The Relationship between Undergraduate Students’ Creative Self-efficacy, Creative Ability and Career Self-management

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Abstract

Purpose – The study aimed to investigate if creativity is related to career self-management and to cover the relationship between creative self-efficacy, creative ability and career self-management.

Design/methodology/approach – Reviews the literature relating to the effects of employee creative self-efficacy on creative ability is presented to provide the basis for the research hypotheses. We surveyed a sample of 158 undergraduate students from Zhejiang Gongshang University, China, a wide range of majors, regarding their creative self-efficacy, creative ability and career self-management. Creative self-efficacy and career self-management were measured by subjective and self-described questionnaires. Creative ability was measured by creative ability test. Regression analyses, correlate analyses and so on were used to test the hypotheses.

Findings – The results showed that (1) This study provided two distinct categories of creative self-efficacy. The two factors accounted for 66 percent of the variance in this study. The factors were named creative intention and creative behavior. (2) Creative ability predicted career self-management. (3) Creative self-efficacy was positively related to creative ability.

Practical implications – Knowledge of the antecedents to career self-management should provide certain advantages universities attempting to design course and teach students. The findings have implications for undergraduate students education programmes, especially creative thinking course.

Originality/value – This paper makes a valuable contribution to both creative self-efficacy and career management literatures, by being one of the first to examine the relationship between creative self-efficacy, creative ability and career self-management. This paper also will be useful to the academic communities, the public and other interested parties who are interested in improving students’ career self-management during their periods of study in the universities.

Keywords: career self-management; creative self-efficacy; creative ability; undergraduate students; China
1. Introduction

Students are products of universities. Upon graduation, they become the source of manpower for developing the country’s economy. However, some students who graduated from the university would not only find it difficult to develop their own career, but also, in a way, hinder the development of the labor market. Therefore, academics and educators should concern students’ career self-management before they enter corporations, which are often said to be the “end user” in the supply chain of graduates for the labor market. The American Psychological Association has affirmed the importance of career planning and development in undergraduate psychology education (Prehar and Ignelzi, 2012).

In the light of this issue, this research is undertaken to determine the undergraduate students’ career self-management in Zhejiang Gongshang University, China. In addition, this study is conducted to identify the factors that influence their career self-management. This research will examine the relationship between creative self-efficacy, creative ability and career self-management.

1.1 Career Self-management

The counterpart to organizational career management is individual career self-management – the personal efforts made by individuals to advance their own career goals which should coincide with those their organizations have for them. The notion of joint responsibility assumes that individual efforts are needed for career success, as well as an appropriate career management program on the part of the employer. Employees are active to satisfy their personal career goals, and it is the task of employers to ensure this process helps the organization achieve its goals. Employees who fulfill high levels of individual career management will report greater career success than employee who fulfill low level. The job market is undergoing globalization, declining job security, which requires employees to show more self-management than before if they want to succeed. Abele and Wiese (2008) were conducted to analyze the nomological network of general self-management strategies, specific self-management strategies and central indicators of career success, self-referent subjective success and other-referent career success. Their study have shown that the link from self-management to subjective success was independent of objective success. Career self-management was positively associated with career effectiveness (Orpen, 1994). As argued by Abele and Wiese (2008), in modern labour markets, individual career success required strategies of self-management, which comprised self-set career goals and goal-pursuing behavior. These strategies could be conceptualized on a more general level of self-management as well as in a very career-specific way. Career self-management help the individuals determine “Who am I” in ability and potential for the future.

Undergraduate students’ career self-management refers to career planning, the process of identifying what one wants from his or her education, assessing his or her strengths and weaknesses in relation to one’s goals, and deciding what efforts need to be done to realize
these goals in the light of one’s own strengths and weaknesses. It comprises a variety of individual decisions that ought to be made as rationally and systematically as possible if planning is to contribute to career success. Individual decisions include taking course, deciding how to spend their leisure time, taking part-time job, serving as a leader in student union, developing leadership skill and so on. Universities should encourage students to develop career identity, and thus engender student intrinsic career motivations and career self-management skills and behaviors(Bridgstock, 2010).

However, career planning needs to be supported by good tactics for implementation, especially in the light of changing circumstances that are often difficult to predict in advance. Unless individuals are able to develop and execute strategies for carrying out their plans, they are unlikely to be successful. A series of career tactics have been advocated, all of which involve manipulating the situation in which individuals find themselves to their own advantage, so that they can successfully achieve their goals.

