

DEPENDENCY AND SELF-CRITICISM AMONG FIRST-TIME MOTHERS: THE ROLES OF GLOBAL AND SPECIFIC SUPPORT

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The assumption that the frequency of depressive symptoms among highly dependent and highly self-critical first-time mothers is mediated by a distinct attitude toward social support is explored. It is hypothesized that self-criticism reduces the perceived availability of social support, which in turn increases the risk of depressive symptoms. Dependency scores were expected to effect an increase of the perceived availability of social support, thus reducing depressive symptomatology after delivery. Personality variables were assumed to affect global support mainly. Results reiterate previous findings about the protective effects of dependency in the transition to motherhood, and support a mediation model of global and specific support for the dependency and self-criticism associations with depressive symptoms. Even though self-criticism and dependency showed different patterns of association with specific and global support, husband's support was found to play a protective role in relation to these two personality variables.

The research literature on the transition to motherhood supports the view of pregnancy and the postpartum period as a time when issues of both interpersonal relations and identity and self-esteem come to the fore, imposing a reassessment of the individual's autonomy and close interpersonal relationships (Gotlib, Whiffen, & Wallace, 1991; O'Hara, 1986; Priel, Gonik, & Rabinowitz, 1993; Priel & Besser, 1999). Transition to motherhood thus taps fundamental issues of both other- and self-directedness that have been proposed as basic modalities of human

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existence; these modalities have been referred to as communion and agency (Bakan, 1966) or affiliation or intimacy versus achievement or power (McAdams, 1985).

Using a similar perspective on basic personality dimensions, Blatt and colleagues (Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982) proposed that normal developmental processes are characterized by a dialectical interweaving of relatedness and self-definition. While in mental health a continuous dialectic relationship between these two basic lines of development is assumed, individuals do differ as to the relative emphasis they place on each of these processes. Differences in the relative weight of relatedness and self-definition delineate two personality styles—dependency and self-criticism—each with favored modes of cognition and adaptation. Overemphasis on self-critical or dependency motives results in dysfunctional attitudes and is assumed to constitute vulnerability to depression (Flett, Hewitt, Endler, & Bagby, 1995).

However, an important difference between dependency and self-criticism as vulnerabilities for depression is emerging in the research literature: while the association between self-criticism and dysphoria is corroborated repeatedly in different contexts, dependency appears as a vulnerability factor mainly in conditions of interpersonal loss and rejection (Priel & Shahar, 1999; Shahar, 1997; Zuroff & Mongrain, 1987). Moreover, evidence is accumulating that dependency may be adaptive in some interpersonal contexts (Blatt, Zohar, Quinlan, Zuroff, & Mongrain, 1995; Mongrain, 1998). A specific context where dependency was found to play a significant protective role in the stress-distress association is the transition to motherhood. In a recent longitudinal study, Priel and Besser (1999) have shown that, while high self-criticism measured during pregnancy predicted depressive symptoms after childbirth, dependency was negatively associated with postpartum depressive symptoms, when controlling for the common variance with self-criticism as well as for depressive symptoms measured during pregnancy.

Adopting a perspective on self-criticism and dependency as personality vulnerabilities to depression, we aimed to explore the assumption that the frequency of depressive symptoms among highly dependent or highly self-critical women in the transition to motherhood is mediated by a distinct attitude toward, and style of handling, social support. This mediation model integrates theoretical assumptions and empirical evidence on the association between personality and social support, on the one hand, and between social support and well-being on the other. Moreover, existing research (Sarason et al., 1991) confirms the notion that perceived social support associates with personality characteristics rather than with the actual helpfulness of others when needed. These

studies emphasize the role played by personal beliefs regarding the risks and advantages of seeking help, affecting the development and use of support resources (Vaux, 1992). The mediating model of social support proposed reflects the assumption that emphasis on dependency or on self-criticism imply opposed beliefs about the meaning and effectiveness of social support: while highly dependent individuals may underscore the need for and advantages of receiving social support, it is very probable that highly self-critical individuals will emphasize the risks for the self that may be involved in close supportive relationships.

