

Family Economic Deprivation and Self-esteem among Preschoolers

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Data were analyzed using SPSS and PROCESS macro for SPSS. The analytic code necessary to reproduce the analyses presented in this paper is not publicly accessible. The analyses presented here were not preregistered.

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Abstract

Previous studies have established a negative correlation between economic deprivation and self-esteem; however, limited insights exist regarding the onset of children linking self-esteem to economic status. To investigate this, we examined 198 preschoolers (96 girls, 102 boys) and their parents (170 mothers, 28 fathers). Children self-reported implicit and explicit self-esteem, while parents reported personal relative deprivation and economic objective deprivation of the family. Additionally, we explored children's money knowledge as a moderator. Our findings reveal that preschoolers may connect their implicit self-esteem with family economic status; however, such connections require basic knowledge about money. We discuss potential explanations for the influence of family economic deprivation, specifically on the implicit, not explicit, self-esteem of preschoolers.

Keywords: self-esteem, economic deprivation, money knowledge

Self-esteem is considered a vital determinant of success and well-being in various domains, including relationships, work, and health (Orth & Robins, 2014). It can serve as a psychological defense mechanism against threats (Leary et al., 1995), benefiting children by helping them cope with family stresses, social pressures, and deviant behaviors (Dalgas-Pelish, 2006). Previous studies have also demonstrated discernible links between preschoolers' self-esteem and significant outcomes such as aggression (Peterson, 2001), depressive symptoms (Cvencek et al., 2020), and shyness (Kemple, 1995). Therefore, while there is a wealth of research on the factors influencing self-esteem in adolescents and adults, understanding the dynamics of its early formation remains imperative (Orth et al., 2018). This is crucial because even in the early stages of life (i.e., among preschoolers), self-esteem can lead to significant consequences mentioned above.

In this paper, our focus is on one extensively examined predictor of self-esteem, namely economic status. Meta-analytical evidence highlights a positive correlation between economic status and self-esteem in elementary school children (Twenge & Campbell, 2002). Our specific emphasis is on economic deprivation, a factor demonstrated to adversely affect not only self-esteem but also emotional distress among ten to fifteen-year-olds (Zhang et al., 2020). We contend that economic deprivation may similarly impact self-esteem in preschoolers. However, at this early developmental stage, not all children may comprehend their financial situation. Consequently, we explore money knowledge as a critical moderator in the relationship between economic deprivation and self-esteem. Our assumption is that the negative association between self-esteem and economic deprivation will manifest primarily in children with developed money knowledge.

Economic Deprivation and Self-esteem

According to Zhang's (2009) hypothesis, money and self-esteem exhibit a degree of "interchangeability" as resources. Zhang posits that this interchangeability manifests through

mechanisms such as augmentation, where a higher income contributes to a sense of satisfaction and competence, subsequently elevating self-esteem. Another mechanism is substitution, where possession of one resource can compensate for the lack of the other (e.g., high self-esteem partially compensating for a financial deficit, and vice versa). Zhang's hypothesis suggests that individuals facing economic deprivation would typically exhibit lower self-esteem. This correlation can be explained by the increased probability of economically disadvantaged individuals encountering negative emotions such as anger, frustration, shame, or humiliation, as highlighted by Hill and Gaines (2007). These emotions are posited to impact self-esteem and life satisfaction among those experiencing economic hardship, as discussed by Martin and Hill (2012).

In our study, we differentiate between two forms of economic deprivation, which may lead to diminished self-esteem. The first is objective economic deprivation, denoting tangible and quantifiable deficits in a family's financial resources, such as a lack of access to basic necessities (Guio et al., 2016). As mentioned earlier, individuals experiencing objective economic deprivation may encounter challenges in meeting their fundamental needs, resulting in feelings of inadequacy or frustration that can contribute to diminished self-esteem (Hill & Gaines, 2007; Martin & Hill, 2012). However, even in the absence of objective economic hardship, families may experience relative deprivation (Smith et al., 2012). This arises from comparisons between one's own circumstances and those of similar others, creating a perception of disparity that induces a sense of injustice or unfairness. This subjective assessment can also evoke feelings of resentment, frustration, and a diminished perception of one's own value (Smith et al., 2012).

