PROBLEMS
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986

THE IMPACT OF MATERNAL EMOTIONAL INTELLIGENCE AND BACKGROUND ON CHILDREN'S EMOTIONAL COMPETENCE

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Abstract

This study aimed to explore the relationship between maternal emotional intelligence, background factors, and children's emotional competence, focusing on how these factors contribute to the emotional development of children aged 1 to 6 years. Data were collected through a questionnaire survey using purposive sampling. A total of two hundred thirty-five mothers and their children participated, ensuring a balanced gender distribution. Results showed that children's emotional competence does not significantly differ by gender. The higher the emotional competence is, the greater the age and grade level are. Maternal emotional intelligence plays a significant role in predicting children's emotional competence. This study highlights the critical role of mothers' emotional support in fostering children's emotional growth. It also suggests that the role of fathers and other contextual factors must be considered to build a more comprehensive image.

Keywords: *emotional intelligence, emotional competence, maternal EQ*

Introduction

Emotional intelligence (EI) is the capacity to identify and comprehend one's own emotions as well as those of others, enabling individuals to express and justify emotions appropriately in social interactions (Salovey & Mayer, 1993). Goleman (1995) emphasizes that emotional intelligence, self-awareness, self-regulation, social skills, and empathy are essential in managing emotions or enhancing social interactions. He also stressed that the intelligence quotient (IQ) is less important than emotional intelligence (EQ) regarding the success pathway. Similarly, Mayer et al. (2004) highlight social adaptability more, stating the importance of emotional regulation. More publications in recent years pointed out that people who have the capability of higher emotional intelligence have higher self-esteem, have more advanced social skills, and can regulate their own emotions (Pandey & Choubey, 2010). In general, people with high emotional intelligence will consume less alcohol and report greater life satisfaction and better people contact (Austin et al., 2005; Palmer et al., 2002; Saklofske et al., 2003).

The family environment is equally critical in shaping an individual's emotional development. Shapiro (1997) notes that emotional support provided by family members is crucial for children's emotional growth. For instance, young children often imitate their parents' emotional responses, with parental expressions of emotion serving as behavioral models and references for children (Smith & Walden, 2001; Eisenberg et al., 1998). As a result, parents' emotional expressions have a considerable influence on their children's emotional development and impact their children's social development (Eisenberg et al., 1998).

In early childhood, mothers are often seen as primary emotional support providers, significantly influencing the development of their child's emotional competence. Eisenberg et al. (1996) have found that only maternal, rather than paternal, negative emotional responses predict a child's ability to regulate emotions. Similarly, Denham and Kochanoff (2002) have observed that positive emotional reactions from their mothers more strongly influence

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PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

preschoolers' emotional knowledge. When emotional instability in mothers may reduce their adolescent's ability to cope with negative emotions, then increase the risk of psychological issues in the adolescent (Crespo et al., 2017). A mother's emotional intelligence significantly influences her child's ability to express emotions, establish social relationships, and adapt to different situations (Goleman, 1995). Tsai (2022) also proved that parental emotional ability is strongly related to the emotional ability of upper-elementary-aged children. Additionally, Zeng (2013) has noted a positive correlation between family financial status and positive parenting, suggesting that socioeconomic background substantially influences parenting approaches. Thus, parents' emotional intelligence, especially that of mothers, plays a crucial role in predicting their children's emotional competence.

Given the substantial influence of maternal emotional intelligence on children's emotional regulation and overall development, this study examines how maternal emotional intelligence influences children's emotional competence in Taiwan while accounting for background factors related to both mothers and children.

Research Problem, Focus, and Aim

The study addresses the current status of children's emotional competence, analyzing differences related to demographic variables and evaluating the influence of maternal emotional intelligence and background factors on children's emotional competence. This research contributes to the goals of inclusive and equitable quality education (SDG 4), highlighting the role of emotional competence in a child's educational journey. Additionally, it emphasizes the need to empower mothers as primary emotional caregivers through education and emotional development (SDG 5), supporting efforts to reduce disparities in emotional education and promote future generations' well-being.

Research Aim

The study aims to understand the current status of children's emotional competence and how mothers' background factors and emotional intelligence affect children's emotional competence.

Research Objectives

The study's objectives are listed as follows.

1. To assess the current status of children's emotional competence.
2. To analyze children's emotional competence according to their background factors.
3. To evaluate the impact of maternal emotional intelligence on children's emotional competence.

Research Methodology

General Background

Grounded in emotional intelligence theory, this study aims to examine the impact of maternal emotional intelligence on young children's emotional competence by employing a quantitative, cross-sectional approach. It was conducted over three months in early 2023, involving Taiwanese mother-child pairs, with data collected through physical and online surveys.

PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

Sample

To perform factor analysis and regression analysis with a significance level of 0.05, a power of 0.8, and a medium effect size, more than 200 sample sizes must be provided to ensure the results can be stable and interpretable. The research population consisted of 235 mother-child pairs in Taiwan, providing a broad view of family demographics and educational backgrounds. The children aged 1 to 6 years included boys (118, 50.2%) and girls (117, 49.8%), with some enrolled in kindergarten and others not. The largest age groups were 5-6 years (40.0%) and 1-2 years (28.5%). Among the mothers, the average age was 36.49 years (SD = 5.09), with most holding a university or associate degree (64.7%) and being married (96.6%). Family types were primarily nuclear families (67.2%), or three-generation households (27.7%), and 24.7% reported a monthly income of over NTD 100,000.

Instrument and Procedures

A questionnaire survey was used to gather data on background variables for both children and mothers. The "Mother's Emotional Intelligence Scale," adapted from Lin Wen-Ting's (2008) Teacher Emotional Intelligence Scale, consists of 21 items using the Likert scale (1: Strongly Disagree to 5: Strongly Agree). The higher scores indicate greater emotional intelligence. The "Children's Emotional Competence Scale," adapted from Jian Shu-Zhen and Li Zong-Wen's (2006) Emotional Domain Report, includes 31 items rated from (1) Never Occurs to (5) Always Observed, with higher scores reflecting better emotional competence. The survey also collected data on children's gender, kindergarten grade, and mothers' age, education level, household income, marital status, and family type. The participating mothers completed the questionnaires. Ethical procedures included obtaining informed consent from all participants and assuring anonymity and confidentiality.

Assessment of Scale Reliability and Validity

1. Reliability and Validity of Children's Emotional Competence

The Kaiser-Meyer-Olkin (KMO) value of .96 and a significant Bartlett's test ($\chi 2$=6089.935, df = 465, p < .001) confirm the data's suitability of the children's emotional competence scale for factor analysis. The analysis identified three factors: Emotional Understanding and Regulation, Emotional Recognition and Awareness, and Emotional Expression and Communication. The scale demonstrated excellent reliability, with Cronbach's α ranging from .83 to .97 across the subscales and total scale. The total variance explained by the factors was 65.05%. Moderately strong to extreme factor loadings and internal solid consistency confirm the scale's validity in measuring children's emotional competence across different dimensions.

Table 1
Factor Analysis and Reliability of the Children's Emotional Competence Scale

Statements and subscales	Cronbach-α	*KMO*	*L*	*r/itt*	Dissemination %
Emotional Understanding and Regulation	.96	0.96	.402~.941	.938**	55.83
Emotional Recognition and Awareness	.94	0.96	.472~.889	.936**	5.60
Emotional Expression and Communication	.83		.397~.919	.906**	3.620
Total Scale	.97	0.96	.397~.919	1	65.05

Note: ***p < .01, **p < .05, *p < .01

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PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

2. Reliability and Validity of the Maternal Emotional Intelligence Scale

The Kaiser-Meyer-Olkin (KMO) value of 0.950. Moreover, a significant Bartlett's test ($\chi^2 = 3397.155$, df = 210, $p < .001$) confirms the data's suitability of the maternal emotional intelligence scale for factor analysis. The Emotional Understanding and Regulation subscale shows excellent reliability (Cronbach's $\alpha = .935$), with factor loadings ranging from .406 to .908, and explains 54.012% of the variance. The Emotional Recognition and Awareness subscale has strong internal consistency (Cronbach's $\alpha = .911$), with loadings from .308 to .962, explaining 5.845% of the variance. The total scale (items 1–21) demonstrates excellent reliability (Cronbach's $\alpha = .956$). Overall, the scales effectively measure their constructs, with the first factor explaining much of the variance.

Table 2
Factor Analysis and Reliability of the Maternal Emotional Intelligence Scale

Statements and subscales	Cronbach-α	*KMO*	*L*	*r/itt*	Dissemination %
Emotional Understanding and Regulation	.935	0.950	.406-.908	.949**	54.012
Emotional Recognition and Awareness	.911	0.950	.308-.962	.963**	5.845
Total Scale	.956	0.950	.308-.962	1	59.857

Note: ***$p < .001$, **$p < .01$, *$p < .05$

Data Analysis

Descriptive statistics summarized background information, including means, standard deviations, and frequency distributions. Student's *t-tests* and one-way ANOVA were conducted to examine gender and grade differences in children's emotional competence, respectively. Multiple linear regression analysis was used to evaluate the impacts of mothers' emotional intelligence and background factors, including maternal age, education level, marital status, and household income, on children's emotional competence.

