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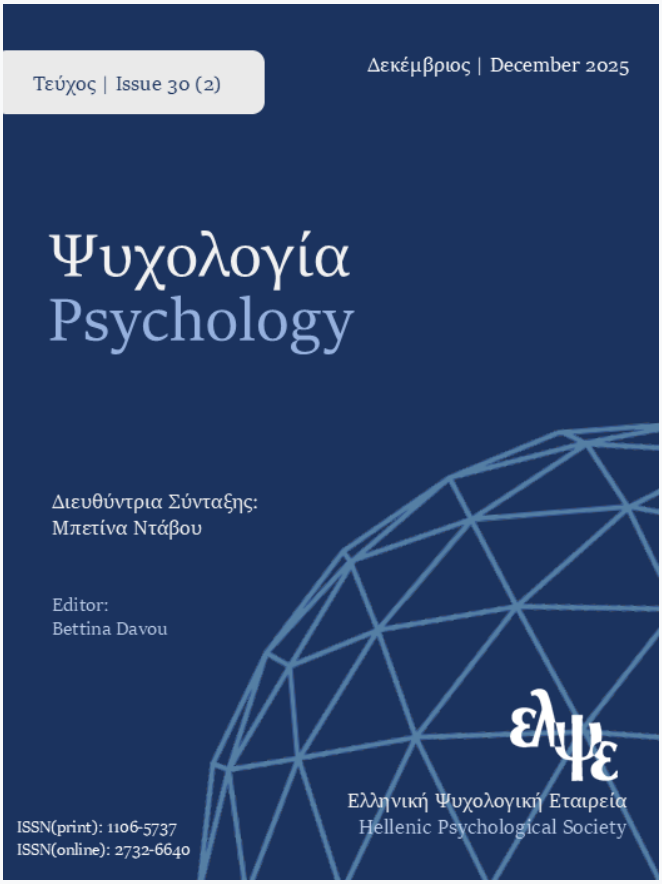

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Parenting and parental phubbing: Adolescents' perceptions and the moderating role of gender in the Greek context

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ABSTRACT

This study draws on attachment and social learning theories to explore the relationship between adolescents' perceptions of parenting dimensions (rejection, emotional warmth, overprotection/control and anxious rearing) and parental phubbing—which is when a parent ignore their child in favor of using a smartphone. Given the growing use of digital devices in family interactions, understanding these dynamics is critical. A sample of 326 adolescents (12 to 16) completed the *Egna Minnen Betraffande Uppfostran* (Memories from my upbringing) questionnaire and the *Generic Scale of Being Phubbed* assessing parenting styles and parental phubbing for each parent separately. The results showed that parental rejection and overprotection/control were linked to parental phubbing, while emotional warmth was associated with lower levels of maternal and paternal phubbing. Gender differences emerged in father-child interactions; boys reported that higher paternal controlling behavior was related to more paternal phubbing, while girls reported that higher paternal anxious rearing was linked to less paternal phubbing. Furthermore, gender moderated the relationship between paternal behaviors and perceptions of paternal phubbing, with a stronger effect seen in girls. These findings suggest that parental behaviors characterized by emotional unavailability or excessive control may contribute to or reinforce patterns of digital disengagement. Implications include the need for interventions that promote parental emotional presence and reduce digital distractions, such as programs promoting mindful smartphone use in parenting.

Parenting has been extensively studied in psychological research. Baumrind's typology (1991) defines parenting styles along responsiveness and demandingness. The authoritarian parent is characterized by low responsiveness and high demandingness, the permissive parent by high responsiveness and low demandingness, and the authoritative parent by high levels on both dimensions (Baumrind, 1991). Maccoby and Martin (1983) added the neglectful parenting style, marked by low demandingness and responsiveness. Research consistently supports the benefits of authoritative parenting for adolescents' development. Several difficulties, including social withdrawal, externalizing and internalizing problems, victimization, and aggression, have been associated with negative parenting, where there is no balance between the two dimensions (Pinquart, 2017).

In the realm of digital communication, parental behaviors have evolved with the widespread use of smartphones, leading to the phenomenon of "parental phubbing" (“phone” and “snubbing”) - where parents prioritize their phones over interacting with their children- raising concerns about its impact on the parent-child relationship (Chotpitayasunondh & Douglas, 2018; Roberts & David, 2016). Studies indicate negative

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outcomes for adolescents, including lower self-control, aggression, cyberbullying, peer alienation, and vulnerability to depression (Braune-Krickau et al., 2021; Jiang et al., 2023).

Despite increasing interest, there is a gap in understanding how adolescents perceive parental phubbing and its relationship with broader parenting behaviors. This study aims to explore adolescents' perceptions of parental phubbing and its association to parenting dimensions, particularly parental emotional warmth, overprotection/control, anxious rearing, and rejection, while considering the moderating role of gender in the Greek context.

Conceptual Background

Parental behaviors, including phubbing, can be understood through theoretical frameworks such as Bowlby's attachment theory and Bandura's social learning theory. Attachment theory emphasizes the role of caregivers in shaping children's emotional security and interpersonal expectations (Scharfe, 2017). When parents are preoccupied with smartphones, it may disrupt emotional availability, potentially leading to insecure attachment or feelings of neglect. Concurrently, social learning theory suggests that children learn behaviors by observing others (Akers & Jennings, 2015). Thus, exposure to parental phubbing may not only affect a child's emotional needs but may also normalize device distraction in relationships.

While early frameworks focused on parenting styles based on responsiveness and control, recent research has adopted multi-dimensional models (Power, 2013). This study incorporates four validated parenting dimensions from the Egna Minnen Beträffande Uppfostran – Child version (EMBU-C) scale, which include emotional warmth (the extent to which parents are affectionate/supportive), overprotection/controlling behavior (the extent to which parents are controlling/intrusive), rejection (the extent to which parents are critical/punitive), and anxious rearing that refers to parental behaviors characterized by persistent worrying about the child's safety or performance, frequent checking, and communications that transmit parental anxiety to the child (Castro et al., 1993; Power, 2013). These dimensions may either complement or extend classical typologies by capturing affective components that typologies alone may overlook.

The introduction of phubbing intersects with parenting dimensions as "parental phubbing" reflects emotional unavailability introducing the term "distracted parenting" (McDaniel, 2019). Preliminary findings suggest that phubbing may undermine the quality of parent-child interactions, particularly during emotionally sensitive developmental stages like adolescence (Xie et al., 2022).

The relationship between parental phubbing and parenting style is an emerging area of research, and a key unresolved issue is whether phubbing reflects a broader parenting style or if it exacerbates relational distance regardless of the parenting style. Research on parental phubbing suggests that while this behavior is influenced by various factors, it is partially related to parenting styles. Parenting styles characterized by lower emotional responsiveness, such as authoritarian or neglectful, may be associated with higher incidences of phubbing, while parents who exhibit more authoritative practices are less likely to engage in phubbing (Li et al., 2024; Niu et al., 2020; Tong et al., 2024). However, phubbing is also understood as a situational behavior driven by the pervasive use of smartphones and technology, occurring across different parenting styles (McDaniel & Radesky, 2018). Consequently, parental phubbing is best viewed as a multifaceted phenomenon that intersects with but operates somewhat independently from traditional parenting styles, with its impact on the parent-child relationship moderated by the broader emotional context and communication patterns within the family (Shi et al., 2024).

Research indicates that adolescents may interpret maternal and paternal behaviors differently, influenced by gender-specific parenting roles and cultural expectations (Pleck, 2010). Mothers are perceived as more permissive or authoritative, emphasizing emotional warmth and nurturing, while fathers are more play-oriented, authoritarian and place more emphasis on rules and discipline (Yaffe, 2023). However, the literature

suggests that these patterns are not fixed but rather dependent on several factors, including family dynamics and individual needs of each child, cultural values, societal norms, and gender roles (Yaffe, 2023). Furthermore, the significant role of fathers in children's development has gained widespread recognition, leading to changes in paternal expected behaviors in many societies (Cabrera et al., 2018).

