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THE MEASUREMENT OF FAMILY RELATIONSHIPS: INDIVIDUAL, DYADIC, AND FAMILY DIMENSIONS OF RELATIONAL CONSTRUCT AND THEIR IMPLICATION FOR FAMILY MEMBERS

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In this paper we illustrate a new method for measuring family relationship through the structural equation modeling (SEM), considering both family members' points of view and dvadic relationships. Starting from the model developed by Cole and colleagues (Cole & Jordan, 1989; Cole & Mcpherson, 1993), we proposed and tested a new measurement model in which the family dimension is operation-alized as a second-order latent variable. We applied the measurement model to companionship — a fundamental feature of close relationships which had previously been investigated exclusively as an individual construct. The different dimensions of relational construct predict the adjustment of the family members differently. The first aim of the study is to test three different measurement models to identify the individual, dyadic, and family dimensions of companionship, and the second whether companionship as a multidimensional construct is related to depression in family members. The participants are 107 family triads who were asked to fill out a questionnaire containing Companionship subscale of Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985) and Depression Scale (Radloff, 1977). Results reveal that the best model for measuring family companionship is that investigated in our study which hypothesizes family dimension as a second-order factor, and that the family dimension of companionship is related to depression in family members.

Key words: Companionship; Depression; Family research; Data interdependence; SEM.

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The study of family relationships is an intriguing area for researchers, as there are a number of different perspectives and several points of view that can be employed for investigation of the family. A simple way to investigate family relationship is to consider the point of view of one family member and to generalize his/her perceptions to all other family members. Following this simple approach, the definition of the family is limited to the perspective of this one family member. A second method is to consider the family as composed of two members, called a dyad. In this perspective, the dyad is the unit of measurement for studying family relationships. Yet another perspective considers the family as a group in which different members and different relationships are organized. In this perspective, in order to fully investigate family relationships, it is necessary to consider different relationships and different members of the family to manage the interdependence that characterizes the family as a whole. In this perspective, the individual (family members), dyadic (relationships), and family (as a whole) levels are intertwined. The relational construct used to investigate family relationships can be measured by taking into account the dif-



ferent levels (individual, dyadic, and family) distinguished in the family. Identifying and analyzing these different levels of analysis represents a challenge for scholars.

In this paper we aim to present a multidimensional measurement model to investigate a specific characteristic of family relationships: companionship. Starting from the previous model proposed by Cole and colleagues (Cole & Jordan, 1989; Cole & McPherson, 1993) to measure family relationships we developed a multidimensional model that measures individual, dyadic, and family dimensions. We focus specifically on companionship in the family relationship because, notwithstanding the fact that the importance of relationship on individual wellbeing and adjustment is well-documented, studies that consider different types of relationships (horizontal and vertical) are rather scarce. Moreover, most research on companionship — such as family relationship — has measured this construct considering only one partner in the relationship. Thus, in studies on companionship the interdependence among relationships and between the partner of relationships has been neglected. But the mutual influence between the partners in a relationship and between these various relationships is one of the specificities of the relational construct and of the family. Indeed, adopting a family perspective for the study of companionship in family relationships enables researchers to investigate both horizontally (e.g., marital relationship) and vertically (e.g., parentchild relationship) at once. Moreover, the inclusion of these different perspectives of the family members on companionship (family member perspective) and different relationships enables us to test the dyadic and the family dimensions of companionship.

Although some studies have shown that companionship in close relationships has positive effects on personal adjustment, as of yet, no studies have investigated how companionship within family relationships might affect outcomes of family members. In particular, those studies that looked at how family relationships affect individual adjustment considered the perspective of only one family member.

The aim of the present study is to test a multidimensional measurement model of companionship in family relationships by considering different perceptions and relationships (mother, father, and child). These elements enable the study of companionship by considering companionship as both dyadic and family characteristics. Furthermore, the association between the multidimensional model of companionship on depression of a family member is tested.