Existing studies consistently demonstrate a positive correlation between income levels and self-esteem among adults (Twenge & Campbell, 2002; Jahan et al., 2015). However, the

nexus between financial status and self-esteem extends beyond adults who earn their income independently, experiencing heightened competence and increased self-esteem through the augmentation mechanism proposed by Zhang (2009). Numerous studies suggest that school-age children also link their self-esteem with financial status, hinting at a potential substitution of these two resources. For example, Veselska et al. (2010) identified a significant impact of socio-economic status (SES) on self-esteem development, particularly during adolescence. Multiple studies using diverse SES measures corroborate these findings, highlighting higher self-esteem in adolescents from more affluent backgrounds (Orth et al., 2010; Haught et al., 2015; Havashida et al., 2019), those reporting elevated subjective financial SES (Yan et al., 2021; Bai et al., 2021), and those residing in prosperous families (Chaplin et al., 2014). Additionally, adolescents facing financial challenges at home (Sobolewski & Amato, 2005; Kavanaugh et al., 2018) and those who feel relatively deprived (Xiong & Hu, 2022) tend to exhibit lower self-esteem.

While research has extensively explored the correlation between economic status and self-esteem in adolescents and adults, there is a notable absence of literature examining such relations during the preschool period. Given that even preschoolers are capable of comparing their family's material status with that of their peers (Heberle & Carter, 2020; Weinger, 1998), it is reasonable to anticipate that the self-esteem of young children is, to some extent, influenced by the economic status of their families (both objective and relative). Parents and caregivers play a crucial role as primary informants on inequality and economic status for their children (Dickinson et al., 2023). Consequently, the way parents assess their economic situation can have implications for a child's self-esteem.

Furthermore, researchers have predominantly focused on explicit self-esteem when investigating the correlation between economic status and self-esteem. Nevertheless, in recent decades, additional dimensions of self-esteem, including implicit self-esteem (e.g., Greenwald et al., 2002), have emerged as crucial contributors to individual functioning. Our article's study aims to fill the aforementioned research gaps by investigating the relationships between economic deprivation and self-esteem, considering both explicit and implicit dimensions, among children aged 4-6 years.

Explicit and Implicit Self-esteem

Self-esteem serves as a crucial personal asset, aiding in navigating interactions and acting as a shield against social challenges (Leary & Baumeister, 2000). It involves making judgments about oneself that carry an evaluative aspect, as outlined by Harter (2005). This encompasses a dual focus on both an overall self-assessment and assessments within specific domains of functioning. Harter (2005) makes a crucial distinction between general evaluations, serving as indicators of global self-esteem, and specific evaluations, which are pertinent to an individual's current life stage.

Researchers also point to the distinction between explicit and implicit self-esteem. While explicit self-esteem is commonly characterized as a conscious experience of self-liking, self-worth, and acceptance (Zeigler-Hill, 2006), implicit self-esteem is defined as a “cognitively simple association of self with valence (*me = good*)” (Cvencek et al., 2016, p. 55). These two forms of self-esteem are conceptualized as outcomes of distinct systems. Explicit self-esteem is believed to result from the intentional, conscious processing of self-relevant information, originating from a controlled, effortful system guided by rule-based learning (Haefffel et al., 2007). On the other hand, implicit self-esteem is regarded as the

introspectively unidentified impact of self-attitude on the evaluation of self-associated and self-dissociated objects (Greenwald & Banaji, 1995), emerging from the intuitive processing of affective experiences.

Explicit self-esteem assessments directly capture consciously held opinions using tools like the Rosenberg self-esteem scale (1965). However, reliance on self-report questionnaires, although common, has limitations, as some individuals may hesitate to admit negative sentiments about themselves (Krizan & Suls, 2008). Implicit self-esteem is usually measured indirectly through methods like the Implicit Association Test (IAT; Greenwald & Farnham, 2000). Both explicit and implicit self-esteem assessments reveal weak correlations, suggesting they tap into different aspects of the self (Bosson et al., 2000; Greenwald & Farnham, 2000). Disparities between these measures can result from factors like lack of introspective access, measurement inaccuracies, and differences in stimuli alignment. To comprehensively assess self-esteem, combining both explicit and implicit methods is recommended.

