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Children's and Mothers' Achievement Goal Orientations and Self-Efficacy: Dyadic Contributions to Students' Well-Being

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Abstract: Starting from the basic idea that identifying predictive family factors for children's well-being is among the levels of the psychology of sustainable human development, our study aimed to investigate the impact of mothers' achievement goal orientations and parental self-efficacy on their children's academic well-being, considering children's own achievement goals as a mediator variable. The entire sample comprised 350 participants: 175 children (42.86% boys) and their respective mothers. Children were enrolled in the 4th grade (n = 85; $M_{age} = 10.44$, SD = 0.49), in the 8th grade (n = 62; $M_{age} = 14.45$, SD = 0.53), and in the 12th grade (n = 28; $M_{age} = 18.39$, SD = 0.62). The results indicated that mothers' motivational orientations had a strong effect on their children's corresponding motivational orientations. Mothers' achievement goal orientations and parental self-efficacy had significant effects on children's well-being, mediated by children's goal orientations. Children's well-being was positively predicted by mothers' mastery and performance-approach goal orientations, with variations between age groups. The importance of the parental motivational orientations in the development of the children's corresponding orientations and well-being suggests that changing academic adaptation might be possible by operating early interventions at the parents' level. Further research is necessary to explore why performance-approach goals had a positive impact on well-being in this cultural context, as previous studies revealed that this type of goal orientation may be detrimental to well-being.

Keywords: achievement goal orientations; learning self-efficacy; parental self-efficacy; well-being

1. Introduction

Nowadays, the definition of sustainability has expanded beyond the ecological, economic, and social environment to include the psychological dimension, focused on the promotion of people's well-being [1]. Previous studies reveal that sustainable development includes important health psychosocial components such as psychological adjustment [2], personal and social well-being [3], motivations against alcohol consumption [4], and even environmental empathy and nature connectedness [5]. As the main socializing environment, the family remains a key factor for optimal development, and the parents the main source of influence for children's and adolescents' well-being [3]. Childhood and adolescence are stages of development with a major impact on the psychological and social adjustment of the future adult. For this reason, empirical research carried out during the last few decades has focused on determining familial and personal factors that influence the sustainable



development of children and adolescents (e.g., [6–11]). On the basis of the existing parenting models in the literature, three characteristics of parents influencing the development of children were identified: the parents' beliefs (values and goals in socializing their children); the parenting practices they employ; and the parenting style as a more global configuration of different parenting practices reflecting the parents' beliefs, attitudes, or values [12]. In the scientific literature, parental socialization was captured as a function of two dimensions: responsiveness, viewed as involvement, warmth, or parental sensitivity to the child's states and needs, and demandingness, viewed as claims parents make of the child, strictness, supervision, or disciplinary effort [12–14]. Thus, in the research field, different parental beliefs, practices, and styles capturing one of the two aforementioned dimensions or a combination of the two were investigated in order to identify the best parenting practices.

However, psychologists in the area of parenting paid special attention to studying parental practices and styles, but they paid scant attention to parents' beliefs [12], which were also related to the child's competences and adjustment in different socialization domains, such as academic achievement. In the present study, in the framework of social-cognitive theory [15], we set out to explore two parental beliefs with impact on socializing children's motivation and on children's well-being: parents' achievement goals and parental self-efficacy in academic settings of their children. These two variables can influence the child's academic adjustment through parental practices. Specifically, the current paper aimed to investigate the relationships between mothers' and their children's achievement goal orientations and learning self-efficacy, as well as whether they have a direct or indirect effect on the children's well-being in their respective academic settings. Our research was conducted on a Romanian sample of students and their respective mothers. Following in the tradition of prioritizing the importance of a high volume of information retention over applied knowledge and skills, there has been an emphasis on achieving academic performance through a series of educational practices specific to the Romanian educational system. These practices include the public hierarchization of pupils according to the marks obtained at various academic contests, the promotion of their participation to various academic competitions where performance is rewarded with prizes from the very beginning of their academic trajectory, and the public display in physical format and on the Internet of the students' results at the major national examinations. These examinations and academic contests posit high stakes for parents, teachers, and students alike, who are all highly focused on boosting the level of performance so that students benefit from the best chances to be considered for admission to the best institutions at the next educational level—gymnasium, high school, and university [16]. The practices of this achievement-oriented context are competition-based, having created an environment where learning and assessment are carried out under stressful conditions [17]. This setup may place undue pressure both on children and their parents, which may potentially engender negative consequences on the learning, motivational, emotional, and achievement processes of the students [18]. Therefore, it is essential to explore how children and their families experience and conceptualize their academic experience and performance in general, as well as how these aspects may affect their well-being and psychosocial adjustment.

Academic well-being is a multi-dimensional construct created in order to address both the importance of students' well-being for their academic outcomes [19] and the centrality of the school contexts in their lives [20]. Although there is no agreed upon definition of the construct, academic well-being has often been employed in empirical research because of its increased pragmatic utility, albeit with varied conceptualizations [21]. Thus, prior research on adolescents generally measured positive and negative indicators of academic well-being, such as self-esteem, school value, and stress [22]. Other authors conceptualized it as encompassing children's academic self-concept, their perceived learning difficulties, and school burnout [23], or as exhaustion at school, cynicism towards the meaning of school, sense of inadequacy as a student, schoolwork engagement, and satisfaction with educational choice [24]. When examined during educational transition periods, academic well-being was shown to be associated with students' motivational profiles (i.e., their goal orientations), in the sense that mastery oriented students reported higher levels of academic well-being both before and after the transition

as compared to the avoidance-oriented ones [24]. However, when studying students' motivation in relation to academic well-being, empirical research showed that competence and control beliefs are essential to the understanding of the concept [25]; self-efficacy was shown to interact with children's goal orientations in its influence on academic well-being, as it strongly predicted positive affect and adaptive coping strategies [26].

Achievement goal approach underwent changes from an initial dichotomous perspective [27] to a more complex model, including several types of goal orientations. In this theory, a goal is a psychological construct describing the reasons underlying achievement processes or patterns of cognitions and affects that create a particular orientation toward achievement situations [28]. The initial taxonomy considered mastery and performance goals as two divergent motivational orientations. Subsequently, the theory was expanded, with approach-avoidance motivation perspectives added [29–31]. This expansion lead to the Trichotomous Achievement Goal Model that distinguishes between (1) mastery goals, set by an absolute or intrapersonal positive standard (developing competence or task mastery); (2) performance-approach goals, set by a positive normative standard (e.g., obtaining success); and (3) performance-avoidance goals, set by a negative normative standard (e.g., avoiding failure). Subsequent research in the educational field showed that some goals were more maladaptive than others: the mastery goals—unequivocal positive effects, the performance-avoidance goals—unequivocal negative effects, and the performance-approach goals, with mixed results [32].

