



European Journal of Psychology and Educational Research

Volume 2, Issue 1, 21 - 30.

ISSN: 2589-949X

<http://www.ejper.com/>

Perceived Social Support and University Adjustment among Spanish College Students

Zeltia Martinez-Lopez
University of Santiago de
Compostela, SPAIN

Carolina Tinajero*
University of Santiago de
Compostela, SPAIN

M. Soledad Rodriguez
University of Santiago de
Compostela, SPAIN

M. Fernanda Paramo
University of Santiago de
Compostela, SPAIN

Abstract: Previous studies have confirmed that perceived social support facilitates university adjustment during emerging adulthood. Less is known, however, about the specific dimensions of social support that foster successful transition to university. This research represents the first attempt to examine the combined effects of social provisions, sense of support and perceived acceptance on each facet of adaptation to higher education. The sample consisted of 198 women and 102 men, of average age 18.03 years ($SD = 0.52$), enrolled in the first year of different degree courses at a public university. Three measures were used to assess various dimensions of perceived social support: the Social Support Questionnaire (SSQ6), the Perceived Acceptance Scale (PAS) and Social Provisions Scale (SPS). The measures of the various facets of university adjustment were obtained from the Student Adaptation to College Questionnaire (SACQ). Regression analysis indicated that reassurance of worth and perceived acceptance by friends were the dimensions that best predicted all facets of university adjustment. The findings provide a more comprehensive understanding of how perception of social support could be used to develop effective intervention strategies and programmes to prevent failure at university.

Keywords: *Emerging adulthood, first-year students, perceived social support, transition to university, university adjustment.*

To cite this article: Martinez-Lopez, Z., Tinajero, C., Rodriguez, M.S., & Paramo, M.F. (2019). Perceived social support and university adjustment among Spanish college students. *European Journal of Psychology and Educational Research*, 2(1), 21-30. <https://doi.org/10.12973/ejper.2.1.21>

Introduction

Transition to university is viewed as a major developmental event that provides a positive opportunity for personal growth during emerging adulthood (Arnett, 2000), a period of exploration and instability that occurs between the ages of 18 and 29 years. First year students must deal with new demands and changes such as moving away from their family home, establishing new relationships, developing new learning habits and coping with new levels of freedom in an unknown and highly competitive environment (Friedlander, Reid, Shupak, & Cribbie, 2007; Lanctot & Poulin, 2018; Tao, Dong, Pratt, Hunsberger, & Pancer, 2000). Such experiences are thought to help students to become self-sufficient and emotionally independent, and to achieve a sense of competence, interact with others with increasing tolerance, develop a sense of purpose (Chavoshi, Wintre, Dentakos, & Wright, 2017).

Unfortunately, not all emerging adults are able to master this vital experience and will encounter serious difficulties in adapting to the new educational surroundings (Buote et al., 2007). Adaptation to university is conceptualized as a complex process of interaction between the student and the environment. This generates various types of requirements and needs and induces a wide variety of coping responses (Crede & Niehorster, 2012). Four facets of adjustment are consistently differentiated: academic, personal-emotional, social and institutional. Each of these components represents a specific area of demands from the new situation. Academic adjustment indicates how well students deal with educational demands, such as motivation to complete academic tasks, academic effort and satisfaction with the academic environment. Personal-emotional adjustment indicates the psychological status of students and the extent to which they experience general psychological distress. Social adjustment indicates success in coping with the interpersonal-societal demands inherent in university life. Institutional attachment describes students'

* **Corresponding author:**

Carolina Tinajero, Department of Evolutive and Educational Psychology, University of Santiago de Compostela, Spain. ✉ carolina.tinajero@usc.es



satisfaction with the university experience in general and the quality of the relationship between the student and the institution. Adjustment in the global sense can thus be seen as a condition or state in which the students feel that their needs have been fulfilled and that their behaviour conforms to the needs of the environment (Salami, 2011).

Various studies across the world in the last decades have identified perceived social support as a protective, empowering factor that is key to enabling emerging adults to fulfil the challenges involved in university life (Abdullah, Kong, & Talib, 2014; Katz & Somers, 2017; Lidy & Kahn, 2006; Rodriguez, Tinajero, & Paramo, 2017; Tao et al., 2000). However, little is known about how different dimensions of support might influence the diverse areas of adaptation to university in emerging adulthood. Both perceived support and adjustment have usually been treated globally, despite the diverse facets of adjustment are supposed to be differentially affected by social support (Crede & Niehorster, 2012). On the other hand, different dimensions of support (e.g. provisions and sources) have also been distinguished although their role on adjustment has been scarcely explored. In particular two different, but complementary, multidimensional approaches to the study of perceived social support have been taken, known as functional and global perspectives (Lakey & Cohen, 2000).

According to the functional approach, successful or failed adaptation to higher education is largely determined by the different support resources available to help young adults face the changes produced at this stage of their lives (Cutrona & Russell, 1987). Weiss (1974) described six different social functions or provisions that may be obtained from relationships with others, namely *reliable alliance* (tangible assistance) *guidance* (advice or information), *attachment* (emotional closeness from which one derives a sense of security), *social integration* (belonging to a group with similar interests and concerns), *reassurance of worth* (recognition of one's skills, competence and worth as seen by others), and *opportunity for nurturance* (others who rely on one for their well-being).

