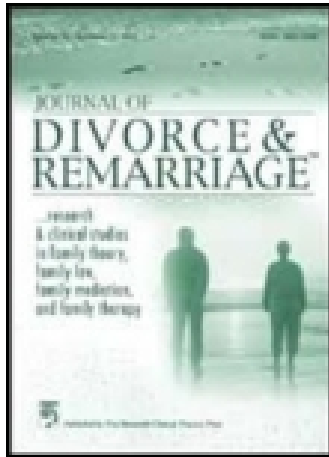


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### Psychometric Properties of the Fisher Divorce Adjustment Scale in a Turkish Divorced Sample

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# Psychometric Properties of the Fisher Divorce Adjustment Scale in a Turkish Divorced Sample

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**ABSTRACT.** The main purpose of the present study was to investigate psychometric properties of Fisher Divorce Adjustment Scale (FDAS; Fisher, 1978) in a Turkish sample. One hundred and twenty-nine Turkish divorced individuals participated in the current study. In general, the findings of the reliability and validity analyses supported the usage of the FDAS in a Turkish sample. Instead of the six as in the original FDAS, the Turkish version of the scale revealed five subscales as grief reaction, disentanglement from relationship, self-worth, anger, and trust and intimacy. Reliability analysis indicated that FDAS and its factors had adequate internal consistencies and split-half reliability coefficients. Consistent with the expectations, FDAS scores were found to be significantly and positively correlated with psychological distress and

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negatively associated with perceived social support and general life satisfaction measures. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2006 by The Haworth Press, Inc. All rights reserved.]

**KEYWORDS.** Divorce adjustment, psychological distress, perceived social support, general life satisfaction

For a long time, researchers assumed that divorce was one of the common stressful life events such as birth, death, job loss, promotion, moving, and marriage. From this perspective, divorced individuals are supposed to encounter pileup of stressors starting with a decline in the marriage and cease within several years following the divorce (Doherty, Su, & Needle, 1989; Mastekaasa, 1994; Mastekaasa, 1997). In recent years, extant literature have increasingly begun to attain a consensus about the necessity and usefulness of conceptualizing divorce as a perpetual period without a definite beginning and end, considering the standpoint that practice of divorce is a processual phenomenon (Emery & Dillon, 1994; Kitson & Holmes, 1992; Kitson & Morgan, 1990; Robinson, 1993; Stewart, Copeland, Chester, Malley, & Barenbaum, 1997; Wallerstein, 1986).

Viewed in this way, divorce experience can be described as a fairly complex life transition process and its effects might carry on throughout the life course (Kitson & Holmes, 1992). In fact, divorce has serious negative impacts on psychological, social, emotional, and economic domains of an individual's life (Bohannon, 1970, cited in Feldman, 1989; Kitson & Holmes, 1992; Weiss, 1975), each of which is separately related to individuals' postdivorce distress with its own enduring challenges (Feldman, 1989). When we compare divorced people with nearly all other marital-status groups, they seem to have more psychological problems than the currently married, never married, and remarried individuals even after an extended period of divorce (Garvin, Kalter, & Hansell, 1993; Júlíusdóttir, 1997; Kitson & Holmes, 1992; Katz, 1991; Lorenz & Simons, 1997; Shapiro, 1996). Socially, divorce generally leads to a decrease in the social network size (Kitson & Holmes, 1992; Plummer & Koch-Hattem, 1986; Robinson, 1993; Weiss, 1975; Wang & Amato, 2000) and to a dramatic change in the social status and roles (Diedrick, 1991; Song, 1991; Wallerstein, 1986). Emotionally, along

with the feelings of fear, anger, sadness, guilt, and depression, the divorced individuals may also experience emptiness, rejection, worthlessness, and loneliness (Diedrick, 1991; Emery & Wyer, 1987; Júlíusdóttir, 1997; Kitson & Holmes, 1992; Song, 1991; Wallerstein, 1986; Weiss, 1975), which can be accepted as strong and conflicting feelings towards the diverse aspects of this complicated experience (Cohen, Finzi, & Avi-Yonah, 1999; Tschann, Johnston, & Wallerstein, 1989). Economically, a large number of studies have demonstrated that both parties but especially custodial parents experience a decrease in their ordinary standard of living (Christensen & Rettig, 1991; Doherty et al., 1989; Júlíusdóttir, 1997; Kitson & Holmes, 1992; Kurz, 1995; Lawson & Thompson, 1996; Mauldin, 1991; Plummer & Koch-Hattem, 1986; Shapiro, 1996; Song, 1991; Wang & Amato, 2000).

The fact that divorce produces such multiple negative consequences for an individual's life does not necessarily result in a reduction in the frequency of divorce. Indeed, it is among the most common major life transitions experienced by nearly half of the individuals in the United States (Rosenbaum, 2000; U.S. Bureau of the Census, 1992). More recently, divorce has begun to be a marked component of the social structure not only in the Western societies but also in the developing countries (Cohen & Savaya, 1997) as related to the modern way of life resulting from urbanization and the level of development (Lester, 1997). As a developing country, Turkey experiences such a case. Even though the proportion of divorce in Turkey is still low as compared to Western countries, a gradual rise has been taking place as the new law facilitating the divorce action had been introduced in 1988 and as a result of the rapidly shifting sociocultural circumstances (Arikan, 1996; Doğan, 1998; Uyar, 1999). The divorce statistics of 1997 revealed that there was an increase in the crude divorce rates from .42 to .52 between 1988 and 1997 (Divorce Statistics, 1999).