COMPANIONSHIP: FROM THE INDIVIDUAL TO THE FAMILY DIMENSION

The term companionship generally refers to the opportunity to spend time with a person who inspires feelings of trust, satisfaction, and intimacy. It has been defined as pleasurable social interaction (Buunk & Verhoeven, 1991; Fischer, 1982; Rook, 1987) emphasizing the importance of the ludic-recreational aspect of shared time together (such as shared leisure and recreation or discussion of common interests). However, despite the fact that many studies point to companionship as one of the fundamental features of a close relationship (McAdams, 1988; Rook & Ituarte, 1999), a shared definition of the concept is not presented in the literature. The importance of companionship throughout the life cycle was recognized by Sullivan (1953), who identifies the need for companionship in childhood in the form of a desire for adult interest and participation in the child's play. This need continues throughout life as a desire to be involved with others in mutually interesting and enjoyable activities. Most studies define companionship indirectly, and as distinguished from other similar concepts such as intimacy and support. Buhrmester and Furman (1987) distinguished



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the differences between companionship and intimacy in fairly generic terms: they define companionship as engaging in enjoyable activities with others, but intimacy in terms of disclosing personal thoughts and feelings to others. Recently Griffiths, Crisp, Barney, and Reid (2011) discovered that the participants of their qualitative study identified companionship as being "related to satisfying a need for connection" (p. 4) and as a benefit of seeking informal support. Moreover, several authors have investigated various effects of companionship and support on both health and wellbeing (e.g., Bolger & Eckenrode, 1991; Buunk & Verhoeven, 1991; Haines & Hurlbert, 1992; Larson, Mannell, & Zuzanek, 1986; Rook, 1987; Rook & Ituarte, 1999). In particular, support protects people from the debilitating effects of life stress, whereas companionship protects people from the emptiness and despair associated with loneliness.

From a methodological point of view, the previously mentioned studies investigated companionship within a dyadic relationship considering primarily individual perception. Most of this research involved only one member of the family or one partner of the relationship: the unit of analysis is the individual. In this way, the researchers gathered data about individual perceptions of the degree of companionship in a dyadic relationship, but did not pick up the features of dyadic relationships. In fact, if we collect data on companionship in the mother-child relationship only from the child, we obtain data regarding the way in which the child perceives companionship in the relationship. Conversely, if we consider companionship as a feature of the dyadic relationship, in order to obtain information related to the specific relationship, we gather data from both of the partners within the relationship. Moreover, if we are interested in investigating companionship as shared characteristics of family relationships, two or more dyadic family relationships should be involved. In fact, we can hypothesize that, with regard to companionship within a family, the different members and the various relationships share family norms and behavior.

The first aim of this paper is to present a measurement model to investigate companionship as a multidimensional construct composed of the individual, dyadic, and family dimensions. The individual dimension refers to the individual's perception of the degree of companionship perceived in the dyadic relationship, while the dyadic dimension refers to the shared variance between an individual's perceptions of the two members of the dyad, and the family dimension refers to the shared variance among dyadic family relationships. All three dimensions are necessary to probe the complexities of family relationships (Scabini, Marta, & Lanz, 2006). The multidimensional model of companionship in family relationships will be tested by investigating how companionship affects family members.

COMPANIONSHIP AND DEPRESSION:¹ WHO CAN BENEFIT FROM COMPANIONSHIP IN ORDER TO COUNTERACT DEPRESSION?

For many years, social scientists have shown that the presence and quality of close relationships may influence health (Simpson & Tran, 2006). Several studies have demonstrated the apparent buffering effects of close relationships on mortality (i.e., Berkman, 1995; House, Landis, & Umberson, 1988), recovery from chronic diseases, and physical and psychological morbidity such as schizophrenia, alcoholism, obesity, elevated blood pressure, or depression (Simpson & Tran, 2006). Cassel (1976) and Cobb (1976) suggested that social relationships provide people with a sense of belonging or with the feeling that one is a valued member of a social group. They noted



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that people who had few social connections tended to have a worse prognosis with respect to recovering from illness or maintaining health than did those with more social connection. In his review of 26 cross-sectional studies, Whisman (2001) showed that the quality of marital relationships is negatively associated with depressive symptoms. Serious marital dissatisfaction predicts increased risk for a major depressive episode in the year following initial assessment, even after controlling for history of depression (Whisman & Bruce, 1999). Moreover, numerous previous studies have revealed that both adolescents' satisfaction with their families and difficulties in marital relationships are associated with the development of depression (Barber & Buehler, 1996; Cumsille & Epstein, 1994; Scabini et al., 2006; Weissmen & Paykel, 1974).

