RESEARCH PAPER

The Portuguese Version of the Psychological Adjustment to Separation Test-Part A (PAST-A): A Study with Recently and Non-recently Divorced Adults

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Abstract   Past research has demonstrated that divorced adults show more health problems and psychological distress than married adults. Considering the high prevalence rates of divorce among Western countries, new and robust measures should be developed to measure psychological distress after this specific transition in adulthood. The aim of this study was to adapt and validate a Portuguese version of the Psychological Adjustment to Separation Test-Part A (PAST-A; Sweeper and Halford in J Family Psychol 20(4):632–640, 2006). PAST-A is a self-report measure that assesses two key dimensions of separation adjustment problems: lonely-negativity and former partner attachment. Psychometric properties of the Portuguese version of PAST-A were assessed in terms of factor structure, internal consistency, and convergent and divergent validity, in an online convenience sample with divorced adults (N = 460). The PAST-A two-factor structure was confirmed by exploratory and confirmatory factor analyses, with each factor demonstrating very satisfactory internal consistency and good convergence. In terms of discriminant validity, the Portuguese PAST-A reveals a distinct factor from psychological growth after divorce. The results provided support for the use of the Portuguese PAST-A with divorced adults and also suggested that the explicative factors of the psychological adjustment to divorce may be cross-cultural stable. The non-existence of validated divorce-related well-being measures and its implications for divorce research are also discussed.

Keywords   Adjustment · Satisfaction with life · Assessment · Divorce · Self-acceptance · Separation · Validation

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1 Introduction

Despite being a prevalent transition in western countries, divorce is still one of the most stressful experiences during adulthood (e.g., Sbarra et al. 2011). In the aftermath of marital dissolution, adults showed comparable psychological distress and posttraumatic stress symptoms to those showed by adults who experienced other stressful life-common and life-threatening events (Middeldorp et al. 2008; Miller et al. 2007; Mol et al. 2005). Additionally, when compared with married adults, divorced adults reported higher levels of psychological distress as well as higher levels of depression and anxiety symptomatology, physiological stress, and greater risk of suicide and physical health problems (Arber et al. 2009; Breslau et al. 2011; Corcoran and Nagar 2010; Gardner and Oswald 2006; Lorenz et al. 2006; van Eck et al. 1996; Waite et al. 2009; Zhang and Hayward 2006).

Despite the fact that a heightened risk of divorced adults to experience psychological and physical health problems is empirically well-established, the theoretical interpretation of these negative outcomes is not consensual (Ahrons and Rodgers 1987; Amato 2000; Bohannan 1968; Goode 1956; Hetherington and Kelly 2002; Kessler 1975; Lamela et al. 2010a, b; Wallerstein and Kelly 1996). Two broad epistemological frameworks reunite the theoretical models of the divorce: the pathology framework and the process framework (Ahrons and Rodgers 1987; Ahrons and Tanner 2003; Masheter 1998). The pathology framework suggests that divorce is a consequence of personal, social and societal risks and deficits (Masheter 1998), in which adults who reported more risk factors and deficits during marriage are more likely to be *selected* to get divorced (Masheter 1998) as well as the post-divorce maladjustment outcomes tend to be permanent, with a high probability of an intergenerational transmission to the offspring (Wallerstein et al. 2000).

Conversely, the process framework suggests that, for the majority of divorced adults, post-divorce negative outcomes are acute distressed responses to marital dissolution (Ahrons and Rodgers 1987) and the post-divorce adjustment outcomes may be explained by the proficiency of divorced adults to cope with challenging changes emerged in this event (Ahrons and Rodgers 1987; Amato 2000; Clarke-Stewart and Brentano 2006; Hetherington and Kelly 2002; Lamela et al. 2010a, b; Masheter 1998). Therefore, while the post-divorce negative outcomes in adults' life are not defined as being universal, unavoidable, irreversible and permanent, some scholars also highlight that this transition can trigger higher levels of subjective and psychological well-being, especially for divorced adults who leaved distressed marriages (Amato and Hohmann-Marriott 2007; Hetherington and Kelly 2002; Lucas 2005).

1.1 Adjustment to Divorce

According to the process framework assumptions, some authors have suggested that the adjustment to divorce is related with the successful resolution of the instrumental and emotional tasks generated by the divorce process (Clarke-Stewart and Brentano 2006; Hetherington and Kelly 2002; Lamela et al. 2010a, b; Wang and Amato 2000). Subjective well-being and absence of psychopathology are usually considered as the outcomes of a positive general adjustment to divorce (Gardner and Oswald 2006; Lucas 2005; Luhmann et al. 2012; Mancini et al. 2011). Past research has supported this assumption by demonstrating that divorced adults who reported fewer psychopathological symptoms and higher subjective well-being are those that successfully coped with the developmental tasks of divorce (Andreß and Bröckel 2007; Kramrei et al. 2007; Yárnoz-Yaben and González 2010). Furthermore, some studies have revealed that as adults positively cope

with these tasks, their subjective well-being increases over time. In a meta-analytic study, Luhmann et al. (2012) showed that, despite of a significant moderate decrease in the first months, subjective well-being significantly increases as a consequence of divorce. These results lead the authors to conclude that divorce could actually be advantageous for the adults' subjective well-being (Luhmann et al. 2012). Similar results were found in early studies (Clavarino et al. 2011; Gardner and Oswald 2006; Lucas 2005; Soons et al. 2009).

1.2 Psychological Adjustment to Divorce (PAD)

General adjustment to divorce and PAD are interdependent but distinct constructs. While general adjustment to divorce is a composite outcome of the positive coping with psychological, instrumental and interpersonal demands triggered by marital dissolution (Clarke-Stewart and Brentano 2006), PAD is specifically dependent on a successful resolution of the psychological tasks that emerged during the divorce process (Fisher 1977; Kitson 1982; Sweeper and Halford 2006; Yárnoz-Yaben and González 2010). In this sense, PAD is one of the indicators of the general adjustment to divorce construct and not an outcome of a good general adjustment to divorce (Clarke-Stewart and Brentano 2006).

However, there is no consensual theoretical view on the indicators of PAD (Berman 1988; Fisher 1977; Gray and Shields 1992; Kitson 1982; Yárnoz et al. 2008). More recently, Sweeper and Halford (2006) formulated a definition of psychological adjustment to separation/divorce that aimed to synthetize and incorporate these previous empirical and theoretical contributions about this construct. Based partially on the family stress–diathesis model of coping (McCubbin and Peterson 1983), the authors described the psychological adjustment to separation/divorce as a self-reorganization process that results in weaker feelings of emotional closeness to the ex-spouse, a perception of social integration and affective balance (Sweeper 2004). Additionally, for those adults who are parents, a co-parenting alliance with the ex-spouse is also a component of PAD (Sweeper and Halford 2006). Past studies have demonstrated that divorced adults with higher scores in the indicators of PAD proposed by Sweeper and Halford (2006) reported a greater subjective well-being and fewer psychopathology symptoms as well. Subjective well-being is moderately associated with a higher forsaken of the life goals previous to divorce (King and Raspin 2004), a weaker emotional attachment to the ex-spouse (Kulik and Heine-Cohen 2011), an increase of social relationships (Kramrei et al. 2007), a new satisfactory intimate relationship (Kulik and Heine-Cohen 2011), and a cooperative coparenting relationship (Yárnoz-Yaben and González 2010).

1.2.1 Time Since Divorce and PAD

The majority of studies found that non-recently-divorced adults reported greater PAD than recently-divorced adults (Hetherington and Kelly 2002; Lorenz et al. 1997; Mastekaasa 1994b; Sweeper and Halford 2006). However, previous research also suggested that, for some individuals, PAD may be very slow, incomplete or even unlikely probable to occur in long-term (Amato 2000; Kitson and Holmes 1992; Lucas 2005; Luhmann et al. 2012; Soons et al. 2009; Terhell et al. 2004). In addition, negative long-term effects of marital dissolution on mental health are reported by past research in some non-recently-divorced adults as well (Hope et al. 1999; Overbeek et al. 2006). These negative outcomes in PAD and in mental health found in some non-recently-divorced adults are also extended to subjective well-being. For example, Mancini et al. (2011) demonstrated that 19 % of the

divorced participants reported a significant decline in their subjective well-being as a consequence of divorce and this decline was still present 4 years later.

