Learned Helplessness and Learning Goals: Role played in School Refusal. 
A Study on Italian Students

SORRENTI LUANA, FILIPPELLO PINA, ORECCHIO SUSANNA, BUZZAI CATERINA
Department of Cognitive Science, University of Messina, Italy

Email Corresponding author: sorrentil@unime.it

Abstract

Literature on school refusal has shown a link between school refusal and poor school performance. However, there has been little investigation into the individual underlying factors, and specifically factors directly related to the learning process, such as the learning goals of students and their expectations of success and/or failure. The main purpose of the present study is to investigate the influence of Learned Helplessness (LH) and learning goals on risk of developing school refusal. We hypothesized that LH and learning goals exert a unique role in predicting risk of school refusal above and beyond the roles of academic achievement. The sample consisted of 201 Italian students with an average age of 11.93, with both low (57.2 % of students) and high (42.8 %) academic achievement. Risk of school refusal, LH, and learning goals were measured by means of questionnaires. The results confirm the hypothesis of this study; in fact, we found that learning goals and, above all, LH play a more predictive role of risk of school refusal than academic achievement. These results extend previous studies on school refusal and, for the first time, they provide additional knowledge about this problem, analyzing the relationship between school refusal, learning goals, and LH, still neglected in the literature. Implications on the psychological well-being of students are discussed.

Keywords: School refusal; Learned Helplessness; learning goals; academic achievement; Italian students
Introduction

School refusal is a phenomenon that characterizes those children who find it difficult to enter or remain at the school for a full day (Kearney, 2007). It differs both from truancy (“illegal absence from school or unexcused absence without parental knowledge”; Kearney, 2008, p. 5) and from school phobia (“fear-based absenteeism, as when a child is specifically afraid of something related to school, such as school bus, fire alarm, or a classroom animal”; Kearney, 2008, p. 5).

School refusal is a complex and multidimensional construct. It is the child’s inability to maintain an functioning appropriate to age compared to school attendance or inability to cope with the stress related to the school context. In fact, it can manifest itself in various ways: (a) does not attend school for an extended period of time (b) does not be able to remaining in classes for an entire day (c) attend only some of the lessons (d) arrive late to school (chronic slowness) (e) go to school after many tantrums to induce parents not to send them. So school refusal affects both students who do not attend school for long periods, and those who rarely are absent but attend school only because they are forced by their parents (Kearney & Albanò, 2010).

Independently of different manifestations, at the base of school refusal there is a state of anxiety; indeed, children who exhibit this behavior are generally described as fearful, anxious, sad, and timid (Kearney, 2007).

The Functional Model of School refusal behavior indicates four reasons of school refusal (Kearney, 2008; Kearney & Spear, 2014):
1. Avoidance of general school-related distress caused by known or un-known factors (e.g. feelings of embarrassment, rejection, or shame).
2. Escape from adverse social and/or evaluative situations (e.g. interactions with peers, group work, or classwork).
3. Attention-seeking towards parents (e.g. manifesting physical symptoms or non-compliance to remain at home and not go to school).
4. Self-gratification (e.g. to do pleasant activities such as play games, watch TV, go out with friends, instead of going to school).

The causes and risk factors of school refusal can be multiple (Inglés, González-Maciá, García-Fernández, Vicent, & Martínez-Monteagudo, 2015). School refusal is usually investigated in relation to both internalizing (i.e. anxiety, fatigue, somatic complaints, depression) and externalizing (i.e. dependency, seeking reassurance, both verbal and physical aggression, escape from school and/or home) disorders (Heyne, King, Tonge, & Cooper, 2001). Literature on school refusal has shown a link between school refusal and poor school performance (Sikorski, 1996; Mahoney & Cairns, 1997; Yahaya, Ramli, Hashim, Ibrahim, Kadir, Boon, & Rahman, 2010). However, there has been little investigation into individual underlying factors in order to facilitate preventative or interventionist action, and specifically there has been little investigation into factors that are directly related to the learning process, such as the learning goals of students and their expectations of success and/or failure. In fact, the learning process and the outcome of it (success or failure) are closely influenced by the individual characteristics of each student, such as skills, cognitions, attitudes, and motivations (Covington, 1992; Sorrenti, Larcan, Cuzzocrea, & Oliva, 2004). Moreover, the Functional Model of school refusal behavior does not explain cognitive variables underlying this problem. Therefore, before analyzing the relationship between academic achievement and school failure, it would be appropriate to focus on the underlying individual variables.
The role of Learning goals and Learned Helplessness on school refusal

