 1 and Time 2, respectively. The correlations between conscientiousness and GPA were .23 ( $p < .01$ ) and .13 ( $p > .05$ ) at Time 1 and Time 2, respectively. The correlations between school-specific conscientiousness and GPA were .45 ( $p < .01$ ) and .38 ( $p < .01$ ) at Time 1 and Time 2, respectively. These results might reflect that faking that occurred at Time 2 reduced the criterion-related validity of personality scores. If ATIC is a determinant of faking, it may work as a suppressor or moderator on the predictive validity of personality scores on GPA. According to Paulhus, Robins, Trzesniewski, and Tracy (1994), suppression effect occurs when the addition of a new predictor improves the predictive validity of original predictors in a regression model. Accordingly, if adding ATIC in a regression equation improves the predictive validity of personality traits on GPA, the suppression effect of ATIC is supported.

In order to test whether ATIC suppressed or moderated the personality scores – GPA associations, I ran a four-step regression model for each personality dimension (see Table 7 and Table 8). Specifically, at step 1, only control variables including age and gender (dummy coding as male = 1, female = 0) were entered; at step 2, the particular personality dimension was entered; at the step 3, the ATIC was entered; and at step 4, the ATIC × personality dimension interaction term was entered. As seen in Table 7 and Table 8, ATIC\_BF did not have any moderation effects on personality dimensions – GPA relationships, whereas ATIC\_SC moderated the relationship between extroversion scores and GPA. The simple slope analyses showed that the extroversion scores had stronger predictive power on GPA for people who had higher ATIC\_SC (see Figure 6). Therefore, ATIC actually increased the score accuracy on extroversion dimension, which in turn boosted the predictive validity of personality scores.

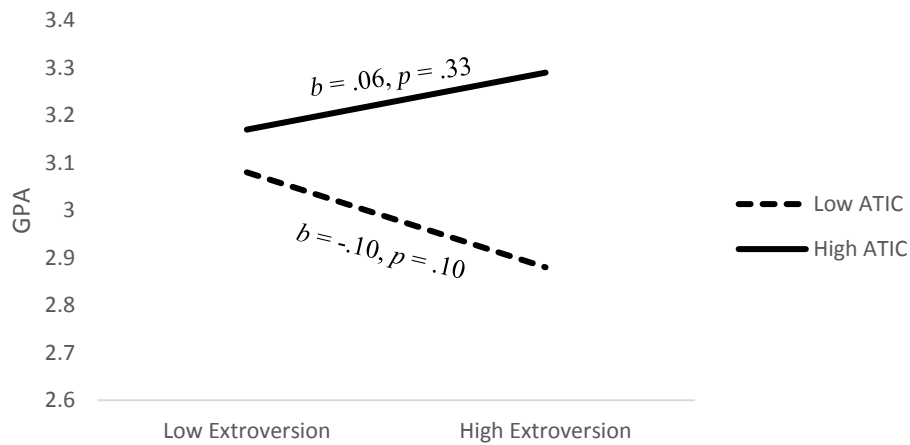


Figure 6. ATIC\_SC × Extroversion Interactive Effect on GPA  
 (Note. ATIC\_SC is the ATIC rating corresponds to the specific conscientiousness personality measure)

Table 7

*The Moderating and Suppression Effect of ATIC\_BF on Personality-GPA link*

Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.10	-.09	Age	-.12	-.12	-.10	-.10
Gender	.10	.10	.10	.10	Gender	.10	.10	.10	.10
Extro_t2		-.05	-.06	-.15	Conscient_t2		.13 <sup>†</sup>	.09	.23
ATIC_BF			.26**	.06	ATIC_BF			.24**	.58
ATIC_BF × Extro_t2				.23	ATIC_BF × Conscient_t2				-.38
R <sup>2</sup>	.02	.02	.09	.09	R <sup>2</sup>	.02	.04	.10	.10
$\Delta R^2$		.00	.07**	.00	$\Delta R^2$		.02 <sup>†</sup>	.07**	.00
Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.10	-.10	Age	-.12	-.14	-.11	-.11
Gender	.10	.11	.11	.10	Gender	.10	.06	.07	.07
Agree_t2		.04	.02	.07	Emo.Stab_t2		.12	.09	.06
ATIC_BF			.26**	.41	ATIC_BF			.25**	.19
ATIC_BF × Agree_t2				-.17	ATIC_BF × Emo.Stab_t2				.07
R <sup>2</sup>	.02	.02	.09	.09	R <sup>2</sup>	.02	.03	.09	.09
$\Delta R^2$		.00	.07**	.00	$\Delta R^2$		.01	.07**	.00
Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.10	-.10	Age	-.12	-.12	-.10	-.10
Gender	.10	.08	.10	.10	Gender	.10	.12	.12	.12
Open_t2		.11	.05	-.11	Sch.Cons_t2		.39**	.36**	.25
ATIC_BF			.24**	-.29	ATIC_BF			.19**	-.09
ATIC_BF × Open_t2				.60	ATIC_BF × Sch.Cons_t2				.33
R <sup>2</sup>	.02	.03	.09	.10	R <sup>2</sup>	.02	.17	.21	.21
$\Delta R^2$		.01	.07**	.01	$\Delta R^2$		.15**	.19**	.00

*Note.* Gender: 1 = male, 0 = female. ATIC\_BF is the ATIC in the general big five personality test. Extro = Extroversion. Agree = Agreeableness. Conscient = Conscientiousness. Emo.Sta = Emotional Stability. Open = Openness to experience. Sch.Cons = School-specific Conscientiousness. t2 = Time 2.

\*  $p < .05$ , \*\*  $p < .01$ .

Table 8

*The Moderating and Suppression Effect of ATIC\_SC on Personality-GPA link*

Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.12	-.11	Age	-.12	-.12	-.12	-.12
Gender	.10	.10	.11	.13	Gender	.10	.10	.11	.10
Extro_t2		-.05	-.03	-.33**	Conscient_t2		.13 <sup>†</sup>	.11	.23
ATIC_SC			.20**	-.49	ATIC_SC			.19*	.52
ATIC_SC × Extro_t2				.75*	ATIC_SC × Conscient_t2				-.36
R <sup>2</sup>	.02	.02	.06	.08	R <sup>2</sup>	.02	.04	.08	.08
$\Delta R^2$		.00	.04*	.02*	$\Delta R^2$		.02 <sup>†</sup>	.05**	.00
Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.12	-.13	Age	-.12	-.14	-.13	-.14
Gender	.10	.11	.12	.12	Gender	.10	.06	.08	.07
Agree_t2		.04	.03	-.07	Emo.Stab_t2		.12	.10	-.11
ATIC_SC			.20**	-.11	ATIC_SC			.20**	-.33
ATIC_SC × Agree_t2				.34	ATIC_SC × Emo.Stab_t2				.59
R <sup>2</sup>	.02	.02	.06	.07	R <sup>2</sup>	.02	.03	.07	.09
$\Delta R^2$		.00	.04*	.00	$\Delta R^2$		.01	.05**	.01
Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.12	-.12	Age	-.12	-.12	-.12	-.12
Gender	.10	.08	.10	.10	Gender	.10	.12	.13*	.13*
Open_t2		.11	.07	.02	Sch.Cons_t2		.39**	.38**	.37*
ATIC_SC			.19**	-.02	ATIC_SC			.18**	.15
ATIC_SC × Open_t2				.23	ATIC_SC × Sch.Cons_t2				.03
R <sup>2</sup>	.02	.03	.07	.07	R <sup>2</sup>	.02	.17	.20	.20
$\Delta R^2$		.01	.05**	.00	$\Delta R^2$		.15**	.18**	.00

*Note.* Gender: 1 = male, 0 = female. ATIC\_SC is the ATIC in school-specific conscientiousness. Extro = Extroversion. Agree = Agreeableness. Conscient = Conscientiousness. Emo.Sta = Emotional Stability. Open = Openness to experience. Sch.Cons = School-specific Conscientiousness. t2 = Time 2.

