# Introduction

## *The self as motive*

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*ABSTRACT* This article is an introduction to the special issue on the motivational aspects of the self. It outlines the motivational effect of the self-concept and presents several aspects of the self that are conseidered relevant to efficacious behavior. In particular, self-concept, including both self-perception and self-esteem, self-efficacy, possible selves, interest, perceived personal control, and affect are briefly discussed as motivators of human behavior. At the end of the article, the contribution of the individual papers of the present issue are presented and their relation to the broader theoretical context is pointed out.

*Key words:* Motivation, Performance, Self.

During the last fifteen years a considerable interest has been noticed among researchers to bring together cognition and motivation in an attempt to better explain human behavior. Up to then, the focus was on cognitive factors since they were considered the dominant force in explaining performance in achievement situations. Nowadays, cognition and motivation are considered by many researchers as "inseperable", because each of them is a facet of the other; "cold" cognition and "hot" motivation are blended together and function in a "synergistic" way to produce human performance (Sorrentino & Higgins, 1986). On the one hand, motivation viewed as a set of energizing factors including several aspects of the self, emotions, goals and orientations, directly and/or indirectly influences human performance; on the other hand, changes in cognitive processing and performance influence subsequent motivational states and orientations (Pintrich & Schunck, 1996; Schunck, 1991).

Many current motivational theorists emphasize the role of the self-system as having motivational power to pursue efficacious behavior (Bandura, 1986; Breckler & Greenwald, 1986; Burns, 1982; Cantor, Markus, Niedenthal, & Nurius, 1986; Deci & Ryan, 1990; Κωσταρίδου-Ευκλείδη 1995; Harter, 1992; Nicholls, 1979; Sorrentino & Higgins, 1986). The self-system is a complex phenomenological and/or experienced construct that refers both to the definition of self (self as agent, 'I', and self as object, 'me'; see James, 1890/1963) and its

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functioning in producing behavior (Ferrari, 1998). Weiner (1986b) claims that there is a lot of evidence indicating the fundamental role of self in human motivation ranging from thoughts and behaviors being determined by one's self-concept to actions aiming at maintaining self-consistency or enhancing self-esteem. Thus, several terms such as self-concept (global or domain-specific, academic or non-academic), self-esteem, self-efficacy, image of self, perceived personal control over outcomes, ideal self, possible selves, self-awareness, self-regulation, as well as personal interests, goals and orientations indicate some of the facets of the self that bear motivational properties and direct human behavior. However, although there exists considerable agreement regarding their motivational energy, it is still vague how each of the above mentioned facets of the self functions and interacts with other self-factors as well as with human performance. This is mainly due to (a) different theoretical perspectives, and (b) methodological difficulties to approach the whole self, including its diverse aspects, based on valid and reliable methods. Besides, the bi-directional relationship between the self and performance seems to be very complex that needs further study. This complexity increases if we take into account different domains of achievement (e.g., academic vs. social or mathematical vs. verbal, etc.) and different age groups. For example, most studies have focused on several aspects of the academic self-concept during adolescence, whereas limited data are available for the nonacademic self-concept and for other age periods.

This special issue attempts to shed further light on the self-system, including many of its most prevailing aspects. It should be mentioned that most of the authors discuss different aspects of the academic self-concept and their direct or indirect relation to academic performance. In the following part, our purpose is to briefly describe each aspect of self that is being studied by the authors of this volume and then to outline their contribution.

## Self-concept: Self-perception and self-esteem

Self-concept is defined as a system of knowledge and affective structures about the self (Cantor et al., 1986; Epstein, 1973) that refer to all the beliefs and evaluations someone has about her/his own self. That is, self-concept is composed of two elements, namely the self-image or self-perception being the cognitive component, and self-esteem or self-worth being the evaluative and affective component (Burns, 1982; Harter, 1985; Λεονταρή, 1996).

Most of self-concept theorists agree that the self-concept is a multidimensional construct, since one perceives her/himself in different fields of activity and/or competence, such as the academic field, the domain of social relationships, the domain of physical appearance and strength, etc. (Burns, 1982; Harter, 1992; Marsh, Byrne, & Shavelson, 1988; Marsh & Shavelson, 1985). This self-knowledge is associated with the personally significant goals, values, plans, fears, preferences, etc. For many researchers, it is this individual understanding that lies behind self-relevant actions; in other words, self is directly related to motivation and, according to Cantor, Markus and their associates (Cantor et al., 1986), "motivation cannot be fully understood without a reference to the self-concept" (p. 27).

