

## PERSONAL AND SITUATIONAL DETERMINANTS OF RELATIONSHIP-SPECIFIC PERCEPTIONS OF SOCIAL SUPPORT

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This study explores personal (self-esteem, perceived stress, and depressive mood) and situational (undesirable life events) variables as determinants of relationship-specific perceptions of social support. Structural equation analyses from two-wave panel data ( $N = 583$ ) of adult participants from a community-based urban sample revealed that, after controlling for initial levels of perceived social support, psychological characteristics (high levels of stress and depression, and low levels of self-esteem) and situational determinants (number of undesirable life events) were both negatively related to perceived social support from specific significant relationships over time. Multigroup analyses revealed that these processes generalized across groups of gender, income, and marital status (single vs. married). Implications of these findings are discussed.

Social support research tradition has focused primarily on the protective function of social support against the negative effects of stressful life events and/or on the positive effects of social support on psychological well-being (see

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reviews by Cohen & Wills, 1985; Henderson, 1992; House, Umberson & Landis, 1988; Lin & Peek, 1999; Schwarzer & Leppin, 1992; Turner & Turner, 1999). Social support, however measured, has been analyzed mostly as an independent or moderating variable that may affect psychological well-being or the relationship between stress and well-being (House et al.). However, social support has received less attention as a dependent variable.

Over 15 years ago, House et al. (1988), in an influential review, claimed that research on the effects of social relationships on health had paid almost no attention to social integration, networks or supports as dependent variables. For House "the determinants of these, as well as their consequences, are crucial to understanding the theoretical and causal status of social relationships in relation to health" (p. 308). Also, Newcomb (1990a) considered that determining the relationship between social support and psychological functioning is equally as important as understanding how that support came to be available. More recently, Barrera (2000) noted that what had been a totally neglected area of research had finally received serious attention. As Barrera put it, if research shows that qualitative measures of social support such as satisfaction and perceived availability have a stronger correlation with psychological adjustment than do other measures (e.g., Barrera, 1986; Cohen & Wills, 1985; Cutrona, 1986), the question is obvious: "What are the determinants of perceived support?" (p. 226).

Approaching this question leads inevitably to the debate about the nature of perceived social support: Does social support reflect primarily a characteristic of the perceiver or is it the result of environmental or situational influences (Barrera, 2000; Pierce, Lakey, Sarason, Sarason, & Joseph, 1997)? So far, the weight of the argument lies on the side of personal correlates of social support, with a substantial number of studies finding associations between social support and a wide array of personal characteristics such as extraversion, neuroticism, self-esteem, trait anxiety, locus of control, hardiness, or network orientation (see Pierce et al., 1997, for a review). In contrast, research on situational and environmental correlates of social support has been somewhat more scant (Barrera, 2000). Nonetheless, for Pierce et al., constructs such as perceived support represent the blending of personal and situational constructs. For these authors, the field needs to develop more complex models that seek to account for both personal and environmental influences. Similarly, Vaux (1990) proposed that support processes take place within a social ecology and are shaped by characteristics of the person (e.g., personality and distress) and the social context (e.g., stressors).

Studies examining determinants of perceived social support should acknowledge the importance of both personal and situational variables and their reciprocal nature by analyzing how both types of variables work together. Also, studying determinants of perceived support poses to the researcher other

important issues. Perceived support as it reflects personality or other personal influences may show stability over time. At the same time, perceived support as it reflects other situational influences should not remain fixed over time (Pierce et al., 1997). In this respect, prospective studies are needed to better understand processes determining perceived support over time. Also studies showing evidence of correlations between personal or situational variables and perceived support cannot clarify whether this relationship can be defined in terms of outcomes or predictors (e.g., is positive self-esteem a consequence of high levels of perceived support or are high levels of perceived support a consequence of high self-esteem?). Except for a few studies (e.g., Newcomb, 1990a; Norris & Kaniasty, 1996), evidence of personal or situational correlates of perceived support is based on cross-sectional studies.

