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Article

Social Understanding and Friendships in Children with Attention Deficit/Hyperactivity Disorder or Dyslexia

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Abstract: Social understanding relies upon children's experience of the world and the communicative interaction with others. Opportunities to engage in cooperative social interaction, such as friendships, can foster the development of social understanding. Children with Attention Deficit/Hyperactivity Disorder (ADHD) and dyslexia often have friendships of poorer quality. The present study examined relationships and differences in social understanding and friendship quality in children with ADHD or dyslexia, in comparison to neurotypically developing children (NTD). Participants were 192 primary-school students ($M_{age}=9.77$, $sd=1.21$) from Attica, Greece. Social understanding was measured with second-order and advanced theory of mind (ToM) tasks, and the Bryant's Index of Empathy for Children and Adolescents, while friendships were examined with the Friendship Quality Questionnaire. Children with ADHD scored significantly lower across all positive characteristics of friendship quality, empathy and advanced ToM than those with dyslexia, who in turn, scored significantly lower than NTD children. Moreover, children with ADHD performed significantly worse in the second-order ToM tasks comparing to children with NTD or dyslexia, while NTD children scored significantly lower in the friendship conflict betrayal subscale compared to both ADHD and dyslexia groups. Multiple regression analyses controlling for learning disability status, gender, and age showed that ToM and perceived empathy predict friendship quality characteristics in all groups of children. Our findings contribute to a better understanding of children's friendship relationships and give insight to parents and professionals involved in children's education, provision, and mental health care.

Keywords: theory of mind; empathy; friendship quality; ADHD; dyslexia

1. Introduction

Social understanding is a broad concept with social and emotional dimensions, which among others encompasses theory of mind (ToM) and empathy. ToM is the ability to attribute mental states (i.e., beliefs, emotions, desires, etc.) to oneself and to others, and to shape one's behaviour accordingly [1]. Longitudinal and cross-sectional studies demonstrate that success in ToM tasks at a young age is related to individual's later socio-emotional competence [2–4], to school performance and adjustment [5], and to popularity and interpersonal relationships [6, 7]. More specifically, research evidence indicates that a well-developed ToM among close friends facilitates the development of intimacy, cooperation, help, and mutual assistance [8–10]. Respectively, it has been found that preschool children who had at least one friend showed higher performance on ToM tasks, as compared to those peers who did not have any friends, regardless of their language competence and social acceptance [11]. Finally, it has been reported that conflict in the safe context of a very close friendship relationship can encourage both friends to practice skills important for their ToM and to consider different points of view [12].

Empathy is a social competence [13] which plays an essential role in social interactions, in socially acceptable behaviours, and in one's well-being and adjustment [14]. Empathy helps to understand another person's point of view and to experience emotional reactions related to the other

person's emotional state [15]. Research suggests that empathy contributes to the development and the quality of interpersonal relationships throughout life [16]. Specifically, children who have developed empathy can better control their emotional reactions and exhibit fewer aggressive or antisocial behaviours, are altruistic, more optimistic, and demonstrate positive attitudes towards their peers who choose to be their friends [17]. Hence, children with greater empathy form easier very close friendships, characterised by intimacy, tenderness, and support [18, 19], while conflicts between friends are rarer and resolved by discussion or mutual compromises [13].

Previous studies have shown that in preschool and middle school children and adolescents with neurotypical development (NTD) both ToM and empathy are related to their social behaviour, social position, and interpersonal relationships [20, 21]. Thus, positive associations have been reported among ToM, empathy, peer acceptance, prosocial behaviour, and conflict resolution between friends [22–24]. From middle childhood, success on empathy and advanced ToM tasks has been positively associated with social adjustment, sociability, popularity, and friendships characterised by cooperation, support, and mutual help [3, 9, 21]. On the contrary, low performance in empathy and ToM tasks has been linked to moral disengagement, social skills deficits, poor friendship qualitative characteristics, and aggressive or even bullying behaviours in children and adolescents [25–27]. However, certain findings positively correlate ToM with aggression, suggesting that children with NTD who have a well-developed ToM can easily adopt aggressive or bullying behaviours in their interpersonal relationships, involving mainly social exclusion, rumour-spreading, gossiping, and manipulation of friends [25, 28].

Friendships are very significant interpersonal relationships, observed across cultures and times, gender and age, and linked with human nature's need for affection and support [29, 30]. It has been postulated that the existence of friends in children's lives can predict their psycho-emotional adjustment, school readiness and academic performance, as well as their quality of life [31]. The presence of friendships in one's life is equally important to the identity of one's friends and the qualitative characteristics of their friendship [32, 33]. Several studies suggest that high-quality best (i.e., very close) friendships, with more positive and less negative qualitative features, significantly influence both friends' self-esteem, socio-emotional adjustment, and well-being [34, 35]. Conversely, low-quality best friendships may lead one or both friends to feelings of loneliness, anxiety, and depression [36], and to difficulties in psycho-social adaptation [37], expressed by aggressive, antisocial or even delinquent behaviours [38].

1.1. Theory of Mind, Empathy, and Friendships of Children with ADHD or Dyslexia

Children with ADHD face great difficulties in ToM, mainly in understanding the mental states of both themselves and others [39, 40]. Moreover, several studies report severe difficulties [41, 42] or complete lack of empathy [43, 44] in children and adolescents with ADHD. The aforementioned difficulties have been linked with problems related to interpersonal relationships and to social acceptance [45], and thus, ADHD has often been characterised as a "social disorder" [46]. Therefore, it could be suggested that for children with ADHD problems in understanding others' perspectives, thoughts, intentions, emotions, and beliefs, and in having low tolerance levels, result in behaviours that may lead them to rejection by their peers and to few friendships [50–52], in which conflict resolution is harder to be achieved, and thus, their friendships dissolve easily [39]. However, other research evidence suggests that children with ADHD have increased empathy, especially for positive emotions [47, 48]. There are also studies underpinning the need to further investigate the relationship among social understanding (ToM and empathy) and ADHD children's social skills and friendships [49].

In addition, children with ADHD encounter social difficulties [53], due to either their externalising problems, such as disruptive, defiant or aggressive behaviours, or to their internalising problems, such as anxiety, mood disorders or depression [54]. These behaviours lead children with ADHD to frequently be neglected or rejected by their peers in various social contexts [55] and thus, to have few friends [56], less stable friendships [57, 58], often characterised by lower qualitative

features [51, 59, 60, 61]. Thus, children with ADHD of both genders often report that their friendships are distinguished by several negative features, such as conflict, rivalry, and aggression [61].

Findings regarding children with dyslexia and their performance in ToM tasks are scarce and contradictory. Some studies indicate that children with dyslexia do not differ significantly in their performance in ToM tasks as compared to their counterparts with NTD [62], while others consider that children with dyslexia, and especially those with severe reading difficulties, show significantly low performance in ToM tasks [63, 64]. In the advanced ToM tasks, though, where the understanding of metaphors, humour, irony, lies, etc., are examined, children with dyslexia were found to have severe difficulties [65]. Moreover, the very limited research on empathy in children with dyslexia, positively associates phonological awareness and reading ability with empathy [63] and agrees that these children have greater difficulties comparing to their peers with NTD [66, 67]. These difficulties in empathy result in hindering children with dyslexia to acknowledge the feelings of their peers or to attain a realistic view of reality, leading them to problems in their interpersonal relationships [63, 65].