A lot of studies have investigated the relation between the academic self-concept including its more domain-specific aspects (e.g., maths self-concept, reading self-concept, etc.), and achievement. There is considerable consensus among researchers about the dynamic interplay between the above mentioned factors. On the one hand, performance in achievement situations provides feedback for the formation and/or possible modification of self-concept and sometimes becomes an important index of self-worth; on the other hand, our self-image can also be viewed as "significant regulator" (Cantor et al., 1986, p. 97) of behavior in order inner consistency to be maintained. Children and adolescents who

have positive views of themselves and their abilities to perform at school tend to exhibit high academic performance and vice versa.

It should be made clear that causality between the two factors, self-concept and achievement, cannot be determined, because the findings are only correlational. However, the fact that differences in self-concept are associated with differences in academic achievement is a consistent finding, allowing us to state predictions in so far as the motivational power of self is concerned; that is, self-concept could be seen as a potential predictor of academic performance (Burns, 1982).

**Self-efficacy**

Self-efficacy theory (Bandura, 1982; Bandura & Schunck, 1981) stresses another aspect of the self that emphasizes the role of expectancies in motivated behavior. Self-efficacy, although sounds similar to self-concept, it does differ from it. It refers to the very specific and situational view of perceived competence in light of particular goals. More specifically, self-efficacy judgments are not global assessments about capabilities in a domain of achievement, but rather they are related to the particular task in hand and represent one's expectancies about her/his performance in this task at a given moment (e.g., error recognition in a written text). However, other researchers approach self-efficacy at a more general level representing the individual's expectancies on a set of tasks sharing common characteristics (Pintrich & DeGroot, 1990).

Research findings consistently indicate that self-efficacy and expectancy beliefs about one's capabilities to succeed in a task are strongly associated to academic achievement in classroom settings, to school grades as well as to performance on standardized cognitive tasks (Bouffard-Bouchard, Parent, & Larivee, 1991; Schunck, 1989, 1991).

**Possible selves**

Possible selves are representations of the self in the future (Cantor et al., 1986; Markus & Nurius, 1986). They are conceptualized as a component of the dynamic self-concept, which reflects how an individual perceives her/his own potential in terms of both strengths and weaknesses. In other words, possible selves represent positive, desired selves in the future, as well as negative, non-desired selves that the individual is afraid of becoming in the future. Thus, it is clear that possible selves are highly related to the individual's motives, goals, plans, preferences, values, expectancies, fears, and threats; however, this relation is reciprocal in the sense that possible selves are formulated by all the factors above, but, at the same time, they influence and determine behavior related to them. Well-elaborated possible selves motivate an individual to pursue particular life tasks and adopt or avoid certain types of behavior in order to achieve them. Furthermore, possible selves are a complex representation that, apart from thoughts and behavioral strategies, also includes feelings accompanying the self projected in a future state. Consequently, they constitute a particularly interesting aspect of self that clearly shows the interaction between motivation, cognition, and affect in guiding behavior.

**Interest**

Interest is an emotion known to bear motivational power since it increases the probabilities for an individual to get involved in a specific task situation. Researchers have identified three types of interest, namely (a) personal or individual interest, (b) situational interest, and (c) interest as a psychological state (Krapp, Hidi, & Renninger, 1992; see also Schick, this issue).

Personal interest is conceptualized as a personality trait, which is relatively stable, and it is usually directed towards a specific domain (such as maths, sports, theater, etc.). Individual differences in personal interest are related to

individual differences in learning and academic performance. Situational interest is the interest that is generated by the learning environment. The emphasis here is on those characteristics of an environment that can generate the learner's interest. Finally, the interest as a psychological state is the result of the interaction between the learner's personal interest and the environment. That is, when an individual with high level of personal interest meets a highly interesting learning environment, s/he experiences a strong psychological state of interest (Krapp et al., 1992; see also Pintrich & Schunck, 1996).

Studies aiming at investigating the role of interest in learning indicate that interest has high motivational value, because it results in less effortful selective attention and cognitive processing, triggers prior knowledge more efficiently, and limits the demands of purposeful self-regulation promoting thus automatic behavior (Pintrich & Schunck, 1996). Furthermore, interest, in all the three types, usually causes positive emotions, which, in turn, motivate the individual towards goal attainment.

**Perceived personal control**

Attribution theory in achievement contexts (Weiner, 1986a), as a cognitive theory of motivation, has been very influential to the research on self dynamics. The causal dimension that mostly contributes to the formation of expectancy beliefs is locus of control. Locus of control refers to the extent to which one perceives the causes of one's performance as controllable or not by one's self. For example, some individuals tend to perceive themselves as fully responsible for their own actions (e.g., effort), whereas others believe that the outcomes of their actions are controlled by external factors (e.g., task difficulty) (Pintrich & Schunck, 1996).