Finally, research on the determinants of perceived social support should take into account differences between global and relationship-specific perceptions of social support. Pierce, Sarason, and Sarason (1990, 1991; Sarason, Pierce, & Sarason, 1990) have proposed that people have, in addition to general perceptions of available support, expectations about the availability of social support from specific significant relationships. Global perceptions of support may represent a stable personality characteristic encompassing expectations about the supportiveness of the social environment that may be rooted in early childhood relationships. In contrast, relationship-specific perceptions of support are thought to be the result of support-relevant experiences with particular relationships. For Pierce, Sarason, Sarason, Joseph and Henderson (1996), general support expectations may have greater impact on the appraisal of potentially supportive individuals we do not know well; whereas relationship-specific expectations may be more important when interpreting supportive transactions in the context of close relationships. Each class of expectations for social support is expected to contribute uniquely to personal adjustment and, as research findings suggest, both constructs appear to be to a considerable degree, independent of one another (Davis, Morris, & Kraus, 1998; Pierce, Sarason, & Sarason, 1992). As Pierce et al. suggested, a promising pathway in investigating social support is the study of social support in the context of specific, close relationships, since the manner in which potentially supportive efforts are appraised may reflect relationship-specific, rather than generalized expectations for support. According to Pierce et al., because social support is a product of social interaction, it is necessary to investigate social support (both its consequences and its antecedents) within the context of close or significant interpersonal relationships – those in which a person is likely to have developed elaborate expectations for the behavior of a specific other. For Procidano and Smith (1997), another advantage of assessing relationship-specific support is its

potential for clearer understanding of support experiences in the context of different types of life transitions.

### **THE PRESENT STUDY**

This study aimed to evaluate personal and situational variables, as well as previous levels of perceived support, as determinants of relationship-specific perceptions of social support over time. As personal determinants, measures of psychological well-being (self-esteem, perceived stress, and depression) were used. Self-esteem has been repeatedly associated with perceived social support (e.g., Brown, Andrews, Harris, Adler, & Bridge, 1986; Newcomb, 1990a; Newcomb & Keefe, 1997; Sarason, Sarason, & Shearin, 1986). In this respect, Cutrona, Suhr, and MacFarlane (1990) suggested that self-esteem may lead to idiosyncratic interpretations of intended support that may promote or prevent the development of a secure psychological sense of support. Hobfoll, Nadler, and Leiberman (1986) propose that people who enjoy a positive view of self are also likely to be satisfied with their relationships (Hansson, Jones, & Carpenter, 1984; Jourard, 1971; Rosenberg, 1965). Newcomb and Keefe (1997) also considered that although self-esteem has been emphasized primarily as a result of social support, positive self-regard may help to strengthen existing attachment relationships. Also, distress (depression, perceived stress) may play an important role in determining levels of perceived social support. For instance, psychological distress may disrupt perceptions of availability of support or may affect the responsiveness of the supportive network (Newcomb, 1990a; Vaux, 1990). Also Roberts and Gotlib (1997) called attention to the possibility that rather than inadequate social support simply causing depression, depression would lead to diminished support.

As situational determinants of perceived social support a measure of stressful life events was used. Stressful life events are a situational variable that can influence the appraisal of support (Keinan, 1997). Although the stress buffer model assumes independence, social support is not always independent of stress, and therefore can be influenced by the stressor (Barrera, 1988; Depue & Monroe, 1986; Eckenrode & Wethington, 1990; Rook & Dooley, 1985; Vaux, 1988). Stressful life events are important situational factors that may either mobilize or diminish support resources, as support mobilization or support deterioration models suggest (Barrera, 1988; Ensel & Lin, 1991; Hobfoll, 1988; Lin, 1986; Wheaton, 1985). According to Norris and Kaniasty's (1996) analysis, the perceived aspects of social support are particularly vulnerable to postevent deterioration, and some events can undermine the victim's sense of being supported.

This study presented a self-report instrument to assess relationship-specific perceptions of social support which takes a different approach from other

measures developed to this end (e.g., PSS, Perceived Social Support, Procidano & Heller, 1983; QRI, Quality of Relationships Inventory, Pierce et al., 1991; SPC, Social Provisions Checklist, Davis et al., 1998). Measures of relationship-specific perceptions of support tend to differ in terms of their appraisal of investigator-specified or respondent-specified support sources (Procidano & Smith, 1997). While, in the first case, instruments assesses perceived availability of support (types of support or other dimensions of relationships) from specific domains (parents, spouse, family, friends, and so on), in the second case, the instrument first asks the respondents to identify those persons who are important and supportive, and then inquires about support perception. Two potential problems can be identified in the first approach. First, when relying on investigatorspecified domains or sources of support, the relationships that are both unique and salient, and that reflect the recipient's unique social adaptation may systematically be neglected (Procidano & Smith, 1997). And second, as Davis et al. (1998) recognized, a researcher definition of a specific social domain (e.g., family defined as mother, father, and siblings) can either include too few (excluding important sources of support) or too many sources (including in the same domain sources of different importance to the respondent). By identifying first the core network of support figures, that may or may not belong to different domains, we avoid asking respondents to think in terms of social domains defined by the researcher (avoiding at the same time thinking in too narrow or too extensive terms).