Research on differences between maternal and paternal phubbing is limited. Existing research suggests that mothers, responding to social expectations, may regulate the use of their phone (Incekar et al., 2024). Recent evidence also shows that maternal and paternal phubbing may affect adolescents differently. For instance, Pivetta et al. (2024) found that maternal phubbing predicted male and female adolescents' problematic gaming through increased maternal indifference. In contrast**,** paternal phubbing was associated with problematic gaming only among female adolescents, suggesting that girls may be particularly sensitive to inattentive paternal behavior. Gender differences in parenting and digital behaviors underscore the importance of examining these dynamics separately (Tamis-LeMonda et al., 2004).

Research has shown that boys may perceive their mothers as overly controlling, while girls may interpret the same behaviors as protective/caring (Smetlana, 2017). Further, boys have been found to perceive their parents as more authoritarian and permissive compared to girls; however, both boys and girls perceive their parents as mainly authoritative (Olivari et al., 2015). These differences are largely attributed to factors such as gender socialization, parent-child relationships, and cultural expectations. Studies have shown that girls may value authoritative parenting practices because it is socially expected for girls to express emotions and seek support. In contrast, boys may respond more positively to parenting practices that align with traditional expectations of control, independence, and discipline (Chen et al., 2024).

Furthermore, younger adolescents (10-14 yrs), who are still closer to earlier developmental stages, may rely largely on their parents' guidance and perceive authoritative behaviors as supportive/nurturing. As they seek more autonomy and independence, they may begin to perceive parental control as strict or annoying. Older adolescents (15+), having gained more autonomy, may strongly reject parental control or authoritarian practices (Sanders & Morawska, 2018). Studies have shown that younger adolescents perceive their parents, particularly mothers, as more affectionate and supportive while reporting less criticism (Ortega et al., 2023). It has also been found that parents of older adolescents are more likely to exhibit neglectful or indulgent parenting styles and are less likely to set limits on online behavior (Rosen et al., 2008).

In relation to phubbing, studies suggest that girls may perceive parental phubbing differently and may be more affected by it than boys (McDaniel, 2019). In a study with Chinese adolescents it was found that the relationship between paternal phubbing and communication with father was stronger in female adolescents (Wang et al., 2022).There are also data indicating that the negative impact of parental phubbing is stronger for younger children (McDaniel & Radesky, 2018).

Greek Cultural Context

Cultural values and norms play a significant role in parenting practices and adolescents' perceptions. It has been supported that authoritative parenting is more valued in Western societies, while authoritarian practices are more common in Eastern societies (Smetana, 2017). Moreover, in cultures where more authoritarian practices are normative, the impact on children's development is not so negative compared to cultures with contrasting values (Lie & Wang, 2018; Smetana, 2017).

Greece has strong family ties and high parental involvement, with traditional gender roles associating mothers with affectionate practices (Georgas et al., 2006; Giotsa et al., 2018; Lampropoulou et al., 2025; Mussa, 2022; Vakalopoulou, 2022). Greek parenting reflects a mix of authoritarian and authoritative practices influenced bicultural values and family dynamics (Antonopoulou & Tsitsas, 2011; Antonopoulou et al., 2012). Greece's cultural context situates it between more authoritarian and permissive societies, with Greek

adolescents describing their parents as mainly authoritative (Mussa, 2022; Olivari et al., 2015). As smartphone use increases in Greek households, with children having consistent access to smartphone devices through their parents (Papadakis et al., 201), understanding its impact on parenting is timely and relevant.

The Current Study

Parenting research highlights the evolving nature of parent-child relationships in the digital era. In Greece, where traditional family structures are prominent, the emergence of behaviors such as parental phubbing introduces novel dynamics in parent-adolescent interactions. Existing literature emphasizes the importance of parenting dimensions (e.g., emotional warmth, rejection, overprotection/control, anxious rearing) in shaping adolescent development, yet less is known about how these interact with modern behaviors like phubbing. Moreover, gender differences in how adolescents perceive these parenting behaviors and how these perceptions influence their psychosocial outcomes remain underexplored.

In the present cross-sectional design, parental phubbing is conceptualized as the outcome variable that may co-occur with—and potentially be reinforced by—less adaptive relational patterns such as high rejection or control. Building on the theoretical and empirical background reviewed above, the present study investigates (a) the associations between adolescents' perceptions of parenting dimensions—emotional warmth, overprotection/control, rejection, and anxious rearing—based on the EMBU-C questionnaire, and parental phubbing, and (b) whether these associations are moderated by adolescent gender. In addition, it assesses differences attributable to adolescent demographic characteristics (gender, age) and contrasts perceptions of maternal versus paternal behavior. These goals offer a nuanced understanding of how parenting behaviors intersect in Greek families.

Based on the presented rationale, the study addresses the following hypotheses and research question:

H1: Adolescents' perceptions of parenting practices and parental phubbing will differ based on adolescents' gender and age. Prior research indicates that girls and boys differ in their emotional sensitivity to parenting behaviors and that developmental stage influences how adolescents interpret parental availability (Ditman et al., 2013; Shek, 2008).

H2: Adolescents are anticipated to report higher levels of maternal emotional warmth and lower levels of maternal phubbing. This is in line with traditional maternal roles and previous findings that suggest mothers are more emotionally available (Pivetta et al., 2024).

H3: Higher levels of parental rejection, overprotection/control, and anxious rearing and lower levels of parental emotional warmth will be positively associated with increased parental phubbing. This is consistent with prior findings that link authoritarian and disengaged/neglectful parenting with digital distraction (Hong et al., 2019; McDaniel & Radesky, 2018; Xie et al., 2022).

RQ1: Does adolescent gender moderate the relationship between perceived parenting dimensions and parental phubbing, separately for mothers and fathers?

This study addresses a gap in the literature by contextualizing these relationships within a specific cultural framework. By considering parenting dimensions, parental phubbing, and gender simultaneously, the study contributes to the development of context-specific interventions to promote healthier relationships in the digital age.

Method

Participants

In total, 326 adolescents (104 males, 222 females) aged 12-16, participated in the study. Of these, 54% attended junior high school and 46% attended senior high school located in eastern Athens. Additionally, 89% reported that their family was intact, while 9% reported that their parents were divorced/separated. Most participants'

fathers (48%) had a higher education degree, 36% had completed senior high school, and 14% had finished basic/mandatory education. The majority of the participants' mothers (62%) had a university degree, 30% had completed senior high school, and 7% had finished basic/mandatory education.

Measures

Parenting. The 40-item EMBU-C ("Egna Minnen Betraffande Uppfostran"-Memories from my upbringing) questionnaire was used to evaluate parenting behavior in children aged 7 to 16 (Castro et al., 1993; Muris et al., 2003). It includes four factors (10 items each): Control/Overprotection (e.g., Your mother/father wants you to reveal your secrets to him/her), Emotional Warmth (e.g., Your mother/father likes you just the way you are), Rejection (e.g., Your mother/father treats you unfairly), and Anxious Rearing (e.g., Your mother/father worries about you making a mistake). Responses were provided separately for each parent using a 4-point Likert scale (1=*No, never*, to 4=*Yes, all the time*). The Greek adaptation of the EMBU-C has shown good internal consistency in previous research with Greek adolescents (e.g., α=.74–.85 across subscales; Lianos, 2015). For this study, a modified, shorter version of the instrument was used to match the sample's characteristics. A detailed description of the modification procedure is provided later in the article.