Elliott and Gramling (1990) and Hawkins, Tan, Hawkins, Smith, and Ryan (1999) found that the social support provisions of reassurance of worth, attachment and social integration significantly reduce the level of psychological discomfort among college students; while Cutrona, Cole, Colangelo, Assouline, and Russell (1994) found that reassurance of worth was related to higher grade point average obtained by undergraduates. Thus, we may expect that at least these provisions particularly affect personal-emotional and academic adjustment, although this relation remains unexplored. In fact, specific research on adjustment to university has been characterized by underestimation and masking of the effect of different social provisions during this vital transition period (Abdullah et al., 2014; Chavoshi et al., 2017; Lidy & Kahn, 2006; Tao et al., 2000; Wintre & Yaffe, 2000) yielding inconclusive results.

In the only study, to our knowledge, that has examined the relationship among several provisions and facets of adjustment, Robbins, Lese, and Herrick (1993) observed that social support provisions did not significantly affect academic and personal-emotional adjustment to university. This was attributed to the moderating effect of goal instability, another variable taken into consideration in the study. This variable refers to the ability to create or initiate age-appropriate purposes or objectives. Further studies should differentiate among social provisions and adjustment facets, as it would serve to establish the most appropriate support resources to help students face the diverse challenges involved in entry to higher education.

From a global perspective it is postulated that relatively stable beliefs regarding the quality of interpersonal relationships foster student adaptation, as they serve as a safety network enabling students to explore and participate actively in a wide range of vital experiences. Such experiences enable students to acquire coping strategies, social skills, self-sufficiency and confidence in relationships. In this respect, perceived social support can be considered as an adult manifestation of internal working models generated from early experiences of relationships of attachment to parents and enriched by representations forged about others, oneself and the relationships between oneself and others. These interpersonal schemes enable emergent adults to regulate, interpret and predict their behaviour, thoughts and feelings about other significant people and about oneself, and *sense of support* and *sense of acceptance* can thus be considered as central constructs in this type of schemes (Sarason, Pierce, & Sarason, 1990).

Sense of support refers to the perception of having a number of people to whom one can turn when needed (perceived availability) and the degree of satisfaction with this support (Sarason et al., 1990). The possible role of these global dimensions of social support in the process of adaptation to university in the first year has not been fully explored. Lubker and Etzel (2007) and Salami (2011) showed that undergraduates with higher levels of perceived available support adjust better to university life than those with lower levels of perceived social support. In a recent study carried out to assess the influence of sense of support in the four dimensions of university adjustment, Paramo, Martinez, Tinajero, and Rodriguez (2014) reported that availability and satisfaction with social support were associated in different ways with adaptation; the former contributed to personal-emotional and social adjustment, whereas the latter favoured academic adjustment. These results suggest that the degree of satisfaction could be a better index of the match between perceived social support and salient challenges being experienced by undergraduate students, such as obtaining academic success. On the other hand, perceived disposition of one's social network to provide support may be more relevant for affective wellbeing.

Several investigations have also taken into account perceived availability of different sources of support. Friedlander et al. (2007) reported that increased perceived availability of friends, but not of family, is predictive of better personal-

emotional and social adjustment to university after the first semester. On the other hand, Katz and Somers (2015) have shown that perceived availability of family is a significant predictor of academic and personal-emotional adjustment, while accessibility of friends is a significant predictor of social adjustment. In line with the assumption of Sarason et al. (1990), different relationships would determine particular expectations of support and might fit specific needs. The results just mentioned would suggest a significant role of support from intimate relationships on personal-emotional adjustments, while family support seems particularly important for academic adjustment and peer support may be expected to influence social adjustment.

Finally, sense of acceptance or perceived acceptance represents the relationship-specific and relatively stable cognitive appraisal that significant others are concerned about us and value us independently of our specific attitudes and actions (Sarason et al., 1990). It is regarded as the essence of supportive relationships and it is thought to mediate the relation of other dimensions of perceived social support with adjustment (Brock, Sarason, Sanghvi, & Gurung, 1998).

Although few studies have considered the effect of perceived acceptance, available data differentiate among sources of support. Brock et al. (1998) and Pinheiro and Ferreira (2005) found that diverse variables involved in adaptation such as physical and psychological well-being, loneliness, peer relationships, self-esteem and optimism, were predicted by acceptance from friends, family and parents when surveying college students. A mediator effect of acceptance on the relation of perceived support with outcome variables was also observed. In the study by Paramo et al. (2014) previously cited, perceived acceptance was found to be a significant predictor of adjustment and to mediate the relationship of support satisfaction and perceived availability of support with adjustment. These findings suggest that perceived acceptance may play an important role in successful transition to university and encourage exploration of this role in relation to other dimensions of perceived support.

Research Goal

The current study presents a comprehensive view of perceived social support, systematically taking into account dimensions of support that may predict university adjustment in first-year students in Spain. We analysed the influence of each different dimension on university adjustment, firstly from a functional perspective and then from a global perspective. Finally, we analysed the combined impact of both systems of perceived social support on each dimension of adaptation to university life (academic, personal-emotional, social and institutional). In addition, the role of gender in the relation between social support and adjustment was controlled, given that differences between men and women college students have been previously registered both in relation with perceived support and adjustment to university (Tinajero, Martinez-Lopez, Rodriguez, Guisande, & Paramo, 2014; Wintre, & Yaffe, 2000). This approach enabled us to gain some insight into the connection between the different dimensions of support and their global and/or functional incidence in the process of transition to university, thus helping to identify areas of action for inclusion in possible intervention programmes.