Finally, the use of a community-based urban sample in this study tries to address an identified limitation in this research area. As Davis et al. (1998) have argued, the use of convenience samples (college students), does place limits on the generalizability of findings, especially to groups that differ markedly in age and life experience, and it seems plausible that the magnitude of the association between support and other measures might vary across populations.

Drawing from these ideas, this research was conducted to evaluate the roles of personal (self-esteem, depression and perceived stress), and situational (undesirable life events) determinants on relationship-specific perceptions of social support over time in an urban community-based sample of adult participants.

## METHOD

### PARTICIPANTS

Respondents in this study were drawn from an urban community-based sample, and took part in a two-wave panel study of social-support processes. At Wave 1, respondents 18 years old and older were identified in a three-stage sample designed to yield equal representation of gender and age in four groups

of the life cycle -18-25, 26-49, 50-64 and more than 64 years. Firstly, five neighborhoods representing a cross-section of the city's residents in terms of socioeconomic status were selected. Secondly, participants identified by in-person recruitment (door-to-door canvassing) were contacted and asked to collaborate in the study. Limits were placed on the number of interviews that could be obtained in any one block, and only one interview was allowed per household (see Gracia & Herrero, 2004, for a detailed description).

Thirdly, trained personnel conducted interviews in the respondents' homes. The sample of 1051 respondents obtained in the first wave represented an overall completion rate of 78%. The most common reason for refusal was simply disinterest. In follow-up interviews that took place after six months, 780 of the original sample were reinterviewed.

No significant differences were found at wave 1 for age, gender, income or marital status between those who did and those who did not respond at wave 2. Of the 780 respondents interviewed in the follow-up, 197 were excluded from the analyses because they failed to provide valid data for one or more variables, yielding a final sample of 583 respondents.

## MEASURES

All variables were scored so that a high score represents higher levels of the construct. Back-translation was used for original scales and a high degree of consensus between the English and Spanish forms was found (Gracia & Herrero, 2004). Correlations among observed variables are presented in Table 1.

### PERSONAL DETERMINANTS

**Perceived Stress** The 14-items version of the Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) was used to measure the degree to which respondents appraised situations as stressful in their life (e.g., "In the last month, how often have you felt confident about your ability to handle your personal problems?"). Items were scored on a 5-point scale from (1) *never* to (5) *very often*. Coefficient alpha for the perceived stress scale was .83.

**Depression** The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was used to evaluate the presence of depressive symptomatology. Responses for the 20 items were rated on a four-point scale from (0) *rarely or none of the time (less than once a week)* to (3) *most or all of the time (5-7 days a week)*. Coefficient alpha was .88.

**Self-esteem** The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to assess global self-esteem. The scale is a 10-item Likert scale with items answered on a four-point scale from (1) *strongly agree* to (4) *strongly disagree*. Coefficient alpha for the self-esteem scale was .78. All personal determinants were measured at time 1.

