Full Length Research Paper

Relationship between employees' perfectionism and their creativity

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A major challenge confronting managers in the 21st century is how to effectively use the potential capabilities of their employees. To achieve this goal, employees must be encouraged to use their intellectual capabilities to enhance their knowledge and creativity. One aspect that reinforces individual creativity is perfectionism, which is a stable pattern of thinking and behavior that changes relatively little over time. Although there is not yet a model of perfectionism in the workplace, the results will help improve human resource management practices. The aim of this paper is to study the relationship between perfectionism and creativity among the employees of Shahid Sadoghi University of Yazd. The measuring tools were two questionnaires, one concerned with positive perfectionism and the other with creativity. Pearson correlations and linear regression were used to test the hypothesis. The results showed that there is a meaningful correlation between positive perfectionism and creativity. In addition, there are meaningful correlations between positive perfectionism and the need for achievement, locus of control, encounters with ambiguous conditions, and creativity-related skills. Considering the results, it was determined that the characteristics of perfectionism impact people's perception, interpretation, and feelings of responsibility about their progress. It is recommended that managers empower positive perfectionism in order to generate new ideas, achieve reachable goals, and move toward organizational progress.

Key words: Positive perfectionism, creativity, needs for achievement, locus of control, ambiguity conditions.

INTRODUCTION

The concept of perfectionism has been receiving attention in personality psychology for many years, but only a handful of studies have investigated the effects of perfectionism in the normal workplace.

A major challenge confronting managers in the 21st century is how to use the potential capabilities of employees to enhance and accelerate organizational innovation. To achieve this goal, employees can use their intellectual capabilities to activate positive organizational changes by using their knowledge and creativity to empower such changes (Alirezaei and Tavalaei, 2008).

Creativity is a broad area that could result in improve-ments to people's lives (Batey and Furnham, 2008). Many studies have identified creativity as an outcome that focuses on new and useful ideas (Shalley and Gilson, 2004). Creativity can be defined as the ability to discern new relationships, examine subjects from new perspectives, and form new concepts from existing information (Forgionne and Newman, 2007). In some studies, creativity is considered to be a personal characteristic with features that include broad areas of interest and high energy levels (King and Gurland, 2007).

It is obvious that many organizations do not consider creativity, especially in developing countries. Even so, environmental changes have forced organizations to think creatively to help ensure their survival (Sadegi-Mal-Amiri and Raeisi, 2010). Therefore, it is important for all organizations to improve their employees' creativity, so managers must focus on identifying, understanding, and

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utilizing techniques and approaches that promote the creativity of their people. One technique is for the manager to focus on the characteristic of perfectionism.

Only a handful of studies have investigated the effects of perfectionism in normal populations in the workplace (Benson, 2003). Perfectionism has positive and negative aspects, depending on how it is channeled (Silverman, 1999). Usually, persistence and hard work are valued in organizations that emphasize perfectionism. The employees of such companies feel that they must avoid mistakes, keep track of everything, and work long hours to attain narrowly-defined objectives, that, they must do things perfectly (Bulens et al., 2002). But emphasizing perfectionism can result in various outcomes, some of which may not be positive.

One of the first theorists to mention perfectionism was Adler (1956). He claimed that we all strive to reach a goal that makes us feel strong, superior, and complete. As a result, striving for perfection is a normal phenomenon for most individuals, and the urge to live is tied to this striving (Saya, 2006). Perfectionism has been conceptualized both as a stable personality trait that results in individuals' engaging habitually in the same patterns of behavior and thinking styles or as the ways in which individuals think about such behaviors (Melrose, 2011). Therefore, perfectionism is a personality trait that is characterized by the person's striving for excessively high standards of performance, accompanied by a tendency to be overly critical of her or his own behavior (Besharat et al., 2010).

A perfectionist strives toward high goals, especially in the work domain, which may or may not be attainable for two reasons. First, the individual may have set unrealistic goals in regard to her or his abilities; perhaps the goal is not attainable in the given time period or for other reasons. Second, perhaps the situation was inherently unfair, that is, the individual sets reasonable goals, but progress is thwarted by discrimination or a lack of management support.

