

# FILIAL MATURITY IN YOUNG ADULT CHILDREN: THE VALIDITY OF THE FILIAL MATURITY MEASURE AND THE ROLE OF ADULT TRANSITIONS

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Filial maturity refers to adult children's ability to perceive parents as other adults with qualities and vulnerabilities. Although few studies have empirically analysed this concept, most have used samples of middle-aged adults. In this study we had two main aims: (a) to test the construct validity of the Filial Maturity Measure (FMM) in a sample of Portuguese young adults; (b) and to examine how comprehending and distancing dimensions of the FMM varied with young adults' age and life transitions (i.e., employment and leaving parental home). A sample of 593 young adults aged between 19 and 30 years old was randomly assigned to a calibration (n = 297) and validation (n = 296) sample. Factorial validity and cross-validation of the FMM were tested using exploratory and confirmatory factor analysis. These analyses gave support to a two-factor measure with nine items; however the distancing factor presented validity problems. Results also showed that the development of filial maturity was associated with life course transitions that led to greater independence from parents.

Key words: Filial maturity; Validity; Young adults; Transitions; Parent-child relationships.

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#### INTRODUCTION

Parent-child relationships change considerably between adolescence and adulthood. As young people move into adult roles, children's dependent relationship with parents gradually transforms into a more symmetrical and mutually supportive one (e.g., Anderson & Sabatelli, 1990). Underlying this relational change is a shift in the way children and parents view each other. Filial maturity gives adult children the ability to acknowledge parents in a more realistic way and to see them as persons with strengths and weaknesses. The development of this ability can begin in early adulthood and seems to depend on a child's psychological development and the quality of the interactions with parents (Birditt, Fingerman, Lefkowitz, & Dush, 2008; Blenkner, 1965; Nydegger, 1991). However, few studies have analysed the development of filial maturity in younger ages. Moreover, life course transitions (e.g., from parental home to one's own home and from school to work), which have been linked to psychological development (e.g., Aquilino, 1997), are nowadays more diversified and difficult to concretize than in a recent past (e.g., Arnett, 2000; Biggart & Walther, 2006). Thus, it is important to analyse how different transitional situations may affect young adults' development.

The current study tested the construct validity of the Filial Maturity Measure (FMM; Birditt et al., 2008), developed in the United States, with a sample of Portuguese young adults. Past studies



have indicated that the significance of developmental and family variables may depend on the cultural context (e.g., Chun & MacDermid, 1997; Kagitçibasi, 1996; Manzi, Vignoles, Regalia, & Scabini, 2006). In this way, we intended to evaluate the validity of the FMM in the Portuguese context, where the emphasis on familistic values is stronger than in the dominant North American one. In addition, the current study investigated how young adults' age and life course transitions (e.g., entering the labour market and leaving parental home) were related with this developmental construct.

#### FILIAL MATURITY

Filial maturity refers to adult children's ability to perceive parents beyond their parental role and accept them as persons recognizing their limitations, needs and personal history. Margaret Blenkner (1965) introduced this concept to describe a "filial crisis" that takes place when adult children realize that the nature of the parent-child relationship has changed and that they must become a reliable source of support for their parents. In this way, filial maturity has been conceptualized as a key feature of parental care later in life (Blenkner, 1965; Marcoen, 1995) and has been mainly addressed in the domains of gerontology and family care-giving (e.g., Braeckmans & Marcoen, 1998; Brody, 1985; Cicirelli, 1988; Perrig-Chiello & Sturzenegger, 2001). However, more recent perspectives have pointed out conceptual limitations to Blenkner's perspective (see Fredriksen & Scharlach, 1996; Nydegger, 1991), in particular her notion of filial crisis. Rather than a crisis that occurred during mid-life, it was proposed that filial maturity was the result of a gradual process that developed throughout the parent-child relationship and depended on a child's psychological development (e.g., individuation) and characteristics of the relational bond (e.g., empathy, closeness). Results of a recent study supported this perspective (Birditt et al., 2008). Moreover, it was also found that filial maturity increased with age during young adulthood, but not in middle adulthood. This seemed to sustain the perspective that filial maturity should be considered an expression of development instead of a characteristic associated to a specific age (Braeckmans & Marcoen, 1998; Brody, 1985; Fredriksen & Scharlach, 1996).

The ability to perceive parents more objectively implies the establishment of a less hierarchical parent-child relationship. According to individuation theory (Grotevant & Cooper, 1986; Youniss & Smoller, 1985) this is achieved by psychologically separating from parents, while maintaining the emotional qualities of the parent-child relationship. De-idealization of parental figures is inherent to this process. It allows adolescents to have a more realistic appraisal of parents and to understand them as people with positive and negative characteristics.