**TABLE 1**  
**MEANS, STANDARD DEVIATIONS, AND ZERO-ORDER CORRELATIONS OF OBSERVED VARIABLES**

Variable	<i>M</i>	<i>SD</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1. Perceived Stress	36.58	7.28	--													
2. Depression	13.08	8.65	.71***	--												
3. Self-esteem	25.88	3.87	-.60***	-.51***	--											
4. Undesirable life events	1.50	1.63	.23***	.25***	-.15***	--										
5. Emotional support T1	4.03	0.85	-.13*	-.13**	.14**	-.13**	---									
6. Instrumental Support T1	4.28	0.82	-.06	-.08	.07	-.10*	.70***	---								
7. Guidance support T1	3.85	0.86	-.11**	-.10*	.11**	-.14**	.80***	.68***	---							
8. Emotional support T2	4.13	0.79	-.17***	-.20**	.22***	-.21***	.45***	.30***	.41***	---						
9. Instrumental Support T2	4.35	0.84	-.09*	-.10*	.12**	-.14**	.30***	.43***	.31***	.60***	---					
10. Guidance support T2	3.92	0.86	-.12**	-.15***	.17***	-.20***	.35***	.28***	.44***	.75***	.59***	---				
11. Gender <sup>a</sup>	1.49	0.50	.26***	.22***	-.18***	-.04	.02	-.00	.03	.11**	.11**	.09*	---			
12. Age	37.23	15.74	-.12**	-.01	-.05	-.13**	.10*	-.00	.16***	.18***	.09*	.21***	-.03	---		
13. Income <sup>b</sup>	2.53	1.21	-.13**	-.09*	.12**	-.06	.02	-.01	-.04	.00	-.02	-.03	-.04	.05	---	
14. Marital Status <sup>c</sup>	1.52	0.49	-.07	-.00	.03	-.12**	.15***	.04	.16***	.22***	.13**	.19***	.00	.67***	.23***	---

<sup>a</sup> 1 = male, 2 = female. <sup>b</sup> 1 = less than 6000 euros/year, 6 = more than 32000 euros/year. <sup>c</sup> 1 = single, 2 = married.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed test).

**SITUATIONAL DETERMINANTS**

**Undesirable Life Events** A list of 33 undesirable life events selected from a 118 event list used by Lin, Dean and Ensel (1986) in the Albany Health Survey was used. These 33 stressful life events represented those events rated as undesirable by at least 80% of respondents in the study of Lin et al. Conflicts and problems in the last six months in areas such as work/school, home, health, community, finances, and legal were covered in this checklist. Internal consistency analysis for event lists was not appropriate “since a high internal consistency suggests that the questionnaire includes events that are nonindependent, an outcome that is undesirable if the measure is designed to assess accumulation of relatively independent life experiences” (Cohen, 1988; p. 16). Situational determinants were measured at Time 1.

**DEPENDENT VARIABLES**

**Perceived Social Support** Participants completed the Relationship-specific Social Support questionnaire (RSS) a new measure designed to assess the availability of three support provisions from specific relationships in the support network. The RSS consists of a list of six items representing three support provisions (emotional, guidance, and instrumental support) for a list up to 12 significant others. Respondents are asked to list “those persons who are important to you. Please consider only those persons who really support you in a truly personal way”.

Responses were rated on a 5-point scale from (1) *never* to (5) *almost always* that covered the following dimensions of perceived social support: emotional -2 items- (e.g. “Could you freely express and share your emotions with this person?”); instrumental -2 items- (e. g. “If you were sick or needed to be taken to the doctor, would this person be of any help?” ); and guidance -2 items- (e.g. “Would this person be of any help if you should have to make an important decision?”). Internal consistency for the scale was  $\alpha = .76$ . Principal components analysis with varimax rotation was carried out on the perceived social-support questionnaire wave 1 data. In this analysis, three factors with eigenvalues greater than 1.0 emerged, accounting for 60% of the variance. Each factor clearly reflected one of the three hypothesized functions of support (emotional,  $\alpha = .88$ ; instrumental,  $\alpha = .88$ ; and guidance,  $\alpha = .93$  ). All of the loadings were in excess of  $|.50|$  and no cross-loadings greater than  $|.20|$  were observed.

This questionnaire was administered at both time 1 and time 2 to obtain two measures of the outcome or dependent variables. As Newcomb recommends when panel data are used (1990b), dependent variables must be assessed concurrently with the predictor, and also at some point in the future. This criterion controls for the within-time association between cause and effect, by

including a correlation between these at the baseline assessment. Secondly, it guarantees that if a significant effect or influence is found across the two waves, it will actually represent a change in the outcome or consequence construct. This is operationalized by including a stability path between the same construct assessed at two times. Compared to their wave 1 data, the means of emotional, instrumental, and guidance perceived support in wave 2 were significantly higher,  $t(582) < -3.08, p < .01$ , indicative that those with higher scores in social support measures tended to remain in the sample at wave 2.