As to the social support/depression association, the idea that perceived interpersonal bonds play an important role in the regulation of distress is basic to conceptualizations of perceived social support, in general (Cohen & Syme, 1985; Priel & Shamai, 1995; Sarason, Pierce, & Sarason, 1990), and in relation to new mothers adjustment, in particular (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993). Social support has been found to represent a major psychosocial variable involved in the prediction of postpartum dysphoria (Cutrona, 1984; O'Hara, 1986).

Recent advances in the study of social support tend to distinguish between two main dimensions: a "sense" of support (Sarason, Pierce, & Sarason, 1990b), or global social support that constitutes a trait-like construct, assumed to reflect a general outlook of—or attitude toward—self and others, and a relational-specific or domain-specific social support dimension, which stems mainly from particular personal experiences (Davis, Morris, & Kraus, 1998). The comparison between global and relational-specific support constructs suggests that these are rather independent, with distinct, and not redundant, associations with well-being (Davis et al., 1998). Perceptions of global support have been found to discriminate between attachment styles and to associate with general distress. Specific support is related to the actual helpfulness of others, but seems not to associate with personality styles beyond global support, and was found to be unlikely associated with general assessments of distress (Davis et al., 1998). In the transition to motherhood, the husband's support was assumed to play a major protective role; this assumption stems from a series of longitudinal studies showing that perceptions of marital partners as close and supportive constitute an important indicator of healthy coping with the stresses of the transition to parenthood (Belsky & Rovine, 1990). Following these empirical findings we were interested in comparing the effects of global and specific-husband support in the transition to motherhood. We expected that personality tendencies will affect more strongly perceptions of global than of husband's support, since the former relate mainly to a person's general expectancies of interpersonal relationships, while the latter reflect also the husband's actual behaviors and attitudes.

We expected global and specific support to play a protective mediating role in the association between dependency and distress. Self-criticism, on the other hand, was expected to reduce the perceived availability of global and specific support, thus increasing distress. In addition, we expected the effects of dependency and self-criticism on global support to be significantly stronger than on specific support.

METHOD

PARTICIPANTS

Participants were a consecutive sample of pregnant women attending routine checkups at their community Well Baby Clinic in a middle-class, urban area. Participants were volunteers. In order to control for psychosocial factors known to affect depression in the postpartum period, we included in our sample only first natural pregnancies among married women without previous psychiatric history and without previous miscarriages. High-risk pregnancies were also excluded. These criteria were fulfilled by about 85% of the first-mothers population in the Well Baby Clinics in this study. The final sample included only those subjects who subsequently had normal childbirth and healthy babies. Infants' health status was defined according to their Apgar scores as determined by two consecutive pediatric evaluations. We used Apgar scores of 8 and higher as criteria for normality in newborns (Nelson, 1987).

Participants were asked to volunteer for a study on women's experiences of the first pregnancy and motherhood. Of the women we approached, 87% agreed to take part in this research. Our sample included 125 women; however, four participants did not take part in Time 2 data collection: three of them had miscarriages or delivered prematurely, and the remaining participant left the area before Time 2. The final sample thus included 121 participants with a mean age of 25.2 years ($SD = 3.6$), and 10 to 19 years of formal education ($Mean = 13.2$, $SD = 1.69$).

MEASURES

The Depressive Experiences Questionnaire (DEQ). The DEQ was used to assess vulnerability to depression. The DEQ (Blatt, D'Affliti, & Quinlan, 1976) is a 66-item scale devised to evaluate patterns of experiences that constitute a predisposition to depressive states, and is therefore appropriate for use with a nonclinical population. The DEQ dependency factor reflects preoccupation about abandonment and separation, feelings of being unloved, fear of loss. The self-criticism factor reflects concerns with failure and guilt, self-criticism, and being unable to meet high stan-

dards set by the self and by others. Intratest homogeneity, as well as test-retest reliability were adequate (Blatt et al., 1982). Items were converted to z scores and multiplied by the factor weight coefficient, according to Israeli norms (Priel, Besser & Shahar, 1998). Correlations between the scores obtained, using the English and the Hebrew versions of the DEQ were .93 ($p < .001$) for self-criticism and .85 ($p < .001$) for dependency. Cronbach's alpha internal consistency coefficients in the present study were .86 for self-criticism and .70 for dependency.