Dweck and Leggett (1988) have analyzed the role that learning goals play on academic performance. These authors have made a distinction between two different types of students: students with mastery-oriented goals and students with performance-oriented goals. The sole objective of students who are mastery-oriented is to learn and improve more and more. These students have an implicit incremental theory of intelligence (Dweck, 2000); i.e. they believe that each learning opportunity is important to expand their knowledge and skills and engage more, even when they face failures (Sciarretta e Cacciamaani, 2012). For this reason, they are not worried about new and challenging tasks, which instead represent a challenge to extend their knowledge and skills. Failures do not discourage them, but represent an incentive to do more, and to change strategies to exercise more control over their activities.

Conversely, students who are performance-oriented have an extrinsic motivation; they study only to obtain external reinforcements (i.e. praise, incentives, etc.). They prefer to perform simple tasks in order to achieve success and, therefore, gratification from parents and teachers. These students have also an implicit entity theory of intelligence (Dweck, 2000). That is, they are convinced that intelligence is a fixed and unchanging entity, and therefore believe they can do nothing to change failure situations, and do not attribute any value to commitment. Therefore, these students do not believe that intelligence can increase; consequently they do not tolerate failure, because they consider it a demonstration of lack of skill. They are convinced that they can do nothing to overcome the negative situation and consequently give no value to the commitment (Sciarretta & Cacciamaani, 2012). Therefore, the performance-oriented students could be more at risk of experiencing anxiety, frustration, and helplessness (Eppler & Harju, 1997; Daniels, Stupnisky, Pekrun, Haynes, Perry, & Newall, 2009).

Others studies (Filippello, Sorrenti, Larcan, & Rizzo, 2013; Peixoto & Almeida, 2010; Macher, Paechter, Papousek, & Ruggeri, 2012; Sorrenti, Filippello, Buzzai, & Costa, 2015b) have shown that a state of helplessness may affect the academic success of students, because it is characterized by individual factors (e.g. beliefs, self-representation, explanatory styles, etc.) that play an important role in learning. Helpless students have lack of confidence in their own abilities; they attributes their failures to personal inadequacy, low intelligence, poor memory, or problem-solving ability, and do not see the connection between their commitment and achieving success. For this reason, they believe that successes are unlikely and failures likely, despite the presence of some experiences of success, which they attribute to external factors, such as unique circumstances or luck (“pessimistic explanatory style” - Abramson, Seligman, & Teasdale, 1978; Abramson, Metalsky, & Alloy, 1989; Alloy, Kelly, Mineka, & Clements, 1990; Schleider, Ve’lez, Krause, & Gillham, 2014). These students believe they cannot control events; therefore, they believe that the events that they are exposed to are always inevitable and uncontrollable. Consequently, they exhibit a passive behavior typical of Learned Helplessness (LH) (Seligman & Maier, 1967; Abramson et al., 1978; Abramson et al., 1989). LH is characterized by passivity in academic tasks, in particular, those tasks that require persistence and that the helpless student perceives as a challenge that they cannot cope with (Ames, 1990). As a result, these students develop a negative attitude towards tasks and they will be overwhelmed by anxiety and frustration (Dweck & Leggett, 1988; Ruthig, Perry, Hladkyj, Hall, Pekrun, &
Chipperfield, 2008; Dickhäuser, Reinhard, & Englert, 2011). The problems described so far could lead to avoiding school, and absenteeism, in turn, can worsen academic performance; the literature shows, in fact, that school participation predicts academic success which increases self-esteem (Filce & LaVergne, 2015). According to the “participation-identification” model (Mahoney & Cairns, 1997), there is a close link between the student’s involvement in school and good academic results. This, in turn, increases student participation in school life. Conversely, low academic performance negatively affects the self-esteem of a student (Filippello, Sorrenti, Cuzzocrea, Nuzzaci, & Larcan, 2014), and can prompt this student to refuse school, which is experienced as a source of frustration (Sikorski, 1996).

