Review in Psychology Research
December 2013, Volume 2, Issue 4, PP.53-60

The Role of General Causality Orientations in Interpreting and Predicting Employees Behavior in the Workplace

Lan Ye, Jian Zhang#, Zakaria Hocine

Dongling School of Economics and Management, University of Science and Technology Beijing, Beijing, 100083, China

#Email: zhangj67@manage.ustb.edu.cn

Abstract

As a special taxonomy of personality, General Causality Orientations can be usefully characterized in terms of understanding the nature of causation of behavior. Researchers have used General Causality Orientations to explain various organizational phenomena. In this article, we reviewed the literature to understand General Causality Orientations and pointed out the importance of predicting behaviors in the workplace. In accordance with the environmental and personality factors, General Causality Orientations and the Five-Factor Model were distinguished. Furthermore, it was discussed how General Causality Orientations may interpret work behaviors and some implications were given for organizations.

Keywords: General Causality Orientations; Work Behavior; Personality; Self-Determination Theory; Five Factor Model

1 INTRODUCTION

There are many points of view to interpret employees work behaviors. Personality is considered as the major factor in anticipating performance and behavior in the workplace. Hagger and Chatzisarantis (2011) suggested that environmental and interpersonal factors are both important when predicting individual behaviors. Other research has also suggested that the self is not the only motivational force at work, only because the self develops within the social environment: the ongoing integrative process can be nurtured, but it can also be derailed by the social context (Deci & Ryan, 2000; Vansteenkiste & Sheldon, 2006). As a new taxonomy of personality, General Causality Orientations (Deci & Ryan, 1985a, 1985b) with the environment and personal characteristics have gained widely attention.

In this paper, we will explore how General Causality Orientations (Deci & Ryan, 1985a, 1985b) represent an attempt to link environment and motivation with personality. Lam and Gurland (2008) found that autonomy orientation positively predicted self-determined work motivation, which in turn predicted job outcomes, namely job satisfaction and identification commitment. King and Gurland (2007) proved that autonomy orientation was associated with the detail/complexity dimension of creativity, perhaps consistent with Sheldon's (1995) analysis of autonomy integrally related to trait creativity. Hagger and Chatzisarantis (2011) observed that participants in a "non-rewarded" condition with autonomy orientation exhibit higher levels of intrinsic motivation compared to participants with a control orientation. This research provides an indication that causality orientations exert a powerful influence on the interpretation and prediction of events, like work performance or organizational behaviors.

This research also clarifies characteristics of General Causality Orientations and briefly distinguishes the relationship between General Causality Orientations and the Five-Factor Model; then discusses the importance of employees' evaluation within human resource management through General Causality Orientations of personality. Each of these orientations, if managed effectively, may contribute to both individual's work adjustment and organizational effectiveness.

2 GENERAL CAUSALITY ORIENTATIONS

General Causality Orientations originate from the theory of motivation, Self-Determination Theory (SDT; Deci &

Ryan, 1985a). The basic assumption of the Self-Determination Theory is that individuals are active, growth-oriented organisms; with innate and natural tendencies toward developing a more elaborated and unified identity (Soenens, et al., 2005). Central to the Self-Determination Theory are claims that human growth and activity potential are inherent and achieved through satisfaction of basic psychological needs for experiencing autonomy, competence and relatedness (Deci & Ryan, 2000). The theory could be characterized as a predominantly social psychological theory because of its strong emphasis on contextual determinants of need satisfaction, experiences and emotions that ensure internalization and self-regulation of behaviors (Olesen, 2011). The Self-Determination Theory argues that humans experience social environments as need-facilitating or need-thwarting, and that these experiences develop into enduring individual differences in internalized self-regulation, namely General Causality Orientations (Deci & Ryan, 1985a).

