Students' Intentions to Persist in, Versus Dropout of High School: What Self-determined Motivation Tells Us about It?

Vali Khalkhali 1, Rouhollah Sharifi 2 and Ali Nikyar 3

1Department of Psychology, Malayer Branch, Islamic Azad University, Malayer, Iran; 2Farhangian University, Eghlid Center, Eghlid, Iran; 3Department of Psychology, Qazvin Branch, Islamic Azad University, Qazvin, Iran

ARTICLE INFO

ABSTRACT

High school dropout represents an important problem that affects thousands of students each year, and has obvious psychological, economical, and social ramifications. One factor in a student's decision to dropout of school may be motivation. Teachers play important role in helping students develop motivational resources through the provision of autonomy-supportive classrooms. The purpose of this study was to examine the relationship of behavioral regulation and competence to students' intention to persist in, versus drop out of, high school. The authors argue more self-determined forms motivations could positively predict the intention of students to persist in, versus drop out of, high school. The subjects were 318 Iranian 9th grade students. All subjects completed academic self-regulation questionnaire, perceived competence scale and intention to persist in high school questionnaire. The results of regression analysis showed that more self-determined forms of behavioral regulation predict the intention of students to persist in high school. The results indicated students' intentions to persist in high school increase with more self-determined forms of behavioral regulation and more perceived competence in classroom. The results also yielded an interesting finding that identified regulation did not predict students' dropout intention. With respect to intention to persist in high school, these results highlight the importance of taking into account the fostering of perceived competence and more self-determined forms of behavioral regulation.

Keywords:
Behavioral regulations, competence, dropout of school, self-determination theory

Introduction

High school dropout represents an important problem that affects thousands of students each year. Dropping out of school is not only an educational problem but a significant social problem as well. Indeed, it has obvious psychological, economical, and social ramifications. There is strong evidence that dropouts may undergo a loss of self-esteem, turn to drugs, and become a financial burden to society (Mensch & Kandel, 1988; Tidwell, 1988).

Although it seems teachers do not control students' out-of-school circumstances, but a survey of research on high school dropout reveals that one factor in a student's decision to drop out of school may be motivation (see Hardre and Reeve, 2003; Vallerand, Fortier & Guay, 1997; Rumberger, 1987; Tidwell, 1988). Teachers can nevertheless provide classroom contexts that foster situational engagement, nurture interest, and promote the development of internal motivational resources (Deci, 1995; Hidi & Harackiewicz, 2000; Reeve, 1996; Hardre and Reeve, 2003). Positive experiences in school can influence young people to value of schooling which can foster persist in school (Hardre and Reeve, 2003). Of particular importance is how motivating classes are for the students, and how much teachers are able to increase the young people participation in school activities. When teachers support their students' interests (rather than control their...
behavior), students are more likely to find value in their schooling and are less likely to formulate dropout intentions (Steinberg, Elmen, & Mounts, 1989; Vallerand & Bissonnette, 1992; Vallerand et al., 1997). Once nurtured and developed in the classroom, motivation can therefore function as a student-owned internal resource that contributes significantly to the decision to persist in school.

A motivational theory that has been successfully applied in educational settings is self-determination theory (SDT, Deci & Ryan, 1985; Ryan & Deci, 2000; Vallerand et al., 1997; Khalkhalhi, 2012). Self-determination theory (Deci & Ryan, 2000) can be used as a framework to understand the motivational influences underlying students’ intentions to continue versus dropout of school. Self-determination theory, when applied to education, is about fostering in students an interest in learning, valuing education, and a confidence in personal capabilities. According to this theory, students become actively engaged in educational activities to the extent that classroom endeavors affirm their competencies and prove themselves to be interesting and relevant to students’ lives (Hardre and Reeve, 2003).

Self-determination theory (Ryan & Deci, 2000) distinguishes three kinds of motivation: intrinsic motivation, extrinsic motivation, and amotivation, situated along a continuum ranging from high to low self-determination, and which vary according to the degree of behavioral regulation. Thus, amotivation refers to the absence of the intention to act and this may be because the person does not feel competent, cannot see the contingencies between the behaviors performed and the expected results, or does not value the activity. Intrinsic motivation represents the highest degree of self-determined motivation and occurs in the situations in which individuals feel free to commit to activities they find interesting and/or fun and that offer them the chance to learn. Lastly, extrinsic motivation, in contrast, takes place when people carry out a task because they value the results associated with it (e.g., public acknowledgement, extrinsic rewards) more than the activity itself. However, within extrinsic motivation there is a continuum. External regulation is when the behavior is controlled by external conditionalities (e.g., “I go to school because I am forced to”). Introjected regulation is when the external conditionalities have been internalized to some extent, (e.g., “I go to school because I would feel guilty otherwise”). Identified regulation is when the outcomes of the behavior are consciously valued by the individual (e.g., “I go to school because I value the learning”). Integrated regulation is when the outcomes of the behavior are fully congruent with the individuals’ other values (e.g., “I go to school because it is part of who I am”). External and introjected regulations are relatively controlled forms of regulation, whereas identified, integrated, and intrinsic regulation are relatively autonomous forms of regulation (Deci & Ryan, 2000).

