Summary

The Link Between Negative Mother-Adolescent Relationship Quality and Internalizing Problems: Exploring the Mediating Role of Frustration of Basic Psychological Needs with Dyadic Analysis Method

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Mother-adolescent relationship quality is a multidimensional construct includes both negative and positive valences (Boele et al., 2019). Positive mother-adolescent relationships characterized by trust and open communication provide adolescents with a secure base from which to explore and navigate the challenges of adolescence, while, in contrast, negative mother-adolescent relationship quality, marked by conflict and criticism, can undermine adolescents' emotional well-being and hinder their developmental progress (Boele et al., 2019; Laursen et al., 1998). In this study, we only focused on a negative dimension of relationship quality, which has been considered as the opposite of positive relationship quality (Boele et al., 2019). The significance of the mother-adolescent relationship quality rather than father-adolescent relationship quality stems from its status as the primary socializing agent during adolescence (Sunar, 2002; Sunar & Fisek, 2005). Since mothers play a significant role in adolescents' lives during this formative period, the quality of the mother-adolescent relationship serves as a crucial determinant of adolescent well-being.

Research consistently demonstrates that negative mother-adolescent relationship quality is associated with a range of adverse outcomes, including internalizing problems such as heightened levels of stress, anxiety, depression for adolescents (Branje et al., 2010; Huey et al., 2017; McWey et al., 2015; Qu et al., 2021) and for mothers (Lougheed & Hollenstein, 2016; Van Der Giessen et al., 2015). Therefore, it is expected that an individual would evaluate their own life according to their relationship with their mothers or adolescents, where negative relationship quality would be related to higher levels of internalizing problems.

While numerous studies have investigated the relation between relationship quality and internalizing problems, there is a lack of research examining the underlying mechanisms that explain how and why negative relationship quality is linked to internalizing problems. To gain a more detailed understanding of the mechanisms underlying the impact of negative mother-adolescent relationship quality on their internalizing problems, the Basic Psychological Need Theory (Deci & Ryan, 2000) proposes that heightened negative mother-adolescent relationship quality diminishes the well-being of both parties by undermining their basic psychological needs.

The Basic Psychological Need Theory (Deci & Ryan, 2000) suggests that human behaviors are driven by three fundamental psychological needs. Autonomy reflects individuals' yearning to maintain control over their thoughts, actions, and behaviors. Competence pertains to the desire to feel effective and proficient when undertaking various tasks. Relatedness involves individuals' longing for meaningful connections with others. Satisfaction of these needs is associated with relatively more positive outcomes, whereas their frustration is linked to less favorable outcomes and internalizing problems (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013). Previous research has shown that the context plays a pivotal role in determining whether these fundamental needs are met or thwarted, consequently influencing the likelihood of internalizing problems (Vansteenkiste & Ryan, 2013). Therefore, it can be assumed that relatively more negative relationship quality between mothers and adolescents, as a need-thwarting context, may lead mothers and adolescents to frustrate their needs, which in turn, will be linked to heightened problems. Conversely, a less negative relationship quality between mothers and adolescents, as a need-flourishing context, may enable individuals to fulfill their needs, potentially resulting in lower levels of problems (Tindall & Curtis, 2019; Vansteenkiste & Ryan, 2013).

A limited number of dyadic studies have shown significant links between mother-adolescent relationship and internalizing problems (Claridge et al., 2015; Van Der Giessen et al., 2013, 2015; Withers et al., 2016) and needs frustration (especially for relatedness and competence frustration) and internalizing problems (Van Petegem et al., 2020). Therefore, conducting a simultaneous examination of the potential relations among these variables within a sample of Turkish adolescents and their mothers, while also accounting for the potential mediating influence of basic needs frustration, will enrich our understanding of their interconnectedness. In this regard, the main aim of this study is to examine the mediating role of basic psychological needs frustration in the relation between negative mother-adolescent relationship quality and internalizing problems. It was hypothesized that negative mother-adolescent relationship quality will be positively associated with basic psychological needs frustration (Hypothesis 1) and basic psychological needs frustration will be positively associated with internalizing problems (Hypothesis 2) for both actor (i.e., within) and partner (i.e., between) paths. Therefore, it was hypothesized that both mothers' and adolescents' heightened negative relationship quality will indirectly predict greater internalizing problems through greater needs frustration (Hypothesis 3).