Children with dyslexia state that they have very few best friends and great difficulties in forming and maintaining close friendships with their peers at school [68], where because of their learning difficulties, they feel embarrassed, ashamed, insecure, and inferior [69, 70]. Furthermore, children with dyslexia also reveal that their friendships have poor qualitative characteristics, lacking support and intimacy [69]. Quite often they tend to befriend peers with similar difficulties, as in these relationships they feel more accepted and freer to discuss their problems [71]. However, research focusing on how ToM and/or empathy may affect the friendships of children with dyslexia is, to our knowledge, non-existent. Finally, there are no published studies comparing social understanding in children with ADHD, dyslexia, and NTD, nor exploring the relationships between aspects of social understanding and friendship quality in these three groups of children.

1.2. Purpose of the Study

Even though friendships are important bonds across the lifespan and instrumental for individuals' socio-emotional adjustment, mental health, and well-being, the studies that have examined possible associations among friendships, ToM, and empathy in children with NTD are very limited [12]. In addition, research evidence linking ToM and empathy with the friendship quality of children with ADHD or dyslexia is scarce [51]. Thus, the present study will try to enrich and advance scientific knowledge regarding the relationship among ToM, empathy, and the perceptions of friendship quality in children with ADHD, dyslexia, and NTD, by answering the following research questions:

1. Are there any differences in the performance of children with ADHD or dyslexia in empathy, second order or advanced ToM tasks comparing to their peers with NTD?
2. To what extent ToM and empathy are associated with the qualitative characteristics of the best friendships of children with ADHD, dyslexia or NTD?
3. Can social understanding and specifically ToM and empathy predict the positive and negative qualitative aspects of the best friendships of children with ADHD, dyslexia or NTD?

2. Materials and Methods

2.1. Participants

One hundred and ninety-two children with either ADHD, dyslexia or NTD (64 in each group) participated in the present study. All participants who were between 8 and 12 years of age ($M_{age}=9.77$ years, $sd=1.21$), attended randomly selected inclusive mainstream primary schools in Attica, Greece, and had their parents' consent to take part in the study. No significant differences were observed among the three groups regarding children's gender and age, as shown in Table 1. As all the participating children with ADHD and dyslexia had an official diagnosis (confirming either ADHD or dyslexia, with no comorbidity), by public Educational and Counselling Centres, supervised by the Greek Ministry of Education, Religion, and Sports, no diagnostic procedures were performed in this

study. Children with NTD were selected, based on their teachers' quarterly reports on their academic achievement.

Table 1. Demographics by Group.

		NTD (n=64)		Dyslexia (n=64)		ADHD (n=64)		Differences	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	χ^2	<i>p</i>
Gender	Boy	31	48.4	33	51.6	32	50	0.13	0.94
	Girl	33	51.6	31	48.4	32	50		
Grade level	3 rd	16	25	16	25	16	25	0.21	0.99
	4 th	17	26.6	15	23.4	16	25		
	5 th	16	25	17	26.6	16	25		
	6 th	15	23.4	16	25	16	25		
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	$F_{(2,104)}$	<i>p</i>
Age (in years)		9.67	1.15	9.82	1.15	9.81	1.16	0.29	0.75

Note: NTD = children with Neurotypical Development, Dyslexia = children with dyslexia, ADHD = children with Attention Deficit/Hyperactivity Disorder.

2.2. Measures

Demographics: Participants answered a short demographic questionnaire with information regarding their gender, date of birth, and school year.

ToM – Second-order false belief tasks: To test second-order reasoning, probing children's ability to handle the beliefs of one person about the beliefs of another, stories such as the ice-cream van were used [72]. Three stories presented in an A4 folder, were read to all participants to avoid misunderstandings, due to possible reading difficulties. Each story had 4 pictures depicting its main points. Participants could view the pictures and the script while the researcher read the story. The names of the main characters in all stories were translated or altered to common Greek names, so that the participants could relate with them. One of the stories, for example, is about John and Mary who are in the park, as well as an ice-cream van. Mary wants to buy an ice-cream, but she does not have any money with her. The man in the ice-cream van announces that he is going to be in the park for the afternoon, so Mary goes back home to get some money. After Mary leaves and John is still at the park, the man in the ice-cream van tells John that as there are not many people in the park, he will take the van to the church for the rest of the day. However, when at home, Mary sees the ice-cream van passing by and finds out that it will be at the church for the rest of the day. As John does not know that Mary knows that the van will be at the church, he believes that Mary believes that the ice-cream van is still at the park. Therefore, we think that John will think that Mary thinks that the ice-cream van is still at the church. This example of second-order ToM or second-order belief attribution, because we have to access two mental states (John's mental state of Mary's mental state) to answer the question. Certain types of questions followed each story: a reality question (e.g., 'Where did Mary go to buy an ice cream?') and a memory question (e.g., 'Where was the ice cream van in the morning?'), to verify that the participants understood the story. An experimental question (e.g., 'Where does John think Mary went?') for the identification of the second order belief was scored 0 or 1 based on its correctness. If the participant could not answer it, a forced question) followed, including two options (e.g., 'John believes that Mary went to the church or to the park?'). Finally, there was a documentation question to assess the understanding of the second order of belief, as it asked to justify the answer (e.g., 'Why does John think Mary is there?'). The documentation question was scored 0, 1, or 2, depending on whether there was an incorrect documentation (0 points) or a correct one, using natural (e.g., 'To buy an ice-cream') (1 point) or mental (e.g., 'Because John didn't know that Mary had talked to the man in the ice cream van and knew that he went to the church') situations (2 points). Thus, the maximum score for each story was 3.

Advanced ToM tasks: The Strange Stories [73] were used to examine participants' advanced mentalising ability. To overcome a possible ceiling effect in second-order false belief tasks which are

often fully acquired by the age of 8 or 9 years in children with NTD [72], and as the participants' age was between 8 and 12 years, twelve advanced ToM tasks requiring the interpretation of non-literal statements in the context of social narratives we administered [74]. The Strange stories were presented as short vignettes and participants were asked why a character says something that is not literally true. Correct answers require attribution of certain mental states, such as pretense, joke, lie, white lie, misunderstanding, irony, forgetting, double bluff, contradicting emotions, persuasion, and figure of speech [75]. Each vignette has a title related to its topic in the upper left side of the brochure, together with a small, black-and-white representative image and two questions: a comprehension question (e.g., "Is it true what s/he said?") and a documentation question (e.g., "Why did s/he say this?"), in the context of which the justification of the answers was ascertained. If a comprehension question was answered incorrectly, the participants were encouraged to listen to that particular vignette again and to look at their script. There was no time limit for answering the comprehension and documentation questions. Correct answers to comprehension questions were scored with 1. Answers to documentation questions were scored with either 0 if they were incorrect, or with 1 (correct – physical documentation) and with 2 (correct – mental state documentation) [76]. This test has satisfactory internal consistency ($\alpha = .65$) and reliability [77]. To avoid fatigue and distraction of the participants, and as the partial administration of the mentalistic vignettes does not affect the final result [74], children were presented with only one (of the two) vignette for each figure of speech.

Bryant's Index of Empathy for Children and Adolescents: This widely used questionnaire [78], validated [79] and adapted in Greek [80], examines children's and adolescents' empathy. For primary school children, the tool consists of 22 items, with 'Yes' or 'No' as possible answers. Positive answers are scored with 1 and negative answers with 0 (e.g. 'I really like to watch people open presents, even when I don't get a present myself'). There is also a reverse scoring for some sentences (2, 3, 9, 10, 15, 16, 17, 18, 20, 21, 22), where 'No' is scored with 1 and 'Yes' with 0 (e.g., 'It is hard for me to see why someone else gets upset'). The final score can range from 0 to 22, with 22 indicating the greatest empathy. In the present study, Cronbach's alpha for the Bryant's Index of Empathy was .64.

