

RELATIONS BETWEEN CERTAIN TYPES OF MOTIVATION AND SELF-ORIENTATION

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The main goal of this research is to examine relations between certain types of motivation (intrinsic and extrinsic) and self-orientation which is defined by the assumptions of the Self-determination theory (integrated self, ego-invested self, impersonal self). The sample includes 399 students from different faculties in Serbia (42.4% male and 57.6% female), aged between 18 and 36 ($AS = 21.14$; $SD = 2.42$). Aspiration index was used to evaluate motivation and an Ego functioning questionnaire was used to evaluate self-orientation. Three hierarchical regression analysis were conducted in order to answer the questions of the research. In every analysis predictors are the same (intrinsic and extrinsic motivation), while the criteria are different (integrated self, ego-invested self and impersonal self). Based on the obtained findings, models from the second step were adopted and they include both types of motivation. Intrinsic and extrinsic motivation represent significant predictors of the integrated self and they explain 22.9% of the variance of the mentioned criterion. Intrinsic motivation is a better predictor of integrated self than extrinsic motivation. The results are similar when ego-invested self is concerned, however, extrinsic motivation proved to be a better predictor. Finally, in predicting impersonal self both types of motivation proved to be significant predictors. In this model as well as in the first one intrinsic motivation is a better predictor than extrinsic motivation. The results are in accordance with the basic assumptions of the Self-determination theory.

Key Words: Intrinsic and extrinsic motivation, self-orientation, Self-determination theory.

INTRODUCTION

Relying on the Self-determination theory (Deci & Ryan, 1985, 2002) Hodgins and Knee (Hodgins & Knee, 2002) introduce the idea about people as proactive beings capable of psychological growth and development. According to them, people have an inherent core of the self, which consists of the basic motivational apparatus and cognitive developmental dispositions.

Social environment can encourage or hinder the natural ability of the self to realize its potentials. The circumstance facilitates or prevents the actualization of the self through incitement or through preventing the satisfaction of one or all three basic psychological needs (autonomy, competence and relating to others). The optimal social context will ensure the conditions for the development of self, i.e. openness to experience and an autonomous regulation of behaviour. The quality of ego functioning then becomes conditioned by the success of the ego-system in integrating external and internal experiences into the existing structure and adapting them to the advent of new information (Majstorovic, Legault & Green-Demers, 2008).

Motivation, which is basically a self-structure, is very significant for the way a person deals with existing experiences and especially new ones (Hodgins & Knee, 2002). Self-orientation is a term used to denote prevalent orientations of the system in regulating the state of motivation. When self-orientation and the integration level of the self are considered there are three types of ego-system: integrated self, ego-invested self and impersonal self (Hodgins & Knee, 2002). Different development scenarios lead to the development of

the three types of self that differ in the degree of integration of cognitive and affective structures with overall values and needs of the self.

The integrated self is characterised by a harmonious ego-system which has received full social support to satisfy entirely all three psychological needs. According to Hodgins and Knee such individuals know the value of their own personality and they attribute significance to their authentic internal impulses. They develop their own unconditional value. They have intrinsic motivation in most of their actions. Their perception of reality compared to other types of ego functioning is more objective and precise. They easily make social contacts and they are spontaneous in their reactions. This type of ego-system is open to changes and novelties with the will to explore external and internal reality.

Ego-invested self develops when an individual experiences lack of support to realize autonomy in childhood. Internalized social pressures and limitations will probably lead to the development of the feeling of one's own value based on the built (false) self-image. As a result, such individuals act under the influence of external goals such as money, power and popularity. Their behaviour is rigid, they experience reality selectively, they are eager for environment's approval and acknowledgements for their achievements. They actualize imposed qualities not authentic ones. This kind of success does not contribute to the emergence of self-respect.

Impersonal self represents the lowest level of the integration of self and it is formed in the conditions that prevent the satisfaction of all three basic psychological needs (autonomy, competence and relatedness) (Deci & Ryan, 1985). People with this type of self lack not only autonomous regulation of behaviour but they also lack intentionality (Deci & Ryan, 1991; according to Hodgins & Knee, 2002). They are characterised by amotivation or a total lack of motivation. They do not have the ability to develop a self that will protect them to a certain degree from a "threatening" reality. Individuals with this type of impersonal ego could be easily aroused, overwhelmed with information, negative thoughts and feelings. Such people have a tendency to withdraw when faced with new experiences, routinely repeating their activities.