General Causality Orientation (GCO; Deci & Ryan, 1985b) is an individual difference variable that refers to people's tendency to orient toward particular kinds of social or environmental input, and their particular interpretations. Causality orientations refer to people's general motivational stance towards a broad range of behaviors and attitudes, hence, the way in which they deal with identity concerns (i.e. their identity styles) (Deci & Ryan, 1985a; Ryan & Deci, 2003). Deci (1980) implied that General Causality Orientations can be usefully characterized in terms of people's (explicit or implicit) understanding the nature of causation of behavior. Nowadays, Causality orientation is a stable disposition over time and across domains.

2.1 Autonomy Orientation

The autonomy orientation involves a high degree of experienced choice with respect to the initiation and regulation of one's own behavior (Deci & Ryan, 1985a). Autonomy-oriented people seek out opportunities for self-determination and choice (Deci & Ryan, 1985a). Hagger and Chatzisarantis (2011) pointed out that in the mechanism for autonomy causality orientation, individuals are more likely to interpret rewards and other potentially controlling environmental contingencies as opportunities to demonstrate competence and, as a consequence, more likely to exhibit intrinsic motivation with respect to tasks. Autonomous individuals take into account the advice of credible, well informed experts, which suggests that they seek the most reliable information before making choices (Koestner et al., 1999).

2.2 Control Orientation

The control orientation involves people's behavior being organized with respect to controls, either in the environment or within themselves. Control-oriented people seek out, select, or interpret events as controlling (Deci & Ryan, 1985a). Highly control-oriented people tend to do things because they think they "should", and their motivation relies on extrinsic events such as deadlines or surveillance which play a more determinative role in their behavior (Deci & Ryan, 1985a). Other research has found that greater effort exerted on the task was associated with higher control orientation, and under threat of evaluation (Bober & Grolnick, 1995; Koestner, Bernieri, & Zuckerman, 1992), interpreted how much the highly control-oriented people are susceptible to environmental controls.

2.3 Impersonal Orientation

The impersonal orientation involves a person experiencing their behavior a beyond their intentional control. They tend to believe that they are unable to regulate their behavior in a way that will lead reliably to desired outcomes (Deci &Ryan, 1985a). In a case of high-impersonal orientation, people see themselves as incompetent and unable to master situations (Deci &Ryan, 1985a).

3 CHARACTERISTICS OF GENERAL CAUSALITY ORIENTATIONS

Compared to other personality traits, causality orientations have mainly two enablers to explain aspects of personality through stable individual differences in a different way.

Firstly, within the Self-Determination Theory, causality orientations are not considered unequivocally orthogonal nor are they considered directly deterministic of the types of motivation likely experienced by an individual in a given

context (Deci & Ryan, 1985a). Instead, causality orientations can be viewed as reflecting a continuum ranging from high to low levels of generalized perceptions of self-determination with respect to action (Hagger & Chatzisarantis, 2011). It is therefore possible that an individual can have both autonomy and control orientations and that the relative contribution of these causality orientations over action may vary across context.

Secondly, as importantly, the Self-Determination Theory posits two perspectives with respect to the antecedent factors that support or undermine intrinsic motivation: environmental and interpersonal factors (Hagger & Chatzisarantis, 2011). Causality orientations are viewed as interaction with environmental contingencies in terms of determining the level of intrinsic motivation of an individual who is likely to experience motivation in a given context or with respect to a particular action (Deci & Ryan, 1985a; Koestner & Zuckerman, 1994). As predicted by the Self-Determination Theory, a person's General Causality Orientations is associated with the way they interpret situational factors (Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1985b). Thus, a situational factor might have different effects on individuals with different causality orientations, whereas environmental and interpersonal factors may have interaction variation in interpreting a person's behavior. (Hagger & Chatzisarantis, 2011).

4 DISTINGUISHING GENERAL CAUSALITY ORIENTATIONS FROM FIVE FACTOR MODEL

The Five Factor model has been independently developed by several investigators, e.g. Gold-berg (1990) and Costa and McCrae (1992), and is currently the most widely accepted theory of personality traits. Both the Five Factor Model and the Self-Determination Theory describe and attempt to explain aspects of personality through stable individual differences, however there are some distinguishing and correlating factors between them.