Importantly, self-evaluations appear in the early stages of a lifetime. According to Kozaiecki (1986) and Harter (2005), children initially develop self-evaluative capacities between the ages of two and four, coinciding with the onset of language acquisition and the reception of early assessments, often centered on appearance or conduct. Harter and colleagues (Harter & Pike, 1984, Harter, 2005) studies using pictorial self-report methodology indicate that children between the ages of three and seven may harbor a form of generalized self-esteem, even if they do not explicitly articulate it. However, within this age range, they are capable of expressing domain-specific self-evaluations in two key areas: (1) perceived cognitive and physical competencies and (2) perceived social acceptance.

However, when it comes to children's implicit self-esteem and its measurement, research on it is relatively new and still very limited. Cvencek et al. (2011, 2016) developed and validated the Preschool Implicit Association Test (PSIAT), a specialized version of the Implicit Association Test (IAT) designed to assess group and self-associations, including the self-esteem of preschool children. In constructing this tool, the authors utilized the social psychological phenomenon known as the mere ownership effect (Beggan, 1992). Cvencek and colleagues (2016) research successfully demonstrated the feasibility of measuring implicit self-esteem in preschoolers. Despite this, there is a notable paucity of studies investigating the relationship between explicit and implicit self-esteem in children. Addressing this research gap and recognizing the distinct aspects assessed by explicit and implicit self-esteem, our study aims to measure both forms of self-esteem.

The Moderating Role of Money Knowledge

Previous research indicates that children between the ages of three and five possess an awareness that money is distinct from other objects and is associated with the act of purchasing (Webley, 2005; Kupiesiewicz, 2004). However, a more nuanced comprehension of money unfolds gradually and exhibits variability among preschoolers, reflecting their diverse cognitive capacities and experiential backgrounds (Berti & Bombi, 1988; John, 1999; Webley, 2005). While some preschoolers may demonstrate basic proficiency in identifying and matching coins and bills as early as three or four years old, others may require a more extended period to acquire these skills (Berti & Bombi, 1988; Kupiesiewicz, 2004; Lau, 1998).

In the context of our study, we assert that money knowledge is crucial for children to establish connections between their family's economic status and their own self-esteem. An improved understanding of money may enable children to be more aware of their family's

financial constraints, potentially leading to feelings of inadequacy or disappointment and, consequently, influencing lower self-esteem.

Overview

In this cross-sectional study, we surveyed preschoolers and their parents, examining the association between parental reports of two types of family economic deprivation (relative and objective) and children's explicit and implicit self-esteem measures. We hypothesized a negative association between both measures of family economic deprivation and child's self-esteem (H1). Additionally, considering the varied money knowledge among preschoolers, we examined its role in the relationship between economic deprivation and self-esteem. We hypothesized (H2) that this association would be negative only among children with more mature money knowledge, as it might be essential for comprehending their families' financial situations and connecting them with self-esteem.

Method

Participants

We obtained approval for this study from the institutional Ethics Committee (approval number: 21/11/2022) and conducted it in public preschools in Warsaw, Poland. Parents or caregivers were asked to provide written informed consent for their child's participation and complete questionnaires. Participating parents were incentivized with a voucher (40 PLN \approx \$10) for a popular Polish store. Only children with parental consent were invited to participate, and their verbal agreement was also sought before inclusion in the study.

To determine the minimum sample size, we used G*Power software (Faul et al., 2007). With a statistical power of 80% and a 95% confidence level, the required sample size to detect small effect sizes of $r = .10$ corresponds to 192 (Funder & Ozer, 2019). We collected data from 232 parents and 229 children. However, we had to exclude some cases due to substantial missing data. As a result, in the final database, we included 198 children

(96 girls and 102 boys) aged 39-87 months ($M = 66.32$, $SD = 11.87$) and 198 parents (170 mothers and 28 fathers) aged 25-60 years ($M = 38.41$, $SD = 4.79$).

Materials and Procedure

Personal Relative Deprivation

We used the Personal Relative Deprivation Scale (Callan et al., 2011) to evaluate parents' self-reported personal relative deprivation. The PRDS gauges individuals' general beliefs and emotions related to comparing their outcomes with those of similar others, encompassing statements like “*I feel deprived compared to others like me*” and “*I feel privileged compared to others like me.*” Participants assessed 5 items on a 6-point scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The Cronbach’s alpha for this scale was .74.