In the light of aforementioned results and theoretical background, the following hypotheses were proposed. First, social support provisions of attachment, social integration and reassurance of worth would be positive and significant predictors of the four facets of adjustment. Second, perceived availability of support would affect personal-emotional and social adjustment and grade of satisfaction was expected to contribute to academic adjustment. Third, perceived acceptance from family would facilitate academic adaptation, while friends' perceived acceptance would promote emotional-personal and social adaptation. The fourth and last hypothesis was that perceived acceptance would mediate the effect of perceived social support on college adjustment. No hypotheses were advanced about the relation of provisions of reliable alliance, guidance and opportunity for nurturance with adjustment.

Methodology

Sample

The participants were 300 first year students enrolled in various degree courses within the five main areas of study (Sciences, 32%; Health Sciences, 20%; Social Sciences and Law, 25%; Humanities, 19.7% and Engineering, 3.3%). 66% were women (n=198) and 34% were men (n=102), which is consistent with the gender distribution of students in the university. The average age of the participants was 18.03 years ($SD= 0.52$). Most undergraduates were from nuclear families (91%) and households of middle socioeconomic status (79.9%). Parents' educational level varied from less than high school (mother 37.7 %; father 38.3 %) to university education (mother 29 %; father 27 %) of students.

Participants were selected from a larger sample of first year undergraduate students, by applying the following academic and family-related criteria: first-time, first-year attendance at university undertaking full-time courses (60 credits), age less than or equal to 20 years, undertaking courses that were their first or second choices, unmarried, and not employed (i.e., they were economically dependent on their parents).

Instruments

Perceived social support. The measures of social provisions, sense of support and sense of acceptance dimensions of perceived social support were obtained from the Spanish versions of the Social Provisions Scale (SPS; Cutrona &

Russell, 1987), Social Support Questionnaire-Short Form (SSQ6; Sarason, Sarason, Shearin, & Pierce, 1987) and Perceived Acceptance Scale (PAS; Brock et al., 1998).

The Social Provisions Scale contains 24 items (in a 4-point Likert-type format) designed to measure the social provisions of perceived social support: reliable alliance, guidance, attachment, social integration, reassurance of worth and opportunity for nurturance. Half of the items describe the presence of one of the provisions of social support, and the others describe the absence of any social support provision. Sample items include "There are people who enjoy the same social activities I do" and "There is no one I feel comfortable talking about problems with" (reverse scored). The Spanish version of the SPS adapted by Martinez-Lopez et al. (2014) has shown adequate internal consistency reliability (Cronbach's alpha from .75 to .55 for the subscale scores, and .88 for the total score) and convergent and discriminate validity, as indicated by the correlations between the subscale scores (r s range from .35 to .77). In the current study, Cronbach alpha coefficients for the subscale scores were .79 for reliable alliance, .74 for guidance, .68 for attachment, .70 for social integration, .63 for reassurance of worth and .62 for opportunity for nurturance. Reliability values were similar to those obtained for the original version and were considered adequate for research purposes.

The Social Support Questionnaire-Short Form, adapted for the Spanish population by Martinez-Lopez et al. (2014), is a six-item measure designed to assess two distinct aspects of sense of support: availability and satisfaction. Availability is measured as the estimated number of people who can be relied on when assistance is required. Satisfaction is the perceived adequacy of the support available. For each of the 6 items, the respondent lists the people on whom he or she can count on in the situation described (maximum of nine persons) (example: "Whom can you really count on to be dependable when you need help?") and expresses his or her degree of satisfaction in regard to the support (on a scale from 1 to 6). Two total scores are calculated: N (availability or number of people), the average number of persons listed for the items, and S (satisfaction), the average satisfaction score. The authors have reported that the Spanish version of the SSQ6 possesses good psychometric properties, including excellent internal consistency, with Cronbach's alpha values of .90 for SSQ6N and .96 for SSQ6S. The internal consistency of the scale scores for the present sample were $\alpha = .87$ for perceived availability and $\alpha = .95$ for perceived satisfaction.

The Perceived Acceptance Scale, adapted by Rodriguez, Martinez, Tinajero, Guisande, and Paramo (2012), is a 44-item self-report measure designed to assess perceptions of acceptance within four specific categories of relationships: friends (12 items), family (12 items), mother (10 items) and father (10 items). Sample items include "My parents objected to a number of things I did" or "I am a very important part of the lives of my friends". Responses are made on a 5-point Likert-type scale ranging from 1 "strongly disagree" to 5 "strongly agree". This scale has demonstrated good internal consistency, with Cronbach's alpha scores higher than .86 for the subscale, and has also displayed excellent convergent and discriminant validity. The total score was correlated with other measures of social support (r s .24 or higher). In the current study, only the friends and family perceived acceptance were measured. Internal consistency was satisfactory for both subscales scores; with alpha values of .87 and .88, respectively.

