STUDENT MOTIVATION AND SELF-CONCEPT: IS THERE A CONNECTION?

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Abstract

The concept of motivation has been placed at the heart of discussions related to academic achievement and school withdrawal. Student and trainee self-concept is presented – throughout the reviewed literature – as an effective response for schools as well as an aspect to consider when promoting motivation and performance in students. Several studies argue that self-concept is the foundation of motivated behaviour. The present study reviews the literature concerning the connections between student motivation and self-concept, highlighting their importance in academic performance. Trainee motivation is also characterized here with respect to self-concept through information collected from a sample comprising 149 trainees from the Training Course for Petty Officers 1st Class by applying the Assessment Scale for Trainee Self-concept in the Portuguese Navy (ASTSC-PN) (Frade & Veiga, 2016) and the Learning Motivation Scale (LMS) (Frade, 2015; Frade & Veiga, 2014). The data were analysed using SPSS software. The result analysis allowed the finding of connections between trainee motivation and personal variables. It is intended that the gathered information contributes to support and validate the theoretical constructs presented here.

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1. Introduction

The interest in helping individuals prosper in school and years of research have highlighted the importance of the self-theories in the creation of different patterns of school motivation (Dweck & Leggett, 1988). Dweck & Grant (2008) agree that the self-theories and goals together create a system of meaning that shape interpretations of self-relevant stimuli and events, influencing how people understand their own experience, and guiding their affects, cognitions, and behaviours. This influences their motivation and engagement towards training (Veiga, Garcia, Neto, & Almeida, 2009). Hence, these beliefs represent self-concept, which has been used to predict motivation, emotions, cognitions and performance (Bong & Skaalvik, 2003; Shavelson, Hubner, & Stanton, 1976), and arises from motivational processes as well (Bandura, 1986; Shavelson et al., 1976). Franken (1998) even considers self-concept as the foundation for all motivated behaviour.

2. Problem Statement

Fernández (2005) reinforces the study of self-concept when related to constructs from other motivational theories by investigating how “it conditions the causal attributions conducted by the student, the goals set and the value assigned to a task.” (p. 151). Diener and Dweck (1978) have, in their research, distinguished two different behavioural patterns of response to failure situations: in the first one, the subjects blamed it on lack of ability, expressed negative feelings and demonstrated a decrease in performance; in the second the elements remained optimistic, expressed positive feelings and made use of deeper strategies to solve the task demonstrating a learning-oriented pattern. Therefore, different self-theories will lead to motivational differences, to different goals (Blackwell, Trzesniewski, & Dweck, 2007; Dweck & Master, 2009; Dweck, Mangels, & Good, 2004; Faria, 2002; Robins & Pals, 2002) and to different beliefs in the nature of intelligence (Elliott & Dweck, 1988). Students believing in intelligence as a fixed attribute, a global and stable trait, uncontrollable and limited in amount – static conception – will be performance goal oriented, are concerned and protective of their image. On the other hand, students believing that intelligence is a changeable attribute, a dynamic set of competences and knowledge susceptible of development through effort and personal investment, hence controllable – dynamic conception – will be learning goal oriented (Anderman, Anderman, & Griesinger, 1999), and are motivated to make the best of opportunities to learn, practice and improve (Cury, Da Fonseca, Zahn, & Elliot, 2008; Dweck et al., 2004; Mangels et. al, 2006). These different conceptions work as organising constructs generating a differentiated integration of the individuals’ experiences in several realization contexts and distinctively directing their actions into those contexts (Fontaine & Faria, 1989). According to Dweck and Grant (2008) “the self-theory that people adopt has important consequences for their motivation and achievement” (p. 406). From researches with military personnel Rawat (2011) highlights that “the greatest barrier to accomplishment and success in a mission or task in a military environment is neither lack of competence, ability or potential but probably due to a soldier’s belief that achievement above a certain threshold is beyond his capability” (p. 124).

