

THE RELATIONSHIP BETWEEN AUTONOMOUS VERSUS EXTERNAL MOTIVATION AND REGULATORY FOCUS

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Abstract

The objective of the study is to investigate the relationship between different forms of motivation mindsets. The integrative model of motivated behavior (Meyer, Becker, & Vandenberghe, 2004) indicates relations between the forms of motivation identified in the self-determination theory (Deci & Ryan, 1985) and the regulatory focus theory (Higgins, 1997, 1998). A concept of goal regulation proposes relations between autonomous versus external motivation and promotion versus prevention focus. The research involved 288 university students. Participants rated their motivation for three personal goals on scales assessing self-concordance (Sheldon & Elliot, 1999). The regulatory focus was assessed by the Regulatory Focus Questionnaire (RFQ, Higgins et al., 2001). It was found that autonomous motivation was significantly positively related to promotion focus. Furthermore, autonomous motivation predicted promotion focus. Between external motivation and prevention focus a significant relationship was not confirmed. However, external motivation significantly negatively correlated with promotion focus.

Keywords: *Autonomous motivation, external motivation, promotion focus, prevention focus.*

1. Introduction

Behavior is a complex of factors, which explain its character. One of the important ones is motivation. When it comes to setting a goal, we take certain steps to achieve the desired state. Depending on the type of motivation, goal-striving may take on significantly different forms. For example, Higgins et al. (2001) compare two situations of a student who is studying for an exam. In the first one, a student reads not only the study material but also some additional texts. In the second situation, a student reads the study material and keeps reading over and over. We may notice in the first situation that the student is interested in learning additional optional information, in order to make progress and expand his/her knowledge. The student who studies just what is required and makes sure to learn it well probably feels the urge to carry out his/her duties and not fail. Here we illustrated the influence of motivation on the process of goal attainment. Our study's aim is to investigate the relationship between different forms of motivation mindsets. The integrative model of motivated behavior (Meyer, Becker, & Vandenberghe, 2004) presents relations between the forms of motivation identified in the self-determination theory (Deci & Ryan, 1985) and the regulatory focus theory (Higgins, 1997, 1998). What are the relations between motivations defined in these theories? Is there a significant relationship between motivations? Is conceptual integration relevant?

According to the self-determination theory, the extent to which a goal reflects one's own interests and values differentiates the type of motivation. In other words, motivation varies within the autonomy range. More autonomy involves more interest, enjoyment, and congruence while engaging in goal achieving. Autonomous motivation arises in the process of integration of the activity with one's own self. This process may be facilitated by providing a meaningful rationale, acknowledging the individual's perspective and conveying choice rather than control. When the acceptance or internal identification with the activity does not occur, an inner conflict is experienced. External motivation, which follows pressure and demand, is in contrast to autonomous motivation. Autonomous motivation is associated with greater effort, commitment, perseverance, better performance, and other positive consequences. Feelings of anxiety, guilt, or embarrassment indicate external motivation (Deci, Eghrari, Patrick, & Leone, 1994; Deci & Ryan, 2008; Ryan & Deci, 2000; Sheldon & Elliot, 1998; Sheldon & Filak, 2008).

Sheldon and Elliot (1999) use the term self-concordance to define the extent to which one feels autonomy in goal striving. The prevalence of autonomous motivation is captured by the self-concordance index when the result is a positive value. It can be calculated by subtracting external reasons (sum of

extrinsic and introjected motivation) from autonomous reasons (sum intrinsic and identified motivation) (Koestner, Lekes, Chicoine & Powers, 2002). Touré-Tillery and Fishbach (2014) characterize autonomous motivation as process-focused. Positive emotions, satisfaction, greater persistence, and also more time spent solving the task indicate autonomy. External motivation is an outcome-focused motivation, which centers on the desired final state associated with an external reward or benefit. The indicator may be a faster movement toward the goal. Milyavskaya, Inzlicht, Hope, and Koestner (2015) use the terms *want-to* and *have-to* motivation instead of terms autonomous and external motivation.

According to the regulatory focus theory, goal-directed behavior is regulated by two distinct motivational systems, namely promotion and prevention focus. Promotion focus is associated with achieving gains (“+1”), and failure represents non-gains (“0”). Primary concerns are nurturance and growth. This includes, for example, the achievement of ideals, hopes, and aspirations. Exceeding the status and advancing to better states is a strategic mean used to approach the desired end-state. Conversely, prevention focus is associated with achieving non-losses (“0”) and failure represents losses (“-1”). Primary concerns are safety and security. This includes, for example, the achievement of oughts, duties, and obligations. The preferred strategy is to maintain or restore the status quo and prevent falling to worse states (Higgins & Cornwell, 2016).

