1 **School belonging among young adolescents with SEMH and MLD: the**

2 **link with their social relations and school inclusivity**

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School belonging among young adolescents with SEMH and MLD: the link with their social relations and school inclusivity

Despite the considerable institutional changes schools have made to accommodate the individual needs of pupils with special educational needs and disabilities (SEND), as underpinned by key principles of inclusion, there is still international concern about the mainstream experiences pupils with SEND have in school settings. This study helps us gain a clearer understanding of the schooling experiences of pupils with social emotional and mental health (SEMH) difficulties and moderate learning difficulties (MLD) by investigating whether they have a sense of school belonging and positive social relations as well as whether these vary according to the level of inclusiveness of the school ethos at the institution they attend. Perceived social relations and feelings of belonging of 1,440 (282 SEND) pupils, attending the 7th to 10th grades, from three secondary mainstream settings that differ in inclusivity, were analysed using a self-reporting questionnaire. Findings demonstrated that pupils with SEND are not a homogeneous group, as pupils with behavioural difficulties were found to have less of a sense of belonging, and social relations than those with learning difficulties. It was also found that the sense of school belonging of both groups of SEND is associated with their positive perceived relations with teachers, as well as their inclusiveness of school ethos. These findings contribute to the literature of special education, as they offer ways of enhancing the sense of school belonging of pupils with behavioural and learning difficulties in mainstream settings.

Keywords: inclusive ethos; school belonging; social relations; learning difficulties; mental health difficulties

Introduction

A basic definition of inclusion refers to the acceptance of pupils with special educational needs and disabilities (SEND) in mainstream settings. A more sophisticated one places the onus on schools to make suitable and often radical adjustments in order to accommodate the individual needs of all pupils (Ainscow, 1999). As Sebba and Sachdev (1997, 9) stated, inclusion is 'the process by which a school attempts to respond to all

35   pupils as individuals by reconsidering and restructuring its curricular organisation and

36   provision and allocating resources to enhance equality of opportunity'. To achieve this, it

37   is necessary for schools to provide all pupils with suitable support that meets their

38   individual needs. However, it is a common finding in the literature of special education

39   that pupils with SEND often fail to report positive schooling experiences in mainstream

40   settings (e.g. Bouchard and Berg, 2017), particularly those with social, emotional and

41   mental health (SEMH) difficulties, which suggests that their needs are not being met

42   (Cefai and Cooper, 2010; Sellman, 2009). It can be argued that school change to improve

43   inclusion is in vain, if pupils with SEND do not experience greater inclusion. One way to

44   investigate the extent to which pupils with SEND feel included within mainstream

45   settings is to measure their sense of school belonging.

46   The significant role that school plays in the schooling experiences of pupils has

47   been demonstrated through several surveys. School ethos characteristics, such as pupils'

48   active involvement in decision making and participation in extra-curricular activities,

49   praise and encouragement by teachers, successful implementation of caring behaviour

50   management policies, use of positive language and attitude, as well as knowledge of

51   individual pupils, have been found to have a positive effect on pupils' feelings of

52   belonging towards school and social relations (see for example: Carter, 2002; Cemalcilar,

53   2010; Flitcroft and Kelly, 2016; Ma, 2003; Wallace, Ye and Chhuon, 2012). These

54   findings relate to typical pupils, but the above characteristics of ethos are also those of an

55   inclusive one for pupils with SEND (see Avramidis, Bayliss, and Burden, 2002; Booth

56   and Ainscow, 2002; Hatton, 2013; Rouse and Florian, 1996) that is, schools that place

57   emphasis on the learning of all pupils, that actively promote their participation in decision

58   making, where staff and pupils have a clear understanding of school rules and behaviour

59   management approaches are applied with consistency and fairness, where teachers work

60   in collaboration to resolve any problems encountered and share responsibility to employ

61   inclusion. Consistent with findings for typical pupils, it can be hypothesised that pupils

62   with SEND attending a school with a more inclusive ethos would have an enhanced sense

63   of belonging and good social relations. This paper examines the relationship between

64   inclusive ethos and a sense of school belonging and positive social relations for pupils

65   with two of the largest categories of SEND, mild learning difficulties (MLD) and SEMH,

66   to shed light on how inclusion works.