Although some studies have shown that companionship has important expressive functions, such as positive effects on mood and feelings of wellbeing, fewer studies have looked more specifically into the link between companionship and depression. Weiss (1974) distinguishes between lack of emotional support (or lack of intimacy) and lack of companionship (or lack of a sense of belonging) and differentiates emotional and social loneliness in terms of the core feelings that people experience when they lack particular kinds of social relationships. The lack of an intimate relationship, in his view, gives rise to emotional loneliness, which is characterized by feelings of utter aloneness, pervasive apprehensiveness, and hypervigilance toward social cues from the environment. The lack of companionship, in contrast, gives rise to feelings of social loneliness, which Weiss described as characterized by feelings of boredom, exclusion, and social marginality. Consistent with this, emotional loneliness and social loneliness have been shown to have distinctive effects on psychological wellbeing in younger (Russell, 1982) as well as in older people (Green, Ericsson, &Winblad, 2001; Holmén, Richardson, Lago, & Schatten-Jones, 2000).

Some authors (Hays, 1985; Rook, 1987) suggest that companionship is a more consistent predictor of overall satisfaction with one's relationships than are other kinds of social exchanges. A lack of companionship, therefore, should be regarded as a particularly potent source of dissatisfaction. Moreover, if companionate activities represent a primary means by which people weave pleasure and excitement into their lives (Simmel, 1949; Weiss, 1973), then people who lack partners for such activities are apt to appear particularly deprived. Thus, as compared to people who have other kinds of interpersonal deficits, people who lack companionship are likely to be seen as less happy with their social lives.

Our research investigated the relationship between quality of family relationships and depression in the family. We find no studies to date that have taken into account the dyadic and family dimensions when investigating how family relationships affect the individual wellbeing of all family members. Moreover, previous research focused on a single actor as the "recipient" of such influences, neglecting the fact that family as system is characterized by interdependence among its members (Scabini et al., 2006). The second aim of this paper is to test how companionship (dyadic and/or family) is related to depression of a family member.

THE STUDY OF FAMILY RELATIONSHIPS

Studying the family entails the methodological challenge of addressing the non-independence of data (Kenny, Kashy, & Cook, 2006), based on the assumption that a family relationship is characterized by interdependence. It is possible to distinguish two types of interdependence in family research: interdependence between individuals involved in the same relationship, and in-



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terdependence among family dyadic relationships (Tagliabue & Lanz, 2010). Specifically, interdependence is both the mutual influence that the partners of relationships exert on each other and the reciprocal influence that dyadic relationships have on each other. Interdependence between individuals implies that the thoughts, feelings, or behaviors of related individuals will closely resemble each other. Thus, the scores from individuals who are involved in a relationship will not be independent (Kashy, Campbell, & Harris, 2006). One of the most important advantages of gathering non-independent data is that researchers can examine not only how specific characteristics of a person affect his/her own behavior, but also how those specific characteristics affect his/her partner's behavior. Gathering information from more than one person in the family group is a methodological choice that allows the researcher to collect the different perspectives that family members have on their various relationships. Moreover, when we focus on dyadic relationships within the family, the interplay among the different dyadic relationships highlights reciprocal influence among a dyadic family relationship. For example, a high level of satisfaction in marital relationship affects the quality of parent-child relationships. Both types of interdependence are important when we investigate the family as an organization of relationships (Laursen, 2005; Tagliabue & Lanz, 2010).

Numerous scholars have stressed the importance of developing research paradigms that will allow the interdependent nature of the relationship to be revealed. Moreover, nowadays there is a number of statistical techniques that can be used to manage the non-independence of family data (Campbell & Kashy, 2002; Ickes, 2002; Kenny, 1988; Lanz & Rosnati, 2002). In particular, confirmatory factor analysis (CFA) can be extremely useful for testing theoretical measurement models that consider individual, dyadic, and family components.