Because mastery and performance-approach goals are focused on positive potential outcomes, they may be considered as enhancing factors for the learning process and for the achievement outcomes, whereas performance-avoidance goals, being associated with escapism and non-participation, may be considered as negative influences for both learning processes and their corresponding outcomes. Previous findings revealed that mastery goals were positively associated with intrinsic interest in learning activities and inconclusively related to actual performance; in contrast, performance-approach goals did predict concrete achievements, but were not found to positively influence intrinsic motivation [27,30,33,34]. A different line of research showed that only performance-avoidance goals engendered negative effects on intrinsic motivation, whereas performance-approach goals produced positive effects on intrinsic motivation comparable in magnitude to those elicited by mastery goals [31]. Although there is a consensus on the negative impact of the performance-avoidance goals on the learning and achievement outcomes, there is still a debate in the literature about the consequences of performance-approach goals. Some theorists posit that performance-approach goals have a positive effect on learning and school outcome, whereas others consider this is detrimental [35,36]. Specifically, in some studies, performance-approach goals significantly and positively predicted academic performance [37-41], were related to greater self-esteem [42] and greater self-efficacy [30,42,43], and even positively predicted intrinsic motivation [31] and learning strategies [44]. Nevertheless, other findings showed a negative impact of performance-approach goals on some students' academic outcomes. Specifically, performance-approach goals appear to also be related to higher anxiety and depression [42,45,46]. An explanation for the varied results concerning the impact of performance-approach goals on academic motivation and achievement can be found in a different way of conceptualization and operationalization of the construct in different studies [47]. Thus, some definitions of performance goals include demonstrating ability as an essential aspect of this construct, whereas others consider that striving to outperform others is the critical feature [32]. When assessing the students' reasons for which they are pursuing performance goals, about half of them invoked personal desires, such as the experience of competition or pride (normative goals), and half referred to self-presentational desires such as making a positive impression (appearance goals) [48]. An emphasis on one or the other of the two reasons for performance goals may lead to different effects on learning and school performance. According to a meta-analytical study, performance-approach goals based on normative goals were positively correlated with performance outcomes (r = 0.14), whereas performance-approach goals based on appearance goals were negatively correlated with performance outcomes (r = -0.14) [47].

Concerning students' emotions and well-being, having mastery goals was associated with more positive emotions (e.g., feelings of enjoyment, hope, and pride), less negative emotions, higher self-esteem, higher well-being (e.g., less depressive symptoms), and higher satisfaction with educational choices, whereas having performance-avoidance goals was associated with more negative emotions (e.g., hopelessness and shame), higher anxiety, lower self-esteem, and lower well-being (e.g., more depressive symptoms) [24,28,49–53]. Moreover, longitudinal research showed that anxiety was negatively predicted by mastery goals and positively predicted by performance-approach goals [45]. Performance-approach goals seemed to have had mixed effects, depending on other contextual variables with which they had interacted. Students who endorsed performance-approach goals reported higher levels of positive general affect in class, but also higher levels of test anxiety [54].

Parents' achievement goals refer to the reasons for which parents engage in achievement related behavior and represent particular orientations toward achievement situations [28]. Parents' achievement goals for their children may be defined as beliefs about the reason why parents engage their children in achievement related activities and represent, along with self-efficacy beliefs, important predictors of parental involvement [55]. Although the effects of parental involvement on academic achievement are well-documented, their influence on children's motivation have been less investigated, according to a comprehensive literature review [56]. Most studies focused on how parenting styles and practices influence children's academic outcomes, such as their academic performance (for reviews, see [57–59]), their intrinsic and extrinsic motivation [56,60], and academic self-efficacy ([61]; for a systematic review, see [62]). Parental styles and practices were shown to significantly influence the academic outcomes of children and adolescents [8,11] and their socio-psychological development [2,3,9,63]. Among several components of parental involvement, the aspirations that parents held for their children's education proved to be an important predictor of school performance [64]. Parental motivational beliefs, such as goals, values, expectances, and aspirations were also shown to have a significant influence (be it positive or negative) on the children's motivational orientations, namely, achievement goals, and academic self-efficacy [8,65–68]. The influence is bi-directional—children brought their own contribution to the process of development, as shown by the transactional model [69,70]. Very limited research has examined the effect of some indicators of parental involvement and demandingness on children's goals orientations. In the Romanian educational context, perceived parental autonomy was positively linked to children's mastery goals, whereas parental rejection was negatively associated with mastery and performance-approach goals [71], whereas in Singapore, parental control predicted maladaptive coping orientations and low achievement, partially mediated by mastery and performance avoidance goals [7]. The results also showed that parenting styles led to specific outcomes (i.e., feelings of helplessness or mastery motivation) because they exposed the children to a certain type of feedback [72]. Finally, in a Taiwanese elementary school, parents' achievement goals (measured from the children's perspective) were found to be significantly related to the children's own goals [73]. Concerning the relationship between parents' and children's goal orientations, the empirical data so far is scarce. Previous research mainly focused on investigating how teachers' goal orientations influence the development of their students' goal orientations [38,74,75]. A few studies examined how parents' perceived goal orientations influenced their children's goals. For instance, it was shown that when students perceive their parents as being oriented towards mastery goals, they tended to also adopt this type of goal orientation, with positive academic outcomes [76]. In contrast, children's perceptions of their parents' performance goals led to either null or maladaptive academic outcomes, as children developed performance (approach or avoidance) orientations themselves [76–79].

Self-efficacy refers to people's beliefs in their abilities to organize and perform the actions required in order to achieve certain results [68]. Meta-analytical findings confirmed its significant influence on motivation, socio-cognitive functioning, well-being, and performance-related accomplishments [80]. Theoretically and empirically, it is considered both a general and a domain-specific concept [81]. Learning self-efficacy is a specific type of self-efficacy that develops gradually under the influence of certain factors such as past performance, vicarious experiences, feedback from others, and perceptions of emotional states of the self. In children, it was dependent upon their age and maturity [82,83], as younger children had no stable perception regarding their own efficacy. Instead, they were influenced by direct or vicarious experiences and by the feedback received from significant figures of attachment up until reaching adolescence [84]. Learning self-efficacy declined with age [85,86], mainly due to academic competition, assessment methods, and stress associated with school transitions [82]. Parental self-efficacy represents a dimension of parental competence referring to the trust parents have in their ability to influence the actions, development, and success of the child [87]. This belief has been positively associated with parents' involvement [88], with parents' use of positive and effective practices [87,89,90], and with children's socio-emotional, behavioral, and academic outcomes [89,90]. In what concerns the enhancement of children's cognitive development, parental self-efficacy was associated with academic motivation and achievement, whereas its effects on children's social development were associated with their ability to interact with adults and peers. Finally, parental self-efficacy was associated with respect for authority or prosocial behavior in providing structure for the child [91]. Parental self-efficacy was also shown to potentially influence the child's behavior and adjustment, both directly and indirectly, via parenting practices [90]. In a study conducted on elementary school students and their parents, the authors found that higher levels of parental self-efficacy were associated with higher levels of social competence, motivational orientation, and academic skills in children [6]. Additionally, perceived parental self-efficacy in academic settings and aspirations were strong predictors for children's learning and social self-efficacy [92,93]. This relationship between parents' and children's self-efficacy was moderated by age, with younger children relying more on others' perception (i.e., their parents') regarding their abilities [82–84].

