

Original Article: Investigating the Relationship between Perceived Choice and Self-Awareness (SDT) and Students' Experience of Fascination (FLOW)

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ABSTRACT

The aim of this study was to determine the relationship between self-determination and the experience of fascination. The method of the present study is descriptive and correlational. For this purpose, 260 students of Sistan and Baluchestan University (104 boys and 156 girls) were selected using stratified random sampling method using the self-determination questionnaire (Sheldon and Desi, 1993) and the fascination status scale (Jackson and Auckland, 2002) responded. The results showed that the mean of students' self-determination and experience of fascination (122.91 and 39.07) with 95% probability, is higher than the expected average (108 and 30). The results also showed that there is a positive and significant relationship between the perceived selection component and the experience of infatuation. ($P < 0.01$) and regression results also showed that the perceived selection component can predict the amount of infatuation experience. But the predictive power of the experience of infatuation by the component of self-awareness is weaker. And there was no significant difference between the level of self-determination and the experience of fascination of male and female students.

Introduction

Stress the science of positive psychology is a new approach in psychology that instead of focusing on the negative aspects of human existence, focuses on the positive aspects and aims to change the focus of psychology from psychological disorders to a positive quality of life. (Sixth Century and Lefebvre, 1989). The experience of fascination has

emerged as one of the newest constructs of positive psychology [1-3].

Baker (2005); Fallaga and Clovi (2009) state that the experience of infatuation was first developed and described by Sixthminthal. Sixthminthally placed the experience of infatuation at the center of positive psychology and defined it as a state of consciousness in which the individual,

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completely immersed in an activity. So that nothing else seems important [4].

This experience is enjoyable in itself and makes people engage in it just for the sake of being active, despite the high cost. Enjoyment of the activity, inner motivation to do the activity and full involvement in the activity are important aspects of the experience of fascination [5].

According to Asakawa (2004), an important factor that makes the experience of fascination important is that fascination is a universal experience that occurs for people of all cultures and in all countries. He states that the term experience of infatuation is coined to refer to a desirable state of mind in which a person feels that he or she has a more efficient and deeply engaged perceptual state, with a very high level of motivation and experience of pleasure [6].

Based on Sexentmihali's research on the experience of infatuation, Baker first proposed the model of infatuation in the workplace, defining it as a short-term peak work experience, stating that this experience occurs when between job expectations and There is a balance between the professional ability of the staff. According to this model, fascination is characterized by three elements: attraction, job pleasure and intrinsic motivation [7].

Recruitment refers to a state of complete concentration in which employees become fully engaged in their work and time passes quickly and they forget about the things around them. Job satisfaction makes employees feel happy and their judgment of their quality of work life positive. Happiness is the result of the emotional and cognitive evaluation of the experience of fascination. Intrinsic motivation also refers to doing the work or goal of experiencing inner pleasure and contentment. Six-Century (1989) states that in order to gain the experience of infatuation, a balance must be struck between the challenge received in that situation and the skill that the person acquires in that situation, and in order to remain in the state of the experience of infatuation, one must Increase the complexity of your activity with skills to receive more challenges [8].

According to the theory of the experience of fascination; Intense concentration, interest and pleasure in an activity must be experienced simultaneously for this experience to occur. And it

is associated with a sense of inner motivation, high control, low self-awareness and enjoyment [9].

Sexentmihali (1989) also states that there are activities in which a person engages in conflict; Sober, controlled, aware, and optimally functioning, does not sense time, emotional problems disappear, and may feel superior and united in that activity. This state is probably characterized by complete absorption, pleasure and deep involvement in the activity in question [10].

A person may be reading a favorite book, talking to a person, engaging in a favorite pastime, or playing a favorite game. If any of the above is true, the person is experiencing a feeling of well-being. (Mohsenian, 2015). This experience emerged a quarter of a century ago and was known as the result of a series of studies that were originally called internal stimulus activities, and that is what an activity looks like, not because of external reinforcements and external factors, but because of the activity itself, are done by individuals.

Models related to the experience of fascination include the following cases:

1- Sequent Mihali Fascination Experience Channel Model (1975) Studies first conducted by Chichant Mihali in 1975 are considered a state of fascination. Chichant Mihali (2009) emphasized the dimension of pleasure as the main reason for pursuing an activity. In his research, Sexentmihali concluded that activities provide the background for the experience of fascination that provide opportunities for action, without worry and fatigue. This model shows that the experience of infatuation occurs when a person finds a balance between the challenges ahead and his or her personal skills, which Chichant Mihali refers to as the channel of the experience of infatuation (Chichant Mihali, 1975). When a person believes that the situation in which he is active has too many challenges to his abilities, he experiences stress and consequently anxiety. However, when the ratio of one's abilities is high; But the challenges ahead are still beyond one's abilities, one experiences anxiety. Finally, when a person's skills outweigh the challenges, it can lead to fatigue [11].