Research Results

Current Status of Children's Emotional Competence

The analysis of children's emotional competence yielded mean scores across three key factors: Emotional Understanding and Regulation, Emotional Recognition and Awareness, and Emotional Expression and Communication. The mean score for Emotional Understanding and Regulation was 3.29 (*SD* = 0.897), indicating a moderate ability among children to recognize and regulate their emotions. The *skewness* was -0.907, suggesting that many children performed above average, while the kurtosis was 0.279, reflecting a relatively uniform distribution of scores. Emotional Recognition and Awareness had a mean score of 3.40 (*SD* = 0.796), reflecting that the studied children can recognize their own and others' emotions. The *skewness* was -0.437 and the *kurtosis* 1.964, suggesting that mothers think their children have better emotional recognition and awareness. Lastly, Emotional Expression and Communication received the highest mean score of 3.56 (*SD* = 0.785), with a *skewness* of -1.356 and a *kurtosis* of 1.904, indicating that mothers generally viewed their children as adept at expressing and communicating emotions effectively. This trend across all factors indicates that children's emotional competence is well-developed, particularly in expression and communication.

PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

Table 3
Descriptive Results of Current Status and Bivariate Correlations for Factors of Children's Emotional Competence (N =235)

Factor	*M*	*SD*	Skewness	Kurtosis	1	2	3	4
Emotional Understanding and Regulation	3.29	.897	-.907	.279	1			
Emotional Recognition and Awareness	3.40	.796	-.437	1.964	.831**	1		
Emotional Expression and Communication	3.56	.785	-1.356	1.904	.758**	.774**	1	
Total scale	3.42	.766	-1.358	1.755	.938**	.936**	.906**	1

Note: $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$

Differences in Children's Emotional Competence According to Background Factors

As shown in Table 4, the analysis found no significant gender differences in emotional competence across all dimensions. The *p*-values for "Emotional Understanding and Regulation," "Emotional Recognition and Awareness," "Emotional Expression and Communication," and "Emotional Intelligence" were all above .05, indicating that boys and girls scored similarly in these dimensions.

Table 4
Differences in Children's Emotional Competence by Gender (N =235)

Dimension	Gender	*M*± *SD*	*t* value
Emotional Understanding and Regulation	Boy	3.321 ± 0.913	0.460
	Girl	3.267 ± 0.882	
Emotional Recognition and Awareness	Boy	3.415 ± 0.823	0.227
	Girl	3.392 ± 0.772	
Emotional Expression and Communication	Boy	3.589 ± 0.819	0.472
	Girl	3.541 ± 0.751	
Emotional competences	Boy	3.442 ± 0.793	0.419
	Girl	3.399 ± 0.740	

Note: $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$

Table 5 presents the ANOVA results for the four dimensions of children's emotional competence. Significant differences were found between groups in all dimensions ($p < .001$). Post-hoc Scheffe tests indicate that Group 5 (Senior Class) differs significantly from the lower groups, with the order of significance descending as follows: Senior Class > Middle Class > Junior Class > Nursery Class > Not Enrolled.

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PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

Table 5
Comparisons of Children's Emotional Competence Across Grade Levels (N =235)

Dimension	Grade	N	*M*	*SD*	*F*	Scheffe test
Emotional Understanding and Regulation	1. Not enrolled	44	2.58	1.26	11.22***	5>4>3>2>1
	2. Nursery Class	52	3.26	0.87		
	3. The junior class	38	3.43	0.75		
	4. The middle class	35	3.51	0.62		
	5. The senior class	66	3.60	0.50		
	Total	235	3.29	0.90		
Emotional Recognition and Awareness	1. Not enrolled	44	2.74	1.17	12.27***	5>4>3>2>1
	2. Nursery Class	52	3.40	0.74		
	3. The junior class	38	3.57	0.51		
	4. The middle class	35	3.59	0.58		
	5. The senior class	66	3.66	0.47		
	Total	235	3.40	0.80		
Emotional Expression and Communication	1. Not enrolled	44	2.90	1.09	11.73***	5>4>3>2>1
	2. Nursery Class	52	3.77	0.51		
	3. The junior class	38	3.60	0.79		
	4. The middle class	35	3.74	0.57		
	5. The senior class	66	3.73	0.56		
	Total	235	3.56	0.78		
Total Emotional competences	1. Not enrolled	44	2.74	1.12	13.52***	5>4>3>2>1
	2. Nursery Class	52	3.48	0.62		
	3. The junior class	38	3.53	0.61		
	4. The middle class	35	3.61	0.54		
	5. The senior class	66	3.66	0.47		
	Total	235	3.42	0.77		