University adjustment. The Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1984), adapted by Rodriguez, Tinajero, Guisande, and Paramo (2012), consists of 67 nine-point Likert items that assess the quality of students' adjustment to college/university on the basis of a multifaceted concept of this process. The SACQ includes four subscales: academic adjustment (24 items), personal-emotional adjustment (15 items), social adjustment (20 items) and institutional attachment (15 items, some of them also included for academic or social adjustment). This scale was shown to have good internal reliability and convergent validity in a population of freshman college students (Baker & Siryk, 1989). In the current study, Cronbach's alpha values were .90, .89, .85 and .84, for the academic adjustment, personal-emotional adjustment, social adjustment and institutional attachment subscales, respectively.

Procedure

The data were collected at two different times by trained researchers from the same group of freshmen students enrolled in a broad variety undergraduate degree courses.

The first evaluation was carried out during the first semester of the course, with the prior consent of students and teachers, according to the deontological code of the Spanish Official Committee of Psychologists. The participants completed a self-report questionnaire during class that included a survey on personal and family data and three scales of social support, to assess perceived levels of social provisions, sense of support and sense of acceptance. Those subjects who agreed to participate in a second phase of the study were asked to provide a contact email or phone. Out of a total of 855 first-year students recruited during the first phase, 300 remained at the end of this study (i.e., participated twice and completed all questionnaires). The persistence rate was 35%.

The second evaluation took place in the middle of the second semester of the academic year and information on dependent variables was gathered. Two members of the research team contacted the students to inform them about the objectives of the second part of the study and to arrange a group appointment. The participants completed a questionnaire on student adjustment to university and were paid 15 € for their participation.

Analyzing of Data

Data were analysed using IBM SPSS version 20 for Windows. Descriptive statistics and Cronbach's alpha were first obtained for all measures. Correlational and linear regression analyses were then performed to examine the relationships among the variables considered in the current study. The mediator effect of perceived acceptance was analysed using the PROCESS macro for SPSS (Hayes, 2013).

Results

Descriptive Statistics and Correlations

Mean values, standard deviations, Cronbach's alpha and correlations for predictor variables and outcome variables are presented in table 1.

Correlation analysis showed that all dimensions of perception of social support, except perceived availability and satisfaction with support, were positively and significantly associated with all facets of university adjustment (r s range from .120 to .389).

Table 1. Correlations, descriptive statistics and Cronbachs' alpha for all study variables

	RA	G	A	SI	RW	ON	N	S	Fr	Fa	M	SD	α
SPS													
Reliable alliance (RA)											3.84	0.38	.79
Guidance (G)	.778**										3.75	0.45	.74
Attachment (A)	.496***	.662***									3.49	0.56	.68
Social integration (SI)	.514***	.496***	.485***								3.56	0.47	.70
Reassurance of worth (RW)	.380***	.366***	.374***	.384***							3.24	0.51	.63
Opportunity for nurturance	.419***	.433***	.436***	.369***	.385***						3.33	0.51	.62
SSQ6													
Availability (N)	.334***	.338***	.313***	.333***	.243***	.352***					5.05	1.6	.87
Satisfaction (S)	.324***	.387***	.282***	.268***	.184**	.198**	.154**				5.32	0.8	.95
PAS													
Friends (Fr)	.474***	.545***	.513***	.549***	.490***	.426***	.367***	.275***			4.23	0.62	.87
Family (Fa)	.404***	.417***	.288***	.268***	.426***	.312***	.272***	.204***	.354***		4.06	0.63	.88
SACQ													
Academic	.145*	.218***	.302***	.236***	.362***	.252***	.139*	.123*	.288***	.325***	5.81	1.17	.90
Personal-emotional	.120*	.123*	.206***	.240***	.313***	.130*	.169**	.059	.389***	.172**	5.98	1.49	.89
Social	.153**	.204***	.252***	.201***	.283***	.279***	.171**	.067	.382***	.202***	6.71	0.98	.85
Institutional	.147*	.160**	.169**	.158**	.248***	.209***	.096	.062	.281***	.218***	7.52	1.04	.84

*** $p < .001$; ** $p < .01$; * $p < .05$

Multiple Regression Analysis

Three hierarchical regression analyses were performed in order to determine the predictive dimensions of perceived social support associated with adaptation to university. The two first models were performed to separately assess the association of functional (First hypothesis) and global (Second and Third hypothesis) dimensions of perceived social support with facets of adjustment. Finally, the third one was conducted to examine the combined contribution of various dimensions of support. Gender was included in the first step as an independent variable, followed in subsequent steps by dimensions of perceived social support. To analyze the mediating effect of acceptance sense of family and friends on the relation of dimensions of provisions and sense and university adjustment, the PROCESS macro by Hayes (2013) was used with the bootstrapping technique of 1,000 sub-samples (Forth hypothesis).

As we can see in table 2, when gender was controlled for, the variance explained by all provisions (ΔR^2) was 16.7% for academic adjustment, 14% for personal-emotional adjustment, 14.2% for social adjustment and 8% for institutional attachment. Separate analysis of the weight of the standardized beta coefficients showed that reassurance of worth is the only provision that contributes significantly to predicting all facets of adjustment. The effect of the other provisions varied depending on the facet of adjustment evaluated. Attachment affected academic adjustment ($\beta = .150$, $p < .05$) and personal-emotional adjustment ($\beta = .170$, $p < .05$); social integration affected emotional adjustment ($\beta = .161$, $p < .05$), and the opportunity for nurturance affected social adjustment ($\beta = .191$, $p < .01$). Standardized beta coefficients for reliable alliance and guidance were not statistically significant.

