Research Reports

Perceived Social Support and Academic Achievement in Argentinean College Students

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Abstract
This research aimed at describing perceived social support and its relation to academic achievement in a sample of 760 Argentinean college students. Perception of social support was assessed in terms of four possible sources: parents, teachers, classmates, and boyfriend/girlfriend or best friend. Academic achievement was measured using three different indicators: the rate of passed, failed and dropped classes in the time since the academic career was initiated. The main hypothesis posed was that a higher perception of social support would be related to a better academic achievement (a bigger rate of passed classes, and a smaller rate of failed and dropped classes). Findings showed that women perceived significantly more support than men from all sources, except from teachers. Both males and females perceived more support from best friends or boyfriends/girlfriends, and identified teachers as the less supportive source. A higher perception of social support was associated with better academic achievement but only for females. Limitations of the study and implications for the set in motion of different interventions in the academic field, which could be specific to certain type of students, are discussed.

Keywords: perceived social support, academic achievement, college students, buffering model

Concern about academic achievement is commonplace in Argentina. Though difficulties are present at every educational level, the strive to pass classes and get a degree is mostly present in college students (e.g. Bassi, Busso, Urzúa, & Vargas, 2012). Thus, identifying factors associated to students’ performance has become an interesting challenge for Argentinian researchers since it entails the chance of intervention and improvement of academic achievement. The study of non-intellectual factors has taken the lead as an alternative to studies that seek cognitive variables related to academic performance (Grimm, Steele, Burchinal, Mashburn, & Piana, 2010; Tripicchio, 2011). Social support, for instance, has been pointed out as a variable related to students’ achievement in every educational level. Therefore, it should be useful to describe the way students perceive social support, determine if it is related to academic achievement and if so, how.

Social Support
Two main perspectives can be outlined when conceptualizing social support (Cohen & Wills, 1985): the main-effect model and the buffering model. The first model considers the concept as a coping strategy, and emphasises searching and the actual use of the support (Carver, Scheier, & Weintraub, 1989; Frydenberg & Lewis, 1993;
Lazarus & Folkman, 1984; Moos, 1993). The second one emphasises the perception of support and its role as a coping resource to prevent and reduce the negative effect that different adverse situations might cause on the individual (Malecki & Demaray, 2002).

Even though trying to determine what social support entails involves a large amount of diverse definitions, there is a great consensus on what the concept of perceived social support involves (Barrera, 1986). Cobb (1976) described it as the perception that a person has about being cared, loved and appreciated, and also about the fact of belonging to a network of people that the individual can count on in case of need. The perception of support is a cognitive and subjective appraisal that allows a person to have the confidence of depending on someone else’s help under given circumstances (Barrera, 1986).

Several authors stress the importance of the perception of support instead of the support actually received (Antonacci & Israel, 1986). For instance, the study carried out by Wethington and Kessler (1986) confirmed that when analysing the impact of social support on stressful situations, the perception of support was more relevant than the received support itself. When talking about perceived social support the focus is placed on the potential availability – the buffering model – and not on the support actually received – the main-effect model – (Lakey & Cassady, 1990; Streeter & Franklin, 1992). Accordingly, the buffering model prevails in current research, and assessment of social support is usually based on the perception about the potential support available.

**Gender and Developmental Differences in Perceived Social Support**

Perception of support is different in males and females. Women report wider use of social networks since they tend to identify more people as significant to them. On the other hand, though men are able to establish close relationships, they search support from fewer people than women do (Caetano, Silva, & Vettore, 2013). Studies reported that in general, child and adolescent girls perceive more support than boys (Demaray & Malecki, 2002; Talwar, Kumaraswamy, & Mohd Fadzil, 2013). Even when analysing every particular source, girls generally perceive more support from friends, classmates, parents and teachers than their male peers (Brookmeyer, Henrich, Cohen, & Shahar, 2011; Vitoroulis, Schneider, Cervoño Vasquez, Soteras de Toro, & Santana Gonzáles, 2012). Only few research results do not follow with the trend described before. For instance, Malecki and Demaray (2003) found no differences between boys and girls regarding parents and teachers support, and Vitoroulis et al. (2012) concluded that compared to girls, boys found more support in fathers.