2- Challenge Sixthmachine Skills model (1988) in a subsequent study by Mihali in 1988, he found that skills and challenges must not only be in balance for the experience of fascination to emerge; Rather, the level of challenge experienced should be slightly

higher than the individual's skill level. This means that high challenges lead to the development of new skills, while due to the high level of challenges and skills ahead (both), the experience of fascination is likely to occur.

3- The model of the six-dimensional fascination experience (1997) in 1997, Chichant Mihali proposed a more scientific and sensible model than the previous model of the experience of fascination, which describes the above experience as the relationship between the challenges of a job and the skills of individuals. This model suggests that another aspect of the infatuation experience is likely to occur; That is when the challenge of the work that is being done is above average and, in this regard, people have above average skills. The improvement seen in this model compared to previous models is that; In this model, the level of personal readiness should be at the desired level, also in this model, individual differences of individuals have been considered [12].

4- According to this model, the quality of the experience of fascination is a function of two factors; First, the perceived challenge arising from an activity must be in balance with the individual's abilities and skills, and second, such perceived challenges and skills must be at a relatively high level [13].

Mental cycle explains the different modes of this model. When the challenge and skill (both) are low, the person experiences indifference; When the challenge is low and the skill is moderate, the person experiences fatigue; When the challenge is low and the skill is high, the person experiences peace; When the activity is somewhat challenging and the skill is high, the person feels in control; A state of anxiety arises when the activity is somewhat challenging and the person's skills are lacking; When the activity is challenging and the skill is low, the person experiences anxiety; When the activity is very challenging and the skill of the person is moderate, the person experiences arousal, and finally the state of experience of fascination is when the activity is very challenging and the skill of the person is high [14-17].

On the other hand, knowing the experience of fascination requires addressing individual characteristics, such as the needs and motivations of individuals. And one of the motivational approaches that has attracted a lot of attention in

recent years is the theory of self-determination. This theory was proposed by Desi and Ryan (1985).

The main focus of this theory is on intrinsic motivation, extrinsic motivation and addressing the three basic needs (need for autonomy, sense of competence and communication) in humans. The emphasis of this theory is on the extent to which human behavior is voluntary or self-determined. One of the claims of the theory of self-determination is that the basic psychological needs for belonging, competence, and autonomy are universal, that is, that all cultures are important to people [18].

The theory of self-determination states that although cultures affect people in profound and important ways, they do not depend on culture because the need that must be met for people to experience the optimal level of well-being [19].

The need for competence reflects the need for the individual to be effective in interactions with the social environment, gaining opportunities to practice and tool their abilities, the ability to achieve the desired outcomes, and a sense of being able to influence and dominate the environment.

Another need that arises in the theory of self-determination is the need to belong and communicate with others. Roca and Gagni (2008) consider the perception of communication as a form of social influence and state that this need means communication with those who are important to or support the person, and this need to connect with others and Receiving support from individuals.

Lagarde, Ryan, Kochman, and Desi (2000) also consider the perception of communication to include the need for positive relationships and a sense of belonging to a group or community. Another need that has been raised in the theory of self-determination is the need for autonomy. This need has two aspects: perceived choice and self-awareness. Gagni and Desi (2005) state that behavior is autonomous when; The feeling of willpower and having the opportunity to choose is accompanied by a decision to start and set a behavior. Also, the need for autonomy means self-perception as the source of one's behaviors and the need for the experience of choosing and being initiator in performing activities and having a feeling of non-compulsion in actions has been defined [2].

Ryan and Lynch (1989) also emphasize that autonomy is not the same as independence. Autonomy means to act with intention and will and satisfaction with a sense of choice, but independence does not mean to act without relying on others. Thus, autonomy refers to a quality in which a person feels involved in moment-to-moment behavior.

One of the components of the need for autonomy is perceived choice, which is the central and important core of the need for autonomy. This means that the person has the power to choose and initiate his activities. According to Spriters (1995), autonomy is described as the individual's sense of choice in performing and regulating performance. Another component of the need for autonomy is self-awareness. Self-awareness is the conscious perception and evaluation of oneself about oneself and the thoughts and beliefs one has about oneself. Self-awareness is a system of attitudes about oneself.

Self-awareness also includes all the thoughts, perceptions, and values that make up the "I" or "myself" and includes the awareness of what I am and what I can do. And this perceived self, in turn, affects a person's perception of the world and his behavior. Also, thinking about oneself, known as "introspection," is likely to lead to a greater awareness of certain aspects of the "self," which is called "self-awareness." Desi (1975) as the author of the theory of self-determination states that human beings may be motivated by the inherent attraction to doing a task or by using reward and punishment.