1.2.2 Gender and PAD

Furthermore, despite the fact that not all the studies document gender differences in the PAD (Mastekaasa 1994a), the general findings in past research state that men tend to report lower PAD than women (for review Braver et al. 2006). Following divorce, men show more depression symptoms as a consequence of the marital dissolution process (Kendler et al. 2001; Scott et al. 2010), a lower social support (Kalmijn 2007), more emotional loneliness (Dykstra and Fokkema 2007), more risk of suicide (Kaplan and Kronick 2006), a higher number of post-divorce self-perceived health problems and higher risk of mortality (Ikeda et al. 2007). Divorced men also reported a lower subjective well-being than divorced women (Lucas 2005). Additionally, previous longitudinal studies suggested that these gender differences in PAD long-term stable (Wallerstein 1986).

1.3 Assessment of PAD

In the last decades, PAD has been mainly assessed by the administration of measures of screening of psychopathological symptomatology (Johnson and Wu 2002). Some authors suggested that the use of such measures is theoretically inaccurate since the presence or absence of psychopathology is an indicator of a general adjustment to divorce and those measures did not capture the adults' process of resolution of divorce psychological tasks either (Yárnoz-Yaben and González 2010). Therefore, several measures were developed aiming to measure the specific dimensions of the PAD (for review Sweeper 2004). However, the majority of the published measures exhibit some theoretical and psychometric limitations, such as no examination of the construct validity (e.g., Fisher Divorce Adjustment Scale; Fisher 1977), no test of internal consistency (e.g., Adjustment Behavior Checklist; Clarke-Stewart and Bailey 1989), no assessment of convergent and divergent validity (e.g., Preoccupation and Hostility with Ex-spouse; Masheter 1997), use of small samples to perform psychometric analyses (e.g., Divorce Reaction Inventory; Brown and Reimer 1984), and the fact that it is mainly designed to be administered to divorced adults who have children with the ex-spouse (e.g., CAD-S, Yárnoz-Yaben and González 2010).

1.3.1 The Psychological Adjustment to Separation Test

To surpass these limitations, Sweeper and Halford (2006) developed the Psychological Adjustment to Separation Test. This scale aims to measure three theory-driven dimensions of the PAD. The first dimension is loneliness-negativity caused by the loss of the emotional bond with the ex-spouse and the social networks related to him or her; loneliness is defined as the feeling of isolation, the amount of time spent alone and the experience of negative affect. The second dimension is attachment to the former spouse; the authors described attachment to the ex-spouse as a product of an ongoing desire for emotional closeness with the ex-spouse after an intimate dissolution. Finally, a third dimension is the post-dissolution coparenting relationship. Coparenting relationship is characterized by the coordination and negotiation between parents regarding key issues of the children's well-being.

The PAST comprised three subscales that are divided in two parts. Part A of the PAST (PAST-A) contains items that comprise the lonely-negativity and the former partner

attachment subscales, and part B is composed by the items of the coparenting conflict subscale. Thus, PAST-A includes items related to psychological adjustment common to all adults while PAST-B comprises items that are only shared by adults who are parents. PAST-A and PAST-B can be administered autonomously. PAST-A subscales are those that better predict the PAD, while PAST-B can be administered optionally. According to PAST scoring procedures, higher scores reflect more problems in the psychological adjustment to a separation or divorce.

Prior results reported by Sweeper and Halford (2006), using two samples assessed cross-section and longitudinally, suggested that PAST-A is a reliable and valid measure to examine interindividual differences in the adjustment to divorce among recently separated and divorced adults. The construct validity assessed via a Confirmatory Factor Analysis (CFA) showed an adequate fit. No cross-factor loadings of the items were found (all items <.3) in the Exploratory Factor Analysis. Additionally, the subscales of the Australian version of the PAST-A revealed good internal consistency, ranging from .88 to .90. In that study, correlations between PAST-A subscales and the 21-item Depression, Anxiety and Stress Scales were .73 to the Lonely-Negativity subscale and .40 to Former Partner Attachment. One-week test–retest reliability was high. More recently, Smet et al. (2011) translated and adapted PAST-A to the Dutch population, using a community sample of 196 separated and divorced adults. The internal consistency of the Dutch version PAST-A subscales was high ($\alpha = .86$ for Lonely-Negativity subscale and $\alpha = .83$ for Former Partner Attachment subscale). In this first empirical study that administered the PAST to assess PAD, Smet et al. (2011) found that individuals with higher scores on PAST-A subscales showed more unwanted pursuit behaviors toward their ex-partners than theoretically expected. However, no information about construct validity of this version of the PAST-A was provided by the authors.

1.4 The Present Study

In the last 10 years, Portugal showed one of the largest increases of divorce rate among European countries. While the divorce rate grew on average 11 % in the 27 countries of European Union from 1998 to 2005, in Portugal there was an increase of 47 % (Eurostat 2010). In 2010, the Portuguese national statistics authorities registered a ratio of 69 divorces per 100 legal marriages, while that ratio was 30 divorces per 100 marriages and 13 divorces per 100 marriages in the years 2000 and 1990, respectively (INE 2012). These numbers reflect legal and sociological transformations that are occurring within the Portuguese society regarding the family structure and values (Aboim and Wall 2002). Additionally, the 2008 revision of the Portuguese Divorce Act legally abolished the litigious divorce, reinforced the promotion of joint custody arrangements, and stimulated the use of family mediation as a recommended mechanism for conflict resolution during the divorce process. Instruments to assess psychological dimensions of the adjustment to divorce may therefore assume an essential tool for forensic psychologists and other professionals involved in the legal divorce mediation and in the negotiations of children custody arrangements.

However, to our knowledge, no instrument to examine PAD is psychometrically validated in the Portuguese context. As a consequence of this limitation, the Portuguese standard forensic protocols of child custody evaluations recommend the administration of measures of presence of psychopathology symptoms to assess adults' PAD (Antunes et al. 2005; Pereira and Matos 2011). Similarly, empirical studies with Portuguese divorced adults also suggested that the lack of availability of a specific measure of PAD is a major

limitation in the research of the divorce psychological processes in Portugal (Lamela et al. 2010a, b). For these reasons, the validation of a measure of PAD may represent a significant contribution for forensic and clinical practices and scientific research in the Portuguese context.

This study intents develop and validate a Portuguese version of the PAST-A using a sample of divorced adults. PAST-A shows three main advantages in comparison with previous scales. First, dimensions of PAD assessed by the PAST-A are theory-driven and conceptually well-sustained. Secondly, when compared with previous measures (e.g., Fisher Adjustment to Divorce Scale), PAST-A is comprised by a parsimonious number of items. Finally, in contrast with earlier published instruments, the main psychometric validity criteria were tested by PAST authors (i.e., content validity, construct validity, criterion validity, and reliability).

1.4.1 Methodological Considerations

1.4.1.1 Validating Exclusively PAST-A   As the PAST is comprised by two parts that can be administered autonomously, only the psychometric properties of the PAST-A were investigated in the current study. Two main reasons supported our option of exclusively translate and examine the psychometric properties of the Portuguese version of the PAST-A. Firstly, the Lonely-Negativity and Former Attachment to Ex-partner subscales seem to have more theoretical significance in the assessment of the psychological adjustment to separation/divorce than the coparenting relationship after an intimate relationship (Sweeper 2004; Sweeper and Halford 2006). For instance, in the Dutch version of this measure, only part A was also translated, validated and used to measure the psychological adjustment to separation (Smet et al. 2011).