The degree in which a person will realize his or her potentials and maximum happiness depends mostly on how much he or she follows the intrinsic goals (Ryan & Deci, 2002). According to the Self-determination theory (Kasser & Ryan, 1996), life goals can be divided into two groups: intrinsic and extrinsic. Kasser and Ryan (Kasser & Ryan, 1996, p. 280) define intrinsic goals as "the expression of desires that are in agreement with natural human aspirations towards actualization and growth". It follows that intrinsic goals are associated with self-determined behaviour and people follow them naturally because they satisfy psychological needs. The realization of intrinsic goals satisfies basic psychological needs therefore people who value these goals more are more content with their life (Kasser & Ryan, 1996). Intrinsic goals include personal growth, relations with others, contributions to the community and health. Personal growth refers to personality development that is autonomy, self-acceptance and self-image. Relations with others imply a goal towards establishing good interpersonal relationships while the goal of contribution to the community refers to activities aimed at the improvement of the society. Health refers to the desire towards good physical health and shape. Opposite to these goals, which stem from inherent tendencies towards growth and directly satisfy psychological needs, extrinsic goals are directed towards achieving external rewards and acknowledgements. There are three extrinsic goals, and they are: wealth, fame and image. Wealth refers to the pursuit of acquiring more material assets and money; fame represents the desire to be a celebrity and to be admired by others, while image represents the desire towards an attractive physical appearance. Extrinsic goals are instrumental goals because they are a substitute for deeper needs. They can serve as an auxiliary service to satisfying psychological needs, however if they become more important than intrinsic goals and unbalanced in relation to them, it can result in decreased well-being. Therefore, extrinsic goals do not enable the satisfaction of psychological needs and they sometimes even aggravate it. An excessive pursuit of extrinsic goals may represent an obstacle towards satisfying psychological needs because people are directed towards goals that are not directly associated with inherent needs (Ryan & Deci, 2002). People who place greater value on extrinsic goals become more attached and dependent on external things (e.g. Fashion, status symbols etc.), circumstances and the social community in which they live. In that case, the realization of extrinsic goals does not increase well-being. According to the

Self-determination theory, the question of importance is to what extent people are able to satisfy their psychological needs while they follow and realize their goals (Deci & Ryan, 2000).

Therefore, the theory assumes that individuals with dominant intrinsic motivation have an integrated self. On the other hand, individuals with an ego-invested self are primarily extrinsically motivated, while individuals with impersonal self lack motivation. Accordingly, the main problem in this study is to examine the relations between life goals or types of motivation (intrinsic and extrinsic) and certain types of self. In other words, can the knowledge of types of motivation predict the structure of self the person has.

METHOD

Sample

The sample includes undergraduate students from different faculties and different cities from Serbia. An appropriate sample was used of 399 examinees, aged from 18 to 36 ($AS=21,14;SD=2,42$). 42.4% of the sample were male examinees and 57.8% were female.

Instruments

Aspirations Index (Aspirations Index - AI; Kasser & Ryan, 1996) is intended for the evaluation of seven different life goals that are divided into two categories: intrinsic and extrinsic goals. The questionnaire includes 35 items grouped in seven subscales (personal growth, relations with others, contribution to community and health - intrinsic goals; wealth, fame and image - extrinsic goals). The examinees are required to evaluate on a seven-point Likert type scale (1-completely false; 7-completely true) the importance of each goal for them, to what extent have they realized it and the probability of realizing it in the future. The examples of the items are: "Life goal: Develop and learn new things" (personal growth), "Life goal: Have good friends I can count on" (relations with others), "Life goal: Work to improve society" (contribution to community), "Life goal: Keep myself healthy" (health), "Life goal: Become very wealthy" (wealth), "Life goal: That many people know my name" (fame) and "Life goal: Look attractive to others" (image). A total score of both types of life goals - intrinsic and extrinsic motivation was used for the needs of this study.