\*  $p < .05$ , \*\*  $p < .01$ .



As seen in Table 4, the correlation between ATIC\_BF and GPA is .26 ( $p < .01$ ), and the correlation between ATIC\_SC and GPA is .20 ( $p < .01$ ). The regression results showed that ATIC\_BF and ATIC\_SC were still significantly related to GPA after age and gender were controlled (see Table 7 and Table 8). Additionally, when ATIC was entered, the regression weight of each personality trait on GPA was reduced. This pattern was more obvious for ATIC\_BF than for ATIC\_SC. For instance, when ATIC\_BF was entered in the regression model on conscientiousness, the regression weight of conscientiousness on GPA was reduced from .13 (which was marginally significant) to .09 (which was nonsignificant), and the regression weight of school-specific conscientiousness on GPA was reduced from .39 ( $p < .01$ ) to .36 ( $p < .01$ ). These results are inconsistent with suppression effects (Paulhus et al., 2004). Instead, they were similar to the pattern of the point-to-point correspondence of ATIC ratings that was previously found in research focusing on job interviews and assessment centers (see Figure 2).

To further answer the research question 2, “should ATIC reduce or increase the predictive validity of personality scores”, I conducted path analyses to examine the ATIC’s effect on the predictive validity of personality scores. In Jansen et al.’s (2013) study, ATIC in assessment centers and job interviews worked as a common variance between selection performance and job performance and thus was one of the explanations of why test performance on these selection procedures could predict job performance to some extent (see Figure 2). Accordingly, ATIC in personality tests may also serve as a common variance between school-specific conscientiousness scores (the only personality dimension showing consistent predictive validity on GPA) and GPA.

I ran a mediated path model using PROCESS, which is a macro for SPSS ([www.afhayes.com](http://www.afhayes.com)). Results showed that the indirect effect of ATIC\_BF on GPA through

school-specific conscientiousness was .06, with 95% CI of [.06, .30]. Specifically, the total predictive power of school-specific conscientiousness on GPA was .38 (see Figure 7.1), and after controlling ATIC\_BF, the predictive weight reduced to .35 (see Figure 7.2). Thus, ATIC\_BF accounted for 7.9% of variance  $((3.8-3.5)/.38)$  in predictive validity of personality scores on GPA. The indirect effect of ATIC\_SC on GPA through school-specific conscientiousness scores was not significant, with the indirect effect of .02 and 95% CI was [-.02, .07]. Therefore, the nature of ATIC was as follows: (1) ATIC\_BF predicted GPA; (2) ATIC\_BF predicted scores on the school-specific conscientiousness measure; and (3) ATIC\_BF was a common variance shared by school-specific conscientiousness scores and GPA, which was thus one of explanations of the predictive validity of school-specific conscientiousness scores. All the above results have indicated that ATIC did not reduce the predictive validity of personality scores on academic performance (i.e., GPA). In contrast, it works to increase the predictive power of personality tests on academic performance.

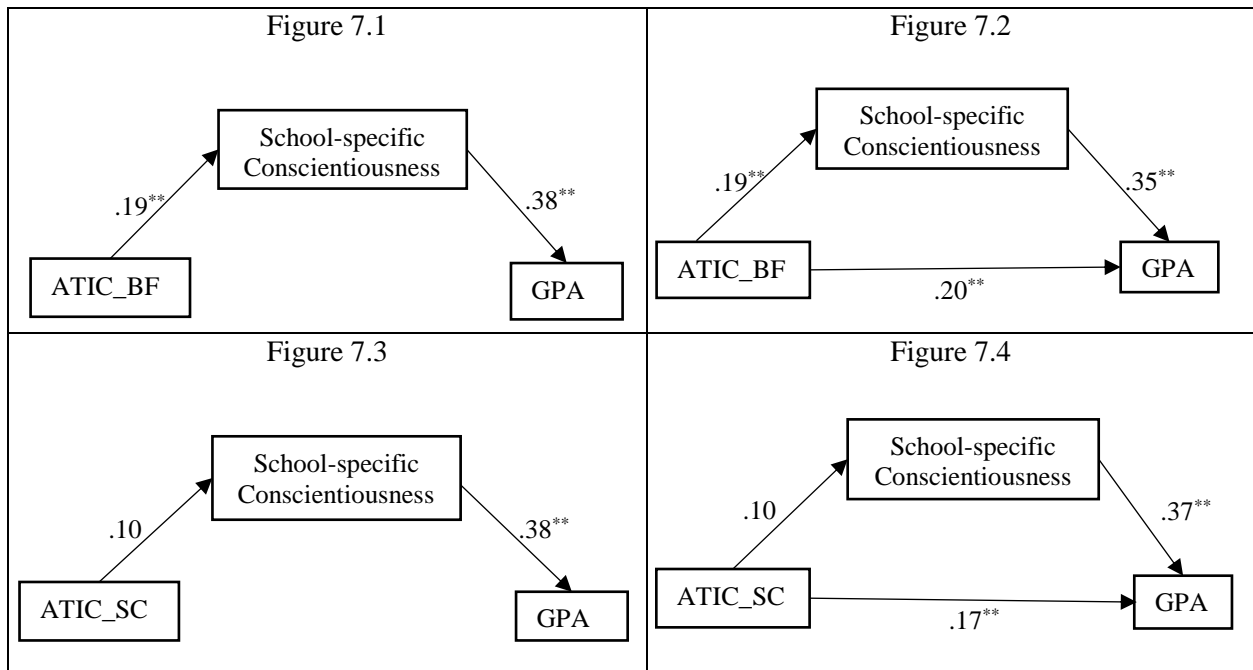


Figure 7. ATIC, Personality Scores and GPA

**4. Test-taking Motivation and Predictive Validity of Personality scores.** Since applicant test-taking motivation was positively related to faking on personality tests, it might work as a suppressor or a moderator on the predictive validity of personality scores. Test-taking motivation, as a determinant of faking, introduced bias in personality scores and resulted in low score accuracy. In this way, test-taking motivation might suppress the predictive validity of personality scores on GPA such that if test-taking motivation was controlled, the predictive validity of personality scores on GPA increased. Alternatively, test-taking motivation might moderate the relationships between personality scores and GPA such that the predictive validity of personality scores on GPA might be higher among participants whose test-taking motivation was lower.