Therefore, in order to identify more specific variables at the root of school refusal, we need to investigate the role played by the learning goals (mastery vs. performance) and LH on school refusal behavior. We hypothesize that the difficulty of students performance-oriented in perceiving the relationship between their own behavior and environmental consequences can affect their explanatory style. In fact, if a student believes that the positive results do not depend on internal factors (i.e. capacity and effort), even when they are successful, they attribute the positive result to external factors (i.e. the situation). Consequently, this student would not change his perception of the school as a source of frustration. Therefore, even positive educational outcomes may not be enough to reduce the level of anxiety experienced at school, creating in the student a sense of helplessness that would lead them to avoid school so as not to suffer the discomforts linked to school attendance.

In fact, in the literature the relationship between achievement and academic success is controversial. Previous studies (Schraw, Horn, Thorndike-Christ, & Bruning, 1995; Eppler & Harju, 1997) have shown that the relationship between performance goals and achievement is not simple or direct, but is complex. For example, a student with a strong performance goal orientation who has a lower confidence in his abilities will have poor achievement and will implement helpless behavior, compared with another student with a performance goal orientation but with higher levels of confidence in their own capabilities to face the task (Eppler & Harju, 1997).

On the basis of these assumptions, the main purpose of the present study is to explore other variables hitherto neglected from literature that may induce school refusal, in a preventive perspective. In fact the school refusal behavior, if it is not fronted promptly, can have severe consequences in the short term (e.g.: high stress, worsening of school performance, social alienation) and long term (e.g.: deviant behavior, depression and school dropout) (Kearney & Albano, 2010).

The present study

The aim of the present study is to investigate the influence of LH and learning goals on the four functions of school refusal (avoidance, escape, attention-seeking, and self-gratification). We hypothesized that LH and learning goals may be predictive of risk of developing school refusal behavior. Furthermore, the present study investigates the incremental validity of LH and learning goals in the risk of school refusal. Accordingly, we hypothesized that LH and learning goals exert a unique role in predicting the risk of school refusal, above and beyond the role of academic achievement.

Method
Participants

The sample consisted of 201 participants, 110 male (54.7%) and 91 females (45.3%) with an average age of 11.93 (SD = .81). Participants were from four middle schools in the city of Messina, Italy. In the sample, 57.2% of students had low academic achievement (an average of 5 and below) and 42.8% had high academic achievement (an average of between 7 and 10). In the Italian school system, teachers evaluate their students by using a 10-level gradation for each subject (from 1 = extremely insufficient to 10 = excellent) with 6 being the cut-off for sufficiency. Academic achievement was measured by the average grades obtained in all subjects, provided by teachers of participants. The grades were derived from different oral and writing tasks to which students are subjected during different periods of the school year. Children's achievement was collected at the end of the first semester through the use of original school records.

With regard to the socioeconomic status (SES) of the sample, 80% of students came from families with medium socioeconomic status (both parents educated to secondary level or at least one parent to university level), 6.5% of students came from families with low socio-economic status (both parents educated to primary level or at least one to secondary level), and 13.5% of students came from families with high socioeconomic status (both parents educated to university level). Parent educational status is considered to be one of the most stable aspects of socioeconomic status because it is typically established at an early age and tends to remain the same over time (Sirin, 2005). For this reason, family sociocultural status was based on the education of the father and the mother, grouping maternal and paternal educational levels into a single SES category (see Sirin, 2005).

All students in the sample were of Italian nationality and spoke Italian. Furthermore, all the students came from two-parent families.