Both the increase in the rates and adverse reactions experienced by divorced individuals have prompted researchers to understand the constituents of divorce adjustment. Despite the interpretations of the issue in numerous studies, researchers have not reached an agreement on defining the adjustment to divorce so far (Bursik, 1991; Kitson & Holmes, 1992; Kitson & Morgan, 1990; Raschke, 1987; Wang & Amato, 2000). Obviously, this inconsistency among researchers results from the multifaceted nature of the divorce experience requiring adaptation to the changes in nearly every domain of a human's life. As a matter of fact, this situation is reflected in how to measure postdivorce adjustment

and warrants a multiple assessment approach. Correspondingly, in an attempt to obtain inclusive and precise information concerning the impacts of divorce, the preponderance of studies (e.g., Bevvino, 2000; Bursik, 1991; Doherty et al., 1989; Garvin et al., 1993; Gray & Silver, 1990; Lambert, 2000; Tschann et al., 1989) have employed a complex battery including various representative indicators of global adjustment—such as measurements of life satisfaction, psychological well-being, psychological distress, or self-esteem, etc. With regard to divorce, however, adjustment entails its specific consequences that go far beyond the more general signs of adjustment (Kellas & Manusov, 2003). Therefore, information about divorced individuals' overall adjustment level is not necessarily and sufficiently connected with *divorce* adjustment.

In this vein, it can be asserted that there is a strong need in the field to use devices particularly developed for divorced individuals when investigating postdivorce adjustment. Yet, very limited numbers of standardized tests exist in the literature (see Thiriot & Buckner, 1991 for a review). In this respect, Fisher Divorce Adjustment Scale (FDAS), which is designed by Fisher (1978) to specifically evaluate the level of adjustment after divorce, seems to be a quite constructive and the most widely used assessment device (e.g., Cohen & Savaya, 2003; Kellas & Manusov, 2003; Plummer & Koch-Hattem, 1986; Stolberg & Ullman, 1984; Thiriot & Buckner, 1991). Since Fisher (1976) conceptualized the experience of divorce as including a rebuilding process identified by specific steps of social and emotional adjustment, the FDAS operationalizes the adjustment to divorce by means of examining a series of feelings and experiences solely pertinent to divorced people. As a result, the device is able to reflect a multidimensional approach to the measurement of postdivorce experience (Kellas & Manusov, 2003).

It is clear that if the components of divorce adjustment process are not comprehensively investigated, improvement in prevention and intervention techniques for divorced individuals would not be promising. This, in turn, could be detrimental not only for divorcees themselves but all family members as well. On the other hand, culture and society in which divorced individuals exist have potential effects on the components of adjustment to divorce (Cohen & Savaya, 1997, 2003; Kitson & Morgan, 1990). Thus, the aim of the present study was to evaluate the psychometric properties of the FDAS in a Turkish sample to determine cross-cultural utility of a device which was specifically developed for divorced individuals of a Western society. Therefore, it would be possible to improve the level of understanding “culture-specific” and

“universal” dimensions of postdivorce adjustment, which were conceptualized by Kitson and Morgan (1990).

## METHODS

### *Subjects*

The participants of the present study were 129 divorced parents consisting of 95 females (74%) and 34 males (26%). Not being remarried was the criterion that divorced individuals have to meet for inclusion in the study. The age of the total sample ranged from 22 to 51 with a mean of 36.82 years ( $SD = 6.35$ ). While the average age for the females was 35.81 years ( $SD = 6.11$ , range = 22-50), it was 39.66 years for the males ( $SD = 6.26$ , range = 25-51). The average education year for the total sample was 12.49 years ( $SD = 3.59$ ). The duration of participants' divorce ranged from 1 month to 16 years, with a mean of 4.2 years ( $SD = 3.46$ ). Participants of the study had a maximum of six children. Although gender ratio was in favor of females, independent samples *t*-test did not reveal any significant gender difference for the measures of FDAS.

### *Instruments*

Three instruments were utilized in the current study. Participants were administered the Fisher Divorce Adjustment Scale (FDAS) (Fisher, 1978), the Brief Symptom Inventory (BSI) (Derogatis, 1992; cited in Sahin & Durak, 1994), and the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988; cited in Eker & Arkar, 1995; Eker, Arkar, & Yaldiz, 2000). The BSI and MSPSS were used in order to examine the concurrent validity of the FDAS. A single 5-point Likert-type item measuring general life satisfaction (GLS) was also used as one of the concurrent measurements in evaluating the validity of the FDAS.

### *Fisher Divorce Adjustment Scale (FDAS)*

The FDAS (Fisher, 1978) is a 5-point, 100-item Likert-type scale designed to assess levels of adjustment after divorce or termination of a love relationship. The initial version of the scale was developed as a part of Fisher's dissertation study (1976) the aim of which was to determine if the adjustment difficulties of the divorced people could be partially

eliminated by attending a ten-week seminar. The scale built on a pragmatic basis since the items written in the scale were items that had been mentioned by the participants in the seminars as having been a problem following their divorce (Fisher, 1976). Response options of the scale range from *almost always* to *always never*. Higher scores indicate poor postdivorce adjustment, whereas lower scores indicate adjustment to divorce. The FDAS consists of six subscales: (1) self-worth, (2) disentanglement from the relationship, (3) anger, (4) grief, (5) trust and intimacy, and (6) social self-worth (Buehler, 1990). The internal consistency coefficient of the scale was .98 and that alpha for the subscales ranged from .87 to .95 (Buehler, 1990; Hensley, 1996, cited in Kellas & Manusov, 2003). The Kuder-Richardson reliability for the total scale was reported to be .92 (Fisher, 1988, cited in Thiriot & Buckner, 1991). In general, the statistical analyses demonstrated that original version of the FDAS was a reliable and valid instrument to measure a person's adjustment to divorce.

Including a nonmarried student sample that experience dissolution of a romantic relationship, Kellas and Manusov (2003) further explored the psychometric properties of the FDAS in their study. They found that the scale has four factors structure as (1) emotional disentanglement, (2) grief work, (3) self-worth, and (4) anger. Internal consistency analyses revealed Cronbach's alpha coefficient for the whole scale as .94. The alpha coefficients computed for the subscales of the FDAS were found to be .94 for emotional disentanglement, .87 for grief work, .81 for self-worth, and .71 for anger. In addition, the FDAS and its some subscales revealed significant associations with the several elements of narrative completeness measures performed with using break-up stories.