Self-efficacy and achievement goals. In previous studies, it was found that mastery goal orientations were positively associated with self-efficacy [36,43,94–97], whereas performance-approach goals were shown to be either positively [43,95,98] or non-significantly associated with this concept [99]. This was also true for performance-avoidance goals, as verified by Bong who found no significant relationship between this type of goal and self-efficacy [43], whereas other studies found negative associations between the two [95,96,98]. Finally, although normative performance-approach goals were found to be associated with high self-efficacy, no significant relationship between appearance performance-approach goals and self-efficacy was found [36].

The present study aimed (1) to explore the relationships between mothers' and their children's learning self-efficacy and achievement goals, and (2) to analyze the effect of mothers' and their children's learning self-efficacy and achievement goals on the children's well-being in their academic settings, assessed by measuring their depressive symptoms and their satisfaction with student life. Our goal was to build upon past research that showed that parental behavioral and motivational patterns were strong predictors of children's goal orientations [71,72], and that children's goals were associated with positive or negative affective states in academic contexts [49,51] and academic well-being [24,50,52,53]. Previous research using the three-goal model [29] assessed the three types of achievement goal orientations (mastery, performance-approach, and performance-avoidance), in a subject-specific manner, through a series of items meant to estimate the extent to which the goals are valued in specific achievement activities; we chose to explore our participants' achievement goal orientations towards the broader academic context. Although past research only showed this relationship between the achievement goals of parents and children through indirect measures (the parents' achievement goals were evaluated through their children's perspective [73,78,79]), our study aimed to address this limitation by directly evaluating the mothers' achievement goal orientation through self-report, in order to increase the accuracy of the results. Prior literature has examined parental beliefs and behaviors of mothers and fathers [6,46,70,100] despite the fact that it is a quite common and accepted research practice to solely rely on reports from mothers [63,87]. The scientific literature in the field showed that, during middle childhood and adolescence, mothers seem to be engaged in more interactions with children than fathers [101], although during the last two decades there have been important changes regarding the

parental roles and their perception. For the time being, the cultural model regarding parenting in Romania is still dependent on the traditional distribution of family roles, with mothers being the ones who are more concerned with raising and educating their children. There is also a greater tendency now for women to be involved in parental education programs inside or outside the school. However, during the last decade, the objectives of education providers have been to increase the participation rate of fathers in these programs [102]. In line with previous research, we hypothesized the following:

Hypothesis 1 (H1). Each of the mothers' achievement goals is positively associated with the children's corresponding achievement goals - for instance, the mothers' mastery goals with their children's mastery goals, the mothers' performance-approach goals with their children's performance-approach goals, and the mothers' performance-avoidance goals with their children's performance-avoidance goals.

Hypothesis 2 (H2). Parental self-efficacy of mothers is positively correlated with children's learning self-efficacy.

Hypothesis 3 (H3). Mothers' goal orientation for their own children and parental self-efficacy of mothers would have a significant contribution in predicting the children's satisfaction with student life and depressive symptoms through their effect on the children's goal orientations and their own learning self-efficacy.

2. Materials and Methods

2.1. Participants and Procedure

Our study was conducted on a sample of 350 participants comprising 175 children and their mothers. A total of 85 of the children were enrolled in the 4th grade (35 boys and 50 girls), 62 in the 8th grade (34 boys and 28 girls), and 28 in the 12th grade (6 boys and 22 girls). The average ages of children were 10.44 (SD = 0.49) years in the 4th grade, 14.45 (SD = 0.53) years in the 8th grade, and 18.39 (SD = 0.62) years in the 12th grade. Concerning the mothers, 85 of them were mothers of 4th graders, with an average age of 39.51 (SD = 4.70) years; 62 of them were mothers of 8th graders, with an average age of 42.83 (SD = 3.61) years; and 28 were mothers of 12th graders, with an average age of 45.92 (SD = 4.14). Subsequently, parent-child pairs (n = 175) were used in the calculations investigating the relationships between the mothers' variables and the children's variables. We sought to explore these relationships across three children groups, namely, those belonging to 4th, 8th, and 12th graders because of the relevance of these school years in reflecting the characteristics of the achievement- and competition-focused Romanian educational system [16–18]. The data collection was accomplished with the assistance of the School Inspectorate, which ensured the involvement in our research of children enrolled in schools considered as average with regard to the academic performance of the children. For the participant selection, in collaboration with the school principals, we removed from our sample the children with socio-economic status and academic performance significantly below and above average.

Our study was granted ethical approval by the Ethics Committee of our university (Alexandru Ioan Cuza University of Iași, Romania). In the initial stages of our research, the homeroom teacher requested the mothers' consent both for their own and their children's participation; during this interaction, the mothers were thus informed that there are two questionnaires, one for themselves and one for their children. The mothers who agreed to take part in our study were informed that their questionnaires would be mailed to them in a sealed envelope; upon completing them privately, they were kindly asked to re-seal them and send them to the teachers via their children in this format. Thus, the children did not have access to the answers provided by their mothers. Prior to this and separately, the children filled in their questionnaires in the classroom, under the supervision of a teacher and of one of the authors of the present paper; therefore, the children filled in their questionnaires before the mothers were mailed their own questionnaires.

2.2.1. Measures of Children

To measure the achievement goal orientation of the children, we used three scales from the revised Achievement Goal Orientations Scales of the questionnaire created by Midgley et al. [103] as follows: *mastery goals*, with five items and internal consistency coefficient $\alpha = 0.81$, in the current study (e.g., "It is important for me to learn new things at school."; "It is important to me that I thoroughly understand my class work."); performance-approach goals, with five items and internal consistency coefficient $\alpha = 0.89$ (e.g., "It is important for me to do better than other students in my class"; "It is important to me that I look smart compared to others in my class"); and performance-avoidance goals, with four items and internal consistency coefficient $\alpha = 0.66$ (e.g., "It is important for me to avoid looking like I have trouble doing the schoolwork."; "It is important to me that I don't look unintelligent in my class."). The answers were given on a six-point Likert scale ranging from 1 (not important) to 6 (very important). For the purposes of our research, we employed confirmatory factor analysis (CFA) using structural equation modeling (SEM) with Analysis of Moment Structure (AMOS) 21.0 in order to verify the factorial structure of the instrument. Upon removing one item from the original performance-avoidance goals scale, due to insufficient factor loading, the model goodness-of-fit of the instrument administered to the children was found to be acceptable: $\chi^2 = 319.080$; df = 74; p < 0.001; χ^2 /df = 4.312; comparative fit index (CFI) = 0.90; Tucker Lewis index (TLI) = 0.87; root mean square error of approximation (RMSEA) = 0.09, 90% CI: (0.08, 0.10), standardized root-mean-square residual (SRMR) = 0.07. Also, the scales were validated in a previous study on a sample of Romanian adolescents [104].