Cross (1981) used the Chain-of-Response model to clarify the interactions between the forces that drive adults to engage in or back away from participating in learning activities, and stated that motivation
to get involved with learning is connected to: the perception of competence; the individual’s attitudes about learning; the importance of established goals and expectations towards the achievement of those goals; the transitions or periods of change in the individual’s life; the opportunities and obstacles – institutional factors; the information received by the subjects and used to identify opportunities and obstacles; and the participation in learning activities. In a logic similar to Cross’ (1981), Rosa and Pinto (2011) defend, regarding individuals, that “the self-assessment they conduct on their abilities before a certain situation will lead to the establishment of goals matching the previous assessment” (p.186).

Once mentioned the influence of competence perception in motivation, it is also relevant to focus the influence of other specific dimensions of self-concept in motivation, particularly interpersonal relationships and satisfaction. In what concerns interpersonal relationships their importance is pointed out in the hierarchy of needs by Maslow (1954), in the hygiene factors by Herzberg (1966), as well as in the theory of needs by McClelland (1987). Lemos (2009) states that individuals develop a set of beliefs related to the satisfaction of a need for safety and interpersonal relationship in which those who feel safe in this relationship tend to interpret events as achievable challenges and try to deal with them effectively. This author considers that the beliefs in competence and autonomy also contribute to this outcome. Lemos (2009) also stresses that, though little researched in educational context, the need for relationships, for feelings of belonging and for safe bonds with colleagues and teachers is an essential motive for students. The influence of contexts and social relationships in school motivation is also highlighted by Pereira (2013) who based on Stipek (2002) states that “the interactions with teachers may be (…) paramount for performances and motivation, so negative interactions may lead to weak performances by students” (p. 470).

Regarding work satisfaction, it concerns the assessment of work or work-related factors, which translates into affective and emotional assessments of individual experiences (Ferreira, Neves, & Caetano, 2001). Locke (1969) defines work satisfaction as a state of emotional pleasure resulting from the assessment made by professionals of how much their work facilitates or allows the pursuing of their goals and values. High levels of motivation have been considered a positive result of work satisfaction (Sledge, Miles, & Coppage, 2008). Dinham and Scott (1998) also stated that satisfaction and motivation are inseparable due to their influence over one another. According to Hackman and Oldham (1980) work satisfaction results from the characteristics of the work the subject performs. These authors consider possible to develop ideal forms of organising work (variety and skills, task identity, function autonomy and feedback) in order to influence the individuals’ psychological states and hereby contribute to professional performance, work satisfaction and motivation. Hence, it is anticipated that individuals seeking challenges and revealing interest in their work are more satisfied and motivated for a good performance of their function (Hackman & Oldham, 1980). To Graça (2000), work satisfaction is a consequence of the assessment each individual makes on their degree of fulfilment regarding professional expectations, preferences and needs. The author defends that work satisfaction reflects the individual’s perception of what they receive (success, money, safety, friendship, prestige, autonomy at work, the opportunity to work in a team, interesting and stimulating tasks, professional recognition, career development) as being fair or matching what they were expecting to obtain. From here the relationship between professional recognition, resembling performance goals, and professional satisfaction is
particularly brought up. Vroom’s (1964) theory in which subjects are motivated to do what is highly likely to reward their worth points out the logic that if an individual feels satisfied with their work, it is thereby assumed that their needs – including recognition – are met. Also in this field the hierarchy of needs by Maslow (1954), Herzberg’s (1966) theory and McClelland’s (1987) all highlight the need for recognition as a motivational factor influencing worker satisfaction. Having considered the more conceptual aspects, the empirical studies of these variables are presented next.

In the studies developed by Castillo, Balaguer and Duda (2003) involving teenage students, the authors stressed that the perception of academic competence is positively determined by task orientation (learning) and negatively determined by ego orientation (performance).

The research conducted by Elliot and Church (1997) with college students of psychology class, the results point to a positive relationship between the learning goal and competence expectations. The performance-approach goal correlates positively with fear of failure and competence expectations. Pursuing learning goals and performance-approach goals influence intrinsic motivation. The performance-avoidance goal correlated positively with fear of failure, but got a negative correlation with competence expectations. The researchers also concluded that a high perception of one’s own ability favours learning goal and performance-approach goal orientations, while a low perception of one’s own ability favours a performance-avoidance goal orientation. The authors quote Nuttin (1984) defending that “achievement goals are construed as "focused needs,” the "concretized" channels through which achievement motivation and fear of failure exert their influence on achievement-relevant behavior” (p. 228).