We may engage in goal activity differently, depending on the promotion or prevention focus of our motivation. Förster, Grant, Idson, and Higgins (2001) found that promotion focus, in the presence of success feedback, increased motivational strength as one moved closer to the goal. When there was failure feedback, the motivational strength near a goal increased with a prevention focus. Success and failure represent positive and negative outcome focused on maintaining (or inducing) a state of eagerness for promotion focus and a state of vigilance for prevention focus. Förster, Higgins, and Bianco (2003) in their studies showed that regulatory focus influenced speed and accuracy for participants in different tasks. As participants move closer to completing a task, those participants with promotion focus have greater speed but accuracy decreases. For participants with a prevention focus, speed decreases and accuracy increases. These results support the notion that motivation may influence quantity/quality differences in performance.

As we can see, there are parallels between concepts of motivation. In the integrative model, Meyer et al. (2004) introduced a concept of goal regulation, which connects self-determination theory with regulatory focus. Motivation, according to the self-determination theory, focuses on the perceived causes of the behavior, that is, why we strive to achieve a goal. To refer to why he/she is pursuing a goal the term perceived locus of causality is used, which reflects the relative strength of internal and external inducements. The regulatory focus theory addresses the purpose of one’s behavior, that is, what we are trying to do while striving to achieve a goal. The term perceived purpose refers to the general purpose in the process of goal attainment. The concept of goal regulation reflects both the reasons for and the purpose of goal-directed activity.

Meyer et al. (2004) propose that the relative salience of internal forces for behavior increases autonomous motivation, and the relative salience of external inducements increases external motivation. Relative salience means that these forces can operate simultaneously and are relatively independent. Goal-directed behavior driven internally should be perceived as the ideal to be achieved. Therefore, a promotion focus should be stronger. Externally driven behavior should be experienced as working towards the oughts that characterize a prevention focus.

2. Objectives

In our study, we aim to examine the relations between autonomous versus external motivation and promotion versus prevention focus. Is there a significant relationship between autonomous motivation and promotion focus? Is there a significant relationship between external motivation and prevention focus? Based on the theoretical background and assumptions by Meyer et al. (2004), we have formulated two hypotheses:

*H*₁: Autonomous motivation statistically significantly predicts promotion focus.

*H*₂: External motivation statistically significantly predicts prevention focus.

3. Method

3.1. Participants and procedure

288 undergraduate students (157 women, 131 men), aged 17-29 ($M = 20.80$, $SD = 1.65$), voluntarily participated in the study. Students were non-randomly selected from the population. First, the respondents described three personal goals. Then they completed 4-item scales assessing self-concordance to each goal (Sheldon & Elliot, 1999). Finally, they completed an 11-item Regulatory Focus Questionnaire (RFQ, Higgins et al., 2001).

3.2. Measures

In the beginning, the following instructions were given: “Goals represent some desired future state that we intend to accomplish. Please, try to briefly describe three goals you are striving to achieve. Write a few sentences for each goal.”

Self-concordance scales (Sheldon & Elliot, 1998)

Participants were asked to rate the reasons for pursuing their goal. The 4 types of reasons for goal pursuing corresponded to a continuum of self-determination ranging from highly external to highly autonomous. Ratings ranged on a scale from 1 (*not at all for this reason*) to 7 (*completely because of this reason*). The items represented external (“striving because somebody else wants you to or because you’ll get something from somebody if you do”), introjected (“striving because you would feel ashamed, guilty, or anxious if you didn’t strive for this”), identified (“striving because you really believe it’s an important goal to have – you endorse it freely and wholeheartedly”), and intrinsic reason (“striving purely because of the fun and enjoyment that striving provides you”). According to Koestner et al. (2002), the self-concordance index is calculated by subtracting the sum of the external and introjected ratings from the sum of the intrinsic and identified ratings.

Regulatory focus questionnaire (RFQ, Higgins et al., 2001)

Participants were asked to answer questions about specific life events in their lives. The items assessed individuals’ subjective histories of success or failure. The 11 items loaded on 2 scales. Ratings ranged on a scale from 1 to 5 (for instance, 1- *never or seldom*, 3- *sometimes*, 5- *very often*). High scores indicate that the individual has been successful in using approach eagerness means or avoidance vigilance means to attain goals. The Promotion scale consists of 6 items (for instance, “Compared to most people, are you typically unable to get what you want out of life?”, “Do you often do well at different things that you try?”). The Prevention scale consists of 5 items (for instance, “How often did you obey rules and regulations that were established by your parents?”, “Not being careful enough has gotten me into trouble at times.”). Internal consistency of the scales was acceptable (Cronbach’s alpha was .65 for the Promotion scale and .76 for the Prevention scale). The regulatory focus predominance can be calculated via the index by subtracting the prevention ratings from the promotion ratings – the resulting positive value indicates the prevalence of the promotion focus and the negative value the prevalence of the prevention focus (Camacho, Higgins, & Luger, 2003).