Measures

The Italian version of the School Refusal Behavior Scale (Kearney, 2008), revised by Rigante and Patrizi (2007) was used to evaluate the risk of school refusal. This instrument consists of 24 items rated on a 7-point Likert-type scale, ranging from 0 (never) to 6 (always). The scale measures the four dimensions of school refusal identified by Kearney (2008): avoidance of general school-related distress caused by known or unknown factors (e.g., “How often do you have trouble going to school because you are afraid of something in the school building, for example a teacher, school bus, etc.?“); escape from adverse social and/or evaluative situations (e.g., “Do you have trouble speaking with the other kids at school?”); attention-seeking towards parents (e.g., “Do you often do things to upset or annoy your family?”); self-gratification (e.g., “Do you ever skip school because it’s more fun to be out of school?”). Scale scores were computed as the means of items. The range had a minimum value of 0 and a maximum of 6 (absence/presence of the specific reason which may induce school refusal). In this study, Cronbach’s alpha for avoidance is .74, for escape is .75, for attention-seeking is .81, and for self-gratification is .70.

LH was measured using the subscale Learned Helplessness Scale of the Italian version of the instrument Learned Helplessness Questionnaire (LHQ; Sorrenti, Filippello, Costa, & Buzzai, 2014, 2015b), which consists of six items measuring
LH (e.g., When you encounter an obstacle in school work you get discouraged and stop trying. You are easily frustrated.) The student indicated on a five-point Likert scale, from 1 (not true) to 5 (absolutely true), how much he/she agreed with each statement. The range had a minimum value of 1 to a maximum of 5 (low / high risk of LH). In this study, Cronbach’s alpha is .75.

Learning goals were measured using the QC3O questionnaire, based on the Amos 8-15 package (Cornoldi, De Beni, Zamperlin, & Meneghetti, 2011). The QC3O assesses the assumptions of the students regarding their learning goals, i.e. whether they give more value to the results (performance goals) or to what they learn without worrying about failure (mastery goals). The student indicated on a four-point Likert scale, from 1 (agree) to 4 (disagree), how much he/she agreed with the statements. The range had a minimum value of 1 (performance goals) to a maximum of 4 (mastery goals). In this study, Cronbach’s alpha is .66.

Procedure

The parents of the participants provided informed consent. The study procedures were explained to the students, questions were answered, and participants were given a questionnaire packet. Each child was tested individually and completed a questionnaire in a single session in their classrooms during school hours. Instructions stated that the questionnaires were voluntary and responses confidential. All the students responded to the same questionnaire packet. Participation for each individual took 30–50 minutes. To avoid effects due to the order of presentation of the instruments, it is a matching procedure was implemented.

Data analyses

Standard descriptive statistics, Cronbach’s alpha, Pearson’s r correlations, and hierarchical multiple regressions were applied to the data to evaluate the variables ability to predict the four functions of school refusal. All analyses were performed using SPSS.

Results

Descriptive analyses and correlations

Table 1 shows the Cronbach’s alpha, means, standard deviation, skewness, and kurtosis values for all the variables under investigation for the total sample. The mean scores of all the factors were consistent with the normative data of these instruments. The descriptive analysis showed that all scales have good scores of symmetry and kurtosis (Table 1). The internal reliability of all the instruments ranged from .66 to .81.
Table 1. Mean, Standard Deviation, Skewness, Kurtosis for all the variables under investigation.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Ske</th>
<th>Kur</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.45</td>
<td>.50</td>
<td>.19</td>
<td>-1.98</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>11.94</td>
<td>.81</td>
<td>.12</td>
<td>-1.45</td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>6.84</td>
<td>1.15</td>
<td>-.11</td>
<td>-.88</td>
<td></td>
</tr>
<tr>
<td>Learned helplessness</td>
<td>2.11</td>
<td>.76</td>
<td>.36</td>
<td>-.61</td>
<td>.75</td>
</tr>
<tr>
<td>Learning goals</td>
<td>2.74</td>
<td>.63</td>
<td>.24</td>
<td>-.62</td>
<td>.66</td>
</tr>
<tr>
<td>Avoidance</td>
<td>1.93</td>
<td>1.18</td>
<td>.31</td>
<td>-.37</td>
<td>.74</td>
</tr>
<tr>
<td>Escape</td>
<td>.98</td>
<td>.95</td>
<td>.98</td>
<td>.42</td>
<td>.75</td>
</tr>
<tr>
<td>Attention-seeking</td>
<td>2.03</td>
<td>1.31</td>
<td>.44</td>
<td>-.46</td>
<td>.81</td>
</tr>
<tr>
<td>Self-gratification</td>
<td>3.03</td>
<td>1.23</td>
<td>-.11</td>
<td>-.42</td>
<td>.70</td>
</tr>
</tbody>
</table>