67   **Understanding sense of school belonging**

68   *Theoretical perspectives and operational definitions*

69   Sense of belonging is recognised as fundamental to human well-being and healthy

70   development, regarding which: Maslow (1943), in his hierarchy of needs theory,

71   conceived belongingness as the third most fundamental need of the self and argued that

72   the need to belong has to be satisfied before other needs can be fulfilled (e.g. self-

73   actualisation). Bowlby (1969), in his attachment theory, supported the assumption that

74   lack of secure attachment with the caregiver in early years can disable an individual's

75   capacity to form caring and affectionate relations with others in later life. The significance

76   of belongingness in an individual's life was also acknowledged by Baumeister and Leary

77   (1995), who described the need to belong as a vital human motivation. The authors

78   articulated that human beings are innately social, having an internal desire to foster and

79   maintain relationships that need to be characterised by approval and intimacy for close

80   social bonds to be formed.

81   Regarding the need to belong in the school environment, Finn (1989) proposed

82   the 'identification-participation' model to explain pupils' engagement and disengagement

83   from school. He suggested that only when pupils feel that school satisfies their needs (i.e.

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84   they feel respected and valued) do they develop a sense of belonging to the institution,

85   which promotes their commitment to school goals and enhances their willingness to

86   participate actively in school activities. Research has shown that no matter what the

87   causes of a low or absent sense of belonging, pupils who fail to have a positive belonging

88   to school are more likely to display low academic achievement, low attendance, risky

89   behaviours, even dropping out of school (Goodenow, 1993; Voelkl, 1997). A different

90   angle regarding belongingness was taken by Goodenow (1993), who placed emphasis on

91   the social relationships of pupils with others in the school environment, where

92   belongingness to school reflects "the extent to which students feel personally accepted,

93   respected, included and supported by others" (Goodenow, 1993, 80). Various researchers

94   have attempted to define and measure school belongingness. Despite the differences in

95   the operational definitions used to measure it, one thing that is consensually agreed, is

96   that a sense of belonging is a psychological need that when fulfilled has a positive impact

97   on pupils' school lives.

98   Studies on school belonging have shown a strong link between pupils' feelings of

99   belonging and its positive effects on their psychological, social and academic lives. In

100   particular, pupils who feel that they belong to school are found to be more motivated in

101   their learning, more willing to participate in all school activities, have higher school

102   attendance rates, better social relations and better academic outcomes (Goodenow, 1993;

103   Osterman, 2000). However, most studies have focussed on typically developing pupils,

104   while studies involving pupils with SEND are fewer. In the current study, emphasis is

105   given to school belonging as evidence of pupils feeling included within their school. It is

106   plausible to expect that those with SEND may have greater difficulties in fostering a

107   positive school belonging than their typically developing peers.

108 *Belonging and social relations*

109 Of the studies defining belonging institutionally, the research outcomes have revealed a

110 strong link between pupils who feel that they belong to their school and those having

111 positive social relations within the school environment. For example, in a Canadian study,

112 Bouchard and Berg (2017) employed individual interviews with teachers and pupils to

113 investigate how middle school pupils (4th-8th Grades) foster a sense of belonging to their

114 school. Thematic analysis of both teachers and pupils' responses revealed that a high

115 sense of belonging is fostered through positive and caring social interactions with teachers

116 as well as peer friendships. Similarly, in a Turkish study involving 799 typical middle

117 school pupils, Cemalcilar (2010) examined the impact of different social relations (i.e.

118 with teachers, administrators and peers) on pupils' feelings of belonging towards school.

119 The findings indicated that all three relationships were positively correlated with a sense

120 of school belonging and pupils' perceived relations with their teachers were found to be

121 the most significant of all.

122 The key role that quality teacher-to-pupil relations play in pupils' sense of school

123 belonging was highlighted by Chiu and colleagues (2016). Through conducting a large-

124 scale study, the researchers examined the school belonging of 193,073 15-year-old pupils

125 from 41 countries. Their findings indicated that positive teacher-to-pupil relations have

126 the strongest association with sense of school belonging.