Robin and Pals (2002), in their longitudinal study with college students, concluded that the more the students defended a static conception of intelligence and performance goals, the more eroded their self-esteem would become throughout their academic years. On the other hand, the more the students defended a dynamic conception and learning goals, the higher their self-esteem would be over their academic years. Liu’s (2010) research with college students highlights the existence of a highly positive relationship between the variables of academic self-concept and motivation for learning components in which students with a more positive academic self-concept are more motivated for learning.

Morreale’s (2011) study with military and former military personnel enrolled in higher education, declared the existence of significant relationships between academic motivation and academic self-concept. It pointed out the significant and negative correlations between academic self-concept and “amotivation” (lack of motivation). Academic self-concept related moderate and positively with intrinsic motivation. Morreale (2011) also emphasises that as the academic motivation increases, the “amotivation” decreases, and as academic self-concept increases, academic motivation increases. The study by Morreale (2011) reveals that the peer assessment of academic ability and the school satisfaction dimensions are significantly related to all of the academic motivation dimensions. Through multiple regression analysis, the author detected that the academic self-concept significantly predicts academic motivation (22% of explained variance).

Considering the previously stated, this study aims to understand if there is a connection between student motivation an self-concept.
3. Research Questions

Starting from the question “Is there a connection between student motivation and self-concept?”, this study aims to answer some specific questions:

- Is there a connection between learning goals and interpersonal relationship?
- Is there a connection between performance-approach goals and competence?
- Is there a connection between performance-approach goals and satisfaction?

4. Purpose of the Study

This study aims to contribute to the understanding of the relationship between motivation and self-concept, directing schools and stakeholders’ actions towards strengthening student and trainee learning motivation.

The presentation of the study conducted and respective results of variance analysis regarding the influence of self-concept in the motivation of trainees from the Training Course for Petty Officers 1st Class of the Portuguese Navy (CFS) will follow.

5. Research Methods

5.1. Subjects

This study considered a representative heterogeneous and non-probability sample of 149 trainees from the Training Course for Petty Officers 1st Class which started in 2011 and 2012. This course is composed of seventeen specialties and the sample consists of adults, ages ranging from 25 to 38 of both genders, but mostly male (92.6%). 53.7% of the trainees left the residence area to join the Portuguese Navy and 45% maintained the same residence area. 20.8% of the trainees live in the barracks because their residence area is located over 120 km.

5.2. Instruments

To assess trainee motivation, the Learning Motivation Scale (LMS) (Frade, 2015; Frade & Veiga, 2014) was used, based on the work of Zenorini and Santos (2008) – Escala de Avaliação da Motivação para Aprendizagem – Universitários (EMAPRE-U) [Learning Motivation Scale - Undergraduates (LMS-U)]. This scale presented four significant dimensions: learning goal (MEAP), performance-approach goal (MPAP) and performance-avoidance goal (MPEV), a general dimension – total motivation (MTOT) – having also been considered as a result of adding the scores obtained in each dimension.

To assess trainee self-concept, the Assessment Scale for Trainee Self-concept in the Portuguese Navy (ASTSC-PN) (Frade, 2015; Frade & Veiga, 2016) was used in its portuguese adaptation from Teacher Self-concept Evaluation Scale (TSCES) (Veiga, Gonçalves, Caldeira, & Zuniga, 2006). This instrument presented five significant dimensions: interpersonal relationships (RIP), competence (COM), satisfaction (SAT), self-acceptance and risk acceptance (ARI). A general dimension was also considered – total self-concept (ACT) – from adding the scores obtained in each dimension.
In both instruments, for the response options, a 6-point Likert scale was chosen, where the trainees classify themselves according to their degree of agreement, choosing an answer for each of the items from disagree entirely (1) to agree entirely (6).