The linkage between individuation and filial maturity is made clearer by Nydegger's (1991) conceptualization of filial maturity. Based on a qualitative study with adult men and respective fathers, she stated that the development of filial maturity was accomplished by two processes: one that pulled the child apart from the parent through psychological separation and de-idealization of parents — filial distancing — and a second one that drew them together through an understanding of their parents' world and how it shaped their viewpoints and life options — filial comprehending. This latter dimension is described as a slow process linked to a child's life course transitions. According to this perspective, filial maturity ideally co-occurred with parental maturity and in both developments distancing and comprehending processes were present.



## THE FILIAL MATURITY MEASURE

Although the concept of filial maturity was introduced during the 1960's, it was not until the 1990's that research began to empirically evaluate it (Marcoen, 1995; Nydegger, 1991). The majority of studies on this topic relied on qualitative assessments (e.g., Nydegger, 1991), and the quantitative ones used in proxy measures of filial maturity, such as filial anxiety (Cicirelli, 1988), or quite extensive measures (Marcoen, 1995). Nydegger's perspective was recently used to develop a brief quantitative assessment of filial maturity.

The FMM (Birditt et al., 2008) is a 10-item instrument that was originally constructed from data of young and middle-aged American adults. In their original work, exploratory and confirmatory factor analysis yielded two factors representing the comprehending and distancing dimensions. They verified that these two dimensions were negatively associated (r = -.33, p < .01) and demonstrated satisfactory reliability ( $\alpha = .76$  on both scales). Evidence of convergent validity was based on correlations between the FMM and other developmental and relational measures. Moderate (r > .30 and r < .49) and strong associations (r > .50; Cohen, 1988) showed up between the dimension of comprehending and positive relationship quality, closeness and personal authority, and between the dimension of distancing and negative relationship quality and de-idealization. Moreover, higher levels of comprehending and mid-to-low distancing predicted more positive and less negative parent-child relationships. Although convergent and predictive validity were tested for the FMM, further validity is needed, in particular, in different cultural contexts.

#### CULTURAL INFLUENCES ON THE TRANSITION TO ADULTHOOD

Achieving independence from parents has been established as a major task of young adulthood (e.g., Anderson & Sabatelli, 1990). Access to a stable employment is a key feature in this process and in the engagement of further adult transitions (Arnett, 2000; Guerreiro & Abrantes, 2004; Pappámikail, 2004), such as leaving parental home. Several studies have indicated that young adults' financial and residential independence facilitated their psychological development (e.g., individuation; Aquilino, 1997; Belsky, Jaffee, Caspi, Morffitt, & Silva, 2003; Dubas & Peterson, 1996; Flanagan, Schulenberg, & Fuligni, 1993). Moreover, it has been found that as children age and move into adult roles, parent-child relationships become more positive (Aquilino, 1997; Belsky et al., 2003) and their sense of obligation to support parents increased (Rossi & Rossi, 1990; Stein, 2009).

Nevertheless, in recent years these transitions have turned out to be more difficult to accomplish (Arnett, 2000; Biggart & Walther, 2006; Moreno, 2012) and young adults have grown to be more dependent on parents (Cherlin, Scabini, & Rossi, 1997; Scabini, Marta, & Lanz, 2006). In particular, it has been pointed out that the transition to adulthood in Southern European countries tends to occur *within* the family of origin (Cherlin et al., 1997; Moreno, 2012; Scabini et al., 2006). Indeed, Portugal has one of the highest percentages of young people living with their parents in the European Union¹ (Choroszewicz & Wolff, 2010): 57.5% of young adults aged between 18 and 34 years old live with at least one of their parents. This percentage is more than twice that found in Northern European countries and in the USA (Mather, 2011). A combination of socio-economical, institutional and cultural factors has been presented to explain this particu-



lar model of transition in Southern European countries (Guerreiro & Abrantes, 2004; Moreno, 2012; Pais, Cairns, & Pappámikail, 2005; Vogel, 2002).

Sociological studies have shown that there has been a relatively rapid expansion in higher education (doubled in Portugal since the 1990's) and those still in education tend to continue living within the parental household (Choroszewicz & Wolff, 2010; Pordata, 2011). In parallel, unemployment rates² have also risen and job conditions have become more precarious (Biggart & Walther, 2006; Pais et al., 2005). As a consequence, having a job does not necessarily lead to self-sufficiency. Thus, with economic hardship and weak welfare policies, family support has shown to be an essential resource for these young adults — *family welfare state* (Vogel, 2002). Moreover, it has been suggested that the importance of family in these countries is reinforced by its Catholic heritage and the presence of familistic values that emphasise strong ties and commitment to family (Fontaine, Andrade, Matias, Gato, & Mendonça, 2006; Van de Velde, 2008; Vogel, 2002). Indeed, comparative studies have indicated that Southern Europeans place lower value on independence and more value on family togetherness than other Europeans (Iacouvou, 2010; Moreno, 2012). In this way, a culture of family dependence (economic and affective) appears to play a greater role here than in other European countries and or the United States.