127 One of the few studies on this topic examining the impact of different social

128 relations on the sense of school belonging of pupils with SEND was carried out in the

129 USA by Murray and Greenberg (2001). The sample comprised 289 primary pupils with

130 SEND (i.e. SEMH, MLD, Mild Mental Retardation (MMR), or Other Health Impairments

131 (OHI)) or without SEND. The findings indicated that pupils with SEND were more likely

132 to have negative relations with teachers, and lower rates of sense of school belonging than

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133   pupils without disabilities. Among the pupils with SEND, those with SEMH and MMR

134   were found to have less intimate relations with and were more dissatisfied by teachers

135   than pupils without disabilities. Similarly, in an Italian study, Nepi et al. (2013) used self-

136   reporting questionnaires to examine the link between sense of school belonging and social

137   position of 418 primary school pupils with and without SEND. Findings revealed that

138   pupils with SEND are less accepted and less likely to have a positive sense of belonging

139   than their typical counterparts. In another study, McCoy and Banks (2012) analysed

140   qualitative data from a National Longitudinal Study of Children in Ireland. The research

141   outcomes revealed that the sense of school belonging of all pupils, with or without SEND,

142   was positively related to their perceived relations with teachers and peers. Taken together,

143   these works underline the importance of positive social relations for the sense of school

144   belonging of pupils with SEND. Another important adult group for pupils with SEND in

145   the school is the Teaching Assistants (TAs), as discussed by Webster and Blatchford

146   (2013). However, the impact of TA relations on pupils with SEND school belonging is

147   relatively unexamined.

148   ***Belonging, individual characteristics and school ethos***

149   Research outcomes of several studies in the international literature have shown that the

150   sense of belonging of pupils to school is affected by their individual characteristics and

151   the quality of school ethos (Cemalcilar, 2010; Smerdon, 2002). For instance, in three

152   large-scale studies, Smerdon (2002), Ma (2003) and Fullarton (2002) examined the

153   association between individual pupils' characteristics and school characteristics in

154   relation to pupils' sense of belonging. Using hierarchical linear modelling for their

155   analysis, all three studies delivered similar research outcomes: that the majority of

156   variation in pupils' belonging lies within rather than between schools. Smerdon (2002)

157   found that the proportion of the variance within-school was 95%, but a small nevertheless

158   significant proposition of variance was explained by school factors (5%). Similarly, Ma

159   (2003) showed that 4% of school variance in belonging was attributed to school factors,

160   while 96% was down to the students. Fullarton (2002) found slightly higher results for

161   the between-school aspect, which reached 9% of its variance. The fact that most

162   variability was found to be within schools, points to not just individual differences in

163   belonging, but also, that the experiences and opportunities pupils have at school vary by

164   individual. It is worth noting that all these studies employed quantitative methodologies

165   for the data collection. In contrast to individual characteristics (e.g. gender) that can be

166   objectively measured, ethos is a difficult term to define and measure, as it is subjectively

167   perceived and experienced (Solvason, 2005). The small amount of variance in belonging

168   explained by ethos might be as a result of the inadequacy of the measures. Despite the

169   between-school differences in belonging not being found to be large, the fact that they

170   exist at all indicates that the quality of the school a pupil attends does play a role in their

171   sense of belonging. That is, this suggests that, irrespective of the individual differences a

172   pupil might have, the ethos of a school can equally enhance or discourage pupils' sense

173   of belonging towards school.

174   Educational and psychological research over time has provided evidence that the

175   quality of school ethos affects the sense of belonging of pupils to school. In a Turkish

176   study involving 799 middle school pupils from 13 schools, Cemalcilar (2010) found that

177   pupils' perceived satisfaction with their social relations as well as with the school ethos

178   were significant predictors of positive feelings of belonging towards school. This is

179   higher in schools that promote positive relationships between individuals as well as in

180   those where they are given the opportunity to take decisions about academic work, learn

181   collaboratively (Smerdon, 2002) and participate in the school's extracurricular activities

182   (Flitcroft and Kelly, 2016). The applied behaviour management of a school was also

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183 found to be linked with pupils' belonging. Cassidy (2005) elicited that care-based[1]

184 disciplinary practices can be more effective in sustaining school belongingness than the

185 traditional ones that rely on punishment. Fair treatment was also argued by Newmann

186 (1992) to be crucial to a student fostering a positive sense of belonging to school. In a

187 similar vein, Ma (2003), drawing on quantitative data from a large-scale study conducted

188 in Canada, found a school's disciplinary climate was positively associated with 8th grade

189 pupils' sense of school belonging.