Secondly, we advocate that coparenting conflict may not be a nuclear dimension of the PAD construct. PAD refers to the proficiency of adults to cope with specific psychological tasks that are exclusively triggered by marital dissolution (e.g., cope with emotional loneliness, negative affect and feelings of attachment for the ex-spouse). In fact, the management of the coparenting conflict is not a specific psychological task of the divorce process since coparenting relationship is a family process formed during pregnancy (van Egeren 2004) and it is a *pivot* family subsystem in predicting parenting quality and children psychological adjustment in families with married parents and in families with divorced parents (Shook et al. 2010; Teubert and Pinquart 2010). Coparenting is not therefore a family process exclusive to divorced parents and some studies demonstrate that post-divorce coparenting conflict could be better predicted by the quality of coparenting and marital relationship prior to divorce rather than the divorce process per se (Dush et al. 2011; Lamela and Figueiredo 2011). Consequently, the coparenting tasks described by Sweeper and Halford (2006) may be not circumscribed to divorced/separated parents, but they are universal for all parents who share responsibilities in childrearing, independently of the family structure.

Coparenting is a dyadic, interpersonal and interactional construct by nature and, therefore, may not reflect individual PAD (Dush et al. 2011; Sbarra and Emery 2008; Teubert and Pinquart 2010). The degree of coparenting conflict after the divorce is exclusively dependent of both parents' efforts to develop a coordinated and efficacious relationship that promotes a positive psychological functioning of their children, independently of the family's structure (Feinberg 2003; Feinberg et al. 2012). Indeed, some studies suggest that divorced adults' PAD may trigger more coparenting conflict behaviors in the ex-spouses. For example, Sbarra and Emery (2008) found that the parents'

psychological acceptance of divorce and the lower attachment behaviors toward the ex-spouses (both indicators of PAD) predicted an increasing in ex-spouses' reports of co-parenting conflict. However, we assume that for divorced parents, the resolution of specific tasks related to the PAD can potentially be moderated by the quality of coparenting relationship with the ex-spouse, as demonstrated by previous studies (Fischer et al. 2005; Madden-Derdich and Arditti 1999). Similarly, in the original study of the PAST psychometric properties, authors did not perform a CFA comprising these three dimensions at the same time. Rather, Sweeper and Halford (2006) only conducted a CFA comprising the two dimensions assessed by PAST-A subscales. Additionally, the very low correlation between the Coparenting Conflict subscale with the Lonely-Negativity subscale ($r = .14$, $p < .01$) and the non-significant correlation between the Coparenting Conflict subscale with the Former Partner Attachment subscale ($r = .05$, ns) found in that study may also suggest that coparenting conflict may be not a nuclear dimension of the PAD latent construct. Therefore, considering past research on the dimensions of PAD (e.g., Kramrei et al. 2007; Kulik and Heine-Cohen 2011), as well as the recent theoretical contributions that outlined co-parenting as a universal family process (Feinberg 2003; Lamela et al. 2010a, b), in the current study, we assumed that lonely-negativity and former partner attachment would be the only two components that reflect PAD.

1.4.1.2 Construct Validity and Reliability   To reach the goal of the current research, the factor structure of the Portuguese PAST-A was tested in order to explore and confirm the two-factor model proposed by Sweeper and Halford (2006). The internal consistency and convergent, discriminant and concurrent validity were also examined. Internal consistency reliability was examined by computing Cronbach's alpha coefficients (α), average inter-item correlation and item-total correlation for both subscales.

1.4.1.3 Convergent Validity   To the best of our knowledge there is no other validated psychometric instrument to the Portuguese population that accurately measures the PAD. For this reason, we used one measure that assessed a closely associated construct, namely the self-acceptance. The Self-acceptance subscale of the Psychological Well-being Scale (Ryff 1989) was also used to test convergent validity. Self-acceptance refers to positive affect and regard toward the self and acceptance of good and bad aspects of the self in consequence of divorce. We assumed self-acceptance as an indicator of the PAD. Higher scores of self-acceptance may reflect a coherent acceptance of the divorce process and the post-marriage identity. For example, King and Raspin (2004) found that women less engaged with 'lost selves', proactively accept and create new life goals, after 'newly divorced selves' reported higher scores in PAD and subjective well-being. Therefore, we predicted that PAST-A subscales would also be moderately and negatively associated with Self-acceptance subscale of the Psychological Well-being Scale (Ryff 1989).

1.4.1.4 Discriminant Validity   PAST-A was expected to measure PAD as a distinctive construct from stress-related psychological growth (Joseph and Linley 2005). Despite the fact that these dimensions are both aspects of optimal well-being after a stressful event, they are conceptually distinct (Staudinger and Kunzmann 2005; Tedeschi et al. 2007). While PAD may be defined as the ability of a divorced adult in coping successfully with challenging psychological developmental tasks triggered by a marital dissolution contributing to general adjustment to divorce and, consequently, to a subjective well-being, divorce-related psychological growth refers to the development of a deeper and wider view

of the self, the others and the world, as well as the continuous development of psychological maturity and meaning of life as contingent consequences of the struggle with the divorce aftermath (Authors' reference blinded; Staudinger and Kunzmann 2005; Tedeschi et al. 2007). Past studies about the association between personal growth after a stressor and psychological adjustment have demonstrated two main findings. First, no systematical and causal positive relationship between these two constructs can be made (e.g., Powell et al. 2003) and, second, that psychological maladjustment and stress-related psychological growth can co-exist at the same time (Tedeschi et al. 2007; Zoellner and Maercker 2006). In this way, discriminant validity will be examined by testing whether the PAD and divorce-related psychological growth are two distinguishing constructs, by performing an Exploratory and Confirmatory Factor Analyses.

1.4.1.5 Predictive Validity Since literature has been reporting differences in the PAD based on gender and time since the divorce (e.g., Dykstra and Fokkema 2007; Lorenz et al. 1997; Sweeper and Halford 2006), we tested differences in the adjustment to the divorce between men and women and between recently divorced (within past 24 months) and non-recently divorced (more than 24 months) adults as well. According to the literature review, on the one hand, we expected that divorced men would report higher PAST-A scores than women, and, on the other hand, recently divorced individuals would also show higher PAST-A scores than non-recently divorced individuals. Additionally, we hypothesized that PAST-A would negatively predict adults' satisfaction with life. Satisfaction with life refers to a cognitive and judgmental process in which individuals assess the quality of their lives as a whole (Diener et al. 2009). Satisfaction with life, as an indicator of subjective well-being, is conceptually associated with general adjustment to divorce (e.g., Lucas 2005) and therefore captures the divorced adults assessment of all the other dimensions of the general adjustment to divorce beyond psychological adjustment.

2 Method

2.1 Participants

The sample was composed by 460 Portuguese divorced adults, in which 330 were female (71.7 %) and 130 were male (28.3 %). Three inclusion criteria were applied: the participant was over 18 years old, the couple had been married for at least 1 year and the participant was a Portuguese citizen. Participants were on average 41.6 years old ($SD = 8.1$ years; range $= 24$–65), highly educated ($M = 17$ years of education, $SD = 4.16$; range $= 6$–30 years), had been married on average for 11.08 years ($SD = 7.8$ years; 1–40 years), and their divorce had occurred on average 5.2 years earlier ($SD = 5.01$ years). 196 of the participants had gotten divorced within the past 24 months (recently divorced).

2.2 Measures

The Psychological Adjustment to Separation Test-Part A (PAST-A; Sweeper and Halford 2006) is a 19-item self-report scale that consists of two subscales corresponding to two dimensions of psychological adjustment to separation of intimate close relationships: lonely-negativity (11 items) and former partner attachment (8 items). Instructions ask the

subject to rate how much each statement characterizes their experience in the past 2 weeks. The response scale is a 5-point-Likert scale (1, *strongly disagree* to 5, *strongly agree*). In the original version, scores on PAST-A range from 19 to 95, with higher scores reflecting more adjustment problems. Overall means were 30.69 ($SD = 10.14$) in the Lonely-Negativity subscale and 22.99 ($SD = 8.38$) in the Former Partner Attachment subscale. In the Australian study, all participants had to be separated from their marriage or cohabiting relationship for the past 18 months.

The Satisfaction with Life Scale (SWLS; Diener et al. 1985) was used to assess the cognitive dimension of well being. This 5-item scale measures the global assessments of how satisfied participants are with their lives, in which higher scores represent higher levels of well-being. In the current study, the Cronbach's alpha was .87. The Portuguese version of the SWLS showed very good psychometric properties (Neto 1993).