The literature on psychological development has been mainly dominated by an individual-istic cultural view, emphasizing psychological separation and independence from parents as essential features of a healthy psychological development (e.g., Blos, 1979; Hoffman, 1984). The universal significance attributed to independence has been questioned by several studies conducted in contexts that value togetherness over separateness (Chun & MacDermid, 1997; Dias & Fontaine, 1996; Kagitçibasi, 1996; Manzi et al., 2006). For instance, Manzi and colleagues verified that family cohesion and enmeshment were distinct constructs both in the UK and Italy, but orthogonal in the UK, and positively correlated in Italy. Moreover, family enmeshment was associated with poor psychological well-being in the UK, but not in Italy. Dias and Fontaine also verified that young Portuguese people that displayed greater autonomy presented worse parent-child relationships.

In this way, these results tend to suggest that the meaning attributed to filial maturity could vary across cultural contexts; however, this has not been verified yet.

#### AIMS OF THE STUDY

Further research is needed to test the validity of the Filial Maturity Measure (Birditt et. al., 2008). Studies have shown that the significance attributed to developmental and relational constructs varied across cultures (e.g., Manzi et al., 2006). In fact, when using a measure in a different cultural setting, items may present a dissimilar meaning or may be differently related to the constructs being analysed (Van de Vijver & Leung, 1997). For this reason, it is important to test the validity of the FMM in cultural settings different from the dominant American one, such as the Portuguese, to widen the empirical evidence for this instrument.

Additionally, to further comprehend the construct of filial maturity during young adult-hood, we aimed to analyze how it was related to age and to life transitions. This would also contribute to test FMM's criterion validity, that is, its ability to distinguish between groups as theoretically expected. Filial maturity has been posited as a developmental construct. Thus, we expected that older young adults would present higher levels of filial maturity, that is, higher com-



prehending and lower distancing, than younger ones. Because entering the labour market and leaving parental home have been associated with psychological development and mature parent-child relationships, we also expected that those involved in these transitions would present greater filial maturity (i.e., higher comprehending and lower distancing). Nevertheless, it is important to analyze in greater detail how different transitional situations are associated with development during this life period. Thus, in this study we considered four possible transitional situations/typologies: Type 1 — Double *dependence on parents*, which included students that coreside with parents; Type 2 and Type 3 — *Semi-independence from parents*, which respectively included students living away from parents, and workers co-residing with parents; and finally Type 4 — *Independence from parents*, which included workers living away from parents.

To sum up, in this study we had two main aims: (1) to develop a Portuguese version of the FMM and test the construct validity of this instrument in a sample of Portuguese young adults (i.e., factor validity, convergent validity and discriminant validity) and (2) to analyze if levels of filial maturity varied with young adults' life transitions and age (criterion validity).

#### **METHOD**

## Participants and Procedure

Five hundred and ninety-three young adults living in the metropolitan area of Porto participated in this study. Their ages ranged between 19 and 30 years old (M = 23.29, SD = 3.02). A nearly equal number of female (n = 307, 51.7%) and male young adults participated in this study. In this sample, 60% of young adults were students in higher education (53%) and in professional training<sup>3</sup> (47%) institutions. The remaining 40% were full-time workers (civil and military<sup>4</sup>), of which 41% had a higher education degree. Concerning their living arrangements 58% of our participants stated they lived with their parents. In order to disentangle the influence of employment and leaving parental home on filial maturity, we created four transitional typologies of young adults. Type 1 was composed of young adults in a situation of double dependence, that is, students co-residing with parents (n = 230); Type 2 of students who lived away from parents (n = 113), Type 3 of workers co-residing with parents (n = 100), and finally Type 4 of young workers who lived away from parents (n = 134). Although there are no official numbers about each of these groups, they tended to represent the demographics of living arrangements and occupational situations<sup>6</sup> in Portugal during this life period. Moreover, in the sample 52% of the young adults were up to 22 years old. We considered this age to be our cutting point in creating two age groups (i.e., up to 22 inclusive and above 22 years old) because it corresponds to the age by which young people tend to finish their higher educational studies in Portugal. Finally, only 5.1% of the young adults were married and 80% came from a traditional two-parent family configuration.

Data was gathered both by collective administrations during higher educational and professional training classes and individual administrations to civil and military workers. In the former situation, students were recruited in their educational institutions and class time was allocated for the completion of the questionnaires. In the latter situation, participants were recruited by institutional contacts and the questionnaires were delivered by the principal investigator or a trained researcher to participants' workplace or military institution. These participants completed



the questionnaires alone and returned it in a closed envelope. In both situations instructions and briefing about the study was the same. Participants did not receive reimbursement. The participation in the study was voluntary and anonymity was ensured.