To assess the children's learning self-efficacy, we used the short version of the *Self-efficacy for Self-Regulated Learning Scale* [105]. The five items of the scale measure the trust in one's own ability to regulate learning and to perform specific behavioral tasks (e.g., "How certain are you that you can remember previously learned information?"; "How certain are you that you can focus well on the lesson to be learned for school?"). The answers were given on a six-point Likert scale from 1 (not at all) to 6 (very much). In the current study, the internal consistency coefficient for the short version used was 0.78.

To evaluate the children's satisfaction about school, we used eight items, translated into Romanian, from the *Multidimensional Students' Life Satisfaction Scale* (MSLSS) [106]. The items used in this study measure children's satisfaction with the school domain (e.g., "I like being in school."; "I enjoy school activities."). The participants responded to each item on a six-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). In this study, the internal consistency was 0.91.

The depression symptomatology of the children was measured with the *Achenbach System of Empirically Based Assessment* (ASEBA)—the forms for Youth Self-Reports for ages 11–18 (YSR) [107], an instrument translated and adapted to Romanian and validated for this population [108]. We retained 11 items for our study, assessing the extent to which the children and teenagers were functionally well-adjusted by evaluating emotional and physiological parameters such as feelings of sadness, unhappiness, joylessness, and fatigue, and the occurrence of headaches and stomach aches (e.g., "I feel tired for no reason."; "I think nobody loves me."). The participants responded to each item using a six-point scale, ranging from 1 (not at all true in my case) to 6 (very true in my case). The internal consistency coefficient obtained in this study was 0.83.

We analyzed the results, considering also the *children's grade* variable as a moderator in the relations between the other variables. Therefore, depending on the level of education of the students (4th grade for primary school, 8th grade for gymnasium/middle school, and 12th grade for high-school/secondary school), they were part of one of the three groups of the children's grade variable. The three groups of children were chosen to reflect the final stages of each of the three pre-university educational cycles in Romania. Thus, each group stood for a specific educational level and specifically reflected the populations of pupils from the terminal years of each cycle: 4th grade as the final year of primary school, 8th grade as the last year of gymnasium/middle school, and 12th grade as the final year of high-school/secondary school. These populations were of interest to us for the purposes of this study because each of these groups are subjected to academic examinations that are decisive for the subsequent school enrollment (and academic trajectory), as the results obtained by students at these examinations are used for admission to specific schools/classrooms at the next educational level. Therefore, at these ages, children are particularly attuned to their motivational orientation and are likely to be driven towards a high level of efficacy in managing their studying, all the while potentially being more prone to anxiety and depression. For all these age groups, the measurements in our study have been performed during the first semester of the school year.

2.2.2. Measures of Mothers

To measure the achievement goal orientations of mothers for their children, we used the three scales from the revised Achievement Goal Orientations Scales [103] that were administered to the children, but each item was rephrased for suitability according to the parents group. Therefore, the mothers completed the following scales: *mastery goals*, with five items and internal consistency coefficient α = 0.79, in the current study (e.g., "It is important for me that my son/daughter learn new things at school."; "It is important to me that my son/daughter thoroughly understand his/her class work."); *performance-approach goals,* with five items and Cronbach's $\alpha = 0.90$ (e.g., "It is important for me that my son/daughter do better than other students in his/her class."; "It is important to me that my son/daughter looks smart compared to others in his/her class."); and performance-avoidance goals, with four items (the same item was removed as from the scale presented to the children) and Cronbach's $\alpha = 0.76$ (e.g., "It is important for me that my son/daughter avoid looking like he/she has trouble doing the schoolwork"; "It is important to me that my son/daughter doesn't look unintelligent in his/her class."). CFAs using SEM in Amos 21.0 revealed that the model goodness-of-fit of the achievement goal scale applied to the mothers was acceptable: $\chi^2 = 219.425$; df = 87; p < 0.001; $\chi^2/df = 2.522$; CFI = 0.90; TLI = 0.88; RMSEA = 0.09, 90% CI: (0.08, 0.11), SRMR = 0.08. The answers were given on a six-point Likert scale ranging from 1 (not important) to 6 (very important).

The parental self-efficacy of mothers was assessed with four items, extracted from the *Parental Self-Efficacy Scale* [81] and translated from English to Romanian, employing the forward and backward translation procedure. This scale measures the respondents' confidence regarding their ability to perform certain parental tasks that may directly exert a significant influence over the academic activities and outcomes of their children (e.g., "How much do you trust the fact that you can help your children with their homework?" or "How much do you trust yourself to be able to assist your children to get better academic outcomes?"). The answers were given on a six-point Likert scale ranging from 1 (not at all) to 6 (very much). The Cronbach's alpha obtained in this study was 0.76.

2.3. Data Analysis

The statistical analyses of the data we collected for this study were conducted in SPSS version 21. We first performed a descriptive analysis of all the variables included in our study. In addition, preliminary analyses were performed in order to explore the following: (a) the mean differences between the three goal orientation (mastery goals/performance-approach goals, mastery goals/performance-avoidance goals, and performance-approach goals/performance-avoidance goals) both for the children and for the mothers; (b) the mean differences in score of children's goal orientations, learning self-efficacy, satisfaction with student life, and depressive symptoms, according to the three grades in which they were enrolled; and (c) the mean differences in score of mothers' goal orientations and parental self-efficacy, according to the grade of their children. The paired samples *t*-tests were used to compare the dimensions of the achievement goal orientations (taken two by two) as dimensions of the same psychological construct, rated on the same scale by the same sample [109]. One-way analysis of variance (ANOVA), with post-hoc Hochberg GT2 test, was applied to explore the mean differences in scores of children's and mothers' variables, depending on the three grade levels. These analyses allowed us to observe if the grade in which the children were enrolled could be considered as a

moderating variable of the relations between mothers' goal orientation, children's goal orientation, and children's well-being.

To verify hypotheses 1 and 2, we conducted Pearson correlations between the variables measured in the mother and in the child. Next, to verify the third hypothesis, we performed a mediation model and we tested some moderation effects using the main variables worked on in the study. A proposed mediation model was tested in SPSS 21 using SEM with AMOS, version 21.0. The mothers' variables (parental self-efficacy, mastery goals, performance-approach goals, and performance-avoidance goals) were entered as predictors and the children's variables (depressive symptoms and satisfaction with student life) as outcomes. We also used the children's variables (learning self-efficacy, mastery goals, performance-approach goals, and performance-avoidance goals) as mediators. The model fit was assessed on the basis of a chi-square, comparative fit index (CFI > 0.90), Tucker Lewis index (TLI > 0.90) and root mean square error of approximation (RMSEA < 0.06 to 0.08) [110]. We used a sample of 5000 for bootstrapping and a 95% confidence interval (CI), where the absence of zero indicates a significant effect [111]. Secondly, we computed a multigroup analysis to test the moderating role of grade (4th, 8th, or 12th grade) on the aforementioned mediation model [112]. We used a chi-square difference test to verify whether there are differences between the grades.