The Self-acceptance Scale of the Psychological Well-Being Scales (SAS; Ryff 1989) was used to examine personal attitudes toward the self, awareness of personal qualities and limitations and acceptance of one's past life. Participants were asked to reflect about their own self-acceptance feelings as a consequence of the divorce process. Higher scores reflect more self-acceptance. The internal consistency (α) for the total score in the current sample was .83. The Portuguese version of the Psychological Well-Being Scales used in the current study showed adequate psychometric properties (Novo 2003).

The Posttraumatic Growth Inventory Short Form (PTGI-SF; Cann et al. 2010) was used to examine the positive outcomes in the aftermath of divorce. The total score of the 10-item PTGI-SF was used. Higher scores reflect the presence of more positive changes in consequence of divorce. The Cronbach's alpha for this sample was .88. The Portuguese version of the PTGI-SF exhibited excellent psychometric properties (Lamela et al. 2013).

2.3 Procedure

The Portuguese translation of the PAST-A was accomplished using a back-translation procedure by two independent translators. The translators were the first author (with an academic degree in Psychology) and a bilingual translator, specialist in Portuguese and English semantics. Discrepancies arising from this process were discussed until a convergence on a common version was achieved.

The adaptation and validation of PAST-A is included in the Portuguese National Study about Divorce Experience. For the purpose of collecting data, an online survey was conducted. The online survey was available on a Portuguese internet research portal for divorce research from June to October 2010. Participants were recruited through electronic outreach (e-mails to institutional universities web accounts, and notices on national web forums, for example a forum of a support group to divorced adults and also a forum of family issues) and announcements in the media (newspapers, radio and newspaper websites). No compensation was offered to participants. To guarantee data quality, standard methodological and ethical guidelines for internet-based research were followed (Kraut et al. 2004; Reips 2002), such as implementing informed consent procedures recommend by Kraut et al. (2004), using an adequate and parsimonious plan of participants' recruitment and guarding against potentially biases sample. Previous research has consistently demonstrated that Internet-based research produces trustful and reliable data equivalent to those obtained from traditional methods (Gosling et al. 2004).

3 Results

3.1 Construct Validity

Exploratory Factor Analysis (EFA) using principle axis factoring with an oblique rotation method were conducted using the Portuguese sample. The main goal of EFA was to examine whether the factor structure initially found by Sweeper and Halford (2006) replicated within the Portuguese sample. An initial EFA with all 19 items identified three factors; however two items showed low communality and one of them loaded on a factor by itself. Using standard guidelines (Field 2009) and Sweeper and Halford's procedures, these two items (items 6 and 14 in the original Australian version) were removed from the Portuguese version of PAST-A, and the remaining 17 items were factor analyzed again. In this EFA, two factors with eigenvalues greater than 1 were extracted. Factor 1 accounted for 51 % of the variance, while factor 2 accounted for 9 %. The distribution of the items was the same of the PAST-A original version. For that reason, the labels of the factors were maintained in the Portuguese version. The correlation coefficient between Factors 1 and 2 was moderate to high, $r = .68$. The Kaiser–Meyer–Olkin (KMO) index was .93, indicating that the adequacy of the factor analysis is superb (Field 2009).

Subsequently, a Confirmatory Factor Analysis (CFA; AMOS 18.0) was performed for the 17 remaining items of the PAST-A. The estimation method was maximum likelihood. The original two-factor model was tested. Four measures were reported to test the good-fitting of this factor solution: the Chi square statistic (χ^2), the comparative fit index (CFI), normed fit index (NFI), and the root mean square error of approximation (RMSEA). A good-fit model is attained with non-significant Chi square statistic, a CFI and NFI values above .90, and with a RMSEA value lower than or equal to .08 (Bollen and Long 1993). However, the Chi square statistic was not considered the major indicator of fit for the reason that it is affected by the sample's size (Bollen and Long 1993; Kline 2010). For the total sample, the model did not allow any correlated error terms and showed a non-adequate fit, $\chi^2(116) = 5.78$, *ns*, CFI = .99, NFI = .88, and RMSEA = .10 (90 % CI .09–.11). The model required seven correlations of two error terms in order to reach a good-fit, $\chi^2(96) = 4.46$, $p < .001$, CFI = .94, NFI = .93, and RMSEA = .08 (90 % CI .07–.09). Any additional correlation between error terms did not allow a better fit of the model. The factor loadings from the CFA for this model with correlated error terms are presented in Table 1.

In consequence of the high intercorrelation (.76) among the 2 factors found in the CFA analyses, it is plausible to hypothesize that other potential factor models could fit the data more appropriately. More concretely, it is possible that these two factors in the original version of the PAST-A may represent a single factor or can be accounted for by one common higher-order latent factor. Therefore, we compared the original 2-factor model without correlated error terms, the 2-factor model with correlated error terms with other two competing models via CFA in order to examine the best underlying factor structure of the Portuguese version of PAST-A. The competing models compared were:

Model A: The original 2-factor model without correlated error terms;
Model B: The 2-factor model with correlated error terms;
Model C: one global second-order latent factor, in which the higher-order factor could explain the correlation between the original two subscales that were understood as lower order factors;

Table 1 Standardized regression weights of the Portuguese PAST-A items from the CFA

Item	Factor loadings[a]	
	Lonely negativity	Former partner attachment
14. I feel like my life has less purpose in it now	.88	
13. I feel desperately lonely	.82	
3. I feel isolated	.79	
11. I feel like I'm on a constant emotional roller-coaster ride	.80	
12. I get angry more than I used to	.74	
17. Little things seem to upset me now	.77	
15. I sometimes have difficulty controlling my emotions	.70	
8. I find it difficult to enjoy myself	.73	
1. I find it hard to do things without a partner	.44	
10. I don't have much time to see my friends	.35	
5. I miss my former partner a lot		.89
2. I constantly think about my former partner		.85
4. Days that have special meaning for my former partner and I are really difficult		.86
9. It is hard looking at photos and other things that remind me of my former partner		.77
6. I wish my former partner and I could try to make the relationship work		.72
16. I feel rejected by my former partner		.63
7. I don't really know why my former partner and I separated		.52

[a] Items' numbers are adjusted to the Portuguese factorial solution. Items' numbers presented are not equivalent to the Australian version of PAST-A since two items were removed in the Portuguese version of the PAST-A

Model D: one-factor solution in which the PAD was understood as a unitary construct (i.e., all items of the PAST-A load in the same single factor).

Table 2 reports the fit indices for the four models. Fit indices revealed that Model C (one global second-order factor) and Model D (one-factor) exhibited poor fit to the data. In comparison with the other three competing models, Model B (2-factor solution with correlated error terms) was the solution that revealed better fit to the data. Therefore, the consequent statistical analyses conducted to examine reliability and convergent, divergent, and predictive validities were based on the 2-factor with correlated error terms model.

3.2 Internal Consistency Reliability and Convergent, Discriminant and Predictive Validity of the PAST-A

Cronbach's alpha was .93 for PAST-A total scale, .91 for the 10-item Lonely-Negativity subscale and .90 for the 7-item Former Partner Attachment subscale. Average inter-item correlation for the Lonely-Negativity subscale was .52 and .56 for the Former Partner Attachment subscale. Item-total correlations were very satisfactory for both factors of the PAST-A, $r > .4$.

