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Marianna Szabóné Habók: Parental Patterns of Irony Use and Preschoolers' Irony Comprehension in Hungarian Families
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Parental Patterns of Irony Use and Preschoolers' Irony Comprehension in Hungarian Families

This paper presents the findings from two studies exploring associations between parental irony use and preschool children's irony comprehension. The first study investigates the relationship between Hungarian parental irony use and children's irony comprehension skills, using adapted tools from Banasik-Jemielniak et al. (2020). A moderate positive correlation was found between mothers' irony use and children's irony comprehension scores in this pilot sample. The second study expands this investigation by surveying a broader parental sample. The results describe gender-related patterns in irony use and varied irony use across norm-based scenario types. While group averages were not significantly different, mothers more often reported explaining ironic utterances. With the aim of contributing novel data from Hungarian families, the studies complement existing research and add cross-linguistic descriptive evidence on parental practices and children's irony comprehension. The findings can motivate observational and longitudinal work on how everyday exposure relates to early pragmatic development.

Keywords: children, irony, comprehension, parents, pragmatic development

1. Introduction

Verbal irony is a form of nonliteral language in which the speaker's intended meaning differs from the literal interpretation of their words (Wilson & Sperber, 2012). Irony comprehension is considered a complex skill that develops gradually and relies on various cognitive and social abilities (Bernicot et al., 2007; Filippova & Astington, 2008). While adults often use irony in everyday situations, for example, in family conversations (Recchia et al., 2010) or online communication (Aguert et al., 2016), children often find it difficult to understand.

Yet, research on children's irony production has provided evidence that its use can reflect home exposure (Pexman et al., 2009). Complementary evidence from comprehension studies is consistent with the possibility that frequency and context of exposure may matter. Children's figurative language comprehension corresponded to the frequency and style of parental use (Recchia et al., 2010; Banasik-Jemielniak et al., 2020). This perspective aligns with Language Socialization Theory (Ochs & Schieffelin, 1984; 2011), which states that communicative skills develop through repeated participation in everyday

interactions. Though comprehension and production may not progress in parallel, parental input provides one likely context in which children encounter and learn about irony.

This paper further explores the topic in a Hungarian context, focusing on patterns and variability in children's irony comprehension and in parents' self-reported irony use. The research builds on earlier findings that suggest a link between parental input and children's pragmatic skills (Szabóné Habók, 2024). It addresses two main questions: (1) whether the frequency of parental irony use is associated with children's irony comprehension, and (2) how typical irony use, functions and explanatory practices differ between mothers and fathers. Given the pilot design and the reliance on parent self-report, the study is descriptive and exploratory rather than causal. The studies were conducted with Hungarian-speaking children and their parents, contributing novel cross-linguistic data on irony comprehension in early childhood. The first study examines children's irony comprehension together with parental responses, while the second explores parental irony use in more detail through a broader questionnaire.

Most studies in the field come from English and Polish contexts. By focusing on Hungarian preschoolers, the present research adds cross-linguistic descriptive evidence from an under-represented language.

2. Language Socialization Theory

To better understand how children develop the skill to understand complex, nonliteral forms of language, it is important to consider not only cognitive development but also the sociocultural context in which language use occurs. Language Socialization Theory (Ochs & Schieffelin, 1984; 2011) is a framework that connects linguistic development with social experience. According to this theory, language learning takes place through culturally meaningful interactions and involves not just mastering grammar and vocabulary but also becoming a competent member of a speech community. It can be particularly relevant to irony comprehension. Unlike basic linguistic structures, irony is highly context-dependent and relies on subtle social cues, background knowledge, and shared assumptions. When hearing an ironic utterance, children must learn to recognise that a speaker means the opposite of what is said. This special skill is often modeled rather than explicitly taught. Language Socialization Theory highlights how the forms of pragmatic competence can develop through participation in everyday routines and communicative practices, especially within families.

In this framework, parental language use can also play a central role in shaping children's pragmatic development. Exposure to irony in the home through humorous comments, playful criticism, or indirect evaluations can help children gradually develop sensitivity to ironic utterances. Previous studies suggest that the frequency and way irony is used by parents may be associated with children's

ability to understand such utterances (Banasik-Jemielniak et al., 2020; Recchia et al., 2010).

Building on this perspective, the current study investigates whether variations in parental irony use and attitudes can be linked to differences in preschool children's irony comprehension in a Hungarian context. It examines both quantitative links between parental responses and children's performance, and broader patterns of use among mothers and fathers. Thus, it aims to contribute to our understanding of how pragmatic skills develop in everyday family settings.

3. The Role of Exposure in Irony Comprehension

Irony comprehension develops gradually and typically lags behind the acquisition of other linguistic skills (Bernicot et al., 2007). This delay is often attributed to the complex interplay of cognitive and sociocultural factors required for processing nonliteral language. A growing body of evidence suggests that exposure can play a central role in this process, as children's irony comprehension seems to develop through everyday communicative experiences.

Pexman et al. (2009) demonstrated that children's ability to use and understand irony between the ages of 3 and 15 was not strongly linked to their cognitive abilities or vocabulary levels. Instead, their familiarity with irony was more closely tied to how frequently it was used in their home environment. Similarly, Recchia et al. (2010) found that children between the ages of 4 and 6 tended to imitate figurative language used by their parents, indicating that naturalistic exposure supports the acquisition.

A study involving monolingual Polish-speaking families discovered that eight-year-olds' irony comprehension was associated with their mothers' use of ironic utterances in everyday interaction. The study revealed that "Children who are proficient in understanding irony have parents who declare a more positive attitude towards irony. However, when looking at mothers and fathers separately, this only holds true for mothers." (Banasik-Jemielniak et al., 2020: 9). The researchers suggested that traditional family dynamics, in which children spend more time with mothers than with fathers, might help account for this maternal pattern (Banasik-Jemielniak et al., 2020).

These findings collectively support the view that irony is encountered and becomes meaningful in context through regular social interaction. This perspective is echoed in research by Szücs and Babarczy (2017), who studied Hungarian-speaking children aged 5 to 8 and found that irony comprehension was not significantly correlated with general language abilities or theory of mind. Instead, metapragmatic knowledge, that is, the child's awareness of how language operates across different communicative situations, appeared to play a more central role.

They concluded that:

> ironic interpretation is a social-pragmatic phenomenon and – under non-laboratory circumstances – children learn to comprehend ironic statements from natural discourses, in which they encounter them in a context where the ironic interpretation is either explained or is the only cognitively plausible interpretation. (Szücs & Babarczy, 2017, p. 145)

On the basis of these findings, the present study investigates whether similar relationships between parental input and children's irony comprehension can be observed in Hungarian families. It aims to describe how exposure in the natural learning environment relates to pragmatic development.