Table 2. Hierarchical regression analyses for social provisions (SPS) as predictor of students' adjustment (SACQ)

Steps and variables	Academic		Personal-emotional		
	β Step 1	β Step 2	β Step 1	β Step 2	
Gender	-.130*	-.073	.142**	.193***	
Reliable alliance		-.164		-.034	
Guidance		.063		-.103	
Attachment		.150*		.170*	
Social integration		.066		.161*	
Reassurance of worth		.289***		.237***	
Opportunity for nurturance		.075		.008	
F	5.159*	9.414***	6.089**	7.919***	
ΔR ²	.017*	.167***	.020*	.140***	
Adjust R ²	.017	.184	.020	.160	
		Social		Institutional	
Gender	.049	.131*	-.009	.037	
Reliable alliance		-.100		-.018	
Guidance		.044		.022	
Attachment		.136		.041	
Social integration		.051		.031	
Reassurance of worth		.163**		.174**	
Opportunity for nurturance		.191**		.119	
F	.721	7.027***	.023	3.652***	
ΔR ²	.002	.142***	.000	.080***	
Adjust R ²	.002	.144	.000	.080	

***p <.001; **p<.01; *p<.05

The results of the second set of regression analysis are presented in table 3. The amount of variance explained by the availability and satisfaction was 2.5% for academic adjustment, 3.7% for personal-emotional adjustment and 3.4% for social adjustment. The influence of these two dimensions on personal-emotional adjustment and social adjustment is mainly explained by the availability of support (β=.184, p<.01; β=.174, p<.01, respectively). When sense of acceptance was included in the model, the amount of variance explained increased by 11.2% for academic adjustment, 12.1% for personal-emotional and social adjustment and by 8.5% for institutional adjustment. The standardized coefficients of regression indicate that acceptance by friends contributed significantly to predicting all facets of adjustment, while family acceptance only did so for academic adaptation (β=.250, p<.001) and institutional attachment (β=.144, p<.05).

Table 3. Hierarchical regression analyses for sense of support (SSQ6) and perceived acceptance (PAS) as predictor of students' adjustment (SACQ)

	Academic			Personal-emotional			
	β Step 1	β Step 2	β Step 3	β Step 1	β Step 2	β Step 3	
Gender	-.130*	-.109	-.116*	.142**	.169**	.151**	
Availability		.110	-.019		.184**	.048	
Satisfaction		.097	.010		.043	-.048	
Friends			.202***			.371***	
Family			.250***			.045	
F	5.159*	4.275**	10.645***	6.089*	6.020***	12.793***	
ΔR ²	.017*	.025*	.112***	.020*	.037**	.121***	
Adjust R ²	.017	.042	.153	.020	.058	.180	
		Social			Institutional		
Gender	.049	.075	.059	-.009	.006	-.004	
Availability		.174**	.034		.089	-.031	
Satisfaction		.046	-.048		.049	-.032	
Friends			.356***			.251***	
Family			.080			.144*	
F	0.721	3.735*	11.006***	0.023	1.143	6.309***	
ΔR ²	.002	.034**	.121***	.000	.011	.085***	
Adjust R ²	.002	.036	.158	.000	.011	.097	

***p <.001; **p<.01; *p<.05

Hierarchical regression analysis was used to examine the combined contribution of perceived social support to academic, personal-emotional, social and institutional adjustment. As before, gender was entered in the first step of the regression analysis. Social provisions were included in the second step, the dimensions of sense of support were included in the third step and perceived acceptance of family and friends were included in the fourth step.

The results of the hierarchical regression analysis confirm the complementary nature of perceived support and perceived acceptance as relevant predictors of adaptation in first-year students. The variance explained by social provisions increased on considering the different dimensions of the sense of support and sense of acceptance, reaching 22% for academic adjustment, 21.9% for personal-emotional adjustment, 19.1% for social adjustment and 11.3% for institutional attachment.

A decrease in the effect of provisions on university adjustment was observed in the latter step, indicating that its act on adaptation to university through the perceived acceptance. This possible mediator effect was analyzed using the PROCESS macro. Results show that family acceptance mediated the relationships between reassurance of worth and academic adjustment ($B=1.217$, $SE=0.415$, 95% CI [0.400, 2.048]). The effect of reassurance of worth in personal-emotional ($B=1.664$, $SE=0.393$, 95% CI [0.947, 2.489]), social ($B=1.509$, $SE=0.328$, 95% CI [0.914, 2.174]), and institutional adjustment ($B=1.320$, $SE=0.309$, 95% CI [0.767, 1.966]) was mediated by perceived acceptance from friends; as well as the relationships between opportunity of nurturance and social adjustment ($B=0.781$, $SE=0.270$, 95% CI [0.278, 1.350]).