Method

A total of 230 mother-adolescent dyads (N = 460) mainly living in metropolitan cities of Türkiye (95.22%) participated in the study. The ages of the mothers ranged from 32 to 58 (M_{age} = 45.47, SD = 5.31) and from 11 to 18 for adolescents (M_{age} = 15.79, SD = 1.84; 56.1% of them were female). The Quality of Mother-Adolescent Relationship Questionnaire-Mother and Adolescent Forms, Basic Psychological Needs Frustration subscale of the Basic Psychological Needs Satisfaction and Frustration Scale, and The Depression Anxiety Stress Scale were used as measures. Before conducting the study, ethical approval was obtained. Participants were reached with a convenience sampling method. In addition to the consent of the mothers, adolescents' assent was also taken before starting to fill out the questionnaires. Although 506 participants were sampled, 6 of them dropped because mother-adolescent dyads were not living together at the time of data collection, 36 of them could not be matched because of unmatched pseudonyms, and 4 of adolescents were older than 18 years. Therefore, all analysis were handled with a total of 230 mother-adolescent dyads who were living together at the time of data collection. The Actor-Partner Interdependence Model Extended to Mediation (APIMeM) was used to examine the intraindividual and interpersonal pathways in the association between negative mother-adolescent relationship quality and internalizing problems by means of needs frustration. APIMeM was tested by using MEDYAD (Coutts et al., 2019) which is a macro for SPSS which allows the testing of dyadic mediation models with distinguishable dyads. The indirect effects were calculated based on 5000 bootstrap samples with asymmetric percentile-based confidence intervals.

Results

The results of the APIMeM analysis showed that mother's negative relationship quality reports were positively associated with mother's needs frustration (B =.31, p < .001) and adolescent's needs frustration (B = .14, p = .045). Similarly, adolescent's negative relationship quality reports were positively linked to adolescent's needs frustration (B = .22, p < .001). However, surprisingly, there was no association between adolescent's negative relationship quality reports and mother's needs frustration (B = .01, p = .815). Additionally, in line with the study hypotheses, both mother's and adolescent's needs frustration were positively linked to their individual levels of internalizing problems (B = .44, p < .001 and B= .45, p < .001). Furthermore, as expected, adolescent's needs frustration was positively linked to their mother's internalizing problems (B = .08, p = .023), while, unexpectedly, there was no association between mother's needs frustration and adolescent's internalizing problems (B = .03, p = .519). Furthermore, both mother's and adolescent's reports of negative relationship quality were positively associated with their own internalizing problems (B = .22, p < .001 and B = .26, p < .001). However, mother's reports of negative relationship quality showed no significant relation with adolescent's internalizing problems (B = .01, p = .824), the opposite was also not significant (B = .07, p = .081).

The indirect effect of mother's negative relationship quality reports on their own internalizing problems through their needs frustration was significant (B = .14, Bootstrap: 95%-CI: .093 – .231), and needs frustration fully mediated the direct effect of mother's negative relationship quality reports on their own internalizing problems (B = .07, p = .071). Furthermore, the indirect effect of mother's negative relationship quality reports on adolescent's internalizing problems through adolescent's needs frustration was significant (B = .06, Bootstrap: 95%-CI: .0001 – .120), and adolescent's needs frustration fully mediated the direct effect of mother's negative relationship quality reports on adolescent's internalizing problems (B = .06, p = .157). Additionally,

the indirect effect of adolescent's negative relationship quality reports on mother's internalizing problems through adolescent's needs frustration was significant (B = .02, Bootstrap: 95%-CI: .003 - .041), and adolescent's needs frustration fully mediated the direct effect of adolescent's negative relationship quality reports on mother's internalizing problems (B = .04, p = .161). Lastly, the indirect effect of adolescent's negative relationship quality reports on adolescent's internalizing problems through their own needs frustration was significant (B = .10, Bootstrap: 95%-CI: .050 - .159), and adolescent's needs frustration partially mediated the direct effect of their negative relationship quality reports on their own internalizing problems (B = .16, p < .001) (see Table 2 for details).