According to the SDT (Deci & Ryan, 2002), the transformation of external regulation into self-determined forms of regulation, as well as the stability of self-determined (intrinsic) motivation depends on three aspects (Black & Deci, 2000): The satisfaction of the basic, innate psychological needs for support of autonomy, support of competence, and social support. SDT proposes that human beings have innate psychological needs for autonomy, competence and relatedness. According to Gagne (2003) people are more likely to be intrinsically motivated, doing an activity simply for the enjoyment they derive from it, when they can freely choose to pursue an activity (autonomy/choice), when they master the activity (competence) and when they feel connected and supported by significant people, such as a manager, a parent, a teacher or teammates (relatedness). Yet, the significance of the three basic needs for the explanation of action and experience can vary depending on the situation and the cultural context (Deci & Ryan, 2000).

Intrapersonal and interpersonal contexts that support the satisfaction of these needs will promote a person’s enjoyment of activities and the autonomous self-regulation of behaviors (Ryan & Deci, 2000). According to this theory, social contexts differ in the way communicate with peoples. Within SDT (Ryan & Deci, 2000b) these contexts are described as being controlling versus autonomy-supportive. Environments that support students’ needs for competence and self-determination constitute autonomy-supportive environments, whereas those that neglect and frustrate these needs constitute controlling environments (Deci & Ryan, 1987; Reeve, Bolt, & Cai, 1999).

Autonomy-supportive teachers facilitate, whereas controlling teachers interfere with the congruence between students’ self-determined inner motives and their classroom activity. Autonomy-supportive teachers facilitate this congruence by identifying and nurturing students’ needs, interests, and preferences and by creating classroom opportunities for students to have these internal motives guide their learning and activity. In contrast, relatively controlling teachers interfere with students’ inner motives because they tend
to make salient a teacher-constructed instructional agenda that defines what students should think, feel, and do. To shape students’ adherence toward that agenda, controlling teachers offer extrinsic incentives and pressuring language that essentially bypass students’ inner motives (Deci & Ryan, 2000).

When students have autonomy supportive teachers (Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005; Khalkhali & Golestaneh, 2011) or when students perceive their teachers to be relatively autonomy supportive (Lim & Wang, 2009; Khalkhali, 2012), students report relatively high levels of self-determination (Deci & Ryan, 1985; Vallerand et al., 1997), competence (Ryan & Grolnick, 1986), and valuing of school (Hardre & Reeve, 2003). Autonomy-supportive teachers are able to facilitate these positive educational and developmental outcomes in their students because they find ways to involve and satisfy their students’ psychological needs (for autonomy, competence, and relatedness) during instruction (Hardre & Reeve, 2003; Reeve, 2002).

These motivational resources, when supported and nurtured in the classroom, provide students with the motivational foundation they need to become highly engaged in school and committed to graduating (Vallerand et al., 1997). The degree to which needs to autonomy, competence, and relatedness are satisfied by teachers influences on students’ behavioral regulations that show the perceived loci of causality of individuals’ behavioral goals and reflect qualitatively different reasons for the behavior chosen. Controlling environments produce an external locus of causality, thereby frustrating people’s basic need for self-determination or autonomy, that is, their tendency to engage in a willing and volitional manner in an activity (Chatzisarantis et al. 2003). Assessing each behavioral regulation separately may provide further insight into how adolescents differ in their motivational profiles (Wang & Biddle, 2001; Wang, Chatzisarantis, Spray, & Biddle, 2002).

According to the theory of planned behavior (Ajzen, 1991), people’s overt statement of intention is the strongest predictor of behavior. Hagger, Chatzisarantis, Culverhouse, & Biddle, (2003) proposed that intention summarized a person’s general affective and cognitive orientation towards the behavior (attitude), the perceived pressure placed on them by significant others to participate in the target behavior (subjective norm), and their competence-related evaluation of their faculties and capacities towards the behavior (perceived behavioral control). As such, more self-determined forms of behavioral regulations (which effect more positive consequences or adaptive outcomes) are more likely to enhance stronger intentions from a person.

