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## Self-efficacy in learning and scholastic success: implications for vocational guidance

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### Abstract

Perceived self-efficacy is one of the psychological aspects strictly involved in learning processes and scholastic choice. Learning in educational contexts applied to self - efficacy is, more often, related to “wellness”. Self efficacy therefore becomes an important element for all help strategies and to arrange appropriately vocational guidance plans. The aim of this study is verifying the correlation between perceived self-efficacy, social self-efficacy and academic performances.

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*Keywords:* Students, teachers, performances, self esteem, self-efficacy, career;

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### 1. Introduction

Learning in educational contexts related to self-efficacy is a good predictor of *wellness* and may have possible relations with various dimensions of a future organizational context that may be perceived as being of *quality* (Santisi *et al.*, 2004).

Whoever students who feel competent have a certain self-efficacy, are motivated, and show a good degree of self-esteem. In other words, we are dealing with a person without specific issues related, who likes himself and the environment he belongs to.

Self-efficacy allows the individual to enact appropriate behavior to the situations and to always be proactive also in social self-efficacy contexts. Being “self efficient” means knowing what you like, listening to oneself, and being aware of one’s limits and weaknesses, being convinced of one actions and understanding what one is able to accomplish. This skill relates to all the other skills as an additional element capable to determine a significant improvement in performance (both cognitive, physical and in sport) (Kleitman & Gibson, 2011). Self-efficacy

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therefore becomes an important element for all help strategies and to arrange appropriately vocational guidance plans.

Perceived self-efficacy is one of the psychological aspects strictly involved in learning processes and scholastic choice. Relevant scholastic choices are primarily based on realistic evaluation of personal competences, self-confidence, and the awareness to use them to achieve one's own targets. Self-esteem and self-efficacy in scholastic performances – as components of self-image – arise from earlier scholastic experiences and depend on learning abilities and relations with teachers and other students. Self-efficacy beliefs are made up of mechanisms for efficacy expectations and outcome expectations that underlie all behavior. Efficacy expectations can be defined as one's belief in being able to manage a behavior required for attaining certain results in a successful manner whereas outcome expectations are defined as predicting that a particular behavior will result in certain consequences (Bandura, 1977). Self-efficacy beliefs have an influence on students' motivation to learn. Students with a weak self-efficacy belief are less willing to learn, cannot concentrate on instructional tasks properly, do not want to confront difficulties or do not make efforts to overcome these difficulties (Bandura, 1993). Students' self-efficacy beliefs for learning could be improved as long as one has a clear idea about the sources of their self-efficacy beliefs and to what extent these sources influence their self-efficacy beliefs.

## 2. Aim of Study

The purpose of this study is verifying the relationship between the evaluation of perceived self-efficacy in learning in students, and the teachers' evaluation of academic performance.

## 3. Methods

Participants were 639 Italian students (331 males and 308 females) attending the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> class of primary schools (n = 478), and the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> class of junior high schools (n = 161). Regarding teachers, they were 478 and expressed their opinion on the academic performances – about different disciplines - of their students.

## 4. Instruments

Tests used for data detection were: 1) a questionnaire for the evaluation of Scholastic Perceived Self-efficacy (ASCP, Pastorelli *et al.* 2001), composed by 19 items based on the 5 level Likert scale (for primary school alpha was .83; for junior high school alpha was .87); 2) a questionnaire for the evaluation of Social Perceived Self-efficacy (ASP/G, Pastorelli *et al.* 2001), composed by 13 items based on the 5 level Likert scale (for primary school alpha was .69; for junior high school alpha was .67). 3) a questionnaire for the teachers' evaluation of the academic Performances of their students, purposely created for the research.

## 5. Results

In order to analyze the differences between males and females, means of investigated variables have been compared with t-test for independent samples; whereas, in order to analyze the differences between school levels, the analysis of variance was applied.

Significant differences, between males (n = 250) and females (n = 228) in primary schools, are put in evidence on Table 1. Females show higher levels of self-efficacy in several dimensions of Scholastic Perceived Self-efficacy, both involving the self-efficacy belief in each subject and the self-efficacy belief in learning.