Discussion

Regarding the first part of the proposed model, it was found that mother's reports of negative relationship quality were positively associated with both their own and their adolescent's needs frustration, whereas adolescent's reports of negative relationship quality were only positively related to their own needs frustration. This means that higher levels of negative relationship quality experienced by either dyad member (mother or adolescent) were related to higher levels of their own needs frustration. Additionally, mother's higher levels of negative relationship quality were related to their adolescent's higher levels of needs frustration. The results related to the first hypothesis were consistent with the assumptions of the Basic Psychological Need Theory. Specifically, the theory asserts that the fundamental psychological needs within family relationship can either be satisfied or frustrated according to the nature of the familial relationships (Soenens et al., 2019; Vansteenkiste & Ryan, 2013). Therefore, conflictual mother-adolescent relationships serve as a need-thwarting family environment and eventually lead to higher levels of needs frustration (Vansteenkiste & Ryan, 2013). Despite frequent studies on the link between parenting and needs frustration, we are aware of only one unpublished dissertation that specifically examines the relation between the quality of the relationship between mothers and emerging adults and their basic needs (Yavuz, 2022). While this study is not dyadic and does not concentrate on adolescence, its finding of a significant connection between negative relationship quality and needs frustration aligns with the findings of our current study. In this regard, this study will make an important contribution to the literature in terms of the detrimental role of conflictual mother-adolescent relationship on their basic needs with a dyadic perspective.

In addition to the actor effects, the role of mother's report on negative relationship quality on adolescent's higher levels of needs frustration (the partner effect) also deserves attention. According to family systems framework, a family is a system and change in one area has an effect on the other (Bowen & Kerr, 2009). In this framework, the reports of a system (family) member acting with a universal sense of need satisfaction regarding the negative relationship quality are expected to have an absolute effect on the other member. At this point, the non-significant relationship (partner effect) between the adolescent's reports of negative relationship quality and the mother's reports of blocking their needs is quite surprising when evaluated within the framework of the family systems approach. However, the findings make sense when evaluated in the context of the hierarchical structure of Turkish culture. In Turkish culture, harmony in family relationships is generally very important and the ties between family members are generally close (Sunar & Fisek, 2005). These ties may reduce or conceal the impact of family conflicts. Especially adolescents have great respect for their families in a hierarchical family structure (Sunar, 2002) and may avoid expressing their negative feelings openly. There are findings in the literature that Turkish family structure and cultural values may affect adolescents' negative emotional expressions (Sunar, 2002). Therefore, factors such as cultural norms, family structure, and social values may prevent adolescents from directly expressing their negative relationships with the mother, and thus a context that prevents the satisfaction of the mother's needs may not occur. In fact, the significant relation between the mother's relationship quality and the basic psychological needs of the adolescent supports this assumption.

The findings related to the second part of the model are consistent with the Basic Psychological Need Theory and the second hypothesis of the study. The findings revealed that adolescents' reports of high level of need frustration predicted their own and their mothers' internalizing problems. On the other hand, mothers' reports of high level of need frustration predicted only their own internalizing problems. These results are consistent with the significant relations observed in previous studies between the frustration of basic needs and internalizing problems such as depression, anxiety, and stress (Chen et al., 2015; Tindall & Curtis, 2019; Van Petegem et al., 2020)

From the Basic Psychological Need Theory perspective, while satisfaction the basic needs of the individual is associated with psychological well-being, the frustration of these needs has been associated with various negative outcomes, including internalizing problems (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013). In

more detailed terms, the mother's and adolescent's feeling of being inhibited about the need for autonomy and agency (autonomy need), activity and competence (competence need), and belonging and closeness in the family (relatedness need) may be associated with more internalizing problems (Van Petegem et al., 2020). When the findings are evaluated on the basis of the Basic Psychological Need Theory, it is suggested that, regardless of gender, age, race, or cultural background, less frustration towards basic psychological needs of all individuals will be associated with less negative outcomes (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013). In this sense, the universality assumption of the theory is also valid for the significant partner effect between the frustration of the adolescent's needs and the mother's internalizing problems, and this was supported by the findings of the study.