4. Exploring the role of parental ironic language use in preschool children's irony comprehension in Hungarian families

4.1 Sample

The families were recruited through social media via the snowball sampling technique. The experiment involved 19 Hungarian families, consisting of 20 typically developing preschool children and their parents, as shown in Table 1 below.

Table 1. Participants' details

Number of families	19
Number of mothers	19
Number of fathers	19
Number of children (male/female)	20 (11/9)
Children's average age (years; months)	4; 6
Children's range of age (years; months)	4;0 – 5;7

All participating children were monolingual Hungarian speakers and had no regular exposure to another language in the home environment. All were reported by their parents to be typically developing, with no diagnosed developmental, cognitive, or sensory impairments. The age range of 4;0–5;7 was chosen to include children in the same general developmental stage of preschool attendance before entering formal schooling, while also reflecting the limited recruitment opportunities available for a small-scale study. Taking into account the pilot nature of the study, age was treated as a design constraint rather than as a continuous predictor. In addition, this study aimed to capture the onset window of

irony comprehension in Hungarian preschoolers. A sensitivity analysis ($\alpha = .05$, two-tailed) showed that the study had 80% power to detect effects of about $\rho = .45$, so smaller links may not have been found. The findings should therefore be viewed as preliminary and interpreted with caution.

Before the study began, all parents provided written informed consent. Participation was voluntary, and confidentiality was fully guaranteed. As a token of appreciation, the children received a small treat (e.g., chocolate). Although all participating families were known to be middle-class and lived in Jász-Nagykun-Szolnok County, detailed information about parents' educational background and occupation was not collected. For this reason, potential differences between mothers' and fathers' educational levels could not be examined, which limits the generalisability of the findings. Since the study sought to capture aspects of the family environment, additional information was collected regarding the time each parent spent with the child. All children had spent most of their time with their mothers before preschool. At the time of testing, parents' time spent with their child varied, but mothers were still the main caregivers in most families.

4.2 Procedure and materials

Two measures were used: a test assessing children's irony comprehension and a self-report questionnaire on parents' use of and general attitude toward irony. Both were conducted in the children's homes, lasted 12-15 minutes, and unfolded in a single session facilitated by the same experimenter. While the parents were completing the questionnaire, the experimenter conducted the test with the child in a separate room.

The children's session began with a standard false-belief task based on Wimmer and Perner's (1983) unseen transfer paradigm. This task was included as a basic screening measure to assess task engagement and age-appropriate participation. The subsequent part measured irony comprehension. It was a shortened and simplified version of the test used in Banasik-Jemielniak et al.'s (2020) experiment mentioned above. It featured eight short stories, four ending with an ironic utterance, as shown in Figure 1, and four with a non-ironic (control) utterance, as shown in Figure 2. To reduce cognitive load, the stories were kept short (maximum 34 words), used familiar vocabulary, and were accompanied by drawings. All ironic utterances were examples of contextualised evaluative irony. They combined features of hyperbole and counterfactual contrast. Each involved an exaggerated positive evaluation that directly contradicted the factual context (e.g., "You have become so clean!" after a fall into the mud). This form is typical of irony used by adults with children in everyday interactions and was chosen for ecological validity (Schnell, 2021).

The complete list of the children's irony comprehension task is provided in Appendix 1. These stories were first piloted in a smaller-scale Hungarian-language study (Szabóné Habók, 2024) that reported preliminary findings with a

reduced participant group. The present study builds on that pilot work by analysing a larger sample, extending the investigation with an additional component, conducting more detailed statistical analyses, and situating both components within a broader theoretical and empirical framework.

All stories were delivered by the researcher, who followed a fixed script to ensure consistency across participants. Each story was told with a neutral intonation, with a slight cue on the ironic predicate to mark contrast. Although pre-recorded stories would offer greater control and are planned for future studies, live delivery was chosen here to help maintain the children's attention and allow brief clarifications when necessary.

All eight narratives featured a central character, a child named Matthew, and involved his interactions with an adult figure, either the mother, father, or preschool teacher. Each of the stories was illustrated with visual stimuli, 2-4 custom-designed drawings presented on a tablet. The number of drawings was aligned with the logic of the given narrative. After each story, the children answered two questions: (1) *Does XY really think...?* and (2) *Why? What makes you think so?*.

Figure 1. Sample ironic story used in the comprehension task (English translation)
'The children are playing in the snow in the yard of the kindergarten. Matthew's snowball hits the kindergarten teacher's head. The kindergarten teacher says*: "You are really kind Matthew!".*
Question 1: Does the kindergarten teacher really think Matthew is kind?
Question 2: Why? / What makes you think so?'

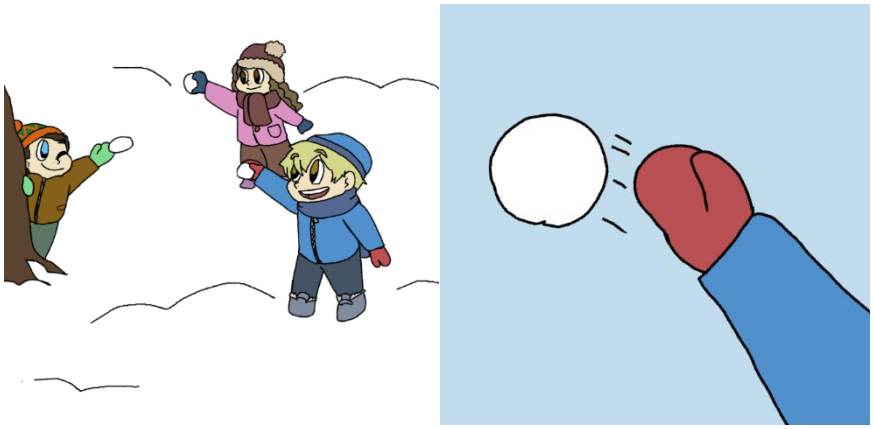


Figure 2. Sample non-ironic story used in the comprehension task (English translation)
'After kindergarten, Matthew and his mother are walking home from kindergarten. The sun is shining and the weather is nice. Matthew and his mother like to walk on days like this. Matthew is happy and jumps around. *"I'm glad you're in such a good mood."* says Matthew's mother.
Question 1: Does Matthew's mother think Matthew is really in a good mood?
Question 2: Why? / What makes you think so?'