4. Results

Data were analyzed using the statistical software SPSS 21.0. We calculated the mean score for self-concordance scales across the three goals. Then, we calculated autonomous motivation by summing mean scores of intrinsic and identified reasons, and external motivation by summing mean scores of external and introjected reasons. The relationship among the variables was explored using correlational and regression analyses. Results of the correlational analysis are shown in Table 1.

Table 1. Means, standard deviations and Pearson correlation coefficients among variables.

Motivation	<i>n</i>	<i>M</i>	<i>SD</i>	1.	2.	3.	4.
1. autonomous	285	8.52	1.58	–	-.33**	.25**	.04
2. external	285	4.99	1.70		–	-.22**	-.01
3. promotion	288	21.27	3.54			–	.17**
4. prevention	288	15.86	3.98				–

n = sample size, *M* = mean, *SD* = standard deviation, ** $p < .01$

Preliminary analysis shows that autonomous motivation was statistically significantly negatively correlated with external motivation ($r_{xy} = -.33, p < .01$). The promotion focus was statistically significantly positively correlated with prevention focus ($r_{xy} = .17, p < .01$). The calculation of the self-concordance index shows that autonomous motivation dominated ($M = 3.52, SD = 2.68$), and according to the RFQ index calculation, it dominated the promotion focus ($M = 5.41, SD = 4.86$).

The main results show that autonomous motivation was significantly positively correlated with promotion focus ($r_{xy} = .25, p < .01$). External motivation did not correlate with prevention focus ($r_{xy} = -.01, p > .05$), but we found a significant negative relationship with promotion focus ($r_{xy} = -.22, p < .01$). Therefore, we excluded from further analysis the examination of the relationship between external motivation and prevention focus.

To examine whether autonomous motivation predicts promotion focus, we ran a linear regression analysis. After checking the Mahalanobis distance at the critical chi-square value set at $\chi^2_{(1)} = 10.83$, we identified eight cases that exceeded this critical value (max. $\chi^2_{(1)} = 16.91$). We excluded extreme cases to improve the model's ability to estimate the values of the dependent value. Therefore, the subsequent statistical analysis included $n = 277$ cases for autonomous motivation and $n = 280$ cases for promotion focus.

The correlation coefficient between autonomous motivation and the predicted value of the promotion focus was $r_{xy} = .29$ ($p < .0005$). The coefficient (index) of determination had the value $r_{xy}^2 = .08$, which means that through autonomous motivation we can explain 8.2 % of the variability of the promotion focus. Our regression model was statistically significant ($F_{(1)} = 24.57$, $p < .0005$). The standardized regression coefficient had a value of $\beta = .29$ ($b = .85$, $SE = .17$, $t = 4.96$, $p < .0005$, 95 % $CI [.51, 1.19]$). Based on the score in autonomous motivation, it is possible to estimate the score in the scale of promotion focus.

5. Discussion

Meyer et al. (2004) created a concept of goal regulation, which presupposes a connection of autonomous motivation with a promotion focus and a connection of external motivation with a prevention focus. This assumption is based on parallels that exist in these motivation theories. Internally motivated behavior should be perceived as achieving the ideals (stronger promotion focus), and externally motivated behavior should be perceived as achieving the oughts (stronger prevention focus).

As one may expect, a statistically significant negative relationship was found between autonomous and external motivation, but such a result is not always confirmed as reported by Koestner, Otis, Powers, Pelletier, and Gagnon (2008). Based on the result of a statistically significant positive relationship between the promotion and prevention focus we suppose that the relations between types of motivation are more complex.

We confirmed the assumption formulated in hypothesis H_1 that autonomous motivation statistically significantly predicts the promotion focus. Despite the apparent theoretical context, we failed to support all of the assumptions formulated by Meyer et al. (2004). Hypothesis H_2 , that the external motivation will statistically significantly predict prevention focus, was not confirmed. We found that external motivation was statistically significantly negatively correlated with promotion focus. Therefore, the primary consideration should be that an individual with external motivation lacks promotion focus, thus, prevention focus may be process-forming only in a special personal or situational setting. We suppose that the relationship between external motivation and prevention focus could be mediated or moderated by the presence of another important variable such as anxiety (Strauman et al., 2015). Additionally, the amount of autonomy in motivation could also matter.

Future researchers should re-examine the relations between types of motivation, for example, there seems to be no consensus on whether a relation between autonomous and external motivation is negative or positive (Koestner et al., 2008). We also suggest to explore the theory concerning mediation or moderation analysis in order to examine in more detail the relationship between external motivation and prevention focus.

6. Conclusion

The present study aimed to measure the relationship between autonomous versus external motivation and promotion versus prevention focus as proposed by the concept of goal regulation (Meyer et al., 2004). We hypothesized that there is a significant relationship between autonomous motivation and promotion focus; and external motivation and prevention focus. In conclusion, our results showed that autonomous motivation was significantly positively related to promotion focus. Furthermore, autonomous motivation predicted promotion focus. Between external motivation and prevention focus a significant relationship was not confirmed. However, external motivation significantly negatively correlated with promotion focus.

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