Parental Phubbing. The Generic Scale of Being Phubbed (GSBP; Chotpitayasunondh & Douglas, 2016) was used to evaluate adolescents' experiences of parental phubbing. The scale comprises 22 items distributed across three subscales: Perceived Norms (e.g., Your mother/father seems to be using his/her phone to go online), Feeling Ignored (e.g., Your mother/father would rather pay attention to his/her phone than talk to me) and Interpersonal Conflict (e.g., I tell my mother/father that he/she interacts with his/her phone too much). Responses were rated on a 5-point Likert scale (1=*strongly disagree*, 5=*strongly agree*). Items were modified to assess perceptions separately for each parent by administering the scale twice (once for the mother and once for the father). While the GSBP has not been formally validated in the Greek context, a translation-back-translation procedure was conducted by two bilingual members of the research team. Exploratory and confirmatory factor analysis supported the three-factor structure, and internal consistency was high for both maternal and paternal scales (Cronbach's α=.81–.94).

Socio-demographic variables. The study measured gender, grade, parental education, and family status.

Procedure

The study, conducted from March to June 2024, was approved by the Ethics Committees of the Department of Psychology, National & Kapodistrian University of Athens (PN=529a 28/3/2024). The sample was selected through convenience sampling from four public secondary schools that had previously collaborated with the research team. This method was chosen for its ease of access to the school settings. Parental written informed consent was required. Information (aims/process) was provided on the first page of the questionnaire. Students were informed about the voluntary nature of participation, the anonymity and confidentiality of their responses, and the right to withdraw at any time. The questionnaires were completed during a regular class period (20-30 minutes).

Data Analytic Strategy

The statistical analysis involved exploratory and confirmatory factor analysis, normality tests, and descriptive statistics. Pearson's correlation coefficients (r) were calculated to assess the relationships among the dependent variables, with values ranging up to .19 being considered very weak, .20 to .39 weak, .40 to .59 moderate, .60 to .79 strong and over .80 very strong (Evans, 1996). T-tests were conducted to explore differences based on demographics, with effect sizes up to .20 considered small, up to .50 moderate and over .80 large (Cohen, 1988). To address multiple testing, *p*-values were adjusted using Bonferroni corrections.

Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to provide a comprehensive and rigorous approach to examining the structure of the measuring instruments. In terms of CFA, goodness of fit was determined using the comparative fit index (CFI), Tucker-Lewis Index (TLI), with acceptable values of >.90, and root mean square error of approximation (RMSEA) with acceptable goodness of fit values of <.08. The *p*-value of standardized root mean square residual (SRMR) was calculated based on the RMSEA values, with values of $p<.08$ indicating close fit (Brown, 2015). The difference between the observed and model-implied covariance matrix was tested with the Pearson's chi-squared test (χ^2), where absence of statistical significance denotes that the measurement models are consistent with the data; however, since significant chi-square values are common in large samples, incremental indices are emphasized (Hu & Bentler, 1999). The χ^2/df was also calculated with values below 5 considered reasonable (Wheaton et al., 1978) and values below 2 being indicative of superior fit between the model and the sample data (Cole, 1987). These tests were performed in R (lavaan) to check the equality of the measurement invariance models for both parents. Specifically, the configural (baseline), metric (with equal loadings) and scalar (with equal loadings and intercepts) models were tested. Lack of significant differences means that latent means of phubbing and parenting dimensions across mother and father can be compared meaningfully.

Moderation analyses employing adolescents' gender as a moderator were conducted using the PROCESS macro for SPSS (Model 1; Hayes, 2018), to examine whether adolescent gender altered the strength or direction of the relationship between parenting dimensions and parental phubbing behaviors. To control the proportion of false positives due to the fact that many tests were conducted, results that remained significant at $\alpha = .01$ were only taken into account. Statistical analyses were performed with IBM SPSS (v29.0) and JASP (v0.19.3) using the lavaan code.

Missing data were managed through listwise deletion, meaning that any case with missing values on variables included in the analysis was excluded. This approach was selected because the proportion of missing data was low (<5%) and Little's MCAR test was non-significant, $\chi^2(16)=28.0$, $p=.08$, indicating that data were missing completely at random (MCAR) (Little, 1988). Under these conditions, listwise deletion is less likely to introduce bias and is a statistically appropriate method (Enders, 2010).

Results

Dimensionality of the Measures

The dimensionality of the study's measures (GSBP, EMBU-C) was explored. Examination of the initial structure exhibited evidence of misfit across fathers and mothers. Therefore, the model was re-specified and re-estimated to provide a robust fit (Byrne, 2008). The first stage of the analysis was to estimate an appropriate baseline measurement model. Given that the same items were administered to adolescents for each parent, EFA was conducted on just one set (i.e., fathers) arbitrarily. Item retention followed a standard rule for both measures: retain loadings > .49; discard items with loadings < .32 or with cross-loadings > .32 on different components (Tabachnick & Fidell, 2007). The emerging structure was tested on the items referring to fathers and mothers through CFA to verify that the structure held across both parental figures (King et al., 2023). Analyses were conducted using the maximum likelihood factoring method. Assuming that the components should be related, promax oblique rotation was used.

Exploratory Factor Analysis (EFA) of the GSBP. A three-factor solution was examined for the GSBP, as per the initial version of the scale. The number of factors that emerged explained 56,7% of the distribution. Following the item retention rule, items 1 and 22 were discarded, leaving 20 items in the new version of the questionnaire. Factor loadings are shown in Table 1.

Table 1. *Factor Analysis of the GSBP*

	Factor 1	Factor 2	Factor 3
GSBP1P		*.400*	
GSBP2P		*.511*	
GSBP3P		*.531*	
GSBP4P		*.647*	
GSBP5P		*.575*	
GSBP6P		**.685**	
GSBP7P		**.738**	
GSBP8P		*.567*	*.337*
GSBP9P		**.639**	
GSBP10P	**.510**		
GSBP11P	**.813**		
GSBP12P	**.791**		
GSBP13P	**.829**		
GSBP14P	**.729**		
GSBP15P	**.561**		
GSBP16P	**.924**		
GSBP17P	**.696**		
GSBP18P			**.671**
GSBP19P			**.801**
GSBP20P			**.853**
GSBP21P			**.624**
GSBP22P	*.396*		*.252*

**Note.* GSBP = Generic Scale of Being Phubbed; Applied rotation method is oblique promax; item loadings in italics were discarded after first and second scrutiny; item loadings in bold were retained.

Confirmatory Factor Analysis (CFA) of the GSBP. CFA was conducted on the revised version of GSBP for the 20-item version for both genders. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) was greater than .60 for fathers (.94) and mothers (.93), and Bartlett's test of sphericity was significant [fathers: χ^2 (190) = 4901.255, p< .001; mothers: χ^2 (190) = 3993.443, p <.001], it was concluded that the data were suitable for factor analysis. The two 20-item models demonstrated poor fit (Table 2), and additional items were considered for removal to improve model fit. Specifically, it was found that five more items, 2 (Your father/mother seems to be using his/her phone to go online); 3 (Your father/mother places his/her phone where he/she can see it); 4 (Your father/mother seems worried that he/she will miss something important if he/she does not check his/her phone); 5 (Your father/mother seems like he/she loses awareness of his/her surroundings because of his/her phone); and 8 (Your father/mother seems like he/she is "in his/her

own world" using his/her phone), although having yielded accepted loading in the EFA, their removal improved significantly goodness-of-fit indices of the revised 20-item version, narrowing the scale down to 15 items (Table 2). A closer inspection of estimates justified this omission. After scrutiny of the R^2 index, the items displayed the lowest values mostly for mothers (.172; .122; .339; .437; .280 respectively) but also for fathers (.213; .170; .383; .560; .430 respectively), indicating little distribution effect. This adjustment improved the model fit for both parents, except RMSEA for fathers, which remained above the .08 benchmark (although dropping from .107 to .098). Table 3 shows the remaining items' loadings on the three factors of the scale and the squared multiple correlations (determination coefficients), which indicate the proportion of the variance explained by each item. R^2 values range from .450 (Q9 mothers) to .779 (Q14 fathers).