In order to determine cross-cultural utility of the FDAS in a Turkish population, the scale was initially translated into Turkish by a translator who were bilingual and who had strong psychology background. In accordance with the original FDAS (1976), Turkish meaning of the "spouse" was used in the translated form instead of "love-partner" concept. These translated items together with the original versions of them were given to seven additional judges having at least an assistant professor degree and being proficient in both languages. Two member of the judge group were also expert in the topic of divorce and some members of the group were familiar with both cultures. The judge group was asked either to choose the alternative Turkish translation or to make their own translations for each item. Finally, the authors of the study met together and compared the seven forms in terms of their similarities and discrepancies. The items on which there was a very high consensus

among the seven forms were chosen to the final form of the FDAS. The comprehensiveness and appropriateness of the statements with regard to Turkish language was also considered when deciding on the Turkish version of the FDAS. Since the usage of back-translation in Turkish language may give rise to items which are not easy to understand, “control and evaluation in one directional translation” procedure was used as the translation approach (Savasir, 1994).

#### *Brief Symptom Inventory (BSI)*

The BSI (Derogatis, 1992, cited in Sahin & Durak, 1994) is a 53-item symptom checklist related to various aspects of psychological distress. It consists of nine specific symptom dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism) and provides a score of overall psychological distress. Subjects rate their level of distress in the past week on a 5-point scale ranging from *not at all* to *extremely*. The test-retest reliability results revealed correlations ranging from .68 to .91 for the symptom dimensions (Derogatis & Spencer, 1982, cited in Garvin et al., 1993). Support for convergent validity with using the Minnesota Multiphasic Personality Inventory (MMPI) is impressive (Derogatis & Spencer, 1982, cited in Garvin et al., 1993).

The scale was adapted into Turkish culture by Sahin and Durak (1994). The factor analyses of the scale have revealed five factors, namely anxiety, depression, negative self, somatization, and hostility in the Turkish population. The authors reported Cronbach’s alpha coefficient for the total scale score as ranging from .95 to .96 and that alpha for subscales ranged from .55 to .86. The validity study of the scale was in the form of correlations with certain scales such as UCLA Loneliness Scale ( $r = .36$ ) and Beck Depression Inventory ( $r = .70$ ). In the current study, the total scores of the BSI were used to assess the general psychological distress levels of the divorced parents. Cronbach’s alpha coefficient of the scale was .98 and Guttman split-half reliability was .96 (with internal consistency coefficients of .96 and .96 for the two halves of the scale) in the present study.

#### *Multidimensional Scale of Perceived Social Support (MSPSS)*

Multidimensional Scale of Perceived Social Support (MSPSS); Zimet et al., 1988, cited in Eker & Arkar, 1995; Eker et al., 2000) is a 7-point 12-item Likert-type scale that measures the adequacy of social



support from three sources as family, friends, and significant other. The response options of MSPSS range from *disagree very strongly* to *agree very strongly*. In terms of reliability, the internal consistencies of the total scale and the subscales are high, ranging from .79 to .98 in various samples and the test-retest reliability over a 2- to 3-month period produces correlations ranging from .72 to .85 (Kazarian & McCabe, 1991; Zimet et al., 1988, cited in Eker & Arkar, 1995). As for validity, the MSPSS correlated positively with another social support scale and a self-concept measure (Kazarian & McCabe, 1991, cited in Eker & Arkar, 1995) and negatively with measures of depression (Kazarian & McCabe, 1991; Zimet et al., 1988; cited in Eker & Arkar, 1995).

The scale was first adapted into Turkish culture by Eker and Arkar (1995). The reliability and validity studies, which were carried out in psychiatry, surgery, and normal samples, have revealed that the psychometric properties of the scale were satisfactory to use the scale in Turkey. Even so, a second study was conducted to make the usage of the scale culturally more appropriate by strengthening the construct validity of "significant other" subscale (Eker et al., 2000). In the second study, Cronbach's alpha coefficients for the total scale score was reported as ranging .83 to .91 and that alpha for subscales ranged from .80 to .95, indicating high internal consistency for both the three subscales and the total scale. The validity study of the scale was in the form of correlations with certain scales such as UCLA Loneliness Scale ( $r = .63$ ) and the Symptom Check List-90-R ( $r = .58$ ). In consistent with the aims of the present study, only the total scores of the scale were used. The Cronbach's alpha for the total scale was found to be .88 in this study. In addition, Guttman split half reliability was obtained as .89 (Cronbach alpha coefficients were .80 and .76 for the first and the second halves, respectively).

### **Procedure**

The population of the study was recruited through snowball sampling procedure by using networks (Kumar, 1996). Before the administration of the instruments, verbal instructions were given to the participants who were contacted face-to-face by the researcher. The FDAS, BSI, and MSPSS were presented in a randomized order so as to eliminate the effect of sequencing. The cover page included informed-consent and a brief explanation about the study. As well, each scale had its own instructions. The total administration time of the instruments was approximately 30 minutes.

## RESULTS

### *Factor Structure*

To examine the factor structure of the FDAS, scores obtained from the scale were exposed to factor analysis by using varimax rotation. Kaiser-Meyer-Olkin measure of sampling adequacy in order to run a factor analysis demonstrated that the sampling adequacy coefficient for the sample of the current study was .71, which is higher than its conventional level of .60 (Tabachnick & Fidell, 1996). Also, Bartlett's test of sphericity value, which is another test of the adequacy of the sample, was significant ( $df = 495, p < .001$ ). Moreover, communality values around the range of .5 ( $M = .48, SD = .15$ ) indicated that the size of the current sample met the necessary and sufficient standards for carrying out factor analysis (MacCallum, Widaman, Zhang, & Hong, 1999).