CFA to Study Family Relationships

In CFA the investigator specifies the theoretical model to test a priori, creating a theory driven measurement model. For family researchers, CFA may be a useful technique, as it forces the researcher to take into consideration the type of construct measured. In fact, dyadic or family constructs (i.e., communication, conflict, cohesion) are commonly measured by adopting an individual unit of analysis, thus gathering data from only one family member without considering the interdependence between family members and among the family dyadic relationship. Findings from this type of research give us only limited evidence regarding how the family member perceives the construct, and give us no information concerning the features of dyadic relationships or the family as a set of different relationships. CFA is a useful technique for analyzing family data, as it allows one to develop complex measurement models that reflect the complexities of the family. Through CFA it is possible to adopt a multiple perspective and multirelationship approach to measure family constructs and to test and compare different measurement models. Researchers adopting a multiple perspective for the study of family relationships have proposed and tested different theoretical models for the study of family relationships (Cole & Jordan, 1989; Cole & McPherson, 1993; Sabatelli & Bartle, 1995).

We can distinguish two general models: one-factor and multi-factors. In one-factor model, the idea is that family members share a general view of the relational construct due to their belonging to the same family. Thus, the individual's perception of the relational construct is due, to



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some extent, both to one's family and to the uniqueness of one's perception. The unique variance of each item is allowed to correlate with all the other error variance of the same family members (correlated uniqueness). Instead, the multi-factors model follows the multidyadic-multiperspective approach, based on the multitrait-multimethod approach (MTMM) developed by Campbell and Fiske (1959), which focuses on the individual perspective (methods) and the dyadic perception of relationship (traits). The unique variance of each item is allowed to correlate with all other error variance of the same family members (correlated uniqueness) (Kashy & Kenny, 1992, 2000). In this model, the family dimension is defined by the correlations among the dyadic latent factors. The variance in the individual score is partitioned into latent factor (dyadic) and error variance (unique perception) (Bartle-Haring, Kenny, & Gavazzi, 1999). Thus, the individual perception of the relational construct is due to some extent to one's family, the relationships in which one is involved, and one's uniqueness of perception.

THE PRESENT STUDY

Our aims are twofold. The first is to test different hierarchical measurement models of companionship to highlight the individual, dyadic, and family dimensions of this relational construct. Three measurement models will be tested and compared in order to identify the dimensions of companionship. In the first model we propose a one-factor solution in which the individual score of all family members is affected by one latent family factor. The family factor represents the level of companionship shared by all family members. In the second model, following the multidyadic-multiperspective approach, we propose a three-factor model in which each latent variable is one dy-adic relationship (mother-child; father-child; husband-wife), and the correlations among latent factors represent the family dimensions. In this model the family is conceptualized as the interrelation-ships among dyadic relationships. In the third model we propose a second-order CFA in which the family dimension is tested as a second-order factor and dyadic relationship as a single-order factor. In this model the family is conceptualized as a multilevel organization in which there are individual level (unique perception), dyadic level (one latent factor), and family level (the variance shared by the dyadic relationship). The second aim is to test a structural model in which companionship, measured through a multifactor latent model of family members is related to depression.

METHOD

Participants

The study involved 107 complete familiar triads (made up of mother, father, and son-daughter) from Northern Italy who were asked to fill out a paper questionnaire. Children were students from 15 to 23 years old (M = 16.84, SD = 1.03). Male participants were 41.0%; females 59.0%.

The mothers' ages ranged from 36 to 59 (M = 46.28, SD = 4.65). Their level of education was middle school or lower (13.4%), vocational school (24.8%), secondary school (37.1%), Bachelor's degree (4.8%), and Master's degree or higher (19.9%). Participants holding a full-time job were 44.8%, 26.7% were housewives, 21.9% worked part-time, and the remaining 6.6% were unemployed, involved in other activities (e.g., student), or unable to work.



The fathers' ages ranged from 35 to 60 (M = 48.72, SD = 4.78). Regarding their level of education, 22.6% of the fathers had completed middle school or lower, 11.3% held a diploma from a vocational school, 50.1% from a secondary school, .9% had a Bachelor's degree, and 15.1% had a Master's degree or higher; 91.4% had a full-time job, 5.5% had a part-time job, and the remaining 3.1% were unemployed, involved in other activities (e.g., student), or unable to work.