Table 2. *Goodness-of-fit of the Revised Versions of the Study's Measures*

Measures	**Goodness-of-fit indices**					
	CFI	*TLI*	*RMSEA [90% CI LL-UL]*	*SRMR*	*χ^2 (df)*	*χ^2/df*
GSBP (mother) (20 items)	.871	.853	.095 [.088-.103]	.067	666.049 (167)**	3.99
GSBP (father) (20 items)	.865	.846	.107 [.100-.115]	.060	800.096 (167)**	4.79
GSBP (mother) (15 items)	.942	.930	.079 [.069-.090]	.043	268.789 (87)**	3.09
GSBP (father) (15 items)	.926	.911	.098 [.088-.109]	.048	366.056 (87)**	4.21
EMBU-C (mother) (23 items)	.894	.881	.061 [.054-.068]	.056	540.428 (246)**	2.20
EMBU-C (father) (23 items)	.902	.889	.065 [.057-0.72]	.062	528.454 (224)**	2.36
EMBU-C (mother) (20 items)	.938	.929	.050 [.042-.059]	.051	333.678 (183)**	1.82
EMBU-C (father) (20 items)	.939	.930	.056 [.047-.064]	.054	330.053 (164)**	2.01

**Note.* ** <.001; GSBP = Generic Scale of Being Phubbed; EMBU-C = Egna Minnen Beträffande Uppfostran (children's version); CFI = Comparative fit index; TLI = Tucker-Lewis index; RMSEA = Root mean square error of approximation; SRMR = Standardized root mean square residual; df = degrees of freedom

Chi-squared difference tests were performed to compare the 15-item models for fathers and mothers. First, the baseline fit of the configural model was calculated, $\chi^2(390) = 3235.7$. After constraining loadings equal, the model fit showed insignificant change, $\chi^2(402) = 3253.3$, $\Delta\chi^2 = 17.66$, $\Delta df = 12$, $p = 0.1265$. Thus, the metric invariance was supported. Adding intercept constraints produced no further significant change in the fit, $\chi^2(414) = 3256.5$, $\Delta\chi^2 = 3.23$, $\Delta df = 12$, $p = 0.9937$; scalar invariance was also supported. Overall, since the models remain stable as constraints are added, latent means of phubbing dimensions across mother and father can be compared meaningfully.

The internal consistency of the three latent factors was computed using Cronbach's *alpha*. Results indicated high reliability for both parents: Perceived Norms-Fathers (α = .84); Perceived Norms-Mothers (α = .81); Feeling Ignored by Fathers (α = .94); Feeling Ignored by Mothers (α = .92); Interpersonal Conflict with Fathers (α = .88); Interpersonal Conflict with Mothers (α = .86). To ensure the convergent validity of constructs, the average variance extracted (AVE) of each construct was examined. The AVEs were higher than the recommended value of .50 [Perceived Norms-Fathers (.66); *Perceived Norms*-Mothers (.60); Feeling Ignored by Fathers (.67); Feeling Ignored by Mothers (.60); Interpersonal Conflict with Fathers (.65); Interpersonal Conflict with Mothers (.61)] indicating adequate convergent validity. To ensure discriminant validity, the square roots of the AVEs were calculated, and the products were found to be higher than the correlations of each construct with the other constructs.

Exploratory Factor Analysis (EFA) of EMBU-C. A four-factor solution was investigated according to the structure of the initial scale. The number of factors that emerged explained 41,7% of the distribution. Following the item retention rule, items 1, 3, 4, 11, 12, 16, 21, 23, 24, 25, 26, 28, 29, 30, 32, 37, 39 were

discarded from the model, leaving 23 items in the new version of the questionnaire. Factor loadings are presented in Table 4.

Confirmatory Factor Analysis (CFA) of EMBU-C. CFA was conducted on the revised version of EMBU-C for the 23 set of items for both genders (Table 2). Since Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) was greater than .60 for fathers (.90) and mothers (.88), and Bartlett's test of sphericity was significant [fathers: χ^2 (190)= 2917.615, p<.001; mothers: χ^2 (210) = 2628.566, p<.001], it was concluded that the data were suitable for factor analysis. As the models demonstrated poor fit, additional items were considered for removal to improve model fit. Specifically, it was found that three more items, 20 (Your father/mother criticizes you in front of others), 31 (Your father/mother watches you very carefully), and 38 (Your father/mother checks on you), although having yielded accepted loading in the EFA (.502; .545; .616 respectively), its removal improved significantly goodness-of-fit indices of the revised 20-item version (Table 2). A closer inspection of estimates justified this omission. After scrutiny of the R^2 index, the items displayed the lowest values for mothers (.287; .211; .272 respectively) and fathers (.294; .226; .286 respectively), indicating little distribution effect. Table 5 shows the remaining items' loadings on the four factors of the scale and the determination coefficients of each individual item. R^2 values range from moderate to large (.305; Q22 mothers to .727; Q14 fathers).

Metric invariance across mothers and fathers was supported ($\Delta\chi^2$=15.20, Δdf=36, p=.999), indicating comparable factor loadings. Partial scalar invariance was achieved, but constraining intercepts led to a small but significant worsening of fit ($\Delta\chi^2$=21.27, Δdf=8, p=.006), with an RMSEA of 0.075. This indicates that only partial scalar invariance was achieved. Overall, the results support the use of the scales for examining structural relationships across parent types, while latent mean comparisons should account for the partial scalar invariance constraints.

The internal consistency of the four latent factors was computed using Cronbach's *alpha*. Results indicated acceptable and high reliability for both parents: Paternal Warmth (α = .90); Maternal Warmth (α = .88); Paternal Control (α =. 77); Maternal Control (α = .79); Paternal Rejection (α = .71); Maternal Rejection (α = .71); Paternal Anxious Rearing (α =. 86); Maternal Anxious Rearing (α =. 80). To ensure the convergent validity of constructs, the average variance extracted (AVE) of each construct was examined. The AVEs were near and/or higher than the recommended value of .50 [Paternal Warmth (.50); Maternal Warmth (.42); Paternal Control (.49); Maternal Control (.53); Paternal Rejection (.46); Maternal Rejection (.46); Paternal Anxious Rearing (.61); Maternal Anxious Rearing (.52)] indicating adequate convergent validity. To ensure discriminant validity, the square root of the AVE for each construct was calculated and was found to be higher than the correlations of the construct with other constructs.

Descriptive Statistics and Correlations

Mean scores on parenting factors revealed the highest levels for anxious rearing both for mothers (M=3.38) and fathers (M=3.24), while the lowest scores were found for rejection (Mmothers=1.56, Mfathers=1.52). The strongest correlations regarding fathers emerged between feeling ignored and paternal rejection, which showed a moderate positive association (r = .46, p < .01), and between feeling ignored and paternal emotional warmth, which showed a moderate negative association (r=⁻.49, p<.01). Regarding mothers, correlation between feeling ignored and maternal rejection which showed a moderate positive association (r=.44, p<.01), and between interpersonal conflict and maternal emotional warmth, which showed a moderate positive association (r=.42, p<.01) (Table 6).

Table 3. *Factor loadings (standardized estimates and standard errors) and determination coefficients (R^2) of the final GSBP items*

Variables	Factor 1		Factor 2		Factor 3		R^2	
	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers
Q6			.867 (.021)	.805 (.027)			.752	.648
Q7			.877 (.021)	.855 (.025)			.769	.732
Q9			.680 (.035)	.671 (.036)			.463	.450
Q10	.856 (.017)	.771 (.025)					.732	.594
Q11	.839 (.018)	.812 (.021)					.704	.660
Q12	.738 (.027)	.688 (.031)					.545	.473
Q13	.758 (.025)	.734 (.028)					.574	.539
Q14	.882 (.014)	.804 (.022)					.779	.646
Q15	.797 (.022)	.763 (.025)					.635	.582
Q16	.821 (.020)	.815 (.021)					.675	.665
Q17	.823 (.020)	.817 (.021)					.677	.667
Q18					.750 (.028)	.759 (.027)	.562	.577
Q19					.818 (.022)	.725 (.030)	.668	.526
Q20					.844 (.021)	.826 (.022)	.712	.683
Q21					.839 (.028)	.828 (.022)	.704	.686

**Note.* Factor 1 = Feeling Ignored; Factor 2 = Perceived Norms; Factor 3 = Interpersonal Conflict.

Sociodemographic Variables

Parents' gender. Paired sample *t* test was performed for comparing participants' perceptions by parents' gender. After correction, significant differences were found between mothers and fathers for Emotional Warmth (*M*fat = 3.04, *SD* = .66; *M*mot = 3.23, *SD* = .58; *t* [296] = ⁻7.45, *p* < .001, *d* = ⁻.43), Overprotection/control (*M*fat = 1.92, *SD* = .71; *M*mot = 2.10, *SD* = .77; *t* [317]= ⁻7.08, *p* < .001, *d* = ⁻.40), and Anxious Rearing (*M*fat = 3.24, *SD* = .68; *M*mot = 3.38, *SD* = .61; *t* [298] = ⁻5.48, *p* < .001, *d* = ⁻.32).