Research on career self-management has grown substantially in prominence over the past decade (Briscoe, et al., 2006; King, 2004; Chiaburu, et al., 2006). Broadening our understanding of career self-management needs examine the individual factors that are likely to influence it (King, 2004). Proactive personality is positively related to career self-management behaviors (Chiaburu, et al., 2006). For undergraduate students, university education is the key to enhance career competences. Defillippi and Arthur (1994) have defined career competences, from individual and organizational perspective. US National Career Development Association has identified 12 adult career competences which are important for career self-management. These include skills to participate in work and lifelong learning and skills to prepare to seek, obtain, maintain and change jobs. Ball (1998) have pointed to four competences. They are optimizing career prospects, playing to one’s strengths, engaging in personal development and balancing work and non-work.

Creative ability prefers to engage in unique thinking because of an intrinsic desire to find new and better things. In recent years, most universities have paid much attention on cultivating students’ creative ability (Zhang, et al., 2010). The students possessed high creative ability can build up the ability to analyze and resolve the problems. These abilities can help foster a base for the future actual work or career.

As far as the above is concerned, the following hypotheses are developed:

H1:There will be a positive relationship between creative ability and career self-management.

1.2 Creative self-efficacy

Generalized self-efficacy is defined as a personal judgement of “how well one can execute courses of actions required to deal with prospective situations” (Bandura, 1982). Self-efficacy is also one’s belief, like work ethic, which represents the degree that one believes he or she is
capable of successfully performing a specific task within a given context, even a difficult context.

According to the social cognitive view, self-efficacy is not a static trait, it is dynamic, directly changeable, and is linked to particular performance domains (Judge, et al., 1994). Studies have posited that the attainment of the goals set by individuals creates the framework for task mastery and competence (Annelies, 1996), because individuals with high self-efficacy for a given task would set higher personal goals.

Several studies have concluded that self-efficacy is related to task effort and performance, persistence, resilience in the face of failure, effective problem solving and self-control (Prussia, 1998; Stajkovic, 1998; Gist, 1992). Previous studies has shown individuals with high self-efficacy can do better task performance because it improves motivation. Self-efficacy views can be general or specific.

Among researchers, there appears to be reasonable consensus regarding the definitional elements of creativity. Most researchers agreed that the two elements that define creativity are novelty and usefulness (Shalley, 1991). According to Gurteen (1998), innovation is the taking of new or existing ideas and turning them into action. Creativity is coming up with new ideas, which is the food of innovation.

The relationship between creative self-efficacy and creativity is possible to be attenuated by factors such as a bad fit between the person and the job. Binnewies, et al. (2008) found job control and support for creativity moderated the relationship between age and idea creativity. Age was positively related to idea creativity under high job control and negatively related to idea creativity under low job control and low support for creativity. However, the relationship is still possible to be strongly positive. The individuals possessed higher creative self-efficacy more likely to perceive opportunities to actually apply their creative potential in the form of creative action. Indeed, there are several studies to examine the role of creative self-efficacy in the creative process. Jeffery, et al. (2010) found the relationship between creative self-efficacy and individual creativity, they investigated that creative self-efficacy was positively related to individual creativity. Tinney and Farmer (2002) reported that creative self-efficacy predicted the job performance. Dronvaek, et al. (2010) developed a definition of entrepreneurial self-efficacy and found it played a crucial role in the process of starting-up a new business. Empirical evidence supported the influence of self-efficacy beliefs on creativity development and growth. Abele and Spurk (2009) found that occupational self-efficacy measured at career entry had a positive impact on salary and status three years later and a positive impact on salary change and career satisfaction seven years later. Creative self-efficacy is the belief in one’s capacity to successfully take of new or existing ideas and turn them into action. Therefore, it is reasonable creative self-efficacy can play a role in creative action or creative ability.

The purpose of this paper is to propose the predictor of creative ability. It is conceivable that creative ability is largely determined by creative self-efficacy.
As far as the above is concerned, the following hypotheses are developed:

H2: There will be a positive relationship between creative self-efficacy and creative ability.