In the Five Factor Model, dispositional personality traits are defined as "dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings, and actions" (McCrae & Costa, 2003). In comparison, in General Causality Orientations, dispositional personality traits are defined as "individual differences in degrees of internalized self-regulation" (Deci & Ryan, 1985a), and orientations towards stable tendencies in cognition, affect, and behavior, which originate in the well-established and widely researched theory of motivation, Self-Determination Theory (SDT; Deci & Ryan, 2000).

The overlap of the two theories arises mainly from two aspects: (1) Descriptions, contents of personality traits and causality orientations have considerable similarities; (2) Personality traits and causality orientations are predictors of similar outcome variables, such as well-being and behaviors (Olesen, Thomsen, Schnieber, & Tønnesvang, 2010). Both personality traits and causality orientations are known to predict well-being states; extraversion and autonomy orientations are known to predict well-being, whereas neuroticism and impersonal orientations are known to predict ill-being (Deci & Ryan, 1985a, 2000; McCrae & Costa, 2008). Thus, autonomy orientations might add to or influence the relationship between extraversion and well-being, whereas impersonal orientations might add to or influence the neuroticism and ill-being relationship (Olesen, 2011). In terms of the Big Five personality correlates, an autonomous orientation has been linked with high levels of agreeability and extraversion (Deponte, 2004). The controlled orientation has been associated with low levels of agreeability (Deponte, 2004). Personality correlates of an impersonal orientation include neuroticism, low extraversion, and low conscientiousness (Deponte, 2004). The point is that traits viewed as "causal" dispositions can be integrated with the view that psychosocial environments influence trait expressions through characteristic adaptations such as causality orientations (Hodgins et al., 2006; Lynch et al., 2009; Sheldon et al., 1997).

Olesen and colleagues (2010) indicated that autonomy orientation, and the aspect of control orientation and impersonal orientation address individual differences in personality that are not captured by the Five Factor Model traits. This was confirmed by Jöreskog et al (2001), in which all three causality orientations were distinguished from personality traits (Olesen, Thomsen, Schnieber, & Tønnesvang, 2010). One central difference is that autonomy orientation encompasses an internal perceived locus of causality (Deci & Ryan, 1985a); that is an understanding of the causes and reasons for one's behavior in social relations. This is supported by studies that show the free initiation of behavior and volitional choice, encompassed by autonomy, and predicting consistency among attitudes, traits, and behaviors (Koestner, Bernieri, & Zuckerman, 1992), also referred to as a strong self-integration (Hodgins & Knee,

2002), an authentic self (Sheldon et al., 1997), or an autonomy-supportive personality (LaGuardia & Ryan, 2007).

5 General Causality Orientations and Work Behavior Predictions

A theoretical model of work motivation proposed by Gagné and Deci (2005), suggested General Causality Orientations as a predictor of job outcomes. Based on Gagné and Deci's (2005) call for the examination of General Causality Orientations as a particularly key individual difference, many researchers have attempted to test its role in predicting self-determination and ultimately job outcomes (Lam&Gurland, 2008). Autonomy orientation has been shown to be related to variables that express psychological well-being and self-governance, such as high self-esteem, self-awareness, high levels of ego-development and personality integration, low levels of self-derogation, and successful goal attainment (Deci& Ryan, 1985a; Hodgins & Knee, 2002; Sheldon & Kasser, 1995). Autonomy orientation also has been positively associated with job performance and psychological adjustment (Baard et al., 2004). Black and Deci (2000) had found similar results in non-work domains. Deci and Ryan (1985a) also found that causality orientations are likely to interact with environmental contingencies in determining intrinsic motivation. With a high level of autonomy orientation, people are more often intrinsically motivated, and they are more likely to be self-determined with respect to extrinsic rewards (Deci &Ryan, 1985b). According to Ryan, an autonomy orientation means that rewards are less likely to undermine intrinsic motivation when the informational function of rewards is made salient (Ryan, 1982; Ryan et al., 1983). Similar research by Hagger and Chatzisarantis (2011) found that intrinsic motivation levels among autonomy-oriented participants assigned to the reward condition were not different from those autonomy-oriented participants who were exhibited by the non-rewarded condition.