Economic Objective Deprivation

To assess the level of economic objective deprivation among participants, we employed the Material and Social Deprivation Index (MSD, Guio et al., 2016). This index comprises a list of 13 material and social needs considered to be essential to lead an adequate life, both at the household (e.g., keeping home adequately warm) and individual levels (e.g., having regular leisure activities). Participants rated each, indicating to what extent their household's financial situation allows them to fulfill these needs on a 4-point scale, ranging from 1 (definitely does not allow) to 4 (definitely allows). To create the composite score, all items were reversed and averaged. Cronbach’s alpha for the scale was .93.

Implicit Self-Esteem

We employed the pictorial–audio Preschool Implicit Association Test (PSIAT), a well-validated procedure for assessing implicit self-esteem in children aged 4 to 6 (Cvencek et al., 2016). In the sorting task of the PSIAT, children categorize stimuli from four groups presented on a computer screen using two response keys. The task relies on the principle that

responding faster indicates a stronger mental association between the categories. Our study employed a self-esteem task within the PSIAT, utilizing four categories: me, not-me, positive, and negative. This task assesses the association of self with either positive or negative valence attributes. For children with high self-esteem, rapid sorting of "me" with positive words and "not-me" with negative words implies a positive implicit attitude toward self (me = good). The me and not-me categories were represented by two sets of novel flags, one belonging to the child ("my flags") and another not belonging to the child ("not my flags"), as described by Cvencek et al. (2016). Good and bad concepts were represented by four positive words (Polish translations of good, happy, fun, and nice) and four negative words (Polish translations of bad, yucky, mean, and mad). These words were presented both as audio recordings and written stimuli. In one task, my flags and good words shared a response key, while not-my flags and bad words shared another key. In the second task, the assignment of good and bad words was reversed.

PSIAT self-esteem scores were computed using the D measure based on the scoring algorithm developed by Greenwald, Nosek, and Banaji (2003). The D measure ranges from +2 (me = good) to -2 (me = bad), with 0 indicating an equal association of self with both positive and negative valence. Positive scores signify positive implicit self-esteem.

Cronbach's alpha, calculated from two D measures computed for matched 40-trial subsets of the self-esteem PSIAT in our sample, was $\alpha = .78$.

Explicit Self-Esteem

We used 12 questions from the Pictorial Scale of Perceived Competence and Social Acceptance (Harter & Pike, 1984) to measure explicit self-esteem across two domains, each consisting of six items. Children were individually tested by trained interviewers following the provided manual's guidelines (Harter et al. 1983). Children were shown pairs of pictures along with an oral description and asked to choose the picture that best represented a child

they feel more similar to, e.g., „*This girl is good at solving puzzles, and this girl is not very good at solving puzzles. Which one of them is more similar to you?*”. Children were then asked to specify their level of identification with the chosen child. The interviewer wrote down the number corresponding to the selected picture, using a rating scale from 1 (low perceived acceptance or competence) to 4 (high perceived acceptance or competence). The self-esteem score was determined by calculating the mean of all twelve items. The scale exhibited a Cronbach's alpha of .70.

Money Knowledge

Similar to Gąsiorowska et al. (2016), we conducted two tasks to assess children's money knowledge. In the first task, participants were presented with one 2-PLN and one 5-PLN coin and were asked to identify which they believed had more money. In the second task, children viewed three sets of money: one 50-PLN bill, two 20-PLN bills, and five 5-PLN coins. They were then instructed to indicate which set they would use to buy more candy. A correct response was scored as 1, while an incorrect one was scored as 0. The final score, ranging from 0 to 2, was determined by summing the points from both tasks.

Controlled Variables

We considered both the child's sex (female or male) and age in our analysis. Parents provided information about the child's year and month of birth, which we used to calculate the child's age by finding the difference between the study's date and the child's birthdate.

Results

Zero-order Correlations

Correlations between personal relative deprivation, economic objective deprivation, implicit self-esteem, explicit self-esteem, money knowledge, age, and sex are presented in Table 1, along with the means and standard deviations. Only four associations between variables reached significance. Money knowledge demonstrated a positive correlation with implicit self-esteem, age, and sex (specifically, boys exhibited higher money knowledge compared to girls). Additionally, both measures of economic deprivation were positively linked. Since measures of personal relative and economic objective deprivation were not linked to implicit and explicit self-esteem, our data did not provide support for H1.