2. Method

2.1 Sample and procedures

Data for this research were collected by means of questionnaire. We asked 158 undergraduate students to voluntarily participate in this research. Participants administered a self-administered questionnaire with an accompanying cover letter that stated the purpose of the research. They answered questions regarding age, majors, gender and so on.

The samples were undergraduate students in Hangzhou and approximately half were female (60%, n=95). Some of them served as a leader in student union (42%, n=67). Mean age was 22.6 (SD=2.2) years. They studied in various fields, including business, art, philosophy, information technology, finance, economics, and so on.

2.2. Measures

The major measures for this present research were creative self-efficacy, career self-management and creative ability. Unless stated otherwise, participants responded to all questionnaire items for measures using a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Creative self-efficacy

Creative self-efficacy are shown in Table I along with reliability estimates for it. Items 1-4 were taken from Tierney and Farmer’s (2002), five of which (items 5-9, Table I) were created for the present study in order to assess two additional nuances of creative self-efficacy not included in the existing items. One of the additional items assessed students’ perceptions regarding the extent to which they believe that they have the talent or expertise to do well in their study life, while the other item measured students’ perceptions of the extent to which they feel that they are able to take risks by trying out new ideas. Responses on items for each measure items were averaged to form an overall score so that higher scores indicated a higher standing on the measure.
Table 1

<table>
<thead>
<tr>
<th>Items</th>
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</thead>
<tbody>
<tr>
<td>Creative self-efficacy scale α=.85</td>
</tr>
<tr>
<td>1. I feel that I am good at generating novel ideas.</td>
</tr>
<tr>
<td>2. I have confidence in my ability to solve problems creatively.</td>
</tr>
<tr>
<td>3. I have a knack for further developing the ideas of others.</td>
</tr>
<tr>
<td>4. I am good at finding creative ways to solve problems.</td>
</tr>
<tr>
<td>5. I have the talent or expertise to do well in my study.</td>
</tr>
<tr>
<td>6. I feel comfortable trying out new ideas.</td>
</tr>
<tr>
<td>7. I did always find new methods to do thing.</td>
</tr>
<tr>
<td>8. I feel I can resolve some problems with new methods.</td>
</tr>
<tr>
<td>9. I did always resolve problems with many methods.</td>
</tr>
</tbody>
</table>

Career self-management

It was measured by an eight-item scale, designed to assess each of the main aspects of career planning and tactics identified by Hall in his psychological success model. In this study, we revised several items in order to fit undergraduate students. There were five items in the career planning subscale (α=0.81), to each of which subjects responded on a scale from 1 (very untrue of me) to 5 (very true of me). The example items were: (1) I have definite goals for my career over my lifetime. (2) I always consider I will take a job which I like.

The career tactics subscale (α=0.84) comprised six items, designed to measure those generalized tactics claimed in the psychological success model to have the widest applicability.

They were:

1. I am always very careful to avoid dead-end career paths.
2. I try to have as much visibility and exposure to my teacher or others as I can.
3. I go out of my way to find a mentor or sponsor to help my career in the future.
4. I cultivate friendships with influential people for my career outside work.
5. I actively seek opportunities to develop my skill which is necessary to my career.
6. I try to achieve things important for my career, even if it is not what I want.

Creativity

Previous study measured creativity by individual perceptions of opportunities to engage in creative behaviors using five items developed specifically (Houghton & DiLiello, 2010). Such as, I have opportunities to use my creative skills and abilities at work. Rebecca and Magdalena (2012) argued the conceptions of creativity were five dimensions, novelty, product, problem solving, cognitive processes and personal attributes. But in
this study, it was measured by the following creativity ability test. Please draw a meaningful picture using two lines, two triangles and two circles. We considered every subject can do it no matter what his major is. Drawing a meaningful picture can get 10 points, no more than 100 score.

3. Result

We factor analyzed the seven items of creative self-efficacy items. Using a varimax rotation, the factor analysis results are displayed in Table 2. As is shown in the table, the factor analysis identified two factors with eigenvalues greater than 1.0. Cumulatively, the two factors explained 68.2% of the variance in the measures. examination of the scree plot showed a distinct break between the slope of the three factors and those of the subsequent factors whose eigenvalues were less than 1.0. As can be seen in the table, the items about creative intention loaded strongly on Factor 1 (the average factor loading was 0.648). Thus, this factor can be labeled creative intention. The four items loaded strongly on Factor 2 (the average factor loading was 0.70).Thus, this factor can be labeled creative behavior.