Table 2 presents the correlations among the four functional dimensions of the School Refusal Behavior Scale (avoidance, escape, attention-seeking, and self-gratification), academic achievement, LH, and learning goals (mastery vs. performance).

Table 2. Correlation among measures.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieve.</td>
<td>.31**</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned Helplessness</td>
<td>-.03</td>
<td>-.06</td>
<td>-.36**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance</td>
<td>-.18*</td>
<td>.03</td>
<td>-.17*</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape</td>
<td>-.20**</td>
<td>-.18**</td>
<td>-.33**</td>
<td>.39**</td>
<td>.63**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention-seeking</td>
<td>-.27**</td>
<td>-.11</td>
<td>-.17*</td>
<td>.22**</td>
<td>.51**</td>
<td>.47**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-gratification</td>
<td>-.10</td>
<td>.21**</td>
<td>.01</td>
<td>.21**</td>
<td>.38**</td>
<td>.09</td>
<td>.34**</td>
<td></td>
</tr>
<tr>
<td>Learning goals</td>
<td>.15*</td>
<td>.07</td>
<td>.28**</td>
<td>-.26**</td>
<td>-.27**</td>
<td>-.20**</td>
<td>-.22**</td>
<td>-.25**</td>
</tr>
</tbody>
</table>

**p<.01, *p<.05.

Regression on School Refusal.

To examine whether LH, academic achievement, and learning goals can predict risk of school refusal, we performed hierarchical multiple regressions which were conducted separately for four dependent variable functional dimensions: avoidance, escape, attention-seeking, and self-gratification. Control variables age and gender with academic achievement were entered in Block 1. The LH and learning goals were entered in Block 2 (Tab. 3).
Achievement. Block 1 explained 6% variance in avoidance, $F(3,197) = 4.02; p < .01$, $R^2_{adj} = .043$, with achievement ($\beta = -.17, t = -2.25, p < .05$) being significant negative predictors of avoidance.

In Block 2, when LH and learning goals were entered into the regression, there was a significant change in $R^2$ [$F$ change $(2,195) = 26.82; p < .001$, $R^2$ change = .20] and the model explained an additional 20% variance in avoidance, $F(5,195) = 13.77; p < .001$, $R^2_{adj} = .242$, with the gender ($\beta = -.16, t = -2.46, p < .05$), LH ($\beta = .44, t = 6.45, p < .001$), and learning goals ($\beta = -.16, t = -2.36, p < .05$) providing additional unique contributions.

Escape. Block 1 explained 17% variance in escape, $F(3,197) = 13.06; p < .001$, $R^2_{adj} = .153$, with age ($\beta = -.16, t = -2.44, p < .05$) and achievement ($\beta = -.32, t = -4.66, p < .001$) being significant negative predictors of escape.

In Block 2, when LH and learning goals were entered into the regression, there was a significant change in $R^2$ [$F$ change $(2,195) = 9.67; p < .001$, $R^2$ change = .08] and the model explained an additional 8% variance in escape, $F(5,195) = 12.40; p < .001$, $R^2_{adj} = .222$, with age ($\beta = -.15 t = -2.38, p < .05$) and achievement ($\beta = -.19, t = -2.60, p < .01$) maintaining a unique contribution, and LH ($\beta = .29, t = 4.22, p < .001$) providing additional unique contributions.

Attention-seeking. Block 1 explained 9% variance in attention-seeking, $F(3,197) = 6.78; p < .001$, $R^2_{adj} = .080$, with gender ($\beta = -.23, t = -3.21, p < .01$) being a significant negative predictor of attention-seeking.