#### Measures

Participants responded to a socio-demographic questionnaire and to the FMM (Birditt et al., 2008) that was translated into Portuguese. In this process two independent researchers translated the FMM. The translations were discussed and disagreements resolved through consensus. This Portuguese version was then back-translated into English by another independent researcher to verify the translation process and make adjustments if needed.

The FMM was composed by 10 items: six of them comprising the Comprehending scale (e.g., "As I grow older, I notice my parents and I have more in common") and four the Distancing scale (e.g., "Regardless of how much I love my parents, they certainly have faults"). Participants rated their agreement to items on a scale that ranged from 1 (*strongly disagree*) to 6 (*strongly agree*). In the original instrument, items considered each parent separately, however in this version items were formulated considering both parents simultaneously. Although levels of filial maturity may vary between mothers and fathers, this procedure allows us to analyze filial maturity as a more global developmental construct. In fact, a similar approach was used by Marcoen (1995) in the Louvain Filial Maturity Scale.

## Data Analysis

The database was built in PASW Statistics 18 (SPSS Inc., Chicago, IL). Before performing data analysis, missing values of continuous variables were estimated through the linear regression method of missing imputation using SPSS software.

The factor structure of the FMM was tested using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) with AMOS software (v. 19, SPSS Inc, Chicago, IL). It has been proposed that EFA is a useful heuristic strategy for model specification before CFA (Fabrigar, Wegener, MacCullum, & Strahan, 1999). In the testing of the factor structure the sample was randomly split into two, forming a calibration (n = 297) and a cross-validation sample (n = 296).

Data was analyzed in three steps. First, EFA was performed in the calibration sample to estimate a factor structure of the FMM. Next, this factor structure was tested using CFA in the same sample. Presented with findings of inadequate fit, re-specifications to the model were introduced based on substantive (i.e., similarity of item content) and statistical information (e.g., modification indices provided by AMOS). In the third step, the final factor structure obtained before (baseline model) was tested with the validation sample (Byrne, 2010). This last procedure was used because post-hoc modifications performed in the calibration sample might capitalize on chance features of the data (MacCallum, Roznowski, & Necowitz, 1992). In this study we employed a more strict method of cross-validation by performing a multi-group analysis of measurement invariance across the two independent samples (Byrne, 2010). When measurement invariance is established researchers have confidence that the meaning of factors does not differ



significantly across independent samples of the same population, providing information about model's external validity.

Factorial validity, measurement invariance, convergent and discriminant validity were estimated using a structural equation modelling approach (SEM). Criterion validity was tested through multivariate analyses of variance on the entire sample by testing differences between diverse transitional typologies and age on FMM.

## **Exploratory Factor Analysis**

EFA allows researchers to identify latent constructs underlying a set of measured variables (i.e., to understand the structure of correlations among the variables). In this study EFAs were conducted using principal factor estimation with a varimax orthogonal rotation in SPSS. Varimax has generally been regarded as the best and most widely used rotation in psychological research (Fabrigar et al., 1999). Items were considered as part of a factor if they had loadings of .50 or greater on one factor and loading below .30 on the other factors (Bryant & Yarnold, 1995).

## Confirmatory Factor Analysis

The CFAs were performed on a raw data base with no missing values using maximum likelihood (ML) procedure. Models fit to data were assessed through multiple goodness-of-fit indices and respective reference values. A nonsignificant  $\chi^2$  test indicates a good absolute fit of the model to the data, but this test is sensitive to sample size. In this way, other indices were employed in order to minimize the occurrence of errors of Type 1 and Type 2. Following recommendations of Schermelleh-Engel, Moosbrugger, & Muller (2003) an acceptable model fit occurs when the chi-square likehood ratio ( $\chi^2/df$ ) has values lower than three, the Bentler Comparative Fit Index (CFI) has values greater than .95, and the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR) has values lower than .08.

The Aikake Information Criterion (AIC) was also used to test modifications on non nested models (i.e., models that were modified based on deletion of items). A reduction in AIC values in comparison with other competing models would be indicative of an improved and more parsimonious fit of the model (Schermelleh-Engel et al., 2003).