But they cannot be affected by both at the same time. Those who are motivated from the inside are more likely to be deeply involved and fascinated by the work, or it seems that the activity has fascinated them. This is what Six Century Imagination calls the experience of fascination.

According to Desi and Ryan (1987), based on the theory of self-determination, supporting autonomy leads to internal motivation. When people are motivated internally, they do so because of the interest, challenge, and pleasure that a particular activity creates, not because of an external factor. In practice, intrinsic motivation provides the innate motivation to pursue inclinations and strive to develop skills and abilities.

When psychological needs are active and nurtured while performing an activity; Spontaneously, people experience a sense of satisfaction, and this inner motivation is the result of a sense of worthiness and autonomy while performing an activity.

When autonomy is supported, individuals experience greater intrinsic motivation, perceived competence, motivation for dominance, and positive emotion, and in learning and performance. Show more stability

In another study, Menel, Zazanak, and Larson (1988) hypothesized that the free choice of activities in individuals is based on an intrinsic motivation and leads to experiencing high levels of infatuation. But contrary to their expectations, the results showed that it is the external motivation of individuals that leads to the free choice to participate in voluntary activities and the experience of high levels of fascination. Jackson (1988) also showed that the dimensions of the experience of fascination were positively and significantly related to self-determination.

In another study, Jackson and Robert (1992) found that athletes who experienced high levels of competency perception, perception, communication, and autonomic perception were more likely to report fascination (quoted by Kowal and Forter, 1999). The results of Breyer, Walland, Bliss and Peltier (1995) also showed a positive and significant relationship between self-determination and positive emotions. Also have reported a positive relationship between self-determination and the experience of fascination [20-22].

Cole and Forter (1999) showed that perceived competence and perceived communication and autonomic perception were positively and significantly related to the experience of fascination. And their results showed that swimmers who were self-determined, motivated, and participated in the activity because of the pleasure and satisfaction associated with the activity, compared to those who did the swimming activity because of the benefit to them. They reported higher levels of the infatuation experience.

And their study showed that self-determination can facilitate the experience of fascination. Also, the results of Cole and Forter (1999) showed that although the perception of autonomy is positively

related to the experience of fascination, but noted that swimmers who scored higher in perceived competence and perceived communication, higher levels of this Reported the experience. And the role of perceived autonomy is less important than the other two needs. But Cole and Forter (2000) state that no study has yet examined the relationship between perceived autonomy and the experience of fascination.

Also, showed that the experience of fascination has a positive relationship with self-perception and mindfulness. Overall, a review of the practical background shows that few studies have examined the relationship between self-determination and the experience of fascination in the context of the correlation model, especially in Iran. The purpose of this study is to investigate the relationship between self-determination and students' experience of fascination.

Therefore, in addition to determining the relationship between these variables, the present study seeks to add to the richness of the research literature in the field of intra-quantum theory as well as the theory of self-determination.

Research Method

The research method is descriptive and correlational. And the statistical population includes all students of Sistan and Baluchestan University in the academic year (2015-2016).

The estimated sample size is 260 based on Morgan's table. (104 boys and 156 girls) who were selected by stratified random sampling method and answered the questionnaires. The tools used in this research are:

- 1- Desi and Sheldon (1993) self-determination scale, which was translated by the researcher. This scale examines two aspects of the need for autonomy, self-awareness and perceived choice. For each question, there are two situations, "a" and "b". And the test subject must state which of the two situations seems more correct.
- 2- There is a five-point Likert scale. If situation "a" is absolutely correct, the answer is one; If situation "b" is absolutely correct, the answer is five; If situation "a" is somewhat true, answer is two, and if

situation "b" is somewhat true, answer is four, and if the answer is "I have no idea", option three is selected. The self-determination scale has ten questions.

Perceived selection component and questions 10, 8, 6, 4, 2; They measure the component of self-awareness. And the questions of the perceived selection component have inverse scoring. Cronbach's alpha for all scale questions is from 0.92 to 0.86 and its reliability ($r = 0.77$) is during 8 weeks [22-24].

Also, Cronbach's alpha calculated by the researcher for the self-determination scale is 0.76. The second questionnaire used is the Fascination Experience Scale by Jackson and Auckland (2002). The scale has 36 questions and measures 9 dimensions: challenge-skill, clear goals, unambiguous feedback, focus, performance-awareness integration, loss of self-awareness, sense of control, sense of time evolution, and sense of inner motivation. And the answers are based on the Likert option scale including always, most of the time, sometimes, rarely and never.