In Block 2, when LH and learning goals were entered into the regression, there was a significant change in $R^2$ [$F$ change $(2,195) = 5.22; p < .01$, $R^2$ change = .046] and the model explained an additional 4.6% variance in attention-seeking, $F(5,195) = 6.33; p < .001$, $R^2_{adj} = .118$, with gender ($\beta = -.24 t = -3.38, p < .01$) maintaining a unique contribution and LH ($\beta = .17, t = 2.32, p < .05$) providing additional unique contribution.

Self-gratification. Block 1 explained 6% variance in self-gratification, $F(3,197) = 4.22; p < .01$, $R^2_{adj} = .046$, with age ($\beta = .21, t = 3.08, p < .01$) being a significant positive predictor of self-gratification.

In Block 2, when LH and learning goals were entered into the regression, there was a significant change in $R^2$ [$F$ change $(2,195) = 14.29; p < .001$, $R^2$ change = .120] and the model explained an additional 12% variance in self-gratification, $F(5,195) = 8.59; p < .001$, $R^2_{adj} = .159$, with age ($\beta = .23, t = 3.55, p < .001$) maintaining a unique contribution, and achievement ($\beta = .22, t = 2.88, p < .01$), LH ($\beta = .24, t = 3.33, p < .01$), and learning goals ($\beta = -.25, t = -3.57, p < .001$) providing additional unique contributions.

### Table 3. Regression analysis for avoidance, escape, attention-seeking, and self-gratification.

<table>
<thead>
<tr>
<th></th>
<th>Avoidance</th>
<th>Escape</th>
<th>Attention-seeking</th>
<th>Self-gratification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\Delta R^2$</td>
<td>$t$</td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td>.035***</td>
<td>.149***</td>
<td>.090***</td>
<td>.059**</td>
</tr>
<tr>
<td>Age</td>
<td>.62</td>
<td>.04</td>
<td>-2.54 - .17*</td>
<td>-1.47 - .10</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.89</td>
<td>-.14</td>
<td>-1.58 - .11</td>
<td>-3.33 - .24**</td>
</tr>
<tr>
<td>Achievement</td>
<td>-1.80</td>
<td>-.13</td>
<td>-4.16 - .29**</td>
<td>.50</td>
</tr>
</tbody>
</table>
**Discussion**

The aim of this study was to investigate the influence of LH and learning goals on the four school refusal functions (avoidance, escape, attention-seeking, and self-gratification). We hypothesized that LH and learning goals exert a unique role in predicting risk of school refusal, above and beyond the role of academic achievement.

The regression results confirm the hypothesis of this study; in fact, we found that LH and learning goals can be considered as strong incremental predictors of risk of school refusal, over and above academic achievement.

In particular, academic achievement was only negatively predictive of escape. This confirms that failure at school can induce school refusal behaviors (Sikorski, 1996; Mahoney & Cairns, 1997), such as escape to avoid adverse situations (e.g. anxiety-inducing situations such as the school evaluation system) (Kearney, 2008). The literature shows the link between students’ anxiety disorders and low academic performance, social and academic difficulties, underachievement, school refusal, and maladaptive perfectionism (Van Ameringen, Mancini, & Farvolden, 2003; Brandibas, Jeunier, Clanet, & Fourasté, 2004; Yahaya et al., 2010; Heyne, Sauter, Van Widenfelt, Vermeiren, & Westenberg, 2011; Filippello, Sorrenti, Buzzai, & Costa, in press). The academic achievement predict negatively also avoidance only in first step of regression analysis and loses its predictive value in second step, when LH and learning goals were entered into the regression. The positive relationship in the regression between academic achievement and self-gratification suggests that probably also students with high academic achievement can pursue gratifications not attending school. However, given that the zero-order correlation between academic achievement and self-gratification was essentially zero, the significant positive regression coefficient for academic achievement may be the result of a suppression effect, and should be interpreted with prudence.