#### Cross-Validation

Cross-validation of the FMM model was tested performing a multi-group analysis of measurement invariance across the calibration and validation samples (Byrne, 2010). The base-line model was tested on validation sample and after consistency was found, measurement invariance was done by adding constraints to three nested models: the first CFA (Model 1) tested the equality of the baseline model across the two samples simultaneously (i.e., same dimensions and location of fixed and freed dimensions) — configural invariance. The subsequent CFAs tested the invariance of factor loadings (i.e., loadings of same items constrained to be equal across groups;



Model 2) — metric invariance; and the invariance of means of latent constructs (i.e., intercepts of items constrained to be equal across both groups; Model 3) — scalar invariance. Metric invariance is considered the minimal evidence of measurement invariance and scalar invariance is made when researchers are interested in making mean comparisons across groups (Marsh, 1994). Although the  $\chi^2$  difference test is widely used to compare the fit of nested models, it has been criticized for its sensitivity to sample size. Researchers have advised the use of other indices that are not prone to this problem, namely the  $\Delta$ CFI (e.g., Cheung & Rensvold, 2002). In this way, a nonsignificant  $\Delta\chi^2$  and a  $\Delta$ CFI lower than 0.01, between the constrained and unconstrained models, would be indicative of invariance.

## Construct Validity

Construct validity of the FMM was assessed through factorial, convergent, discriminant and criterion validity (Maroco, 2010).

Besides the combination of exploratory and confirmatory factor analysis, factor validity was assessed through item's reliability. According to Hair, Black, Babin, Anderson, and Tatham (2006) an item is significant if the values of standardized factor loadings (FL) are greater than 0.50 and the proportion of variance in the construct explained by the item ( $R^2$ ) is above .25.

Convergent validity was assessed by each factor's internal consistency — composite reliability (CR) — and the average variance extracted (AVE) of each factor. Hair et al. (2006) suggested that CR should be used with SEM to address the tendency of Cronbach's alpha to minimize reliability. The AVE measures the amount of variance captured by the construct in relation to the amount of variance explained by measurement error. CR and AVE to be considered adequate values should present values of .7 and .5 or higher, respectively (Hair et al., 2006; Maroco, 2010).

Discriminant validity measures the extent to which constructs differ in the model. A way to assess if discriminant validity is adequate (Maroco, 2010) is to evaluate if the variance shared between a construct and any other construct in the model (squaring the correlation between two constructs) is less than the variance that a construct shares with its measure (AVE). As such discriminant validity was assessed by comparing if the square root of the AVE of each factor was greater than the correlation between that factor and any other factor.

Criterion validity tests the ability of measures to distinguish groups as theoretically expected. Analyses of variance (e.g., ANOVA, MANOVA) are adequate strategies to assess this type of validity.

#### **RESULTS**

## **Descriptive Statistics**

Before performing data analysis missing values of continuous variables (5%) were estimated and replaced. Table 1 contains the means, standard deviations, and estimates of skewness

TABLE 1
Descriptive statistics of the items of the FMM

Scale	Item	Mean	SD	Skewness	Kurtosis
Comprehending	I often tell my parents about my problems and rely on their advice.	3.84	1.45	37	64
	I think of my parents more as friends than parents.	3.07	1.48	.21	85
	It means a lot to me when my parents confide in me.	4.74	1.24	-1.04	.69
	My parents sometimes come to me for advice about important matters.	3.69	1.51	23	88
	As I grow older, I notice my parents and I have more in common.	3.88	1.36	41	46
	I share my deepest thoughts and feelings with my parents.	3.34	1.51	.01	98
Distancing	Regardless of how much I love my parents, they certainly have faults.	4.32	1.28	68	.24
	My parents have really annoying habits.	3.54	1.41	29	75
	I worry about turning out like my parents.	2.62	1.56	.59	76
	My parents are practically perfect (reversed).	3.83	1.52	26	91



and kurtosis for each item of the FMM. Some items had mean scores below the midpoint of 3.5 (items 2, 6 and 9) and standard deviations reflected a certain spread of participant's responses, ranging from 1.14 to 1.56. Univariate skewness and kurtosis indices were in general small and within the recommended values of |3| and |10| respectively (Kline, 2011). Results indicated that there were no serious violations of normality with the FMM questionnaire. Moreover, the Mahalanobis squared distance (D2; p1 and p2 < .001) identified one multivariate outlier on both the calibration and validation samples; outliers were deleted.

## **Exploratory Factor Analysis**

An EFA was performed using principal components on the 10 items of FMM. This exploratory analysis estimated two factors that explained 55.40% of the variance. The scree plot and eigenvalues information supported the two factor solution. In general items saturated on the same factors as in the original study, however item 10 ("My parents are practically perfect") saturated on both of them (Table 2). In this way, another EFA was conducted without this item. A similar solution was found that accounted for 56.62% of the variance (comprehending factor accounted for 38.07% and distancing factor accounted for 18.54% of the variance).