Moreover, when comparing the frequency of support perceived as given by different sources, it was found that girls describe friends as the more supportive ones, while for boys their friends were, conversely, the less supportive element (Rueger, Malecki, & Demaray, 2008). In order to examine developmental differences, a longitudinal study with college students was conducted, which showed that the perception of support from friends decreased according to the age, while the role of mentors increased (Bordes-Edgar, Arredondo, Robinson Kurpius, & Rund, 2011). Authors assumed that this could be due to the fact that at this stage of life a role model or mentor is more important, since in may help them prepare for future professional challenges.

**Social Support in the Academic Field: its Association to Academic Achievement**

Academic development is considered as having a close link to social development (Konishi, Hymel, Zumbo, & Li, 2010). The reason why a high perception of social support is related to a better academic achievement lies on both conceptions of social support: the main effect model and the buffering model (Cohen & Wills, 1985). The academic scene has been repeatedly identified as a source of stress (Casullo & Fernández Liporace, 2001;
As stated above, searching social support is a commonly employed coping strategy: different studies found that a high perception of support favours academic achievement. In elementary students, for example, academic performance was better when perceived support from parents, teachers, friends and social support in general was higher (Chen & Rubin, 1992; Dubow & Tisak, 1989; Elias & Haynes, 2008; Garcia D’Avila-Bacarji, Marturano, & dos Santos Elias, 2005; Levitt, Guacci-Franco, & Levitt, 1994; Murray & Zvoch, 2011; Rosenfeld, Richman, & Bowen, 2000). These same types of analyses conducted with high school students, showed improved academic accomplishments when the perception of support from all sources was higher (Crean, 2004; Domagala-Zyśk, 2006; Jun-Li Chen, 2005; Konishi et al., 2010; Lee & Smith, 1999; Malecki & Demaray, 2003; Perry, Liu, & Fabian, 2010; Rosenfeld et al., 2000). Despite of the scarcity of research with college students, similar results were found: a better academic achievement was linked to a higher perceived support from teachers and parents (Bordes-Edgar et al., 2011; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994).

Interventions to increase the perception of social support in students stands out as concrete proposals with positive outcomes (Lamothe et al., 1995; Mattanah, Ayers, et al., 2010; Pratt et al., 2000). However, it must be pointed out that these studies focused on academic adjustment, a much more complex and encompassing variable that will not be analysed here. Nevertheless, it seems reasonable to assume that academic performance would run in the same direction as academic adjustment. As a matter of fact, the improvement of academic performance by the enhancement of social support has also been found in a recent study (Mattanah, Brooks, Brand, Quimby, & Ayers, 2012). Taking this into account, strategies of this kind would benefit students who could have access to resources that may help them navigate academia.

As initially pointed out, the Argentine educational system as a whole is concerned with the low achievement of students at all levels (Bassi et al., 2012; García de Fanelli, 2005; Gazzola & Didriksson, 2008; Ministerio de Educación de la Nación, 2010; Organización para la Cooperación y Desarrollo Económico, 2009; Premat, 2011). Considering this, detecting factors related to academic performance on which professionals could intervene, comes up as a challenge for pursuing its improvement (Di Gresia, Porto, & Ripani, 2002). These variables would allow actors involved in education to design ad hoc interventions that would certainly derive in a better administration of resources.

Following these lines of reasoning, the goal set forth here is to describe the perception of social support of college students by analysing: in first place whether females and males differ in their perception of support from different sources – parents, teachers, classmates and best friend or girlfriend/boyfriend –; secondly, if the amount of perceived support differs in each source; and finally, if the perception of social support is significantly linked to academic achievement in Argentine college students and if so, in which way.
Hypotheses based on previous research were:

H1: Women will perceive more social support from parents, teachers, classmates and best friend or girlfriend/boyfriend when compared to men.

H2: When comparing the amount of perceived support from each source, friends will be the most important source for women and the less important source in the case of men.

H3: Students with better academic achievement will show a higher perception of social support.

Method

Participants

A non-randomized sample of 760 Argentinean college students aged between 17 and 53 (\(M = 23.80\), \(SD = 4.04\)) was analysed. They attended different careers at public universities in Buenos Aires: Psychology 59.4%, Public Accounting 16.4%, Computer Engineering 3.5%, Business Administration 3.2%, Arts 3%, Medicine 2% and various others 12.5%. Most of them (74.3%) were females. Also, the majority described themselves as belonging to the medium socioeconomic level (76.8%). Participants were volunteers who did not receive any payment. They were evaluated in their own classrooms after signing an informed consent, which explained the goals of the research and guaranteed confidential treatment of the data provided. Psychologists properly trained in research activities gathered the data.