The selection of these two questions — assessing the speaker's belief and the speaker's motivation — was based on the methodology used by Banasik-Jemielniak et al. (2020), enabling direct comparability of findings across linguistic contexts. These questions were considered age-appropriate for 4–5-year-old Hungarian-speaking children. Given the focus on this age group and the need to minimise linguistic load, this design reduces expressive demands while still probing belief and motivation, which are central to irony comprehension at this age. Other possible components, for instance assessing the speaker's intention or employing object-choice paradigms, were not included in the present design because they typically require more complex linguistic processing, which can be challenging for preschoolers. The chosen questions provided a balance between conceptual depth and age-appropriate linguistic demands. While other low-verbal-load paradigms could also be applied in this age group, for instance, object-choice tasks used in metaphor comprehension (Pouscoulous & Tomasello, 2020) and relevance implicature understanding (Schulze & Buttelmann, 2021), these were not included here to maintain consistency with the Banasik-Jemielniak et al. (2020) design.

The second measure of the study assessed parental use of irony. It was an extended version of Banasik-Jemielniak et al.'s questionnaire (2020) comprising a total of 11 questions and completed by 38 parents (19 mothers, 19 fathers). In this questionnaire, "irony" was operationalised through short, everyday conversational scenarios adapted from Banasik-Jemielniak et al. (2020) and identical to those in the children's irony comprehension task. Embedding the concept in concrete examples, rather than providing an abstract definition, ensured that all parents referred to the same type of verbal irony targeted by the study. The initial four questions included these ironic narratives (see (1) below). The subsequent seven questions in the parental questionnaire were designed to

assess three main areas: parents' overall attitudes toward irony (see (2) below), their primary reasons for using irony, and their perceptions of their child's comprehension and use of irony (see (3) below).

(1) 'It is snowing, the pavement is slippery. Your child is sliding, but unfortunately, he falls, so his pants get muddy and wet. Would you make a comment like this: "You have become so clean!"?'

(2) 'How often do you say something ironic at home?'

(3) 'Do you think your child (participating in the experiment) understands irony?'

Since parents completed the questionnaire independently in writing, all response options for each item, including the intermediate options, were provided in full written form directly after each question. Responses were scored on a 5-point Likert scale (0–4), with higher values indicating more frequent irony use. By summing responses to Q1–Q6 and Q8, the maximum score attainable on the parents' questionnaire was 28. The total score summarises parents' self-reported frequency of irony use and their general attitude toward irony across the scenarios. Responses to Q7 and Q9–Q11 were not included in the global score, as they assessed functions of irony use or parents' perceptions of their child's abilities rather than parental behaviour itself. The complete parental questionnaire used in this part of the study is provided in Appendix 2.

4.3 Results

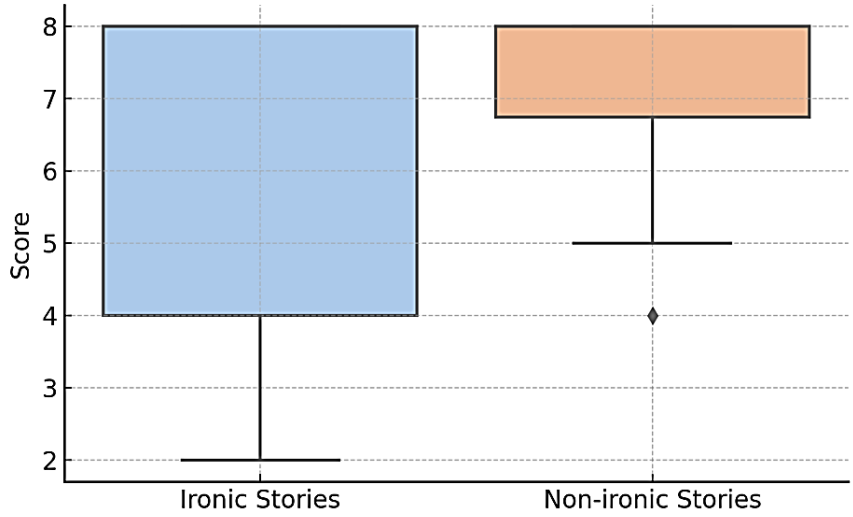
Throughout the study, the children (Ch01–Ch20) were consistently arranged in ascending order of age, and parents were aligned with their children. Starting with the children's tests, each correct response was assigned 1 point. There were eight stories (four ironic, four non-ironic), each followed by two questions, resulting in a maximum score of 8 points for both the ironic and non-ironic story sets.

Children's answers to each story were coded according to two dimensions: (i) the belief question ("Does XY really think…?") and (ii) the motivation question ("Why?"). Responses to the motivation question were categorised using an a priori coding scheme. Answers were classified as irony-consistent if they referred to mismatch, incongruity, pretence, exaggeration, joking, or reversal (e.g., "She said it to be funny," "He didn't really mean it"). Responses that restated the literal state or event without acknowledging any discrepancy were coded as literal. Replies that were off-task, ambiguous, or uninterpretable were coded as unclear/other.

Figure 3 illustrates the distribution of children's comprehension scores across ironic and non-ironic stories. All the children provided at least two correct responses consistent with the target interpretation in both task types. The mean score for ironic stories was 6.40 (SD = 2.39, range = 2–8, IQR = 4.00), with performance ranging from 2 to 8 correct responses. In contrast, the mean for non-ironic stories was 7.05 (SD = 1.36, range = 4–8, IQR = 1.25). The scores achieved