In order to test whether test-taking motivation suppressed or moderated the relationship between personality scores and GPA, I also ran a four-step regression model for each personality dimension (see Table 9). Results showed that the moderating effects of test-taking motivation on the criterion-related validity of personality scores were not significant across all personality dimensions. However, the suppression effects of test-taking motivation were possible for conscientiousness and school-specific conscientiousness dimensions. Specifically, before controlling test-taking motivation, the regression weight of conscientiousness on GPA was not significant ( $\beta = .13, p > .05$ ), while the regression weight turned to be significant ( $\beta = .17, p < .05$ ) when partialling out the test-taking motivation factor. Consistent with the general pattern of suppression effects (Paulhus et al., 2004), the regression weight of test-taking motivation was negative and significant ( $\beta = -.15, p < .05$ ). Similarly, after controlling test-taking motivation, the regression weight of school-specific conscientiousness on GPA was increased from .39 ( $p < .01$ ) to .46 ( $p < .01$ ). The regression weight of test-taking motivation was negative and significant ( $\beta$

= -.24,  $p < .01$ ). For other personality dimensions, the results showed similar patterns to suppression effects but did not reach the level of significance.

In order to test the significance of suppression effects, MacKinnon, Krull and Lockwood (2000) proposed the statistical similarities between mediation and suppression effects: if the indirect effect from an independent variable (e.g., conscientiousness) to a dependent variable (e.g., GPA) via a suppression variable (e.g., test-taking motivation) is significant and negative, the suppression effect is regarded as significant. Accordingly, I tested the significance of suppression effects by examining whether the indirect effects of conscientiousness/school-specific conscientiousness on GPA via test-taking motivation were significant or not based on the bootstrapping method. Results showed that the suppression effect of test-taking motivation on conscientiousness - GPA link was -.03, which was negative and significant with 95% CI being [-.07, -.00]; and the suppression effect of test-taking motivation on school-specific conscientiousness - GPA link was -.05, which was also negative and significant with 95% CI being [-.10, -.02]. In conclusion, test-taking motivation was a proximal antecedent of faking, which introduced response bias into personality scores, and thus suppressed the criterion-related validity of conscientiousness and school-specific conscientiousness.

Therefore, regarding the research question 4, “should test-taking motivation reduce or increase the predictive validity of personality scores”, the answer is that test-taking motivation reduces the predictive validity of personality scores (i.e., conscientiousness and school-specific conscientiousness) on academic performance.

Table 9

*The Moderating Effect of Test-taking Motivation on Personality-GPA link*

Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.13	-.12	Age	-.12	-.12	-.13	-.14
Gender	.10	.10	.09	.10	Gender	.10	.10	.09	.10
Extro_t2		-.05	-.02	.39	Conscient_t2		.13	.17*	-.12
Motivation			-.09	.43	Motivation			-.15*	-.58
Motivation $\times$ Extro_t2				-.76	Motivation $\times$ Conscient_t2				.59
R <sup>2</sup>	.02	.02	.03	.05	R <sup>2</sup>	.02	.04	.06	.06
$\Delta R^2$		.00	.01	.02	$\Delta R^2$		.02	.02*	.01
Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.13	-.12	Age	-.12	-.14	-.15*	-.15*
Gender	.10	.11	.11	.11	Gender	.10	.06	.04	.03
Agree_t2		.04	.08	.33	Emo.Stab_t2		.12	.14	.47
Motivation			-.12	.39	Motivation			-.12	.30
Motivation $\times$ Agree_t2				-.65	Motivation $\times$ Emo.Stab_t2				-.57
R <sup>2</sup>	.02	.02	.04	.05	R <sup>2</sup>	.02	.03	.05	.05
$\Delta R^2$		.00	.01	.01	$\Delta R^2$		.01	.01	.01
Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$	Predictors	Step 1: $\beta$	Step 2: $\beta$	Step 3: $\beta$	Step 4: $\beta$
Age	-.12	-.12	-.13	-.13	Age	-.12	-.12	-.14*	-.14*
Gender	.10	.08	.07	.08	Gender	.10	.12	.11	.11
Open_t2		.11	.13	.00	Sch.Cons_t2		.39**	.46**	.33
Motivation			-.12	-.34	Motivation			-.24**	-.46
Motivation $\times$ Open_t2				.28	Motivation $\times$ Sch.Cons_t2				.30
R <sup>2</sup>	.02	.03	.05	.05	R <sup>2</sup>	.02	.17	.22	.23
$\Delta R^2$		.01	.01	.00	$\Delta R^2$		.15**	.05**	.00

*Note.* Motivation = Test-taking motivation. Extro = Extroversion. Agree = Agreeableness. Conscient = Conscientiousness. Emo.Sta = Emotional Stability. Open = Openness to experience. Sch.Cons = School-specific Conscientiousness. t2 = Time 2.

\*  $p < .05$ , \*\*  $p < .01$ .

## Discussion

Study 2 was conducted to examine whether the motivation to fake and the ability to fake predicted faking behavior, and whether these two factors reduced the predictive validity of personality scores. Results showed that the motivation to fake was as an important predictor of faking behavior, and also suppressed the predictive validity of conscientiousness and school-specific conscientiousness on academic performance. However, there was limited evidence that supported the relationship between the ability to fake (ATIC) and faking behavior.

Similar to the results of studies on job interviews and assessment centers (e.g., Jansen et al., 2013), we found that ATIC contributed to the criterion-related validity of selection procedures. Specifically, as shown in Figure 7, the nature of ATIC was as follows: (1) ATIC\_BF predicted GPA; (2) ATIC\_BF predicted personality scores on the school-specific conscientiousness measure; and (3) ATIC\_BF was a common variance shared by school-specific conscientiousness scores and GPA. Thus, ATIC in a general personality measure was one of explanations of the predictive validity of school-specific conscientiousness scores on GPA.

In addition, ATIC in the school-specific conscientiousness measure moderated the extroversion - GPA relationship such that ATIC increased the relationship between extroversion and GPA from negative ( $\beta = -.10$ ) to slightly positive ( $\beta = .06$ ) (see Figure 6). These results may be due to low transparency of the extroversion subscale. For instance, research in personality tests has yielded unclear relationships between extroversion and academic performance (Oswald, Schmitt, Kim, Ramsay, & Gillespie, 2004). Because of low transparency, in order to fake successfully on the extroversion subscale, people should have high ability to understand what dimensions the personality subscale are measuring. When people's ATIC is low, people's responses on the extroversion subscale might have low score accuracy and thus might not predict

their academic performance. The truth that ATIC and the motivation to fake only affect the predictive power of conscientiousness and school-specific conscientiousness, not other personality dimensions, may be largely due to high job/academic desirability of conscientiousness dimensions (Barrick & Mount, 1991).

## General Discussion

Although several faking models or frameworks have been established by faking scholars, the psychological process of faking on personality tests remains a poorly understood phenomenon. Most faking scholars have emphasized that the ability to fake and the motivation to fake are two important proximal antecedents of applicant faking. That is, applicants engage in successful faking mainly because of their being motivated and able to fake. There is a lack of consensus, however, regarding the measurement of these two constructs. This article consists of two studies to clarify several important issues in the faking area: (a) how to operationally define and measure the concepts of the ability to fake and the motivation to fake; (b) what the nomological network of the ability to fake in personality tests is; (c) how the ability to fake and the motivation to fake are related to faking; and (d) how these two factors affect the criterion-related validity of personality tests.