Friendship Quality Questionnaire: The Friendship Quality Questionnaire (FQQ; [81]) is a world accepted tool, designed to examine children's perceptions about the quality of their best friendships. It has been adapted in Greek [82], along with many other languages. In its long form, FQQ has 40 items allocated in the following 6 subscales: a) Validation and Caring (e.g., Makes me feel good about my ideas), b) Companionship and Recreation (e.g., Always play together at recess), c) Help and Guidance (e.g., Share things with each other); d) Conflict and Betrayal (e.g., Fight a lot), e) Conflict Resolution (e.g., Make up easily when we have a fight); and finally, and f) Intimate Exchange (e.g., Always tell each other our problems). Validation and Caring, Companionship and Recreation, Help and Guidance, Conflict Resolution, and Intimate Exchange are considered to be the positive qualitative characteristics of a best friendship, while Conflict and Betrayal is a negative qualitative feature. At the beginning of the administration of the questionnaire, participants were asked to identify and to write on its initial page the name of their best same-sex friend from their classroom and then to answer all the questions having this friend in mind. Answers were given on a 5-point Likert type scale (not at all true=0, a little true=1, somewhat true = 2, pretty true = 3, really true = 4), and the score for each subscale was the average of the ratings for the relevant items. Only item 21 is reverse scored. In the present study, Cronbach's alpha was .75 for companionship and recreation, .90 for help and guidance, .84 for conflict and betrayal, .73 for conflict resolution, .90 for validation and caring, and finally, .86 for intimate exchange, and for the whole FQQ was .96.

2.3. Procedure

Initially, the Greek Institute for Educational Policy granted permission for the present research, and then the head teachers and the board of teachers of inclusive mainstream primary schools in Attica, Greece, were approached and informed about the purpose of the study. In the schools that agreed to participate, parental written consent was asked and when provided, all the questionnaires and tasks were administered individually to the children. Each questionnaire/task was thoroughly explained, and all items were read aloud to avoid misunderstandings, especially from children with

reading difficulties. Teachers provided a code number for each participant to ensure their anonymity. The whole procedure, which took place in a secluded room (e.g., library) in the school premises, lasted about one hour.

3. Results

One-way ANOVA was performed to examine group differences on friendship quality, second-order false belief understanding, advanced ToM, and empathy. Pearson correlations were used to test for possible correlations among the different variables. Finally, a single hierarchical regression analysis was computed for the friendship variables, in order to examine major determining factors including social understanding (ToM and empathy), group, age and gender. All statistical analyses were performed with IBM SPSS version 24 statistical software.

3.1. Research Questions 1: Are There Any Differences in the Performance of Children with ADHD or Dyslexia in Empathy, Second Order or Advanced ToM Tasks Comparing to Their Peers with NTD?

Table 2 presents differences in the friendship quality characteristics (both positive and that referring to the negative characteristic of conflict and betrayal in friendships) and in the social understanding variables (2nd order false belief understanding, advanced ToM and empathy) among ADHD, dyslexia and NTD groups. Post-hoc comparisons have shown that ADHD children tend to experience friendships of significantly poorer quality (less validation and caring, less help and guidance, less companionship and recreation, less intimate exchange, less conflict resolution) than the other two groups ($p < 0.05$), and performed significantly worse on all social understanding tasks than their NTD peers ($p < 0.01$). Similarly, children with dyslexia had friendships of lower quality than their NTD peers ($p < 0.05$) and their performance on social understanding was worse than that of their NTD counterparts ($p < 0.01$). However, the dyslexia group did not differ from the ADHD group in 2nd order false belief understanding. Additionally, NTD children were more likely to experience less conflict and betrayal in their friendships than were children with dyslexia and ADHD children ($p < 0.05$).

Table 2. Group Comparisons in Friendship Quality and Social Understanding.

	NTD		Dyslexia		ADHD		$F(2, 191)$	η^2	ANOVA Post hoc comparisons
	M	SD	M	SD	M	SD			
Friendship Quality									
Validation-Caring	4.50	0.49	3.37	0.79	3.05	0.89	67.35*	.42	ADHD<Dyslexia<NTD
Conflict-Betrayal	1.82	0.43	2.37	0.67	2.51	0.71	22.48*	.19	NTD<ADHD, Dyslexia
Conflict Resolution	4.41	0.68	3.52	0.97	3.05	0.94	40.69*	.30	ADHD<Dyslexia<NTD
Help-Guidance	4.18	0.72	2.94	1.02	2.47	0.99	59.11*	.39	ADHD<Dyslexia<NTD
Companionship-Recreation	4.55	0.47	3.36	0.89	3.01	0.90	68.28*	.42	ADHD<Dyslexia<NTD
Intimate Exchange	4.16	0.81	3.12	1.02	2.62	1.04	42.96*	.31	ADHD<Dyslexia<NTD
2 nd order false belief	7.78	2.61	3.23	3.03	2.19	2.69	73.16**	.44	ADHD<Dyslexia, NTD
Advanced ToM	25.61	4.52	18.39	4.26	16.06	3.33	95.87**	.50	ADHD<Dyslexia<NTD
Empathy	14.75	2.77	9.64	5.17	7.53	4.41	49.01**	.34	ADHD<Dyslexia<NTD

Note. ANOVA = analysis of variance; NTD = children with neurotypical development, Dyslexia = children with dyslexia, ADHD = children with Attention Deficit/Hyperactivity Disorder; ToM = Theory of Mind.

* $p < .05$, ** $p < .01$ – Bonferroni correction of critical p values when performing post hoc multiple comparisons.

3.2. Research Question 2: To What Extent ToM and Empathy are Associated with the Qualitative Characteristics of the Best Friendships of Children with ADHD, Dyslexia or NTD?

In order to examine possible associations among friendship quality aspects and social understanding outcomes, all positive attributes of friendship quality (validation/caring, conflict resolution, help/guidance, companionship/recreation, intimate exchange) were averaged to compose

the 'friendship quality-positive attributes' variable, whereas the negative aspect of friendship quality, that of 'conflict-betrayal' remained a separate variable named 'friendship quality-conflict/betrayal'. Similarly, '2nd order false belief understanding' and 'advanced ToM' made a total sum ToM-score with empathy remaining a separate score, both reflecting social understanding. Positive correlations were found among the friendship quality-positive attributes, ToM and empathy for each group separately and for the total number of participating children. Significant negative correlations emerged among ToM and conflict/betrayal in friendship quality for the ADHD, the NTD group and for the total number of participants but not for the dyslexia group. Finally, empathy was negatively associated with conflict/betrayal for the ADHD group and the total number of participants (Table 3).

Table 3. Correlations among friendship quality-positive attributes, friendship quality-conflict/betrayal, Theory of Mind and Empathy in children with ADHD, dyslexia and neurotypical development.

	ToM (2 nd order false belief & Advanced ToM)				Empathy			
	Dyslexia (n=64)	ADHD (n=64)	NTD (n=64)	Total Sample (N=192)	Dyslexia (n=64)	ADHD (n=64)	NTD (n=64)	Total Sample (N=192)
Friendship Quality - Positive Attributes	.40**	.35**	.54**	.69**	.40**	.38**	.42**	.62**
Friendship Quality - Conflict-Betrayal	-.23	-.31*	-.25*	-.48**	-.06	-.26**	-.15	-.36**

*p<0.05, **p<0.01. Note: NTD = children with neurotypical development, Dyslexia = children with dyslexia, ADHD = children with attention deficit/hyperactivity disorder; ToM = Theory of Mind.