The Center for Epidemiological Studies Depression Scale (CESD). The CESD (Radloff, 1977) was used to measure depressive symptoms during pregnancy and 8 weeks after delivery. This is a 20-item scale designed to measure current levels of depressive symptomatology in the general population. Items, assessed on a scale from 0 to 3, are: depressed mood; feelings of guilt and worthlessness; feelings of helplessness and hopelessness; psychomotor retardation; loss of appetite, and sleep disturbances (Radloff, 1977). This scale has been shown to be valid and reliable in many different samples, including pregnancy and postpartum research (see, e.g., Fleming, Ruble, Flett, & Wagner, 1990). The Cronbach's alpha internal consistency coefficient for CESD scores in the present study was .87.

Global Social Support. The 27-item Social Support Questionnaire (SSQ; Sarason, Levine, Basham & Sarason, 1983) was utilized as a measure of perceived availability of and satisfaction with social support. The SSQ yields two scores: The Number Scale measures the perceived ability to enroll social support and consists of the average number of individuals listed across each of the SSQ items. The Satisfaction Scale assesses individuals' satisfaction with the social support perceived as available. The construct and discriminant validity of the SSQ have been repeatedly demonstrated (Sarason, Shearin, Pierce, & Sarason, 1987). In the present sample, we obtained alpha coefficients of .93 and .97 for amount of, and satisfaction with, social support, respectively.

Specific Social Support. The Support Expectations Index developed by Levitt, Coffman, Guacci-Franco, and Loveless (1994) was used to assess specific support. This is a 14-item questionnaire that assesses the extent to which the mother-to-be expects a specific close relation to provide emotional and instrumental support after the baby is born. At Time 1 we assessed participants' expectations of support after delivery. At Time 2 we modified these instructions asking participants about the extent to which each support item was actually provided by the husband. Higher scores indicated expectations for more support at Time 1 or more actual support from husband at Time 2. These two assessments will be referred to as "expected" and "received" husband support. In the present research, we obtained alpha coefficients of .90 and .87 for expected and received husband support, respectively.

PROCEDURE

Two waves of measurement were performed as part of a larger longitudinal project on depressive symptoms after childbirth. Participants who fulfilled the demographic and clinical criteria completed the self-report measures during the last trimester of pregnancy ($Mean = 26.6$ weeks, $SD = 6.4$) and 8 weeks after childbirth. At Time 1, subjects completed the CESD, DEQ, SSQ, and the index of expected support from husband. Time 2 assessments included the CESD, and the index of received support from husband. The order of presentation of the questionnaires was randomized. Depression assessments before and after giving birth will be referred to as CESD1 and CESD2, respectively.

RESULTS

DESCRIPTIVE STATISTICS

Table 1 contains the means, standard deviations, and intercorrelations of the demographic, personality, depression and support variables included in the study.

Dependency and self-criticism were not intercorrelated in the present sample and each construct correlated in opposite directions with measures of depressive symptoms and social support. Table 1 shows significant, positive correlations between self-criticism and both CESD1 ($r = .20$) and CESD2 ($r = .51$) scores, but the association is significantly stronger with CESD2 ($z = .31, p < .006$). Correlations between self-criticism and social support measures were negative. Dependency, on the other hand can be seen to correlate negatively with depression indices and positively with social support measures. CESD mean scores at Time 1 and 2 were not significantly different ($t[120] = 1.29, n.s.$). In our sample, 36.4% of the pregnant women and 39.7% of the new mothers scored above 16 on this scale, the cut-off point for depressive symptomatology in community samples. The correlation between CESD1 and CESD2 ($r = .38, p < .001$), indicates a moderately consistent level of depressive symptoms during pregnancy and after delivery.

PRELIMINARY ANALYSES

As a pre-condition to the analysis of mediation, we established the significance of the direct association between personality styles and depressive symptomatology. In addition to the Pearson correlation coefficients (see Table 1), we explored the combined direct effect of dependency and self-criticism on postpartum depressive symptoms performing a Hierarchical Multiple Regression Analysis of CESD2 scores.