Procedure

Adolescents were asked to complete a self-report questionnaire during a one-hour class period and then to take home an envelope containing two questionnaires to be completed separately by each of the parents. All the participants had been previously informed via written communication that participation would be free and voluntary, and that the data would be used only for research purposes in an aggregate manner. Each participant signed consent and privacy protection forms and participated in the study voluntarily. No material reward was provided to any of the participants.

Instruments

Companionship. Companionship was studied using the Companionship subscale of the Italian version of Furman and Buhrmester's (1985) Network of Relationships Inventory (NRI) which was validated by Guarnieri and Tani (2011) and measures the level of companionship between parents and children. The same items were also used to measure companionship between two partners. The NRI scale is made up of three items (e.g., "How much do you joke and have fun with your father/your mother/your partner/your child?") on a 5-step scale (from 1 = Not at all to 5 = Very much).

Depression. Fava's (1981, 1983) Italian validation of Depression Scale by Radloff (1977) was used to measure tendencies toward feeling depressed. These tendencies appear as lack of appetite, interest, pleasure, and so forth. A reduced version of the 10 items was used for each family member (e.g., "I feel depressed") on a 4-step scale (1 = Never or almost never to 4 = Always or almost always). The 10 items are aggregated into three parcels for each family member.

Data Analysis

Measurement model. In the first (one-factor) model, the family latent factor represents the family culture and norms of companionship that affect family members' behaviors and perceptions. Error terms of the observed variables represent the unique perception of each family member, that is, the amount of variance not shared by the other family members. The error terms of each family member are correlated to each other in order to take into account the specificity of that family member's point of view (correlated uniqueness model). As all the family members were affected in the same way by the family factors, all paths of observed variables are constrained to 1 (Figure 1).

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FIGURE 1 Model 1: One latent factor for family companionship.

In the second (three-factor) model, the family dimension is operationalized through the correlations between dyadic latent factors. The three latent factors represented the three dyadic relationships (marital, mother-child, father-child). Three sources of variance are present: the trait (i.e., the relational construct specific for each relationship type or each specific partner), the method (i.e., the shared variance due to the person who is assessing different relationship types or to the shared relationship), and the correlated uniqueness (i.e., the shared variance of each item across different relationship types). The method is measured through the correlation among errors of the same family member following the correlated uniqueness model (Figure 2).



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FIGURE 2 Model 2: Three latent factors (dyadic dimensions of companionship).

In the third model, we inserted a second-order latent (family dimension) factor, which affects the three first-order latent factors (dyadic relations: mother-child, father-child, and married couple). We tested a second-order CFA in which the second-order latent factor represents the family dimension. Moreover, in the second and third model, all paths between latent factor and observed variables were constrained to 1 (Figure 3).

Model goodness-of-fit. Model goodness-of-fit was checked using several indices simultaneously (Bollen, 1989). Two of these indices were χ^2 and the ratio between χ^2 and degree of freedom (χ^2/df). A model fits the data well when χ^2 is not significant. An acceptable ratio for χ^2/df value should be less than 3.0 (Hair, Anderson, Tatham, & Black, 1998). However, the chi-square statistic is sensitive to sample size; therefore, we adopted additional fit indices which were less sensitive to sample size: comparative fit index (CFI) and root mean square error of approximation (RMSEA). The CFI values equal to or above .90 were considered acceptable (Hu & Bentler, 1997, 1999). Finally, RMSEA values equal to or smaller than .08 were considered satisfactory. To compare the nested model (second and third model), we used the chi-square difference test ($\Delta\chi^2$).



FIGURE 3 Model 3: Second order factor (multidimensional construct).

Structural model. For the second aim we used a structural equation model to investigate whether family companionship measured by taking into account individual, dyadic, and family dimensions is related to family members' depression in any way. To measure depression for each family member, we divided the Depression Scale into three parcels. The theoretical model of family underlining our structural model stated that family is characterized by dyadic relationships and unique perception of each family member. Moreover, family component of companionship is related to family member depression (Figure 4).

