Loneliness in autistic and non-autistic children: Associations with social networks in school

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Introduction

Loneliness: An awareness of mismatch between one's desired and actual interpersonal relationships (Asher & Paquette, 2003)

Autistic children experience more loneliness in school than non-autistic peers when entering into adolescence (e.g., Bauminger & Kasari, 2000; Deckers et al., 2017)

➡ Contradict to traditional assumptions that autistic individuals lack the desire and motivation to build social networks

Aim: To examine the associations between loneliness and social networks in school in autistic and non-autistic primary-school pupils, using a multi-method approach

Methods

Participants

47 autistic children & 52 non-autistic classmates from 2 special education primary schools in NL (M_{age} = 10.84 ± 1.21 years ; 34 girls, 65 boys)

Measures

▪ **Loneliness in school – self-report:**

Children's Loneliness Scale (Maes et al., 2017)
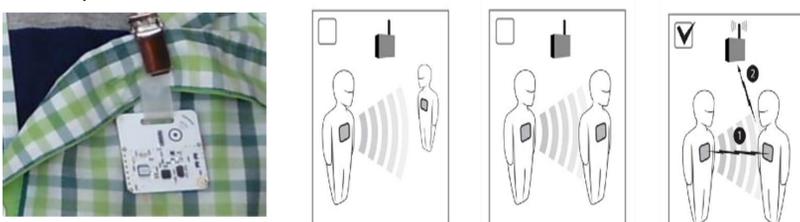
▪ **Social networks – peer nomination:**

Nominate 5 best friends

    a) Reciprocal friendships

    b) Social network centrality (Bonacich, 1987)

▪ **Social networks – wearable proximity sensor:**

Radio Frequency Identification Devices (RFID) on playground during recess

    a) Time spent in face-to-face interaction

    b) Number of interaction partners

(Cattuto et al., 2010)

Results

Levels of loneliness in school

Autistic **=** non-autistic children (U = 898.5, p = .975)

Levels of social networks in school

Autistic **<** non-autistic children on **all** measures (U = 381.5 – 635.0, p = .002 – .042)

Time in interaction

Illustration social network (RFID data)
· Thickness = time dyadic interaction
· Color = total time in interaction
· ASD = autistic child ; T = teacher
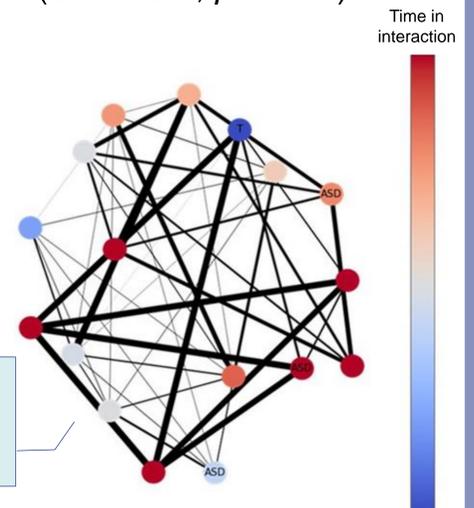
Correlations in all children (autistic / non-autistic)

		Loneliness
Peer nomination	Reciprocal friendship	-0.01 (0.03 / -0.08)
	Centrality	-0.22 (-0.19 / **-0.30***)
RFID	Time in interaction	-0.12 (0.13 / **-0.32***)#
	Interaction partners	-0.18 (**-0.37*** / -0.02)

* *p* < .05 for Spearman's correlation (rho)
# Between-group difference in correlation strength (*p* < .05; Fisher's r-to-z transformation)

Conclusion

Loneliness can relate to social network differently in autistic and non-autistic children:

▪ Autistic children: number of contacts

▪ Non-autistic peers: duration & position in social interaction

Implications:

▪ **Autistic children value having more social contacts → important for feeling socially connected.**

▪ **Individual differences are crucial to consider when aiming for a welcoming school climate.**

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