According to Ellingson and McFarland (2011), the motivation to fake is well explained by the VIE theory of motivation, which consists of valence, instrumentality and expectancy dimensions. Based on this theory, researchers can measure job applicants' motivation to fake in a more nuanced way, rather than measure it by directly asking them "are you going to fake or lie on a selection test?" (McFarland & Ryan, 2006; Mueller-Hanson et al., 2006). Fortunately, the measurement of this motivational component based on valence, instrumentality and expectancy aspects is well established in the test-taking motivation area (e.g., Arvey et al., 1990; Sanchez et al., 2000).

Unlike the motivation to fake, the ability to fake has been less explored. After an intensive literature review, the ability to fake is best defined as the ability to identify criteria (ATIC) in personality tests. The ATIC measurement was developed in the 1990s and firstly



applied in job interviews and assessment centers (Kleinmann et al., 2011). ATIC is a measure-specific measurement, which is designed based on a specific selection test. I found only one study that has developed an ATIC measurement in a personality test (König et al., 2006). Due to the lack of ATIC measures in personality tests, the nomological network or the nature of ATIC in personality tests has seldom been explored by researchers. Study 1 sought to extend our understanding of the nature of this relatively new construct in the faking area.

### **The Nature of ATIC in Personality Tests**

ATIC was initially conceptualized as the ability to assess situation demands in selection procedures such as job interviews or assessment centers (Kleinmann et al., 2011). Study 1 tried to examine whether ATIC in personality tests was related to cognitive ability and self-monitoring, as well as whether ATIC ratings were affected by the frame-of-reference of personality tests. Results showed that ATIC was correlated with verbal, numerical and abstract reasoning abilities, but not correlated with the concept of self-monitoring. These results have indicated that ATIC in personality tests is also a specific measure of cognitive ability. However, ATIC in personality tests was not associated with self-monitoring, an important social competence factor. Contrary to our findings, Griffin (2014) found that ATIC in interviews was predicted by social understanding, but not by cognitive ability. These inconsistent results may be due to the low requirements for social interactions of personality tests compared to job interviews. In a job interview, a job candidate needs to interact with other people such as interviewers and his or her social skills are essential to determine his or her selection performance. Conversely, job candidates do not need to act socially when completing a personality test. That is, social-related activities such as communicating with others, cooperating with others or teamwork are not involved in completing a personality test. Therefore, ATIC

ratings in personality tests lack the social competence component and only reflect the cognitive ability component.

In order to examine the effect of the frame-of-reference of personality tests on ATIC scores, I have applied the ATIC measure in a general personality measure (i.e., the IPIP measure) and in a specific personality measure (i.e., the school-specific conscientiousness measure). Participants had higher ability to identify dimensions (ATIC) in the school-specific conscientiousness measure than in the IPIP measure in both Study 1 and Study 2. The cross-measure consistency of these two ATIC ratings was also apparent because of the high correlations between ATIC ratings in the IPIP measure and ATIC ratings in the school-specific conscientiousness measure with  $r = .52$  and  $.69$  for Study 1 and Study 2, respectively. Results of Study 1 have also shown that ATIC in the general personality measure is a more ability-laden concept than ATIC in the specific personality measure (although the difference in correlation coefficients was not significant) because the former has higher correlations with three aspects of cognitive ability than the latter. This ability-laden nature is also partially supported by the correlations between ATIC and GPA: ATIC in the general big five measure has a higher correlation with GPA ( $r = .26$ ) than the ATIC in the school-specific conscientiousness measure ( $r = .20$ ) (although the difference in correlation coefficients was not significant).

### **The Effects of the Ability to Fake and the Motivation to Fake on Faking**

Study 2 tested a model of faking that integrated the VIE theory of faking motivation and the ATIC concept denoting faking ability. In general, results of Study 2 showed that the motivation to fake could strongly predict faking behavior on all personality dimensions, whereas ATIC was not related to faking or its effects on faking were negligible. I have also examined the effect of ATIC and the motivation to fake on the predictive validity of personality scores. Results

showed that the motivation to fake suppressed the criterion-related validity of personality scores. Specifically, when the motivation to fake was controlled in regression models, the predictive power of conscientiousness and school-specific conscientiousness on GPA increased significantly.

Generally, ATIC was not a proximal predictor of faking behavior, which actually aided in the predictive validity of school-specific conscientiousness on GPA. The ATIC, as an ability of situational assessment, enables people to behave in a socially effective way in a selection context as well as in a real academic setting. Conscientiousness is an academic-related personality dimension. That is, it is strongly associated with academic performance (Oswald, Schmitt, Kim, Ramsay, & Gillespie, 2004). People who have high ATIC should realize the academic-relevance of the conscientiousness dimension, and may report higher scores on this subscale in a plausible range. In the same vein, people with high ATIC should know how to perform in classes, quizzes and exams, and thus obtain high GPAs at school. Overall, ATIC in personality tests, which serves as a common variance of conscientiousness scores and GPA, may contribute to the criterion-related validity of conscientiousness scores. To support this argument, we found that ATIC in the general personality measure was a common variance of school-specific conscientiousness scores and GPA. It provides a partial explanation on why school-specific conscientiousness scores should predict GPA.

### **Is Faking an Issue?**

There is a heated debate in the faking literature regarding whether faking is an issue or not. One group of researchers have argued that faking may bias true personality scores, present error variance, and thus harm the construct and criterion-related validity of personality tests and reduce the quality of hiring decisions (e.g., Lanyon et al., 2014; Mueller-Hanson et al., 2003).

This characterization of faking emphasizes faking as an intentional and effortful behavior because job applicants consciously choose or decide to provide inaccurate responses on a personality test in order to increase their chance of being hired (Griffith & Peterson, 2006). In contrast, other researchers have argued that faking is rare in selection settings and it is not a serious concern because it is an expression of social effectiveness skills (Barrick & Mount, 1996; Hogan, Barrett, & Hogan, 2007). The results in this study provide some valuable insights to alleviate the above dissents among two groups of researchers.

The divergent views may in fact reflect the different components of faking behaviors. The first group of researchers may focus their attention on the motivational-aspect of faking (Peterson, Griffith, Isaacson, O'Connell, & Mangos, 2011). Ellingson and McFarland (2011) emphasized that it was the motivating force that stimulated a conscious intention to fake. Thus, faking is characterized as a conscious and motivational behavior involving job applicants being motivated to distort their responses on personality tests in order to obtain a job position. From this specific perspective, faking prohibits selection decisions based on full and accurate personality information, displaces qualified individuals with fakers (Peterson, Griffith, & Converse, 2009), and then deteriorates the predictive power of personality scores. This perspective was supported by the present study because the motivation to fake predicted faking and suppressed the predictive validity of personality scores. Therefore, faking behavior stimulated by a motivating force should have damaging effects on the quality of hiring decisions and the criterion-related validity of personality scores.