RESULTS

The correlations among companionship scores from all members' perspectives and the descriptive statistics are reported in Table 1. The first model (Figure 1) — in which family companionship is operationalized as one latent factor — has unacceptable fit indices, $\chi^2(143) = 564.73$, p < .001, $\chi^2/df = 3.94$; CFI = .53; RMSEA = .16 (.15-.18). In the second model, a three-latent-factor model was tested with correlations among latent factors to indicate the association



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FIGURE 4 Model in which the family dimension is related to individual depression of mothers, fathers, and children.



	М	SD	1	2	3	4	5	6	7	8	9
Adolescents											
1. Mother companionship ^a	3.40	0.74	-								
2. Father companionship ^a	3.17	0.75	.57*	-							
3. Depression ^b	1.89	0.53	12	20*	_						
Mothers											
4. Child companionship ^a	3.24	0.68	.51*	.21*	26**	-					
5. Partner companionship ^a	3.15	0.90	.12	.19*	21*	.31**	-				
6. Depression ⁶	1.72	0.57	.30**	.25**	20*	.38**	.41**	-			
Fathers											
7. Child companionship ^a	3.04	0.72	.24*	.47**	27*	.33**	.37**	.32**	-		
8. Partner companionship ^a	3.26	0.87	.17	.24*	23*	.24**	.68**	.29**	.52**	_	
9. Depression ⁶	1.58	0.64	.28**	.19*	21*	.35**	.36**	.43**	.35**	.35**	-
Cronbach's alpha			.67	.68	.78	.77	.85	.88	.78	.82	.70

TABLE 1 Descriptive statistics, Pearson's *r* correlations, and Cronbach's alpha for the instruments used and among actors

^aRange 1-5. ^bRange 1-4. ***p* < .01. **p* < .05.

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among dyadic dimension of companionship (Figure 2). The model produced acceptable fit indices, $\chi^2(138) = 240.59$, p < .001, $\chi^2/df = 1.74$; CFI = .88; RMSEA = .08 (.06-.10). The third model was developed to operationalize family companionship as a second-order latent variable which explains the three first order latent variables (representing the dyadic dimensions) (Figure 3). Here the fit indices are good, $\chi^2(137) = 230.10$, p < .001, $\chi^2/df = 1.68$; CFI = .89; RMSEA = .08 (.06-.09). All the factors of the model were significant.

To test whether the third model significantly improved model fit, we used the chi-square difference test ($\Delta \chi^2$). A significant $\Delta \chi^2$ indicates that the third model explains a great deal of variance of the matrix. The $\Delta \chi^2$ is distributed with Δdf degrees of freedom and can be checked manually for significance using a χ^2 table. The $\Delta \chi^2$ is significant, $\Delta \chi^2(1) = 10.48$, p < .001.

The second goal was to investigate whether the family dimension of companionship is related to family member depression (Figure 4). To measure family companionship we used the third model tested (second-order factor).

The fit of this model is good, $\chi^2(324) = 490.76$, p < .001, $\chi^2/df = 1.51$; CFI = .89; RMSEA = .07 (.05-.08). All paths from family companionship to individual depression are significant. In particular, family companionship is negatively related to family member depression. Family companionship accounts for 21% of the variance in the children, 19% for mothers, and 10% for fathers.

DISCUSSION

The general aim of this study was to test a hierarchical measurement model of companionship within family relationships by considering the interdependence among family members and dyadic family relationships. The measurement models presented revealed that the individual perception of companionship may be unpacked by considering both a dyadic and a family dimension. The dyadic dimension of companionship refers to the features of a specific dyadic relationship in which the family member is involved, while the family dimension refers to the amount of companionship shared between dyadic relationships. People belonging to the same family have a more similar perception of their companionship than people that do not belong to the same family. From a statistical point of view, this means that the variance of individual perception of a relational characteristic is partitioned into different components depending on dyadic and family relationships.

Our theoretical model of companionship expands upon the findings of Cole et al. (1989, 1993), adding the family as second-order factor. Using this model we explored the complexities of the family as system involving different relationships. The comparison of the two nested models (second order vs. dyadic model) showed that the dyadic model is less satisfying than the one which also includes the family dimension. We therefore found that the family companionship measurement model is the best in terms of fit.