Table 1

Descriptive Statistics and Zero-Order Correlations between Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Personal relative deprivation	2.71	0.96	–					
2. Economic objective deprivation	3.56	0.45	.45***	–				
3. Implicit self-esteem	0.28	0.43	-.07	-.12	–			
4. Explicit self-esteem	2.89	0.46	-.02	.05	-.11	–		
5. Money knowledge	1.35	0.57	.08	.07	.17*	-.08	–	
6. Age (39–87 months)	66.33	11.87	.004	.11	.07	.05	.29***	–
7. Sex (0 = female; 1 = male)	–	–	.06	-.04	.09	-.01	.16*	-.12

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

Moderation Analyses

To test the hypotheses regarding the moderating role of money knowledge in the relationship between measures of economic deprivation and self-esteem (H2), we conducted four linear regressions, incorporating appropriate interaction terms. Moreover,

acknowledging the observed correlations between the child's age and sex with money knowledge, we incorporated these variables as covariates in our analyses. Regression models were computed using Model 1 within the PROCESS macro for SPSS (Hayes, 2022).

Initially, we examined the model with implicit self-esteem as the dependent variable and personal relative deprivation as the independent variable. This model yielded significance, and detailed results are presented in Table 2. Similarly, the model with implicit self-esteem as the dependent variable and economic objective deprivation as the independent variable also proved to be significant, with detailed results presented in Table 3. The control variables demonstrated no significant associations with a child's implicit self-esteem in both models. Personal relative deprivation exhibited a positive association with implicit self-esteem, while economic objective deprivation did not. Money knowledge positively predicted implicit self-esteem in both models. Interaction terms between measures of deprivation and money knowledge were negative and significant in predicting implicit self-esteem in both models.

Table 2

Testing the Moderating Effects of Money Knowledge on the Relationship between Personal Relative Deprivation and Implicit Self-Esteem

	<i>B</i>	<i>SE</i>	<i>t</i>	95% CI
Intercept	-0.44	0.29	-1.54	[-1.01, 0.12]
Control variables				
Age	0.00	0.00	0.07	[-0.01, 0.01]
Sex	0.05	0.06	0.75	[-0.07, 0.17]
Independent variables				
Personal relative deprivation	0.19*	0.09	2.08	[0.01, 0.36]
Money knowledge	0.59**	0.18	3.19	[0.22, 0.95]
Interactions variables				
Personal relative deprivation × Money knowledge	-0.17*	0.06	-2.63	[-0.29, -0.04]
<i>F</i>			<i>F</i> (5, 192) = 3.10*	
<i>R</i> ²			.07	

Note. ****p* < .001. ***p* < .01. **p* < .05.

Table 3

Testing the Moderating Effects of Money Knowledge on the Relationship between Objective Economic Deprivation and Implicit Self-Esteem

	<i>B</i>	<i>SE</i>	<i>t</i>	95% CI
Intercept	-0.36	0.30	-1.22	[-0.95, 0.22]
Control variables				
Age	0.00	0.00	0.06	[-0.01, 0.01]
Sex	0.06	0.06	0.98	[-0.06, 0.18]
Independent variables				
Economic objective deprivation	0.31	0.19	1.62	[-0.07, 0.68]
Money knowledge	0.55**	0.19	2.93	[0.18, 0.92]
Interactions variables				
Economic objective deprivation × Money knowledge	-0.30*	0.13	-2.36	[-0.55, -0.05]
<i>F</i>		<i>F</i> (5, 192) = 3.16**		
<i>R</i> ²		.08		

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

We also conducted analyses on models with explicit self-esteem as the dependent variable; however, neither model yielded significance: $F(5, 213) = 0.67$, $p = .647$ for personal relative deprivation as the independent variable, and $F(5, 213) = 1.07$, $p = .378$ for economic objective deprivation as the independent variable. Detailed results for these models are presented in the Online Supplement.

Given the lack of significance in models predicting explicit self-esteem, we provide detailed presentations exclusively for models predicting implicit self-esteem. Figure 2 depicts the simple slopes at various levels of money knowledge with personal relative deprivation as the independent variable, while Figure 3 illustrates the same for economic objective deprivation: low money knowledge (-1 SD; score 0.787), medium money knowledge (mean; score 1.354), and high money knowledge (+1 SD; score 1.920). Notably, both measures of deprivation negatively predicted implicit self-esteem only among children with high money knowledge.