3. Results

3.1. Preliminary Analyses

3.1.1. Comparisons between the Three Types of Achievement Goals

Table 1 summarizes the descriptive data concerning our participants and their scores on the measured variables. Paired samples *t*-tests showed that both children (t(171) = 8.28, p < 0.001) and mothers (t(174) = 17.77, p < 0.001) exhibited greater orientation towards mastery goals than towards performance-approach goals. By calculating the effect size and analyzing the results according to Cohen's [113] criteria, it was observed that the effect size was strong in the case of children ($d_{Cohen} =$ 0.62, r = 0.53, $r^2 = 0.28$) and very strong in the case of mothers (d_{Cohen} = 1.34, r = 0.80, $r^2 = 0.64$). These values indicate a large magnitude difference between mastery goals and performance-approach goals for mothers and for children. The orientation towards mastery goals was also significantly stronger than the orientation towards performance-avoidance goals in both children (t(171) = 8.91, p < 0.001) and mothers (t(174) = 20.69, p < 0.001). The effect size according to Cohen's [113] criteria was strong in the case of children ($d_{Cohen} = 0.68$, r = 0.56, $r^2 = 0.31$) and very strong in the case of mothers ($d_{Cohen} = 1.56$, r = 0.56, $0.84, r^2 = 0.71$). We did not find any statistically significant differences between performance-approach and performance-avoidance goals in children (t(171) = 0.870, p = 0.386). For mothers, however, performance-approach goals were significantly stronger than performance-avoidance goals (t(174) =4.23, p < 0.001). In this case, the effect size according to Cohen's [113] criteria was at a medium level $(d_{Cohen} = 0.32, r = 0.30, r^2 = 0.09)$. The patterns were found occurred at all grade levels (see Table 1).

Variable	All (<i>n</i> = 175)		4th Grade (<i>n</i> = 85)		8th Grade (<i>n</i> = 62)		12th Grade (<i>n</i> = 28)	
	M	SD	M	SD	M	SD	М	SD
Measures of children								
1. Children's mastery goals	5.04	0.98	5.52	0.55	4.61	1.09	4.60	1.05
2. Children's performance-approach goals	4.28	1.35	4.63	1.17	4.08	1.39	3.72	1.53
3. Children's performance-avoidance goals	4.20	1.12	4.37	1.07	4.13	1.03	3.97	1.39
4. Children's learning self-efficacy	4.95	0.78	5.16	0.64	4.65	0.87	4.94	0.77
5. Children's satisfaction with student life	4.38	1.29	5.20	0.92	3.83	1.05	3.21	1.14
6. Children's depressive symptoms	2.01	0.82	1.86	0.75	2.17	0.96	2.12	0.61
Measures of mothers								
7. Mother's mastery goals	5.74	0.42	5.82	0.31	5.71	0.41	5.54	0.64
8. Mother's performance-approach goals	4.06	1.25	4.03	1.33	3.97	1.20	4.37	1.13
9. Mother's performance-avoidance goals	3.80	1.20	3.74	1.28	3.75	1.17	4.07	1.03
10. Mother's self-efficacy	4.96	0.81	5.14	0.70	4.92	0.72	4.48	1.09

Table 1. Mean scores (M) and standard deviations (SD) on main measures for the entire sample and depending on the grade in which the children were enrolled.

Note: all the variables were measured on a six-point scale.

3.1.2. Variables Measured in Children Compared by Grade Level

Concerning children's goal orientations, learning self-efficacy, and their subjective well-being (satisfaction with student life and depressive symptoms), we found a series of significant differences according to the grade in which they were enrolled. Thus, as a function of the children's grade—4th, 8th, or 12th—different average values emerged in their mastery goals (F(2169) = 23.58, p < 0.001), in their performance-approach goals (F(2169) = 6.06, p < 0.01), in their learning self-efficacy (F(2172) = 8.21, p < 0.001), as well as in their satisfaction with student life (F(2170) = 54.83, p < 0.001), as illustrated in Table 1. Post hoc tests revealed that the mastery and performance-approach goals of the 4th graders were significantly higher than those of the older students; we found no significant differences between the 8th and the 12th graders concerning these variables. The learning self-efficacy of the 4th graders was significantly higher than the 8th graders', with no significant differences found between 4th and 12th graders, or between 8th and 12th graders. In addition to this, our findings also revealed significant differences in children's satisfaction with student life according to the grade in which they were enrolled, suggesting that this type of satisfaction may have declined with age.

3.1.3. Variables Measured in Mothers Compared by the Grade Level of the Child

For mothers, the only significant difference found in score of goal orientations, according to the grade in which the children were enrolled, occurred for mastery goals (F (2172) = 4.91, p < 0.01). Thus, the mothers of 4th graders exhibited a significantly stronger orientation towards mastery goals as compared to mothers of 12th graders. The same pattern of grade differences was also observed for mothers' self-efficacy (F (2172) = 7.45, p < 0.01)—4th graders' mothers had a significantly higher level of self-efficacy compared with mothers of 12th graders (Table 1).

3.2. Correlations between the Variables Measured in the Mother and in the Child

Pearson correlation analyses were conducted in order to verify hypotheses 1 and 2 (Table 2). For the entire sample, mothers' achievement goal orientations were significantly associated with children's corresponding goal orientations, and parental self-efficacy of mothers was significantly positively related to children's learning self-efficacy. Specifically, mothers' mastery goals were positively correlated with children's mastery goals, mothers' performance-approach goals were positively related to children's performance-approach goals, and mothers' performance-avoidance goals were positively related to children's performance-avoidance goals. Mothers' mastery goals were also positively associated with children's performance-approach goals, learning self-efficacy, and satisfaction with student life. Mothers' performance-approach goals were also positively correlated to children's learning self-efficacy and satisfaction with student life. Mothers' performance-approach goals were also positively correlated to children's learning self-efficacy and satisfaction with student life. Mothers' performance-approach goals were also positively correlated to children's learning self-efficacy and satisfaction with student life. Mothers' performance-approach goals were also positively correlated to children's learning self-efficacy and satisfaction with student life. Mothers' performance-avoidance goals, negatively with children's depressive symptoms, but unrelated to children's learning self-efficacy and satisfaction with student life. Mothers' performance-avoidance goals were also positively satisfaction with student life. Mothers' learning self-efficacy, satisfaction with student life, or depressive symptoms.