190   In the field of special education, school ethos characteristics were explored in one

191 American and one English study for any positive influence on the sense of school

192 belonging in pupils with SEND (Frederickson et al., 2007; Hagborg, 1998). Neither study,

193 using Goodenow's (1993) Psychological Sense of School Membership scale, found any

194 significant difference in the sense of school belonging between typical pupils and pupils

195 with SEND. In the Harborg study, this mark of inclusion was attributed to small size of

196 the participating school and the quality of special support provided to pupils. In the study

197 by Fredrickson and colleagues pupils with SEND received education in classes which

198 were part of an innovative inclusion programme. However, to researchers' knowledge

199 none of the existing studies had ever investigated whether the sense of school belonging

200 and social relations of pupils with SEMH and MLD vary according to the level of

201 inclusiveness of the school ethos at the institution they attend. The following research

202 questions were compiled to guide this study aimed addressing the gaps in the literature

203 identified above:

204   1. Are there differences in belonging, and social relations (i.e. with teachers, TAs
205   and peers) between typically developing pupils and those with SEND?

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[1] Care-based practices focus on promoting the academic and personal welfare of students.

2. Is there a relationship between the perceptions of pupils with SEMH and MLD regarding social relations (i.e. with teachers, TAs, and peers) and their sense of school belonging?

3. Is there a relationship between the perceptions of pupils with SEMH and MLD about ethos with their sense of school belonging, and social relations?

4. Is the inclusiveness of school ethos linked with school belonging and social relations for pupils with SEMH and MLD?

Methodology

Participants and Procedure

Data were collected from 1,440 pupils attending the 7th to 10th grades of three mainstream state-funded English secondary schools in a suburban metropolitan area, pupils identified with SEND by their schools and all their classmates. The schools were purposively selected based on the inclusivity of their school ethos. Three schools, one 'very inclusive', one 'just inclusive' and one 'less inclusive', were identified after a rigorous selection process based on School Census statistics provided by the Department for Education in England and accepted for participation in the study. The identification of schools that differ in inclusivity was based on *two initial criteria*, followed by matching *three further criteria*. *First criterion*: the 'inclusivity' of each school was measured by the difference in the percentage of SEND pupils in each school with the average for the Local Authority (LA) to which it belonged. *Second criterion*: another indication of 'inclusivity' was the percentage of exclusions. Schools that had a lower percentage when compared with the LA's average were characterised as inclusive, while those with a higher percentage were deemed as less so. Schools that had been refined from the first and second criteria also needed to have similar Ofsted reports, socioeconomic background (i.e. percentage of pupils eligible for free school meals) and ethnicity levels (i.e. percentage of pupils who

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speak English as first language) to meet the third, the fourth and fifth criteria,

232 respectively. The current study focused on pupils with SEMH and MLD, as they are

233 among the largest groups of SEND receiving education in mainstream English settings at

234 the time of the study (DfE, 2011. Typical pupils attending the 7th to 10th grades in the

235 same schools were also included as a comparable group.

236   The number of participating pupils from each school was approximately 500. At

237 the time of the study, schools were required to identify pupils with SEND as requiring

238 School Action, School Action plus or a Statement of SEND (DfE/DHSC, 2015). The

239 majority of pupils, nearly 78% were classified by schools as typical, while 19% were

240 identified as having some level of SEND (3% of pupils were not classified in either of

241 the two categories due to missing data in the information provided by pupils in the self-

242 reporting questionnaire). Of the total sample: 2.4% pupils (n=36) were identified by the

243 school as having SEMH, including those with SEMH and another SEND category; 6.7%

244 (n=99) were identified by the school as having MLD, including those identified as having

245 this and another SEND category. Pupils with another category of SEND, as well as those

246 pupils that had a combination of MLD and SEMH, were classified as having Other SEND

247 (9.9%, n=147) for the purpose of this study.