TABLE 2 EFA of the 10 and nine items of filial maturity

		Ten items	solution	Nine items solution			
		Comprehending	Distancing	Comprehending	Distancing		
1	Tell them problems	.82	11	.82	13		
2	Parents as friends	.63	.06	.63	.06		
3	Parents confide	.73	.08	.72	.08		
4	Come for advice	.73	.02	.74	.01		
5	Have in common	.69	20	.69	19		
6	Share feelings with parents	.82	21	.82	22		
7	Parents have faults	.08	.77	.08	.77		
8	Parents have annoying habits	12	.78	13	.79		
9	Worry turning like them	08	.61	09	.63		
10	Parents are perfect	.64	45	_	_		

#### Confirmatory Factor Analysis

To decide whether the best solution was a nine or a 10 item model, a CFA was performed on the factor structure obtained with the EFA, as well as with the 10 item factor structure proposed by Birditt et al. (2008; i.e., with item 10 loading on distancing) on the calibration sample. Based on



theoretical and empirical evidence (Birditt et al., 2008) the two factors were specified to be correlated on both models. In the identification of the model, factor variances were fixed to 1 (Figure 1).

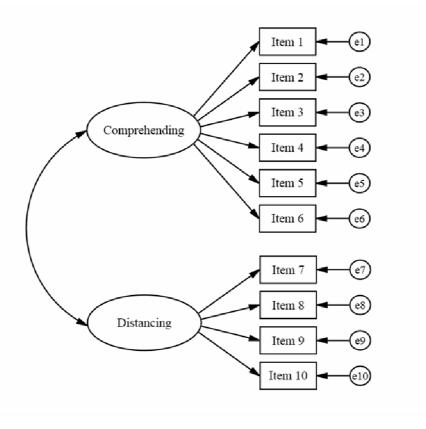


FIGURE 1 Measurement model proposed by Birditt et al. (2008).

The 10-item model did not present an acceptable fit,  $\chi^2 = 148.95$ ,  $\chi^2/df = 4.38$ ; CFI = .896; RMSEA = .11; SRMR =.084. Item 10 ("My parents are practically perfect") showed a high factor loading (-.93) and the remaining three items non significant loading ( $\leq$  0.40). Nevertheless, the 9-item model presented a nearly acceptable fit,  $\chi^2 = 81.22$ ,  $\chi^2/df = 3.12$ ; CFI = .93; RMSEA = .085; SRMR =.058, and the estimate of factor loadings was in general appropriate (exception for item 9). Moreover, AIC values decreased from 200.83 to 119.20 when item 10 was eliminated. Because of this, we opted for the 9-item model. Although, item 9 showed a low loading (Table 3), it was maintained because it has been suggested that a latent factor should be estimated by at least three items (e.g., Kline, 2011) and some studies have used .40 (e.g., Brouwers & Tomic, 2001) as a cut-off value for significant factor loadings. Modification indices revealed a substantial improvement by correlating measurement errors between items 1 and 6. Since both items reflected similar content (personal sharing) this re-specification was introduced. This modification introduced a significant improvement,  $\Delta \chi^2(1) = 22.75$ , p < .001, in the model fit,  $\chi^2 = 58.46$ ,  $\chi^2/df = 2.34$ ; CFI = .96; RMSEA = .067; SRMR = .053. In this way, the two-factor model with nine items and a pair of correlated measurement errors served as the baseline model.



TABLE 3 Factorial and convergent validities of FMM on the calibration sample

	FL	$R^2$	CR	AVE	α
Comprehending					
Item 1	.63	.40			
Item 2	.52	.27			
Item 3	.76	.58	.83	.45	.84
Item 4	.68	.46			
Item 5	.67	.45			
Item 6	.73	.54			
Distancing					
Item 7	.50	.25			
Item 8	.80	.64	.61	.36	.58
Item 9	.41	.17			

Note. FL = Factor Loading;  $R^2$  = item reliability; CR = Composite Reliability; AVE = Average Variance Extracted;  $\alpha$  = Cronbach's alpha.

Besides evaluating factorial validity, we also assessed the instrument's convergent and discriminant validity. The values of convergent validity (Table 3) were near to acceptable for the comprehending factor (CR > .70, but AVE < .50). For the distancing factor both values were below the recommended criterion. This suggested that the distancing factor was partially explained by the three items representing this factor. As in the original study, the two factors were negatively correlated (r = -.27; p < .01). Discriminant validity was evaluated by testing if the square root of the AVE of comprehending and the square root of the AVE of distancing were bigger than the correlation between the two factors. Since the  $\sqrt{\text{AVE}_{\text{comprehending}}} = .67$  and  $\sqrt{\text{AVE}_{\text{distancing}}} = .60$  were higher than -.27, discriminant validity was achieved.

The baseline measurement model was cross-validated using a multi-group analysis of factor invariance across the calibration and validation sample. Measurement invariance was tested following the hierarchical ordering of nested models: configural invariance, metric invariance and scalar invariance. As Table 4 shows, the pattern of results was similar across both independent groups. Models 1 and 2, and Models 2 and 3 were not significantly different, based on the  $\Delta\chi^2$  and the  $\Delta$ CFI difference tests. This demonstrated that the factor structure, factor loadings, factor means were fully invariant across both samples.