Table 2: Factor Analysis of creative self-efficacy (N = 158)

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I am good at generating novel ideas.</td>
<td>0.685</td>
<td></td>
</tr>
<tr>
<td>I feel I can resolve some problems with new methods</td>
<td>0.641</td>
<td></td>
</tr>
<tr>
<td>I have confidence in my ability to solve problem creatively.</td>
<td>0.547</td>
<td></td>
</tr>
<tr>
<td>I feel I can resolve some problems with new methods</td>
<td>0.721</td>
<td></td>
</tr>
<tr>
<td>I have a knack for further developing the ideas of others.</td>
<td></td>
<td>0.712</td>
</tr>
<tr>
<td>I did always find new methods to do things</td>
<td>0.678</td>
<td></td>
</tr>
<tr>
<td>I did always resolve problems with many methods</td>
<td>0.695</td>
<td></td>
</tr>
<tr>
<td>I am good at finding creative ways to solve problems.</td>
<td></td>
<td>0.738</td>
</tr>
<tr>
<td>I have the talent or expertise to do well in my study.</td>
<td></td>
<td>0.677</td>
</tr>
<tr>
<td>I feel comfortable trying out new ideas.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Factor loadings greater than 0.70 are underlined, N (listwise) = 158.

Means, standard deviations, and spearsons correlations among the study variables are presented in the table 3.
Table 3: Means, standard deviations, and correlations of study variables (N=158)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Career self-management</td>
<td>3.55</td>
<td>.79</td>
<td>.442**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Creative intention</td>
<td>.517**</td>
<td>.215**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Creative behavior</td>
<td>3.31</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Creative ability</td>
<td>.621**</td>
<td>.143</td>
<td>.221**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: ** Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 1 posited that creative ability would relate positively to subjective indicators of career self-management. The regression results indicated significant relationships between creative ability and career self-management (r=0.215, p<.001). The dependent variable, career self-management, was regressed on creative ability, which exhibited a significant relationship (β=0.215, p<0.05, R²=.046), testing a main effects model yielding a significant and positive regression for creative ability on career self-management. Thus, Hypothesis 1 was supported.

Table 4 lists the results of the regression analysis for the model of hypothesis 2, including all participants. Statistical analysis results indicate that this model was significant (R²=.046, p<.01). As revealed in Table 5. Compare the two β coefficients, creative behavior affected more the creative ability.

Table 4: Regression results of the model

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Standardized β coefficient</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative ability</td>
<td>.215</td>
<td>.008*</td>
</tr>
</tbody>
</table>

** p<0.01, * p<0.5

Table 5: Regression results of the model

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Standardized β coefficient</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative intention</td>
<td>.01</td>
<td>.02*</td>
</tr>
<tr>
<td>Creative behaviors</td>
<td>.22</td>
<td>.01*</td>
</tr>
</tbody>
</table>

** p<0.01, * p<0.5
4. Discussion

During these decades, career management has received more and more attention in studies of the organizational or vocational behaviors. Because there is widespread agreement among researchers and practitioners that career management have important implications for individual behaviors and work outcomes and both affect the implementation process of the psychological employment contract.

Nowadays, individuals are experiencing different models of careers as compared to previous decades, and careers are changing. There is a general recognition that career success is no longer only supported by employers. Given the complex and rapidly changing nature of the current work environment, individuals’ capabilities to effectively influence their environment and regulate their behavior may be critical to career success (Converse, 2012). Therefore, undergraduate students should have to take responsibility in planning and controlling their own careers before entering an organization.

As argued by Maury and Yehuda (1997), careers in the 21st century require a new set of support structures, including self-support. In modern labor markets individual career success needs strategies of self-management, such as self-set career goals, goal-pursuing behavior and design steps how to achieve goals. Those undergraduate students who have higher creative ability can be able to find good strategies to manage their own career in a very creative self-management way.

There has been more attention paid to the creativity in the last 10 years than during the previous many years, in this science and technology age, teaching and enhancing the undergraduate students’ most valuable creativity is a major problem which universities face to. A full display of creativity is indispensable, not only for developing new products and technology, but also for managing any business, even any career. In a word, those undergraduate students with higher creativity will be more easily to gain career success. Career success is helpful to individuals but also to organizations because employees’ career success can eventually contribute to organizational performance. So, it is widely acknowledged that the responsibility for career management lies both with individuals and the organization which employs them. Even, central to the career management process is self-management, such as training himself to improve performance. So, receiving university education became a part of individual career self-management.