248   For triangulation purposes on the identification of SEMH, all pupils were asked

249 to complete the pupil self-reported version of the Strengths and Difficulties Questionnaire

250 (SDQ) (Goodman, 1997). The SDQ is a brief measure of screening for behavioural and

251 emotional problems with pupils and adolescents. According to its terminology,

252 behavioural problems are labelled as externalising difficulties and emotional problems as

253 internalising ones. Classification made based on the SDQ total difficulties scores revealed

254 that 70.3% of pupils were identified as normal, 11.5% as borderline and 7.5% as abnormal

255 (10.8% missing values). On the SDQ externalising difficulties sub-scale, 76.3% were

256 classified as normal, 7.2% as borderline and 5.9% as abnormal. Whilst a comparison of

257 the percentages of pupils classified by the school as SEMH and by self-report as abnormal

258 on SDQ externalising scale revealed some degree of concord, disagreement was also

259 evident, i.e. half of the pupils identified by their school as SEMH had scores in the normal

260 range on the SDQ externalising scale and half of the pupils with scores on the borderline

261 or in the abnormal range on the SDQ externalising scale were not identified as SEMH by

262 their schools. Consideration of the challenges in accurately identifying SEMH is beyond

263 the scope of this paper and will be discussed in a later one. Identification of SEMH

264 provided by school SENCO and SDQ questionnaire are used in this paper.

265   Informed consent was sought from all participants and parents of participating

266 pupils. All participants were informed of their right to withdraw from the study and of

267 their rights to confidentiality and anonymity.

268 ***Measures***

269 *Developing new scales*

270 Two scales were developed for the purpose of the current study, the sense of school

271 belonging and the social relations. The former was developed for the following reasons.

272 In the literature, there are two core drivers underpinning the perceptions of researchers

273 on school belongingness. The first, used by numerous researchers, pertains to measuring

274 pupils' belongingness to school in terms of social relations, by examining the extent to

275 which students feel valued and accepted by the members of the school community (i.e.

276 teachers and peers) (see Goodeneow, 1993; Ma, 2003; Smerdon, 2002; Voelkl, 1996).

277 The second perspective is in respect of a pupil's belongingness to the school as an

278 institution. Relations with school are measured mostly by examining pupils' feelings of

279 school liking or belonging (see Cemalcilar, 2010; McCoy and Banks, 2012).

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280   The majority of previous studies focused mainly on examining typical pupils'

281   feelings about school, using a definition that involved social relations to measure school

282   belonging. In contrast, for this study the interest lies in investigating the feelings of pupils

283   identified as having SEND towards an institution, by using inclusion as a theoretical

284   framework. According to Florian (1998), inclusion is defined as the opportunity for active

285   involvement and choice in the school setting, and not something given to SEND pupils.

286   Thus, in order to examine pupils' belonging to school as an institution there is a need to

287   separate out social relations, and relations to school, i.e. probing each one discretely.

288   Regarding the social relations scales, most of the previous researchers (see

289   Cemalcilar, 2010; Goodenow, 1993; Morrison et al. 2012) have devised tools to examine

290   typical pupils' social relations. None of the existing scales assess the social relations of

291   pupils with SEND, nor can they capture the difficulties that pupils with SEMH and MLD

292   encounter in their social interactions with peers and key educators. Accordingly, a new

293   scale measuring social relations with peers, teachers and teaching assistants (TAs) was

294   constructed, where some of the items were developed specifically for this study and others

295   were based on existing validated instruments (e.g. Booth and Ainscow, 2002; Goodenow,

296   1993; Ma, 2003).

297   *Scales used in the main study*

298   Prior to the data collection, a pilot study was conducted to test the clarity of items and

299   their internal consistency. Participants were asked to fill in a self-reported questionnaire

300   on a 5-point Likert scale.