Note: $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$

Predictors of Children's Emotional Competence

The regression model in Table 6 demonstrated significant explanatory power, with an F-value of 6.738 ($p < .001$) and $R^2 = .193$, indicating that the model explains 19.3% of the variance in children's emotional competence. The analysis controlled several variables, including maternal age, education level, household monthly income, marital status, family type, child's gender, and age. The findings revealed that Maternal EQ significantly influences children's emotional competence with a coefficient of B = 0.241, β = 0.185, $p = .003$, indicating a positive relationship. Children's age also significantly impacts children's emotional competence with a coefficient of B = 0.173, β = 0.349, $p < .001$, indicating that as children grow older, their emotional abilities tend to improve.

In Contrast, the following variables did not show a significant impact on children's emotional competence: maternal age (B = 0.007, β = 0.047, $p = .466$), education level (B = 0.001, β = 0.001, $p = .911$), household monthly income (B = -0.036, β = -0.065, $p = .309$), and children's gender (B = -0.070, β = -0.046, $p = .448$).

PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

Overall, the model revealed that these independent variables explain approximately 19.3% of the variance in children's emotional competence, with significant effects attributed to Maternal emotional intelligence and children's age.

Table 6

The Effect of Maternal Emotional Intelligence on Children's Emotional Competence (N =235)

Variables	*b*	*SE*	β	*t*	R^2	*F*
constant	1.918	.658		2.914**	.193	6.738***
Maternal _EQ	.241	.080	.185	3.018**		
Maternal age	.007	.010	.047	.731		
Maternal education level	.001	.076	.001	.011		
household monthly income	-.036	.036	-.065	-1.019		
marital status	-.146	.179	-.051	-.817		
family type	.003	.033	.005	.083		
Children's gender	-.070	.092	-.046	-.760		
Children's age	.173	.033	.349	5.280***		

Note: $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$

Discussion

This study aimed to assess the current status of children's emotional competence and examine how maternal background factors and emotional intelligence impact it. Previous research has established that children's emotional competence develops gradually, with expressive abilities emerging early and emotional regulation developing more slowly, often into adolescence (Thompson, 1991). These findings underscore the role of nurturing and the family environment in shaping emotional competence, where initial development in emotional expression precedes the more complex process of emotional regulation. This study supports these established patterns, finding that expressive and communicative abilities were more developed among kindergarten-aged children than emotional understanding and regulation. This suggests that early childhood programs should prioritize fostering expressive skills as foundational to broader emotional development, which can be further supported as children mature.

Another established finding in the literature is the varying role of gender in emotional competence, with some studies reporting significant gender differences while others do not (Eisenberg & Morris, 2002; Sharma, 2017). Our study found no significant differences in emotional competence by gender, suggesting that factors like maturation and educational experiences might have a more uniform impact across genders within this age range. However, this contrasts with the findings by Yan, Jing-Jing, and Ting-Ting (2016), who identified gender as a significant predictor. This discrepancy may be due to contextual factors, such as cultural or sample-specific characteristics, that warrant further research.

Regarding new contributions, this study identifies maternal emotional intelligence (EQ) and children's age as significant predictors of children's emotional competence, accounting for 19.3% of the variance. This finding aligns with prior research support emphasizing maternal emotional support's role in early development. However, our study provides a unique contribution by examining these relationships within a Taiwanese context, where family dynamics and cultural expectations may shape how maternal EQ influences children's emotional skills. This suggests that programs aimed at enhancing maternal EQ could have a meaningful impact on children's emotional development in early childhood education settings.

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PROBLEMS
OF EDUCATION
IN THE 21st CENTURY
Vol. 82, No. 6A, 2024

While our model explains only a portion of the variance, this highlights the potential influence of unmeasured factors, such as environmental or social variables, on emotional competence. This underscores the complexity of emotional development and suggests that future research should consider longitudinal and qualitative approaches to capture these broader influences over time. Additionally, exploring the interaction between maternal EQ, children's age, and other contextual factors can yield, more profound insights into the intricate dynamics supporting early childhood emotional development.

Conclusions and Implications

While gender is not the main factor, children's emotional competence improves with age. The results also highlight the importance of maternal emotional intelligence in supporting children's emotional development. Educators and policymakers should consider strategies that enhance parental emotional competence as part of early childhood programs. Additionally, future research should further explore the varying effects of gender on emotional competence and examine how these factors interact over time. This can provide more tailored approaches for supporting emotional development in diverse contexts.

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