Adolescents' gender and grade. Independent-samples t-tests were conducted to compare participants' perceptions of their parents' parenting behaviors by adolescents' gender. To control familywise error across 8 comparisons, *p*-values were adjusted using Bonferroni correction, (α_adj = .05/8 ≈ .00625). After adjustment, significant differences remained between girls and boys for maternal anxious rearing (*M*girls = 3.46, *SD* = .58; *M*boys = 3.21, *SD* = .65; *t* [321] = 3.33, p < .001, *d* = .41), paternal anxious rearing (*M*girls = 3.32, *SD* = .65; *M*boys = 3.05, *SD* = .70; *t* [321]= 3.28, p < .001, *d* = .40), indicating that girls reported moderately higher levels of anxious rearing from both parents than boys. No significant differences between girls and boys were found in phubbing

Table 4. *Factor Analysis of the EMBU-C*

	Factor 1	Factor 2	Factor 3	Factor 4
EMBU1P		*.408*		
EMBU2P	**.685**			
EMBU3P		*.303*		
EMBU4P			*.355*	
EMBU5P	**.608**			
EMBU6P		**.634**		
EMBU7P	**.785**			
EMBU8P			**.640**	
EMBU9P				**.492**
EMBU10P	**.618**			
EMBU11P	*-.382*		*.315*	
EMBU12P			*.345*	
EMBU13P		**.658**		
EMBU14P			**.810**	
EMBU15P			**.760**	
EMBU16P		*.473*		
EMBU17P	**.806**			
EMBU18P		**.736**		
EMBU19P	**.653**			
EMBU20P			*.502*	
EMBU21P		*.461*		
EMBU22P		**.573**		
EMBU23P	*-.308*		*.298*	
EMBU24P	*.433*			
EMBU25P		*.322*		
EMBU26P		*.330*		
EMBU27P	**.635**			
EMBU28P		*.339*	*.312*	
EMBU29P		*.309*		*.281*
EMBU30P	*.487*			
EMBU31P		*.545*		
EMBU32P		*.379*		
EMBU33P	**.612**			
EMBU34P			**.952**	
EMBU35P				**.504**
EMBU36P	**.743**			
EMBU37P		*.457*		
EMBU38P		*.616*		
EMBU39P			*.300*	
EMBU40P				**.660**

**Note.* EMBU-C = Egna Minnen Beträffande Uppfostran (children's version); Applied rotation method is oblique promax; item loadings in italics were discarded after first and second scrutiny; item loadings in bold were retained.

Table 5. *Factor loadings (standardized estimates and standard errors) and determination coefficients (R^2) of the final EMBU-C items*

Variables	Factor 1		Factor 2		Factor 3		Factor 4		R^2	
	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers
Q2	.745 (.051)	.675 (.034)							.534	.456
Q5	.611 (.046)	.618 (.039)							.460	.382
Q6			.544 (.057)	.611 (.041)					.325	.374
Q7	.725 (.051)	.676 (.034)							.512	.457
Q8					.630 (.045)	.684 (.037)			.530	.468
Q9							.524 (.055)	.581 (.048)	.335	.337
Q10	.601 (.046)	.630 (.038)							.456	.397
Q13			.830 (.055)	.825 (.028)					.628	.681
Q14					.666 (.037)	.781 (.031)			.727	.610
Q15					.495 (.036)	.656 (.039)			.492	.431
Q17	.646 (.043)	.741 (.029)							.560	.549
Q18			.845 (.055)	.817 (.029)					.648	.668
Q19	.642 (.040)	.758 (.028)							.609	.575
Q22			.509 (.052)	.552 (.045)					.312	.305
Q27	.551 (.040)	.653 (.036)							.499	.426
Q33	.521 (.043)	.605 (.039)							.401	.366
Q34					.667 (.038)	.727 (.034)			.687	.528
Q35							.590 (.048)	.670 (.043)	.502	.448
Q36	.620 (.046)	.626 (.038)							.480	.392
Q40							.621 (.047)	.793 (.040)	.571	.628

**Note.* Factor 1 = Emotional Warmth; Factor 2 = Rejection; Factor 3 = Control/Overprotection; Factor 4 = Anxious Rearing.

Table 6. *Means, Standard Deviations and Inter-correlations of the Variables*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Emotional Warmth/Mo	1													
2. Rejection/Mo	-.53**	1												
3. Overprotection/Control/Mo	-.04	.29**	1											
4. Anxious rearing/Mo	.39**	.01	.26**	1										
5. Emotional Warmth/F	.74**	-.45**	-.19**	.27**	1									
6. Rejection/F	-.46**	.76**	.27**	-.06	-.6**	1								
7. Overprotection/Control/F	-.06	.77**	.83**	.21**	-.10	.27**	1							
8. Anxious rearing/F	.29**	.21**	.12**	.75**	.39**	-.07	.33**	1						
9. Perceived Norms/Mo	-.11	.26**	.20**	.06	-.23**	.25**	.15**	-.05	1					
10. Feeling ignored/Mo	-.35**	.44**	.23**	-.08	-.34**	.39**	.18**	-.12	.58**	1				
11. Interpersonal Conflict/Mo	-.26**	.42**	.20**	-.04	-.29**	.35**	.14	.18**	.49**	.72**	1			
12. Perceived Norms/F	-.04	.14	.13	.06	-.23**	.24**	.12	-.09	.18**	.42**	.28**	1		
13. Feeling ignored/F	-.22**	.32**	.23**	-.02	-.49**	.46**	.18	-.17	.70**	.69**	.46**	.59**	1	
14. Interpersonal Conflict/F	-.09	.24**	.17**	.02	-.28**	.32**	.14	-.07	.31**	.46**	.54**	.54**	.72**	1
Mean	3.23	1.56	2.1	3.38	3.04	1.52	1.92	3.23	3.04	1.28	1.21	3.08	1.28	1.23
Standard deviation	.58	.62	.78	.60	.66	.64	.67	2.00	1.10	.32	.32	1.23	.36	.35

**Note*: Mo=Mother - F=Father; Numbers on the upper horizontal line indicate the study's variables as found in the left column.