TABLE 1. Correlations, Means and Standard Deviations for Demographic, Personality, Support and Depressive Symptomatology Variables

Variable	2	3	4	5	6	7	8	9	10	M	SD
1. Age	.28**	-.00	-.03	-.20*	-.00	-.06	-.20*	-.19*	.03	25.2	3.60
2. Education	—	-.18 [†]	.26**	-.20*	-.21*	.24**	-.09	.03	.21*	13.2	1.69
3. Self Criticism	—	—	-.12	.20*	.51***	-.21*	-.33***	-.13	-.17 [†]	-.50	1.0
4. Dependency	—	—	—	-.11	-.25*	.26**	.20*	.22*	.32***	-.09	.97
5. CESD-1 ^a	—	—	—	—	.38***	-.09	-.03	.11	.12	13.7	7.3
6. CESD-2 ^b	—	—	—	—	—	-.24**	-.31***	-.03	-.29***	14.7	8.4
7. Support Number	—	—	—	—	—	—	.36***	.12	.15	2.9	1.5
8. Support Satisfaction	—	—	—	—	—	—	—	.38***	.08	5.3	.55
9. Expected Support	—	—	—	—	—	—	—	—	.29***	85.5	11.8
10. Received Support	—	—	—	—	—	—	—	—	—	83.8	14.07

Note. N = 121 (two - tailed tests).

[†]p < .06; *p < .05; **p < .01; ***p < .001.

^aCESD-1 = Depression measured at Time 1; ^bCESD-2 = Depression measured at Time 2.

TABLE 2. Hierarchical Multiple Regression Analysis of Time 2 Depressive Symptomatology: Personality Variables

Predictor variable	Multiple R	R ²	F Change	Overall F	df	β
1	.42	.18	8.43***	8.43***	3,117	
Time 1 Depressive Symptomatology						.37***
Age						.12 ns
Education						-.17 ns
2	.61	.37	18.06***	13.76***	5,115	
Self-Criticism						.42***
Dependency						-.16*

Note. N = 121 (two-tailed tests).

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

In order to control for the possible effect of age, education, and initial levels of depressive symptomatology we entered these variables in the first block (see Table 2). We entered dependency and self-criticism in the second block, adding 20% to the explained variance of CESD2.

A second Hierarchical Multiple Regression Analysis was performed to assess the relative contributions of global and specific social support assessments to the explanation of the variance of depression assessments. Age, education and CESD1 scores were entered in the Block 1 (see Table 3), as in the previous regression analysis, and the specific support subscales scores were entered in Block 2, adding 5% to the explained variance of CESD2. Global support scales were entered in Block 3, adding 9% to the explained variance. Similar results were obtained when entering specific support in Block 2 and global support in Block 3.

These analyses show that specific and global support are rather independent constructs, and that each has a particular contribution to the explanation of the variance of depressive symptomatology assessments after controlling for CESD1, age, and education.

ANALYSIS OF MEDIATING EFFECTS

We assessed the mediating hypotheses using structural equation modeling in order to improve the estimation of the mediating variable (Hoyle & Smith, 1994). In addition, this strategy allowed us to evaluate simultaneously both the direct and mediated effects of dependency and self-criticism on depressive symptoms, while reducing measurement errors in the dependent and independent variables, and controlling for the association between dependency and self-criticism and for their co-variation with CESD1.

Formulation and Estimation of Structural Models. We first specified a Complete Mediation Model that included two mediating latent variables (global and specific social support) each measured by two indica-

TABLE 3. Hierarchical Multiple Regression Analysis of Time 2 Depressive Symptomatology: Support Variables

Predictor variable	Multiple R	R ²	F Change	Overall F	df	β
1	.42	.18	8.43***	8.43***	3,117	
Time 1 Depressive Symptomatology						.37***
Age						.12 ns
Education						-.17 ns
2						
Specific Husband Support	.48	.23	3.57*	6.71***	5,115	
Time 1 Expected Support						.02
Time 2 Received Support						-.23**
3						
Global Social Support	.57	.32	8.20***	7.74***	7,113	
Time 1 Support Number						-.05
Time 1 Support Satisfaction						-.32***

Note. $N = 121$ (two-tailed tests).