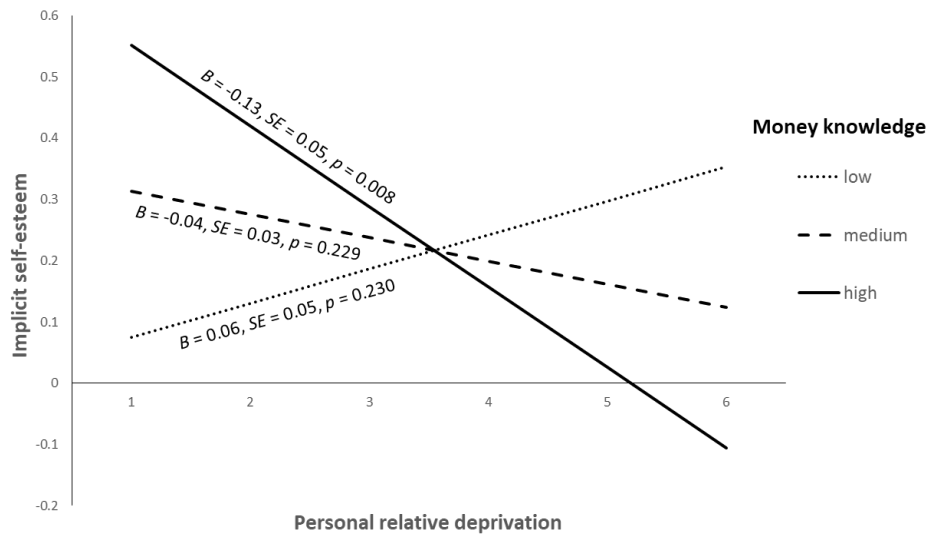


Figure 2

Interaction Effect between Personal Relative Deprivation and Money Knowledge on Implicit Self-esteem

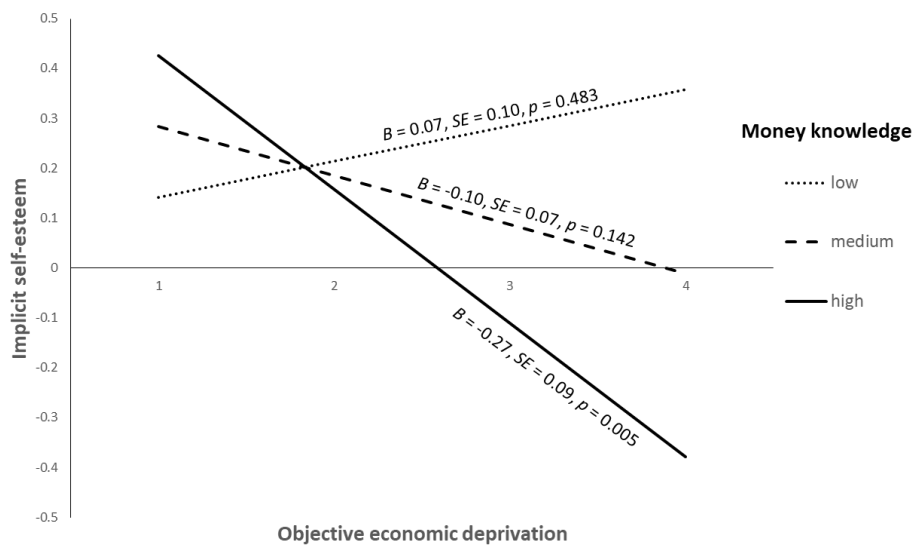


Figure 3

Interaction Effect between Objective Economic Deprivation and Money Knowledge on Implicit Self-esteem

Discussion

Our findings contribute to the broader research on the connection between financial status and self-esteem. Previous studies, including a meta-analysis of 446 samples (Twenge

& Campbell, 2002), have shown such correlations, and a recent study in Poland, where our research was conducted, replicated these findings (Trzcińska & Sekścińska, 2021). The current study uniquely focuses on the link between economic deprivation and self-esteem in preschool children. Considering the potential repercussions of lowered self-esteem in this age group (e.g., Cvencek et al., 2020; Kemple, 1995; Peterson, 2001), it becomes imperative to analyze its determinants at the early stages of an individual's life.

