

Individual Creativity: Influence of Job Autonomy and Willingness to take Risk

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Abstract

In the present era of hasty change, organizations are facing greater demand from their environment to engross in innovative behaviours to create and deliver their products and/ or services to stay competitive, and to lead the change process itself. Innovation is widely claimed to have beneficial influences on the effectiveness and long-term survival of the organizations. In order to accomplish competitive environment successfully, organizations depend on their employee's creativity, since it is the basis of innovation process in the organisations. Hence this study attempts to explore the factors that facilitate individual creativity of employees at the work place. Accordingly through literature reviews the study identified Job autonomy, Challenge, Openness, Playfulness, Conflicts, Debates, Supportive environment, Sufficient resources, Creative climate and Willingness to take risk as the factors that nurture individual creativity. Among these factors this study has considered Job autonomy and Willingness to take risks and has investigated the influence of these two factors on Individual creativity. The study is descriptive in nature and has adopted survey strategy. The study used data collected from 212 respondents working in auto component manufacturing organizations in Coimbatore District. The collected data has been analysed using correlation and regression analysis. Results reveal that Job autonomy is a key factor that nurtures individual creativity more.

Keywords : Individual creativity, Job autonomy, Willingness to take risk, Innovation.



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Innovation is always seen as a stimulant factor which can make good companies great. It's not just invention but also the style of corporate behaviour that encourages employees to come out with new ideas and also to take risk. Growing competition, globalization of companies and businesses, and the nonstop changes in the market and technologies are empowering companies to think about different ways and strategies to gain competitive edge in the market place. Innovation is being considered by companies as one of the methods to gain competitive edge and organizational success. According to Heye (2006) innovation refers to the "implementation or transformation of a new idea into a new product or service, or an improvement in organization or process." Hence, there is an increasing attention to innovation, which is a way to respond to the worldwide competition and pressures from the environment.

Schumpeter (1997) strongly believes that the concept of innovation, described as the use of an invention to create a new commercial product or service, is the key force in creating new demand and thus new wealth. Successes in business today demand untiring innovation. Generating fresh solutions to problems and the ability to inherit new products or services for a changing market are part of the intellectual capital market that gives an enterprise its competitive edge. In a dynamic environment, success comes from looking for the next opportunity and having the ability to find hidden connections and insights into new products or services, desired by the customer.

Need for Innovation and Creativity

The globalization of the world's economies challenges organizations with an increasingly competitive, hasty change, and turbulent environment (Mumford et al., 2002; Maria and Mariano, 2012; Stefan et al., 2012). Innovation in this context is vital since organisations desire to grow, keep up with competitors, and adapt to changing customer needs (Porter 1990; Amabile and Conti, 1999; Marja and Welco, 2009). In such times of change, the ability to innovate is seen as a crucial determinant of organizational performance in terms of growth, competitiveness, and even survival (Amabile, 1988; Kanter, 1988; Janssen et al., 2004). Innovation is the backbone of a country in all aspects. Especially, for a developing country like India, innovation has taken an imperative character. As a developing country, India needs to increase the economic level of the country and it can be accomplished through "Innovation" in governing structure, policies, practices and also in the products and services that are manufactured and rendered by the organizations.

Without creativity innovation will not happen. Amabile et al. (1996) strongly stated that all innovation begins with creative ideas. To add on their view Maria and Mariano (2012) explains that creativity is an ingredient for innovation. The most efficacious organizations will have an environment where creativity and innovation are befalling unfailingly at all levels of the organization, and in all functions (Deepa and Nicholas, 2012). By reviewing these statements it can be concluded that Innovation and Creativity are inseparable terms which are needed for the organisations growth. Deepa and Nicholas (2012) argued that rapidly changing business set-ups and highly competitive markets have enforced companies to diagnose the need to innovate and be creative. Bearing this in mind Anderson et al. (2004) emphasises the importance of organizational innovativeness for both firms

and economies and hence research on the facilitators of innovation has flourished over the last two decades. Organisations can accomplish their goals without any hurdles only when their employees are creative.