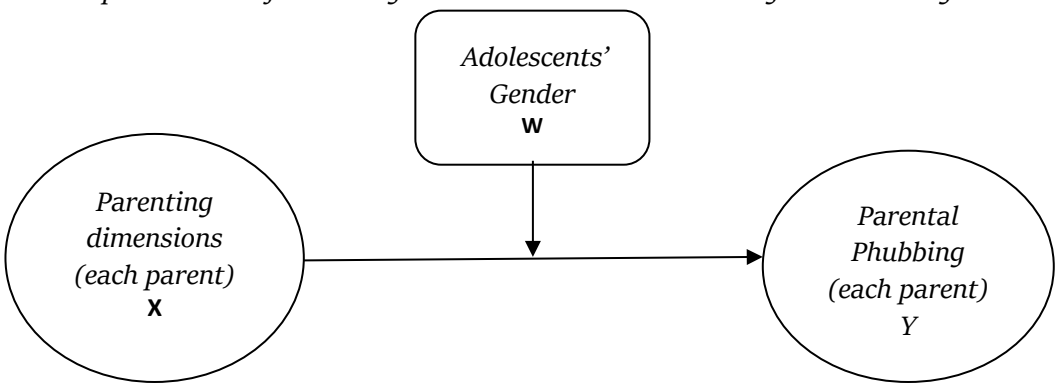
p*<.01

Furthermore, independent-samples t-tests were conducted to compare participants' perceptions of their parents' parenting behaviors by adolescents' grade level. The analyses show several statistically significant differences between junior and senior high school students. To control for multiple testing (8 comparisons), p-values were adjusted using Bonferroni correction (α_adj = .05/8 ≈ .00625). After adjustment, only overprotection/control by mothers showed a small-to-moderate difference favoring junior high students (*M*junior = 2.21, *SD* = .78; *M*senior = 1.98, *SD* = .76; *t* [321] =2.61, *p*<.001, *d* =.30); all other comparisons were not significant after correction. Finally, none of the six comparisons (3 phubbing factors x 2 grade levels) reached statistical significance after Bonferroni correction (α_adj = .05/6 ≈0.0083).

Moderation analyses

A moderation analysis was conducted to examine whether adolescents' gender moderates the relationship between perceived parenting practices (independent variable-IV) and parental phubbing (dependent variable-DV) for each parent (Figure 1). A total of 24 moderation models were estimated (4 parenting dimensions × 3 phubbing outcomes for each parent). All models included adolescent gender as a moderator. Analyses were performed for each parent; however, significant results were found only for fathers.

Figure 1. *Conceptual Model of Parenting Factors and Parental Phubbing Moderated by Adolescents' Gender.*



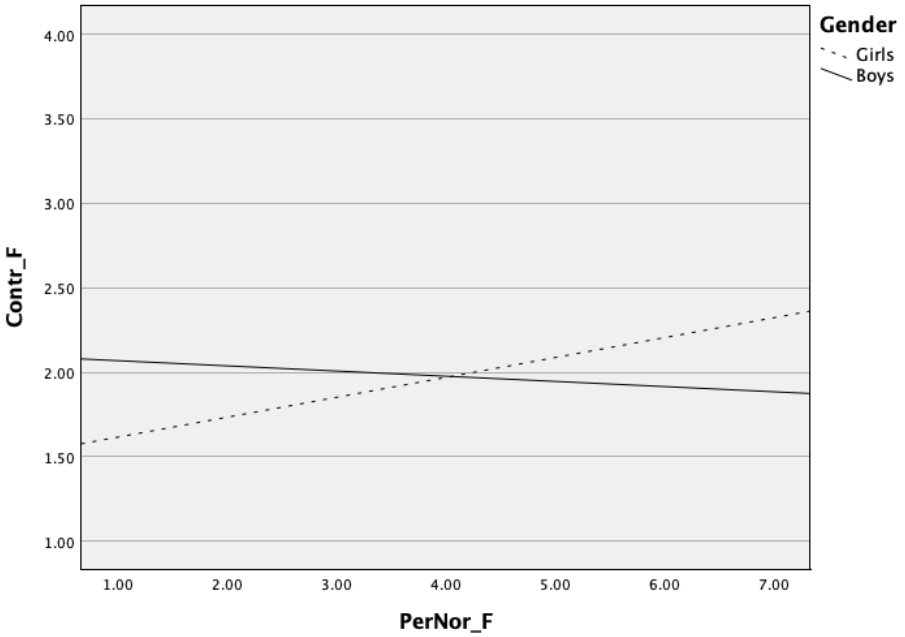
**Note. X=independent variable, W=moderator, Y=dependent variable*

The relationship between perceived norms for fathers and paternal overprotection/control was found to be moderated by gender. The overall model was statistically significant, R^2 = .039, $F(3, 313) = 4.44$, p = .004, accounting for 3.9% of the variance in paternal overprotection/control. Perceived norms were positively associated with paternal overprotection/control (b = .27, SE = .10, t = 2.78, p = .006). The interaction of perceived norms and gender was significant (b = −.15, SE = .07, t = −2.20, p = .029), indicating that gender moderates the relationship between perceived norms and paternal Overprotection/control. A test of the highest-order interaction showed a statistically significant change in R^2 (ΔR^2 = .015, $F(1, 313)$ = 4.84, p = .029). Conditional effects analysis revealed that for girls, higher perceived norms were associated with higher paternal overprotection/control (b = .12, SE = .04, t = 2.99, p = .003, 95% CI [.04, .20]). For boys the relationship was not statistically significant (b = −.03, SE = .06, t = −.56, p = .577, 95% CI [−.14, .08]).

These findings suggest that the association between perceived norms for fathers and paternal overprotection/control is stronger for girls. After applying a Bonferroni correction for multiple comparisons, the main effect of perceived norms on paternal overprotection/control remained significant (b = .27, SE = .10, t = 2.78, p = .006), and the conditional effect for girls was also significant (b = .12, SE = .04, t = 2.99, p

= .003). However, the interaction term (perceived norms × gender) did not reach the adjusted significance threshold (p = .029), indicating that the moderation effect should be interpreted with caution (Figure 2).

Figure 2. *Moderation of the Paternal Control-Perceived Norms Association by Gender*



**Note*: Contr-F = Paternal Control/overprotection, PerNor-F = Perceived Norms (Fathers)

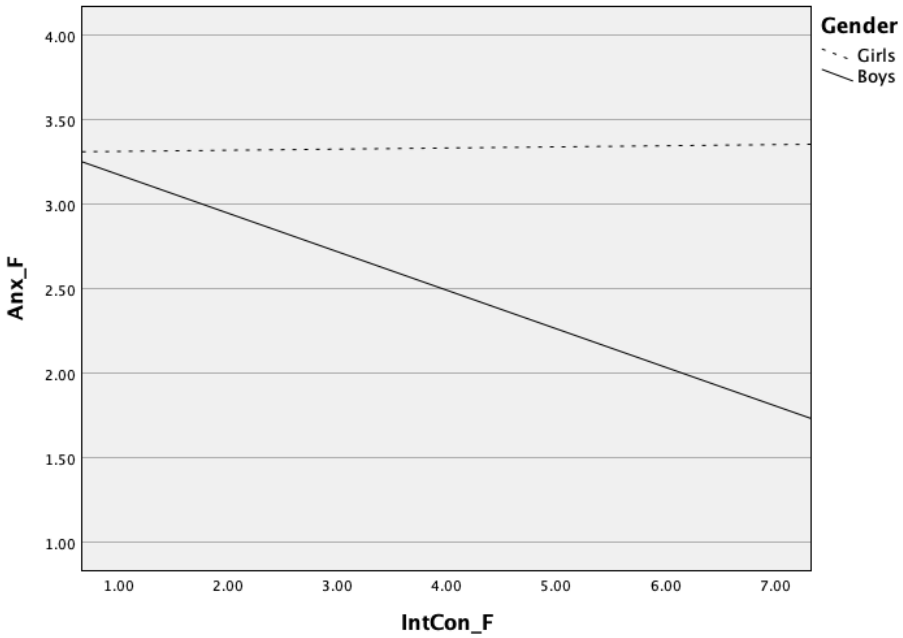
A moderation analysis examined whether adolescents' gender moderated the association between interpersonal conflict with fathers and paternal anxious rearing. The overall model was statistically significant, R^2 = .068, F (3, 300) = 4.75, p = .003, accounting for 6.8% of the variance in anxious rearing perceptions. Interpersonal conflict with fathers was positively associated with anxious rearing (b = .24, SE = .12, t = 2.03, p = .043, 95% CI [.01, .48]). Gender also had a significant main effect (b = −.29, SE = .09, t = −3.39, p = .001, 95% CI [−.46, −.12]), with girls reporting lower levels of anxious rearing than boys. The interaction was significant (b = −.24, SE = .10, t = −2.37, p = .018, 95% CI [−.43, −.04]), indicating that gender moderates the relationship between interpersonal conflict with fathers and anxious rearing.