Confirmatory factor analysis allowed us to articulate a hierarchical model of the key elements of the family. In fact, in our measurement model, family members, dyadic family relationships, and family as a whole were considered. The modelization of companionship in individual, dyadic, and family dimensions allowed us to highlight the different role that dyadic relationships play in the family dimension. In fact, the way in which dyadic relationships are affected is determined by the family dimension. In particular, the amount of variance explained by the family di-



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mension is higher in the father-child relationship than in the mother-child or mother-father relationship. Considering individual, dyadic, and family level of companionship emphasizes the fact that researchers should consider the specificity of individual perception and of dyadic relationship to evaluate relational dimensions such as companionship within a family group. Moreover, the relevance of the family dimension has been demonstrated by those findings related to family members' depression, which showed that the family dimension of companionship is significantly associated with the amount of depression of each family members. The amount of variance explained by the family factor varied depending upon family role. Indeed, the family has a greater impact on depression in fathers than in mothers or children. Mothers and children seem to benefit from the positive influence of the companionship shared among family members and between dyadic relationships. It is worthwhile noting that in our model the family dimension is defined as the variance shared by the three dyadic family relationships (marital, mother-child, father-child).

Our findings shed light on the role of companionship within family relationships by highlighting the different roles that companionship plays for family members and within the family relationship. Moreover, our findings provide insight into how to measure a relational construct through the dyadic and the family dimensions. The use of a structural equation model to study family relationships makes it possible to elaborate a theoretical model of interdependence of family relationships without running the risk of oversimplifying the articulation between relationships and individual perceptions.

As Kelly et al. (1983) explain, the dimension of interdependence is crucial to the study of interpersonal relationships, affirming that people are seen to be in a relationship if they impact each other and if the change in one person causes a change in the other, and vice versa. However, in the study of family relationships, in addition to the interdependence of the family members in the relationship, one must also consider an interdependence among the relationships and a belonging to the family group, aspects which are especially challenging for researchers, because they need to find analytical techniques that not only take into account the interdependence among family members, but that also make it possible to consider the group or family dimension in which the individuals and their relationships are embedded.

The use of structural equation models for research on family relationships is particularly stimulating, as it requires theoretical reflection upon the models to be tested. However, the complexity of family relationships in terms of the family members and the number of relationships involved often leads to the formulation of complex empirical models with a large number of parameters to be estimated and high degrees of freedom, resulting in strong probabilities of inadequate fit indices (Kenny & McCoach, 2003). The researcher thus finds him/herself having to mediate between a multiplicity of sources of variance within the family and the limitations of statistics, which may not always be able to test the modeling in a meaningful way. This could challenge researchers to seek out new statistical methods that will not lead to an oversimplification of the model being tested.

The researcher must be aware that the structural equation model is a powerful tool for testing new models that require a strong theoretical framework to guide the development of the empirical model to be tested (Bagozzi & Yi, 1988). Our study represents one possible way to handle interdependence among family members and among dyadic relationships. The challenge for research focused on family relationships is to use structural equation models to develop new measurement models to operationalize the various identifiable dimensions of family relationships.



Our findings can be considered explorative, as, in order to allow a greater degree of generalization, the model must be tested on different sample and family types. In our model we hypothesized depression as an outcome of family dimensions such as companionship, but we did not consider the recursiveness of this connection. In fact, we can now further hypothesize that depression has an effect on the family dimension. Future longitudinal studies may attempt to identify the association between family dynamics and depression and shed light on the relevance of individual, dyadic, and family dimensions on individual family members.

NOTE

1. In this study we refer to *depression* as a continuous variable rather than a clinical category such as major depressive disorder (American Psychiatric Association, 2000). Some taxometric analyses reveal that depression is better conceptualized as a continuous variable (Hankin, Fraley, Lahey, & Waldman, 2005; Lewinsohn, Solomon, Seeley, & Zeiss, 2000; Ruscio & Ruscio, 2004). Moreover, given the low scores obtained, depression is here used as a general term indicating more properly a general state of low spirits.

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