Learning goals are negative predictors of risk of school refusal. In particular, performance goals are a positive predictor of avoidance and self-gratification. This data can be explained by referring to two distinct types of learning goals (mastery vs. performance goals). In fact, performance-oriented students study only to obtain external reinforcements (i.e. praise, incentives, etc.) and prefer to perform simple tasks in order to achieve success and, therefore, gratification from parents and teachers (Dweck & Legget, 1988). Furthermore, these students are convinced that intelligence is a fixed and unchanging entity, and therefore believe they can do

<table>
<thead>
<tr>
<th>Step 2</th>
<th>.214***</th>
<th>.085***</th>
<th>.050**</th>
<th>.112***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.11</td>
<td>.07</td>
<td>-2.44</td>
<td>-.15*</td>
</tr>
<tr>
<td>Gender</td>
<td>-2.56</td>
<td>-.17*</td>
<td>-2.01</td>
<td>-.13*</td>
</tr>
<tr>
<td>Achievement</td>
<td>1.17</td>
<td>.08</td>
<td>-2.19</td>
<td>-.16*</td>
</tr>
<tr>
<td>LH</td>
<td>6.60</td>
<td>.44***</td>
<td>4.43</td>
<td>.30***</td>
</tr>
<tr>
<td>Learning goals</td>
<td>-2.41</td>
<td>-.16*</td>
<td>-.63</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Note: LH = Learned Helplessness
***p<.001, **p<.01, *p<.05.
nothing to change failure situations. Probably because of the dysfunctional beliefs of which they are victims, students oriented towards performance goals tend to avoid general school-related distress and obtain gratification outside of school, engaging in activities considered to be the most rewarding rather than attending school (which is experienced as a source of stress and frustration). Conversely, mastery-oriented students have an optimistic attitude towards study; even when they get negative results they are not discouraged but, on the contrary, they seek alternative strategies to overcome these difficulties, showing intrinsic motivation, perseverance, and focus on the task (Dweck & Legget, 1988; Ruthig et al., 2008; Dickhäuser et al., 2011). Moreover, these results are supported by the literature regarding the close relationship between school adjustment and students’ orientation (Eppler & Harju, 1997; Elliot, 1999; Dweck, 2000; Daniels et al., 2009; Dekker, Krabbendam, Lee, Boschloo, de Groot, & Jolles, 2016).

Our results also show that the strongest predictor of risk of school refusal is LH. In fact, LH was positively predictive of all four functions of school refusal. In the literature there is now agreement in relation to the negative role of LH on school adjustment (Dweck, 1975; Daniels et al., 2009; Peixoto & Almeida, 2010; Macher et al., 2012; Sorrenti et al., 2015b). Helpless students lack confidence in their own abilities, intelligence, memory, and possess a pessimistic explanatory style, despite the presence of some experiences of success. For this reason, these students believe they cannot manage to control events and, consequently, they exhibit a passive behavior (Abramson et al., 1978; Abramson et al., 1989; Alloy et al., 1990; Ames, 1990; Schleider et al., 2014). As a result, these students develop negative attitudes towards tasks and they are overwhelmed by anxiety and frustration (Dweck & Leggett, 1988; Ruthig et al., 2008; Dickhäuser et al., 2011; Filippello, Harrington, Buzzai, Sorrenti, Costa, 2014; Sorrenti, Filippello, Buzzai, & Costa, 2015a). Maric, Heyne, de Heus, van Widenfelt, & Westenberg (2012) found that negative automatic thoughts concerning personal failure predict school refusal. Therefore, avoidance could become a consequence as these students seek to avoid discomforts linked to school attendance.

In conclusion, this study confirms the role of internalizing variables in risk of school refusal (Kearney, 2008; Heyne et al., 2011; Inglés et al., 2015). In addition, it extends the knowledge of this problem, analyzing the relationship between school refusal and factors more specifically and directly related to the learning process, such as the learning goals of students and LH, which is currently overlooked in the literature. Our results show that, despite the fact that poor academic performance is a factor closely linked to school refusal (Sikorski, 1996; Mahoney & Cairns, 1997; Yahaya et al., 2010), learning goals and, above all, a state of helplessness of students play a more predictive role of school refusal. The tendency to pursue performance goals, a situation of strong distress, and a sense of frustration and helplessness most likely represent the very strongest factors in causing students to avoid school, as opposed to educational outcomes.