Perfectionist tendencies are likely to be reinforced when the world appears just, and they are likely to be suppressed when the world appears to actively disregard hard work or appears random in handing out the benefits of achievement (Kraner, 2011). Research on perfectionism over the past decade has focused on the tendency of some individuals to hold high personal standards (Kraner, 2011); meanwhile, there are big differences between perfectionists and those who are seen as healthy achievers (Anthony and Swinson, 1998).

The results of this study are important to organizations because individual creativity can lead to innovation and flexibility. Creative people usually try to achieve desirable outcomes. They achieve greater success in their activities by setting goals, generating new ideas, and being flexible. Given all of this background information, the goal of this research was to study the effect of positive perfectionism on employees' creativity in one of Iran's major universities.

LITERATURE REVIEW

The dimensions of perfectionism

In one model, the dimensions of perfectionism are divided into positive and negative components. Positive (healthy) perfectionism is defined in terms of achieving positive consequences and the motivation to achieve a certain goal in order to obtain a favorable outcome. Negative (unhealthy) perfectionism is defined as a function of the avoidance of negative consequences and the motivation to achieve a certain goal in order to avoid adverse consequences. This distinction between positive and negative perfectionism is grounded in behavioral theory, where a similar behavior might be associated with different emotional responses, depending on whether it is a function of positive or negative reinforcement (Haase and Prapavessis, 2004).

One study (Fedewa et al., 2005) showed that positive perfectionism was correlated positively with pride and negatively (with moderate correlations) with shame and anxiety. Pride's negative correlations with anxiety, hostility, shame-proneness, and negative perfectionism support the notion that it is an adaptive emotion. Negative perfectionism was significantly related to anxiety, state shame, and shame-proneness. Another study (Ram, 2005) showed that positive perfectionism was associated with higher academic achievement, higher motivation for achievement, positive personality factors, and the use of functional coping strategies. Negative perfectionism was generally found to be associated with negative personality factors and the use of dysfunctional coping strategies. It was not associated with academic achievement or achievement motivation. A study in Iran by Niknam et al. (2010) showed that positive perfectionism is associated with higher advancement, self-esteem, and self-actualization, whereas negative perfectionism is associated with low self-esteem, depression, and illogical beliefs.

Positive perfectionism and negative perfectionism were found to be positive and negative predictors, respectively, for depression and anxiety and, conversely, negative and positive predictors for academic achievement, respectively (Roohafza et al., 2010). The various aspects of both positive and negative perfectionism have some similarities, in that they tend to be intrinsically oriented and focused on internal rewards, processes, and achievements. This is somewhat different from some of the other items that failed to have impacts on either of the factors because they focus more on outcomes (Haase and Prapavessis, 2004).

Some studies conducted within organizations (Stoeber and Eysenck, 2008) have shown that perfectionist standards are associated with reduced efficiency, demonstrating the importance of considering invested time, errors, and response bias when investigating the relationship between perfectionism and performance.

However, it should be noted that there are aspects of perfectionism that act to enhance performance, such as having high standards and a need for order. The paradox that perfectionism helps performance in some ways and hurts performance in others often makes it difficult for the perfectionist to change and for her or his supervisor to confront the over-controlling behavior. Because some aspects of perfectionism help the executive perform, there is often a feeling that any change will lead to less success (Hurley and Ryman, 2003).

In addition, the combination of perfectionist traits and leadership responsibilities poses some interesting dynamics for perfectionists as well as for those who work for them. It is important to note that, in many cases, the perfectionist manager is completely unaware of both problem behaviors and their root causes. In addition, in-depth case studies have revealed that their perception of the degree to which they are loosely or tightly controlling others often is so inaccurate that they may actually think they are being empowering when they are, in fact, using excessive control (Hurley and Ryman, 2003).

Often, perfectionists perform well until they get promoted to a higher-level job that requires trust, empowerment, and other leadership behaviors that the person struggles to perform (Hurley and Ryman, 2003). Attaining a high standard and seeking to do well equate to success, whereas perfectionism costs time, energy, and money. Perhaps it is not so much a case of being perfect as just doing a good job (McMahon and Rosen, 2008). A recent study also suggested that perfectionist managers are unlikely to make good leaders (McMahon and Rosen, 2008).