Literature Review

Individual creativity

Employers+ Employees = Organisation. As discussed in the introduction part, creativity and innovation involves the life of the organisation and employees and employers play the main role since they are the people who take the creativity and innovation to realistic products and services. Ultimately individual creativity will contribute to the innovation and creativity process of the organisation. In support of the above statement Han et al. (1998) explains, Innovation as an increasingly important management function to ensure a firm's growth. However, firms need creative employees to initiate organizational innovation. Not surprisingly, employee creativity is recognized as the key for generating a competitive advantage (Shalley et al., 2004). Similarly, Mark and Scott (2009) explains, organizations are constantly searching for original and appropriate solutions to problems, and as individuals are the makers of creative ideas. To add on to the above study by Prahalad and Hamel (1990) emphasize that due to the essential and hasty technological, cultural, demographic, and economic changes in our knowledge-based economy, employee creativity has become progressively more pivotal challenge for organizations. Organizational creative theorists (e.g., Scott, 1995; West, 1990) have argued that individual's creativity is important in itself and can be conceptualized as a necessary first step or precondition required for innovation and creative employees are critical in order to enhance the creativity in organizations (Maria and Mariano, 2012).

An organization's ability to be innovative or creative depends on its employees and their creative potential. To add on above statement Florida et al. (2005), Deepa and Nicholas (2012) state, they are the ones who discover new technologies giving upsurge to powerful economic growth. Thus, one can reason that an individual's creative potential forms the base for an organization's creative capital. Creativity exhibited by individuals within the organization is often in response to finding solutions to organizational problems. All innovation begins with creative ideas. Successful implementation of new programs, new product introductions, or new services depend on a person who

creates good ideas (Amabile et al., 1996). Therefore, it may be fruitful to concentrate on individual creativity. Innovation is imperative to organizational survival and success and individual creativity is critical to organizational innovation. Management must ensure that the organizational environment is conducive in enhancing the individual creativity.

There are many factors which influence the creativity of employees at work place. Several authors have brought out the significant factors which influence the creativity of employees; Job Autonomy (Naqvi et al., 2013), Supportive Environment (Valentine et al., 2011), Innovative Climate (Amabile, Conti, Coon, Lazenby, and Herron, 1996; Ekvall, 1996; Tesluk, 1997; Anderson and West, 1998), Intrinsic Motivation (Deci and Ryan, 1985; Ryan and Deci, 2000), Innovative Self-Efficacy (Choi, 2004; Flora et al., 2012), Fun at Work (Alexandra, 2005), etc. From the above factors this study has taken two important factors namely Job Autonomy and Willingness to take risk as the factors that promote employee creativity.

Job Autonomy

Freedom is indispensable for a common man to run his daily life. In the organisational point of view, freedom also termed as Job Autonomy (in the organizational context) is essential for an individual employee, even to do his routine work. Hackman and Oldham (1975) defined autonomy as “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (p. 162). In terms of creativity, freedom (Autonomy) is unavoidable since it will stimulate employee creativity (Pelz and Andrews, 1976; Bailyn, 1985; Amabile and Grysiewicz, 1989, 1996; Oldham and Cummings, 1996; Kristina and Audrone, 2006).

Kristina and Audrone (2006) explain that numerous job aspects influence an individual's work outcomes. One of the most vital aspects is job autonomy, which refers to the degree of discretion employees have over significant decisions in their work (Hackman and Oldham, 1980). This aspect has been identified as a significant feature of work design for employee outcomes (Baek-Kyoo et al., 2010). Studies have suggested that giving autonomy to individuals is expected to encourage higher motivation, satisfaction, and performance in a variety of settings (eg., Fried et al., 1999; Troyer et al., 2000; Van Yperen and Hagedoorn, 2003) which will boost up the employee creativity. Various researchers (eg. Barron and Harrington, 1981; Ekvall, 1983;

Bailyn, 1985; Woodman et al., 1993; Amabile et al., 1996; Oldham and Cummings, 1996; Judge et al., 1997; Kristina and Audrone, 2006; Paul and Peter, 2007; Tuan and Venkatesh, 2010) identified that Autonomy is essential for individual creativity and they found positive relationship between individual creativity and Autonomy.