The other group of researchers, however, may focus their attention on the ability-aspect of faking. Hogan et al. (2007) proposed that faking could be defined as normal impression management skills that aim to maximize social acceptance and minimize social rejection and the

loss of status, and it could not be distinguished from typical socialized behavior. This idea was also suggested by Viswesvaran and Ones (1999) when they stated that fakability (i.e., the ability to fake) reflected social intelligence. From this perspective, faking is an expression of social effectiveness, which may actually increase the predictive validity of personality scores. For instance, Blickle, Momm, Schneider, Gansen, and Kramer (2009) found that applicants' personality scores (these personality scores were believed to be affected by faking) correlated more strongly with job performance and context performance than their honest personality. Klehe et al. (2012) also argued that social perceptiveness might account for a possible positive relationship between faking and performance. The current study partially supported this point of view by demonstrating that the ability to fake was not associated with faking, which actually increased the predictive validity of personality scores. Therefore, a faking behavior being conceptualized as a type of ability is not a negative thing (Klehe et al., 2012).

### **Contributions**

The present study makes four major contributions to the faking literature. First, I am among the first who defines the ability to fake using the ability to identify dimensions (i.e., ATIC) in personality tests and who attempts to explore the nature of the ability to fake in personality tests. This research has indicated that ATIC in personality tests is an ability-relevant construct, but not a social-monitoring construct. There is a lack of studies that focus on the ability to fake across different selection contexts, for instance, different personality tests. Given that selection procedures may differ in their difficulty and transparency, different selection procedures may require job applicants to have different levels of ability to decipher the dimensions being measured. Therefore, we may observe some differences in the ability to fake across selection procedures. Just as shown in the current study, ATIC ratings in a more

transparent and specific personality measure are higher than those in a more general personality measure. However, it is also important to note that there is apparent evidence to show the cross-measure consistency of these ATIC ratings on different personality tests. I hope this attempt to integrate ATIC into faking areas could impel more researchers to study this individual difference factor (aka., ATIC) in faking areas.

Second, since McFarland and Ryan (2011) conceptualized the motivation to fake based on the VIE theory of motivation, this is the first study that measures the motivation to fake based on the VIE theory of motivation. Previously, researchers measured the motivation to fake from the perspective of behavioral intention (e.g., McFarland & Ryan, 2000, 2006; Mueller-Hanson et al., 2006). That is, they asked participants whether they were going to lie or fake on a selection test. This measurement may be applied to some lab settings in which participants are instructed to fake, but cannot be applied to simulated application or real job application settings in which real job applicants are competing for a job position and are thus less likely to admit their faking intention. Participants in the current study, however, were asked to indicate the desirability of the summer internship position (i.e., valence), and their believability in the importance of good test performance in personality tests (i.e., instrumentality). This measurement is less transparent and thus can be applied in real job application settings. By measuring the motivation to fake in a more nuanced way, we are able to understand the true effects of the motivation to fake.

Third, this is one of the first studies that measures the ability to fake and the motivation to fake and examines their effects on faking simultaneously. Surprisingly, the ability to fake and the motivation to fake yield different effects on faking behavior and on the criterion-related validity of personality scores. The motivation to fake predicts faking behavior, whereas the ability to fake does not. Additionally, the motivation to fake suppresses the predictive validity of

conscientiousness scores, whereas the ability to fake increases the predictive validity of school-specific conscientiousness scores. Faking scholars have long called for additional theorizing and research on the process of applicant faking, especially whether faking diminishes the criterion-related validity of personality assessments (e.g., Ellingson & McFarland, 2011; McFarland & Ryan, 2006). The present study, thus, serves as a good endeavor to reply to these calls. The opposite effects of the ability to fake and the motivation to fake on faking and the criterion-related validity of personality scores have facilitated our understanding of the psychological process of applicant faking. These may also help us reconcile the controversial views regarding whether faking is a concern or not in selection procedures. I hope this study becomes an impetus for more research on the psychological process of faking behavior.

Finally, a direct measure of faking behavior is used in the current study. Faking behavior is operationalized as differences in personality scores between the honest and simulated application conditions (McFarland & Ryan, 2006). This direct measure fits to the definition of faking behavior as a response distortion or response bias. Most previous faking researchers, however, use validity scales including the impression management scale (Paulhus, 1991), the self-deceptive enhancement scale (Paulhus, 1991), and the bogus statement questionnaire (Dwight & Donovan, 2003) to measure the levels of response distortion. Limited evidence has supported that these validity scales could detect and correct faking effectively (e.g., Hough, Eaton, Dunnette, Kamp, & McCloy, 1990; Kuncel & Borneman, 2007). More specifically, scores on validity scales do not moderate or suppress the predictive validity of personality scores on job performance (Klehe et al., 2012). Therefore, compared to using validity scales, using difference scores as an indicator of faking enables us to test the psychological process of faking more accurately.

## **Practical Implications**

Mueller-Hanson et al. (2006) said that having a better understanding of the antecedents of faking could lead to a better understanding of how faking affects the construct and criterion-related validity of personality scores and how to reduce faking behavior on selection procedures. Corresponding to this point of view, one practical implication of this present study is to know how to reduce faking more effectively. The results of the current research showed that the motivation to fake was an important predictor of faking. Accordingly, organizations may mitigate job applicants' faking behavior by altering people's motivation to fake. According to Pace and Borman (2006), the motivation to fake can be reduced by the implementation of warning messages. Warning messages are instructions shown at the beginning of personality tests to warn test-takers to avoid faking and respond honestly. Researchers can implement warning messages in personality tests to reduce their motivation to fake. This corresponds to a suggestion provided by McFarland and Ryan (2006) that the simple addition of instruction could alter faking. Researchers can design warning messages that directly target reducing valence or instrumentality dimensions of the motivation to fake.

## **Limitations and Future Research**

The current research suffers from several limitations. The first limitation involves the motivation technique used. The study recruited undergraduate students as participants. These students were deceived that they could apply for an internship position (Ellingson et al., 2012). The majority of participants (93.1%) believed the cover story that they could apply for an internship program while completing the personality tests. Additionally, around half of students (45.4%) indicated that he or she wanted to apply for the internship position and wrote down his or her email address. Therefore, this motivation technique was very efficient in simulating a real



job application setting. One concern of this technique is that the job position provided in the lab study was a short-term internship, which was not a long-term full-time job. People may argue that faking behavior occurred in applying for a short-term internship may be different from the faking behavior occurred in applying for a long-term full-time job. However, it is important to note that faking does occur in our simulated job application setting. From another perspective, undergraduate students are more likely to apply for an internship position than to apply for a full-time job position.

More than half of participants did not intend to apply for the internship position might imply participants' low motivation to fake and thus bring a concern regarding the experimental realism of the current study. This truth actually enables us to examine the role of the motivation to fake on faking behavior and the criterion-related validity of personality scores. Sanchez et al. (2000) mentioned that there was a restriction of range of test-taking motivation in job application settings. That is, in real application settings where all job applicants desire to obtain job positions, the motivation to fake should be highly skewed. The highly skewed data limits the potential of testing the effects of the motivation to fake and thus limits our understanding of the true relationship between the motivation to fake and faking behavior. This may be one of the reasons why there was no studies examining the effects of the motivation to fake on applicant faking in real field settings (McFarland & Ryan, 2006; Mueller-Hanson et al., 2006). The ceiling effect of the motivation to fake, however, did not occur in the current study. Participants came to attend this study for course credits. When they heard of the internship opportunity, some of them were interested whereas others were less interested, and this resulted in a normal distribution of the motivation to fake (see Figure 8). Therefore, in the current study, I was able to examine the

true effects of the motivation to fake on faking behavior with no need to take the restriction of range of the motivation to fake into consideration.