The Ego Functioning Questionnaire (*The Ego Functioning Questionnaire – EFQ*; Majstorović, Legault, & Green-Demers, 2004) measures three types of self: integrated self, ego-invested self and impersonal self. It includes 30 items. It is a Likert type seven-point scale of evaluation (1 - completely false; 7 - completely true). The examples of the items are: "I am most fond of the activities that fulfill me completely and enable my personal growth" (integrated self), "Rewards and acknowledgements by others are very important to me" (ego-invested self), "I often feel estranged from others" (impersonal self).

Statistical analysis of data

Hierarchical regression analysis was used to examine relations between types of motivation and self. Intrinsic and extrinsic motivation were included in the model as predictor variables. Intrinsic motivation was inserted in the first step and extrinsic motivation was inserted in the second. Types of self (integrated self, ego-invested self and impersonal self) were criterion variables.

FINDINGS

Descriptive indicators and intercorrelations of the variables

Based on the values in Table 1 the greatest individual differences among examinees are on the following variables: extrinsic motivation, ego-invested self and impersonal self. Even though the values of Kolmogorov-Smirnov test indicate a deviation of values from normal distribution on the scales that evaluate Intrinsic motivation, Integrated self and Impersonal self, skewness and kurtosis on those scales do not exceed the values ($+ - > 1$) that would point to a deviation from a normal distribution of results. Therefore, one of the conditions for the application of parametric analysis has been realized. The reliability is high for the scales of Intrinsic and Extrinsic motivation, low for the scales of Integrated self and Ego-invested self, and moderate for the scale of Impersonal self. In other words, the evaluations of values on the above-mentioned variables are reliable.

Table 1: Descriptive indicators of the basic variables of the research (N=399)

Variables	Range	AS	SD	Sk	Ku	K-S	α
Intrinsic motivation	2.68-6.80	5.47	.62	-.644	.965	.068**	.94
Extrinsic motivation	1.20-6.42	4.05	1.07	-.394	-.150	.039	.96
Integrated self	2.45-6.73	4.92	.80	-.356	-.007	.060**	.72
Ego-invested self	1.00-6.67	4.23	1.06	-.168	-.367	.045	.78
Impersonal self	1.00-6.10	2.79	1.11	.702	.006	.085**	.86

**p < .01; K-S – the values of Kolmogorov-Smirnov test

Correlation analysis indicates that there are significant moderate correlations between Intrinsic and Extrinsic motivation, Intrinsic motivation and Integrated self (Impersonal self), also between Extrinsic motivation and Ego-invested self, which is also the highest correlation between the basic variables of the research. On the other hand, connections of low intensity were obtained between Intrinsic motivation and Ego-invested self, Integrated self and the other two types of self, and between Ego-invested self and Impersonal self.

Table 2: Intercorrelations of variables of the research

Variables	Intrinsic motivation	Extrinsic motivation	Integrated self	Ego-invested self	Impersonal self
Intrinsic motivation	–				
Extrinsic motivation	.43**	–			
Integrated self	.47**	.10	–		
Ego-invested self	.13*	.60**	.11*	–	
Impersonal self	-.27**	.02	-.13*	.24**	–

Relations between types of motivation and self

Three separate hierarchical analyses were conducted for the purpose of testing the relations between types of motivation and self. The same predictors were used in every analysis as well as the same order of inserting the predictors (Intrinsic and Extrinsic motivation). Criterion variables only differed (Integrated self, Ego-invested self and Impersonal self). In this way, two regression models were obtained in every analysis. The following is a review of the findings.

Intrinsic and extrinsic motivations as predictor variables of Integrated self

The results (Table 3.) indicate that Intrinsic motivation as an individual predictor (step I) is significant in predicting the values of Integrated self as well as correlating positively with it. Apart from that, this model explains 21.8% of the criterion variance. When Extrinsic motivation is added the model is still significant and it explains a total of 22.9% of the variance of Integrated self. Therefore, the change is small but significant. Intrinsic motivation has proved to be a better predictor in comparison to Extrinsic motivation, which correlates negatively with Integrated self.