Creativity is fostered when employees have legitimately high level of autonomy to do their work and a sense of ownership and control over their own work and their own ideas (Paolillo and Brown, 1978; Bailyn, 1985; King and West, 1985; West, 1986). According to Amabile and Gitomer (1984), employees harvest more creative work when they perceive themselves to have freedom in how to go about achieving the tasks that they are given. In line with the above statement Giugni (2004) discussed four components of climate which influence the creativity of employees in which one of the essential factors is Autonomy. Amabile and Grysiewicz (1987) suggest that increased autonomy permits individual's freedom from rigid work rules and the capacity to follow novel thoughts.

Willingness to take Risk

“No risk, No gain” this is a universally known proverb. Risk taking is about taking process one step ahead. In the process of innovation and creativity, risk taking is important and unavoidable (Cummings, 1965; Hage and Dewar, 1973; Kimberley and Evanisko, 1981; Ettlie, 1983; Ekvall, 1983; Kanter, 1983; Deci and Ryan, 1985; Mumford and Gustafson, 1988; Nystrom, 1990; Woodman et al., 1993; Utman, 1997; Bertrams, 1999; Zhou, 2003; Kristina and Audrone, 2006; Tuand Lu, 2012), since it includes uncertainty of results. Further, new ideas are risky because they represent disturbances in routines, relationships, power balances, and job security (Albrecht and Hall, 1991).

Todd (2002) states that, new ideas represent change from the established order and invite evaluation and offer potentially negative consequences for the employee offering the idea. It is difficult for us to separate ideas from the people that create them, thus to offer ideas is to put oneself at risk (Albrecht and Hall, 1991). Many researchers (eg. Koberg and Chusmir, 1987; Amabile et al., 1997; McLean, 2005; Kristina and Audrone, 2006; Parzefall et al., 2008; Karun and Goman, 2012) claim that risk taking will positively influence individual creativity. For example, Amabile's (1988) qualitative research among a sample of R&D scientists tinted the role of risk orientation in the promotion of creativity. Likewise, Michael (1979) and Glassman (1986) claim that highly

creative people often have a high propensity for risk-taking. These researchers statement has brought out the relationship between creativity and risk taking.

Todd (2002) explains that, focus on the risk in creative performance is well justified and has deep roots in management occurrences. For example, according to Deming (1986), one vibrant prescription for victory is to push out fear and take risk. Pfeffer and Sutton (2000) states that fear ruins a crucial tricky problem in many workplaces, which complements the statement by Deming (1986). Their research highlighted the “knowledge-doing gap” in organizations. There they found big gap between employee’s knowledge and their performance. This is due to several obstacles, fear being among the most vital of these obstacles. Todd (2002) states that, employees will not act on creativity based on the knowledge they possess if they fear that they will be punished for doing so. Though there are a number of factors that influence the individual creativity of employees. This study considered two factors namely Job Autonomy and Willingness to Take Risk that influences the individual creativity of employees.

Objectives of the Study

- To find out the level of Autonomy, Willingness to take Risk and Individual creativity among the employees.

- To identify the influence of Autonomy and Willingness to take Risk on Individual creativity.

Methodology

The study is descriptive in nature and adopted survey strategy. A questionnaire survey method was used to seek responses from technical employees working in Automotive component manufacturing companies registered under ACMA (Automotive component manufacturing association) in Coimbatore, India. Since the automobile sector has seen consistent growth and innovation and creativity is the key for remaining competitive in the market, the study choose automobile sector. The study used data collected from 212 respondents working in 9 auto component manufacturing organizations in Coimbatore District. The data were collected during the months of January and April, 2015 and all questionnaires were usable. Each response was measured using a five-point Likert scale, ranging from 5 “strongly agree” to 1 “strongly disagree.”

Using a preliminary draft questionnaire, a pilot study was conducted with 40 employees from three companies; these responses were excluded from the final study. Reliability of the variables were ensured by examining the Cronbach’s alpha (α) coefficient with an alpha value of >0.7 considered to be acceptable (Nunnally, 1978). All the variables had an α value of >0.7 ensuring reliability of the variables.