The findings on the relationship between control orientation and work behavior are not consistent. Some studies showed that controlled orientation has been associated with a concern about external agents of control (e.g. social expectations, pressure from others, tangible rewards), and expressions of negative effects and public self-consciousness (Deci & Ryan, 1985a; Sheldon &Kasser, 1995). Other studies concluded that control orientation was unrelated to any of the creativity outcomes (King and Gurland, 2007). Koestner and Zuckerman (1994) demonstrated that a control causality orientation also can moderate the effect of controlling (failure) feedback on persistence as well as performance on experimental tasks. Furthermore, intrinsic motivation levels for control-oriented individuals in the reward and non-rewarded conditions were observed differently in the experiments on intrinsic motivation (Hagger&Chatzisarantis, 2011).

6 Discussion and Implication

Causality orientations can be viewed in terms of motivational, social-cognitive, and developmental adaptations of dispositional traits (McAdams & Pals, 2006). This means that causality orientations can be understood as characteristic adaptations of personality, and thereby they should be influenced by both dispositional traits and by contingencies in psychosocial contexts (Hodgins et al., 2006; Lynch et al., 2009; Sheldon et al., 1997). Because of its characteristic, General Causality Orientations can be applied for assessing position of organization and predicting work performance.

For theoretical contribution, our results may not only enrich the relationship between GCO and work behavior, but also expand the scope of application of Self-Determination theory. Furthermore, distinguishing General Causality Orientations from the Five Factor Model is an important step to rule out redundancy, particularly when dealing with individual personality differences (John, Naumann, & Soto, 2008), thus, establishing the conceptual independence of causality orientations from personality traits may serve as a prerequisite for efforts to integrate the two theories (e.g., Deponte, 2004). Since the two theories are typically classic personality taxonomies, and there have been overlap between them, we may use the two theories together to measure employees work behaviors.

For empirical contribution, new theory is available to direct human resource management activities. Firstly, base on applicants' orientation, managers can recruit and choose employees for specific position. Autonomy-orientated people may have a high level of intrinsic work motivation without external reward. At the same time, they prefer to recognize supportive-environments and seek out opportunities for self-determination and choice. Hagger and Chatzisarantis (2011) found that autonomy orientation has a tendency to offer individuals a degree of "protection"

from environmental contingencies that undermine intrinsic motivation. Supervisors will manage employees more easily if they choose autonomy-orientated individuals who have better work behavior than others. Thus, enterprises can use General Causality Orientations of personality to screen employees from the beginning of the recruitment process. Secondly, we can develop employee's autonomy orientation to improve their work behaviors. Research has demonstrated that autonomy causality orientations are associated with indices of adaptive functioning such as autonomy support (Deci & Ryan, 1985a), ego-development (Deci & Ryan, 1985a), no contingent self-esteem (Deci & Ryan, 1985a), attitude-behavior consistency (Koestner, Bernieri, & Zuckerman, 1992), and relationship-maintaining behaviors (Knee et al., 2002). Managers may provide employees a supportive-environment that let them feel more autonomy-supportive. Managers may also provide employees positive feedback to improve their self-confidence and self-esteem. The causality orientations are believed to be related to the level of awareness of an organism's needs and emotions (Deci &Ryan, 1985a), and supervisors may take care of their own emotions according to their causality orientation. Employees with positive emotions will have better performance than others who have negative emotions. The causality orientations are also believed to be related to the types and qualities of behavior that people engage in. Managers may control and direct employees performance and behaviors depending on their causality orientation. If employees demonstrate autonomy orientation, managers will provide them enough space and empower their autonomy to work. If employees demonstrate control orientation, managers may help them adopt autonomous orientation by providing autonomy-supportive environments with privileges, and encourage them to be more productive in a healthier way. The employees need to understand their contributing task in the workplace in order to better engage in the work. It has also been observed in Causality Orientations that males scored significantly higher on the controlled orientation than females, whereas females scored significantly higher on the autonomous orientation (Deci & Ryan, 1985a). Central to this research, enterprises may encourage employees differently according to their gender. Managers may give females more rights to choose work content and flexible work time while offering males the opportunity to overcome the external control environment and guide them towards autonomous orientation. Once attention is given to supplement individual behavioural predictions based on personality factors, additional advancements in our understanding of these phenomena will be achieved.