Table 3: Hierarchical regression analysis - prediction of Integrated self based on different types of motivation

Model	R	R ²	Change to R ²	β	p	sr ²
Step I	.467**	.218**	/			
Intrinsic motivation				.467**	.000	.22
Step II	.479**	.229**	.011*			
Intrinsic motivation				.517**	.000	.22
Extrinsic motivation				-.117*	.016	-.01

Note: sr² - semipartial correlations; **p< .01; *p< .05.

Intrinsic and extrinsic motivations as predictor variables of Ego-invested self

The findings of the second hierarchical analysis (Table 4.) lead to a conclusion that the model with Intrinsic motivation is significant for predicting Ego-invested self, as well as the model comprised of both types of motivation. Unlike previous results, Extrinsic motivation is more relevant for Ego-invested self, it correlates positively with it while Intrinsic motivation correlates negatively. The first model explains 1.6% of the criterion variance and the second model explains 38.1%. This change is statistically significant and considerably higher in comparison to the first analysis. Extrinsic motivation is a remarkably better predictor of the mentioned type of self compared to Intrinsic motivation.

Table 4: Hierarchical regression analysis - prediction of Ego-invested self based on different types of motivation

Model	R	R ²	Change to R ²	β	p	sr ²
Step I	.126*	.016*	/			
Intrinsic motivation				.126*	.012	.02
Step II	.618**	.381**	.366**			
Intrinsic motivation				-.158**	.000	-.02
Extrinsic motivation				.668**	.000	.37

Note: sr² - semipartial correlations; **p< .01; *p< .05.

Intrinsic and extrinsic motivations as predictor variables of Impersonal self

Finally, the third analysis (Table 5.) indicates the significance of both models, with Intrinsic motivation being a better predictor of Impersonal self than Extrinsic motivation. Apart from that, the first model explains 7.1% of the variance of Impersonal self and the second model explains 9.4%. The change is small but significant. Intrinsic motivation consistently correlates negatively with the mentioned type of self, while Extrinsic motivation correlates positively.

Table 5: Hierarchical regression analysis - prediction of Impersonal self based on different types of motivation

Model	R	R ²	Change to R ²	β	p	sr ²
Step I	.266**	.071**	/			
Intrinsic motivation				-.266**	.000	.07
Step II	.306**	.094**	.023**			
Intrinsic motivation				-.337**	.000	.09
Extrinsic motivation				.166**	.002	.02

Note: sr² - semipartial correlations; **p< .01; *p< .05.

DISCUSSION AND CONCLUSION

The goal of the research was to check one of the assumptions of the SDT, the assumption that refers to the idea of a motivational structure of the ego system. The expectation was that people who are primarily intrinsically motivated would have Integrated self, the ones who are extrinsically motivated will have Ego-invested self and that Impersonal self will show a different pattern of behaviour depending on the type of motivation (negative with Intrinsic motivation and positive with Extrinsic motivation).

Firstly, the results agree to a high degree with the claims which are the indicators of Intrinsic motivation and Integrated self, Extrinsic motivation and Ego-invested self and finally Impersonal self. This finding is encouraging because primarily, it is a reflection of a normal and healthy functioning of the student population in Serbia. Despite numerous political, social and economic difficulties, accompanied with collapsing values, optimal development of young people in this region is more or less preserved. Therefore, positive processes of human development are more dominant and they are reflected in the tendency to actualize potential, acquire knowledge, search for challenges and research the environment. These individuals seek to integrate new experiences and organize them meaningfully into a harmonious, authentic and cohesive system of self. The natural affinity towards interrelation with other people accompanies the above-mentioned tendency. Namely, a healthy human development implies two aspects of the tendency towards integration. The first aspect is called autonomy (tendency towards internal organization and self-regulation), and the second is called homonymy (tendency towards connection, integration and acceptance by other individuals and groups from the social environment) (Angyal, 1963; according to Deci & Ryan, 2002). It follows that intrinsic goals of the students are associated with self-determined behaviour and they follow them naturally because they satisfy psychological needs.