3.3. Research Question 3: Can Social Understanding and Specifically ToM and Empathy Predict the Positive and Negative Qualitative Aspects of the Best Friendships of Children with ADHD, Dyslexia or NTD?

To examine whether variance in children's friendships' quality would be partially explained by the existence or not of learning disability (group status), age, gender and social understanding (ToM and Empathy), a hierarchical regression analysis was computed separately for each of the two friendship quality variables (Positive attributes, Conflict-betrayal). Age and gender were entered at Step 1, group (ADHD, Dyslexia and NTD) at Step 2, and the two social understanding variables (ToM and Empathy) at Step 3 (Table 4)

Table 4. Summary of hierarchical regression analysis for the prediction of Friendship Quality-Positive Attributes and Conflict-Betrayal in Friendships.

Variable	β	t	F	R^2	ΔR^2	ΔF
Friendship Quality - Positive Attributes						
Step 1			1.16	.12	.12	1.16
Age	.04	.57				
Gender	.10	1.42				
Step 2			17.54	.22	.21	49.72*
Age	.06	.99				
Gender	.09	1.42				
Group	.45	7.05*				
Step 3			44.04	.54	.32	65.66*
Age	-.04	-.76				
Gender	.05	1.01				
Group	.08	1.32				

Variable	β	t	F	R^2	ΔR^2	ΔF
ToM (2 nd order false belief & Advanced ToM)	.48	6.46*				
Empathy	.28	4.23*				
Friendship Quality - Conflict-Betrayal						
Step 1			.04	.01	.01	.04
Age	-.01	-.14				
Gender	.02	.25				
Step 2			7.87	.11	.11	23.52*
Age	-.03	-.38				
Gender	.03	.39				
Group	-.33	-4.85*				
Step 3			12.08	.25	.13	16.46*
Age	.06	.85				
Gender	.04	.59				
Group	-.08	-1.09				
ToM (2 nd order false belief & Advanced ToM)	-.38	-4.03*				
Empathy	-.09	-1.13				

* $p < 0.01$.

For the positive attributes of friendship quality, the existence of learning disability predicted 22% of the variance (step 2), showing that the absence of learning disability can predict better friendship quality, but when social understanding variables (both ToM and empathy) were entered into the model the prediction was raised to 54% of the variance with better social understanding predicting higher positive quality in friendships for all the groups of children. Age, gender and group did not significantly predict the positive qualities of friendships in the final model. As regards the negative aspect of friendship quality that of conflict and betrayal at Step 2 group was found to negatively predict 11% of the variance, meaning that NTD children experienced less conflict and betrayal in their close friendships than the ADHD/dyslexia groups. At Step 3, ToM but not empathy added another 14% to the prediction, explaining in total 25% of the variance.

4. Discussion

The present study sought to examine possible differences in the performance of primary school children with ADHD, dyslexia or NTD in social understanding, and particularly in ToM and empathy, and how these differences might be associated with the qualitative characteristics of their best friendships. It also attempted to examine whether ToM and empathy could predict the positive and negative qualitative characteristics of the best friendships of children with and without ADHD or dyslexia.

Initially, children with ADHD reported that their best friendships were characterised by poorer positive (i.e., validation and caring, companionship and recreation, help and guidance, conflict resolution, and intimate exchange) and greater negative (i.e., conflict and betrayal) qualitative features. When compared to the other two groups, i.e., children with dyslexia and NTD, participants with ADHD had the lowest scores in all the positive and the highest score in the negative friendship characteristics. The results confirmed previous findings suggesting that the children with ADHD tend to have great difficulties in forming and maintaining high-quality friendships [51, 59]. Specifically, research evidence reveals that children with ADHD claim that their best friendships are distinguished by more negative qualitative features, and thus they are not particularly satisfied with

them [60, 61]. The present study furthers our knowledge by providing evidence on the differences of the perceptions between children with ADHD and dyslexia regarding the quality of their friendships, as previous research on this field is lacking.

Significant differences were also observed in the qualitative features of their best friendships between children with dyslexia and NTD, with the former perceiving that their friendships have more negative and less positive characteristics. These findings are consistent with previous research, both international and Greek [68, 69], revealing that the children with dyslexia also face difficulties in their friendships and consider them to be of low-quality. A possible explanation that the children with dyslexia perceive their best friendships to be of poor quality may be that due to their feelings of insecurity and inferiority, and their self-awareness of their difficulties at school [69, 70], they are always guarded and conceal their problems from their peers with NTD. Consequently, their friendships are distinguished by the lack of support and intimacy [69, 70]. This argument is quite plausible, as children with dyslexia prefer to befriend their peers with similar difficulties with whom they feel free to discuss their preoccupations [71].

When compared to both ADHD and dyslexia groups of children, the best friendships of children with NTD were characterised by significantly less negative features, i.e., conflict and betrayal. This is in agreement with previous findings [30, 35] regarding the friendships of children with NTD, who usually seek to have and enjoy supportive and caring friendships and try to overcome conflicts and quarrels in order to maintain them. On the other hand, children with ADHD or dyslexia due to their externalising (i.e., disruptive, defiant or aggressive) or internalising (i.e., anxious, embarrassed or depressive) behaviours experience more conflicts and betrayal in their friendships [60, 61, 68]. As to our knowledge, there are no previous studies comparing the negative qualitative characteristics in the best friendships of children with ADHD and dyslexia, the present work provides evidence that both groups of children have equally great difficulties in dealing with conflict with and betrayal from their friends.

Regarding the differences in social understanding, children with ADHD and dyslexia performed worse in all tasks comparing to their peers with NTD. More specifically, in all the variables examined, children with ADHD scored significantly lower than the children with dyslexia, who in turn, scored significantly lower than the children with NTD. However, the only exception was the second-order ToM tasks, where no differences were observed between children with ADHD and dyslexia. These findings are in accordance with previous work stating that the children with ADHD have severe difficulties both in ToM [39, 40] and empathy [41, 42], which result in problems in their social interactions [45]. Moreover, it could be suggested that the lowest performance in all social understanding tasks from the part of the children with ADHD could be attributed to the core characteristics of the disorder, mainly the inattention or the impulsivity, which may affect children's reactions to the thoughts, beliefs, emotions, and desires of others. Regarding the children with dyslexia, our results verify those studies which postulate that children with dyslexia show significantly lower performance in (second-order false belief and advanced) ToM [63–65] and empathy [66, 67] tasks, when compared to children with NTD. As no research has focused so far on the comparison between children with ADHD and dyslexia in ToM and empathy, only cautious speculations could be made for the similarity in their performance (in the second-order false belief tasks) that emerged in this study. It could be postulated, therefore, that as second-order false belief tasks are quite demanding, requiring a child's ability to predict someone's belief about what someone else thinks about a situation, they are not fully acquired by the age of 8 or 9 years [72]. As our sample consisted of children between the age of 8 and 12 years, those children with ADHD and dyslexia might have a slower pace in the development of their ToM. However, further exploration is required, as the difficulties exhibited in ToM by children with ADHD and dyslexia might be attributed to the problems they experience in their social environment (e.g., rejection by peers, etc.) or in emotion regulation/control.