There are also some ambiguous spaces and questions about General Causality Orientations for us to research, and additional research is warranted before a clear conclusion can be drawn. The primary limitation of General Causality Orientations research is that autonomy orientation may lead people to appraise their behavior and the outcomes of their behavior as more conductive to goal attainment (Kwan et.al, 2011). This finding informs our understanding of autonomy orientation on an individual's behavior and inspires us to explore this reason. Future studies may explain this phenomenon from motivation angles and may add controlling factors in their design of high quality in terms of quantitative and qualitative research to deal with employees high appraise of their behavior. Furthermore, the internal consistency of the control orientation subscale has historically been lower than that of the autonomy subscale (e.g., Deci &Ryan, 1985b), and future studies may benefit from larger and more diverse samples. Researchers may also examine the application of the General Causality Orientations subscale in cross-culture studies. From the standpoint of General Causality Orientations in the workplace, future studies may measure the possibility of General Causality Orientations to predict work behaviors in interaction with work environment variables, such as managerial autonomy support, coworker feedback and so on. As taxonomy of personality, General Causality Orientations could be an effective moderator variable between objective factors and job outcomes. Olesen (2011) also pointed out that General Causality Orientations could add to or even influence the relationships between dispositional traits and dependent variables. We conclude that further studies would be worthy to compare General Causality Orientations and the Five Factor Model. Furthermore, Five Factor Models may be combined with General Causality Orientations in assessing job outcomes. In addition, just like other psychology studies, future research may design experimental studies to attest the causal effect of General Causality Orientations on work behaviors.

7 CONCLUSIONS

These findings inform our understanding of the General Causality Orientations, which may aid in promoting employees work behaviors. These discussions also underscore the importance of General Causality Orientations on organizational behaviors. Expanding research into General Causality Orientations may allow organizations to

become more effective and produce more effective employees, which in turn would be of great benefit for organization management.

ACKNOWLEDGEMENTS

We especially thank the National Science Foundation of China (70771009, 71071017) and the Fundamental Research Funds for the Central Universities (FRF-BR-09-019) for supporting this research.

REFERENCES

[1] Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). The relation of intrinsic need satisfaction to performance and well-being in two work settings. Journal of Applied Social Psychology, 34, 2045–2068.

[2] Black, A. E., & Deci, E. L. (2000). The effects of instructors "autonomy support and students" autonomous motivation on learning organic chemistry: A self-determination theory perspective. Science Education, 84, 740–756.

[3] Bober, S., & Grolnick, W. S. (1995). Motivational factors related to differences in self-esteem. Motivation and Emotion, 19, 307–327.

[4] Costa, P. T., Jr., & McCrae, R. R.. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.

[5] DeCharms,R.(1968).Personal causation: the internal affective determinants of behavior. New York: Academic Press.

[6] Deci,E.L.(1980). The psychology of self-determination. Lexington, MA: Health (Lexington Books).

[7] Deci, E. L., Koestner, R., & Ryan, R. M. (1999). The undermining effect is a reality after all—extrinsic rewards, task interest, and self-determination: Reply to Eisenberger, Pierce, and Cameron (1999) and Lepper,

[8] Deci, E. L., & Ryan, R. M. (1985a). The General Causality Orientations scale: Self-determination in personality. Journal of Research in Personality, 19, 109–134.