### CONTROL VARIABLES

Gender, age, income, and marital status were sociodemographic variables used as control variables in this study. Ethnicity was not included since participants in this study belonged to the same ethnic and cultural background. Age was measured in years ( $M = 38.89, SD = 16.52$ ). Family income was measured on a 6-point scale ( $M = 2.50, SD = 1.21$ ). The average income for the entire sample was 12,000–18,000 euros per year. Gender (male=1 and female =2) was distributed almost equally in the sample (51.5% male, 48.5% female) as well as marital status (49.3% single, 50.7% married). The age of the single participants ( $M = 26.12, SD = 7.96$ ) was significantly lower than the age of the married participants ( $M = 47.21, SD = 14.24$ )  $-F(1, 581) = 472.75, p < .001$ . In fact, 90% of single participants were younger than 34 years old and almost 75% of married participants were older than 35 years.

### STRUCTURAL EQUATION ANALYSES

**Model specification.** We used the EQS (Bentler, 1995) structural equation program to estimate the effects of determinants on perceived social support. The predicting latent variables in the model included personal determinants (perceived stress, depression, and self-esteem), and situational determinants (undesirable life events). Perceived social support measures at T2 (emotional, instrumental, and guidance support) configured the final dependent latent variable. We also included the perceived social support latent variable at T1 in the model as a predictor (emotional, instrumental, and guidance support measured at T1). With this strategy, previous levels of perceived social support at T1 control the effects of T1 determinants on T2 perceived social support.

The substantive relationships were tested after controlling for the potential confounding influence of the four sociodemographic control variables (age, gender, income, and marital status). Covariates were added to the model as exogenous variables that were allowed to correlate among themselves and to predict each of the 10 observed variables of the study. Equality constraints were imposed on corresponding factor loadings across the two waves for the perceived social support latent variables at T1 and T2. This forced the latent variables to be

invariant across time (2 constraints). Also, measurement errors for the same-measured manifest variables (emotional, instrumental, and guidance support both at T1 and T2) were allowed to correlate across time. Estimating these covariances helped account for systematic error variance (Bollen, 1989).

**Model estimation.** Maximum Likelihood estimator and corrected  $\chi^2$  were used for the calculation of robust CFI fit index, standard errors, and statistical significance of the parameters. For correcting departure from multinormality, the Satorra-Bentler corrected  $\chi^2$  was used. This statistic gives robust estimates with large samples ( $N > 500$ ) even when departure from multinormality is severe (Chou & Bentler, 1995; Curran, West & Finch, 1996).

### GROUP COMPARISONS

To examine whether the magnitude or direction of the hypothesized parameter estimates were invariant across gender, marital status, and income, we specified two simultaneous between-group models for each one of these sociodemographic variables. Gender multigroup analyses were performed for males ( $n = 293$ ) and females ( $n = 290$ ); marital status analyses were carried out for single ( $n = 276$ ) and married participants ( $n = 307$ ); finally, we split participants into groups of income, lower ( $n = 325$ ) and higher ( $n = 258$ ) than 12000 euros.

## RESULTS

The structural model fitted the data well: (robust)  $\chi^2(31, n = 583) = 40.83, p = .11$ , CFI = 0.99, Robust CFI = 0.99, GFI = 0.99, AGFI = 0.96, SRMR = 0.020; RMSEA = .023 (90% confidence interval 0.000, 0.041). In Figure 1 we present the parameter estimates for the measurement and the structural part of the model.

### PARAMETER ESTIMATES

As shown in Figure 1, the relationship between latent variables and their respective manifest indicators were from moderate to large, and all statistically significant ( $p < .001$ ). According to these results, the measurement part of the model was largely confirmed as indicated by the standardized factor loadings greater than  $|.64|$ . Also, because equality constraints were imposed on corresponding factor loadings across the two waves, a chi-square difference test was used to compare this model with a less restricted model that imposed no factor loadings constraints. This comparison revealed that the chi-square value for the restricted model was not significantly larger than the chi-square for the less restricted model  $-\Delta\chi^2(2, N = 583) = 2.04, ns$ . This supported the invariance across the two waves of the perceived social support latent variables.