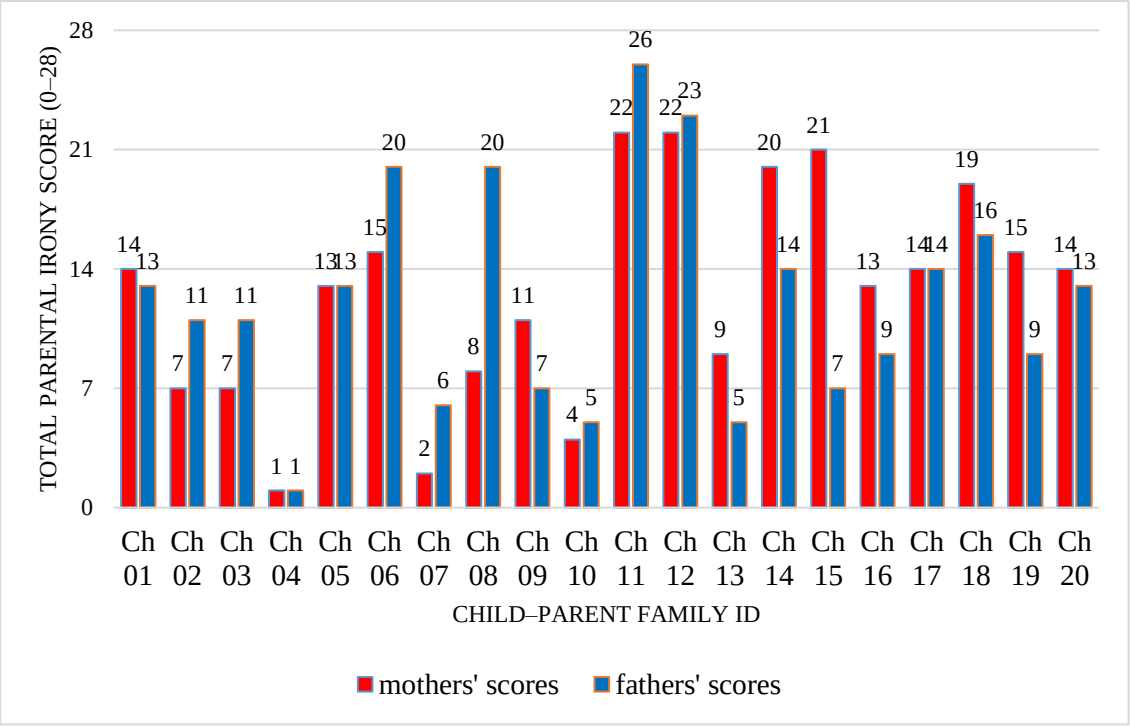
in the non-ironic tasks were considerably higher and exhibited less variability compared to the ironic stories. The markedly larger interquartile range for the ironic stories indicates substantial individual differences in irony comprehension within the sample. By comparison, the distribution of non-ironic scores was more compact, reflecting a ceiling effect typical for simpler linguistic tasks. These results suggest that understanding ironic utterances imposes a significantly greater cognitive and pragmatic challenge for preschool children than understanding literal utterances.

Figure 3. Distribution of comprehension scores across ironic and non-ironic stories



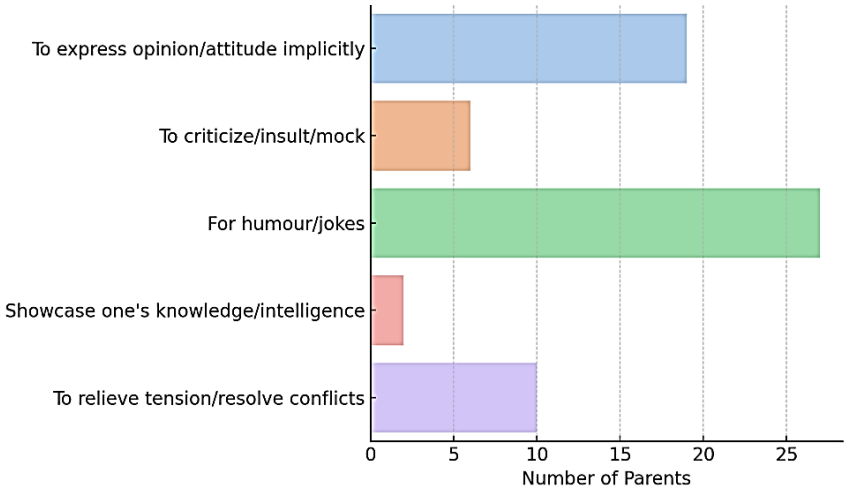
The parents' responses regarding their own irony use and attitudes were summed into a total score, with a maximum of 28 points. Figure 4 displays these results. A higher score indicated more frequent use of irony and a more positive attitude toward it. There was substantial individual variability among parents, both within and across families. Mothers' scores ranged from 1 to 22, and fathers' scores from 1 to 26, reflecting diverse patterns of irony use. This variation may be related to differences in the level of irony exposure children receive at home.

Figure 4. Results of parents' questionnaires
Note. Ch01–Ch20 refer to individual child–parent family units ordered by child age.



Parents were also asked about their preferred functions of irony use. Figure 5 shows that the majority of respondents reported using irony primarily for humor and jokes, followed by expressing opinions or attitudes implicitly. Less frequent motivations included relieving tension or resolving conflicts, criticising or mocking, and showcasing one's knowledge or intelligence.

Figure 5. Reported reasons for parental irony use



The ironic utterances used in the test served the same functions most frequently reported by parents, mainly humor and expressing opinions. The observed similarity may have contributed to the children's high scores on the irony comprehension test. Exposure to these types of ironic utterances at home may have helped them recognise and understand similar utterances during the task.

In the final section of the parental questionnaire, respondents were asked to estimate their children's level of irony comprehension. Mothers' estimations tended to align more closely with the children's test results than fathers', possibly due to the greater amount of time mothers typically spend interacting with their children. Correlational analysis revealed a statistically significant moderate positive relationship (Pearson's $r = .58$, $p < .01$) between the mothers' irony scores and their children's irony comprehension scores. No such relationship was observed for the fathers. This moderate, statistically significant association suggests that mothers' use of irony may co-vary with variability in children's emerging comprehension, although the pattern should be interpreted with caution given the pilot nature and small sample size. Still, this pattern echoes the findings of Banasik-Jemielniak et al. (2020), suggesting that the frequency and function of irony use in the home, particularly by mothers, may be aligned with variability in children's irony comprehension. This association may reflect shared interactional patterns rather than a unidirectional effect.

4.4 Discussion

The following interpretation focuses on observed variability and self-reported practices and does not support causal inference. The results presented above indicate that preschool children show varying levels of irony comprehension. This variation appears to co-vary with aspects of the family environment as reported by parents. Specifically, mothers' reported use of irony showed a moderate positive correlation with children's irony comprehension scores. This finding is consistent with sociocultural approaches that emphasise everyday interaction as a relevant context for pragmatic development, without implying causal direction.

The finding that irony used for humor and implicit evaluation was most common among parents is particularly relevant. These are the same functions represented in the children's comprehension test. This overlap is descriptive and suggests alignment between the types of ironic utterances reported by parents and those assessed in the task. These results highlight the need for future research to examine other aspects of family interaction and children's pragmatic development that may contribute to individual differences in irony comprehension.

5. Expansion of research on parental irony use

Building on the previous study, the second study extends the investigation through an expanded parental questionnaire. The questionnaire was designed to collect more detailed information about the frequency, contexts, and functions of irony use in Hungarian family settings. This second study adopts a descriptive approach to parental self-reports, focusing on reported patterns rather than inferential claims.