This article has attempted to offer a deep insight into the ways in which undergraduate students managing or planning their career, before entering an organization in order to achieve the feeling of career success. In some recent prescriptive accounts, considerable attention is given to the ways in which individuals should manage their careers (King, 2001). The difference is this study focused on the undergraduate students who are at the early stage of career life.

Knowledge of the factors that affect undergraduate students’ career self-management is important for university to seek the good way to educate them. One such factor that recently
gained prominence in career research is self-efficacy (Rachel, 2004; June, 2004). Specifically, this study focused on the effects of creative self-efficacy and creativity on career self-management.

Career self-management was found to predict subjective career success. The study also empirically examined the role that creative self-efficacy played in facilitating career self-management. This suggests that undergraduate students having higher creative ability and a stronger sense of creative self-efficacy would have a greater career self-management.

4.1. Implications of the results

Career planning and development is very important for undergraduate students. Universities should encourage students to develop career identity, and thus engender student intrinsic career motivations and career self-management skills and behaviours (Bridgstock, 2010). We found creative ability can predict the career self-management. So universities should develop the undergraduate students’ creative ability.

In an increasingly chaotic organizational environment, individuals’ career self-management become more important than before. Individuals need take more responsibility for development their careers, such as career planning, receiving education. Knowledge of the antecedents to career self-management can help organizations to select applicants. The study of career self-management is particularly useful.

Organizations that seek to attract and retain the best possible employees should benefit from an understanding of what leads to their career self-management.

An understanding of the process by which career self-management are created could therefore allow organizations to attract applicants who are more creative in turn, to be more committed to their job and career.

Career self-management before entering an organization is not the waste of time, and that it can lead to more successful careers for individuals, from which the individual himself can benefit, in the form of more career opportunities and higher career performance. In a word, the findings of this research should be of help in undergraduate students’ achieving career success.

4.2. Limitations and future research suggestions

Although this research adds to the literature on the relationship between predictors and undergraduate students’ career self-management, like all research, several limitations exist that should be addressed in future research. First, this study was limited by the set of factors that were proposed to be linked to career self-management. There are many predictors that have been examined in previous models of career self-management, the study just proposed the impact of creative self-efficacy on self-management. However, as found in other studies career success are sometimes effected by other variables, such as, proactive
personality (Chiaburu, 2006). While this current study did not examine the relationship between personality and career self-management. So, future studies should capture their influence.

Secondly, although the study identified the two different types of creative efficacy, how to enhance individual creative self-efficacy is still unknown. One area of future research should concern the way to improve students’ creative self-efficacy and creative ability.

Future research can provide additional information and extensions to these results. For example, more information is needed on the mechanisms through which career self-management translates into career satisfaction.

Finally, although this is a limitation with other studies of this field, our study was conducted in a single country, which limits generalizability. Generalizability of our results needs to be ascertained through future research.

Very little research has attempted to investigate the undergraduate students’ career self-management. Future research should continue to explore additional factors that help explain undergraduate students’ career self-management.

5. Conclusion

Notwithstanding the above limitations, this research is the first to examine the roles that creative ability and creative self-efficacy play in the processes career self-management. The study identified the two different types of creative efficacy, creative intention and creative behavior. We found creative behavior are more related to creative ability. This study proposed that universities can potentially enhance students’ career self-management by developing their creative ability.

Previous research found there was a positive relationship between career self-management and career success. The results indicated that subjects who fulfill high levels of creative self-efficacy will report greater career self-management than those who do not. These results suggest that individual’s creative ability initiatives promoting career management behaviors may lead to employee career satisfaction.

The paper makes a valuable contribution to both self-efficacy and career success literatures by being one of the first to present findings of the effects of creative self-efficacy on career self-management. It argues that the effects of creative self-efficacy on career self-management can be facilitated by creativity. Undergraduate students who exhibit high creative self-efficacy would increase their career self-management to attain successfully career success as opposed to those who are less creative self-efficacy.
6. Acknowledgement

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References