An initial, unrotated principal component analysis revealed 23 factors with eigenvalues greater than 1, accounting for 76.79% of the total variance. According to the scree plot and item distribution, four- to six-factor solutions were probable. These three solutions were tested with varimax rotation to decide the most applicable number of components. After examination of the results, the five-factor solution that is the most corresponding to the original FDAS was preferred as relevant in the Turkish divorced sample. The variances explained by these five factors were 30.08%, 6.52%, 5.28%, 3.58%, and 2.84%. Only the items with factor loadings over .32 were taken into consideration for the Turkish version of the FDAS (Tabachnick & Fidell, 1996). Consequently, since four items have loadings below the conventional level, they were excluded from the scale and the scores of the participants for both the reliability and validity studies were computed by using the remaining 96 items. As stated in Kellas and Manusov's (2003) study, because the original factors were not obtainable from either the previous literature or the author, making comparisons between the items that accompany the subscales of the original and Turkish version of the FDAS were not possible.

In the present study, thirty-seven items constituted the first factor which was called as "grief reaction" (e.g., "I feel lonely"; "I feel like crying because I feel so sad"; "I feel as though I am in a daze and the world doesn't seem real") and the alpha coefficient for the factor was .96. The second factor which was composed of twenty items was named as "disentanglement from the relationship" (e.g., "I find myself making excuses to see and talk to my former love partner"; "I have feelings of

romantic love for my former love partner”; “I become upset when I think about my love partner dating someone else”) and this factor had an alpha coefficient of .95. Twenty-one items converged under the third factor named as “self-worth” (e.g., “I feel capable of facing and dealing with my problems”; “People want to have a love relationship with me because I feel like a lovable person”; “I feel I know and understand myself”) and its alpha coefficient was found to be .93. The fourth factor with an alpha coefficient of .86 contained eleven items and “anger” was the name assigned to this factor (e.g., “I easily become angry at my former love partner”; “I would like to get even with my former love partner for hurting me”; “I hope my former love partner is feeling as much or more emotional pain than I am”). The last factor having an alpha coefficient of .85 was comprised of seven items and named as “trust and intimacy” (e.g., “I am afraid of becoming emotionally close to another love partner”; “I am afraid to trust people who might become love partners”; “I feel uncomfortable even thinking about dating”).

### ***Reliability***

The reliability of the scale was determined by computing both internal consistency coefficients and split-half reliabilities. After excluding the items having loadings with the factors below .32, the Cronbach’s alpha coefficient for the whole scale was found to be .97, indicating high reliability for the total scale scores. The Guttman split-half reliability for the total FDAS was .96, where the Cronbach’s alpha coefficient for the first part composed of 48 items was .94 and it was .95 for the second part which consisted of 48 items. In addition, the Guttman split-half reliability was obtained as .94 for 37-item grief reaction subscale (Cronbach’s alpha coefficients were .92 and .93 for the first [19-item] and the second [18-item] halves, respectively), as .94 for 20-item disentanglement subscale (Cronbach’s alpha coefficients were .89 and .93 for the first [10-item] and the second [10-item] halves, respectively), as .91 for 21-item self-worth subscale (Cronbach’s alpha coefficients were .87 and .87 for the first [11-item] and the second [10-item] halves, respectively), as .85 for 11-item anger subscale (Cronbach’s alpha coefficients were .76 and .74 for the first [6-item] and the second [5-item] halves, respectively), and as .88 for 7-item trust and intimacy subscale (Cronbach’s alpha coefficients were .70 and .77 for the first [4-item] and the second [3-item] halves, respectively).

### **Concurrent Validity**

In order to evaluate the concurrent validity of the FDAS and its subscales, the correlation coefficients between FDAS total score, FDAS subscales, BSI, MSPSS, and GLS were examined. The reason for selecting these measures as evidence of concurrent validity of the scale is theoretical. It was thought that as the levels of poor postdivorce adjustment increase, while the level of psychological distress would increase, the levels of perceived social support and general life satisfaction would decrease. Consistent with expectations, as can be seen in Table 1, there was a high positive correlation between total FDAS score and BSI ( $r = .72, p < .001$ ). In addition, the correlations with the FDAS and MSPSS ( $r = -.47, p < .001$ ) and a Likert-type single item GLS measurement ( $r = -.59, p < .001$ ) were moderately negative. That is, an increase in the level of poor postdivorce adjustment was associated with an increased psychological distress level and decreased perceived social support and life satisfaction. As for subscales of the FDAS, grief reaction, self-worth, trust and intimacy, disentanglement from relationship, and anger revealed positive correlations ranging from high to moderate with psychological distress ( $r = .76, .55, .50, .48, .33$ , respectively,  $p < .001$ ). Although the associations with perceived social support were moderately negative ( $r = -.47$  for grief reaction,  $-.46$  for self-worth,  $-.36$  for trust and intimacy,  $-.32$  for disentanglement,  $p < .001$ ), the FDAS anger subscale did not reveal a significant relationship with perceived social support. The correlations with general life satisfaction were negative and in the range of moderate to high ( $r = -.60$  for grief reaction,  $-.59$  for self-worth,  $-.35$  for disentanglement,  $-.33$  for trust and intimacy,  $-.27$  for anger,  $p < .001$ ). Furthermore, except for the pair of disentanglement and anger subscales, there are significant and positive relationships among the other FDAS factors (see Table 1).