A large number of studies have yielded that the self-determined types of motivation (intrinsic motivation and identified regulation) were associated with positive outcomes in academic settings, such as higher concentration in the class (Standage, Duda, & Ntoumanis, 2003) and effort (Ntoumanis, 2001), the intentions for high school attendance (Hardre & Reeve, 2003; Flink, Boggiano, & Barrett, 1990; Grolnick & Ryan, 1987; Ryan & Grolnick, 1986; Vallerand et al., 1997). More autonomous regulation has been found to positively predict sustained participation (e.g. Daley & Duda, 2006; Fortier, Sweet, O’Sullivan, & Williams, 2007; Hagger & Chatzisarantis, 2009). These results show that the students’ self-determination for school attendance and valuing of school is associated with positive outcomes. So the examination of Iranian university students’ self-determination in classroom and its impact on their intention for school attendance it is of great interest.

The purpose of this study was to examine the relationships between students’ perceived competence and behavioral regulations with their intentions to drop out of high school. Based on the SDT framework, we hypothesized that: a) Perceived competence will predict intentions to drop out of high school negatively, b) Intention will be positively predicted by intrinsic motivation and identified regulation while negatively predicted by external regulation and amotivation.

Method

Participants

As between intrinsic, identified, introjected, external regulations, amotivation, and was used to predict students’ intention to persist in versus high school dropout, a correlational research used. The initial student
sample contained 352 Iranian 9th grade students. Students who did not complete the entire questionnaire were excluded from the analyses. Hence, all analyses were based on a final sample of 318 students (age: M = 15.21, SD = 1.1, range =14–16 years).

**Measures**

Firstly, all measures were translated into Persian language and Cronbach’s alpha coefficients were calculated to assess their internal reliability. Finally, in the last part of the questionnaire, participants were asked to indicate their age, student identification number, gender, and date of birth.

**Behavioral regulations.** Students reported their motivational regulations using Perceived Locus of Causality scale (PLOC), a questionnaire developed by Goudas, Biddle, & Fox (1994). The questionnaire begins with the stem, “The reason I go to school is . . .,” and provides a list of 16 different reasons to go to school, each with its own 1–7 response scale. Each motivational regulation contained four items. Subscales in the questionnaire were intrinsic motivation (e.g., “Because I enjoy learning new things”), identified regulation (e.g., “Because I think that a high school education will help me better prepare for the career I have chosen”), introjected regulation (e.g., “To show myself that I am an intelligent person”), external regulation (e.g., “Because I need at least a high school degree in order to find a high-paying job later on”), and amotivation (e.g., “I can’t see why I go to school and frankly I couldn’t care less”). Again, previous research has demonstrated the internal consistency of the five subscales (e.g., Ntoumanis, 2001). In the present study the Cronbach’s alpha coefficients were α = .85 (external regulation), α = .76 (introjected regulation), α = .73 (identified regulation), α = .83 (intrinsic motivation), and α = .81 (amotivation).

**Perceived competence.** We measured competence using the six items that comprise the perceived competence subscale of the Basic Need Satisfaction in General Inventory (Deci, Schwartz, Sheinman, & Ryan, 1981) adapted to the school-related domain. The scale begins with the stem, “When engaged in school-related tasks, I feel . . .,” and provides 6 response items, each with its own 1–7 response scale. An example item is, “I often do not feel very capable.” Alphas in this study were α = .82.

**Intentions to persist versus drop out.** Students were asked to complete three items that measured their future schooling intentions. Tow first items were adopted from Vallerand et al. (1997), which were “I sometimes consider dropping out of school” and “I intend to drop out of school.” And third item was adopted from Harder and Reeve (2003), which was “I sometimes feel unsure about continuing my studies year after year.” Responses to this behavioral intention scale were rated on a 7-point Likert scale, ranging from not at all in agreement (1) to completely in agreement (7). Alphas in this study were α = .78.

**Procedure**

The questionnaires were administrated in the spring. Permission for the study was obtained by the teachers and students. Authors administered the questionnaire during students’ regular class periods and in their regular classrooms. The administrators used standardized instructions, and explained that the purpose of the study was “to understand students’ perspectives on school.” Subjects were assured about the confidentiality of their answers. Questionnaires were administrated with the absence of teacher. Only, participants who were volunteer completed questionnaires.

**Data Analysis**

The data collected were analyzed in two parts. Firstly, descriptive statistics were computed. In addition, analysis of regression was computed followed by descriptive statistics.