Creativity

Creativity research has a long history in psychology, focusing on individual differences in personality, cognitive abilities, and problem-solving styles. However, recent theoretical and empirical work has looked at creativity as something the brain does naturally. That is, creativity is an adaptive feature of normal cognitive functioning that evolved to aid problem solving under conditions of uncertainty. Under such circumstances, novel approaches and invention are highly advantageous (Simonton, 2000).

Organizations are increasingly seeking to foster creativity, because it is an important source of organizational innovation as well as competitive advantage (Oldham and Cummings, 1996). Creativity has been defined as a judgment of the novelty and usefulness (or value) of something (Pirola-Merlo and Mann, 2004). Creativity has been studied from different perspectives and is associated with a number of defining factors and elements. As stated by Unsworth (2001), "These perspectives range from Royce's discussion of inventions in 1898 to Guilford's call for creativity research

in 1950; research into creativity in classrooms to research into creativity in organizations; and Freudian accounts to cognitive accounts; personality accounts, sociological accounts, interactionist accounts, and psychological accounts".

According to conventional wisdom, creativity is something that creative people have or do (Amabile, 1997). Creative individuals have several features that distinguish them from their less creative peers, that is, they have a rich body of domain-relevant knowledge and well-developed skills; they find their work intrinsically motivating; they tend to be independent, unconventional, and greater risk takers; and they have wide interests and a greater openness to new experiences (Simonton, 2000).

Theoretical framework

Generally, the theoretical framework is implied in the research plan. The theoretical framework is established to determine the main problem, the associated variables, and relationships among those variables.

According to Stoeber and Otto (2006), healthy perfectionists are those who work diligently towards a positive result but do not give themselves a hard time along the way or in the event of failure. Healthy perfectionists have been shown to have lower ego defenses, less procrastination, less obsessive-compulsive symptoms, higher self-esteem, and less depression than unhealthy perfectionists (Ellam-Dyson and Palmer, 2010). In this study, the positive perfectionism dimension consists of:

1) Personal standards that are high but attainable;
2) Tendency to organize the required actions;
3) Satisfaction with her or his performance;
4) Search for ways to accomplish the utmost actions; and
5) The stimulation of positive, bonus outcomes (Terry-Short et al., 1995) (Figure 1).

According to the issues aforementioned, perfectionism is considered a stable pattern of thinking and behavior that changes relatively little over time, as opposed to a variable measure of a person's state at any particular moment (Anshel et al., 2009). Perfectionism is often considered to be a maladaptive trait rather than an adaptive trait. Several previous studies have supported this claim; for example, it was found in a Japanese student population that perfectionism was a significant predictor of depression and psychosomatic symptoms (Butt, 2008). On the other hand, individual creativity as dependent variable consists of:

1) Need for achievement;
2) Locus of control;
3) Encounter to ambiguity conditions; and

Need for achievement, locus of control, encounter to ambiguity conditions, creativity-related skills

Individual creativity

intermediate variables: (age, sex, education, marriage, and seniority).

perfectionism

•High personal standard, but obtainable;
•Tendency to organize in action;
•To satisfy his/her performance;
•Search for doing the utmost action;
•To stimulate positive bonus
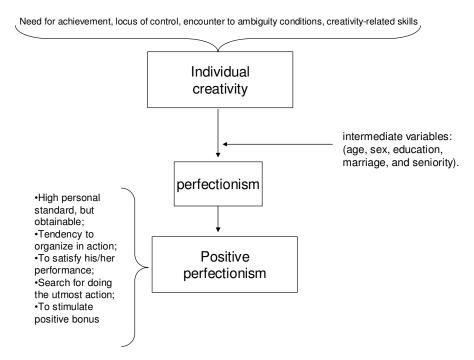
Positive perfectionism

Figure 1. The conceptual model.

4) Creativity-related skills (Shilling, 2008) (Figure 1).

Only a few studies have examined the relationship between perfectionism and creativity, and they confirmed the relationships that have been discussed earlier. For example, Rieke (1994) and Berglund and Wennberg (2006) showed that there is a meaningful relationship between positive perfectionism and creativity. Also, Yu (2010) conducted a study of positive and negative perfectionism and found that positive perfectionists had more creativity than negative perfectionists. This research seeks to answer the following hypothesis.