5.1 Methodology

The form was distributed via SurveyMonkey to 55 Hungarian parents of preschool children (33 females and 22 males). Their ages ranged from 27 to 56. These parents were not part of the earlier experiment, and their children's irony comprehension was not tested directly in this phase. The method focuses on parents' typical language use. While self-reports may not mirror actual behaviour precisely, they yield informative data on how parents perceive their use of irony in everyday interactions.

The questionnaire was designed to quantify the types of irony used by parents of preschool-aged children and to investigate any difference in mothers' vs fathers' use of ironic language. It consisted of 23 items, including both closed and open-ended questions. In this questionnaire, irony was presented through short, everyday conversational scenarios created specifically for the study and reflecting social, moral, and personal norm violations. By embedding irony in familiar, context-rich examples rather than using an abstract definition, the instrument minimised interpretive variability and guided all participants toward the same type of verbal irony relevant to the research aims. The questionnaire also asked about demographic information, children's age, and how much time each child spent with each parent. The main body included 9 scenarios (Q5–Q13) describing common family interactions where ironic utterances might be used, for example, playful criticisms (see (4) below) or exaggerated comments on children's behaviour.

The questions also addressed different types of irony use, including violations of social, moral, and personal norms, to investigate how parents employ irony across varying situations. Additionally, the questionnaire inquired about parents' general attitudes toward irony, their experience with their children when irony was employed (see (5) below), the typical reactions of their children to ironic utterances, and whether other family members also used irony (see (6) below). For the responses, similarly to the previous questionnaire, a 5-point Likert scale was employed. For example, for the first question, the available responses ranged from 'A. Not at all typical of me.' to 'E. Definitely typical of me.' with intermediate options reflecting varying degrees of frequency. Parents completed the questionnaire independently in writing, and all response options for each item,

including the intermediate options, were provided in full written form directly after each question.

(4) ‘Imagine the following situation: your child is playing with building blocks. It is lunchtime. You start to put the toys away, and he takes out a dinosaur and starts playing with it. Would you say to him, "You’re a great help!"’

(5) ‘Have you ever had to explain an ironic utterance? ‘

(6) ‘Do other family members use irony?’

The complete questionnaire used in this study is provided in Appendix 3. Responses to the open-ended questions (e.g., Q16 and Q19) were examined qualitatively. Each answer was classified according to its main motivation or function (e.g., humour, criticism, tension relief, evaluation, reflection). The aim was to identify how irony is used and perceived in everyday Hungarian family interactions. The questionnaire responses could help reveal how parents model irony to their children and how this can relate to children’s language development.

5.2 Results

As in the previous study, scores were calculated using a 5-point Likert scale (0–4). Higher values indicate more frequent irony use. Based on individual averages across the nine irony-related scenarios (Q5–Q13), mothers reported slightly higher irony use than fathers, with a mean of 1.92 compared to 1.79. This difference was not statistically significant, $t(53) = 0.65$, $p = .519$. These results suggest that both mothers and fathers frequently use irony in interactions with their children, with no strong gender-based difference in overall frequency.

The analysis examined whether irony use varied across different types of norm violations and whether gender played a role. Mean scores were calculated for scenarios involving social (Q5–Q7), moral (Q8–Q10), and personal norms (Q11–Q13). Parents used irony most frequently in response to social norm violations (M = 2.20), followed by moral (M = 1.85) and personal norms (M = 1.55). A repeated-measures ANOVA revealed a significant main effect of norm type, $F(2, 108) = 13.54$, $p < .001$. Pairwise comparisons confirmed that all differences were statistically significant (see Table 2). However, a mixed-design ANOVA with gender as a between-subjects factor found no significant gender effect and no interaction (all $p > .45$), indicating that the pattern of irony use across norm types was consistent between mothers and fathers.

Table 2. Pairwise comparisons across norm types

Pairwise Comparisons	***t*(54)**	***p*-value**
Social vs Moral Norms	2.67	.010
Social vs Personal Norms	4.58	< .001
Moral vs Personal Norms	3.05	.004

To assess whether parents differentiated between individual scenarios within each norm type, additional within-subject analyses were conducted. A Friedman test was applied to the three social norm items (Q5–Q7), revealing no significant variation in irony use across scenarios for either mothers ($\chi^2(2) = 1.44$, $p = .487$) or fathers ($\chi^2(2) = 1.73$, $p = .420$). These findings suggest that irony use remained consistent within the domain of social norm violations, indicating a stable parental response pattern across comparable situations.

Parents were also asked about the primary functions of their irony use (Q16). Consistent with earlier findings, most reported using irony primarily for humor or joking. Other common motivations included relieving tension, avoiding conflict, and indirectly expressing opinions. A few parents noted less typical functions: criticism or encouraging reflective thinking. These responses reinforce the view that irony is typically used in playful or strategic ways within the family context.

Two questions (Q17 and Q18) explored parents' perceptions of their children's irony comprehension and typical reactions to ironic utterances. When asked whether they believed their child understood irony, the most common response from both groups was "sometimes yes, sometimes no," indicating that many parents see irony comprehension as context-dependent. A few parents believed their child did not, or only rarely, understand irony. Overall, responses reflect a cautious but open view of emerging irony comprehension in young children.

Regarding typical child reactions, most parents (25 out of 55) reported that their child smiled or laughed in response to ironic remarks, suggesting some level of recognition, enjoyment, or affective engagement. A smaller number (7 out of 55) reported that their child failed to react or appeared unaware, while a few (5 out of 55) noted misinterpretation or visible confusion. These results show that preschoolers' irony comprehension is still emerging and often appears through emotional or social reactions rather than explicit answers.

Responses to Q19, Q21, and Q23 were examined descriptively. Given the exploratory nature of the study and the distribution of responses across categories, no inferential statistical tests were applied to these items. One question (Q19) asked whether parents had ever explained an ironic utterance to their child. More mothers (18 out of 33) than fathers (8 out of 22) answered with yes. This pattern is in line with previous findings in the questionnaire, where mothers reported higher irony use, more positive attitudes toward irony, and greater involvement in daily interactions. Open-ended responses support this trend. Several mothers provided examples of explaining irony, while only two fathers gave brief examples. These results suggest that mothers are not only more frequent users of irony, but also more actively involved in supporting children's irony comprehension.

Two questions (Q21 and Q22) addressed how parents adjust their irony use across ages and when they began using irony with their child. When asked whether they use irony similarly with both younger and older children, more

mothers (17 out of 29) than fathers (8 out of 18) said yes, suggesting greater consistency among mothers. When asked to specify the age at which they began using irony, the most frequent responses from both groups centered around ages 3 to 5. These answers align with developmental expectations, as children typically begin to engage more fully with nonliteral language around this age, prompting parents to adjust their communication strategies.