The present study also revealed positive associations between social understanding (ToM and empathy) and the positive qualitative features of children's friendships for all groups. This finding is to be expected, considering that when children with or without NTD acknowledge the others' point

of view and emotions when they are together having fun or when they negotiate to overcome a conflict, their friendships would be long lasting and of high quality. Research supports this finding, as it has recognised that predominantly in children with NTD, social understanding can facilitate the development of intimacy, cooperation, help, and mutual assistance between friends [8–10], who are able to control their emotional reactions and to challenge their opinions in order to understand the other's perspective [12], exhibiting more altruistic behaviours and positive attitudes towards their peers and friends [17]. The present study contributes to the relevant research by attesting that ToM and empathy play an important role on the positive friendship qualitative features for children with ADHD and dyslexia.

Negative correlations were found between ToM and the negative qualitative features of children's friendships, i.e., conflict and betrayal, for the ADHD and NTD groups and for all the participating children, but not for dyslexia group. Breaking down this finding, it could be claimed that for the children with NTD, a well-developed ToM, as expected in the participants of this study according to their age, would facilitate the resolution of the conflicts with those friends who deem to be close to them and appreciate their friendships [12]. However, regarding the children with ADHD, who have great difficulties in their ToM, this result could imply that the less they take into account the intentions, desires, and feelings of their friends, the more arguments they have in their friendships [50–52] which dissolve easier, as conflict resolution is harder to be achieved [39]. Finally, some hypotheses can be made about the absence of associations between ToM and conflict and betrayal in the friendships of children with dyslexia, as this field has not been adequately investigated. Considering the difficulties that children with dyslexia face in all (second-order false belief and advanced) ToM tasks [63–65], they might be lacking or feeling inadequate when they confront conflicts in their friendships. Thus, they might prefer to either skip a fight with their friends or end a friendship that is not fulfilling.

Empathy was found to be significantly negatively associated with the negative qualitative features of the friendships of children with ADHD. The children in this group are prone to have difficulties in empathy [41, 42], leading to problems in their interpersonal relationships [45, 60], among which are their friendships [51, 60, 61], and thus, ADHD has often been characterised as a "social disorder" [46]. Specifically, low performance in empathy has been linked to social skills deficits, low friendship qualitative characteristics, and aggressive or even bullying behaviours in children and adolescents with or without NTD [25, 26, 27].

Moreover, the present findings establish important relationships between friendships' qualitative characteristics and social understanding in all the participating children. The absence of disability predicted higher positive qualitative features in children's friendships, regardless of their age and gender. When both ToM and empathy entered the equation, the prediction of the positive quality in friendships for all the groups of children was even higher. Thus, the more the children acknowledge and understand the beliefs, intentions, desires, and feelings of their friends, the better quality they can experience in their friendship relationships. This finding is in accordance with several longitudinal and cross-sectional studies in children with NTD indicating that high performance in ToM and empathy tasks enhance the quality of their interpersonal relationships [6–10]. However, this finding also suggests that when children have a well-developed social understanding, the existence of a neurodevelopmental disorder might not gravely affect the positive qualities of their best friendships.

Finally, the absence of disability could moderately negatively predict the negative aspect of friendship quality, while ToM but not empathy can increase the percentage of this prediction. Mainly, this implies that children with NTD experience less conflict and betrayal in their close friendships than children with ADHD or dyslexia, and this is reinforced by a well-developed ToM (second-order false belief and advanced), but not by empathy. This finding agrees with research evidence regarding ToM, which postulates that when confronted with a conflict, children with NTD have to challenge their own opinions and beliefs, in order to understand and accept their friends' points of view [12]. As the analysis of the data in the present study failed to find evidence of the role of empathy in the prediction of the negative qualitative characteristics of children's friendships, further exploration in

this field is required. However, a preliminary suggestion could be that at this age, children might not have fully developed their empathy skills, and thus, they are not always able to experience emotional reactions related to their friends' emotional state [15].

5. Limitations, Future Directions, and Conclusions

The present study has certain limitations. First, as the focus of our research was children's friends at school, friendships were examined exclusively at a classroom level, ignoring other relevant relationships they may have. Future research could explore children's friendships in various social environments (e.g., neighborhood, extra-curricular activities, etc.). Second, the study was solely based on self-report-instruments and thus, the results may be vulnerable to informant bias. To overcome this obstacle and to have more objective results, in future research information could be gathered from various sources (e.g., peers, parents, teachers, observation). Third, the selection of the participants in the ADHD and dyslexia groups relied solely on the diagnoses they had submitted to their schools, and no further assessment to verify each disorder was carried out. The diagnoses of the participating children stated either ADHD or dyslexia, with no comorbidities. Future studies could investigate the effects on the outcomes when children with ADHD or dyslexia also have co-occurring disorders. Finally, a longitudinal experimental design could provide insight to changes in social understanding due to children's development and maturation, possibly leading to different results regarding the friendship quality characteristics in the three groups of children.

Despite its limitations, this study contributes to the advancement of scientific knowledge by providing significant evidence linking social cognition (both ToM and empathy) to the qualitative features of children's best friendships. Although there is scientific evidence regarding ToM, empathy, and friendship quality in children with NTD, relevant research particularly for children with ADHD or dyslexia is very limited and sometimes controversial. Taking into consideration the significance of friendships in children's social adjustment, and every future interpersonal relationship, the findings of the present study are very important for both children with and without NTD. They may also have practical implications, as they could contribute to the acknowledgement of the need to create and apply educational programmes in mainstream schools, to enhance the social understanding and to reinforce long-lasting, high-quality friendship bonds, especially in children with ADHD, dyslexia or any other neurodevelopmental disorder.

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References

1. Perry, A.; Shamay-Tsoory, S. Understanding emotional and cognitive empathy: A neuropsychological perspective. In *Understanding other minds: Perspectives from developmental social neuroscience*, Baron-Cohen, S., Tager-Flusberg, H., Lombardo, M.V., Eds.; Oxford, U.K.: Oxford University Press, 2013, pp.178-194. <https://doi.org/10.1093/acprof:oso/9780199692972.003.0011>
2. Bosacki, S.L. Theory of mind understanding and conversational patterns in middle childhood. *The Journal of Genetic Psychology* 2013, 174(2), 170-191. <https://doi.org/10.1080/00221325.2012.659233>