Materials and Procedure

Student Social Support Scale (Fernández Liporace, Castro Solano, & Contini de González, 2006; Fernández Liporace & Ongarato, 2005; Nolten, 1994). The Argentinean short version of this instrument measures perceived social support in the academic field from four possible sources: parents, teachers, classmates and best friend or girlfriend/boyfriend. It includes 15 items with a 4-point likert scale with the following choices: never or almost never, sometimes, frequently and always or almost always. This version was a result of a translation/back translation process and the linguistic adaptation of items, instructions and answers for local idioms – pilot study –, an analysis of evidences of content validity – expert judgment – and a construct validity study – exploratory and confirmatory factor analyses –. Reliability was tested using corrected item-total correlations to valuate homogeneity aspects, and Cronbach’s alphas for assessing internal consistency – values varied from .70 to .80 –. In this sample, Cronbach’s alphas were .86 for parents, .71 for teachers, .87 for classmates, and .85 for boyfriend/girlfriend or best friend. A confirmatory factor analysis showed a good fit for a 4-factor model (GFI = .963; AGFI = .947; NFI = .958; IFI = .974; SRMR = .032; RMSEA = .046).

Academic achievement. Defining academic achievement can constitute a difficult task. Usual measures of the academic achievement that aim to represent the results of learning processes are of dubious value. In fact, no single measure can accurately quantify the success or failure of learning. Often, grade point averages are used as indicators of performance. While they can be a respectable measure, in Argentina averages differ largely by career, a situation also found in other countries (McGuckin & Winkler, 1979). This constitutes a source of error since, for instance, a grade point average of 6 may represent an excellent performance in some careers and poor one in others. Consequently, researchers use other methodologies to quantify degrees of success in education. Analysing the rates of passed, failed and dropped classes, presents itself as a fine measure already used in Argentina (e.g. Di Gresia et al., 2002). To obtain this information, an ad-hoc survey for gathering data regarding
academic achievement was used. It asked about how many classes the subjects passed, failed or dropped in the period the student attended the university. With this information, three academic rates were calculated: 1) the rate of passed classes; 2) the rate of failed classes; and 3) the rate of classes dropped out. In all cases, this was calculated in the time since initiated the career. Time was measured in semesters. For example, if a student has been in college for six semesters and passed 15 classes, his rate of passed classes would be 2.5.

**Results**

Firstly, a within-subject analysis of variance taking gender as a factor was carried out in order to test a possible interaction between gender and the sources of social support. The choice of this analysis was based on the fact that previous research indicated that social support behaves differently in males and females. A statistically significant interaction between gender and the source of perceived social support was found ($F = 5.883; p = .016$).

Since a significant interaction was found, principal effects could not be interpreted. To contemplate this, two within-subjects ANOVAs were calculated to analyse the second hypothesis and test differences in the amount of support perceived from each source in males and females separately (see Table 1). In the case of males the model was significant, Wilk’s $\lambda = .655$; $F(3, 190) = 33.429; p = .000$; $\eta^2 = .345$. Follow-up comparisons using Bonferroni correction showed that they perceived significantly more support from their best friend or boyfriend/girlfriend in comparison to parents and teachers, and more support from their classmates in comparison to parents and teachers. No differences were found between the support of classmates against that provided by best friends or boyfriend/girlfriends, and between teachers and parents. The model was also significant for females, Wilk’s $\lambda = .448$; $F(3, 556) = 228.109; p = .000$; $\eta^2 = .552$, and differences were found in all measurements. The order of importance of support sources was the following: best friend or boyfriend/girlfriend, classmates, parents, and teachers. See Figure 1 for an illustration of the results – the Y axis corresponds to the mean obtained by the group in the social support subscale.

**Table 1**

*Within-Subjects ANOVAs for Males and Females: Follow-up Comparisons With Bonferronni Correction.*