Table 1: Measures Used

Constructs	Number of Items	Cronbach’s alpha	Author
Job Autonomy (JA) -	6	0.918	GoranEkwall (1996)
Willingness to take risk (WR) -	6	0.510	GoranEkwall (1996)
Individual creativity (IC) – is the ability of an employee to be creative and also help his colleagues in being creative	15	0.731	Dhas and Dollinger (1998)

The collected data was analysed using percentage analysis to portray the demographic profile of the respondents. Descriptive statistics to identify the significant factors that employee attached more importance in constructs Job Autonomy, Willingness to take Risk and Individual Creativity. Correlation and Regression analysis was performed to find the influence of the factors Autonomy and Willingness to take Risk on Individual Creativity.

Analysis and Discussion

Profile of the respondents

50% of the respondents are between 26-35 years of age, 24.8% are below 25 years of age and 5.8% are between 46-55 years and the rest above 55 years, indicating that majority of the respondents are below 35 years of age representing the young workforce. 86.5% are male, 53.8% are married, and 46.2% are engineering graduates. 42.3% of the respondents are in the middle level and 53.8% of the respondents have experience below 5 years.

Table 2: Descriptive Statistics

Factors	Items	Mean	Std. Deviation
Job Autonomy	Carry out work in prescribed ways	4.33	0.872
	Make choices about own work	4.23	1.122
	Freedom to define own work	4.33	1.089
	Option to schedule day-to-day activities	4.38	1.096
	Share information about work with colleagues	4.23	1.104
	Work in strict guidelines and rules	4.15	1.065
Willing to take Risk	Put forward a new idea	3.63	.943
	Tolerate uncertainty when making decisions	4.04	.878
	Venture into unknown territory	3.08	1.091
	Venture on my ideas	3.27	1.078
	Be on the “safe side”	2.85	1.394
	Tendency to protect myself	2.98	1.280
Individual creativity	Suggests new ways to achieve goals or objectives	4.02	1.048
	Propose new ideas to improve performance	4.13	1.094
	Suggests new ways to increase quality	4.13	1.163
	Source of creative ideas	4.10	1.116
	Not afraid to take risks	4.06	1.111
	Promote my ideas to others	4.12	1.033
	Exhibit creativity on my job	4.17	0.977
	Have new and innovative ideas	4.08	0.979
	Come up with creative solutions to problems	4.33	1.071
	Fresh approach to problems	4.04	1.118
	Suggest new ways of performing work tasks	4.23	1.051

Table 2 presents the Mean values for the individual items of the three constructs considered for the study. It is inferred that the mean value for all the items in the constructs Job Autonomy and Individual creativity are greater than 4 which implies that the employees have perceived that they have freedom at work and also freedom (M=4.33) to exhibit creativity in their work and are confident that they are creative in their work and perceive themselves as a creative person.

Items Willingness to take risk has six items. Among them 2 items ie: “I try to be on the safe side (M=2.85)” and “I have a tendency to protect myself in many ways (M=2.88)” have mean value less than 3 which implies that employees come forward and try new things than being on the safe side. This could be due to the good relationship they have with supervisors and management and the support and encouragement received from them.

Table 3: Analysis of Variance

Factor	ANOVA											
	Age		Gender		Marital status		Education		Designation		Experience	
	F	Sig	F	Sig	F	Sig	F	Sig	F	Sig	F	Sig
Job Autonomy	1.518	.197	18.531	.070	.123	.930	18.331	.090	3.640	.067	3.507	.066
Willingness to take risk	1.859	.117	11.297	.001	3.065	.081	6.564	.073	5.469	.005	5.162	.256
Individual creativity	5.112	.001	1.866	.173	7.481	.059	12.626	.066	2.842	.060	5.839	.420

Analysis of Variance shows that there is significant difference in the perception of the respondents of different age groups with respect to Individual Creativity ($F=5.112$, $p<0.001$); for Willingness to take risk among male and female respondents ($F=11.297$, $p<0.001$) and respondents of varied designation ($F=5.469$, $p<0.005$).

Post hoc analysis was carried out for to find out which category of respondents varied in their perception compared to others.