Discussion and Conclusion

The current study has made several original contributions to our knowledge about the relation of perceived social support with university adjustment. First, with regard to the first hypothesis, a distinction has been established among provisions of support in relation to their association with adjustment to university. In accordance with the assumption reported by Cutrona and Russell (1987), our results showed that the different social provisions could facilitate the adjustment to particular university demands. Specifically, attachment and social integration contributed to personal-emotional adjustment; this might indicate that the extent to which young university students are capable of maintaining existing affective relationships and forging new social bonds would prevent the harmful effects of feelings of loneliness upon entering university, since loneliness has been associated with low levels of psychological well-being (Wei, Russell, & Zakalik, 2005). On the other hand, as suggested by Mattanah et al. (2010), loneliness may also interfere with concentration during academic tasks, thus affecting academic adjustment. This effect could also be counterbalanced by the effect of attachment provision on academic adjustment observed in the current study. Besides, in accordance with our results, opportunity for nurturance seems to play a significant role in promoting social adjustment. Being recognized by others as a source of help plausibly improves the sense of personal competence, thus increasing the likelihood of self-sufficiency and being more active when involved in university life (Gençöz & Özlale, 2004). Finally, reassurance of worth was the only provision that predicted all facets of adjustment, which could be due to a buffering effect on the threat to self-esteem posed by the challenges involved in transition to university (Hudd et al., 2000).

In accordance with Cutrona and Russell (1987), Weiss's provisions can be divided conceptually into two broad categories: assistance related and non-assistance related. The first category includes functions that are directly relevant to problem-solving in the context of stress, namely reliable alliance and guidance. The second group (attachment, social integration, reassurance of worth and opportunity for nurturance) includes provisions that do not contribute directly to problem solving, but would be particularly important for reducing feelings of loneliness. Consistent with previous studies (Cutrona et al., 1994; Elliott & Gramling, 1990; Hawkins et al., 1999) as well as with our results, non-assistance-related provisions tend to be more critical for a successful college experience than assistance-related provisions. This effect appears to depend on cognitive processes related to identity and feeling of belonging and intimacy in social relationships (Cutrona & Russell, 1987). In regard to assistance-related provisions, emerging adults who are becoming self-sufficient and independent (Arnett, 2007) could be reticent about recognising the need for provisions that may bring into question their own problem-solving strategies and resources.

The second contribution of the current study is related to second hypothesis that was partly confirmed. Our data indicate that the two dimensions of sense of support could operate differently on adjustment to university. The global perception of availability of support would favour personal-emotional adjustment and social adjustment in emerging adults. These findings are consistent with those of past studies that have shown that this dimension of support is closely related to optimism and social skills (Brock et al., 1998; Compas, Wagner, Slavin, & Vannatta, 1986). As Sarason, Levine, Basham, & Sarason (1983) pointed out, if students enrolling in higher education perceive that they can rely on support from other people when required, they will feel emotionally more secure and will be able to make satisfactory new relationships that will benefit their involvement in university social structures.

In the current study, satisfaction with support was not a significant predictor of the process of adaptation to university. Nevertheless, in view of the findings of the study conducted by Paramo et al. (2014), we cannot rule out the possible involvement of this dimension of perceived support. In the aforementioned study, satisfaction with support emerged as a predictor of academic adjustment in the linear regression models in which gender and university entrance grade were the first variables included. This may suggest that the effect of this variable occurs at an early stage of the academic trajectory and emerges when prior academic performance is taken into account.

With regard to the effect of sources of perceived acceptance (third hypothesis), as expected, and in accordance with previous studies (Katz & Somers, 2015; Lee & Goldstein, 2016), our results indicate that the ideas students generate

regarding the different support providers may have different effects on adjustment. Family acceptance contributed most to academic adjustment. Acceptance by friends was a significant variable explaining all dimensions of adaptation and was particularly important in personal-emotional adjustment, social adjustment and institutional attachment. At least two plausible explanations have been proposed that are consistent with these findings. First, Cutrona et al. (1994) proposed that family support would strengthen positive feelings of self-worth and academic competence, thus affecting the student's ability to successfully complete academic tasks. Second, Buote et al. (2007) suggested that as a source of support with shared interests and concerns, the peer group would contribute to the feeling of belonging and company, aspects that are closely related to the degree of psychological well-being, integration in university social structures and attachment to the institution.

Finally, consistent with the considerations reported by Brock et al. (1998), sense of acceptance may play a remarkable role in the adjustment process. Indeed, we found that perceived acceptance explains unique variance in all facets of adjustment. This personal characteristic may influence the interpersonal skills and self-sufficiency of individuals, thus favouring or hampering social interactions, and ultimately determining stress management and well-being in general. Moreover, the current study revealed that perceived acceptance mediates between perceived social support and the four facets of college adjustment (Forth hypothesis). The mediator effect of friends' acceptance both for the effects of perceived availability of support and support provisions were particularly evident, while family acceptance mediated specifically the effect of reassurance of worth on academic adjustment. These findings are consistent with those obtained by Brock et al. (1998), who observed that sense of acceptance mediated the relationship between perceived support and loneliness. The authors argued that feeling accepted might lead students to experience harmony between their desired social needs and perceived availability support, thus attenuating the feelings of loneliness and affecting emotional adjustment. According to the results of the current study, the effect of support on social, academic and institutional adjustment may also be at least partly due to the effect of acceptance on perceived support. Prominence of friends' acceptance could be attributed to the special need of relatedness on the part of youngsters confronting the separation from family and previous peer relationships (Crede & Niehorster, 2012).