<table>
<thead>
<tr>
<th>Group</th>
<th>M(SD)</th>
<th>vs. Parents</th>
<th>vs. Teachers</th>
<th>vs. Classmates</th>
<th>vs. Best Friend or Boyfriend/Girlfriend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>1.81 (0.82)</td>
<td>-</td>
<td>.308</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Teachers</td>
<td>1.68 (0.67)</td>
<td>-</td>
<td>-</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Classmates</td>
<td>2.08 (0.69)</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Best Friend or Boyfriend/Girlfriend</td>
<td>2.16 (0.71)</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>2.06 (0.75)</td>
<td>-</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Teachers</td>
<td>1.66 (0.62)</td>
<td>-</td>
<td>-</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Classmates</td>
<td>2.34 (0.61)</td>
<td>-</td>
<td>-</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Best Friend or Boyfriend/Girlfriend</td>
<td>2.50 (0.58)</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Student’s t tests were carried out in order to test the first hypothesis that stated that women would perceive more social support from all sources when compared to men. Comparisons showed that women perceived more support than men from all sources (all p = .000), except for the perceived social support from teachers (t = 0.314; p = .754), where no differences were found (see Table 1 for means and standard deviations for each group). Effect size in the case of parents was $d = .31$ ($t = -3.951; p = .000$), for classmates $d = .39$ ($t = -4.948; p = .000$) and for best friend or boyfriend/girlfriend $d = .52$ ($t = -6.487; p = .000$).

Taking into account these results, the analysis of the possible prediction of academic achievement through the perception of social support was conducted separately for females and males (see Table 2). Multiple linear regression analyses served to test the third hypothesis which specified that students with better academic achievement would show a higher perception of social support. In the case of women, models were significant for the rate of passed classes ($R^2/\omega^2 = .064; p = .000$) and classes dropped out ($R^2/\omega^2 = .031; p = .000$), but not for the rate of failed classes ($p > .05$). The perception of support from parents ($p = .010$), classmates ($p = .001$) and best friend or boyfriend/girlfriend ($p = .020$) were significant predictors of the rate of passed classes. In the case of classes dropped out, best friend or boyfriend/girlfriend was the only source that significantly predicted academic achievement ($p = .001$). No significant models were found for males regarding any of the academic performance indicators considered ($p > .020$).
Table 2

Multiple Regressions on Academic Achievement.

<table>
<thead>
<tr>
<th>Group</th>
<th>Passed Classes</th>
<th></th>
<th>Failed Classes</th>
<th></th>
<th>Classes Dropped Out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>( p )</td>
<td>( \beta )</td>
<td>( p )</td>
<td>( \beta )</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>.071</td>
<td>.419</td>
<td>.031</td>
<td>.724</td>
<td>-.071</td>
</tr>
<tr>
<td>Teachers</td>
<td>-.128</td>
<td>.157</td>
<td>.152</td>
<td>.081</td>
<td>-.067</td>
</tr>
<tr>
<td>Classmates</td>
<td>.036</td>
<td>.696</td>
<td>-.145</td>
<td>.102</td>
<td>.108</td>
</tr>
<tr>
<td>Best Friend or Boyfriend/Girlfriend</td>
<td>.119</td>
<td>.180</td>
<td>-.044</td>
<td>.620</td>
<td>-.001</td>
</tr>
<tr>
<td>( R^2/\omega^2 )</td>
<td>.003 (( p = .348 ))</td>
<td>.004 (( p = .329 ))</td>
<td>-.011 (( p = .726 ))</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>.121</td>
<td>.010</td>
<td>-.062</td>
<td>.182</td>
<td>-.086</td>
</tr>
<tr>
<td>Teachers</td>
<td>-.044</td>
<td>.327</td>
<td>-.042</td>
<td>.353</td>
<td>-.042</td>
</tr>
<tr>
<td>Classmates</td>
<td>.152</td>
<td>.001</td>
<td>.064</td>
<td>.178</td>
<td>.030</td>
</tr>
<tr>
<td>Best Friend or Boyfriend/Girlfriend</td>
<td>.108</td>
<td>.020</td>
<td>-.023</td>
<td>.621</td>
<td>-.151</td>
</tr>
<tr>
<td>( R^2/\omega^2 )</td>
<td>.064 (( p = .000 ))</td>
<td>.000 (( p = .380 ))</td>
<td>.031 (( p = .000 ))</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

This study intended to enhance knowledge about the role of social support in college students. The goals here were to describe it and analyse its capacity to predict students’ performance. Firstly, results showed that, when compared to men, women perceived more support from all sources except from teachers, where no differences were found. This is not surprising in view of former studies, which reached similar conclusions (Brookmeyer et al., 2011; Demaray & Malecki, 2002; Malecki & Demaray, 2003; Rueger et al., 2008; Vitoroulis et al., 2012). These findings are in line with the first hypothesis and the assumption that women’s support networks are wider since they give an important role and dedicate time an effort to establish and maintain relationships characterized by contact and intimacy (Caetano et al., 2013). Men, on the other hand, despite being able to engage in this type of relationships may not consider them as necessary as they are to women. This difference may have both cultural and biological correlates (Flaherty & Richman, 1989; Sherman, Kim, & Taylor, 2009).