Main hypothesis

H_1: There is a relationship between employees' positive perfectionism and their creativity at Shahid Sadoghi University of Yazd.

Sub-hypotheses

H_{1a}: There is a relationship between positive perfectionism and the need for achievement among employees at Shahid Sadoghi University of Yazd.
H_{1b}: There is a relationship between positive perfectionism and the locus of control among employees at Shahid Sadoghi University of Yazd.
H_{1c}: There is a relationship between positive perfectionism and creativity among employees at Shahid Sadoghi University of Yazd.

H_{1d}: There is a relationship between positive perfectionism and encounters with ambiguous conditions among employees at Shahid Sadoghi University of Yazd.
H_{1e}: There is a relationship between positive perfectionism and creativity-related skills among employees at Shahid Sadoghi University of Yazd.
H_{1f}: There is a relationship between positive perfectionism and creativity in regard to intermediate variables (age, sex, education, marriage, and seniority) among employees at Shahid Sadoghi University of Yazd.

MATERIALS AND METHODS

In this study, we used the descriptive method with correlation. The statistical population consisted of all 400 employees at Shahid Sadoghi University of Yazd, among whom 197 were selected according to the Cochrane formula as samples, and, finally, 204 questionnaires were collected (N: statistical population, z: 1.96, d: 0.05).

$$n = \frac{\frac{Z^2}{4d^2}}{1+\frac{1}{N}(\frac{Z^2}{4d^2}-1)} = \frac{\frac{3.8416}{0.01}}{1+\frac{1}{400}(\frac{1.96^2}{4*0.05^2}-1)} = 196.21 \simeq 197$$

The tools were two questionnaires, one related to positive perfectionism and the other related to creativity. The validity of two questionnaires was determined to be 0.93, and the reliability of the two questionnaires was determined to be 0.853 and 0.866, respectively.

With the aid of SPSS software, Pearson correlations, linear regressions, and linear logarithms were used to test the hypothesis.

Table 1. Pearson test (perfectionism dimension and creativity.

Variables		Correlation coefficient	P-value
Creativity	Positive perfectionism		
	High personal standards, but obtainable	0.366	0.000
	Tendency to organize in action	0.286	0.000
	To satisfy his/her performance	0.368	0.000
	Search for doing the utmost actions	0.269	0.000
	To stimulate positive bonus	0.258	0.000

Table 2. Pearson test (perfectionism and creativity dimension).

Variables		Correlation coefficient	P-value
Positive perfectionism	Need for achievement	O.329	0.000
	Locus of control	0.186	0.000
	Encounter to ambiguity conditions	0.204	0.000
	Creativity-related skills	0.347	0.000

RESULTS

The demographic characteristics are categorized as follows: 50.5% of employees were men; 49% of the employees were women; and 1% of the employee did not mention gender. Single employees made up 8.3% of the sample population, and 90.7% of the employees were married. Employees who had earned a college degree made up 17.6% of the sample population; among these, 11.1% had a Bachelor's degree, 8.3% had a Master's degree and 5.9% had a Ph.D. degree. Concerning the ages of the participants, 35.3% of them were 30 or younger, 42.6% were 31 to 39, and 21.1% were 40 or older. One percent of the employees did not mention their ages. Considering seniority, 46.6% of employees had worked 10 years or less, 38.2% had worked from 11 to 20 years, and 11.8% had worked 21 years or more.

The results show that correlations between positive and negative perfectionism and creativity were 0.366 and 0.412, respectively. These values show that a meaningful and direct relationship exists between the perfectionism and creativity of employees (Table 1). In addition, correlations between positive perfectionism and need for achievement, locus of control, encounter to ambiguity conditions, and creativity-related skills were evaluated as 0.329, 0.186, 0.204, and 0.347, respectively. It was recognized that a meaningful and direct relationship exists between positive aspects and four components of creativity, but there is not a meaningful and direct relationship between negative perfectionism and need for achievement (Table 2).

The results of linear regression on positive perfectionism aspects and creativity show that only tendency to organize in action with creativity is meaningful, and its ß coefficient was 0.268. The results of linear log assessment of the intermediate variables showed that the variables, such as age, gender, education, and marriage did not affect the employees' perfectionism with their creativity. Only the seniority variable affected employees' perfectionism with their creativity.