A test of the highest-order interaction revealed a statistically significant change in R^2 (ΔR^2 = .027, F(1, 300) = 5.63, p = .018). Conditional effects analysis showed that for girls, the relationship between interpersonal conflict with fathers and anxious rearing was not significant (b = .01, SE = .04, t = .18, p = .860, 95% CI [−.07, .08]). However, for boys, higher interpersonal conflict with fathers was associated with lower anxious rearing perceptions (b = −.23, SE = .09, t = −2.50, p = .013, 95% CI [−.41, −.05]). These findings suggest that the relationship between interpersonal conflict with fathers and paternal anxious rearing perceptions varies by gender, with significant negative associations only for boys (Figure 3). However, after Bonferroni correction, only the main effect of gender remained statistically significant, indicating that evidence for moderation should be interpreted with caution.

A moderation analysis examined whether gender moderated the association between feeling ignored by fathers and paternal anxious rearing. The overall model was statistically significant, R^2 = .082, F(3, 300) = 5.22, p = .002, accounting for 8.2% of the variance in paternal anxious rearing perceptions. Although no main effect of feeling ignored on anxious rearing was found (b = .15, SE = .13, t = 1.15, p = .252, 95% CI [−.11, .41], gender showed a significant main effect (b = −.29, SE = .09, t = −3.42, p = .001, 95% CI [−.46, −

.12]). The interaction between feeling ignored and gender approached marginal insignificance (b = −.20, SE = .11, t = −1.81, p = .071, 95% CI [−.42, .02]). However, simple slopes analysis indicated that paternal anxious rearing was negatively associated with feeling ignored by fathers for boys (b = −.25, SE = .10, t = −2.43, p = .016, 95% CI [−.45, −.05]), but not for girls (b = −.05, SE = .04, t = −1.14, p = .257, 95% CI [−.13, .04]). After applying a Bonferroni correction, the main effect of gender remained significant; however, the moderation effect should be interpreted with caution (Figure 4).

Figure 3. *Moderation of the Paternal Anxious Rearing-interpersonal Conflict Association by Gender*



**Note:* Anx-F – Anxious Rearing (Fathers), IntCon_F = Interpersonal Conflict (Father)

Discussion

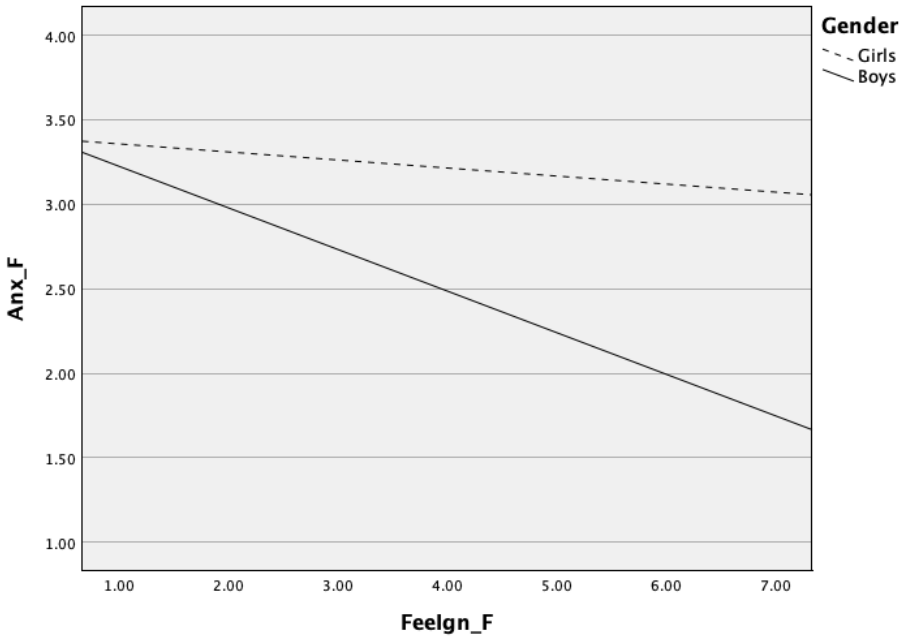
This study explored how adolescents perceive parenting dimensions (emotional warmth, rejection, overprotection/control, anxious rearing) and parental phubbing, while also considering the role of adolescent gender. It also examined differences in adolescents' perceptions based on their age and parents' gender. The findings provide insights into how established parenting behaviors interact with emerging digital behaviors within the Greek context.

The results indicate that Greek parents exhibit a combination of caring and overprotective behavior, aligning with previous research suggesting a mix of authoritative and authoritarian traits among Greek parents (Antonopoulou & Tsitsas, 2011; Olivari et al., 2015). The positive correlation between emotional warmth and anxious rearing suggests that adolescents may interpret their parents' over-worrying behavior as well-intentioned and indicative of concern. Additionally, other Greek studies have found a prevalence of the supportive type (Tsela et al., 2023), which may be seen as a culturally influenced response to contemporary stressors. However, these interpretations are speculative, and empirical studies are needed.

Adolescents perceived parental phubbing as a common behavior with minimal emotional disruption. The high scores for perceived norms suggest that adolescents view parents' device use as a regular occurrence. This aligns with existing literature highlighting the normalization of screen use in family settings (McDaniel, 2019; Storch & Ortiz, 2019). Low scores on interpersonal conflict and feeling ignored,

along with high scores on emotional support suggest that while family interaction may be influenced by technology use (Devitt & Roker, 2009), the emotional climate remains positive and supportive.

Figure 4. *Moderation of the Paternal Anxious Rearing-Interpersonal Conflict Association by Gender*



*****_Note_: Anx-F – Anxious Rearing (Fathers), Feeign_F = Feeling Ignored by Father

Emotional warmth was negatively correlated with phubbing, while rejection and overprotection/control were positively correlated. These results support theories of emotional availability and digital disengagement, suggesting that parents perceived as emotionally distant or overly controlling may reinforce feelings of neglect through their phone use (Kildare & Middlemiss, 2017). In support of H1, these associations indicate that maladaptive parenting styles may co-occur with behaviors that signify emotional unavailability, such as phubbing, while emotionally warm parenting may serve as a protective factor. This echoes prior findings suggesting that parental warmth can mitigate the negative effects of digital distractions on children's development (Hong et al., 2019; Xie et al., 2022).

Adolescents who perceive their parents as rejecting report increased conflicts and feelings of being ignored, aligning with research indicating that rejecting parenting negatively impacts adolescents' self-image and relationships (Pinquart, 2017). Rejecting parents may prioritize phone use over interacting with their children, leading to conflict or feelings of neglect among adolescents. Conversely, the negative correlations between emotional warmth and parental phubbing align with authoritative parenting behaviors, where children are prioritized their over other activities (Power, 2013).

Regarding H2, the data confirmed that mothers were perceived as more emotionally warm, anxious, and controlling than fathers consistent with existing literature (Armao & Anagnostaki, 2023; Chen et al., 2024). In a recent study conducted during the COVID-19 pandemic, Greek mothers demonstrated higher levels of anxiety compared to fathers (Hatzichristou et al., 2021). However, no significant differences were found in adolescents' perceptions of maternal versus paternal phubbing, suggesting that both parents are seen as similarly engaged with their smartphones due to the widespread integration of digital devices into daily life.

Gender and grade differences supported the third hypothesis. Girls perceived parents -especially fathers- as more anxious, while boys reported higher maternal overprotection, possibly reflecting socialization

processes that shape parental expectations. Girls are often seen as more emotionally vulnerable, which may prompt more protective or anxious parenting, while boys may resist perceived intrusiveness due to masculine norms emphasizing independence (Chen et al., 2024; Zahn-Waxler et al., 2015). Further, Greek mothers are often perceived as more overinvolved and controlling, contrary to fathers, who may aim to foster the expected norms for their sons (Armao & Anagnostaki, 2023; Maridaki-Kassotaki et al., 2020; Mussa, 2022).