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

tors ("satisfaction" and "number" for global support, and "expected" and "observed" for specific support). The model included also three observed independent variables (self-criticism and dependency DEQ scores, and CESD1 scores), and one observed dependent variable: CESD2. Indicators' errors were allowed to intercorrelate. This model included the direct as well as the mediating paths between personality tendencies and CESD2, the direct effects of CESD1 on CESD2, and the covariations of CESD1 with dependency and self-criticism.¹ The mediation specified proposed that self-criticism would be associated with a reduction of global and specific support; reduced levels of support would in turn be associated with an increase of depressive symptoms over time. Dependency, on the other hand, was specified as associating with an increase in global and specific support levels, which in turn would be associated with a decrease of depressive symptoms. The model was analyzed with AMOS software (version 3.61 Arbuckle, 1994), using the maximum-likelihood method. The model provided a plausible fit to the

1. We analyzed this complete model also including the direct effects of age and education on CESD2, as well as their covariations with each other and the other variables in the model. The model fitted the data ($\chi^2 [11, N = 121] = 11.16, p = .43; GFI = .98; AGFI = .91; RMSEA = .01; CFI = .99$) accounting for 52% of the variance in CESD2, 27% of the variance in specific support and 27% of the variance in global support. The mediational effects remained unchanged. To simplify the presentation of the results we excluded age and education from all subsequent analyses.

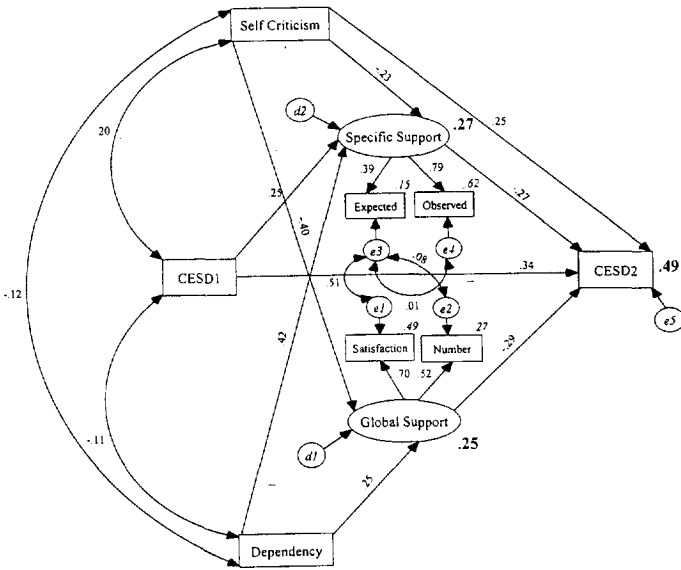


FIGURE 1 .Mediation Effects of Global and Relational Specific Social Support.

Standardized maximum likelihood parameters estimates for final structural model. All estimates are statistically significant. Large circles represent latent constructs, small circles represent residual variances, bidirectional arrows reflect correlations, and unidirectional arrows depict hypothesized directional, or "causal," links.

observed data ($\chi^2[8, N = 121] = 8.3, p = .40; GFI = .98; AGFI = .93; CFI = .99; RMSEA = .02$), accounting for 51% of the variance in CESD2, 30% of the variance in specific support and 26% of the variance in global support.

In order to obtain the most parsimonious model possible, we modified the Complete Model following Bentler and Mooijaart (1989) by removing statistically nonsignificant structural paths (see Figure 1). We removed the direct path from CESD1 to global support (path coefficient = .02, $t[120] = .17, ns$), as well as the direct path from dependency to CESD2 (path coefficient = .06, $t[120] = .48, ns$), confirming an almost full mediational effect. After removing the nonsignificant paths the model fitted well the empirical data ($\chi^2 [10, N = 121] = 8.6, p = .57; GFI = .98; AGI = .94; CFI = 1; RMSEA = .000$). All remaining estimates were found to be statistically significant (see Figure 1). This model accounted for 49% of the variance in CESD2, 27% of the variance in specific support and 25% of the variance in global support.

To assess the significance of the differences between the effects of personality on global and specific support, we calculated critical ratios for

pairwise differences. We found, as expected, a stronger effect of self-criticism on global support than on specific support ($t[120] = -2.02, p < .05$). However, findings were in the opposite direction for dependency, showing a stronger relationship between dependency and specific support assessments ($t[120] = -3.92, p < .001$).