## Transitional Typologies and Age Differences

Two one-way MANOVAs were performed on the entire sample to determine whether levels of filial maturity (comprehending and distancing) varied with emerging adults' age (i.e., up to 22 and above 22 years old) and transitional types. Results indicated a significant difference between younger and older emerging adults on comprehending — F(1, 571) = 4.52, p < .040,  $\eta^2 = .01$  — but not on the distancing — F(1, 571) = 1.10, p = .30 — dimension. As Table 5 shows, older young adults presented higher levels of comprehending, than younger ones. This was par-



TABLE 4
Results of the CFAs testing the factor invariance of the 9-item FMM

Models	df	$\chi^2$	CFI	RMSEA	SRMR
Calibration	25	58.46***	.959	.067	.053
Validation	25	52.78***	.964	.061	.055
Model 1	57	120.85***	.959	.043	.053
Model 2	64	123.16***	.962	.040	.053
Model 3	66	123.47***	.963	.038	.053
Model comparisons		df	$\chi^2_{diff}$	p	ΔCFI
Model 1 and 2	7	2.32	ns	.002	
Model 2 and 3	2	0.30 <i>ns</i>		.010	

Note. df = Degrees of freedom;  $\chi^2$  = Chi-square; CFI = Comparative Fit Index; RMSEA = Rooted Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual;  $\chi^2_{\text{diff}}$  = Chi-square difference;  $\Delta$ CFI = Comparative Fit Index differences. \*\*\*p < .001.

tially in accordance with our expectations. A significant difference was also found between transitional situations on comprehending, F(3, 569) = 4.05, p = .01,  $\eta^2 = .02$ . Tukey post-hoc tests revealed that young adults who engaged in both transitions (i.e., workers that lived away from their parents), presented higher levels of comprehending, than those who were double dependent (i.e., students who co-resided) (Table 5). No significant differences were revealed for the distancing dimension, F < 1.

### DISCUSSION

This study had two main purposes. First, we aimed to evaluate the construct validity of the FMM (Birditt et al., 2008) on a Portuguese sample of young adults. Second, we compared the development of filial maturity between younger and older young adults, and between different transitional typologies. By doing this we aimed to see how these variables were relevant to the development of filial maturity.

Using two samples of young adults and a cross-validation procedure, the present study demonstrated support for a Portuguese version of the FMM composed of nine items and two factors (distancing and comprehending). The instrument presented a configuration similar to the original FMM, but with one item less. Construct validity of the FMM was evaluated through factorial, convergent and divergent validity. In general the psychometric findings showed that a 9-item version of the FMM can be operationalized and empirically addressed. More particularly, results indicated that the comprehending scale is a reliable measure to evaluate adult children's ability to establish an understanding, mutually supportive and intimate relationship with parents. Nevertheless it is important to highlight that the distancing dimension revealed validity problems. The fact that item 10 was eliminated and item 9 showed a low factor loading suggests a reexamination of their contents. Theoretically, distancing should reflect offsprings' awareness of

TABLE 5 Means and standard deviations of filial maturity across age group and transitional situation

	Age group				Transitional situation								
	Younger EA		Olde	Older EA		Type 1		Type 2		Type 3		pe 4	Post hoc
Variable	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
Comprehending Distancing	3.68 3.52	0.96 1.01	3.87 3.43	1.11 1.10	3.64 <sup>b</sup> 3.46	0.94 1.00	3.74 3.48	1.09 1.16	3.74 3.42	1.09 1.07	4.03 <sup>a</sup> 3.52	1.08 0.98	a > b

*Note*. Younger EA = Younger Emerging Adult; Older EA = Older Emerging Adult.



parents' faults and limitations; however, item 9 ("I worry about turning out like my parents") seems to reflect holding a negative view of parents. In fact, distancing was strongly correlated with negative relationships with parents (Birditt et al., 2008). Additionally, this factor showed low values of internal consistency (both composite reliability and Cronbach's alpha). This could be indicative that the three items were not evaluating distancing in a consistent way. Moreover, the average variance extracted by the distancing factor showed that a considerable amount of its variance was attributed to measurement errors (Fornell & Larcker, 1981). All this suggests that the use of the distancing scale may require some caution. Cultural factors may also be underlying elements in these results. Portugal has been characterized as being a family-oriented culture, and consequently distancing may assume here a different meaning than in more individualistic cultures. Thus, it would be important to conduct cross-cultural research in order to evaluate the meaning of these items in different contexts. Further studies should also try to explore other measures of filial distancing (e.g., Parental De-idealization scale; Steinberg & Silverberg, 1986) in order to overcome these problems. Filial maturity has been characterized by the establishment of a peer-like parent-child relationship (Birditt et al., 2008; Blenkner, 1965; Nydegger, 1991). Nevertheless, we verified that the item "I think of my parents more as friends than parents" presented the lowest mean in the comprehending dimension. On one hand, this could be the reflection of early stages of filial maturity development. On the other hand, it could also indicate that "parents remain parents" instead of turning into friends. Some research has supported this perspective (Buhl, 2008; Proulx & Helms, 2008) and has showed that adult children continue to see parents as mentors.