3. Caputi, M.; Lecce, S.; Pagnin, A.; Banerjee, R. Longitudinal effects of theory of mind on later peer relations: The role of prosocial behavior. *Developmental Psychology* **2012**, *48*(1), 257-270. <https://doi.org/10.1080/17405629.2013.821944>
4. Eggum, N.D.; Eisenberg, N.; Kao, K.; Spinrad, T.L.; Bolnick, R.; Hofer, C.; Kupfer, A.S.; Fabricius, W.V. Emotion understanding, theory of mind, and prosocial orientation: Relations over time in early childhood. *Journal of Positive Psychology* **2011**, *6*(1), 4-16. <https://doi.org/10.1080/17439760.2010.536776>
5. Lecce, S.; Caputi, M.; Pagnin, A. Long-term effect of theory of mind on school achievement: The role of sensitivity to criticism. *European Journal of Developmental Psychology* **2014**, *11*(3), 305-318. <https://doi.org/10.1080/17405629.2013.821944>
6. Devine, R.T.; Hughes, C. Silent films and strange stories: Theory of mind, gender, and social experiences in middle childhood. *Child Development* **2013**, *84*, 989-1003. <https://doi.org/10.1111/cdev.12017>
7. Fink, E.; Begeer, S.; Peterson, C.C.; Slaughter, V.; de Rosnay, M. Friends, friendlessness, and the social consequences of gaining a theory of mind. *British Journal of Developmental Psychology* **2015a**, *33*(1), 27-30. <https://doi.org/10.1111/bjdp.12080>
8. Fink, E.; Begeer, S.; Peterson, C.C.; Slaughter, V.; de Rosnay, M. Friendlessness and theory of mind: A prospective longitudinal study. *British Journal of Developmental Psychology* **2015b**, *33*(1), 1-17. <https://doi.org/10.1111/bjdp.12060>
9. Imuta, K.; Henry, J.D.; Slaughter, V.; Selcuk, B.; Ruffman, T. Theory of mind and prosocial behavior in childhood: A meta-analytic review. *Developmental Psychology* **2016**, *52*(8), 1192-1205. <https://doi.org/10.1037/dev0000140>
10. Weimer, A.A.; Warnell, K.R.; Ettekal, I.; Cartwright, K.B.; Guajardo, N.R.; Liew, J. Correlates and antecedents of theory of mind development during middle childhood and adolescence: An integrated model. *Developmental Review* **2021**, *59*, 100945. <https://doi.org/10.1016/j.dr.2020.100945>
11. Peterson, C.C.; Siegal, M. Mindreading and moral awareness in popular and rejected preschoolers. *British Journal of Developmental Psychology* **2002**, *20*, 205-224. <https://doi.org/10.1348/026151002166415>
12. Miller, S.E.; Reavis, R.D.; Avila, B.N. Associations between theory of mind, executive function, and friendship quality in middle childhood. *Merrill-Palmer Quarterly* **2018**, *64*(3), 397-426. <https://doi.org/10.13110/merrpalmquar1982.64.3.0397>
13. de Wied, M.; Branje, S.J.; Meeus, W.H. Empathy and conflict resolution in friendship relations among adolescents. *Aggressive Behavior* **2007**, *33*(1), 48-55. <https://doi.org/10.1002/ab.20166>
14. Hall, J.A.; Schwartz, R. Empathy present and future. *The Journal of Social Psychology* **2019**, *159*(3), 225-243. <https://doi.org/10.1080/00224545.2018.1477442>
15. Eisenberg, N.; Spinrad, T.L.; Sadovsky, A. Empathy-related responding in children. In *Handbook of moral development*; Killen, M., Smetana, J.G., Eds.; New York: Psychology Press, **2006**, pp. 517-549. <https://doi.org/10.4324/9781410615336>
16. Sallquist, J.; Eisenberg, N.; Spinrad, T.L.; Eggum, N.D.; Gaertner, B.M. Assessment of preschoolers' positive empathy: Concurrent and longitudinal relations with positive emotion, social competence, and sympathy. *The Journal of Positive Psychology* **2009**, *4*(3), 223-233. <https://doi.org/10.1080/17439760902819444>
17. Meuwese, R.; Cillessen, A.H.N.; Güroğlu, B. Friends in high places: A dyadic perspective on peer status as predictor of friendship quality and the mediating role of empathy and prosocial behaviour. *Social Development* **2017**, *26*(3), 503-519. <https://doi.org/10.1111/sode.12213>
18. Ciarrochi, J.; Parker, P.; Sahdra, B.; Kashdan, T.; Kiuru, N.; Conigrave, J. When empathy matters: The role of sex and empathy in close friendships. *Journal of Personality* **2017**, *85*(4), 494-504. <https://doi.org/10.1111/jopy.12255>
19. van den Bedem, N.P.; Willems, D.; Dockrell, J.E.; van Alphen, P.M.; Rieffe, C. Interrelation between empathy and friendship development during (pre)adolescence and the moderating effect of developmental language disorder: A longitudinal study. *Social Development* **2019**, *28*(3), 599-619. <https://doi.org/10.1111/sode.12353>
20. Hughes, C.; Devine, R.T. Individual differences in theory of mind from preschool to adolescence: Achievements and future directions. *Child Development Perspectives* **2015**, *9*, 149-153. <https://doi.org/10.1111/cdep.12124>
21. Hughes, C.; Leekam, S. What are the links between theory of mind and social relations? Review, reflections and new directions for studies of typical and atypical development. *Social Development* **2004**, *13*(4), 590-619. <https://doi.org/10.1111/j.1467-9507.2004.00285.x>
22. Fink, E.; Begeer, S.; Hunt, C.; de Rosnay, M. False-Belief Understanding and Social Preference Over the First 2 Years of School: A Longitudinal Study. *Child development* **2014**, *85*(6), 2389-2403. <https://doi.org/10.1111/cdev.12302>
23. Miller, S.E.; Avila, B.N.; Reavis, R.D. Thoughtful friends: Executive function relates to social problem solving and friendship quality in middle childhood. *The Journal of Genetic Psychology* **2020**, *181*(2-3), 78-94. <https://doi.org/10.1080/00221325.2020.1719024>