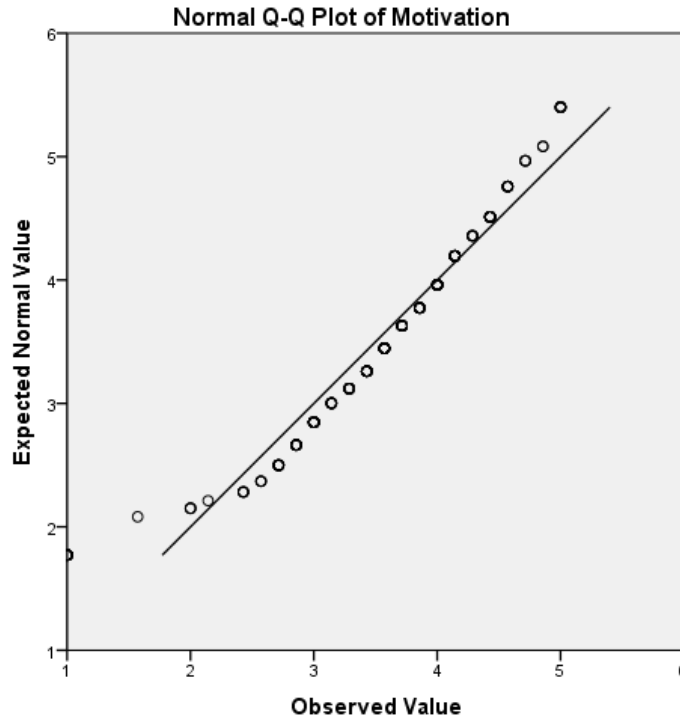


Figure 8. The Normal Q-Q Plot of Motivation

Overall, we can see the strengths of the deception motivational technique used in the current study. Ellingson and McFarland (2011) actually recommended researchers to use this deception technique in a lab setting to test the conceptual framework of faking. Future researchers can also embrace this motivational technique to simulate a better application setting in which participants' motivation to fake varies.

The second limitation is the issue of the generalizability of the study's results because this study was conducted among undergraduate students involving a summer internship position in the United States. It is unknown whether these research results can generalize to other samples, other settings and other cultures. Additionally, the performance criterion I used was students' GPAs. Researchers may find different results targeting different performance criteria,

such as absenteeism, contextual performance or college adjustment. Future faking researchers should also examine the role of the motivation to fake and the ability to fake on faking among other participants, in other settings or in other cultures, and pay attention to different performance criteria.

The third limitation is the issue of common source bias of some variables measured in the current research. I measured the self-monitoring and ATIC at the same setting in Study 1, which may raise the concern of common source bias. However, I relied on two trained coders to rate participants' responses on ATIC questionnaire. The common source bias between coders' ATIC ratings and self-reported self-monitoring skill should be diminished. Additionally, I have also collected data in Study 2 from three sources: from the participants (i.e., personality scores, test-taking motivation), from trained coders (i.e., ATIC ratings), and from archival data (i.e., GPA). This multi-source data should largely decrease the occurrence of common source bias. This is one of the strengths of the present study.

The final limitation of this study is that I did not incorporate environmental factors in the faking models and examine the effects of these environmental factors on faking behaviors as well. Several important environmental factors deserve our attention such as warnings against faking (e.g., McFarland & Ryan, 2003), the desirability of job positions (e.g., McFarland & Ryan, 2003; Snell et al., 1999), others' attitudes toward faking (e.g., Snell et al., 1999), and test characteristics (e.g., Snell et al., 1999). Warnings against faking emphasizing faking would be detected and caught fakers would be punished are likely to reduce faking (e.g., Dwight & Donovan, 2003). The desirability of job positions is influenced by employment status, career prospects, and the competition for the job positions (Goffin & Boyd, 2009). If an individual is currently unemployed, the position applied is very promising, and the competition is high, he or

she is quite likely to fake on a selection test. Additionally, the attitudes of important others (such as good friends and family members) toward faking should also affect participants' willingness to fake in the way that if their important others holding negative views about faking, they are less likely to fake on a personality test. Test characteristics are about the format of a personality test and the transparency of personality items (Snell et al., 1999). Specifically, researchers believed that forced-choice items are less susceptible to faking than Likert-style items, and transparent items were also easy to fake (e.g., Goffin & Boyd, 2009). Future researchers can facilitate our understanding of the psychological process of applicant faking by incorporating the aforementioned environmental factors into the faking model and testing their effects as well. Future researchers can also take the effects of some dispositional factors into consideration. The dispositional factors (e.g., morality, cognitive ability) should affect the applicant faking via the motivation to fake and the ability to fake. Specifically, Machiavellism, Manipulativeness, and lack of morality should enhance faking by increasing individuals' motivation to fake, whereas general mental ability, emotional intelligence and social competency should increase applicant faking by increasing individuals' ability to fake (e.g., Ellingson & McFarland, 2011; McFarland & Ryan, 2006; Snell et al., 1999). It is important to note that the current work is only a starting point in which a basic structure of faking framework including only two main proximal factors- the ability to fake and the motivation to fake is built. More studies are thus needed to furnish the basic model by adding more faking-relevant factors inside the model.

Future research can also try to study the psychological process of faking behavior by incorporating different techniques, such as think aloud protocol. The think aloud protocol is critical for researchers to scrutinize how people make decisions from a process perspective (Carroll & Johnson, 1990). I can only find two empirical studies using this technique to examine

the faking process (i.e., Hauenstein, Bradley, O'Shea, Shah, & Magill, 2017; Robie, Brown, & Beaty, 2007). Their focuses are mainly the motivation to fake. Future research should rely on this technique to understand how a job applicant makes decision on faking from both the motivational and ability-relevant perspectives. Barrick, Shaffer, and DeGrassi (2009) suggested that applicants could employ several IM tactics to raise their ratings such as self-focused or other-focused tactics, and honest or deceptive tactics. Think aloud technique can also help us to figure out what tactics a job applicant uses when completing a personality test, and how these tactics are related to their ability and motivation to fake.

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## Appendix A

### Deception script

Hello, I am \*\*\*. Thanks for coming to my lab and completing the first part of the study, which is my research. For the second part, you are going to do something completely different, and that is not even my research, as I am helping a friend of mine, who is a CEO for a company called InSat Corporation. They are developing a pre-screening assessment for recruiting and selecting college students into their paid summer internship program.

InSat needs a collection of college students to answer the questions to help with development. We have agreed to help them gather the data needed. This pre-screening assessment consists of a personality inventory, a basic skills survey, a general knowledge survey and several other surveys. It takes about 40 minutes to complete. Based on this pilot test, InSat will revise and finalize the pre-screening assessment. They plan to start a large-scale campus recruitment campaign in the spring semester (middle April) of \*\*\*\* at several major universities in the Southeast U.S. This of course includes Auburn University.