Variable	1	2	3	4	5	6	7	8	9	10
Measures of children										
1. Children's mastery goals	-									
2. Children's performance-approach goals	0.52**	-								
3. Children's performance-avoidance goals	0.19*	0.43**	-							
4. Children's learning self-efficacy	0.59**	0.43**	0.04	-						
5. Children's satisfaction with student life	0.64**	0.37**	-0.05	0.45**	-					
6. Children's depressive symptoms	-0.21**	-0.19*	0.10	-0.34**	-0.26**	-				
Measures of mothers										
7. Mother's mastery goals	0.27**	0.17*	0.05	0.21**	0.19*	-0.02	-			
8. Mother's performance-approach goals	0.06	0.17*	0.18*	0.14	0.03	-0.18*	0.20**	-		
9. Mother's performance-avoidance goals	-0.03	0.01	0.20**	-0.05	-0.04	-0.03	0.03	0.76**	-	
10. Mother's self-efficacy	0.32**	0.24**	0.07	0.46**	0.29**	-0.13	0.42**	0.22**	0.07	-
11. Children's grade ^a	-0.48^{**}	-0.23**	-0.15	-0.28*	-0.63**	0.19**	-0.18^{*}	0.01	0.04	-0.20**
М	5.04	4.28	4.20	4.95	4.38	2.01	5.74	4.06	3.80	4.96
SD	0.98	1.35	1.12	0.78	1.29	0.82	0.42	1.25	1.20	0.81

Table 2. Correlations among all the variables for the entire sample.

^a A point-serial correlation was calculated between all numerical variables of the study and the dummy variable children's grade, in which we coded 4th grade = 0 and (8th and 12th grade) = 1. Numerical variables were measured on a six-point scale; *p < 0.05; ** p < 0.01.

3.3. Prediction of Children's Satisfaction with Student Life and Depressive Symptoms

In order to verify the third hypothesis of the present study, we tested the proposed mediation model illustrated in Figure 1 by simultaneously estimating each direct and indirect effect. We were interested in verifying whether the children's variables (learning self-efficacy, mastery goals, performance-approach, and performance-avoidance goals) would explain the relationship between the mothers' variables and the children's depressive symptoms and satisfaction with student life. The model had the following fit indices: $\chi^2(13) = 29.63$; p = 0.005; CFI = 0.970; TLI = 0.87; RMSEA = 0.086 (lower CI = 0.045, upper CI = 0.128). In the figure, only the arrows that have a significant non-standardized coefficient are shown. The final model is presented in Figure 1 and had the following indices: $\chi^2(24) = 41.61$; p = 0.014; CFI = 0.968; TLI = 0.94; RMSEA = 0.066 (lower CI = 0.029, upper CI = 0.098), which accounted for a better fitting model.

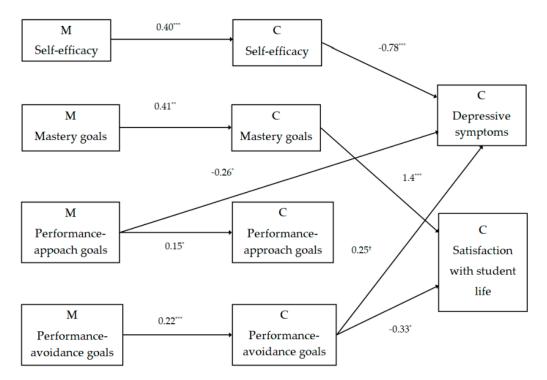


Figure 1. Unstandardized path estimates of the mediation model. Covariances between the mothers' variables and between the children's variables were included in the model. The non-significant paths were trimmed for parsimony. M = mothers' variable; C = children's variable. Note: $^{+}p = 0.07$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

We found that the mothers' variables were significantly linked with children's similar variables. Thus, mothers' self-efficacy was positively associated with children's learning self-efficacy ($\beta = 0.34$, p < 0.001), mothers' mastery goals were associated with children's mastery goals ($\beta = 0.18$, p = 0.002), mothers' performance-approach goals were associated with children's performance-approach goals ($\beta = 0.13$, p = 0.03), and mothers' performance-avoidance goals were associated with children's performance-approach goals ($\beta = 0.23$, p < 0.001). Additionally, higher levels of mothers' performance-approach goals were associated with lower depressive symptoms in their children's depressive symptoms ($\beta = -0.33$, p < 0.001), whereas higher levels of children's performance-avoidance goals were marginally associated with higher levels of children's depressive symptoms ($\beta = 0.13$, p = 0.07). Finally, children's mastery goals were associated with higher levels of children's satisfaction with student life ($\beta = 0.68$, p < 0.001) and children's performance-avoidance goals were associated with higher levels of satisfaction with student life ($\beta = -0.15$, p = 0.01).

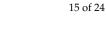
Concerning the mediation, we found four significant relationships. Children's learning self-efficacy fully mediated the relationship between mothers' self-efficacy and children's depressive symptoms, with a significant indirect effect ($\beta = -0.14$, CI 95% (-0.18; -0.05)). Children's mastery goals fully mediated the relationship between mothers' mastery goals and children's satisfaction with student life ($\beta = 0.26$, CI 95% (0.03; 0.22)). Finally, children's performance-avoidance goals fully mediated the relationships between mothers' performance-avoidance goals and children's depressive symptoms ($\beta = 0.03$, CI 95% (0.001; 0.083)) and children's satisfaction with student life ($\beta = -0.03$, CI 95% (-0.09; -0.008)).

3.4. The Moderating Effect of Grade Level

Next, we conducted a multi-group SEM in order to test for the moderating role of the grades in which the children were enrolled. Thus, we tested the above-mentioned mediated model using structural equations modeling to simultaneously analyze the relationships between the three different grades. The unconstrained model presented very good indices: χ^2 (63) = 67.35; p = 0.33; CFI = 0.991; TLI = 0.95; RMSEA = 0.020 (lower CI = 0.000, upper CI = 0.052). Next, we tested whether restraining all the regression paths across the group would lead to a significant decrease in model fit. The chi-square difference test showed that the fully constrained model had a worse model fit (p = 0.03). As such, we assumed that there were differences between the three groups. The separate results for each group are presented in Figure 2. For the 4th graders, mothers' self-efficacy was related to the children's learning self-efficacy (β = 0.31, p < 0.001), and mothers' performance-avoidance goals were related to children's performance-avoidance goals (β = 0.25, p = 0.01). Children's learning self-efficacy was negatively related to children's depressive symptoms (β = -0.33, p = 0.001). Finally, children's mastery goals were positively related to children's satisfaction with student life (β = 0.57, p < 0.001), whereas children's performance-avoidance goals were negatively related to children's satisfaction with student life (β = 0.57, p < 0.001), whereas children's performance-avoidance goals were negatively related to children's satisfaction with student life (β = -0.19, p = 0.04).