The motivational energy of locus of control in guiding behavior is derived from the consequent expectancy beliefs that an individual develops which affect goal setting as well as task selection. Specifically, individuals with high internal perceived control tend to set challenging and high goals and are oriented towards goal attainment, whereas individuals with low perceived personal control tend to choose familiar tasks, set easily satisfied goals, and avoid challenges (see also Leondari & Gialamas, this issue).

Furthermore, perceived personal control is associated to motivation indirectly through self-esteem. Research findings suggest that the dimensions of locus of perceived control is related to feelings of pride and self-worth (Pintrich & Schunck, 1996). Self-worth or self-esteem is enhanced when an individual experiences a success and attributes it to internal factors, self-esteem is protected when a failure is ascribed to external factors such as task difficulty and luck, whereas self-esteem is lowered when an individual attributes a failure to internal causes. The above cases of attributional biases emphasize the relation between perceived locus of control and self-esteem (see also Weiner, 1986b).

**Affect**

The relation between affect and motivation has always been acknowledged by psychologists as significant. Affect involves noncognitive factors such as emotions, feelings, needs, drives etc. (McLeod, 1989, see also Metallidou & Efklides, this issue). As Weiner (1986b) states, a theory of motivation must include the full range of emotions, because "people experience a great diversity of emotions that are interwined with thoughts and actions" (p. 286). Thus, the study of affect also contributes to our understanding of cognition (see also Efklides, 1997).

Emotions are positive or negative in nature and are experienced in low or high intensity; they usually follow a cognitive appraisal of a situation or an action (e.g., causal attribution) and influence subsequent action. In the framework of Weiner's (1986a) attributional approach to motivation, emotions are assumed to be "postattributional" and "prebehavioral", being in the middle of

subsequent behavioral events. However, there are emotions, which are not always preceded by cognitive appraisal processes.

In so far as self is concerned, a strong affective component is embedded to most facets of self such as self-esteem or possible selves. In achievement settings, on the one hand, affective factors such as test anxiety can have a negative effect on learning and academic performance, in general, but can also lower self-esteem and increase students' fear of negative evaluation (Hembree, 1988). On the other hand, pleasant feelings which are generated by interest usually have positive effects on academic performance; such feelings promote self-regulated learning and also influence students' behavior in setting goals, taking initiatives and exerting effort in attaining goals (Bouffard & Vezeau, 1998; Krapp, Hidi, & Renninger, 1992; Schiefele, 1991).

**The present volume**

In the present special issue, all the authors aim at contributing to our better understanding of the motivational facets of self. All of them, on the basis of empirical data, try to expand our knowledge to this complex topic from different perspectives. The eight articles presented in this issue focus either on different aspects of self or different dimensions related to the same self-aspect. Moreover, different methodological approaches are presented, ranging from group testing to individual testing, from surveys to case studies, from questionnaires and cognitive tasks to video recordings, and from quantitative to qualitative data analysis, emphasizing thus the multifaceted character of self which requires multiple different methods and instruments to be investigated. As far as age is concerned, the empirical data range from early school age to adolescence.

The first two articles examine more general aspects of the self which are domain-free, such as self-esteem and possible selves, and elaborate more on different groups in regard either to perceived control or successful/unsuccessful learning. The paper by Leondari and Gialamas contributes to our better understanding of how three aspects of the self, namely self-esteem, perception of personal control over outcomes, and possible future selves, relate to one another and influence academic achievement during adolescence. All three of the above factors are assumed to have motivational power in pursuing directly or indirectly efficacious behavior. The findings reported by the authors suggest that adolescents with high-perceived control and highly elaborated positive possible selves usually exhibit high academic performance, whereas self-esteem is related to achievement indirectly through perceived control. Besides, self-esteem and perceived control are related to the formation of possible selves in the future, which in turn may motivate behavior towards actions that realize or avoid the future selves. In general, the authors stress the dynamic interplay between different facets of the self and their compound effect on performance.

The study conducted by Alves Martins and Peixoto sheds further light on the relationship between academic self-perception, self-esteem, and school performance during adolescence comparing two groups, the academically successful and unsuccessful learners. The results reported indicate, in line with other research findings, that self-esteem of both successful and unsuccessful learners does not dramatically differ, although their academic self-perception reflects their different school performance. That is, unsuccessful learners, in order to protect their self-esteem, which is being threatened by their poor performance at school, seem to be motivated to engage in certain strategies such as devaluing school-related domains and overestimating other domains such as interpersonal relations, in which their perceived competence is higher.