Regarding the relationships of covariates to manifest variables, gender was related to variables representing personal determinants and to perceived social

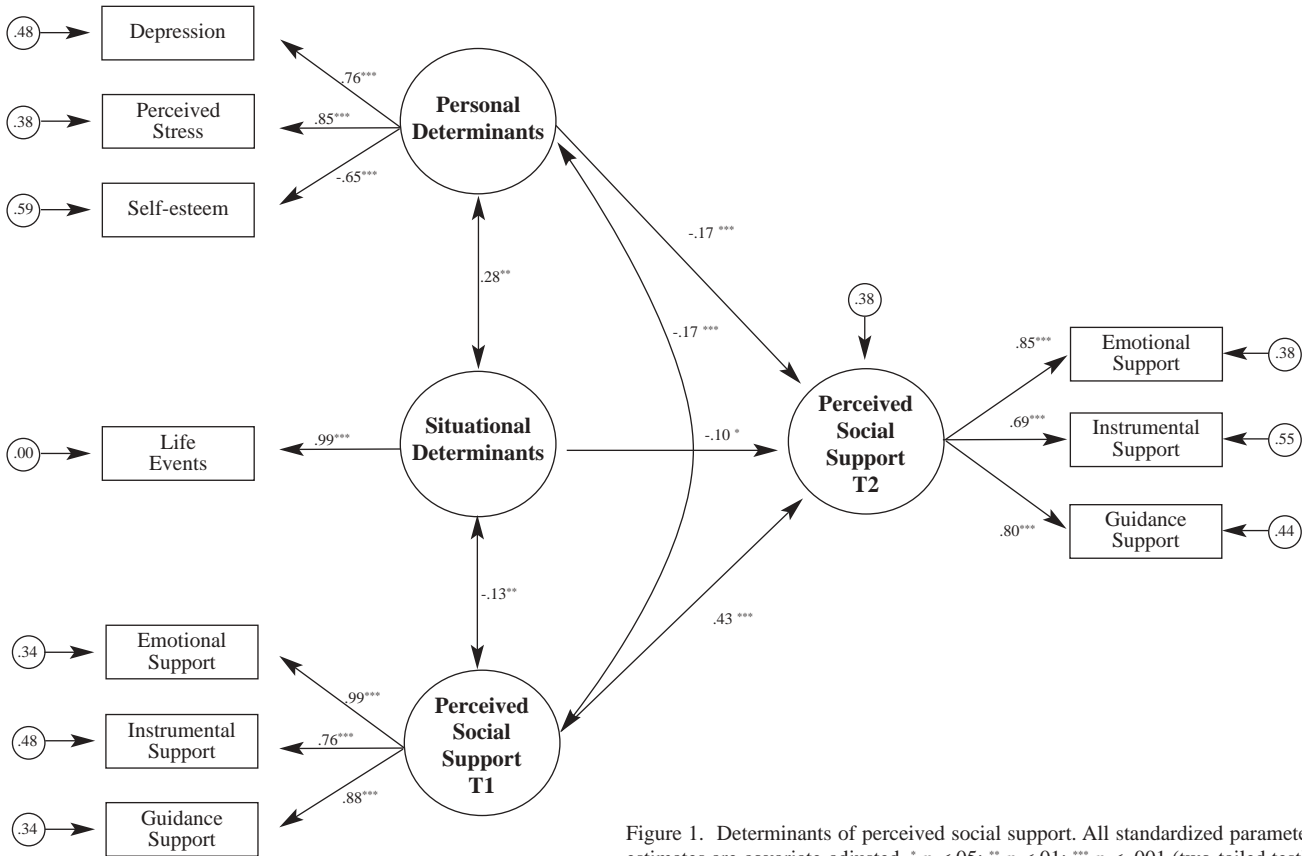


Figure 1. Determinants of perceived social support. All standardized parameter estimates are covariate-adjusted. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (two-tailed test).

support measures at T2. Thus, females showed higher levels of both depressed mood and perceived stress as well as lower levels of self-esteem. Also, females tended to report higher levels of emotional, instrumental, and guidance support than did males, although this tendency was observed for measures only at T2. Age was related to lower levels of perceived stress. Income was related to lower levels of perceived stress and depression, and higher levels of self-esteem. Single participants reported lower levels of emotional, instrumental and guidance support both at T1 and T2. Compared to the correlations among manifest variables in Table 1, most of the previously observed influences of age on the variables of the model were due to the fact that levels of age were strongly related to marital status.