While the relationship between economic deprivation and a child's self-esteem did not prove statistically significant in our study, we identified a developmental process wherein an interchangeable mechanism between financial status and self-esteem (Zhang, 2009) emerges — namely, money knowledge. It appears that the link between economic deprivation and self-esteem becomes evident when a child acquires basic knowledge about money. This result constitutes a significant contribution to developmental and economic psychology. We pinpoint the developmental stage at which a child begins to comprehend their family's economic situation and correlate it with self-esteem. The heightened understanding of money likely enables children to discern their family's financial constraints, potentially leading to feelings of inadequacy or disappointment and subsequently impacting their self-esteem negatively. This insight can be valuable for caregivers to comprehend potential shifts in a child's behavior at this stage of life and for educators to implement more precise self-esteem interventions (for a comprehensive review, see Dalgas-Pelish, 2006).

We examined two forms of economic deprivation, as reported by a child's parent: objective economic deprivation and personal relative deprivation. Consistent patterns emerged in the results for both deprivation measures. The findings suggest that preschool children who possess a grasp of monetary concepts exhibit lower levels of self-esteem when experiencing objective economic challenges within the family. This implies an understanding, to some extent, of their family's financial constraints. Notably, a parallel

relationship was identified concerning personal relative deprivation reported by parents. This suggests that not only the objective financial status but also how parents perceive their economic situation relative to others plays a role. Previous research underscores that parents serve as the primary information source for their children regarding financial status and inequality (Dickinson et al., 2023). Thus, it can be inferred that parental messages directed to children about their economic situation influence how children perceive it, subsequently impacting their self-esteem. However, these hypotheses are tentative and necessitate further investigation, including an analysis of children's perceptions of their family's financial situation.

In our study, we assessed a child's self-esteem through explicit and implicit measures. The association between economic deprivation (both relative and objective) and self-esteem manifested solely in implicit self-esteem, providing only partial support for our hypothesis H2. Nevertheless, this difference in results is understandable given that implicit self-views are presumed to form earlier and possess a more rudimentary nature compared to explicit self-views (Bosson et al., 2003). Therefore, it is reasonable that a meaningful association between a child's implicit self-esteem and economic deprivation exists, while no corresponding link is observed in explicit self-esteem. The latter may entail a cognitive judgment that is too sophisticated for preschoolers, as they are still in the process of developing their self-concept (Marsh et al., 2002).

Our study is not without its limitations. Firstly, the observed association between economic deprivation and self-esteem was confined to implicit self-esteem. Uncertainty persists regarding whether the absence of significant results in explicit self-esteem is indicative of a genuine lack of connection or is influenced by problems with assessing preschool children's explicit self-esteem. The measurement of explicit self-esteem in preschoolers may be less reliable than in adults or older children, given the nascent

development of their self-concept (Cvencek et al., 2020; Marsh et al., 2002). To bolster our findings, future research should employ diverse methodologies to assess both explicit and implicit self-esteem in children. Another area for future exploration is the investigation of mechanisms responsible for the association of economic deprivation, specifically with implicit, but not explicit, self-esteem. For example, comparing financial status with other children may be closely associated with implicit self-esteem, given that previous research has demonstrated the impact of social comparisons on implicit self-esteem (Bocage-Barthélémy et al., 2018). A second limitation of our study is its restricted generalizability to the sample of Polish children attending public preschools in Warsaw. To improve external validity, future research should encompass children from varied backgrounds, settlement sizes, and nations. Additionally, the measurement of our moderator variable, money knowledge, was limited to two tasks. Employing a more intricate assessment, such as understanding the practical value of money (e.g., what can be purchased with a given amount), could offer more nuanced insights into the relationship between economic deprivation and self-esteem.

In conclusion, our research sheds light on the link between economic deprivation and self-esteem among preschoolers. Although this connection was observed earlier in adults and older children, it was not evident when children start to base their self-esteem on economic status. In our study, we not only demonstrated that even preschoolers connect their self-esteem with family economic status but also identified a developmental process indicating that to make such connections, children must possess some basic knowledge about money. The relationship between economic deprivation and self-esteem emerged solely in the context of implicit self-esteem; however, we posit that this occurrence may be attributed to the ongoing construction of self-perception, which, in preschoolers, might be more accurately gauged at the implicit level.

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