**Findings**

Table 1 presents the correlations matrix among the five behavioral regulations and intention. As table 1 show, the positive correlation was observed between intrinsic and perceived competence and intention to persist in, high school, and negative correlation between introjected, external motivation and amotivation.
and intention. For verification of multiple correlation between predictor (independent) variables and dependent variable, a statistical multiple regression method has been used in survey.

**Table 1.** Correlation between intrinsic, identified, introjected, external regulations, amotivation, perceived competence and intention

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>External motivation (1)</td>
<td>0.688**</td>
<td>0.210**</td>
<td>0.712**</td>
<td>0.245**</td>
<td>0.584**</td>
<td>0.409**</td>
</tr>
<tr>
<td>Introjected regulation (2)</td>
<td>1</td>
<td>0.254**</td>
<td>0.601**</td>
<td>0.179**</td>
<td>0.556**</td>
<td>0.362**</td>
</tr>
<tr>
<td>Identified regulation (3)</td>
<td>1</td>
<td>0.222**</td>
<td>0.276**</td>
<td>0.168**</td>
<td>0.091</td>
<td></td>
</tr>
<tr>
<td>Intrinsic regulation (4)</td>
<td>1</td>
<td>0.256**</td>
<td>0.488**</td>
<td>0.399**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amotivation (5)</td>
<td>1</td>
<td>0.354**</td>
<td>0.458**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived competence (6)</td>
<td>1</td>
<td>0.416**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention (7)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.001**

Correlations among the four motivational regulations (Table 1) were consistent with the self-determination theory, that is, the motivational regulations which are nearby in the self-determination continuum had higher correlation in comparison with the others. The exception was about identified regulation. A positive correlation, but not significant, was observed between identified regulation and intention.

**Table 2.** Square value of coefficient of multiple correlation for predictor variables

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.511</td>
<td>0.261</td>
<td>0.249</td>
<td>3.69</td>
</tr>
</tbody>
</table>

As can be seen in above table, behavioral regulations were accounting for an additional 0.249 of variance of intention.

**Table 3.** Sum of square analysis and results

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>MS</th>
<th>df</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1372.082</td>
<td>222.847</td>
<td>6</td>
<td>22.154</td>
<td>0.000</td>
</tr>
<tr>
<td>Resident</td>
<td>3128.349</td>
<td>10.059</td>
<td>311</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F value was significant, F (6, 311) =22.154, p<0.000. It shows predictor (independent) variables can predict variance of dependent variable significantly.

**Table 4.** Coefficients of Regression Equations based on behavioral regulations and intention to persist in high school

<table>
<thead>
<tr>
<th>Variables</th>
<th>Un-standardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE β</td>
<td>β</td>
<td></td>
</tr>
<tr>
<td>intrinsic regulation</td>
<td>0.214</td>
<td>0.054</td>
<td>0.378</td>
<td>4.36</td>
</tr>
<tr>
<td>identified regulation</td>
<td>0.020</td>
<td>0.012</td>
<td>0.081</td>
<td>0.055</td>
</tr>
<tr>
<td>introjected regulation</td>
<td>-0.243</td>
<td>0.082</td>
<td>-0.364</td>
<td>-4.78</td>
</tr>
<tr>
<td>external regulation</td>
<td>-0.312</td>
<td>0.036</td>
<td>-0.216</td>
<td>-5.18</td>
</tr>
<tr>
<td>perceived competence</td>
<td>0.303</td>
<td>0.073</td>
<td>0.429</td>
<td>6.649</td>
</tr>
<tr>
<td>Amotivation</td>
<td>-0.356</td>
<td>0.046</td>
<td>-0.201</td>
<td>5.162</td>
</tr>
<tr>
<td>Constant</td>
<td>13.86</td>
<td>0.62</td>
<td>-</td>
<td>22.34</td>
</tr>
</tbody>
</table>
Table-4 shows a motivation is negatively strongest predictor of intention to drop out of, high school. In the second, perceived competence is positively strongest predictor of intention. Third, external and introjected regulations have negative and significant relationships with intention. Intrinsic regulation is a fourth predictor of intention. Identified regulation have a positive correlation, but not significant, with intention.