When the CEO of InSat approached me for help, I told him that we have this wonderful SONA system through which we will be able to get enough college students to tryout their pre-screening assessment. However, I also asked him if they could offer something additional? They came up with two additional benefits. First, InSat has agreed to sponsor the drawing for ten \$50 cash rewards. We will do the drawing at the end of the semester, and there will be 10 lucky participants who will each receive \$50 cash reward from InSat.

Second, as the CEO was talking to me, he was like, "You know what? Our campus recruitment campaign will cover Auburn University. Maybe some of the participants will be interested in our paid summer internship program. If they indicate that they are interested in the summer internship program by checking the "Yes" box at the end of the assessment, we will review their answers more carefully, and if they perform well on the assessment, we will be happy to give them the earlier consideration for the paid summer internship program." However, no need to feel pressured. That is, taking the test does not necessarily mean that you are required to attend the summer internship program.

In case you want to know a little bit more about this paid summer internship program, you will be paid at the rate of \$15/hour, and may earn up to \$8,000 for the whole summer. In the program, majority (about 70%) of the work you will do are basic clerical, for example, working with Microsoft office software, sending and receiving emails, organizing files, setting up meetings, and taking memos for meetings. However, you will also get a chance to work in the higher ends, such as selling ideas to potential clients, working in a team to come up business plans, and conducting basic level data analysis. InSat has written up an introduction to their paid summer internship program and you can find more details about it on the first page of the survey.

## Appendix B

### Job Description



#### Introduction

Thank you for your willingness to help us develop our pre-employment assessment for our Summer Internship Program. We do have openings in the program. At the end of this part, you'll be asked to indicate if you would like us to contact you about a position. If you select "yes", we'll take a close look at your responses to these questions and evaluate them given our needs. Please write down your name here first.

Here is a brief description of the summer internship program:

InSat Corporation's Summer Internship Program offers college students excellent development opportunities involving real-world job experience. The program consists of multiple paid summer internships, and placements will be available in various areas such as: human resource management, marketing, leadership development, technology, etc. Through a series of rotating assignments, young professionals receive focused development and a mentor. When screening for the Summer Internship Program, we are interested in selecting college students from a variety of backgrounds who are *hardworking* and *detail-oriented*, *sociable*, and *able to work well with others*, *bright and open-minded*, and *able to tolerate stress*. In addition, they need to have some *basic skills* and *broad knowledge background*.

## Appendix C

### The Debriefing Script

Thank you very much for your participation in this study. But I have to disappoint you—we are actually not working with InSat Corporation. InSat Corporation does not actually exist. I apologize for the deception and the disappointment you might have.

You may feel pissed off right now, because no one wants to be deceived. But let me explain—the deception condition was created for research purposes. I will make this debriefing session as educational as possible. I will explain why it is necessary for us to use the deception technique, and toward the end of the debriefing session, you will have the option of withdrawing your data from further analysis.

I am an industrial and organizational psychologist. The aim of this study is to examine applicant faking within selection contexts. Nowadays, more and more organizations ask job applicants to complete some sort of online personality tests and/or bio-data tests as part of the application processes. Recall the items you have just completed. They are all self-report, and the content is very transparent. Think about the job applicants, who really want to get the job, what will they do? They will fake good, or so called “putting the best foot forward.” Research has shown that faking damages the validities of the selection system. This is exactly the phenomenon that I am studying. In order to study this phenomenon, I need to simulate a situation under which research participants are motivated to fake. Historically, there have been two strategies to do this, but both met with limited success. The first strategy was to study real job applicants directly. But the problem is that if we piss off real job applicants, they will sue the company. That is why very few companies would allow researchers like me to study real job applicants. The second strategy was to study faking in the lab setting. Typically, the researcher will say something like, “Imagine that you are applying for your dream job and you really want to the job, and then please complete this personality test.” The problem with this strategy is that the kind of faking behaviors generated this way might not be comparable to the kind of faking behaviors that will occur naturally in the real-world selection contexts. You see, I am stuck. This is why I have decided to be more creative and innovative in this study. So, I pretended to offer a real job opportunity and hopefully at least some participants will be motivated to fake. I am not the first researcher who uses this deception technique. In fact, several other scholars have successfully used it in their research.

The research is supported by my research fund and the drawing for ten 50\$ cash rewards is real. We will do the drawing at the end of this semester. Each participant will get an equal chance to win the cash reward. Also, as mentioned in the informed consent, in order to validate the questionnaire, we need to obtain your GPA from the University Registrar, and will need your permission to get the access to that information.

Given that this study involves a deception, you have the choice of not allowing us to use your data in further analysis. If you choose this option, please notify the experimenter as soon as I leave the room.

## Appendix D

### IPIP-50: A General Big Five Personality Measure

Instruction: Please read the following statements and indicate the degree to which each statement is an accurate description of you with respect to how you behave. Describe yourself as you *generally* are (most of the time, in most situations), not as you wish to behave in the future. Describe yourself as you honestly see yourself in relation to others who are of the same sex as you, and roughly your same age. Your responses will be kept in absolute confidential, so please respond honestly.

#### Response Scale

Please indicate the extent to which each statement below describes the ways you typically think, feel, or act in your daily life.

	Strongly Disagree	Disagree	Slightly Disagree	Neutral/ Undecided	Slightly Agree	Agree	Strongly Agree
	1	2	3	4	5	6	7
1. I am the life of the party.							
2. I insult people.							
3. I am always prepared.							
4. I get stressed out easily.							
5. I have a rich vocabulary.							
6. I often feel uncomfortable around others.							
7. I am interested in people.							
8. I leave my belongings around.							
9. I am relaxed most of the time.							
10. I have difficulty understanding abstract ideas.							
11. I start conversations.							
12. I feel little concern for others.							
13. I get chores done right away.							
14. I am easily disturbed.							
15. I have excellent ideas.							
16. I keep in the background.							
17. I have a soft heart.							
18. I often forget to put things back in their proper place.							
19. I am not easily bothered by things.							
20. I do not have a good imagination.							
21. I don't like to draw attention to myself.							
22. I am hard to get to know.							
23. I follow a schedule.							
24. I change my mood a lot.							
25. I use difficult words.							
26. I don't mind being the center of attention.							
27. I feel others' emotions.							



28. I neglect my duties.							
29. I seldom get mad.							
30. I have difficulty imagining things.							
31. I take charge.							
32. I inquire about others' well-being.							
33. I do things according to a plan.							
34. I get irritated easily.							
35. I am full of ideas.							
36. I find it difficult to approach others.							
37. I love children.							
38. I do things in a half-way manner.							
39. I get angry easily.							
40. I will not probe deeply into a subject.							
41. I feel at ease with people.							
42. I have a good word for everyone.							
43. I make plans and stick to them.							
44. I feel threatened easily.							
45. I catch on to things quickly.							
46. I bottle up my feelings.							
47. I think of others first.							
48. I leave a mess in my room.							
49. I take offense easily.							
50. I am good at many things.							

## Appendix E

### School-specific Conscientiousness Scale

Instruction: Please indicate the extent to which each statement below describes the ways you typically think, feel, or act in your daily life.