Table 2 Fit indices of the four competing models

Models	Description	χ^2	df	χ^2/df	CFI	NFI	RMSEA	RMSEA confidence interval (90 %)
Model A	Initial 2-factor model (without correlated error terms)	681.22	116	5.78	.90	.88	.10	.09–.11
Model B	Final 2-factor (with correlated error terms)	427.74*	96	4.46	.94	.93	.08	.07–.09
Model C	One global second-order factor	766.99*	120	6.39	.88	.87	.10	.09–.11
Model D	One-factor	1,140.51*	101	11.29	.81	.80	.14	.14–.16

* $p < .01$

Correlations between the two PAST-A subscales scores and the measures applied to examine convergent and discriminant validity are presented in Table 3. A moderate correlation between the Lonely-Negativity subscale and the Former Partner Attachment subscale was found. There was a moderate negative correlation between the two PAST-A factors and Ryff's SAS. We examined the discriminant validity of the PAST-A scales performing a factor analysis with a forced two-factor solution (principal axis factoring with oblimin rotation) concerning separation/divorce adjustment (PAST-A items) and psychological growth after divorce (PTGI-SF items) (Straub 1989). The factor analysis showed clear factors: adjustment to divorce and psychological growth after divorce (KMO = .91). There were no cross-factor loadings items (all > .3). Additionally, we conducted two CFA to test whether the solution with two separate dimensions/factors model (one factor comprising all items of the PAST-A and other factor comprising all items of the PTGI-SF) fit the data better than a solution with one factor that comprised all items of the PAST-A and PTGI-SF. CFA results revealed a better fit for the two-factor solution, $\chi^2(287) = 3.25$, $p < .001$, CFI = .92, NFI = .88, and RMSEA = .068 (90 % CI .064–.073), rather than for the one-factor solution, $\chi^2(301) = 819$, $p < .001$, CFI = .73, NFI = .70, and RMSEA = .122 (90 % CI .118–.127). Finally, no association was found between the PAST-A total score and PTGI-SF ($r = .02$, ns).

To test predictive validity, a t test was conducted in order to evaluate gender differences. Males scored higher than females on the Lonely-Negativity subscale and on the Former Partner Attachment subscale, $t(458) = 3.49$, $p < .001$, $t(458) = 4.39$, $p < .001$, respectively. Cohen's d measure of effect size for the Lonely-Negativity subscale was .37 (95 % confidence interval [CI] .15–.56) and for the Former Partner Attachment subscale was .44 (95 % CI .23–.64). In the Lonely Negativity subscale, overall means were 27.58 ($SD = 10.06$) for men and 24.19 ($SD = 9.12$) for women. In the Former Partner Attachment subscale, overall means were 18.13 ($SD = 8.07$) for men and 14.87 ($SD = 6.82$).

An additional t test was performed to examine differences between recently divorced and non-recently divorced participants. Recently divorced participants presented higher scores than non-recently divorced on the Lonely-Negativity subscale and on the Former Partner Attachment subscale, $t(458) = 5.81$, $p < .001$, $t(458) = 7.51$, $p < .001$, respectively. For the Lonely-Negativity subscale, the Cohen's d effect size was .53 (95 % CI .35–.73). For the Former Partner Attachment subscale, a Cohen's d of .69 (95 % CI .50–.88) was found. Overall means in the Lonely-Negativity subscale were 28.04 ($SD = 10.34$)

Table 3 Means, standard deviations and convergent validity of the Portuguese PAST-A

Measure	M	SD	1	2	3
1. PAST-A total score	35.5	15.4	–		
2. PAST-A Lonely-Negativity subscale	22.0	9.7	.95*	–	
3. PAST-A Former Partner Attachment subscale	13.5	7.0	.89*	.69*	–
4. Ryff's SAS	32.3	6.6	−.56*	−.62*	−.35*

Ryff's SAS Ryff's Self-acceptance Scale

* $p < .001$

for recently divorced and 23.01 ($SD = 8.22$) for non-recently divorced. Considering the Former Partner Attachment subscale, overall means were 18.61 ($SD = 8.06$) for recently divorced and 13.7 ($SD = 5.95$) for non-recently divorced.

Lastly, we also conducted a simple linear regression analysis in order to examine whether PAD (assessed by total score of PAST-A) would predict satisfaction with life (assessed by SWLS) among all participants. As hypothesized, our results showed that PAST-A negatively predicted satisfaction with life in the total sample, $\beta = -.54, p < .001$ (standardized values reported). PAST-A also explained a significant proportion of the variance in satisfaction with life scores of the participants, $R^2 = .29, F (1, 259) = 185.6$, $p < .001$, Cohen's $f^2 = .41$ (95 % CI .28–.56). Additionally, we also tested whether PAST-A predicted satisfaction with life of the non-recently divorced participants. The results revealed that satisfaction with life of non-recently divorced was predicted by the PAST-A total score, $\beta = -.30, p < .001$ (standardized regression coefficient reported). PAST-A also explained a significant proportion of the variance in satisfaction with life scores of the non-recently divorced participants. This model significantly explained 34 % of the variance in life satisfaction, $R^2 = .34, F (1, 263) = 132.07, p < .001$, Cohen's $f^2 = .52$ (95 % CI .22–.48).

4 Discussion

The aim of this study was to assess the psychometric properties of the Portuguese version of part A of the PAST in a sample of divorced adults. PAST-A assesses two main aspects of adjustment to divorce that are common to all divorced people independently of whether they are parents or not: lonely-negativity and former partner attachment. Our results confirm the factor structure, reliability, and convergent and discriminant validity of the Portuguese version of PAST-A. EFA and CFA identified a clear replication of the two-factor structure found in the original Australian version (Sweeper and Halford 2006). Concerning reliability, results revealed that the internal consistency coefficients of both scales of the PAST-A were high, being comparable to those obtained by Sweeper and Halford (2006) and Smet et al. (2011).

Our results confirmed differences in the PAD between men and women and recently divorced and non-recently divorced. These results differ from Lopes (2008) that using a sample of Portuguese recently divorced adults did not find differences between men and women in post-divorce psychological adjustment. However, they are broadly consistent with earlier international studies that suggested that men had less PAD and recently divorced also showed higher levels of psychological adjustment problems than non-recently divorced (Lucas 2005; Dykstra and Fokkema 2007). The inconsistency between

our results and Lopes (2008) may be explained by the fact that Lopes study comprised a small sample ($N = 50$) and used a psychopathology symptoms measure to test PAD.

Finally, convergent and discriminant validity were also demonstrated. A moderate negative correlation between PAST-A total and Ryff's SAS was found. These results showed that weaker feelings of emotional loneliness and fewer ongoing desires for an emotional closeness with the ex-spouse are associated with both positive assessment of their quality of life as a whole and also with a more positive respect for the self and the acceptance of good and bad aspects of the self as a consequence of the divorce. Our results are similar to those obtained in other studies that previously examined the association between PAD and subjective well-being indicators and feelings of self-acceptance (King and Raspin 2004; Kramrei et al. 2007; Kulik and Heine-Cohen 2011). More concretely, Lamela et al. (in press) found that fewer feelings of insecure attachment toward the ex-spouse (an indicator of PAD) were significantly associated with lower psychological distress in a sample with Portuguese divorced adults.

Regarding discriminant validity, items of PAST-A and PTGI-SF loaded on two different factors. Subsequent CFA analyses also revealed that the 2-factor solution fit better in the data than the 1-factor solution. Additionally, no significant association between PAST-A and PTGI-SF was found. These findings suggest that adjustment to divorce is a distinct construct from psychological growth after divorce. By suggesting that psychological growth after divorce does not depend on the levels of PAD but may co-occur with the PAD, our results are supported by theoretical frameworks that propose a conceptual distinction between (post-divorce) psychological adjustment and (post-divorce) psychological growth (Joseph and Linley 2005; Keyes et al. 2002; Staudinger and Kunzmann 2005; Tedeschi et al. 2007). No association found between psychological adjustment to a stressor and stress-related psychological found in the current research is also corroborated by previous empirical studies (Helgeson et al. 2006). Moreover, PAST-A surprisingly explained one third of the variance of satisfaction with life of non-recently divorced, supporting past research which showed that divorce may trigger significant and mid and long-term psychological maladjustment outcomes (Doherty et al. 1989). Therefore, this result seems to suggest that PAST-A can be used complementarily to assess divorce-related psychological outcomes in non-recently divorced individuals.

4.1 Divorce and Well-being Measures

The current study reported the psychometric properties of a measure of PAD. As highlighted in the Sect. "1", PAST-A exhibited more theoretical, methodological and psychometric strengths than the previous measures on PAD. However, a major conceptual limitation of the PAST-A, as well as of all the other measures, is the implicit conceptualization of divorce as a distressing, negative, and non-normative event that increases the risk of negative mental health outcomes (Boney 2003; Masheter 1998). This risk perspective grounded in clinical and family psychology traditions may raise substantial limitations in the understanding of positive human experience of marital dissolution. Some scholars have criticized this vision and proposed a resilient view of divorce process (e.g., Hetherington and Kelly 2002). However, even this perspective is based on the theoretical tenet that divorce may be a potentially negative family transition and research should understand the psychological and contextual processes through which some (or the majority) of divorced adults struggled with the potential adverse effect of divorce and did not report mid- and long-term negative outcomes.