### **Criterion Validity**

Regarding the criterion validity of the FDAS, initially two extreme groups were created on the basis of the participants' BSI scores. The BSI scores within the lowest and highest 25th percentile were grouped as "low psychological distress" and "high psychological distress" categories, respectively. In the "low psychological distress" group, there were 32 participants who had a mean score of 9.00 ( $SD = 5.28$ ; below 18 points) and in the "high psychological distress" group, there

TABLE 1. Means, Standard Deviations for, and Intercorrelations Between the Measures

	FDAS	FDAS-GR	FDAS-DR	FDAS-SW	FDAS-A	FDAS-TI	BSI	MSPSS	GLS
FDAS	209.40 (60.34)	.94** N = 129	.81** N = 129	.79** N = 129	.50** N = 129	.75** N = 129	.72** N = 129	-.47** N = 129	-.59** N = 129
FDAS-GR	79.56 (26.99)		.68** N = 129	.67** N = 129	.41** N = 129	.66** N = 129	.76** N = 129	-.47** N = 129	-.60** N = 129
FDAS-DR	35.47 (16.42)			.59** N = 129	.17 N = 129	.57** N = 129	.48** N = 129	-.32** N = 129	-.35** N = 129
FDAS-SW	42.49 (14.57)				.20* N = 129	.51** N = 129	.55** N = 129	-.46** N = 129	-.59** N = 129
FDAS-A	34.11 (10.15)					.42** N = 129	.33** N = 129	-.16 N = 129	-.27** N = 129
FDAS-TI							.50** N = 129	-.36** N = 129	-.33** N = 129
BSI								45.70 (39.92)	-.66** N = 129
MSPSS									60.41 (15.30)
GLS									3.50 (1.08)

Means and standard deviations (in parentheses) are given on diagonal. For all measures, the means for the average score-as divided by the number of items- (and their standard deviations) were provided. FDAS = Fisher Divorce Adjustment Scale, FDAS-GR = FDAS-grief reaction subscale, FDAS-DR = FDAS disen- tanglement from relationship subscale, FDAS-SW = FDAS-self-worth subscale, FDAS-A = FDAS-anger subscale, FDAS-TI = FDAS-trust and intimacy subscale, BSI = Brief Symptom Inventory, MSPSS = Multidimensional Scale of Perceived Social Support, GLS = General Life Satisfaction. \*p < .05, \*\*p < .001.

were 32 participants with a mean BSI score of 102.99 ( $SD = 35.97$ ; over 61 points).

As criterion validity, FDAS including its subscales was expected to differentiate between groups with low vs. high psychological distress. In order to reach this aim, a 2 (psychological distress groups: low vs. high)  $\times$  5 (FDAS factors: grief reaction, disentanglement, self-worth, anger, and trust and intimacy) ANOVA with repeated measures on the last factor was conducted.

The analysis revealed a significant psychological symptoms main effect,  $F(1, 62) = 89.41, p < .001$ . Consistent with the expectations, the participants with high psychological distress reported more postdivorce adjustment difficulties ( $M = 3.06$ ) than those with low psychological symptoms ( $M = 1.81$ ). The analysis also yielded a significant main effect for FDAS factors,  $F(4, 59) = 22.75, p < .001$ . As post hoc multiple comparisons with LSD method indicated, the extent of adjustment difficulties was highest in the anger ( $M = 3.19$ ) domain and it declined considerably towards the trust and intimacy ( $M = 2.63$ ), grief reaction ( $M = 2.26$ ), self-worth ( $M = 2.10$ ), and disentanglement ( $M = 1.86$ ) domains, respectively. Comparisons of the mean differences between all pairwise combinations of the factors revealed a significant difference from each other.

In addition, there was a significant psychological distress groups  $\times$  FDAS factors interaction effect,  $F(4, 59) = 6.77, p < .001$ . Within group pairwise comparisons on the basis of different domains of postdivorce adjustment difficulties demonstrated that in low psychological distress group, while the amount of postdivorce adjustment difficulties was highest in the anger ( $M = 2.70$ ) domain, it was lowest in the disentanglement from relationship ( $M = 1.29$ ). All the same, the difficulties in trust and intimacy ( $M = 1.94$ ) and self-worth ( $M = 1.62$ ) and self-worth and grief reaction ( $M = 1.51$ ) domains were not significantly different in this group. On the other hand, in high psychological distress group, the degree of adjustment difficulties was highest again in the anger ( $M = 3.69$ ) domain and it declined significantly towards the trust and intimacy ( $M = 3.32$ ), grief reaction ( $M = 3.02$ ), and self-worth ( $M = 2.57$ ) domains. However, the problems with self-worth and disentanglement from relationship ( $M = 2.43$ ) was not significantly different within this group (see Table 2). As well, between group comparisons revealed that the scores of high psychological distress group were significantly higher than that of low psychological distress group for each subtest of the FDAS and this difference was emphasized more for grief reaction (see Table 2).

TABLE 2. Mean Scores of Postdivorce Adjustment Difficulties for Low and High BSI Groups

FDAS	Psychological Distress Symptoms	
	Low	High
Anger	2.70 <sub>a1</sub>	3.69 <sub>a2</sub>
Trust and Intimacy	1.94 <sub>b1</sub>	3.32 <sub>b2</sub>
Self-Worth	1.62 <sub>bc1</sub>	2.57 <sub>c2</sub>
Grief	1.51 <sub>c1</sub>	3.02 <sub>d2</sub>
Disentanglement	1.29 <sub>d1</sub>	2.43 <sub>c2</sub>

Note. The mean scores that do not share the same letter-subscript in each column and the same number-subscript in each row are significantly different from each other at .05 alpha level with LSD. BSI = Brief Symptom Inventory, FDAS = Fisher Divorce Adjustment Scale.

## DISCUSSION

In the current study, applicability of the FDAS to Turkish individuals for measurement of postdivorce adjustment was examined and the results promisingly supported the cross-cultural usage of the device in a Turkish sample. With respect to the psychometric properties of the Turkish version of the FDAS, the factor structure, internal consistency, split-half reliability, concurrent and criterion validities of the scale were examined.