As expected, different dimensions of perceived social support seems to be associated in different ways with each facet of university adjustment. Considering this variability would provide to counselors a more solid basis for developing effective intervention programmes aimed at improving adaptation to university in emerging adults and would thus decrease student attrition and academic failure rates. In particular, perceived acceptance is shown to be potentially important for improving the efficacy of intervention programmes aimed at helping students adapt to university life. It may also help identify students who are most likely to experience difficulty in adjusting to the first year of university life.

Despite the above-mentioned contributions of the current study, several limitations should be noted. First, we recruited a sample of first year college students from a single institution, which makes it difficult to apply the findings to other university populations in other parts of Spain or in other countries. Second, although self-report data is a reliable source of information, future studies should use qualitative methods, such as semi-structured interviews or focus groups, to increase our understanding of how Spanish emerging adults perceive their transition to the university. Finally, the study design does not provide longitudinal data that would help us to better understand how different systems of perceived social support contribute to the successful adaptation to university in both the short and long term. A longitudinal design would allow us to examine the possible differences in adjustment trajectories; and the development of undergraduates' perceived social support over time at university. Future research should also consider variables that might function as potential mediators, such as loneliness and self-esteem.

Acknowledgements

Funding: This research was financial supported by the Spanish Ministry of Science and Innovation (PSI2011-24535) and FPU Program of the Ministry of Education, Culture and Sports (AP2009-3529).

References

- Abdullah, M. C., Kong, L. L., & Talib, A. R. (2014). Perceived social support as predictor of university adjustment and academic achievement amongst first year undergraduates in a Malaysian public university. *Malaysian Journal of Learning and Instruction*, 11(1), 59-73.
- Arnett, J. J. (2000). Emerging adulthood. A theory from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066X.55.5.469
- Arnett, J. J. (2007). Socialization in Emerging Adulthood: From the Family to the Wider World, from Socialization to Self-Socialization. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp.208-231). New York, NY: Guilford Press.
- Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, 31(2), 179-189.

- Baker, R.W., & Siryk, B. (1989). *Student adaptation to college questionnaire (SACQ): Manual*. Los Angeles, CA: Western Psychological Services.
- Brock, D. M., Sarason, I. G., Sanghvi, H., & Gurung, R. A. (1998). The Perceived Acceptance Scale: Development and validation. *Journal of Social and Personal Relationships, 15*(1), 5-21. doi: 10.1177/0265407598151001
- Buote, V. M., Pancer, S. M., Pratt, M. W., Adams, G. R., Birnie-Lefcovitch, S., Polive, J., & Wintre, G. M. (2007). The importance of friends: Friendship and adjustment among 1st-year university students. *Journal of Adolescent Research, 22*(6), 665-689. doi: 10.1177/0743558407306344
- Chavoshi, S., Wintre, M.G., Dentakos, S., & Wright, L. (2017). A developmental sequence model to university adjustment of international undergraduate students. *Journal of International Students, 7*(3), 703-727.
- Compas, B.E., Wagner, B.M., Slavin, L.A., & Vannatta, K. (1986). A prospective study of life events, social support, and psychological symptomatology during the transition from high school to college. *American Journal of Community Psychology, 14*(3), 241-257. doi: 10.1007/BF00911173
- Crede, M., & Niehorster, S. (2012). Adjustment to college as measured by the student adaptation to college questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review, 24*(1), 133-165. doi: 10.1007/s10648-011-9184-5
- Cutrona, C. E., Cole, V., Colangelo, N., Assouline, S. G., & Russell, D. W. (1994). Perceived parental social support and academic achievement: An attachment theory perspective. *Journal of Personality and Social Psychology, 66*(2), 369-378. doi: 10.1037/0022-3514.66.2.369
- Cutrona, C.E., & Russell, D.W. (1987). The provisions of social support and adaptation to stress. In W. H. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol.1, pp. 37-67). Greenwich, England: JAI Press.
- Elliott, T. R., & Gramling, S. E. (1990). Personal assertiveness and the effects of social support among college students. *Journal of Counseling Psychology, 37*(4), 427-436. doi: 10.1037/0022-0167.37.4.427
- Friedlander, L.J., Reid, G.J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development, 48*(3), 259-274. doi: 10.1353/csd.2007.0024
- Gencoz, T., & Ozlale, Y. (2004). Direct and indirect effects of social support on psychological well-being. *Social Behavior and Personality, 32*(5), 449-458. doi:10.2224/sbp.2004.32.5.449
- Hawkins, W. E., Tan, P. P., Hawkins, M. J., Smith, E., & Ryan, E. (1999). Depressive symptomatology and specificity of social support. *Psychological Reports, 84*(3), 1180-1186. doi: 10.2466/pr0.1999.84.3c.1180
- Hayes, A.F. (2013). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Hudd, S., Dumlao, J., Erdmann-Sager, D., Murray, D., Phan, E., Soukas, N., & Yokozuka, N. (2000). Stress at college: Effects on health habits, health status and self-esteem. *College Student Journal, 34*(2), 217-227.
- Katz, S., & Somers, C. L. (2015). Individual and environmental predictors of college adjustment: Prevention and Intervention. *Current Psychology, 1-10*. doi: 10.1007/s12144-015-9384-0
- Lakey, B., & Cohen, S. (2000). Social support theory and measurement. In S. Cohen, L.G. Underwood & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 29-52). New York, NY: Oxford University Press.
- Lanctot, J., & Poulin, F. (2018). Emerging adulthood features and adjustment: A person-centered approach. *Emerging Adulthood, 6*(2), 91-103. Doi: 10.1177/2167696817706024
- Lee, C. Y., & Goldstein, S. E. (2016). Loneliness, stress, and social support in young adulthood: Does the source of support matter? *Journal of Youth and Adolescence, 45*(3), 568-580.
- Lidy, K. M., & Kahn, J. H. (2006). Personality as a predictor of first-semester adjustment to college: The mediational role of perceived social support. *Journal of College Counseling, 9*(2), 123-134. doi: 10.1002/j.2161-1882.2006.tb00099.x
- Lubker, J. R., & Etzel, E. F. (2007). College adjustment experiences of first-year students: Disengaged athletes, nonathletes, and current varsity athletes. *Journal of Student Affairs Research and Practice, 44*(3), 457-480.
- Martinez-Lopez, Z., Paramo, M. F., Guisande, M. A., Tinajero, C., Almeida, L. S., & Rodriguez, M. S. (2014). Apoyo social en universitarios españoles de primer año: Propiedades psicométricas del Social Support Questionnaire-Short Form (SSQ6) y el Social Provisions Scale (SPS). *Revista Latinoamericana de Psicología, 46*(1), 102-110.