Table 1. Significant differences between males and females regarding scholastic perceived self efficacy

Males		Females		p
Mean	SD	Mean	SD	

**How good you are:**

Geography	3.60	1.10	3.82	1.02	.02
Italian language	3.84	1.07	4.25	0.96	<.001
Foreign languages	3.16	1.26	3.65	1.24	<.001

**How able you are in ..**

Completing homework	3.83	1.08	4.09	1.01	.007
Committing to studies when having other interesting things to do	3.53	1.22	3.85	1.10	.003
Focusing	3.52	1.21	3.80	1.09	.010
Taking notes	3.30	1.27	3.94	1.82	<.001
Doing research	3.69	1.30	4.07	1.07	.001
Organizing activities	3.80	1.11	4.16	0.92	<.001
Planning activities	3.76	1.17	4.00	0.96	.016
Being interested in school subjects	3.98	1.05	4.41	0.81	<.001
Satisfying your teacher	3.83	1.06	4.12	0.93	.002

Also in Social Perceived Self-efficacy at school, females have significantly higher score than male; a part from the item “making friends with boys”, where obviously, males are more competent.

Table 2. Significant differences between males and females regarding Social Perceived Self-efficacy

How able you are in ..	Males		Females		p
	Mean	SD	Mean	SD	
Taking part in conversations	3.72	1.15	4.02	1.03	.003
Satisfying your friend	3.88	0.94	4.06	0.91	.042
Realizing what you expect	4.04	1.00	4.30	0.89	.003
Making friend with females	3.95	1.18	4.42	1.03	<.001
Giving your opinion	3.82	1.04	4.13	0.92	.001
Working in groups	4.18	0.99	4.38	0.94	.023
Saying what you think	3.77	1.11	3.98	1.13	.046

In the sample of junior high schools the differences between males (n =81) and females (n = 80) are less significant. In the Scholastic perceived Self-efficacy the only significant difference regards the perception of one’s competence in taking notes: females have higher score (M = 2.34, SD = 1.61) than males (M = 2.72, SD = 1.30). In the Social Perceived Self-efficacy the significant differences, which are all in favor of males, deal with the perception or their competence in the physical activities and in sport.

Table 3. – Significant differences between males and females regarding Social Perceived Self-efficacy (junior high school).

How able you are in ..	Males		Females		p
	Mean	SD	Mean	SD	
Taking up new sports	4.58	0.80	3.82	1.13	<.001
Physical Education	4.40	0.93	3.96	0.98	.004
Learning to work in teams (volley ball, basket ball)	4.40	0.84	3.76	1.05	<.001

Differences between primary school classes show up in the Scholastic Perceived Self Efficacy, with average scores that progressively “worsen” as we rank up the classes. Almost in all areas where we observe a statistical difference, we meet higher scores with reference to the 3<sup>rd</sup> class of primary school and lower scores within the last.

Considering differences for each class applied to the sample drawn from primary schools, performance decreases gradually as we rise from the lowest to the highest classes. Do children actually worsen their performance or is it actually the teachers who assess the children more realistically?

Table 4. Significant differences for school levels. Regarding Scholastic Perceived Self–Efficacy and Social Perceived Self-efficacy and Performance

Items	3 <sup>rd</sup> class of primary school		4 <sup>th</sup> class of primary school		5 <sup>th</sup> class of primary school		p
	Mean	SE	Mean	SE	Mean	SE	
Foreign Languages	3.63	0.09	3.16	0.10	3.36	0.09	.005
<b>How able you are in..</b>							
Committing to studies when having other interesting things to do	3.95	0.09	3.60	0.09	3.48	0.08	.001
Taking notes	3.98	0.12	3.36	0.13	3.45	0.11	.001
<b>Performance:</b>							
Italian language	3.98	0.08	3.55	0.08	3.46	0.08	<.001
Grammar	3.97	0.08	3.55	0.09	3.45	0.08	<.001
History	4.01	0.08	3.79	0.09	3.66	0.08	.010
Geography	4.02	0.08	3.67	0.09	3.62	0.08	.001
Mathematic	3.91	0.08	3.70	0.09	3.47	0.08	.001
Science	4.01	0.08	3.75	0.09	3.61	0.08	.004
Foreign languages	3.99	0.08	3.58	0.09	3.40	0.08	<.001

In general the difference among the junior high student are less marked and spread: their perceived self efficacy (ASCP) decreases in mathematics as we range from the 1<sup>st</sup>, through the 2<sup>nd</sup>, and up to 3<sup>rd</sup> class of junior high schools. This data it's also confirmed by other studies on the matter (Rosario *et al.*, 2012).