24. Slaughter, V.; Imuta, K.; Peterson, C.C.; Henry, J.D. Meta-analysis of theory of mind and peer popularity in the preschool and early school years. *Child Development* **2015**, *86*(4), 1159-1174. <https://doi.org/10.1111/cdev.12372>
25. Gomez-Garibello, C.; Talwar, V. Can you read my mind? Age as a moderator in the relationship between theory of mind and relational aggression. *International Journal of Behavioral Development* **2015**, *39*(6), 552-559. <https://doi.org/10.1177/0165025415580805>
26. Kokkinos, C.M.; Voulgaridou, I.; Markos, A. Personality and relational aggression: Moral disengagement and friendship quality as mediators. *Personality and Individual Differences* **2016**, *95*, 74-79. <https://doi.org/10.1016/j.paid.2016.02.028>
27. Shakoor, S.; Jaffee, S.R.; Bowes, L.; Ouellet-Morin, I.; Andreou, P.; Happé, F.; Moffitt, T.E.; Arseneault, L. A prospective longitudinal study of children's theory of mind and adolescent involvement in bullying. *The Journal of Child Psychology and Psychiatry* **2012**, *53*(3), 254-261. <https://doi.org/10.1111/j.1469-7610.2011.02488.x>
28. Caravita, S.C.S.; Di Blasio, P.; Salmivalli, C. Early adolescents' participation in bullying: Is ToM involved? *The Journal of Early Adolescence* **2010**, *30*(1), 138-170. <https://doi.org/10.1177/0272431609342983>
29. Apostolou, M.; Vetsa, P. Friendship preferences: Examining desirable and undesirable traits in a friend. *Evolutionary Psychological Science* **2023**, *9*, 38-49. <https://doi.org/10.1007/s40806-022-00329-w>
30. Demir, M. *Friendship and happiness: Across the life-span and cultures*. New York: Springer Science + Business Media, **2015**. <https://doi.org/10.1007/978-94-017-9603-3>
31. Weeks, M.S.; Asher, S.R. Loneliness in childhood: Toward the next generation of assessment and research. *Advances in Child Development and Behavior* **2012**, *42*, 1-39. <https://doi.org/10.1016/B978-0-12-394388-0.00001-0>
32. Hartup, W.W.; Stevens, N.L. Friendships and adaptation in the life course. *Psychological Bulletin* **1997**, *121*(3), 355-370. <https://doi.org/10.1037/0033-2909.121.3.355>
33. Nangle, D.W.; Erdley, C.A.; Newman, J.E.; Mason, C.A.; Carpenter, E.M. Popularity, friendship quantity, and friendship quality: Interactive influences on children's loneliness, and depression. *Journal of Clinical Child and Adolescent Psychology* **2003**, *32*(4), 546-555. https://doi.org/10.1207/s15374424jccp3204_7
34. Hiatt, C.; Laursen, B.; Mooney, K.S.; Rubin, K.H. Forms of friendship: A person-centered assessment of the quality, stability, and outcomes of different types of adolescent friends. *Personality and Individual Differences* **2015**, *77*, 149-155. <https://doi.org/10.1016/j.paid.2014.12.051>
35. Maunder, R.; Monks, C.P. Friendships in middle childhood: Links to peer and school identification, and general self-worth. *British Journal of Developmental Psychology* **2019**, *37*(2), 211-229. <https://doi.org/10.1111/bjdp.12268>
36. La Greca, A.M.; Harrison, H.M. Adolescent Peer Relations, Friendships, and Romantic Relationships: Do They Predict Social Anxiety and Depression? *Journal of Clinical Child and Adolescent Psychology* **2005**, *34*(1), 49-61. https://doi.org/10.1207/s15374424jccp3401_5
37. Sherman, A.M.; Lansford, J.E.; Volling, B.L. Sibling relationships and best friendships in young adulthood: Warmth, conflict, and well-being. *Personal Relationships* **2006**, *13*(2), 151-165. <https://doi.org/10.1111/j.1475-6811.2006.00110.x>
38. Sijtsema, J.J.; Ojanen, T.; Veenstra, R.; Lindenberg, S.; Hawley, P.H.; Little, T.D. Forms and functions of aggression in adolescent friendship selection and influence: A longitudinal social network analysis. *Social Development* **2010**, *19*(3), 515-534. <https://doi.org/10.1111/j.1467-9507.2009.00566.x>
39. Forner, C.B.; Miranda, B.R.; Fortea, I.B.; Castellar, R.G.; Diago, C.C.; Casas, A.M. ADHD symptoms and peer problems: Mediation of executive function and theory of mind. *Psicothema* **2017**, *29*(4), 514-519. <https://doi.org/10.7334/psicothema2016.376>
40. Saeedi, M.T.S.; Noorazar, G.; Bafandeh, H.; Taheri, M.; Farhang, S. Theory of mind in children with attention deficit hyperactivity disorder compared to controls. *Journal of Analytical Research in Clinical Medicine* **2014**, *2*(3), 99-104. <https://doi.org/10.5681/jarcm.2014.017>
41. Gvirts, H.Z.; Perlmutter, R. What Guides Us to Neurally and Behaviorally Align with Anyone Specific? A Neurobiological Model Based on fNIRS Hyperscanning Studies. *The Neuroscientist* **2020**, *26*(2), 108-116. <https://doi.org/10.1177/1073858419861912>
42. Yuill, N.; Lyon, J. Selective difficulty in recognising facial expressions of emotion in boys with ADHD: General performance impairments or specific problems in social cognition? *European Child and Adolescent Psychiatry* **2007**, *16*(6), 398-404. <https://doi.org/10.1007/s00787-007-0612-5>
43. Cordier, R.; Bundy, A.; Hocking, C.; Einfeld, S. Empathy in the play of children with attention deficit hyperactivity disorder. *OTJR: Occupation, Participation, and Health* **2010**, *30*(3), 122-132. <https://doi.org/10.3928/15394492-20090518-02>
44. Maoz, H.; Gvirts, H.Z.; Sheffer, M.; Bloch, Y. Theory of Mind and Empathy in Children With ADHD. *Journal of Attention Disorders* **2019**, *23*(11), 1331-1338. <https://doi.org/10.1177/1087054717710766>

45. Tseng, W.L.; Kawabata, Y.; Gau, S.S.F.; Crick, N.R. Symptoms of ADHD and peer functioning: A transactional model of development. *Journal of Abnormal Child Psychology* **2014**, *42*(8), 1353-1365. <https://doi.org/10.1007/s10802-014-9883-8>
46. Gentschel, D.A.; McLaughlin, T.F. Attention deficit hyperactivity disorder as a social disability: Characteristics and suggested methods of treatment. *Journal of Developmental and Physical Disabilities* **2000**, *12*(4), 333-347. <https://doi.org/10.1023/A:1009432130076>
47. Braaten, E.B.; Rosén, L.A. Self-regulation of affect in attention deficit hyperactivity disorder (ADHD) and non-ADHD boys: Differences in emphatic reasoning. *Journal of Consulting and Clinical Psychology* **2000**, *68*(2), 313-321. <http://doi.org/10.1037/0022-006X.68.2.313>
48. Gambin, M.; Sharp, C. The differential relations between empathy and internalizing and externalizing symptoms in inpatient adolescents. *Child Psychiatry and Human Development* **2016**, *47*(6), 966-974. <https://doi.org/10.1007/s10578-016-0625-8>
49. Soltani, S.; Kazemi, F.; Maleki, N.; Soltani, Z. Deficits in theory of mind and executive function in children with attention deficit hyperactivity disorder. *Journal of Novel Applied Sciences* **2013**, *2*(10), 449-455.
50. Parker, J.G.; Rubin, K.H.; Erath, S.A.; Wojslawowicz, J.C.; Buskirk, A.A. Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In *Developmental psychopathology: Theory and method. Vol. 3: Risk, disorder, and adaptation*; Cicchetti, D.; Cohen, D.J., Eds.; John Wiley & Sons, Inc., **2006**; pp. 419-493. <https://doi.org/10.1002/9780470939383.ch12>
51. Rielly, N.E.; Craig, W.M.; Parker, K.C.H. Peer and parenting characteristics of boys and girls with subclinical attention problems. *Journal of Attention Disorders* **2006**, *9*(4), 598-606. <https://doi.org/10.1177/1087054705284245>
52. Wehmeier, P.M.; Schacht, A.; Barkley, R.A. Social and emotional impairment in children and adolescents with ADHD and the impact on quality of life. *Journal of Adolescent Health* **2010**, *46*(3), 209-217. <https://doi.org/10.1016/j.jadohealth.2009.09.009>
53. Stormont, M. Social outcomes of children with ADHD: Contributing factors and implications for practice. *Psychology in the Schools* **2001**, *38*(6), 521-531. <https://doi.org/10.1002/pits.1040>
54. Operto, F.F.; Smirni, D.; Scuoppo, C.; Padovano, C.; Vivenzio, V.; Quatrosi, G.; Carotenuto, M.; Precenzano, F.; Pastorino, G.M.G. Neuropsychological profile, emotional/behavioral problems, and parental stress in children with neurodevelopmental disorders. *Brain Sciences* **2021**, *11*(5), 584. <https://doi.org/10.3390/brainsci11050584>
55. Stern, A.; Agnew-Blais, J.; Danese, A.; Fisher, H.L.; Jaffee, S.R.; Matthews, T.; Polanczyk, G.V.; Arseneault, L. Associations between abuse/neglect and ADHD from childhood to young adulthood: A prospective nationally-representative twin study. *Child Abuse & Neglect* **2018**, *81*, 274-285. <https://doi.org/10.1016/j.chiabu.2018.04.025>
56. Spender, K.; Chen, Y-W.R.; Wilkes-Gillan, S.; Parsons L.; Cantrill, A.; Simon, M.; Garcia, A.; Cordier, R. The friendships of children and youth with attention-deficit hyperactivity disorder: A systematic review. *PLoS ONE* **2023**, *18*(8), e0289539. <https://doi.org/10.1371/journal.pone.0289539>
57. McQuade, J.D.; Hoza, B. Peer problems in attention deficit hyperactivity disorder: Current status and future directions. *Developmental Disabilities Research Reviews* **2008**, *14*(4), 320-324. <https://doi.org/10.1002/ddrr.35>
58. Zucchetti, G.; Ortega, E.; Scholte, R.H.; Rabaglietti, E. The mediating role of aggressive behaviour, emotional and behavioural instability on the association between ADHD symptoms and best friend conflicts. *Current Psychology* **2015**, *34*(1), 97-111. <https://doi.org/10.1007/s12144-014-9243-4>
59. Bagwell, C.L.; Molina, B.S.G.; Pelham, W.E.; Hoza, B. Attention-deficit hyperactivity disorder and problems in peer relations: Predictions from childhood to adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry* **2001**, *40*(11), 1285-1292. <https://doi.org/10.1097/00004583-200111000-00008>
60. Kouvava, S.; Antonopoulou, K. Sibling and friendship relationships of children with attention-deficit/hyperactivity disorder and typical development. *Early Child Development and Care* **2020**, *190*(6), 935-947. <https://doi.org/10.1080/03004430.2018.1503255>
61. Normand, S.; Schneider, B.H.; Lee, M.D.; Maisonneuve, M.-F.; Kuehn, S.M.; Robaey, P. How do children with ADHD (mis)manage their real-life dyadic friendships? A multi-method investigation. *Journal of Abnormal Child Psychology* **2011**, *39*(2), 293-305. <https://doi.org/10.1007/s10802-010-9450-x>
62. Cardillo, R.; Garcia, R.B.; Mammarella, I.C.; Cornoldi, C. Pragmatics of language and theory of mind in children with dyslexia with associated language difficulties of nonverbal learning disabilities. *Applied Neuropsychology: Child* **2018**, *7*(3), 245-256. <https://doi.org/10.1080/21622965.2017.1297946>
63. Gabay, Y.; Shamay-Tsoory, S.G.; Goldfarb, L. Cognitive and emotional empathy in typical and impaired readers and its relationship to reading competence. *Journal of Clinical and Experimental Neuropsychology* **2016**, *38*(10), 1131-1143. <https://doi.org/10.1080/13803395.2016.1199663>
64. Kidd, D.C.; Castano, E. Reading literary fiction improves theory of mind. *Science* **2013**, *342*(6156), 377-380. <https://doi.org/10.1126/science.1239918>