6.  Findings

Multiple regression analysis with the selection of stepwise variables was used to get a thrifty result that would allow to predict the variance of results obtained in motivation when connected to the self-concept dimensions considered as independent variables. In fact, to consider the results obtained in each of the motivation dimensions would entail the presentation of a large amount of boards, which due to space limitations and because they contain redundant information doesn’t make sense to include here. Hence multiple regression analyses were conducted and their significant results are presented below.

Table 01 shows the information gathered from the regression analyses of the results, considering the LMS and the ASTSC-PN dimensions. The independent variables were organised in descending order of their importance in explaining the result variance in motivation. The addition to the successively explained percentage may be proven by the achieved coefficient of determination (QR: R squared). The significance proof F indicates that the increase observed in the QR value is statistically different from zero, which means that the percentage of explained variance rose significantly.

Table 01.  Multiple regression analysis of the self-concept dimensions in each of the motivation dimensions

<table>
<thead>
<tr>
<th>V. dep.</th>
<th>Ordem</th>
<th>V. ind.</th>
<th>R mult.</th>
<th>QR</th>
<th>F</th>
<th>Sig. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAP</td>
<td>1°</td>
<td>ACT</td>
<td>.692</td>
<td>.479</td>
<td>111.897</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>2°</td>
<td>RIP</td>
<td>.709</td>
<td>.503</td>
<td>64.33</td>
<td>.000</td>
</tr>
<tr>
<td>MPAP</td>
<td>1°</td>
<td>COM</td>
<td>.213</td>
<td>.045</td>
<td>6.234</td>
<td>.014</td>
</tr>
<tr>
<td></td>
<td>2°</td>
<td>SAT</td>
<td>.324</td>
<td>.103</td>
<td>7.604</td>
<td>.001</td>
</tr>
<tr>
<td>MTOT</td>
<td>1°</td>
<td>ACT</td>
<td>.673</td>
<td>.452</td>
<td>99.091</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>2°</td>
<td>COM</td>
<td>.686</td>
<td>.471</td>
<td>52.980</td>
<td>.000</td>
</tr>
</tbody>
</table>

It was verified that the variability of the learn goal may be explained by total self-concept and by interpersonal relationship (50%) (p<.000). These results may be connected with the influence of self-concept in motivation and the goals adopted by the subjects, as one might be led to conclude by some authors (Dweck & Grant, 2008; Dweck & Master, 2009; Faria, 2002; Rosa & Pinto, 2011), relating positively and significantly to learning (Anderman et al., 1999). The existence of a highly positive relationship between the variables of self-concept and the learning motivation components is pointed out by Liu (2010) and Morreale (2011).

In what concerns interpersonal relationship and assuming that every interpersonal relationship mobilises psychic processes (Chanlat, 1993), the influence that this aspect exerts in personal and group feelings (Moscovici, 2001), as well as in the action itself (Chanlat, 1993) is enhanced. The need for interpersonal relationship is well portrayed in the hierarchy of needs by Maslow (1954) and is included in the category of subject’s social needs. According to the author the subjects’ needs represent the power source for motivations. Herzberg (1966) highlights the relationship among colleagues as a hygienic factor associated to work, and as an element to consider in the professionals’ motivation. McClelland (1987)
through the theory of socially acquired needs stresses the need for affiliation as a basic impulse driving the subjects’ behaviour. Other authors (Cardoso, 2008; Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004) reinforce the motivational potential of social support referring to the relationship with colleagues and headship. These results may have something to do with the way the subject perceives the quality of their relationship with the group and their acceptance in it, so these are predictive of their motivation to learn. Another obtained result is the variance in performance-approach goal (10.5%) explained by the competence and satisfaction (p<.001) factors. Such results may be related to the fact that the kind of goals pursued integrates the beliefs in competence (Ames, 1992; Bzuneck, 1999; Dweck & Leggett, 1988; Elliot & Dweck, 1988; Schunk, 2000). Several researches connect competence with learning goals (Cross, 1981), more than with performance goals (Castillo et al., 2003). According to Cross (1981), motivation to learn is related with competence perception and hence the belief in low competence compromises the participation in learning activities (D’Amico, Lentz, Smith, & Taylor, 2002). Castillo and colleagues (2003) also point out the positive relationship between competence perception and task orientation, so subjects believing in their own competence are more learning goal oriented. These authors consider that the perceived academic competence is one of the most powerful constructs in predicting output at and satisfaction with school, as well as the intention of pursuing with studies. However, the positive relationship of the performance-approach goal with competence beliefs is stressed in the researches by Elliot e Church (1997).