The next two papers focus on self-concepts that are domain-specific, such as maths and reading self-concept, and their relation to academic achievement. The contribution of Lepola, Vauras, and Mäki elucidates how self-concept of attainment in specific domains (maths,

reading, and writing), academic achievement and motivational orientation (task-orientation, ego defensiveness, and social dependency) constitute a motivational-cognitive cycle of functioning. It also examines how this cycle changes along with age and produces significant gender differences. Based on a great number of longitudinal data from the 2nd to the 6th grade, the authors suggest that the self-concept of attainment in all these specific domains changes towards more realistic patterns along with age, better reflecting thus the actual performance in the domains involved (maths, reading, writing). However, the significant gender differences which were found in the maths and writing self-concept do not always accurately reflect boys' and girls' achievement in the two domains. Boys' self-concept of attainment in maths was found significantly higher than girls' self-concept in this domain, a difference that cannot be fully explained by the difference between boys' and girls' actual performance in maths. The same holds true for self-concept in writing but in favour of girls. This perceived competence may motivate boys and girls to promote their performance in maths or writing in order to maintain their respective self-esteem. In so far as motivational orientation is concerned, task orientation was found to be positively related to self-concept of attainment and to have a beneficial role to cognitive performance, whereas ego-defensiveness as well as social-dependency was found to be negatively related to self-concept and have a negative effect on achievement.

Koumi's paper focuses on the structure of the academic self-concept, its relation with students' estimation of academic values and its role to future educational goals. The study was carried out at a comprehensive multi-sectoral secondary school and revealed significant results regarding the effect of course-specific self-concept on (a) particular task-engagement, (b) perceived value/instrumentality, and (c) future goal setting. More specifically, the structure of self-concept was found to highly reflect the structure of the courses taught at school and it was related to perceived importance and instrumentality of the courses in regard to future educational goals. Furthermore, it was found, in line with other findings, that the specific self-concepts highly affect the adolescents' future educational and vocational orientation, and especially, their short-term goals.

The following article by Annette Schick examines the significance of personal interest, as an even more specific dimension of the self, for the learning process in the domain of physics. Interest is conceptualized as a dynamic component of self-concept, and in this case of the specialized physics-related self-concept, that motivates a student to get actively involved in problem-solving procedures or, in general, in a learning situation. More specifically, in particular domains of high interest to the students, interest-oriented actions are carried out in order learning to be promoted. A detailed analysis of case studies based on classroom video observations in association with self-concept and interest-related data collected from interviews and questionnaires revealed important findings about the dynamic interplay between personal interest, self-concept, students' actions, and learning.

Antunes and Fontaine aim at answering the question of how self-concept during adolescence is related to perceived social support from family, peers, and teachers. The findings reported by the authors based on a longitudinal study confirm the interrelations between self-concept and social support and suggest that there is no causal predominance of one over the other in any of the three social support sources; rather both of them are highly interrelated in a very complex network of interactions that merits further study.

The last two papers combine cognitive, motivational, affective and metacognitive factors in an attempt to unravel the possible relations between them. Dermitzaki and Efklides in their contribution aim at exploring how several aspects of academic self-concept such as self-perception, self-esteem, self-efficacy, and others' perception of one's abilities, are related with (a) verbal ability, (b) performance in school language tasks, and (c)

metacognitive knowledge and metacognitive experiences related to this performance, such as knowledge of strategy use and experiences regarding task difficulty, correctness of the solution, and required effort for a solution to be achieved. The results obtained interestingly indicate that academic self-concept in language is being built mainly on the general verbal reasoning ability and less on school performance in language. Furthermore, it affects the set of the respective metacognitive evaluations regarding task processing. The above findings are discussed in light of the results of a similar study in maths and the differences between the two domains are pointed out.

Metallidou and Efklides present a study on the relationships among cognition, metacognition, and affect in terms of structure and development. The metacognitive factors examined by the authors were metacognitive knowledge, referring either to general modes of cognitive processing or to processing in specific cognitive domains, and metacognitive experiences related to the cognitive task in hand. Regarding the motivational-affective factors, achievement motivation and test anxiety were tested. The findings presented here, including both the structural and the developmental ones, clearly indicate that in order to better explain cognitive performance, we do need a multifaceted model equally emphasizing cognitive, metacognitive and affective factors, since all of them, although they constitute different autonomous systems being hierarchically organized, interact with each other during a cognitive endeavour.

The contributions of this special issue elaborate various aspects of the self and reveal their motivational power in pursuing goal-directed behavior. All of them confirm the complexity of the interrelations among those aspects within this field of research and emphasize the "inseparability" of cognition, motivation, and affect in approaching the self-system. On the one hand, they offer an insight into the motivational facets of the self, and, on the other hand, draw our attention to a number of open questions that still require further empirical investigation. Finally, it should be noticed that this field of research provides input to both basic and applied research aiming, first, at a better understanding of how self becomes a motive that directs behavior, and, second, at the design of effective intervention programs in educational settings.

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