DISCUSSION

The results show that there is a meaningful correlation between positive perfectionism dimensions and creativity. In many studies, perfectionism typically has been focused on negative aspects (Egan et al., 2007), but the studies confirmed the effect of positive perfectionism on thoughts, feelings, and behaviors (Besharat et al., 2007). Sadati (2008) also confirmed relationship between positive perfectionism and creativity.

In general, perfectionists are known as individuals who tend to be complete in their lives. They strive toward high goals, especially in the work domain (Niknam et al., 2010), which could have an effect on individual creativity. Perfectionism aspects impact people's perceptions, interpretations, and feelings of responsibility about their progress.

Many studies have proven that positive perfectionists have more positive personality characteristics and more satisfaction in their lives (Hajloo et al., 2011). On the other hand, positive perfectionists have high personal standards and prioritize their duties to organize in their actions (Ye et al., 2008). Positive perfectionists usually enjoy of the hard attempts, challenge themselves to attain improvement and to enhance their flexibility, and admit their shortcomings (Besharat et al., 2008). These features could have influences on creativity, because

creativity is identified as the ability to determine new relationships, to review problems, and to outline new concepts (Forgionne and Newman, 2007). Consequently, it is expected that positive perfectionism has a closer relationship with increased creativity than does non-perfectionism. Even so, we cannot generalize this conclusion to various environments, organizations, and cultures.

The findings also confirm that there is a positive and meaningful correlation between positive perfectionism and the need for achievement. Positive perfectionists have special characteristics, such as high personal standards, the tendency to organize in action, searching for ways to accomplish the most actions (Terry-Short et al., 1995), and these personal characteristics are almost certain to lead to new and original results (Kampylis et al., 2009). Therefore, positive perfectionists usually search for need for achievement as a dimension of individual creativity. The other findings demonstrate that there is a positive and meaningful correlation between positive perfectionism and locus of control. Since the perfectionists have high personal standards (Terry-Short et al., 1995), they try to search for setting goals and represent necessary attempt and decisiveness to acting, that is, locus of control (Shilling, 2008). Also, these standards lead to higher responsibility as one dimension of locus of control (Kreitner and Kinicki, 2005), even though they may not attain the goals. Therefore, positive and negative perfectionists have more locus of control than non-perfectionists.

The findings show that there is a positive and meaningful correlation between positive perfectionism and encounter to ambiguity conditions. In general, perfectionists operate better than other people in uncertain conditions, because they have a tendency to be complete at all times and to have high performance (Niknam et al., 2010). Individuals should have internal control and self-belief to take action better in uncertain and ambiguity conditions (Mahmoodi, 2006). On the other hand, the rapid changes in organizations necessitate that individuals become more flexible to be successful.

In addition, there is a positive and meaningful correlation between positive perfectionism and creativity-related skills. Perfectionism is a personality trait, and such people usually use special behavioral patterns (Melrose, 2011). A perfectionist accepts the responsibility of being clever and competent, and such a person has the opinion that there is a right, complete, and precise solution to problems (Alizade-Sahraei et al., 2010). Perfectionists who have these features are skilled at generating new ideas, accepting and adapting to change, and finding the best solution (Shilling, 2008), all of which highlights their creativity-related skills.

Finally, the findings confirm that the variables, such as age, gender, education, and marriage did not affect the relationship between employees' perfectionism and their creativity, but the seniority variable affected the relationship between employees' perfectionism and their creativity. That is, high seniority had a greater effect on the relationship between employees' perfectionism and their creativity.

Conclusions

Many researchers believe that creativity is very important for the long-term survival of organizations because it enables organizations to remain competitive in a rapidly changing environment and to achieve a competitive advantage. This study highlights how an organization can contribute to the development of personal creativity and success, thereby ensuring organizational success. Perfectionism is an issue to promote creativity.