As expected, age and role transitions led to changes in the way young adults perceived their parents, giving support to FMM's criterion validity, and consequently to further construct validity. Young adults who had established a more independent life from parents, that is, left home and made the transition to work, were able to engage in more equal and comprehensive relationships with their parents (comprehending), than young adults that had not effectuated both these transitions. Interestingly, each transition per se was not associated with significant differences in filial maturity. In this way, being a worker but continuing to co-reside with parents, or living away but continuing to depend on parents' financial support (few people in Portugal work while studying) did not seem to promote the development of more mature relationships with parents. In this way, filial maturity seems to be associated with life course experiences and age (although these two aspects tend to occur in parallel). An unexpected finding was that distancing did not vary with role transitions and age of young adults; however, this could be due to measurement problems.

## Limitations and Future Research Directions

As well as the issues discussed previously regarding the distancing factor, this study had a number of additional limitations that could be addressed in future research. In this study we used a heterogeneous sample and we did not control for the influence of social factors, such as socio-economic background and family structure (two parent traditional family structure vs. non-traditional structures).

In addition, it would be important to analyse the influence of the child's gender on filial maturity. Gender has been pointed out as an organizational feature of family relationships and



studies have shown consistent differences in the way it affects the quality of parent-child relationships and psychological development (e.g., Proulx & Helms, 2008). Indeed, Birditt et al. (2008) verified that adult children reported greater filial maturity with mothers than with fathers. In future research it would be important to analyse if the meaning attributed to filial maturity is the same across children's gender.

Development is promoted or hindered by social, interpersonal and personal factors. As a consequence it would be interesting to develop a model in which these variables were considered and analyse how they influenced filial maturity. The use of a longitudinal methodology would help examine the developmental progressions of patterns of distancing and comprehending over time and integrate it in a life span perspective. Nydegger (1991) in her work introduced the complementary concept of parental maturity and suggested that both maturities exhibited parallel development. Future research should design an instrument to assess parental maturity and examine dyadic developments between filial and parental maturity. Filial maturity is a central concept in helping to understand parent-child adult relationships.

Overall, this study contributed to the literature by assessing young adults' development of filial maturity and analysing how it was associated to some adult transitions. We verified that in our Portuguese sample, the distancing dimension of the FMM lacked validity and required further investigation. In addition, the development of filial maturity was associated with young adults' establishment of an independent life. Further research is needed to clarify this concept and observe its development over time.

## Notes

- 1. These percentages are only exceeded by some new EU-27 member states, such as Bulgaria, Malta, Slovenia and Slovakia.
- 2. At the time of writing unemployment rates were 36.6% for young people and 14.9% for total population (INE, 2012).
- 3. Professional training courses give individuals a professional qualification which is also equivalent with a school degree.
- 4. In Portugal military service is voluntary and professional.
- 5. Sixteen participants were eliminated from this typology because they were working students. This elimination of participants was only carried out for analysis of differences.
- 6. The activity rate in Portugal for young people aged 15-24 was 28.5% in 2010 (European Commission, 2011).

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#### **APPENDIX**

## Portuguese version of the Filial Maturity Measure

#### Portuguese Falo frequentemente com os meus pais acerca dos meus problemas [I often tell my par-1 ent about my problems and rely on him/her for advice] 2 Penso nos meus pais mais como amigos do que como pais [I think of my parent as more of a friend than as parent] 3 Tem muito significado para mim quando os meus pais me fazem confidências [It means a lot to me when my parent confides in me] 4 Os meus pais, às vezes, pedem-me conselhos sobre assuntos importantes da vida deles [My parent sometimes comes to me for advice about important matters] 5 À medida que vou ficando mais velho, noto que eu e os meus pais temos mais em comum [As I grow older, I notice my parent and I have more in common] 6 Partilho os meus pensamentos e sentimentos mais profundos com os meus pais [I share my deepest thoughts and feelings with my parent] Independentemente do amor que tenho pelos meus pais, reconheço que eles têm as suas 7 falhas [Regardless of how much I love my parent, he/she certainly has faults] Os meus pais têm alguns hábitos que são irritantes [My parent has some really annoying 8 habits] 9 Preocupo-me com o facto de ficar igualzinha aos meus pais [I worry about turning out like my parent] 10 Os meus pais são quase perfeitos [My parent is practically perfect]