Nevertheless, as Positive psychology frameworks outlined, optimal adaptation to a life event is not merely circumscribed to the absence of psychopathological symptoms and inexistence of severe problems in the other life domains (Seligman and Csikszentmihalyi 2000; Park 2011). Instead, successful development depends of a selection and optimization of psychological resources to face the challenges provoked by life events in order to achieve higher levels of well-being and happiness (Delle Fave et al. 2011). Surprisingly, the current generation of measures of PAD shows a reduced sensitivity and accuracy to quantify the post-divorce positive outcomes for the reason that they were developed mainly to examine how divorced adults cope with divorce-related internal, social and contextual weaknesses, such as perceived stress, problems in identity, loneliness, and lack of social support (Sweeper 2004 for review). Therefore, it may be plausible to conclude that the majority of conceptual frameworks on divorce adjustment—and associated measures—focuses on marriage-related losses and divorce-related vulnerabilities rather than potential divorce-related gains to divorced adults' mental health. In the same line, Boney (2003) has already argued that research in divorce is biased by a deficit and psychopathology tradition and tenuous empirical efforts were carried out to examine the optimal components of individuals' divorce experience. Thus, according to Boney (2003), as previous research was developed under negative sociocultural attitudes toward divorce and under the assumption that the traditional heterosexual marriage is a major protective factor for adults' well-being (e.g., Gove et al. 1983), an unexpressive alternative conceptual frameworks and measures to examine the normal development and individuals' post-divorce positive outcomes are available.

A growing body of literature is showing that divorce experience may trigger new patterns of positive development, higher levels of mental health and psychological well-being (Kulik and Heine-Cohen 2011; Luhmann et al. 2012; Marks 1996). Additionally, previous research has demonstrating that PAD is a continuous process of cognitive and emotional adjustment to a reaction to this stressful life event that the majority of divorced individuals perform successfully (e.g., Lucas 2005). However, the measures employed to assess post-divorce well-being tend to administer broad-band measures of psychological well-being and subjective well-being, since no specific psychometrically validated measures of post-divorce well-being are available to our knowledge, in contrast with other fields of the psychological science. Future research on well-being measurement should therefore develop measures that focus on how marital dissolution can improve individual levels of well-being, which are the positive psychological resources that elicit, promote, and maintain a human flourishing experience after marital dissolution.

5 Limitations and Conclusion

Since PAST is a very recent measure of psychological adjustment after divorce, only one study using this instrument was published until now (Smet et al. 2011). Consequently, our study assumes particular significance in providing empirical support to this promising measure. In general, our results seemed to replicate the Australian study's findings. More specifically, PAST-A internal structure and distribution of explained variance per factor were similar in both Australian and Portuguese studies and means of Portuguese recently divorced participants in the two scales of PAST-A were comparable to those obtained with the Australian and Dutch samples. Additionally, this study may contribute to scientific research of divorce psychological processes in Portugal. The validation of PAST-A is included in the Portuguese National Study about Divorce Experience, the first large-scale

research concerning the psychological variables of divorce experience in adults conducted in Portugal. The scientific study of psychological variables in Portugal is still residual and the few available studies are based on risk samples (Pereira and Pinto 2003), on limited samples sizes (e.g., Lopes 2008) and on the administration of divorce non-specific measures to assess PAD (Lamela et al. 2010a, b; Lamela and Figueiredo 2011; Lopes 2008).

The current research offers a Portuguese psychometric valid and reliable version of PAST-A, which should be read with some precaution though. First, the current sample was composed by highly educated adults instead of an accurately representative sample. The level of education of the participants could be in part explained by the online convenience sample strategy used in the current study that should be considered as a limitation of our study, since this type of data collection is dependent of computer literacy of the participants (Wilt et al. 2012). Second, these results are circumscribed to divorced adults. Further research should also include adults who separated from a cohabiting relationship. In this sense, future research will have to test the generalizability of these results, by using samples that represent wider socio-demographic characteristics and also employing a paper-and-pencil procedure for data collecting. Finally, the current study used a relatively limited set of instruments of psychological adjustment and well-being. In future studies, this set of measures should be extended.

References

Aboim, S., & Wall, K. (2002). Tipos de família em Portugal: Interacções, valores, contextos [Family types in Portugal: Interactions, values, contexts]. *Análise Social, 38*, 475–506.

Ahrons, Constance., & Rodgers, R. (1987). *Divorced families: A multidisciplinary developmental view*. New York: Norton.

Ahrons, Constance., & Tanner, J. (2003). Adult children and their fathers: Relationship changes 20 years after parental divorce. *Family Relations, 52*(4), 340–351.

Amato, P. (2000). The consequences of divorce for adults and children. *Journal of Marriage and Family, 62*(4), 1269–1287.

Amato, P., & Hohmann-Marriott, B. (2007). A comparison of high and low-distress marriages that end in divorce. *Journal of Marriage and Family*, 69(3), 621–638.

Andreß, H., & Bröckel, M. (2007). Income and life satisfaction after marital disruption in Germany. *Journal of Marriage and Family, 69*(2), 500–512.

Antunes, C., Caridade, S., & Pereira, A. (2005). Avaliação do processo de regulação do exercício do poder paternal [Assessment of child custody arrangements]. In R. Abrunhosa Gonçalves & C. Machado (Eds.), *Psicologia forense* (pp. 289–317). Coimbra: Quarteto.

Arber, S., Bote, M., & Meadows, R. (2009). Gender and socio-economic patterning of self-reported sleep problems in Britain. *Social Science and Medicine, 68*(2), 281–289.

Berman, W. (1988). The role of attachment in the post-divorce experience. *Journal of Personality and Social Psychology, 54*(3), 496–503.

Bohannan, P. (1968). *Divorce and after*. NY Doubleday: Garden City.

Bollen, K. A., & Long, J. (1993). *Testing structural equation models*. Newbury Park: Sage.

Boney, V. (2003). Alternative research perspectives for studying the effects of parental divorce. *Marriage & Family Review, 35*(1–2), 7–27.

Braver, S., Shapiro, J., & Goodman, M. (2006). The consequences of divorce for parents. In M. Fine & J. Harvey (Eds.), *Handbook of divorce and relationship dissolution*. Mahwah, NJ: Lawrence Erlbaum.

Breslau, J., Miller, E., Jin, R., Sampson, N., Alonso, J., Andrade, L., et al. (2011). A multinational study of mental disorders, marriage, and divorce. *Acta Psychiatrica Scandinavica, 124*(6), 474–486.

Brown, S., & Reimer, D. (1984). Assessing attachment following divorce: Development and psychometric evaluation of the Divorce Reaction Inventory. *Journal of Counseling Psychology, 31*(4), 520–531.

Cann, A., Calhoun, L., Tedeschi, R., Taku, K., Vishnevsky, T., Triplett, K., et al. (2010). A short form of the Posttraumatic growth inventory. *Anxiety, Stress & Coping, 23*(2), 127–137.

Clarke-Stewart, A., & Bailey, B. (1989). Adjusting to divorce: Why do men have it easier? *Journal of Divorce, 13*(2), 75–93.

Clarke-Stewart, A., & Brentano, C. (2006). *Divorce: Causes and consequences*. New Haven: Yale University Press.

Clavarino, A., Hayatbakhsh, M., Williams, G., Bor, W., O'Callaghan, M., & Najman, J. (2011). Depression following marital problems: Different impacts on mothers and their children? A 21-year prospective study. *Social Psychiatry and Psychiatric Epidemiology, 46*(9), 833–841.

Corcoran, P., & Nagar, A. (2010). Suicide and marital status in Northern Ireland. *Social Psychiatry and Psychiatric Epidemiology, 45*(8), 795–800.