In professional and corporate settings, recruiters, employers, managers, and employees alike view perfectionism as a positive trait that enables employees to strive to achieve perfect performances/products. However, there is a "dark side" of perfectionism, typically explored in and attributed to clinical populations. The "dark side" could lead to behaviors typically associated with clinical disorders, such as depression, health problems, and severe stress. The "dark side" observed with clinical populations should be examined to determine if it applies to more normal populations, specifically working professionals (Bousman, 2007). Therefore, perfectionism is an energy that can be used either positively or negatively depending on one's level of awareness (Silverman, 1999).

This research showed that a perfectionist is a person who demands perfection of herself/himself or others and is displeased with anything that is not perfect or that does not meet extremely high standards. The variables that lead to positive perfectionism are being discovered, and this may enhance our understanding of the factors that should be emphasized for healthy development. Positive perfectionism has differential associations with achievement, motivation, personality variables, and coping strategies in organizations.

It is critical that a manager who is a perfectionist understand that there is an inflection point where the negative aspects of perfectionism outweigh the positive aspects (Hurley and Ryman, 2003). Also, it is difficult to foster a culture of creativity, personal responsibility, and empowerment alongside perfectionist thinking. Managers can find perfectionists hard to manage, colleagues can find them difficult to work with, and subordinates can be at the mercy of a perfectionist manager (McMahon and Rosen, 2008).

The debated issues should be of interest to perfectionism researchers in general who do not yet have a model of perfectionism in the workplace, an environment that is impacted by many of the employees. The implications of this research are that perfectionism is not a uni-dimensional attribute as it is sometimes assumed

to be. It is suggested that managers empower perfectionism, especially positive perfectionism as a useful tool for creating new ideas and ensuring organizational success. It is hoped that the results of the research will enhance human resource management practices, such as assessing and placing personnel, redesigning jobs, and assisting employees.

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REFERENCES

Alirezaei A, Tavalaei R (2008). Innovation in the organizations. J. Manag. Hum. Resource Oil Ind., 2(3): 69-70.

Alizade-Sahraei A, Khosravi Z, Besharat M (2010). Relation between illogical beliefs with positive and negative perfectionism in students of Noshahr City. J. Psycho. Stud., 6(1): 10.

Amabile TM (1997) Motivating Creativity in Organizations. California management review. 40(1): 42.

Anthony M, Swinson R (1998). When perfect isn't good enough: strategies for coping with perfectionism. New Harbinger Publishing. USA.

Batey M, Furnham A (2008). The relationship between measures of creativity and schizotypy. Pers. Individ. Dif., 45: 816.

Benson E (2003). The many faces of perfectionism. Monitor on Psychology. 34: 18-20.

Berglund H, Wennberg K (2006). Creativity among entrepreneurship students: comparing engineering and business education. Int. J. Cont. Eng. Educ. Lifelong Learn., 16(5): 368.

Besharat MA, Joshan-loo M, Mirzmani S (2007). Perfectionism. J. danshvare raftar. 14(25): 12.

Besharat MA, Nadali H, Zebardast A, Salehi M (2008). Perfectionism and styles to overcome it. Iranian Psycho. J., 5(17): 8.

Besharat MA, Pourhoseina R, Rostamia R, Bazzazianb S (2010). Perfectionism and fatigue in multiple sclerosis. Psychol. Health, 1(14): 2.

Bousman L (2007). The fine line of perfectionism: is it a strength or a weakness in the workplace?. University of Nebraska at Lincoln: 1-2.

Bulens M, Krietner R, Kinicki A (2002). Organizational behavior. Berkshire: McGraw Hill, p. 66.

Butt FM (2008). The role of perfectionism in psychological health: A study of adolescents in Pakistan. Europe's J. Psychol., 6(4): 126.

Ellam-Dyson V, Palmer S (2010). Rational coaching with perfectionistic leaders to overcome avoidance of leadership responsibilities. The coaching psychologist. 6(2): 6-7.

Egan SJ, Piek JP, Dyck MJ, Rees CS (2007). The role of dichotomous thinking and rigidity in perfectionism. Behav. Res. Ther., 45(8): 1813.

Fedewa BA, Burns LR, Gomez AA (2005). Positive and negative perfectionism and the shame/guilt distinction: adaptive and maladaptive characteristics. Pers. Individ. dif., 38: 1615-1616.