- Mattanah, J. F., Ayers, J. F., Brand, B. L., Brooks, L. J., Quimby, J. L., & McNary, S. W. (2010). A social support intervention to ease the college transition: Exploring main effects and moderators. *Journal of College Student Development, 51*(1), 93-108.
- Paramo, M. F., Martinez, Z., Tinajero, C., & Rodriguez, M. S. (2014). The impact of perceived social support in first-year Spanish college students adjustment. *Educational Alternatives, 12*, 289-300.
- Pinheiro, M., & Ferreira, J. (2005). A percepção de suporte social da família e dos amigos como elementos facilitadores da transição para o ensino superior. In B.D. Silva & L.S. Almeida (Coords.), *VIII Congresso Galaico Português de Psicopedagogia* (pp. 467-485). Braga, Portugal: Universidade do Minho- CIED.
- Robbins, S. B., Lese, K. P., & Herrick, S. M. (1993). Interactions between goal instability and social support on college freshman adjustment. *Journal of Counseling and Development, 71*(3), 343-348. doi: 10.1002/j.1556-6676.1993.tb02224.x
- Rodriguez, M. S., Martinez, Z., Tinajero, C., Guisande, M. A., & Paramo, M. F. (2012). Adaptacion española de la Escala de Aceptacion Percibida (PAS) en estudiantes universitarios. *Psicothema, 24*(3), 483-486.
- Rodriguez, M. S., Tinajero, C., Guisande, M. A., & Paramo, M. F. (2012). The Student Adaptation to College Questionnaire SACQ for use with Spanish students. *Psychological Reports: Measures & Statistics, 111*(2), 624-640. doi:10.2466/08.10.20.PR0.111.5.624-640
- Rodriguez, M. S., Tinajero, C., & Paramo, M. F. (2017). Pre-entry characteristics, perceived social support, adjustment and academic achievement in first-year Spanish university students: A path model. *The Journal of Psychology, 151*(8), 722-738. doi: 10.1080/00223980.2017.1372351
- Salami, S. O. (2011). Psychological predictors of adjustment among first year college of education students US-China. *Education Review, 8*(2), 239-248.
- Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology, 44*(1), 127-139. doi: 10.1037/0022-3514.44.1.127
- Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships, 4*(4), 497-510. doi: 10.1177/0265407587044007
- Sarason, I.G., Pierce, G.R., & Sarason, B.R. (1990). Social support and interactional processes: A triadic hypothesis. *Journal of Social and Personal Relationships, 7*(4), 495-506. doi: 10.1177/0265407590074006
- Tao, S., Dong, Q., Pratt, M.W., Hunsberger, B., & Pancer, S.M. (2000). Social support: Relations to coping and adjustment during the transition to university in the people's Republic of China. *Journal of Adolescent Research, 15*(1), 123-144. doi: 10.1177/0743558400151007
- Tinajero, C., Martinez-Lopez, Z., Rodriguez, M. S., Guisande, M. A., & Paramo, M. F. (2015). Gender and socioeconomic status differences in university students' perception of social support. *European Journal of Psychology of Education, 30*(2), 227-244. doi: 10.1007/s10212-014-0234-5
- Wei, M., Russell, D. W., & Zakalik, R. A. (2005). Adult attachment, social self-efficacy, self-disclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counseling Psychology, 52*(4), 602. doi: 10.1037/0022-0167.52.4.602
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17-26). Englewood Cliffs, NJ: Prentice-Hall.
- Wintre, M. G., & Yaffe, M. (2000). First-year students' adjustment to university life as a function of relationships with parents. *Journal of Adolescent Research, 15*(1), 9-37. doi: 10.1177/0743558400151002