Factor analysis revealed five-factor solution in the Turkish sample as grief reaction, disentanglement from relationship, self-worth, anger, and trust and intimacy. Though the original FDAS was organized around six domains including an additional domain as social self-worth, the overall factor structure of the Turkish version was in line with that of the original scale. A culture-specific interpretation might be raised as the reason for not obtaining a separate domain related to social self-worth. According to Kağıtçibasi (1996a,b), the self can be both "autonomous" and "related" especially in cultures which individualist and traditionally collectivist values are jointly granted. Consistently, it was found that both individualist and collectivist tendencies were high in Turkish society (Göregenli, 1997). Therefore, the issues of social self-worth in the Turkish FDAS may be embedded in the general self-worth domain as appraisals about self cannot be made independently from the social context in Turkish culture. To conclude, rather than being independent constructs as "self-worth" indicating general appraisals about the self after

divorce and “social self-worth” indicating appraisals about the self in a social interaction context after divorce, these two might depend more on each other in a culture like Turkish than Western cultures.

The results of the factor analysis also demonstrated that four of the 100 items in the original FDAS had not met the necessary statistical conditions in order to be included in the Turkish version of the scale. As a result, these items were ruled out from the device and the following analyses were performed with this final form of the whole FDAS and its five factors. Reliability coefficients of the scale and its subtests were studied by means of internal consistency and split-half procedures. Compatible with the findings of the previous studies (Fisher, 1976, 1988, cited in Thiriot & Buckner, 1991; Hensley, 1996, cited in Kellas & Manusov, 2003; Kellas & Manusov, 2003), the Turkish version of FDAS was found to be internally consistent and as having good split-half reliability coefficients.

Considering the concurrent validity of the FDAS, the relationships with BSI, MSPSS, and GLS were examined. Corresponding to the expectation, the findings of the current study revealed that postdivorce adjustment, psychological distress, perceived social support, and general life satisfaction were all significantly associated with each other. FDAS-grief reaction, disentanglement from relationship, self-worth, anger, and trust and intimacy subscales were all correlated positively with psychological distress and negatively with general life satisfaction, while the magnitude of these relationships ranged from high to moderate. In addition, except for anger, the other FDAS subscales were moderately and negatively associated with perceived social support. In order to interpret the lack of association between anger domain and perceived social support, it might be useful to recall an often reported finding in the literature that higher level of social support is predictive of better divorce adjustment (e.g., Cheung & Liu, 1997; Gerstel, Riessman, & Rosenfield, 1985; Holloway & Machida, 1991; Sansom & Farnill, 1997; Yilmaz & Fişiloğlu, 2005). On the other hand, the pattern of finding reported in the current study suggests that while some components of postdivorce adjustment might relate with thoughts and behaviors to be potentially influenced by social support, perception of support may not play an effective role in some other domains of adjustment. In case of anger at the former spouse, various compounding factors such as the source and type of support received, unpredictable results of the anger expression in terms of relief or intensification as depending on the responses of the other people might be taken into account. In the light of



these, it could be recommended that the effect of social support should be investigated separately for the different components of postdivorce adjustment in view of potential mediator and/or moderator variables which contribute to the clarification of the association between social support and adjustment to divorce.

In the present study, as compared to the other domains, FDAS-grief reaction seemed to be more strongly correlated with psychological distress. This relationship is also higher than the associations of grief with perceived social support and general life satisfaction. In addition, the difference between low and high distress groups was emphasized more in terms of the grief reaction. The main reason for these findings may be that grief reaction includes indicators parallel to the components of psychological distress such as behavioral, motivational, affective, cognitive, and somatic symptoms of depression and anxiety.

As for criterion validity of FDAS, it was found that low and high psychological distress groups were successfully differentiated on the basis of the measures of FDAS. People with high psychological distress symptoms experienced more postdivorce adjustment problems than those with low psychological distress symptoms. The same difference was also present in all of the FDAS domains. In addition, there were significant variations in the levels of adjustment problems experienced on the different domains of the FDAS. A combination of multiple factors can be responsible from these variations. To illustrate, factors such as gender, initiator status, financial strain, postdivorce relationship with former spouse, and divorce settlements including custody, visitation, and alimony issues might differently affect the levels of adjustment in terms of anger, trust and intimacy, grief reaction, self-worth, and disentanglement. Although many studies make predictions about the roles of these factors on the indicators of overall postdivorce adjustment, there is still a need for further studies investigating the factors specifically related to the different components of divorce experience. Moreover, it is worth to mention that the results of the current study indicated that the adjustment difficulties were more salient in the anger domain than the other domains. With regard to the respondents' high average length of time since their divorce, this finding was consistent with the result from a longitudinal study which pointed to a similar pattern of persisting anger even after a decade following divorce (Wallerstein, 1986). Accordingly, identifying and questioning the negative feelings to the former spouse and training about anger management strategies would be implications for the psychotherapeutic intervention programs carried out to improve the level of adjustment after divorce.

A number of suggestions for future research should be considered based on the limitations of the present study. To begin with, the participants of the study were not representative of the population of divorced people without children. Given that the sample mainly comprised relatively well-educated divorced parents from medium-duration marriages and in the advanced stages of the divorce adjustment process, generalizability of the results of this study was limited for the divorced people having such demographic characteristic. In addition, since the items constituting the original factors could not be determined, a proper comparison of factor structures between the original and Turkish version of the FDAS were not possible. Likewise, in a study with nonmarried students experiencing termination of a romantic relationship, Kellas and Manusov (2003) reached a factor solution that was dissimilar to the original factor structure of the FDAS. In all, further studies focusing on psychometric properties of the scale, in more representative and larger samples to ensure that the results were not unique to the present sample, are strongly recommended.