**Limitations and Directions for Future Research**

These results have important implications in the educational context, both for prevention and intervention. It is suggested that in order to prevent school refusal or to intervene when the problem is already present, it may be useful to work on the beliefs and expectations of the students. Therefore, it would be appropriate to promote mastery goals and to act on variables that can induce LH, such as dysfunctional explanatory style (Abramson et al., 1978; Abramson et al., 1989;
Alloy et al., 1990), low self-esteem and self-efficacy (Peixoto & Almeida, 2010; Macher et al., 2012).

The findings of this study should be viewed within the context of its limitations. Firstly, although our research assumes that LH and learning goals predict school refusal, the direction of effects could not be adequately tested in our cross-sectional study. In fact, our work is limited by the cross-sectional nature of the data, which makes it impossible to disentangle the causal order of these variables. Secondly, LH and school refusal behavior were not observed directly. As a result, it is uncertain whether the ratings reflect the actual behavior of the adolescents, though there is evidence that they do so relatively accurately.

An additional limitation is that the sample is limited to middle school, making these findings limited in terms of generalization and the sample does not allow evaluation of the trend of variables for age effect. Future research using a more heterogeneous sample might address some of the limitations regarding the generalization of these findings.

Finally, contextual variables were not analyzed in this study, such as the attitude of parents towards study or teaching styles of teachers, which could play an important role in the school refusal behavior of the students. For example, it has been shown that overinvestment of parents in study induces anxiety and dysfunctional thoughts related to school in children, because this outlook is characterized by higher and higher performance requirements of children (Kaufmann, Gesten, Santa Lucia, Salcedo, Rendina-gobioff, & Gadd, 2000). Also, parental psychological control, characterized by the use of different manipulation techniques (i.e. guilt induction, disappointment, shaming, isolation, personal attacks, and love withdrawal) to make their offspring comply with their expectations (Barber, 1996; Assor, Roth, & Deci, 2004; Barber, Stolz, & Olsen, 2005; Soenens & Vansteenkiste, 2010), is related to school failure (Bean, Bush, McKenry, & Wilson, 2003; Aunola & Nurmi, 2004), dysfunctional feelings of academic competence (Soucy & Larose, 2000; Soenens & Vansteenkiste, 2010), anxiety and maladaptive perfectionism of students (Soenens, Vansteenkiste, Luyten, Duriez, & Goossens, 2005; Soenens, Luyckx, Vansteenkiste, Luyten, Duriez, & Goossens, 2008). In addition, parental psychological control may cause children to develop insecurities about their competence, feelings of not being in control over events in their lives (Soenens & Vansteenkiste, 2010), and beliefs that they cannot independently cope with unfamiliar and unpredictable situations (Nanda, Kotchick, & Grover, 2012; Schleider et al., 2014), until they are ground into a situation of helplessness (Filippello, Sorrenti, Buzzai, & Costa, 2015). These problems can also be supported by teachers’ dysfunctional educational styles. In fact, it has been shown that teachers who promote performance targets (directed towards “demonstrating” competence) rather than mastery goals (aimed at “developing” competence) may foster in students extrinsic motivation, low self-efficacy, dependence on rewards, and excessive fear of being evaluated as incompetent, resulting in the risk of developing excessive distress in the school context (Ames, 1992; Blumenfeld, 2002; Allahdadi, Jahedizadeh, Ghanizadeh, & Hosseini, 2016). Therefore, future studies could investigate the relationship between attitudes and behavior of parents and teachers and the learning goals and helpless behavior of students with school refusal.

References


© 2014 by the Author(s); licensee Mediterranean Journal of Clinical Psychology, Messina, Italy. This article is an open access article, licensed under a Creative Commons Attribution 3.0 Unported License. Mediterranean Journal of Clinical Psychology, Vol. IV, No. 2 (2016). Doi: 10.6092/2282.1619/2016.4.1235