This tool was proposed by Six Centhemhal (1993) and Jackson and Auckland (1996) obtained its completeness, validity and reliability and developed the final form of this scale. The reliability coefficient for the 9 scales of fascination experience is alpha 0.83. And Cronbach's alpha calculated by the researcher is 0.88. Questionnaires were answered and collected by the sample and SPSS 19 software was used to analyze the data.

Findings

In order to evaluate the level of self-determination and experience of students' fascination, one-sample t-test was used and the results in table 1 show that the level of self-determination and experience of fascination (7.39 and 122.91) were the mean of the case. The community expects more. ($P < 0.01$) and this shows that students are in a good position in terms of self-determination and experience of fascination.

Table 1. Results of single sample T test

Significance level	Degrees of freedom	t value	Expected average	The standard deviation	Average	Variables
000.0	259	945.18	30	722.7	07.39	Self-determination
000.0	259	1314.14	108	79.16	91.122	The experience of fascination

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Table 2. Results of independent t-test

Significance level	Degrees of freedom	t value	Boy		Girl		Statistical indicators Variables
			The standard deviation	Average	The standard deviation	Average	
0.125	258	2.392	7.102	37.68	7.998	40.0	Self-determination
0.215	258	0.883	15.12	124.03	17.83	122.16	Flow

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In order to investigate the differences between girls and boys in the variables of self-determination and experience of infatuation, t-test was used by independent groups. The results of table 2 show that

there is no significant difference between girls and boys in self-determination and experience of infatuation.

Table 3. Pearson correlation test results

Significance level	Flow	Variables
0.0	0.305	Perceived selection
0.006	0.170	Self-awareness
N= 260	P<0/01**	

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Pearson correlation test was used to determine the relationship between self-determination and students' fascination experience. The results of Pearson correlation test in Table 3 showed that there

is a positive correlation between the perceived selection component and the experience of fascination (0.305). And the existing correlation is significant. (01/0> p).

Table 4. Step by step regression results

sig	F	B	T	R ²	R	Predictive variables	Criterion variable
0.0	26.552	0.305	5.153	0.09	0.305	Perceived selection	The experience of
0.006	7.676	0.17	2.177	0.025	0.170	Self-awareness	fascination

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In order to determine the prediction of the experience of fascination by the components of perceived choice and self-awareness, a stepwise regression model was used and the results of Table 4 show that the component of perceived choice can be 9% of the experience of fascination.

To predict. (The adjusted R-square is 0.090 with a probability of P <0.01.) But the self-awareness component with a lower probability can predict the extent of the infatuation experience. (The set of R squared is 0.025 but is not significant.

Discussion and Conclusion

The aim of this study was to determine the relationship between self-determination and the experience of fascination in students of Sistan and Baluchestan University. The results showed that there is a significant positive correlation between self-determination and the experience of fascination. The findings also showed that there is a positive and significant correlation between the component of perceived choice and fascination.

That is, as the perceived choice increases, so does the experience of feeling desirable. But there was no significant correlation between the component of self-awareness and the experience of desirable feeling. Another result of the research is that the component of perceived choice can predict the level of experience of fascination in students.

The results also showed that the average rate of self-determination in students (39.07) with 95% probability ($P < 0.05$) is higher than the average expected by the community (30). And the average experience of fascination in students (122.91) is higher than the expected average (108). Finally, the results showed that there was no significant difference between the level of self-determination and the experience of fascination in male and female students.

Findings of the present study with the results of Desi and Ryan (1987); Rio, Jang, Hard and Amora (2002); Menel, Zazanak, and Larson (1988); Breyer, Walland, Bliss, & Pelter (1995); Jackson, Chemist, Ford and Marsh (1988) and Cole and Forter (2000) are in agreement. Cole and Forter (2000) also showed that although autonomy perception has a positive relationship with the experience of fascination, but perceived competence and perceived relationship as stronger predictors of the experience of fascination and the role Autonomy is considered less important. Cole and Forter (2005) also state that no study has yet examined the relationship between autonomy and the experience of infatuation, which highlights the importance of the present study. The results of this study showed that perceived choice is a good predictor of fascination, so it is suggested that teachers design lesson structure and planning in a way that supports students' autonomy needs and they feel that they are independent in starting and

organizing their activities and consider themselves the cause of their behavior.

Autonomy professors also increase students' perceptions by understanding students' perspectives, supporting initiatives, creating opportunities for choice, and allowing students to practice in their own style, as well as higher levels of student fascination experience.

Such students will do the activities and homework because of the challenge and pleasure they get from doing it, and not just because of external reinforcing factors. It should be noted that the present study has been studied in students and therefore cannot be generalized to other segments of society and as the results showed that the prediction of the experience of fascination by the self-awareness component is weak, so it is recommended in the study. Future aspects of this component should be reconsidered.

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