Respondents of the age groups below 25 years ($M=3.8811$) and 25-35 years ($M=4.0524$) have a similar perception compared to respondents between 36-45 years ($M=4.5844$), 46-55 years ($M=4.2424$) and above 55 years ($M=4.3636$) for the factor Job Autonomy. This could be due to the reason that people above 35 years perceive that they have Job Autonomy compared, since the experience that they have gained over the years in the current organization and earlier experiences have helped them understand and appreciate the autonomy that the organization has given them and enjoy the same compared to youngsters.

Female respondents are less willing to take risk ($M=3.7381$) compared to their male counterparts ($M=4.3593$). This is since male respondents by nature are adventurous and their risk taking ability is high. Female normally think a lot before doing any activity and prefer to be on the safer side and are moderate risk takers or risk averse.

There is a significant difference in the perception among respondents of varied designation for the variable Willingness to take risk. Post hoc results revealed that Middle Level ($M=3.9959$) and Junior level ($M=4.1244$) are less willing to take risk compared to Executive level ($M=4.3140$) employees. Further, since junior level people seek more developments in their position and hence willing to take high risk compared to middle level executives and this attitude triggers them to take more risk in their job. The higher the level employees move in the organization, the higher will be the risk taking ability. This is due to the virtue of their job and hence mean value is highest for the group.

Correlation analysis was carried out to find the association/relationship between the constructs.

Table 4: Correlation

		JA	WR	IC
Job Autonomy	Pearson Correlation	1	-.108	.742**
	Sig. (2-tailed)		.058	.000
Willingness to take risk	Pearson Correlation		1	-.087
	Sig. (2-tailed)			.125
Individual creativity	Pearson Correlation			1
	Sig. (2-tailed)			

Among the two factors considered in correlation analysis with Individual creativity, Job autonomy is highly correlated with Individual creativity ($r=0.742$; $p<0.000$) and the

correlation is significant. This implies that employees place more value on Job Autonomy, since for doing any kind of job, freedom is needed; especially for doing a creative work,

freedom is more vital. Willingness to take risk is negatively correlated with Individual creativity ($r=-0.087$; $p<0.125$) and is not statistically significant, which may be due to the fear of the consequences of failure.

Regression analysis was performed to find out the extent of influence of the factors on the Individual Creativity of the employee. Individual creativity was taken as dependent variable and Job Autonomy and Willingness to take risk were taken as independent variables and step wise regression was carried out.

Table 5: Regression Analysis Model Summary

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square	Adjusted R Square	F, Sig.
	B	Std. Error	Beta					
Constant	.937	.166				.551	.549	380.060, $p<0.001$
Autonomy	.742	.038	.742	19.495	.000			

Regression results revealed that F-Test was statistically significant ($F=380.060$, $p<0.001$), which indicates that the model is statistically significant. The adjusted R square value of 0.549 indicates that 54.9% of the variability in Individual Creativity is predicted by the independent variables. Among the two independent variables Autonomy and Willingness to take Risk, Job Autonomy has an influence of 74.2% on the dependent variable Individual creativity ($\beta = 74.2\%$ positive, $t = 19.495$ positive, $p < 0.001$).

This result reveals that for an effective Individual Creativity, organisation should provide Autonomy to do their job in terms of the freedom to define the way they would like to work and schedule their work. Until and unless freedom is given, employees cannot try new processes and work practices and exhibit their creativity at work.

Conclusion

Innovation process is an essential and vital step in company's growth. Innovations make the difference, offering companies an important competitive advantage in domestic as well as foreign markets. Employees' creativity can catalyse the growth and development of organizations since it helps them stand out and head of their competitors. Among the two important factors considered for the study Job Autonomy and Willingness to take risk, this research identified one important factor namely Job Autonomy that advances the creativity of employees. The results of the study reinforces that organisations should provide Autonomy at work so that employees exhibit their creativity

in their work, but the limits need to be defined. Too much autonomy without responsibility might lead to no desired outcomes. No doubt, the current economic environment is a volatile and violent one. The new environment stresses renewed dynamism of approach. Innovation is the key for this game to begin. Only agile organizations can manage the changes in the new environment. It is the duty of the organisations to keep organization lean, young, flexible, and looking forward for new things to continuously delight the customers, which is the purpose of every business. This result can be used by the management to make a keen eye on individual employees' freedom. As an organisation they can make the healthy environment which can enrich employees' creativity.

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