Discussion

According to SDT, students’ perceptions of self-determination and competence constitute students’ internal motivational resources that support their engagement and persistence in school. Teachers play important role in helping students develop these internal motivational resources through the provision of academic activities which are interesting for students, relevant to their lives, and affirm their competencies. In this study, we tested the hypothesis that perceived competence and internal behavioral regulations would have positive relationship with intention to persist in high school and external behavioral regulations and amotivation would have negative relationship with intention. Results supported the hypothesis. We found that when students perceived that needs for self-determination and competence are being neglected or frustrated, and then they become vulnerable to begin formulating dropout intentions. Students’ perception of classroom as autonomy supportive climate nurture critical motivational variables (i.e., self-determined motivation, perceived competence) that predict their intentions to persist in high school. Self-regulated motivation can help predict intention to persist in high school positively, whereas external regulations and amotivation did negatively. These findings are consistent with previous research (Vallerand et al., 1997; Harder and Reeve, 2003; Wigfield & Eccles, 2000; Meece, Wigfield, & Eccles, 1990). However, identified regulation was shown no significant relationship with intention.

On the basis of SDT, we reasoned that perceived competence satisfies need for competence and more self-determined forms of behavioral regulations would predict intention to persist in high school positively by reducing an external perceived locus of causality for engaging in school, which can satisfy their needs for self-determination and autonomy. In contrast, when students feel less self-determined in classroom, that is, pressured to participate in instructional activities (external and introjected regulations) or feel that instructional activities are a waste of their time (amotivation), they are more likely to adopt controlling intentions which are less likely to be translated into actual behavior.

In classroom, the onus is on the teachers to adopt appropriate motivational strategies that may satisfy need competence and enhance more self-determined forms of behavioral regulations. The implication here for teachers, the importance of being autonomy-supportive in order to foster more self-determined forms of behavioral regulations. According to Ryan and Deci (2000), experience of autonomy facilitates internalization. On the other hand, non self-determined forms of regulations do not result in adaptive behaviors and also lead to outcomes which are not persistent over time (e.g., Reeve, Jang, Carrell, Jeon, & Barch, 2004).

Contrary to the predictions of the SDT (Deci & Ryan, 2000), an insignificant relation between identified regulation and students’ intention to persist in high school emerged. Providing an explanation on bases SDT for this finding is difficult. As a possible explanation in identification, people recognize and accept the underlying value of a behavior. By identifying with a behavior’s value, people have more fully internalized its regulation; they have more fully accepted it as their own. In this study, students’ identification with the importance of learning is not meaning important of schooling. Students yet may want to learning but looking for it in out of school. Secondly, Iran’s society primarily foster non and less self-determined forms of regulation (external and introjected regulations) to encourage students for learning and value to school, which can forestall the internalization process that in turn remain regulations and values either external or only partially internalized. And fully identifying a behavioral regulation is unlikely to have occurred during adolescence and in 9th grade.

Conclusions

According to the findings, students’ perception of need for self-determination and competence satisfaction is a strong predictor of their dropout intention. This finding is important because it shows that
dropout is not only an achievement issue but also as a motivation issue. Perceived self-determination and perceived competence accounted for 26% of the variance in dropout intentions, which show substantial portion of dropout intentions also arise from motivational resources. This findings are particularly important considering the significant role of teachers in promoting motivational resources and how this can in turn reduce dropout intention.

From an applied perspective, our findings insist on motivational intervention strategy to enhance persistence. When teachers provide their students with autonomy-supportive environments and affirm their competencies, they provide a classroom climate which nurtures students’ perceptions of competence and more self-determined forms of behavioral regulations that in turn reduce dropout intention. Nevertheless, these two motivational resources should be encouraged to promote persistence. Teachers must find ways to support students’ interests, connect lessons to students’ lives, and affirm students’ competencies. In practice, doing so means providing opportunities for choice (e.g., offer a wide variety of relevant activities, with rationales for doing them), provide increased opportunities for student input (e.g., allowing students to play different roles in the lesson, and making decisions with regard to how they want to carry out the activities), respect students’ agendas, and empathize and acknowledge the students’ concerns, feelings and questions.

**Limitations and Future Research**

The current study is not without its limitations. First, we conducted a cross-sectional research and the cross-sectional nature of research design which only allowed for a slice-in-time study, but as getting perception of self-determination and competence takes time and formulating an intention to drop out of school occur over time, it would be better use a longitudinal research design. Second, we used a single measure of intention to persist in school. That is, we did not assess students’ actual dropout behaviors. Nevertheless, Vallerand et al. (1997) had already shown that this outcome measure predicts students’ actual dropout behaviors 1 year later. Third, we studied students’ perceptions of only their teachers and didn’t study their perception of school climate, parents and school administrators (Vallerand et al., 1997). Fourth, we just studied two needs of innate psychological needs (need for autonomy and competence) and didn’t study third one (need for relatedness).

Hence, future research might use a longitudinal research design in dropout study, and assess students’ actual dropout behaviors. Future research might study students’ perceptions of school climate, parents and school administrators and also examine relationship between all innate psychological needs, behavioral regulations and intention.

**References**