However, it differs from some results reported by Demaray and Malecki (2002), who found that child and adolescent girls also scored higher in perception of support from teachers, as well as part of the research of Vitoroulis et al. (2012), who concluded that adolescent boys got higher values than girls regarding this source. The difference found in this study could be due to the fact that in this case the students analysed attended college and those authors assessed younger students. However it replicates the result found by Malecki and Demaray (2003) where no differences in teacher support were found between girls and boys and. Also, the expected difference on perceived support based on gender that most researches usually find was replicated.

In the second place, when comparing perceived support from each source – parents, teachers, classmates and best friend or boyfriend/girlfriend – both females and males reported recognising more support from best friend or boyfriend/girlfriend. And the source perceived as less supportive, also in both cases, was that related to teachers. This replicates what H2 posed in the case of women, such as the findings of Rueger et al. (2008) who stated that friends were the more supportive source for adolescent girls. Nevertheless it differs from results reported
in the same study for males, where friends were the source identified as less supportive. This contradicts the assertions of Elias and Haynes (2008) who indicated that students might think that their classmates do not have the skills needed to help them to achieve success in school and, therefore are not perceived as an important source of support. Also, the fact that teachers were the less supportive source goes in the opposite direction of the conclusions by Bordes-Edgar et al. (2011) who specified that as time goes by, the role of mentors becomes more relevant than peers’ support. Once again, different findings in the case of males may be due to the fact that students who participated in this study were older: it seems that their best friend or boyfriend/girlfriend play a more important role than they did in high school.

As for the possible prediction of academic achievement through the perception of social support, significant models were only found for females and in passed and dropped out classes: higher perception of support was linked to a higher rate of passed classes as well as less classes dropped out. That is, H3 was only true in the case of females since no significant predictors were identified for males. This brings up several arguments. On one hand, as reported before, the perception of social support appears to be linked to a better academic achievement (e.g. Bordes-Edgar et al., 2011; Cutrona et al., 1994). On the other, this seems to apply primarily to female students, leading to specific implications for designing interventions in these matters. This may be explained by the suggestions of Flaherty and Richman (1989) who theorise that women appear to be more influenced by the lack of or support since it plays a more significant role in their lives. By this theory, perception of support in women is closely related to their well-being because females are more sensitive to support, and variations in it may have a higher impact because they are more dependant on it.

Programs aimed at addressing support for male college students may not be useful, and a waste of human, financial and time resources. Conversely, strategies to enhance perception of support in their female peers seem more accurate and efficient. According to these data, interventions should be directed specifically to females since this seems to be the population in which perception of social support has an impact. Also, these interventions should not be focused on the support from teachers, who do not seem to play a relevant role but in the support from parents, classmates and best friend or boyfriend/girlfriend.

Because the variable here analysed was perceived social support, interventions to promote the increment or consolidation of sources constituting the students’ networks arise as a concrete and feasible action. For instance, students could be trained in expressing to their parents their need for support in clear terms and in searching for new sources of support in college. The creation of programs to provide a common area for the promotion of supporting groups made up by peers may increase the bonding between classmates, possibly generating new comrade relationships or even friendships among them. But, of course, these proposals should be tested in the field. Also, since the relation between perceived social support and academic achievement was null for males, other variables assumed to explain academic achievement must be identified and analysed in depth.

Some limitations of this study should be mentioned. Firstly, non-significant results in the case of males could find an explanation in the small sample size (n = 100). Statistical power might be increased using a wider sample. Also, no college students from private schools were included, something which could affect the results obtained. In addition, the sample was mostly composed by middle-class students, a variable that has been identified to interact with the perception of social support and its effects on academic performance (Malecki & Demaray, 2006). The measure used for assessing academic achievement, though appropriate for this sample, differs from the most commonly used when studying this variable in other cases (grade point averages). This has a direct correlate in
the difficulty for comparing results with other investigations. Nevertheless, H3 was partially verified. And finally, most of the participants were females, a proportion that may be judged as non-representative. However a female prevalence actually represents accurately what happens in Argentinean colleges (Lopez Cleip De Sosa & Amoroso De Maza, 2007). Despite these limitations, results are interesting, especially considering the fact that perceived social support appears as a variable where interventions are possible, can be designed specifically for certain type of students, and implies simple actions, that may be available for most institutions. New studies should provide new research lines to be developed for males, in order to detect related factors reactive to specific interventions.

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Competing Interests

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