For the 8th grade, mothers' self-efficacy was positively related to children's learning self-efficacy ($\beta = 0.30$, p = 0.002), and mothers' performance-approach goals were negatively related to children's depressive symptoms ($\beta = -0.33$, p = 0.004). Children's self-efficacy was negatively related to children's depressive symptoms ($\beta = -0.26$, p = 0.02), and children's mastery goals were positively related to children's satisfaction with student life ($\beta = 0.61$, p < 0.001). For the 12th graders, mothers' self-efficacy was related to children's self-efficacy ($\beta = 0.55$, p < 0.001), mothers' mastery goals were related to children's mastery goals ($\beta = 0.38$, p = 0.004), mothers' performance-approach goals were related to children's performance-approach goals ($\beta = 0.40$, p < 0.001), and mothers' performance-approach goals ($\beta = 0.40$, p < 0.001), and mothers' performance-approach goals were negatively associated with children's depressive symptoms ($\beta = -0.42$, p = 0.01). Children's mastery goals were positively linked to children's depressive symptoms ($\beta = -0.42$, p = 0.01). Children's mastery goals were positively linked to children's depressive symptoms ($\beta = -0.42$, p = 0.01). Children's mastery goals were positively linked to children's depressive symptoms ($\beta = -0.42$, p = 0.01). Children's mastery goals were positively linked to children's depressive symptoms ($\beta = -0.42$, p = 0.01). Children's mastery goals were positively linked to children's depressive symptoms ($\beta = -0.42$, p = 0.01). Children's mastery goals were positively linked to children's depressive symptoms ($\beta = -0.42$, p = 0.01), whereas children's performance-avoidance goals were negatively related to children's satisfaction with student life ($\beta = -0.32$, p = 0.03). Finally, children's performance-avoidance goals were positively linked to children's depressive symptoms ($\beta = 0.45$, p = 0.008).

Table 3 presents the indirect effects for the full sample and for each separate group. For the 4th grade group, we found a significant indirect effect from mothers' performance-avoidance goals to children's satisfaction with student life ($\beta = -0.05$, CI 95% (-0.13; -0.006)) and one from mothers' self-efficacy towards children's depressive symptoms ($\beta = -0.10$, CI 95% (-0.25; -0.02)). For the 8th graders, the indirect effect from mothers' self-efficacy to children's depressive symptoms was significant ($\beta = -0.08$, CI 95% (-0.21; -0.01)). For the 12th graders, the indirect effect from mothers' mastery goals to children's satisfaction with student life was significant ($\beta = 0.20$, CI 95% (0.01; 0.37)).



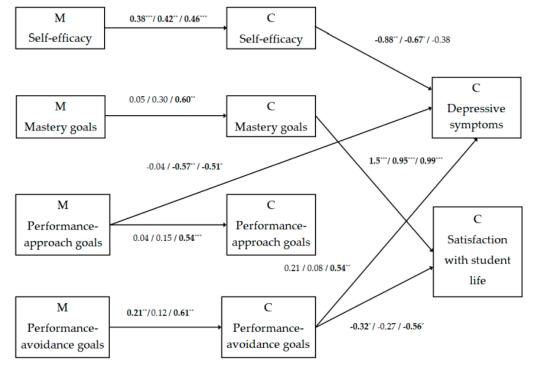


Figure 2. Unstandardized path estimates of the three groups' mediation model (based on [111]). On each arrow drawn from one variable to another, there are three numerical values (unstandardized regression coefficients), separated from each other by a slash. Thus, for each arrow, from left to right, the unstandardized coefficients for the 4th grade were presented first, for the 8th grade second, and for the 12th grade last. Covariances between the mothers' variables and between the children's variables were included in the model. The paths for which each of the three coefficients had been non-significant were trimmed for parsimony. M = mothers' variable; C = children's variable. Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Table 3. Standardized indirect effects with 95% confidence intervals.

Parameter	β	Lower CI Limit	Upper CI Limit
Full model			
$C DS \leftarrow C SE \leftarrow M SE$	-0.114^{***}	-0.188	-0.054
$CSWSL \leftarrow CMG \leftarrow MMG$	0.126**	0.031	0.22
$C DS \leftarrow C AG \leftarrow M AG$	0.03*	0.001	0.083
$CSWSL \gets CAG \gets MAG$	-0.035**	-0.087	-0.008
4th grade			
$C DS \leftarrow C SE \leftarrow M SE$	-0.107^{**}	-0.248	-0.016
$C \text{ SWSL} \leftarrow C \text{ MG} \leftarrow M \text{ MG}$	0.018	-0.072	0.157
$C DS \leftarrow C AG \leftarrow M AG$	0.028	-0.024	0.133
$C \text{ SWSL} \leftarrow C \text{ AG} \leftarrow M \text{ AG}$	-0.05^{*}	-0.134	-0.006
8th grade			
$C DS \leftarrow C SE \leftarrow M SE$	-0.08*	-0.213	-0.014
$C \text{ SWSL} \leftarrow C \text{ MG} \leftarrow M \text{ MG}$	0.07	-0.4	0.18
$C DS \leftarrow C AG \leftarrow M AG$	0.005	-0.021	0.069
$C \text{ SWSL} \leftarrow C \text{ AG} \leftarrow M \text{ AG}$	-0.019	-0.106	0.009
12th grade			
$C DS \leftarrow C SE \leftarrow M SE$	-0.115	-0.306	0.065
$CSWSL \leftarrow CMG \leftarrow MMG$	0.206*	0.011	0.371
$C\:DS \leftarrow C\:AG \leftarrow M\:AG$	0.202	-0.36	0.011
$CSWSL \leftarrow CAG \leftarrow MAG$	-0.156	-0.022	0.49

Notes: C = children's variable; M = mothers' variable; DS = depressive symptoms; SWSL = satisfaction with student life; SE = self-efficacy; MG = mastery goals; AG = avoidance goals; * p < 0.05; ** p < 0.01; *** p < 0.001.

4. Discussion

Our study aimed to investigate the interplay between two motivational factors on children's academic-related well-being as they unfolded for both parents and children alike during critical transition school years—these being achievement goal orientations and self-efficacy. Specifically, we explored the relationships between mothers' and their children's achievement goal orientations and learning self-efficacy, as well as the direct or indirect effect of these motivational beliefs on the children's well-being in their academic settings. We analyzed these relationships considering three levels of education of the children, namely, 4th, 8th, and 12th grade. In these three years of school, the characteristics of the achievement- and competition-focused Romanian educational system are emphasized. Being subjected to academic examinations at the end of the cycle, which are decisive for the subsequent school enrollment, children and their families are particularly concerned with competition for academic performance.

The research participants, both children and mothers, reported a significantly higher orientation towards mastery goals than towards performance approach-goals and especially toward performance-avoidance goals, which were reflected the poorest in our sample. However, both the mastery goal orientations of the mothers and of the children followed a downward trend starting from the 4th grade to the 12th grade. Nevertheless, in the case of the children, there was a dramatic difference in mastery goal orientations between the 4th graders and the 8th graders, whereas in the case of the mothers, the differences between the groups followed a milder descending slope. While keeping in mind that our study was not longitudinal, we might cautiously infer that these differences might reflect the consequences of prolonged exposure over time to the competitive, stressful educational practices that characterize this cultural context, with children having become more aware of them as they underwent the characteristic developmental changes as compared to the mothers, whose experience with the same environment is less direct. We consider this finding as important because a mastery goal orientation was repeatedly found as being associated with positive effects on learning to a greater extent as compared to performance-approach and avoidance goals and was more prevalent in other populations as well, which showed that the Romanian educational context shares this similarity with other Western cultural contexts [54,114]. The decline in the intensity of children's mastery goal orientations was found elsewhere in previous studies as well, which explained this finding as a negative age-related change in adolescents' motivation and self-perceptions [85,86,115–117]. Specifically, adolescence is considered a developmental period associated with some degree of psychosocial vulnerability [118], during which, compared to other life periods, it is more likely that a decrease in self-concept [119,120], lowered academic competence [116], and even drug use [121] will appear.