To conclude, the FDAS, which is developed to assess the adjustment levels of divorced individuals belonging to a Western society, was found to be a reliable and valid instrument that can also be utilized in Turkish society which has diverse features in terms of its cultural composition. This finding, not surprisingly, indicated that the constituents of divorce adjustment have certain “universal” characteristics. Divorce adjustment is a clinical phenomenon and increased knowledge of this phenomenon will enrich not only theoretical views but also some practical applications on the postdivorce adjustment difficulties. In clinical settings, a proper assessment of adjustment to divorce would provide some useful information on intervention programs. Hence, studies focusing on not only cross-cultural similarities but also differences of postdivorce adjustment characteristics are also strongly encouraged.

## REFERENCES

- Arikan, Ç. (1996). *Halkın bosanmaya ilişkin tutumları araştırması*. Ankara: Basbakanlık Aile Araştırma Kurumu.
- Bevino, D.L. (2000). Divorce adjustment as a function of gender, education level, personality, length of separation, disentanglement, initiator status and meaning (Doctoral Dissertation, Lehigh University). *UMI ProQuest Digital Dissertations*.
- Buehler, C. (1990). Adjustment. In Touliatos, J.; Perlmutter, B.F.; Straus, M.A. (Ed.), *Handbook of family measurement techniques* (pp. 562). London: Sage Publications.

- Bursik, K. (1991). Correlates of women's adjustment during the separation and divorce process. In Volgy, S.S. (Ed.), *Women and divorce / men and divorce* (pp. 137-162). New York: The Haworth Press.
- Cheung, C. & Liu, E.S. (1997). Impacts of social pressure and social support on distress among single parents in China. In Everett, C.A. (Ed.), *Divorce and remarriage: International studies* (pp. 65-82). New York: The Haworth Press.
- Christensen, D.H. & Rettig, K.D. (1991). Standards of adequacy for child support awards. In Everett, C.A. (Ed.), *The consequences of divorce: Economic and custodial impact on children and adults* (pp. 19-45). New York: The Haworth Press.
- Cohen, O., Finzi, R., & Avi-Yonah, O.K. (1999). An attachment based typology of divorcing couples. *Family Therapy*, 26, 167-190.
- Cohen, O. & Savaya, R. (1997). 'Broken glass': The divorced woman in Moslem Arab society in Israel. *Family Process*, 36, 225-245.
- Cohen, O. & Savaya, R. (2003). Adjustment to divorce: A preliminary study among Muslim Arab citizens of Israel. *Family Process*, 42, 269-290.
- Diedrick, P. (1991). Gender differences in divorce adjustment. In Volgy, S.S. (Ed.), *Women and divorce / men and divorce* (pp. 33-45). New York: The Haworth Press.
- Divorce Statistics (1999). *State Institute of Statistics Prime Ministry Republic of Turkey*, Ankara.
- Doğan, E. (1998). *Evli ve bosanmislarda yalnızlık, depresyon, benlik saygisi ve denetim odağı inancı*. Unpublished master's thesis, Ankara University, Ankara.
- Doherty, W.J., Su, S., & Needle, R. (1989). Marital disruption and psychological well-being. *Journal of Family Issues*, 10, 72-85.
- Eker, D. & Arkar, H. (1995). Perceived social support: Psychometric properties of the MSPSS in normal and pathological groups in a developing country. *Soc Psychiatry Psychiatr Epidemiol*, 30, 121-126.
- Eker, D., Arkar, H., & Yaldiz, H. (2000). Generality of support sources and psychometric properties of a scale of perceived social support in Turkey. *Soc Psychiatry Psychiatr Epidemiol*, 35, 228-233.
- Emery, R.E. & Dillon, P. (1994). Conceptualizing the divorce process: Renegotiating boundaries of intimacy and power in the divorced family system. *Family Relations*, 43, 374-379.
- Emery, R.E. & Wyer, M.M. (1987). Child custody mediation and litigation: An experimental evaluation of the experience of parents. *Journal of Consulting and Clinical Psychology*, 55, 179-186.
- Feldman, R.S. (1989). *Adjustment: Applying psychology in a complex world*. New York: McGraw-Hill.
- Fisher, B.F. (1976). *Identifying and meeting needs of formerly-married people through a divorce adjustment seminar*. Unpublished Doctoral Dissertation, University of Northern, Colorado.
- Fisher, B.F. (1978). *Rebuilding: When your relationship ends*. Boulder, Colorado: Family Relations Learning Center.
- Garvin, V., Kalter, N., & Hansell, J. (1993). Divorced women: Individual differences in stressors, mediating factors, and adjustment outcome. *American Journal of Orthopsychiatry*, 63, 232-240.