Delle Fave, A., Massimini, F., & Bassi, M. (Eds.). (2011). Flow and health: A bio-psycho-social perspective. In *Psychological selection and optimal experience across cultures: Social empowerment through personal growth* (pp. 295–320). New York: Springer.

Diener, E., Oishi, S., & Lucas, R. (2009). Subjective well-being: The science of happiness and life satisfaction. In C. Snyder & S. Lopez (Eds.), *Oxford handbook of positive psychology* (2nd ed., pp. 187–193). New York: Oxford University Press.

Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75.

Doherty, W., Su, S., & Needle, R. (1989). Marital disruption and psychological well-being. *Journal of Family Issues, 10*(1), 72–85.

Dush, C., Kotila, L., & Schoppe-Sullivan, S. (2011). Predictors of supportive coparenting after relationship dissolution among at-risk parents. *Journal of Family Psychology, 25*(3), 356–365.

Dykstra, P., & Fokkema, T. (2007). Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Basic and Applied Social Psychology, 29*(1), 1–12.

Eurostat. (2010). *Europe in figures*. Luxembourg: Publications Office of the European Union.

Feinberg, M. (2003). The internal structure and ecological context of coparenting: A framework for research and intervention. *Parenting, 3*(2), 95–131.

Feinberg, M., Brown, L., & Kan, M. (2012). A multi-domain self-report measure of coparenting. *Parenting, 12*(1), 1–21.

Field, A. P. (2009). *Discovering statistics using SPSS* (3rd ed.). London: SAGE.

Fischer, T., De Graaf, P., & Kalmijn, M. (2005). Friendly and antagonistic contact between former spouses after divorce. *Journal of Family Issues, 26*(8), 1131–1163.

Fisher, B. (1977). *Identifying and meeting needs of formely-married people through a divorce adjustment seminar*. PhD: University of Northern Colorado.

Gardner, J., & Oswald, A. (2006). Do divorcing couples become happier by breaking up? *Journal of the Royal Statistical Society: Series A (Statistics in Society), 169*(2), 319–336.

Goode, W. (1956). *Women in divorce*. New York: Free Press.

Gosling, S., Vazire, S., Srivastava, S., & John, O. (2004). Should we trust web-based studies. *American Psychologist, 59*(2), 93–104.

Gove, W., Hughes, M., & Style, C. (1983). Does marriage have positive effects on the psychological well-being of the individual? *Journal of Health and Social Behavior, 24*(2), 122–131.

Gray, C., & Shields, J. (1992). The development of an instrument to measure the psychological response to separation and divorce. *Journal of Divorce & Remarriage, 17*(3–4), 43–56.

Helgeson, V., Reynolds, K., & Tomich, P. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology, 74*(5), 797–816.

Hetherington, M., & Kelly, J. (2002). *For better or for worse: Divorce reconsidered*. New York: Norton.

Hope, S., Rodgers, B., & Power, C. (1999). Marital status transitions and psychological distress: Longitudinal evidence from a national population sample. *Psychological Medicine, 29*(2), 381–389.

Ikeda, A., Iso, H., Toyoshima, H., Fujino, Y., Mizoue, T., Yoshimura, T., et al. (2007). Marital status and mortality among Japanese men and women: The Japan Collaborative Cohort Study. *BMC Public Health, 7*(1), 73.

INE. (2012). *Estatísticas demográficas 2010 [2010 Demographic statistics]*. Lisbon: Instituto Nacional de Estatística.

Johnson, D., & Wu, J. (2002). An empirical test of crisis, social selection, and role explanations of the relationship between marital disruption and psychological distress: A pooled time-series analysis of four-wave panel data. *Journal of Marriage and Family, 64*(1), 211–224.

Joseph, S., & Linley, P. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology, 9*(3), 262–280.

Kalmijn, M. (2007). Gender differences in the effects of divorce, widowhood and remarriage on inter-generational support: Does marriage protect fathers? *Social Forces, 85*(3), 1079–1104.

Kaplan, R., & Kronick, R. (2006). Marital status and longevity in the United States population. *Journal of Epidemiology and Community Health, 60*(9), 760–765.

Kendler, K., Thornton, L., & Prescott, C. (2001). Gender differences in the rates of exposure to stressful life events and sensitivity to their depressogenic effects. *American Journal of Psychiatry, 158*(4), 587–593.

Kessler, S. (1975). *The American way of divorce: Prescription for change*. Chicago: Nelson-Hall.

Keyes, C., Shmotkin, D., & Ryff, C. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*(6), 1007–1022.

King, L., & Raspin, C. (2004). Lost and found possible selves, subjective well-being, and ego development in divorced women. *Journal of Personality, 72*(3), 603–632.

Kitson, G. (1982). Attachment to the spouse in divorce: A scale and its application. *Journal of Marriage and the Family, 44*(2), 379–393.

Kitson, G., & Holmes, W. (1992). *Portrait of divorce: Adjustment to marital breakdown*. New York: Guilford Press.

Kline, R. (2010). *Principles and practice of structural equation modeling*. New York: Guilford Press.

Kramrei, E., Coit, C., Martin, S., Fogo, W., & Mahoney, A. (2007). Post-divorce adjustment and social relationships. *Journal of Divorce & Remarriage, 46*(3–4), 145–166.

Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J., & Couper, M. (2004). Psychological research online: Report of Board of Scientific Affairs' Advisory Group on the conduct of research on the internet. *American Psychologist, 59*(2), 105–117.

Kulik, L., & Heine-Cohen, E. (2011). Coping resources, perceived stress and adjustment to divorce among Israeli women: Assessing effects. *The Journal of Social Psychology, 151*(1), 5–30.

Lamela, D., Castro, M., & Figueiredo, B. (2010a). Preliminary efficacy evaluation of a group intervention program for divorced parents. *Psicologia: Reflexão e Crítica, 23*(2), 334–344.

Lamela, D., & Figueiredo, B. (2011). Post-divorce representations of marital negotiation during marriage predict parenting alliance in newly divorced parents. *Sexual and Relationship Therapy, 26*(2), 182–190.

Lamela, D., Figueiredo, B., & Bastos, A. (2010b). Adaptação ao divórcio e relações coparentais: Con-tributos da teoria da vinculação [Adjustment to divorce and co-parental relations: Contributions from the attachment theory]. *Psicologia: Reflexão e Crítica, 23*(3), 562–574.

Lamela, D., Figueiredo, B, & Bastos, A. (in press). Perfis de vinculação, coparentalidade e ajustamento familiar: Diferenças no ajustamento psicológico em pais recém-divorciados [Attachment, coparenting and family adjustment profiles in newly divorced parents: Differences in psychological adjustment]. *Psicologia: Reflexão e Crítica*.

Lamela, D., Figueiredo, B., Bastos, A., & Martins, H. (2013). Psychometric properties of the Portuguese version of the posttraumatic growth inventory short form among divorced adults. *European Journal of Psychological Assessment.* Advance online publication.

Lopes, L. (2008). *Adaptação ao divórcio e sintomatologia psicopatológica associada em mulheres e homens [Divorce adjustment and associated psychopathological symptoms in women and men]* (Unplublished master's thesis). University of Minho, Braga, Portugal.

Lorenz, F., Simons, R., Conger, R., Elder, G., Jr., Johnson, C., & Chao, W. (1997). Married and recently divorced mothers' stressful events and distress: Tracing change across time. *Journal of Marriage and the Family, 59*, 219–232.

Lorenz, F., Wickrama, K., Conger, R., & Elder, G. (2006). The short-term and decade-long effects of divorce on women's midlife health. *Journal of Health and Social Behavior, 47*(2), 111–125.

Lucas, R. (2005). Time does not heal all wounds: A longitudinal study of reaction and adaptation to divorce. *Psychological Science, 16*(12), 945–950.

Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. (2012). Subjective well-being and adaptation to life events: A meta-analysis. *Journal of Personality and Social Psychology, 102*(3), 592–615.

Madden-Derdich, D., & Arditti, J. (1999). The ties that bind: Attachment between former spouses. *Family Relations, 48*(3), 243–249.