The final question (Q23) asked whether parents had ever regretted using irony with their child. While most parents said no (37 out of 55), a notable minority reported experiencing regret: 12 mothers and 6 fathers. Mothers were also more likely to elaborate, with nine providing written explanations compared to two fathers. These comments often referred to situations in which irony caused confusion, was misinterpreted, or led to emotional discomfort for the child. While irony was generally viewed as a playful and useful tool, some parents remained sensitive to its potential for misunderstanding, particularly in early childhood.

5.3 Discussion

The results from the expanded questionnaire align with the conclusions drawn from the previous experiment. They also provide descriptive insight into parental reports of the contexts in which variability in children's irony comprehension is observed. Although group means did not differ significantly, mothers more frequently described using irony across age groups and provided more examples of explaining ironic utterances to their children. These qualitative trends may reflect a higher degree of parental engagement rather than differences in irony use frequency. This finding is consistent with previous observations from the smaller-scale study and with sociolinguistic accounts that emphasise mothers' central role in early language socialization, as they are often the primary figures in children's communicative environments (cf. Ochs & Schieffelin, 1984). While fathers were also active users of irony, their self-reported use appeared more situationally limited and involved fewer reflective comments or explanations.

The analysis also showed that the most common functions of irony reported by parents (humor, indirect evaluation, and managing tension) mirrored the types of ironic utterances used in the children's comprehension tasks. While the two groups of participants were not the same, this thematic overlap may be descriptively aligned with higher performance on familiar forms of irony. Previous studies also show that children understand irony more easily when it follows familiar patterns (e.g., Pexman et al., 2009; Recchia et al., 2010). From a language socialization perspective (Ochs & Schieffelin, 1984; 2011), regular exposure to these forms in everyday talk may contribute to children's sensitivity.

Parents consistently reported using irony most frequently in response to social norm violations, followed by moral and personal norms. While irony use varied by norm type, no significant gender differences were observed, indicating similar pragmatic strategies among mothers and fathers.

The findings are consistent with the view that irony is a socially embedded phenomenon encountered in interaction, including within family contexts, and situated within broader cultural expectations. Future research could explore these dynamics further by examining longitudinal patterns of parent-child irony use or incorporating direct observational data into the study of children's pragmatic development.

6. Concluding summary

This paper presented the findings of two interconnected studies examining the relationship between parental irony use and preschoolers' irony comprehension in a Hungarian context. The first study revealed a moderate positive correlation between mothers' use of irony and children's levels of irony comprehension, suggesting that reported exposure to ironic utterances in everyday interactions may be associated with variability in pragmatic sensitivity. These findings are consistent with observations by Banasik-Jemielniak et al. (2020) in a Polish context and align with previous Hungarian data reported in Szabóné Habók (2024). While the present study did not investigate national caregiving structures directly, the results point to the potential relevance of maternal input for children's exposure to nonliteral language.

The second, larger-scale study extended this investigation by surveying a broader sample of Hungarian parents about their irony use and attitudes. There was no statistically significant gender difference found in the overall frequency of irony use, but qualitative responses indicated that mothers reported using irony in a wider range of contexts. They adjusted their language based on the child's age more often and explained ironic utterances more frequently. These patterns may reflect differences in parental engagement.

Nonetheless, several limitations must be acknowledged. Both studies relied on modest sample sizes without socio-demographic information, which constrain generalisability. The pilot design was sufficient to explore initial patterns of variability, but it did not allow for controlling potential confounding factors related to socio-economic background. Accordingly, the present findings are interpreted descriptively and should not be taken to indicate gender-specific causal mechanisms. Also, the parental data were based entirely on self-reports, which may be affected by bias or social desirability (Bingham et al., 2017). Moreover, the present study assessed only two components of irony comprehension, namely speaker's belief and motivation, to ensure methodological comparability and age-appropriateness. Other approaches, including intention-based questions or object-choice tasks, could be incorporated in future work to provide a broader assessment.

Overall, the results emphasise the socially embedded nature of irony and the role of parental input as part of the social contexts in which pragmatic skills emerge. In line with Language Socialization Theory (Ochs & Schieffelin, 1984;

2011), irony appears to be socially embedded in culturally situated routines and informal communicative practices, rather than being explicitly taught. Data from Hungarian families extend the comparative understanding of irony comprehension and place early pragmatic development in a broader linguistic and cultural context.

Future studies with larger samples could also examine how irony is introduced and adapted over time in family contexts, and how additional factors, for example, parental sensitivity, sibling influence or cultural attitudes, affect the development of irony comprehension. Longitudinal and observational designs would be especially valuable in capturing the dynamic nature of parent and child interaction and its role in shaping pragmatic understanding.

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Appendix 1

The following is the English translation of the original Hungarian children's irony comprehension task used in the first part of the study.

Children's Test: THEORY OF MIND PART

'This is Peti. This is Aaron. Peti puts the little red car in a toy box. Peti goes away.
Áron puts the little red car in the drawer.
Questions: Where will Peti look for the little red car? /Where did Peti put the little red car at the beginning? /Where is the little red car now?'

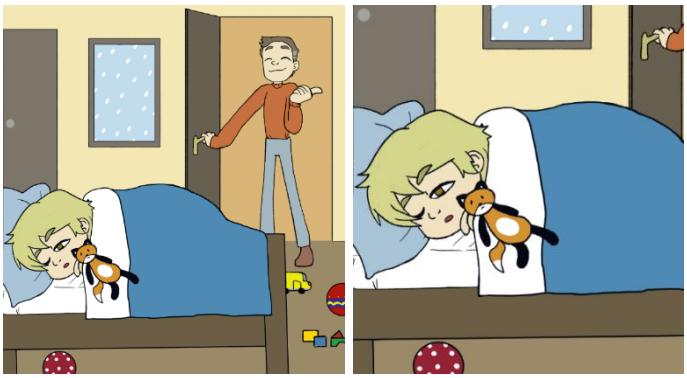
IRONY PART

Story 1

'Matthew is woken up by his dad in the morning. He comes into the room: "Good morning, Matthew!" Matthew does not move. His father says: *"Get out of bed, sleepyhead!"*.'

Q1. Does Matthew's dad think Matthew is really a sleepyhead?

Q2. Why? / What makes you think so?