As can be seen in Figure 1 three additional paths of theoretical significance remained in the final model: (a) the direct positive association between CESD1 and CESD2; (b) the positive association between CESD1 and self-criticism and (c) the positive association between CESD1 and specific support.

DISCUSSION

The empirical study of dependency and self-criticism during the transition to motherhood has shown that the awareness of the importance of others, as well as the ability to maintain close and supporting relations that characterize high dependency, are strongly associated to individuals' well-being. The distinct associations found in this study between dependency and self-criticism and depressive symptoms among women after delivery, replicated the findings of an earlier investigation that centered on maternal bonding to the unborn child (Priel & Besser, 1999). In both these samples self-criticism was found to constitute a vulnerability to depressive symptoms, while dependency appears as a protective factor in the transition to motherhood. Moreover, results from the present study indicate that associations between personality tendencies and depressive symptoms are mediated by diverse perceptions of social support: dependency associates with perceptions of self as enrolling the help of significant others, and enhancing well-being during this stressful period. Self-criticism, on the other hand, associates with lack of support, which, in turn, increases depressive symptoms. The association between self-criticism and decreased social support may hint at a plausible complex attitude that highly self-critical new mothers may have in relation to getting concrete help when needed: Significant others' help may constitute a mixed blessing for these women, since to receive help may be experienced as limiting one's autonomy or proving one's inadequacy.

The hypothesized stronger association between personality tendencies and perceptions of global than of specific support were confirmed for self-criticism, but dependency was found to associate stronger with specific than with global support. These findings suggest that generalized expectations of support (or lack of it) play a strong role in self-criticism while dependency associates mainly with actual support. In addition, this pattern of findings means that dependency associates more positively with specific than with global support, and

self-criticism associates less negatively with specific than with global support; thus, the husband's support was found to play a positive significant role in the transition to motherhood for both dependent and self-critical individuals. However, the mechanism through which this relationship-specific support becomes a positive/protective factor in the study of postpartum dysphoria, may be different for self-critical and dependent mothers. New mothers scoring high in dependency seem to seek and maintain a sense of connectedness, recruiting their husband's support. New mothers scoring high in self-criticism, on the other hand, in their efforts to maintain a sense of autonomy and competence are strongly affected by their representations of others closeness or help—perceiving such support as threatening. These concerns, however, are reduced to some extent when actual, specific support is provided.

The obtained pattern of results suggests that the dependency construct may include an important active interpersonal component. Implied in Bakan's (1966) basic conceptualization of agency and communion—a precursor of the concepts of self-criticism and dependency—was the idea that agency relates to an active instrumental stance, while communion was seen as more passive. Our results suggest that dependency tendencies do not necessarily imply passivity, but a different kind of instrumental approach (Cross & Madson, 1997) that may be important in promoting well-being in the transition to motherhood. Instrumentality is expressed in this case by the active seeking of significant others' support, as well as the maintenance of close relationships.

There were several limitations of our findings. The present study results should be understood in the framework of the moderately stable levels of dysphoria assessed during pregnancy and 8 weeks after delivery. Moreover, beyond the effects of personality and social support, postpartum depressive symptomatology levels were still significantly predicted by depressive symptoms during pregnancy, supporting the findings of most studies of postpartum adjustment in community samples (Cutrona, 1984; Fleming et al., 1990). An important issue for further research is the evaluation of plausible differences between recovery processes among dependent and self-critical mothers.

We assessed self-reported social support only, lacking evidence as to the networks of support that participants actually had. Direct assessments of received support may shed additional light on the specific effects of self-criticism and dependency in structuring new mothers interpersonal world. In addition, the assessment of dependency and self-criticism while participants were already pregnant did prevent the possible confounding between personality and situational factors. Even though dependency and self-criticism have been found to constitute rel-

atively stable trait-like constructs (Blatt et al., 1982), the transition to motherhood might have affected them, since first-pregnancies are a time when both affiliation and autonomy capacities are challenged. Moreover, while a longitudinal study beginning with nonpregnant young women may be helpful in approaching this question, a main question for further research is the study of transactional models, focusing on the mutual effects of personality variables, the demands of pregnancy as a psychological situation, and the social construction of the meanings of pregnancy and motherhood.

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