[9] Deci, E. L., & Ryan, R. M. (1985b). The dynamics of self-determination in personality and development. In R. Schwarzer (Ed.), Self-related cognitions in anxiety and motivation. Hillsdale, NJ: Erlbaum.

[10] Deci, E. L., & Ryan, R. M. (1985c). Intrinsic motivation and self-determination in human behavior. New York: Plenum Press.

[11] Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11,227–268.

[12] Deponte, A. (2004). Linking motivation to personality: Causality orientations, motives, and selfdescriptions. European Journal of Personality, 18, 31–44.

[13] Gagne′, M., & Deci, E. L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior, 26, 331–362.

[14] Gagne′, M., & Koestner, R. (2002). Self-determination theory as a framework for understanding organizational commitment, Society for Industrial and Organizational Psychology. Toronto, Canada.

[15] Goldberg, L. R. (1990). An alternative description of personality: The Big Five factor structure. Journal of Personality and Social Psychology, 59, 1216-1229.

[16] Hagger, M.S., & Chatzisarantis. N.L.D.(2011). Causality orientations moderate the undermining effect of rewards on intrinsic motivation, Journal of Experimental Social Psychology, 47,485–489.

[17] Hodgins, H. S., & Knee, C. R. (2002). The integrating self and conscious experience. In E. L. Deci & R. M. Ryan (Eds.), Handbook of self-determination research (1st ed.,pp. 87–101). Rochester: The University of Rochester Press.

[18] Hodgins, H. S., Yacko, H. A., & Gottlieb, E. (2006). Autonomy and nondefensiveness. Motivation and Emotion. Special Issue: Autonomy, Volitional Motivation, and Wellness, 30, 283–293.

[19] John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big five trait taxonomy. History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of personality theory and research (3rd ed., pp. 114–159). New York: Guilford Press.

[20] Jöreskog, K. G., Sörbom, D., Du Toit, S., & Du Toit, M. (2001). Lisrel 8: New statistical features (3rd ed.). Lincolnwood, IL: Scientific Software International, Inc.

[21] King,L., &Gurland, S.T.(2007).Creativity and experience of a creative task: Person and environment effects, Journal of Research in Personality,41,1252-1259.

[22] Knee, C. R., Patrick, H., Vietor, N. A., Nanayakkara, A., & Neighbors, C. (2002). Self determination as growth motivation in romantic relationships. Personality and Social Psychology Bulletin, 28, 609–619.

[23] Knee, C. R., & Zuckerman, M. (1996). Causality orientations and the disappearance of the self-serving bias. Journal of Research in Personality, 30, 6–87.

[24] Knee, C. R., & Zuckerman, M. (1998). A nondefensive personality: Autonomy and control as moderators of defensive coping and self-handicapping. Journal of Research in Personality, 32,115-130.

[25] Koestner, R., & Zuckerman, M. (1994). Causality orientations, failure, and achievement. Journal of Personality, 62, 321–346.

[26] Koestner, R., Bernieri, F., & Zuckerman, M. (1992). Self-regulation and consistency between attitudes, traits, and behaviors. Personality and Social Psychology Bulletin, 18, 52–59.

[27] Koestner, R., Gingras, I., Abutaa, R., Losier, G. F., DiDio, L., & Gagne´, M. (1999). To follow expert advice when making a decision: An examination of reactive versus reflective autonomy. Journal of Personality, 67, 851–873.

[28] Kwan. B.M., Hooper, A.C., Magnan, R.E., Bryan, A.D.(2011). A longitudinal diary study of the effects of causality orientations on exercise-related affect. Self and Identity,10(3),363-374.

[29] La Guardia, J. G., & Ryan, R. M. (2007). Why identities fluctuate: Variability in traits as a function of situational variations in autonomy support. Journal of Personality, 75, 1205–1228.