Extrinsic goals are in the second place, i.e. extrinsic motivation and Ego-invested self. Only when an individual cannot satisfy his needs he reaches for goals that have no direct connection to them (Ryan & Deci, 2002). The social context is not always supportive and it is a source of many frustrations. Consequently, people may ignore their own needs, which has a negative effect on their welfare. Researches have shown that people with strong extrinsic aspirations have more difficulties in satisfying the needs for autonomy, competence and relations with others and they can become dependent of circumstance, time and society in which they live (Kasser, Ryan, Couchman & Sheldon, 2004). Unsatisfied psychological needs lead to passivity, apathy and alienated functioning (Deci & Vansteenkiste, 2004). If the situations in which the individual cannot satisfy his needs are repeated, he will strive to find some kind of replacement for those needs, in other words, he will set goals that do not satisfy psychological needs but they allow some kind of compensation.

Therefore, apart from the optimal pattern of functioning of the students in Serbia there are also other, less preferable, even maladaptive patterns. It is only a matter of circumstances and intensity in which these behaviours are expressed and controlled. Hodgins and Knee (Hodgins & Knee, 2002) speak of different combinations of the types of self that can be found in one person. In other words, individual differences among people are partly reflected in various quantitative and qualitative methods of ego functioning.

To summarize, the finding concerning the dominant integrated regulation of behaviour, contrary to externally imposed and impersonal one, is very significant because it indicates that the students in Serbia may be considered as mature and healthy personalities who are prevalently intrinsically motivated. This is in accordance with the findings of one of the preceding researches on the sample of teachers in Serbia, it also indicates an optimal positive human development of teachers (Randelović, Stojiljković i Milojević, 2013).

Apart from that, the results show that Intrinsic motivation is consistently better and positive correlation of Integrated self, as opposed to Extrinsic motivation where the direction of the connection is negative. Extrinsic motivation stands out as the best predictor of Ego-invested self and compared to Intrinsic motivation it stands in a positive relation with the mentioned type of self. In other words, people with the tendency for a healthy method of functioning have prevalently intrinsically oriented actions and life goals. Individuals whose behaviour is primarily regulated by external demands have a lower level of optimal functioning - Ego-invested self. These findings are in accordance with the basic assumption of the SDT (Hodgins & Knee, 2002).

The results concerning the Impersonal self coincide with the initial expectation. The finding is interpretable in the context of the SDT and a non-clinical sample, which was used in this research. Therefore, Intrinsic motivation is consistently a better and negative predictor of Impersonal self, while the Extrinsic motivation is a positive predictor. This is not surprising, since these constructs are in an opposite relation and a complete lack of autonomous regulation of behaviour is characteristic for the lowest level of integration of the self. Extrinsic

motivation is conceptually and behaviourally closer to Impersonal self than Intrinsic motivation. This way SDT has received more empirical support.

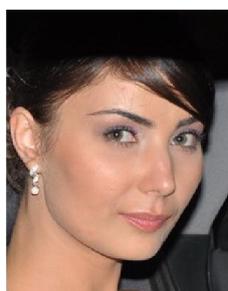
The results of this study indicate that the examination of the types of motivation as correlations for ego functioning is justified and it can be used in practice. Namely, the findings concerning prevalently mature and healthy functioning of young people may represent additional motivation for improving the living conditions in Serbia. Apart from that, the development of a society rests on the maturing generations which is why it is necessary to direct different resources (moral, financial and so on) towards the growth of not only students but also children from the first days of their lives, so that they could in return have a positive influence on the social context in which we live. One must bear in mind that this is a possible image of one of the aspects of psychological functioning of a part of Serbia's population that has managed to cope with various misfortunes. There are other groups of people (e.g. socially disadvantaged, ill etc.), their development occurs under unfavourable social circumstance. Therefore, in order to provide a better insight in motivation and ego functioning of the people in Serbia, a research of this type needs to be expanded to other samples, and in accordance with the results of those studies, it is possible to work on the development of a strategy to improve the quality of living.

Finally, the way of acquiring measures of motivation and types of self (self-evaluation) requires caution in interpretation because the examinees may have given socially desirable responses. This poses an interesting research question concerning the difference between the desired and real, and the conflict between those two aspects of self. Including different measures of evaluation (e.g. combining Q and L data) would certainly improve future researches. Apart from that, this study is of a correlative type so the guidelines for future researches would go in the direction of experimental design that would include some of the relevant social situations and behaviours in those situations. In this way, apart from individual factors, situational factors would also be examined, and that would certainly contribute to a more comprehensive understanding of psychological functioning of people.

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