Younger adolescents view parents as warm and controlling, likely reflecting a shift in parenting as children seek autonomy (Feldman, 2024). Older adolescents perceive their mothers as more engaged in phubbing, possibly due to changes in parent-child dynamics as children become more independent. Furthermore, older adolescents might hold their mothers to higher standards for emotional availability and presence, making them more critical of behaviors like phone use.

Findings showed that gender significantly moderated the relationship between paternal overprotection/control and phubbing, as well as between paternal anxious rearing and interpersonal conflict. Girls who perceived higher levels of paternal control reported higher paternal phubbing, while boys who experienced increased levels of paternal anxious rearing reported higher levels of paternal phubbing. These results suggest that paternal roles may have different emotional impacts on boys and girls, particularly in societies emphasizing traditional father roles (Filus et al., 2019). For boys, heightened paternal worry and checking appear to be read as intrusive but emotionally withdrawn—an experience that aligns with higher reported paternal phone use and, potentially, feelings of being sidelined. In contrast, girls tend to see the same anxious behaviors as signs of care and protection, explaining the weaker association between fathers' anxious rearing and phubbing for girls, which fits with research showing that girls are more accepting of caring behaviors from parents (Chen et al., 2024). By differentiating the meaning adolescents attach to identical paternal behaviors, these results underscore the importance of gender-specific interpretations in digital-family dynamics.

Traditionally in Greek society, fathers held a prominent position in the family and maintained control over their children (Georgas, 1991). Despite societal changes, paternal behaviors remain distinctive in Greece (Filus et al., 2019), with boys potentially viewing their fathers' controlling behaviors, including phone use, as part of their authority. Anxious rearing may lead parents to use technology as a coping mechanism, potentially resulting in emotional distress and feelings of neglect among children.

While the moderation models in this study accounted for a modest proportion of the variance, such effect sizes are not uncommon in psychosocial and prevention research. In applied contexts, even small effects can have meaningful implications when scaled across populations (Carey, 2023; Grice & Ozer, 2020). Modest reductions in maladaptive parenting behaviors, such as parental phubbing, may have cumulative benefits for adolescents' well-being and family communication. Interventions targeting parental digital behaviors can be cost-effective and impactful when implemented broadly, emphasizing the importance of considering even modest effects in prevention efforts (e.g., Funder & Ozer, 2019; Matthay et al., 2021).

In summary, the study reveals that Greek parents, particularly mothers, exhibit a combination of anxious rearing and emotional warmth. Adolescents perceive their parents' phone usage as normal and acceptable. Parental phubbing is associated with negative parenting, particularly interpersonal conflict and feelings of being ignored. Girls tend to view their parents as more controlling and anxious, while boys feel more overprotected and controlled by their mothers. Younger adolescents perceive both parents as emotionally warm and overprotective, while older adolescents perceive their mothers as more engaged in phubbing. Notably, girls who perceive their fathers as more anxious report higher levels of phubbing, and boys who perceive their fathers as more controlling also perceive higher phone use by them. One interaction

(feeling ignored by fathers and anxious rearing) approached significance suggesting a trend that should be interpreted with caution due to borderline significance not providing conclusive evidence.

The study's theoretical implications expand current parenting models by incorporating digital behaviors into established attachment and social learning frameworks. Phubbing can be seen as a micro-level manifestation of parental unavailability or inconsistent responsiveness, disrupting the face-to-face cues that signal emotional presence and responsiveness. These repeated interruptions teach adolescents that their parents' attention is inconsistent, potentially leading to insecure attachment representations (Scharfe, 2017). In this sense, digital distraction is not just a neutral habit but one that undermines the secure-base function of the parent-child bond, modeling inattentive interpersonal behavior for the adolescent as well. Furthermore, the study highlights the importance of considering parental roles by gender when analyzing digital engagement in families, as maternal and paternal behaviors may have distinct emotional impact on adolescents.

Practically, parents, especially fathers, could benefit from psychoeducational programs addressing the emotional effects of device use on adolescents. Interventions promoting mindful smartphone use, such as designated phone-free family times, could be beneficial. Evidence-based parenting programs, like the Triple P—Positive Parenting Program or Emotion Coaching (Sanders, 2023), could be adapted to include components targeting digital distraction. These programs also address overprotection and anxious rearing by fostering consistent, supportive, and autonomy-promoting parenting practices. School-based workshops and parental consultation could raise awareness of the impact of device use on family relationships and promote parenting practices that strengthen emotional connections.

Several limitations should be noted, including the cross-sectional design preventing causal interpretations, convenience sampling from a single metropolitan area, limiting generalizability, and reliance on self-reported data subject to bias. The sample was not representative in terms of demographics, and in some cases (e.g., family status), the group sizes were too small for analysis. The gender imbalance in the sample and modest effect sizes in moderation models should be considered when interpreting the findings. Furthermore, the loss of statistical significance in group comparisons and moderation effects after applying corrections indicates that these findings should be interpreted with caution. Future research should employ more robust sampling and longitudinal designs to better understand how adolescents' perceptions of parental phubbing evolve over time. Experimental and intervention-based studies are needed to assess the effectiveness of parent-focused programs in improving family functioning and adolescent well-being. This study deepens our comprehension of contemporary parenting by highlighting how adolescents' perceptions of parental phubbing are connected with emotional warmth, overprotection/control, anxious rearing, and rejection. Gendered patterns in these perceptions underscore the need for nuanced and culturally sensitive approaches to parenting support in the digital age.

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ΕΜΠΕΙΡΙΚΗ ΕΡΓΑΣΙΑ | RESEARCH PAPER

Αντιλήψεις Ελλήνων εφήβων για τη γονική αγνόηση υπέρ κινητού και τη γονικότητα και ο ρόλος του φύλου

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ABSTRACT IN GREEK

Η παρούσα μελέτη αξιοποιεί τις θεωρίες της προσκόλλησης και της κοινωνικής μάθησης για να διερευνήσει τη σχέση μεταξύ των αντιλήψεων των εφήβων για τις γονικές συμπεριφορές (απόρριψη, συναισθηματική ζεστασιά, υπερπροστασία/έλεγχος και αγχώδης ανατροφή) και της γονικής αγνόησης του παιδιού υπέρ της χρήσης του κινητού τηλεφώνου. Στην έρευνα συμμετείχαν 326 έφηβοι ηλικίας 12 έως 16 ετών, οι οποίοι συμπλήρωσαν τα ερωτηματολόγια Egna Minnen Betraffande Uppfostran και Generic Scale of Being Phubbed, απαντώντας ξεχωριστά για κάθε γονέα. Τα αποτελέσματα έδειξαν ότι η γονική απόρριψη και ο έλεγχος/υπερπροστασία σχετίζονταν θετικά με τη γονική αγνόηση υπέρ του κινητού, ενώ η συναισθηματική ζεστασιά σχετιζόταν αρνητικά με τη γονική αγνόηση υπέρ του κινητού και για τους δύο γονείς. Επιπλέον, αναδείχθηκαν διαφορές φύλου, καθώς τα αγόρια συνέδεσαν τον αυξημένο πατρικό έλεγχο με αυξημένη αγνόηση, ενώ τα κορίτσια συσχέτισαν την αυξημένη αγχώδη πατρική ανατροφή με μειωμένη αγνόηση υπέρ του κινητού. Το φύλο λειτούργησε επίσης ως ρυθμιστικός παράγοντας στη σχέση μεταξύ πατρικών γονικών συμπεριφορών και γονικής αγνόησης, με ισχυρότερες επιδράσεις στις κόρες. Τα ευρήματα υποδηλώνουν τη σημαντική σχέση των γονικών συμπεριφορών που συνδέονται με τη θετική ανάπτυξη των παιδιών και παρέχουν τη βάση για την ανάπτυξη κατάλληλων παρεμβάσεων που ενισχύουν τη συναισθηματική παρουσία των γονέων στην οικογένεια.

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