[30] Lam, C.F., & Gurland, S. T. (2008).Self-determined work motivation predicts job outcomes,but what predicts self-determined work motivation? Journal of Research in Personality, 42,1109–1115.

[31] Lee, F.K., Johnston, J.A., & Dougherty, T.W. (2000). Using the five-factor model of personality to enhance career development and organizational functioning in the workplace. Journal of Career Assessment, 8,419-427.

[32] Lynch, M., La Guardia, J. G., & Ryan, R. M. (2009). On being yourself in different cultures: Ideal and actual self-concept, autonomy support, and well-being in China, Russia and the United States. The Journal of Positive Psychology, 4, 290–304.

[33] McAdams, D. P., & Pals, J. L. (2006). A new big five. Fundamental principles for an integrative science of personality. American Psychologist, 61, 204–217.

[34] McCrae, R. R., & Costa, P. T. Jr., (2008). The five-factor theory of personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of Personality Theory and Research (3rd ed., pp. 156–182). New York: Guilford Press.

[35] Olesen, M. H., Thomsen, D. K., Schnieber, A., & Tønnesvang, J. (2010). General Causality Orientations are distinct from personality traits. Personality and Individual Differences, 48, 538–543.

[36] Olesen, M. H. (2011). General Causality Orientations are distinct from but related to dispositional traits. Personality and Individual Differences, 51,460–465.

[37] Richer, S. F., Blanchard, C., & Vallerand, R. J. (2002). A motivational model of work turnover. Journal of Applied Social Psychology, 32, 2089–2113.

[38] Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. Journal of Personality and Social Psychology, 43, 450–461.

[39] Ryan, R. M., & Deci, E. L. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In M. R. Leary, & J. P. Tangney (Eds.), Handbook of self and identity (pp. 253–272). New York: Guildford.

[40] Ryan, R. M., Mims, V., & Koestner, R. (1983). Relation of reward contingency and interpersonal context to extrinsic motivation: A review and test using cognitive evaluation theory. Journal of Personality and Social Psychology, 45, 736–750.

[41] Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. American Psychologist, 55, 68–78.

[42] Sheldon, K. M. (1995). Creativity and self-determination in personality. Creativity Research Journal, 8, 61–72.

[43] Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. Journal of Personality and Social Psychology, 68, 531–543.

[44] Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., & Ilardi, B. (1997). Trait self and true self: Cross-role variation in the big five personality traits and its relations with psychological authenticity and subjective well-being. Journal of Personality and Social Psychology, 73, 1380–1393.

[45] Soenens,B., Berzonsky, M. D., Vansteenkiste,M., Beyers,W., &Goossens,L. (2005). Identity Styles and Causality Orientations: In Search of the Motivational Underpinnings of the Identity Exploration Process, European Journal of Personality,19: 427–442.

[46] Vansteenkiste, M., &Sheldon, K. M. (2006). There's nothing more practical than a good theory: Integrating motivational interviewing and self-determination theory. British Journal of Clinical Psychology. 45, 63-82.

[47] Wong, M. M. (2000). The relations among causality orientations, academic experience, academic performance, and academic commitment. Personality and Social Psychology Bulletin, 26, 315–326.

AUTHORS



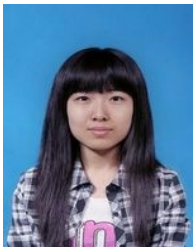
Name: **Jian Zhang**

Title: Professor

Research areas: Organizational Behavior, Human Resource Management.

Telephone Number: 010-82375237

Email: zhangj67@manage.ustb.edu.cn



Name: **Lan Ye**

Degree: PhD. Candidate

Research areas: Human Resource Management, Emotion, Personality

Email: lanyeustb@gmail.com



Name: **Zakaria Hocine**

Degree: PhD. Candidate

Research areas: Human Resource Management, Autonomy Support

Email: zakaria.hocine@gmail.com