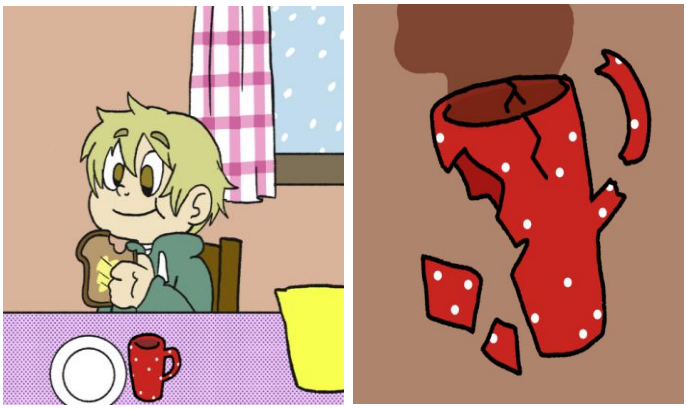


Story 2

'Matthew gets dressed. He sits down to breakfast. He drops his mug and it breaks. Dad says to Matthew: *"Good job!"*.'

Q1. Does Matthew's dad think it was really a good job?

Q2. Why? / What makes you think so?

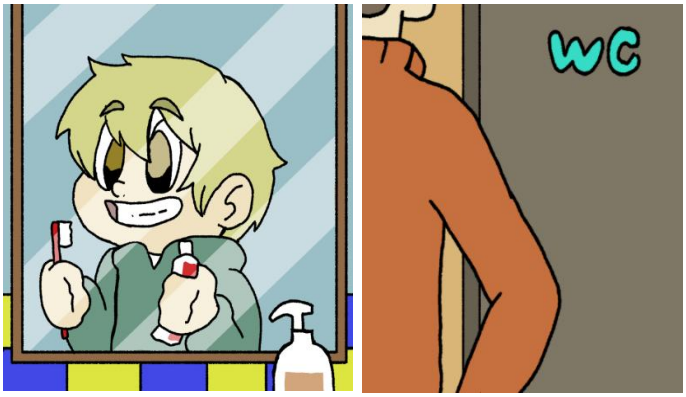


Story 3

‘Matthew finishes breakfast. He goes to brush his teeth. He is in no hurry and spends a long time in the bathroom. They have to leave. Dad says: *“You’re so slow!”*.’

Q1. Does Matthew’s dad think Matthew is really slow?

Q2. Why? / What makes you think so?



Story 4

‘It is snowing outside. Matthew puts on his warm coat, hat, and scarf. Dad cannot find his gloves. Matthew opens a drawer and takes the gloves out. Dad says: *“Did you find the gloves? How clever you are, Matthew!”*.’

Q1. Does Matthew’s dad think Matthew is really clever?

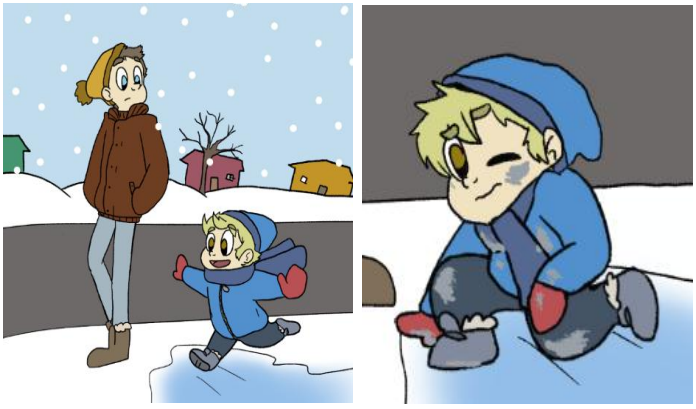
Q2. Why? / What makes you think so?

Story 5

'Matthew and his dad are walking to kindergarten. It is snowing and the pavement is slippery. Matthew is sliding, but he falls and his pants get muddy and wet. His dad says: *"You have become so clean!".*'

Q1. Does Matthew's dad think Matthew is really clean?

Q2. Why? / What makes you think so?

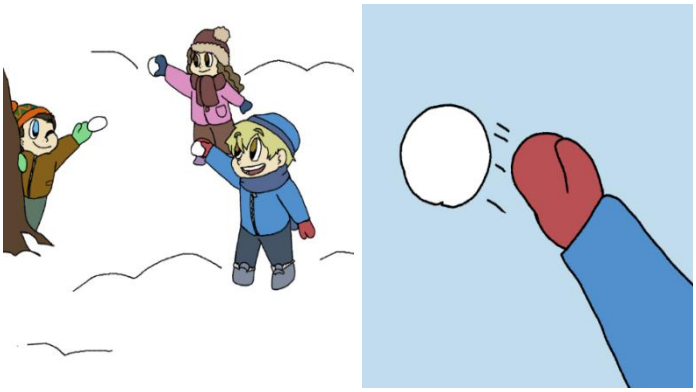


Story 6

'The children are playing snowball in the yard. Matthew's snowball hits the kindergarten teacher's head. The kindergarten teacher says: *"How kind of you, Matthew!".*'

Q1. Does the kindergarten teacher think it was kind of Matthew?

Q2. Why? / What makes you think so?

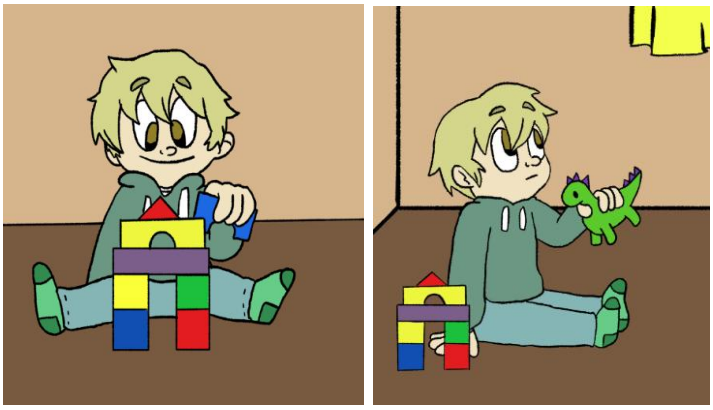


Story 7

‘Matthew is playing with building blocks after his nap. It is time to finish the game. The other children and the kindergarten teacher start to put the blocks away. Then Matthew takes out a dinosaur and starts playing with it. *“You’re a great help!”* says the kindergarten teacher.’

Q1. Does the kindergarten teacher think Matthew is a great help?

Q2. Why? / What makes you think so?



Story 8

‘After kindergarten, Matthew and his mum are walking home from kindergarten. The sun is shining and the weather is nice. Matthew and his mummy like to walk on days like this. Matthew is happy and jumps around. *"I'm glad you're in such a good mood,"* says Matthew’s mum.’

Question 1: Does Matthew's mum think Matthew is really in a good mood?

Question 2: Why? / What makes you think so?