65. Eyuboglu, D.; Bolat, N.; Eyuboglu, M. Empathy and theory of mind abilities of children with specific learning disorder (SLD). *Psychiatry and Clinical Psychopharmacology* **2018**, *28*, 136-141. <https://doi.org/10.1080/24750573.2017.1387407>
66. Bakopoulou, I.; Dockrell, J.E. The role of social cognition and prosocial behaviour. *Research in Developmental Disabilities* **2016**, *49–50*, 354-370. <https://doi.org/10.1016/j.ridd.2015.12.013>
67. Botting, N.; Conti-Ramsden, G. The role of language, social cognition, and social skill in the functional social outcomes of young adolescents with and without a history of SLI. *British Journal of Developmental Psychology* **2008**, *26(2)*, 281-300. <https://doi.org/10.1348/026151007X235891>
68. Lisle, K.; Wade, T.J. Does the presence of a learning disability elicit a stigmatization? *British Journal of Education, Society & Behavioural Science* **2014**, *4(2)*, 211-225. <https://doi.org/10.9734/BJESBS/2014/6379>
69. Doikou-Avliidou, M. The educational, social, and emotional experiences of students with dyslexia: The perspective of postsecondary education students. *International Journal of Special Education* **2015**, *30(1)*, 132-145.
70. Leseayne, M.; Mandende, P.; Makgato, M.; Cekiso, M. Dyslexic learners' experiences with their peers and teachers in special and mainstream primary schools in North-West Province. *African Journal of Disability* **2018**, *7*, a363. <https://doi.org/10.4102/ajod.v7i0.363>
71. Wiener, J.; Schneider, B.H. A multisource exploration of friendship patterns of children with learning disabilities. *Journal of Abnormal Child Psychology* **2002**, *30*, 127-141. <https://doi.org/10.1023/A:1014701215315>
72. Perner, J.; Wimmer, H. "John thinks that Mary thinks that..." Attribution of second order beliefs by 5–10-year-old children. *Journal of Experimental Child Psychology* **1985**, *39*, 437-471. [https://doi.org/10.1016/0022-0965\(85\)90051-7](https://doi.org/10.1016/0022-0965(85)90051-7)
73. Happé, F.G.E. An advanced test of theory of mind: Understanding of story characters' thoughts and feelings by able autistic, mentally handicapped, and normal children and adults. *Journal of Autism and Developmental Disorders* **1994**, *24(2)*, 129-154. <https://doi.org/10.1007/BF02172093>
74. Hayward, E.O.; Homer, B.D. Reliability and validity of advanced theory-of-mind measures in middle childhood and adolescence. *British Journal of Developmental Psychology* **2017**, *35(3)*, 454-462. <https://doi.org/10.1111/bjdp.12186>
75. White, S.; Hill, E.; Happé, F.; Frith, U. Revisiting the strange stories: Revealing mentalizing impairments in autism. *Child Development* **2009**, *80(4)*, 1097-1117. <https://doi.org/10.1111/j.1467-8624.2009.01319.x>
76. Freed, J.; McBean, K.; Adams, C.; Lockton, E.; Nash, M.; Law, J. Performance of children with social communication disorder on the Happe' Strange Stories: Physical and mental state responses and relationship to language ability. *Journal of Communication Disorders* **2015**, *55(1)*, 1-14. <https://doi.org/10.1016/j.jcomdis.2015.03.002>
77. Hayward, E.O.; Homer, B.D. Reliability and validity of advanced theory-of-mind measures in middle childhood and adolescence. *British Journal of Developmental Psychology* **2017**, *35(3)*, 454-462. <https://doi.org/10.1111/bjdp.12186>
78. Bryant, B.K. An Index of Empathy for Children and Adolescents. *Child Development* **1982**, *53(2)*, 413-425. <https://doi.org/10.2307/1128984>
79. Mitsopoulou, E.; Giovazolias, T. The relationship between perceived parental bonding and bullying: The mediating role of empathy. *The European Journal of Counselling Psychology* **2013**, *2(1)*, 1-16. <https://doi.org/10.5964/ejcop.v2i1.2>
80. Vassilopoulos, S.P.; Vlachou, E.; Brouzos, A.; Moberly, N.J.; Misailidi, P.; Diakogiorgi, K. Ability to distinguish genuine from non-genuine smiles in children aged 10- to 12-years: Associations with peer status, gender, social anxiety, and level of empathy. *Hellenic Journal of Psychology* **2021**, *18*, 1-18. <https://doi.org/10.26262/hjp.v18i1.7978>
81. Parker, J.G.; Asher, S.R. Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology* **1993**, *29(4)*, 611-621. <https://doi.org/10.1037/0012-1649.29.4.611>
82. Kouvava, S.; Antonopoulou, K.; Kokkinos, C.M.; Voulgaridou, I. Psychometric properties of the Greek translation of the Friendship Quality Questionnaire. *Psychology in the Schools* **2023**, *60(4)*, 985-1005. <https://doi.org/10.1002/pits.22812>

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