Forgionne G, Newman J (2007). An experiment on the effectiveness of creativity enhancing decision-making support systems. Dec. Support Syst., 42: 2126.

Haase AN, Prapavessis H (2004). Assessing the factor structure and composition of the Positive and Negative Perfectionism Scale in sport. Pers. Individ. Dif., 36: 1725-1737.

Hajloo N, Sobhi-Faramaleki N, Rahbar M, Haghigatgo M (2011). Study of relationship between perfectionism and job burnout. Med. Univers. J., 20(77): 23.

Hurley R, Ryman J (2003). Making the transition from micromanager to leader. Fordham University. 113 West 60th Street, NY, NY 10023:2-9.

Kampylis P, Berki E, Saariluoma P (2009). In-service and prospective teachers' conceptions of creativity. Think. Skills Creat., 4: 16.

King L, Gurland ST (2007). Creativity and experience of a creative task: Person and environment effects. J. Res. Pers., 41: 1252.

Kraner A (2011). Perfectionism: differential relationships with the equity norm and belief in a Just world. Manchester College, pp. 3-4.

Kreitner R, Kinicki A (2005). Organizational behavior management. Poyesh publication, p. 185.

Mahmoodi M (2006). Entrepreneurs. J. hadise zendegi., 30: 2.

McMahon G, Rosen A (2008). Why perfectionism at work does not pay. Coating Feature, pp. 61-63.

Melrose S (2011). Perfectionism and depression: vulnerabilities nurses need to understand. Nursing research and practice. Article ID 858497, doi:10.1155/2011/858497: 2.

Niknam M, Hosseinian S, Yazdi SM (2010). Relationship between perfectionism beliefs and self-handicapping behaviors in university students. J. Behav. Sci., 4(2): 104.

Oldham GR, Cummings A (1996). Employee creativity: personal and contextual factors at work. Acad. Manag. J., 32: 607.

Pirola-Merlo A, Mann L (2004). The relationship between individual creativity and team creativity: aggregating across people and time. J. Organ. Behav., 25: 236.

Ram A (2005). The relationship of positive and negative perfectionism to academic achievement, achievement motivation, and well-being in tertiary students. University of Canterbury: P. 91.

Roohafza H, Afshar H, Sadeghi M, Soleymani M, Saadaty A, Matinpour M, Asadollahi G (2010). The relationship between perfectionism and academic achievement, depression and anxiety. Iranian J. psychiatr. Behave. sci., 4(2): 31.

Sadati S, Behpazhoh A, Afrooz GH, Moltafet Gh (2008). Relation between perfectionism and creativity. Kanevade and pazhohesh J., 2(4): 27-29.

Sadegi-Mal-Amiri M, Raeisi M (2010). Conceptual model for creativity. Police Dev. J., 7 (30): 98.

Saya P (2006). The relationship between attachment styles and perfectionism in high school students. Middle East Technical university. Supervisor: Prof. Dr. Gül Aydın, July, p. 3.

Shalley CE, Gilson LL (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. Leadersh. Q., 15: 34.

Shilling M (2008). Strategic management. Farhangi researches. First edit: 41.

Silverman LK (1999). Perfectionism: the crucible of giftedness. Adv. dev., 8: 47-48.

Simonton DK (1977). Creative Productivity, Age, and Stress: A Biographical Time-series Analysis of Ten Classical Composers. J. Personal. Soc. Psychol., 35: 791-804.

Stoeber J, Eysenck MW (2008). Perfectionism and efficiency: accuracy, response bias, and invested time in proof-reading performance. J. Res. Personal., 42(6): 1673-1678.

Stoeber J, Otto K (2006). Positive conceptions of perfectionism: approaches, evidence, challenges. Personal. Soc. Psycho. Rev., 10: 295.

Terry-short LA, Owens RG, Slade PD, Dewey ME (1995). Positive and negative perfectionism. Pers, Individ. Dif., 18: 663-668.

Unsworth K (2001). Unpacking creativity. Acad. Manage. Rev., 26: 289.

Yu M (2010). The Need to be perfect versus the need to be creative: An investigation of the relationship between perfectionism and creativity. Wayne State University. Open Access Theses. Paper 33. http://digitalcommons.wayne.edu/oa_theses/33