Considering that the same decreased trend may be observed in the children's satisfaction with student life, even if our result may have been overinflated due to the children's tendency to overestimate themselves at young ages [122], it is necessary to carefully consider this in the Romanian educational context, given its shortcomings noted during the Programme for International Student Assessment (PISA) evaluations [123].

Although some of previous studies showed that student achievement goal orientations decline from early to late adolescence [75,124,125], data sustaining a developmental perspective regarding parents' goal orientations and the pattern of relationships between parents' and students' goal orientations are still limited. Other studies also indicated a general decline of students' perceptions of their parents' mastery and performance goals [78,79]. However, there are no available data concerning parents' goals that are measured with questionnaires administered directly to parents, as they were in this study. An explanation for the weaker mastery goal orientations seen in mothers of older children could be the greater concern felt and manifested by parents regarding the development of basic abilities when children are younger. The same pattern of differences was also observed for maternal self-efficacy, which is higher in primary school than in high-school. Mothers might feel less able to influence the children's learning activity as they grow older. Our findings draw attention to the need to deepen research in this direction by investigating potential changes in parenting self-efficacy depending on

the age group of the child, as we have not found empirical evidence on this topic. Increased or decreased parental self-efficacy might also be influenced by the potentially problematic mother–child relationship [70,89,118] rather than by age alone. Additionally, the self-efficacy of parents with difficult and emotionally reactive children was shown to decrease as their children grew older [91]. Further research should explore these avenues so that we may obtain a better comprehension of these findings.

The SEM analyses revealed significant relationships between the goal orientations of the mothers and the goal orientations of their children. These findings support the more general idea that during their development, children develop motivational patterns similar to those of their parents, being influenced by their perceptions on parental expectations [8]. Moreover, other research has shown that parental styles influenced the strategies that children apply in order to achieve their performance goals [126]. This would also explain why the effect of the mothers' mastery and avoidance goal orientation on their children's well-being is mediated by the correspondent motivational orientations of the child. In this regard, our results are consistent with those of prior empirical research, which showed that perceived parental goals were significantly associated with children's own goals [73]. The novel element brought by our research resided in measuring mothers' goal orientations directly through self-report; the concordance between our results and the ones obtained by He, Gou, and Chang [73] may also be indicative of the fact that children tended to interpret their parents' goal orientations adequately, an assumption that warrants further investigation. In agreement with past studies [87,92,93], parental self-efficacy of mothers significantly predicted children's learning self-efficacy, confirming our initial assumptions and revealing that the effect of parental self-efficacy of mothers on the children's learning self-efficacy was meaningful in this cultural context. This effect was observed for all three age groups in our sample and it was in accordance with previous findings, which also showed that children may rely too heavily on their mothers' views in competitive environments [85,86]. As we argued in previous sections, this may be due to the fact that the academic environment in this cultural space does not promote constructive self-assessments or the development of skillsets through its learning and evaluative educational practices, but rather a static assessment of the volume of information retained in order to stimulate competition among students through publicly ranking their results.

Concerning the effect of the motivational variables on the children's well-being, as hypothesized by us on the basis of previous findings from other cultural spaces [28,45,49–54,75], children's performance avoidance goals predicted lower levels of well-being, in contrast with their mastery goals, which were conducive to higher well-being, an effect observable across the three age groups. This seems to support the fact that certain goal orientations might be universally detrimental or beneficial. The same might be true for children's learning self-efficacy, which predicted a lower level of depressive symptoms for our entire sample of children, having had significant effects for the 4th and 8th graders. The absence of this effect for the 12th graders may be due to the fact that learning self-efficacy is not enough to increase their well-being, as theirs is a terminal school year followed by more dramatic life-changes (e.g., getting a job, going to a new city to start college) that might require other types of self-efficacy as well. We also found that a mother's performance-approach goal orientation predicted less reported depressive symptoms in children, a finding that was the strongest for 8th and 12th graders. These results contradict previous studies, which revealed that this type of goal orientation may be detrimental to well-being [51–54], and concur with the results of other studies, which found that performance-approach goals may have positive effects on well-being similar to the ones elicited by mastery goals [31]. This may be specific to the Romanian educational system, to a certain extent, where mastery and performance approach-goals might be conflated. Fundamentally, mastery goals lead to increasing competence, whereas performance goals are orientated toward displaying skills and abilities. However, in an assessment context where grades are the only indicator used for admission to top schools to the detriment of other competences held by the student, and where marks are made public for the entire world to see, increasing competence may be perceived as overlapping with displaying it publicly. Another explanation might be that the items that measured this type of orientation were centered on

"competitive success" [47], a factor with a strong motivational role that is more likely to be associated with anxiety rather than depression. Future studies should further explore this aspect.

All in all, our study shed light on a series of both shared and unique characteristics of the Romanian educational context in what concerns the motivational orientations of parents and children and their influence on the latter's well-being. Parental self-efficacy and goal orientation of mothers for their own children would have a significant contribution towards predicting the children's satisfaction with student life and depressive symptoms through their effect on the children's goal orientations and their own learning self-efficacy. For instance, our findings revealed that although self-efficacy, mastery, and avoidance goal orientations appeared to have important contributions to the students' well-being that are similar to those found in Western cultures, maternal performance approach-goal orientations might have a protective role in defending children against depressive symptoms. We explained this finding in its context, along with the other similarities and disparities found. To conclude, parental motivational orientations play a very important part in the development of the children's corresponding orientations, which emphasizes that changing academic outcomes might be possible by operating interventions at the parents' level; this might be easier to do than changing the children's skill levels, which makes this a worthy avenue for applied interventions. Our results are in addition to those in the international literature that indicate the performance-approach goals as being favourable and not unfavourable. However, this result must be further explored for a more specific cultural differentiation, in a manner in which parental warmth and parental strictness are known to have different consequences for child and adolescent development as a function of the cultural context in which parental socialization takes place [3].

The current study had some limitations. First, this was a cross-sectional study, and thus the interpretations we provided for our findings require further longitudinal investigations. Second, the number of participants was relatively low, due to the fact that several of the mothers approached by the homeroom teachers declined to participate or failed to re-send their questionnaires. Third, in our study, we used reports from mothers only, given the fact that mothers are the ones who are more concerned with raising and educating their children as compared to fathers in the cultural context of our country. This limitation did not diminish the importance of our findings but emphasized the need to develop new research to also explore the role of fathers' achievement goals and self-efficacy in children's adjustment and well-being, compared to the role of mothers. Finally, our study merely tackled more systematic, socio-historical explanations of the effects observed. Further studies are needed to bring clarity to this field.

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Research Involving Human Participants and/or Animals: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

Conflicts of Interest: The authors declare no conflict of interest.

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