Table 5. Significant differences for school level regarding Scholastic Perceived Self–Efficacy.

Items	1 <sup>st</sup> class of junior high school		2 <sup>nd</sup> class of junior high school		3 <sup>rd</sup> class of junior high school		p
	Mean	SE	Mean	SE	Mean	SE	
Mathematic	3.70	0.13	3.43	0.13	2.88	0.15	<.001
Geography	2.63	0.13	3.10	0.12	2.97	0.14	.037

As what concerns the Perceived Self Efficacy in geography, instead, the trend is more leveled out. First, it increases as we move on from the first class, to the second class, to then finally reach lower mean scores in the third class. It was obviously expected, and it's also confirmed by other studies on the matter. As a matter of fact, the negative performances in mathematics are quite frequent, such as the emotional perception of failure (Soresi & Lucangeli, 1995).

Our aim was to consider if between Scholastic and Social Perceived Self-Efficacy and performance there actually is a significant correlation. Pearson product-moment correlation coefficient was used in order to calculate the correlation between the students' self-efficacy beliefs and their performances. Scholastic self-efficacy (academic performance, behavior and social study behavior) is, in all cases, positively correlated with performance.

We will discuss only some of the significant results. A positive and significant correlation was found between self-efficacy and performance: Scholastic Perceived Self-efficacy is correlated with mathematics ( $r = .38, p < .001$ ), geography ( $r = .37, p < .001$ ) and history performance ( $r = .39, p < .001$ ). The perception of learning is correlated

with higher positive index ( $p < .001$ ) with certain social behavior in the school environment e.g. taking part in conversations (social skills). Whoever possesses a better method in learning that is mastering in one's homework ( $r = .37$ ), committing and focusing when studying instead of doing other ( $r = .39$ ), better ability in organizing ( $r = .41$ ), planning ( $r = .42$ ) and memorizing ( $r = .41$ ), has also better chances in building up positive social relationships within the school environment. The higher self efficacy they perceive in learning such as in adopting a certain attitude, mastery in their method, taking notes ( $r = .18$ ), doing research ( $r = .24$ ), organizing ( $r = .18$ ), planning ( $r = .25$ ), memorizing ( $r = .19$ ) the better bonds they create with their classmates (especially with females). Personal expectancies are correlated with what other important people (parents and teachers) expect from them. The Social Perceived Self-efficacy such as "Realizing what you expect" is positively correlated with who claims to be able at committing to studies ( $r = .39$ ), and also with who assumes to be able at satisfying his parents' wishes ( $r = .39$ ) and the teachers' requests ( $r = .38$ ).

## 6. Conclusions

On one hand, school is the place where children have the chance to learn new abilities and on the other to experience and develop their social and relational skills. Therefore, what seems undeniable is the role of education in order to achieve social and personal objectives. Successful scholastic experience can clash with the child's development, to even risking failure (Rutter, & Rutter, 1992). The study in this field has shown great interest as school education guides children in their long life learning (Coleman & Hendry, 1990).

Data analyses showed that self-efficacy was positively related to academic performance, and have a decisive role in determining social and scholastic fitting. Developing self efficacy could increase academic performance and could affect vocational guidance, promoting choices in which student feel more competent. In particular, the Scholastic Perceived Self-Efficacy has shown determinant in favoring social and scholastic success. Primary school students are at the very beginning of the process of education. Therefore, as long as they are provided with the opportunity and training to have high self-efficacy beliefs, they can be enabled to grow up to be self-efficient individuals and to overcome the problems they face in a educational stages or in their future life (Arslan, 2012).

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