Besides competence, satisfaction also comes up as a variance source for the performance-approach goal. Similar elements appear in several authors (Hwang & Chi, 2005; Sledge et al., 2008; Tietjen & Myers, 1998) who consider work satisfaction to be associated with worker motivation so that high levels of motivation have been considered a positive result of work satisfaction.

As for total motivation, 47.1% of its variance is explained by total self-concept and competence (p<.000). This result may be related to the fact that self-concept is the basis for motivated behaviour (Franken, 1998), working as a predictor of subject motivation (Bong & Skaalvik, 2003; Shavelson et al., 1976). Self-concept influences the way the subject deals with areas connected with needs and motivations (Dweck & Grant, 2008; Vaz Serra, 1986; Veiga, 2012), conditioning the students’ goals and causal attributions (Fernández, 2005), and distinctively directing their behaviour in the many contexts (Fontaine & Faria, 1989). In turn, competence emerges likewise, in general, as a good predictor of motivation. Faria (2008) considers that “a motivational analysis on competence means accepting that it constitutes a basic psychological motive for the human being” (p.77). Cross (1981) considers that subject motivation to engage in learning activities comes from their self-assessment, particularly the assessment of one’s own competence.

7. Conclusion

The results from the present study allow the observance that, in general, self-concept as a whole and its specific dimensions become sources of variance for motivation and engagement as well.

Regarding motivation, the influence of self-concept in orienting the different goals adopted by subjects is verified (Bong & Skaalvik, 2003; Dweck & Grant, 2008; Dweck & Master, 2009; Faria, 2002; Fernández, 2005; Rosa & Pinto, 2011; Veiga, 2012), distinctively directs their behaviour in many
The influence of interpersonal relationships, satisfaction and competence in setting achievement goals is also highlighted. The need for interpersonal relationships represents a social need to subjects (Maslow, 1954), motivates their behaviour (Chanlat, 1993; Herzberg, 1966; McClelland, 1987) and exerts influence on personal and group feelings (Moscovici, 2001). It is hereby concluded that the motivational potential of social support, transmitted by interpersonal relationships, should be taken into account when encouraging motivation (Cardoso, 2008; Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004) in work or in training contexts alike.

The kind of goals pursued integrates competence beliefs (Ames, 1992; Bzuneck, 1999; Cross, 1981; Dweck & Leggett, 1988; Elliot & Dweck, 1988). Although many researches connect competence with learning goals (Castillo et al., 2003; Cross, 1981), there are several evidences that the approach to performance also establishes some type of relationship with this self-concept dimension (Elliot & Church, 1997). Therefore, it is once again concluded the pertinence of promoting in trainees the perception of competence as a changeable state (Fernandez, 2005; Tapia, 1992), as a strategy to increase the establishment of learning goals or even of approach to performance, more than avoiding it.

Professional satisfaction, in turn, represented as a set of feelings an individual manifests regarding their work is associated to the work’s specific tasks and characteristics (Gursel, Sunbul, & Sari, 2002). If, on the one hand, the desire to satisfy a certain need generates an impulse in subjects directly connected to motive (Teles, 1981), motivation itself is, on the other hand, a result of satisfaction (Hwang & Chi, 2005; Sledge et al., 2008; Siqueira & Gomide Jr., 2004; Tietjen & Myers, 1998), and therefore professional satisfaction should be considered and encouraged.

Considering that self-concept is a source of variance for motivation, it is hence important that trainers and institutions attend to and stimulate interpersonal relationships, professional satisfaction and trainee competence in order to increase motivation for establishing achievement goals that favour learning.

References