Especially from a cultural perspective, it is quite possible that Turkish mothers, as primary caregivers (Sunar, 2002), are primarily affected by the changes in their children's lives and therefore, whenever adolescents feel frustrated in fulfilling their needs, mothers hold themselves responsible for this situation, attribute the situation to themselves and inevitably show internalizing problems. However, when evaluated on the basis of the same universality perspective, the non-significant partner effect between the mother's frustration of needs and the adolescent's internalizing problems is quite surprising. This situation is also meaningful when evaluated in the context of Turkish culture in the light of family systems approach. In Turkish culture, the family is the most important source of support for individuals and the emotional bonds within the family, especially between mother and child, are generally very strong (Sunar, 2002). In this context, the frustration of mothers' needs is usually noticed by other members in the family and especially adolescents may be affected by their mothers' emotional states due to the closeness in the mother-adolescent relationship (Fisek, 1991; Kagitcibasi, 1983), but other strong support systems within the family may prevent this effect from turning into internalization problems of the adolescent. Since the aforementioned intra-family support systems were not specifically investigated in this study, studies examining possible mediating mechanisms and protective factors are needed to support this conclusion. In addition, the fact that the roles of mothers and adolescents differ markedly in Turkish culture, and that mothers are usually the figures who carry the emotional burdens in the family and try to manage them (Kagitcibasi, 1996; Sunar, 2002) may affect their own psychological well-being more in the event that their needs are hindered, and since mothers try not to reflect this situation to their children, adolescents may be less influenced by this situation.

Regarding the mediation hypothesis, adolescent's needs frustration emerged as a significant mediator between negative mother-adolescent relationship quality and internalizing problems for nearly all actor and partner paths in the dyadic model, except the link between mother's reports of negative mother-adolescent relationship quality and their own internalizing problems. This finding implies that heightened levels of negative mother-adolescent relationship quality reported by either dyad partner (mother or adolescent) correspond to heightened levels of adolescent's needs frustration, which in turn, is associated with greater internalizing problems for both dyad partners. The mother's needs frustration, on the other hand, emerged as a full intermediary factor between negative mother-adolescent relationship quality and internalizing problems for actor paths. This finding suggests that for mothers, higher levels of negative mother-adolescent relationship quality led to higher levels of needs frustration, and consequently, this increased needs frustration is linked to heightened internalizing problems. Previous research has demonstrated strong evidence related to the role of negative mother-adolescent relationship quality on internalizing problems (Claridge et al., 2015; Van Der Giessen et al., 2013, 2015; Withers et al., 2016) but our results additionally highlight that, within this relation, both mothers' and adolescents' needs frustration may be an important intermediary.

The significant actor pathways are consistent with the assumptions of the Basic Psychological Need Theory, as well as with previous theory-based research suggesting that negative mother-adolescent relationship quality is associated with greater frustration of basic psychological needs (Yavuz, 2022), which in turn predicts greater internalizing problems (Van Petegem et al., 2020). These findings support that negative relationship dynamics increase internalizing problems for both mothers and adolescents by thwarting psychological needs. On the other hand, when the mediating role of the adolescent's reports about the frustration of their needs in all of the significant partner effects is evaluated in the context of Turkish culture, it is seen that this situation is compatible with the parenting norms in Turkish culture and the roles of mothers in the family. Research shows that the effects of parents' psychological states on their children are shaped by cultural context, socioeconomic status and parenting styles (Kagitcibasi, 2007; Kagitcibasi & Ataca, 2005). In Turkish culture, especially the parenting approaches of mothers with high education level, urban, middle-upper income level, focusing on children's autonomy, the importance they attach to their psychological values and their sacrificing attitudes in connection with this (Kagitcibasi & Ataca, 2005; Parlak & Tekin, 2020) may reduce

the effects of mothers' inhibition of their own needs on children's psychological well-being. The fact that only mothers were investigated in the current study limits specific inferences based on parents. In this context, there is a need for multi-informant research that will reveal the differences between parents and the consequences of different parenting practices. Limitations related to the correlational nature of the study, the reliance on self-report measures, the potential presence of other mediating factors, the need to explore other possible indicators and measures of the study variables, demographic characteristics of the sample that limit generalizability, the lack of a balanced representation of adolescents from early, middle, and late adolescence periods, and the mere collection of mothers' and adolescents' reports should be considered when evaluating the findings.