**Path coefficients.** The standardized, covariate-adjusted path estimates for the structural model are shown in Figure 1. Correlations among measurement errors are not shown but all were positive and significant ( $.29 > r$ 's  $< .42, p < .001$ ). The stability coefficient of perceived social support was positive and highly significant ( $p < .001$ ). The remaining paths from determinants to the final dependent latent variable can be interpreted as the unique contribution of each determinant on the final dependent latent variable once the effect of all other determinants, the covariates and the previous levels of perceived social support at T1 have been taken into account. This is important to observe because all the determinants were significantly associated with levels of perceived social support at T1. Thus, higher levels of perceived social support at T1 were associated with lower levels of depression and perceived stress as well as higher levels of self-esteem ( $r = -.17, p < .001$ ), and a lower number of undesirable life events ( $r = -.13, p < .01$ ). Also, correlations between determinants were significant ( $r = .28, p < .001$ ). Given these significant relationships among T1 latent constructs, the inclusion of the perceived social support T1 latent variable as a predictor guaranteed that the relationships observed between predictors and the dependent latent variable at T2 was not affected by the relationships observed among them at T1.

Regarding the substantive relationships of determinants with perceived social support at T2, we found support for all the hypothesized relationships in the model. Personal determinants, characterized by low levels of self-esteem and high levels of depression and perceived stress, were deterrents of levels of perceived social support after six months ( $\beta = -.17, p < .001$ ). The same type of relationship was found for the situational determinants, whose effect on perceived social support after six months was negative ( $\beta = -.10, p < .05$ ).

## GROUP COMPARISONS

To evaluate whether the findings based on the full sample were invariant across gender, income, and marital status, unconstrained and constrained simultaneous

between-group analyses were performed. For marital status and gender, non-significant overall chi-square differences were found:  $\Delta\chi^2(6, N = 583) < 7.96$ , ns. For income, the comparison revealed that the unconstrained model would marginally improve model fit:  $\Delta\chi^2(6, N = 583) = 14.80$ ,  $p < .05$ . The Lagrange Multiplier tests revealed that 1 constraint ( $p < .05$ ) out of 6, if released, would contribute to a reduction in chi-square. Examination of this freely estimated parameter revealed that the unstandardized stability coefficient of perceived social support was larger for participants with income below 12000 euros/year, although these parameter estimates were positive and largely significant ( $p < .001$ ) in both groups. Hence, the cross-group analyses indicated that the results generalized across gender and marital status. In the case of family income, perceived social support measures were more stable across time among low-income participants.

## DISCUSSION

Results from the study suggest that personal characteristics of the perceiver (self-esteem, perceived stress, and depressive mood), and situational factors (undesirable life events), play important roles in relationship-specific perceptions of social support. These results indicate that perceived support from specific relationships is not solely a trait-like condition (a relatively stable relationship schema) that remains fixed over time (Newcomb, 1990a; Norris & Kaniasty, 1996; Pierce et al., 1992), or only the result of past experiences of perceived support from a specific set of significant relationships. Our results show that part of the variation in a person's relationship-specific perceptions of social support is due to both personal and situational factors.

Relationships between variables at T1 showed a pattern in which participants' psychological characteristics (high levels of stress and depression, and low levels of self-esteem) and situational determinants (number of undesirable life events) were both related to lower levels of perceived social support. However, no causal relations can be established at T1. When analysing the effects of personal and situational determinants on perceived social support after 6 months, the same pattern of relationships emerged. As these relationships were found after controlling for initial levels of perceived social support, results indicate that actual perceptions of social support from specific close relationships are linked not only to past perceptions of support from those relationships, but also to characteristics of the individual and to the occurrence of undesirable life events.

Psychological characteristics such as self-esteem and distress have been consistently linked to perceptions of support, although empirical tests of this relationship over time have been more scarce (Furukawa & Shibayama, 1997; Green & Rodgers, 2001; Newcomb, 1990a; Norris & Kaniasty, 1996). The

present study has found strong empirical evidence for a personal latent factor in the measurement model, suggesting that self-esteem, depression, and perceived stress shared common variance in explaining perceptions of support over time. This finding is consistent with research indicating a relationship between negative affect and perceived support (Newcomb, 1990a; Vaux, 1990), and with theoretical models that link perceptions of support with cognitions about the self rather than to the actual social environment (Lakey & Cassady, 1990; Lakey, McCabe, Fisicaro, & Drew, 1996; Sarason et al., 1990).