Mancini, A., Bonanno, G., & Clark, A. (2011). Stepping off the hedonic treadmill: Individual differences in response to major life events. *Journal of Individual Differences, 32*(3), 144–152.

Marks, N. (1996). Flying solo at midlife: Gender, marital status, and psychological well-being. *Journal of Marriage and the Family, 58*(4), 917–932.

Masheter, C. (1997). Healthy and unhealthy friendship and hostility between ex-spouses. *Journal of Marriage and the Family*, *59*(2), 463–475.

Masheter, C. (1998). Divorce as selection, stress, and process. *Journal of Divorce & Remarriage, 29*(3–4), 143–159.

Mastekaasa, A. (1994a). Psychological well-being and marital dissolution. *Journal of Family Issues, 15*(2), 208–228.

Mastekaasa, A. (1994b). The subjective well-being of the previously married: The importance of unmarried cohabitation and time since widowhood or divorce. *Social Forces, 73*(2), 665–692.

McCubbin, H., & Peterson, J. (1983). Stress and the family. In H. McCubbin & C. Figley (Eds.), *Family stress and coping, and social support* (pp. 5–25). Springfield, IL: Thomas.

Middeldorp, C., Cath, D., Beem, A., Willemsen, G., & Boomsma, D. (2008). Life events, anxious depression and personality: A prospective and genetic study. *Psychological Medicine, 38*(11), 1557–1565.

Miller, G., Chen, E., & Zhou, E. (2007). If it goes up, must it come down? Chronic stress and the hypothalamic-pituitary-adrenocortical axis in humans. *Psychological Bulletin, 133*(1), 25–45.

Mol, S., Arntz, A., Metsemakers, J., Dinant, G., Vilters-van Montfort, P., & Knottnerus, J. (2005). Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study. *The British Journal of Psychiatry, 186*(6), 494–499.

Neto, F. (1993). The Satisfaction with Life Scale: Psychometrics properties in an adolescent sample. *Journal of Youth and Adolescence, 22*(2), 125–134.

Novo, R. (2003). *Para além da eudaimonia: O bem-estar psicológico em mulheres na idade adulta avançada [Beyond eudaimonia: The psychological well-being in very old women].* Coimbra: FCG & FCT.

Overbeek, G., Vollebergh, W., De Graaf, R., Scholte, R., De Kemp, R., & Engels, R. (2006). Longitudinal associations of marital quality and marital dissolution with the incidence of DSM-III-R disorders. *Journal of Family Psychology, 20*(2), 284–291.

Park, C. (2011). Meaning and growth within positive psychology: Towar a more complete understanding. In K. Sheldon, T. Kashdan, & M. Steger (Eds.), *Designing positive psychology: Taking stock and moving forward* (pp. 324–333). New York: Oxford University Press.

Pereira, A., & Matos, M. (2011). Avaliação psicológica das responsabilidades parentais nos casos de separação e divórcio [Psychological assessment of parenting responsabilities in separation and divorce cases]. In M. Matos, R. Abrunhosa Gonçalves, & C. Machado (Eds.), *Manual de psicologia forense: Contextos, práticas e desafios.* Braga: Psiquilíbrios.

Pereira, G., & Pinto, H. (2003). O conflito no contexto da separação e divórcio: A perspectiva feminina [Conflict in the context of separation and divorce: A feminine perspective]. *Psicologia: Teoria. Investigação e Prática, 2*, 187–203.

Powell, S., Rosner, R., Butollo, W., Tedeschi, R. G., & Calhoun, L. G. (2003). Posttraumatic growth after war: A study with former refugees and displaced people in Sarajevo. *Journal of Clinical Psychology, 59*(1), 71–83.

Reips, U. (2002). Standards for internet-based experimenting. *Experimental Psychology, 49*(4), 243–256.

Ryff, C. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069–1081.

Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5–14.

Sbarra, D., & Emery, R. (2008). Deeper into divorce: Using actor-partner analyses to explore systemic differences in coparenting conflict following custody dispute resolution. *Journal of Family Psychology, 22*(1), 144–152.

Sbarra, D., Law, R., & Portley, R. (2011). Divorce and death: A meta-analysis and research agenda for clinical, social, and health psychology. *Perspectives on Psychological Science, 6*(5), 454–474.

Scott, K., Wells, J., Angermeyer, M., Brugha, T. S., Bromet, E., Demyttenaere, K., et al. (2010). Gender and the relationship between marital status and first onset of mood, anxiety and substance use disorders. *Psychological Medicine, 40*(09), 1495–1505.

Shook, S., Jones, D., Forehand, R., Dorsey, S., & Brody, G. (2010). The mother–coparent relationship and youth adjustment: A study of African American single-mother families. *Journal of Family Psychology, 24*(3), 243–251.

Smet, O., Buysse, A., & Brondeel, R. (2011). Effect of the breakup context on unwanted pursuit behavior perpetration between former partners. *Journal of Forensic Sciences, 56*(4), 934–941.

Soons, J., Liefbroer, A., & Kalmijn, M. (2009). The long-term consequences of relationship formation for subjective well-being. *Journal of Marriage and Family, 71*(5), 1254–1270.

Staudinger, U., & Kunzmann, U. (2005). Positive adult personality development. *European Psychologist, 10*(4), 320–329.

Straub, DW. (1989). Validating instruments in MIS research. *MIS quarterly, 13*(2), 147–169.

Sweeper, S. (2004). *Adult adjustment to relationship separation* (Unpublished doctoral dissertation). Griffith University, Southport, Australia.

Sweeper, S., & Halford, K. (2006). Assessing adult adjustment to relationship separation: The Psychological Adjustment to Separation Test (PAST). *Journal of Family Psychology, 20*(4), 632–640.

Tedeschi, R., Calhoun, L., & Cann, A. (2007). Evaluating resource gain: Understanding and misunderstanding posttraumatic growth. *Applied Psychology, 56*(3), 396–406.

Terhell, E., van Groenou, M., & van Tilburg, T. (2004). Network dynamics in the long-term period after divorce. *Journal of Social and Personal Relationships, 21*(6), 719–738.

Teubert, D., & Pinquart, M. (2010). The association between coparenting and child adjustment: A meta-analysis. *Parenting, 10*(4), 286–307.

van Eck, M., Berkhof, H., Nicolson, N., & Sulon, J. (1996). The effects of perceived stress, traits, mood states, and stressful daily events on salivary cortisol. *Psychosomatic Medicine, 58*(5), 447–458.

van Egeren, L. (2004). The development of the coparenting relationship over the transition to parenthood. *Infant Mental Health Journal, 25*(5), 453–477.

Waite, L., Luo, Y., & Lewin, A. (2009). Marital happiness and marital stability: Consequences for psychological well-being. *Social Science Research, 38*(1), 201–212.

Wallerstein, J. (1986). Women after divorce: Preliminary report from a ten-year follow-up. *American Journal of Orthopsychiatry, 56*(1), 65–77.

Wallerstein, J., & Kelly, J. (1996). *Surviving the breakup: How children and parents cope with divorce*. New York: Basic Books.

Wallerstein, J., Lewis, J., & Blakeslee, S. (2000). *The unexpected legacy of divorce: A 25 year landmark study*. New York: Hyperion.

Wilt, J., Condon, D., & Revelle, W. (2012). Telemetrics and online data collection. In B. Laursen, T. Little, & N. Card (Eds.), *Handbook of developmental research methods* (pp. 163–179). New York: Guilford.

Yárnoz-Yaben, S., & González, P. (2010). El CAD-S: Un instrumento para la evaluación de la adaptación al divorcio-separación [The CAD-S: An instrument for the assessment of adaptation to divorce-separation]. *Psicothema, 22*(1), 157–162.

Yárnoz, S., Plazaola, M., & Etxeberria, J. (2008). Adaptation to divorce: An attachment-based intervention with long-term divorced parents. *Journal of Divorce & Remarriage, 49*(3–4), 291–307.

Zhang, Z., & Hayward, M. (2006). Gender, the marital life course, and cardiovascular disease in late midlife. *Journal of Marriage and Family, 68*(3), 639–657.

Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology: A critical review and introduction of a two component model. *Clinical Psychology Review, 26*(5), 626–653.