- Gerstel, N., Riessman, C.K., & Rosenfield, S. (1985). Explaining the symptomatology of separated and divorced women and men: The role of material conditions and social networks. *Social Forces*, 64, 84-101.
- Göregenli, M. (1997). Individualist-collectivist tendencies in a Turkish sample. *Journal of Cross-Cultural Psychology*, 28, 787-794.
- Gray, J.D. & Silver, R.C. (1990). Opposite sides of the same coin: Former spouses' divergent perspectives in coping with their divorce. *Journal of Personality and Social Psychology*, 59, 1180-1191.
- Holloway, S.D. & Machida, S. (1991). Child-rearing effectiveness of divorced mothers: Relationship to coping strategies and social support. In Volgy, S.S. (Ed.), *Women and divorce/men and divorce* (pp. 179-201). New York: The Haworth Press.
- Júlíusdóttir, S. (1997). An Icelandic study of five parental life styles: Conditions of fathers without custody and mothers with custody. In Everett, C.A. (Ed.), *Divorce and remarriage: International studies* (pp. 87-103). New York: The Haworth Press.
- Kağitçibasi, Ç. (1996a). *Family and human development across cultures: A view from the other side*. New Jersey: Lawrence Erlbaum Associates.
- Kağitçibasi, Ç. (1996b). Özerk-iliskisel benlik: Yeni bir sentez (Autonomous-related self: A new synthesis). *Turkish Journal of Psychology*, 11 (37), 36-43.
- Katz, R. (1991). Marital status and well-being: A comparison of widowed, divorced, and married mothers in Israel. In Volgy, S.S. (Ed.), *Women and divorce / men and divorce* (pp. 203-218). New York: The Haworth Press.
- Kellas, J.K. & Manusov, V. (2003). What's in a story? The relationship between narrative completeness and adjustment to relationship dissolution. *Journal of Social and Personal Relationships*, 20 (3), 285-307.
- Kitson, G.C. & Holmes, W.M. (1992). *Portrait of divorce: Adjustment to marital breakdown*. New York: Guilford Press.
- Kitson, G.C & Morgan, L.A. (1990). The multiple consequences of divorce: A decade review. *Journal of Marriage and the Family*, 52, 913-924.
- Kumar, R. (1996). *Research methodology: A step-by-step guide for beginners*. Malaysia: Sage Publications.
- Kurz, D. (1995). *For richer, for poorer*. New York: Routledge.
- Lawson, E.J. & Thompson, A. (1996). Black men's perceptions of divorce-related stressors and strategies for coping with divorce. *Journal of Family Issues*, 17, 249-254.
- Lester, D. (1997). Correlates of worldwide divorce rates. In Everett, C.A. (Ed.), *Divorce and remarriage: International studies* (pp. 215-219). New York: The Haworth Press.
- Lorenz, F.O. & Simons, R.L. (1997). Married and recently divorced mothers' stressful events and distress: Tracing change across time. *Journal of Marriage and the Family*, 59, 219-233.
- MacCallum, R.C., Widaman, K.F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4, 84-99.
- Mastekaasa, A. (1994). Psychological well-being and marital dissolution: Selection effects? *Journal of Family Issues*, 15, 208-228.

- Mastekaasa, A. (1997). Marital dissolution as a stressor: Some evidence on psychological, physical, and behavioral changes in the pre-separation period. In Everett, C.A. (Ed.), *Divorce and remarriage: International studies* (pp. 155-183). New York: The Haworth Press.
- Mauldin, T.A. (1991). Economic consequences of divorce or separation among women in poverty. In Volgy, S.S. (Ed.), *Women and divorce/men and divorce* (pp. 163-177). New York: The Haworth Press.
- Plummer, L.P. & Koch-Hattem, A. (1986). Family stress and adjustment to divorce. *Family Relations*, 35, 523-529.
- Raschke, H.J. (1987). Divorce. In Sussman, M.B. & Steinmetz, S.K. (Eds.), *Handbook of marriage and the family* (pp. 597-622). New York and London: Plenum Press.
- Robinson, M. (1993). *Family transformation through divorce and remarriage. A systemic approach*. Great Britain: Tavistock/ Routledge Publication.
- Rosenbaum, W.L. (2000). Variables associated with the involvement and frequency of contact of nonresidential fathers with their children following divorce. (Doctoral Dissertation, Lehigh University). *UMI ProQuest Digital Dissertations*.
- Sahin, N.H. & Durak, A. (1994). Kisa Semptom Envanteri (Brief Symptom Inventory-BSI): Türk gençleri için uyarlanması. *Türk Psikoloji Dergisi*, 9, 44-56.
- Sansom, D. & Farnill, D. (1997). Stress following marriage breakdown: Does social support play a role? In Everett, C.A. (Ed), *Divorce and remarriage: International studies* (pp. 39-49). New York: The Haworth Press.
- Shapiro, A.D. (1996). Explaining psychological distress in a sample of remarried and divorced persons. *Journal of Family Issues*, 17, 186-204.
- Song, Y.I. (1991). Single Asian American women as a result of divorce: Depressive affect and changes in social support. In Volgy, S.S. (Ed.), *Women and divorce/men and divorce* (pp. 219-230). New York: The Haworth Press.
- Stewart, A.J., Copeland, A.P., Chester, N.L., Malley, J.E., & Barenbaum, N.B. (1997). *Separating together: How divorce transforms families*. New York: The Guilford Press.
- Stolberg, A.L. & Ullman, A.J. (1984). Assessing dimensions of single parenting: The single parenting questionnaire. *Journal of Divorce*, 8 (2), 31-45.
- Tabachnick, B. G. & Fidell, L.S. (1996). *Using multivariate statistics, 3rd edition*. New York: HarperCollins College Publishers.
- Thiriou, T.L. & Buckner, E.T. (1991). Multiple predictors of satisfactory post-divorce adjustment of single custodial parents. *Journal of Divorce*, 17 (1/2), 27-48.
- Tschann, J.M., Johnston, J.R., & Wallerstein, J.S. (1989). Resources, stressors, and attachment as predictors of adult adjustment after divorce: A longitudinal study. *Journal of Marriage and the Family*, 51, 1033-1046.
- U.S. Bureau of the Census. (1992). *Marriage, divorce and remarriage in the 1990s* (Current Population Reports, Series P23, No. 180). Washington, DC: U.S. Government Printing Office.
- Uyar, S. (1999). *Bosannmis bireylerin evlilik süreci ve bugüne ilişkin psikolojik sorunları üzerine bir araştırma*. Unpublished expertise thesis, Gülhane Askeri Tıp Akademisi, Ankara.
- Wallerstein, J.S. (1986). Women after divorce: Preliminary report from a ten-year follow-up. *American Journal of Orthopsychiatry*, 56, 65-77.

- Wang, H. & Amato, P.R. (2000). Predictors of divorce adjustment: Stressors, resources, and definitions. *Journal of Marriage and the Family*, 62, 665-678.
- Weiss, R.S. (1975). *Marital separation*. New York: Basic Books.
- Yilmaz, A.E. & Fişiloğlu, H. (2005). Turkish parents' postdivorce adjustment: Perceived power/control over child-related concerns, perceived social support, and demographic characteristics. *Journal of Divorce & Remarriage*, 42, 83-108.