The unique contribution of situational determinants to social support perceptions over time found in this study also indicates that undesirable life events influence perceptions of support availability regardless of previous levels of perceived support and levels of personal determinants. Stressors such as unemployment, marital difficulties, or illness, appear to reduce confidence in obtaining support, regardless of previous perceptions of available support from the same set of significant relationships. These findings are consistent with support deterioration models (Barrera, 1988; Hobfoll, 1988; Lin, 1986; Wheaton, 1985), and research documenting the potential eroding impact of stress on perceived social support (e.g., Ensel & Lin, 1991; Lepore, Evans, & Schneider, 1991; Norris & Kaniasty, 1996; Quittner, Glueckauf, & Jackson, 1990). It appears that as situational demands increase, downward corrections are made on the perceived availability of support from specific relationships. A possible explanation of these corrections would be that previous perceptions of available support would be tested against real needs derived from real life events, resulting in a negative balance. Alternatively, Tesser and Beach (1998) consider that this correction can be accounted for by the increase of negative mood with increasing negative life events, which can have as a result the withdrawal of close others, worsening the relationship (a reduction in perceived support over time would be an indicator of this worsening relationship). Another possible explanation of these negative effects of life events on perceived support, suggested by Kruglanski (personal communication to Tesser & Beach, 1998, p. 49), is the possibility that negative life events increase the motivation to attribute one's suffering to a seemingly controllable cause, perhaps to one's relationship partner, therefore reducing previous perceptions of that relationship as a significant source of support. Notwithstanding these explanations, the deterioration of perceived support as a result of life events has important implications. For example, as Norris and Kaniasty (1996) noted, deterioration of perceived support after life events may explain why the stress-buffering properties of perceived support do not often operate in the contexts of disasters or other major stressors. As these authors put it; "After all, in the extreme case, if support is no longer expected, how could it protect against the impact of the stressor" (p. 508).

While these findings sustain the view that relationship-specific perceptions of social support are conditioned by both personal and situational determinants, multigroup analyses suggested that these processes are generalized across groups of gender, income, and marital status (single *vs.* married). In this sense, although the levels of the variables in the study were different in some of the sociodemographic variables, these direct effects did not translate into moderation effects. Thus, while women in this study reported higher levels of distress (perceived stress and depression), lower levels of self-esteem, and higher levels of social support (at T2) than did men, the effect of personal and situational determinants on social support at T2 was equivalent for men and women. Also, given the strong relationship between age and marital status, most of the effect of age was accounted for by marital status and although single participants showed lower levels of social support at both T1 and T2, the effects of determinants on social support were also equivalent for single and married participants. Finally, although the low-income participants in this study were those who reported higher levels of depression, perceived stress, and lower levels of self-esteem, these personal characteristics were related to perceived social support over time with an equivalent magnitude to those participants with higher income. The only minor difference encountered across groups of income was the relatively larger stability coefficient of social support in the low-income group.

The effects of both negative life events and measures of psychological well-being on perceptions of social support observed in this study somehow close the circle of causality between variables traditionally examined in social support research. Perceptions of support availability have long been recognized as an important protective factor against the negative effects of stressful life events on psychological well-being. What this study has illustrated is that the availability of this important resource is also partially a function of undesirable life experiences and previous levels of psychological well-being (this being not only an outcome but also an antecedent of levels of perceived social support). These findings are particularly relevant since the measurement of perceived support used in this research refers to specific relationships. As opposed to global measures of perceived support, which reflect a basically stable view of the supportiveness of the social world, relationship-specific perceptions of social support are more strongly linked to the accumulated history of experience with particularly close relationships (Davis et al., 1998). Besides, as indicated in this research, perceptions of support from specific relationships are the consequence not only of past experiences of support from particular individuals, but are also the result of the dynamics of psychological characteristics of individuals and life situations. By focusing on both the psychological characteristics of the person and his or her life experiences, and their mutual influences, a better understanding can be gained of how perceptions of social support are developed.

In turn, the understanding of how perceptions of support came to be available may help to deepen our understanding of the relationship between social support, life events, and psychological functioning. Clearly, these are still important questions which need to be addressed in future research on the protective effects of perceived social support.

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