Strongly Disagree      Disagree      Slightly Disagree      Neutral/ Undecided      Slightly Agree      Agree      Strongly Agree  
 1 ..... 2 ..... 3 ..... 4 ..... 5 ..... 6 ..... 7

	1	2	3	4	5	6	7
1. I have a lot of self-discipline in my course work.							
2. In my college studies, I don't feel like I'm driven to get ahead.							
3. I'm a very competent person when it comes to college level work.							
4. There are so many little class assignments that need to be done that I sometimes just ignore them all.							
5. For school projects, I have a clear set of goals and work toward them in an orderly fashion.							
6. I don't take student duties like completing professor evaluations very seriously.							
7. I strive to achieve all I can at college.							
8. In college, I am a productive person who always gets the work done.							
9. I keep myself informed and usually make intelligent decisions on class-related projects (e.g., long-range assignments, term papers, group projects, etc.).							
10. I have trouble making myself do what I should for classes.							
11. I pride myself on my sound judgment in my college class work.							
12. I work hard to accomplish my academic goals (e.g., completing homework, making grades, etc).							
13. I'm pretty good about pacing myself so as to get assignments done on time.							
14. I don't seem to be completely successful at anything school-related.							
15. I'm something of a "workaholic" at school.							
16. When I start a self-improvement program to improve my study habits, I usually let it slide after a few days.							

17. Once I start a class project, I almost always finish it.							
18. When it comes to class participation and course work, I am easy-going and lackadaisical.							
19. When a term project gets too difficult, I'm inclined to start a new one.							
20. I strive for excellence in everything I do at school.							
21. I'm known for my prudence and common sense when it comes to academic activities.							
22. When I study, I waste a lot of time before settling down to work.							
23. I often come into academic situations (e.g., tests, group projects, etc.) without being fully prepared.							
24. I am efficient and effective at my schoolwork.							

## Appendix F

### Test-taking Motivation

Instruction: The following statements are about your motivation to obtain the summer internship position at **InSat**. Please rate each statement using the 7-point scale below to indicate the extent to which each statement below describes the ways you are thinking during the assessment.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral/ Undecided	Agree	Strongly Agree

1. I would like to be hired for this job.
2. It would be good to have such a position in InSat.
3. I want to get the job in InSat Company.
4. If I do well on this pre-employment test, I think I can have a good chance of being hired.
5. I think I will be hired if I have a good test performance.
6. How well I did on this pre-employment test will affect whether I am hired.
7. The better my test performance, the better my chance of getting hired.

## Appendix G

### The Ability to Identify Criteria

**Instruction:** One component of the pre-employment assessment that you have just completed was a personality inventory. While responding to the personality test, you might have thought about what specific personality characteristics were being assessed. We are interested in understanding your thinking process.

You might have noticed that some items have some similarities. Below we provide sets of items. For each set, we present three example items that share similarities and which you have already responded to during the assessment. We would like you to tell us your assumption(s) about these items. That is, for instance, *what personality characteristic(s)/trait(s) three personality items are trying to measure, and how they are related to the summer internship position at InSat Corporation?*

You can write down as many assumptions as you wish (up to three assumptions for each set of personality items). You can leave it blank if you don't have any specific assumption.

**Set 1**

- Item 1 *I'm pretty good about pacing myself so as to get assignments done on time.*
- Item 2 *In college, I am a productive person who always gets the work done.*
- Item 3 *Once I start a class project, I almost always finish it.*

Assumption (a): \_\_\_\_\_  
Assumption (b): \_\_\_\_\_  
Assumption (c): \_\_\_\_\_

**Set 2**

- Item 1 *I pay attention to details.*
- Item 2 *I like order*
- Item 3 *I make plans and stick to them.*

Assumption (a): \_\_\_\_\_  
Assumption (b): \_\_\_\_\_  
Assumption (c): \_\_\_\_\_

**Set 3**

- Item 1 *I am skilled in handling social situations.*
- Item 2 *I know how to captivate people.*
- Item 3 *I feel comfortable around people.*

Assumption (a): \_\_\_\_\_  
Assumption (b): \_\_\_\_\_  
Assumption (c): \_\_\_\_\_

**Set 4**

- Item 1 *I'm a very competent person when it comes to college level work.*
- Item 2 *I pride myself on my sound judgment in my college class work.*
- Item 3 *I am efficient and effective at my schoolwork.*

Assumption (a): \_\_\_\_\_  
Assumption (b): \_\_\_\_\_  
Assumption (c): \_\_\_\_\_

**Set 5**

- Item 1 *I sympathize with others' feelings.*
- Item 2 *I take time out for others.*
- Item 3 *I know how to comfort others.*

Assumption (a): \_\_\_\_\_

Assumption (b): \_\_\_\_\_

Assumption (c): \_\_\_\_\_

**Set 6**

- Item 1 *I seldom feel blue.*
- Item 2 *I am not easily bothered by things.*
- Item 3 *I am relaxed most of the time.*

Assumption (a): \_\_\_\_\_

Assumption (b): \_\_\_\_\_

Assumption (c): \_\_\_\_\_

**Set 7**

- Item 1 *I strive to achieve all I can at college.*
- Item 2 *I work hard to accomplish my academic goals*
- Item 3 *I'm something of a "workaholic" at school.*

Assumption (a): \_\_\_\_\_

Assumption (b): \_\_\_\_\_

Assumption (c): \_\_\_\_\_

**Set 8**

- Item 1 *I have a vivid imagination.*
- Item 2 *I am quick to understand things.*
- Item 3 *I love to read challenging material.*

Assumption (a): \_\_\_\_\_

Assumption (b): \_\_\_\_\_

Assumption (c): \_\_\_\_\_

## Appendix H

### The ATIC Rating Sheet

	D	E	F	G
1	<b>Set 1 (extroversion):</b> Item 1 I am skilled in handling social situations. Item 2 I know how to captivate people. Item 3 I feel comfortable around people.2	rater 1	rater 2	<b>set 2 (agreeableness):</b> Item 1 I sympathize with others' feelings. Item 2 I take time out for others. Item 3 I know how to comfort others.
2	social being outgoing intervert vs extrovert			empathy consideration honesty
3	They are good with interacting with people Excel socially Probably a fun person to be around leader			Giving People person Understanding Motherly
4	Comfortable around people			Compassion
5	social interactions			personality
6	social confidence.			empathy levels
7	People person, social, communication skills			Empathetic, thoughtful, caring
8	They are measuring whether or not they are good with social skills.			They are measuring if they are good with caring for
9	Very extroverted person and enjoys the spotlight.			Caring for other people, and do not just care about
10	how sociable you are how you interact with people			how you empathize or feel for or about others
11	'-degree of agreeableness			empathy
12	Social skills, communication abilities.			Social skills, compassion for others, selflessness.
13	socially skilled, leadership capabilities, sales			compassion, social skills, empathy
14	relaxed, personality			sympathetic, considerate, friendship
15	extroverted, talkative, friendly			empathy, sympathetic, caring
16	1. Extroverted/introverted 2. Social ability 3. Self-confidence in social situations			1. empathy 2. ego 3. social awareness