Appendix 2

The following is the English translation of the original Hungarian parental questionnaire used in the first part of the study.

Q1. 'Your child drops his mug, and it breaks. Would you make a comment like this: *"You did a good job!"*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. It is sometimes typical of me and sometimes not.
D. Mostly typical of me.
E. It is definitely typical of me.

Q2. 'It is snowing, the pavement is slippery. Your child is sliding, but unfortunately he falls, so his pants get muddy and wet. Would you make a comment like this: *"You have become so clean!"*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. It is sometimes typical of me and sometimes not.
D. Mostly typical of me.
E. It is definitely typical of me.

Q3. 'You and your child are snowballing in the yard. Your child's snowball hits you in the head. Would you make a comment like this to him: *"How kind of you!"*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. It is sometimes typical of me and sometimes not.
D. Mostly typical of me.
E. It is definitely typical of me.

Q4. 'Your child is playing with building blocks before bedtime. You start putting the blocks away. Then your child takes out a dinosaur and starts playing with it. Would you make a comment like this to him: *"You are a great help!"*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. It is sometimes typical of me and sometimes not.
D. Mostly typical of me.
E. It is definitely typical of me.

Q5. ‘Do you like to be ironic at home?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. It is sometimes typical of me and sometimes not.
D. Mostly typical of me.
E. It is definitely typical of me.

Q6. ‘How often do you say something ironic at home?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. It is sometimes typical of me and sometimes not.
D. Mostly typical of me.
E. It is definitely typical of me.

Q7. ‘What do you use irony most of the time for?’
A. to implicitly express an opinion/opposition
B. to criticise / insult / mock
C. to humour/joke
D. to show off your knowledge/intelligence
E. to relieve tension, avoid conflict
F. Other:

Q8. ‘Do you think irony is a good thing?’
A. It is not at all.
B. Mostly not.
C. Sometimes yes, sometimes no.
D. Mostly it is.
E. It absolutely is.

Q9. ‘Do you think your child (participating in the experiment) understands irony?’
A. Absolutely not.
B. Mostly not.
C. Sometimes yes, sometimes no.
D. Mostly yes.
E. Absolutely yes.

Q10. ‘Do you think your child (participating in the experiment) knows what irony can be used for?’
A. Absolutely not.
B. Mostly not.
C. Sometimes yes, sometimes no.
D. Mostly yes.
E. Absolutely yes.

Q11. ‘How often does your child (participating in the experiment) use irony?’
A. Not at all.
B. Mostly not.
C. Sometimes yes, sometimes not.
D. Mostly typical.
E. Absolutely typical.

Appendix 3

The following is the English translation of the original Hungarian parental questionnaire used in the second part of the study.

Q1. 'What is your gender?'

Q2. 'How old are you?'

Q3. 'How old is your child/ are your children? (years + months)'

Q4. 'Which parent does your child/children currently spend more time with? In what proportion? (e.g., father 50%, mother 50%)'

Q5. 'Imagine the following situation: Your child is playing in their room. You enter and say: *"It is very messy in here! Tidy up your room!"* and they reply: *"Okay, I'll tidy up soon."*, but continue playing with their cars. When you return, you see the mess is unchanged. Would you say: *"Wow, you've really tidied up nicely!"*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q6. 'Imagine the following situation: Your child's hands are dirty from playing outside. You tell them that lunch is ready and they should wash their hands. They don't wash their hands and sit down to eat. Would you say: *"You really washed your hands well, didn't you?"*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q7. 'Imagine the following situation: Your child eats breakfast slowly and then goes to brush their teeth. They take their time in the bathroom even though you need to leave. Would you say: *"You'd better hurry up, it'll be evening soon."*?'
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q8. ‘Imagine the following situation: Your child and a friend are playing in the snow. You tell your child: *“You know snowball fights can be dangerous. Be careful not to hit anyone with a snowball.”* They then throw a snowball and hit their friend. Would you say: *“Well done! You really didn’t aim at a person with that snowball.”*?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q9. ‘Imagine the following situation: Your child is building with blocks. It is lunchtime, and you start putting the toys away. They take out a dinosaur and start playing with it. Would you say: *“You’re such a great help!”*?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q10. ‘Imagine the following situation: Your child has many toys. They see a new toy on TV and start whining for you to buy it. Would you say: *“Poor thing! You hardly have any toys, do you?”*?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q11. ‘Imagine the following situation: It is bedtime. You tell your child to choose a short storybook for you to read. They bring you the longest storybook. Would you say: *“Great choice, this really is a short storybook.”*?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q12. ‘Imagine the following situation: Your family is going on a trip. Your child helps make sandwiches in the morning. On the way, you get the sandwich they made. After eating it with enjoyment, would you say: *“You really messed this up! It is far too tasty!”*?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q13. ‘Imagine the following situation: You are packing a sandwich for your child to take to kindergarten. You tell them to choose a healthy snack to go with it. They bring a lollipop. Would you say: *“Well, that’s certainly a healthy snack!”*?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q14. ‘Do you think irony is a good thing?’
A. Not at all.
B. Mostly not.
C. Sometimes yes, sometimes no.
D. Mostly yes.
E. Definitely yes.

Q15. ‘Do you like using irony at home?’
A. Not at all typical of me.
B. Mostly not typical of me.
C. Sometimes typical of me, sometimes not.
D. Mostly typical of me.
E. Definitely typical of me.

Q16. ‘What do you mostly use irony for? (Mark up to two options.)’
A. To implicitly express an opinion or attitude.
B. To criticise, insult, or mock.
C. For humour or joking.
D. To show off knowledge or intelligence.
E. To relieve tension or avoid conflict.
F. Other: _____.

Q17. ‘Do you think your child understands irony?’
A. Not at all.
B. Mostly not.
C. Sometimes yes, sometimes no.
D. Mostly yes.
E. Definitely yes.

Q18. ‘What is your child’s typical reaction when hearing an ironic comment?’
A. No reaction, or they don’t understand what happened.
B. They become confused or misunderstand the comment.
C. They smile or laugh, showing they understand the irony.
D. They respond or return the ironic comment.
E. They ask whether the speaker really means what was said.

Q19. ‘Have you ever had to explain an ironic remark?’
Yes / No.
If yes, what was it, and how old was your child?

Q20. ‘Do other family members use irony?’
Yes / No.
If yes, what was it, and to what age child?

Q21. ‘If you have more than one child, do you use irony in the same way with younger and older children?’
Yes / No.

Q22. ‘From what age of the child have you used irony?’

Q23. ‘Have you ever regretted using irony?’
Yes / No.
If yes, what was the situation?