301   Perceived sense of school belonging scale was assessed using nine items (e.g. I

302   like to take part in student council (or student body), I feel equal to other pupils in this

303   school). The internal consistency of the scale was .79. Higher scores indicated higher

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304   levels of sense of school belonging. Perceived quality and satisfaction with social

305   relations within school was assessed with three sub-scales, each consisting of 10 items to

306   measure teacher-to-pupil relations (e.g. my teachers give me extra help when I need it),

307   TA-to-pupil relations (e.g. my TA helps me to progress) and pupil-to-pupil relations (e.g.

308   pupils think of me as not fitting in with any group). The internal consistencies for the

309   subscales were .80, .77, and .71, respectively. Higher scores indicated higher levels of

310   satisfaction. Perceived perceptions of the school ethos were assessed using two sub-

311   scales, with the first measuring inclusion and involves 11 items (e.g. my needs are met in

312   this school) and the second sub-scale measuring behaviour management and involves six

313   items (e.g. rules at this school applied equally to all pupils). The internal consistency of

314   the school ethos scale was .83, while the sub-scales for inclusion and behaviour

315   management were .85 and .67 respectively. Further information of the development of

316   the above scales, along with the self-reporting questionnaire can be found in Author

317   (2017).

318   **Findings**

319   *Differences in belonging*

320   Table 1 shows the results of a series of independent-sample *t*-tests on school belonging.

321   Statistically significant differences were found between pupils with and without

322   identified SEND ($t(1279) = 2.139$, $p = .033$), with pupils with SEND scoring lower than

323   their typical peers. There was no significant difference between pupils identified by their

324   school as MLD or SEMH, but belonging scores of those identified as having the former

325   were significantly higher than and those who classified themselves as abnormal on the

326   SDQ externalising difficulties scale ($t(244) = 3.859$, $p < .001$). Consistent with all group

327   comparisons conducted for pupils with co-occurring MLD and SEMH/abnormal SDQ

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328   scores, the MLD group in the latter analysis excluded pupils who also scored within the

329   abnormal range on the SDQ externalising scale (n = 25) to enable comparison between

330   dichotomous groups; and the remaining MLD pupils had a higher mean score on the

331   belonging scale. Finally, it was also found that pupils who classified themselves as

332   abnormal on the SDQ externalising difficulties scale rated their perceived sense of school

333   belonging lower those who classified themselves as abnormal on the SDQ internalising

334   difficulties scale ($t(277) = 2.992$, $p = .03$).

Differences in social relations

336   Comparing responses from different groups of pupils on their perceived relations with

337   teachers indicated statistically significant differences for the majority of the results, as

338   can been seen in Table 1. Differences in perceived relations with teachers were observed

339   between type of SEND status $t(320.972) = 2.276$, $p = .024$, with typical pupils scoring

340   higher than those identified as having SEND. Comparisons between groups of pupils with

341   different categories of SEND also revealed statistically significant differences in the mean

342   scores between groups. However, there was no significant difference between pupils

343   identified by their school as MLD or SEMH, whereas scores of perceived relations with

344   teachers of those with MLD were significantly higher than those who classified

345   themselves as abnormal on the SDQ externalising difficulties scale $t(232) = 8.706$, $p <$

346   .001. Consistent with all group comparisons conducted for pupils with co-occurring MLD

347   and SEMH/abnormal SDQ scores, the MLD group in the latter analysis excluded pupils

348   who also scored within the abnormal range on the SDQ externalising scale (n = 25) to

349   enable comparison between dichotomous groups; and the remaining MLD pupils had a

350   higher mean score on the relations with teachers scale. A statistically significant

351   difference in perceived relations with teachers was also observed $t(209) = 7.014$, $p < .001$,

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352   with pupils who classified themselves as abnormal on the SDQ internalising difficulties

353   scale scoring higher than those on the externalising one.

354   As shown in Table 1, statistically significant differences for perceived relations

355   with peers ($t(292.996) = 4.49$, $p < .001$) were observed only between typical pupils, and

356   those with SEND, with typical pupils scoring higher than those with SEND. This was

357   also the case between groups of SEND ($t(192) = -3.969$, $p < .001$), with those who

358   classified themselves as abnormal on the SDQ internalising difficulties scale scoring

359   higher than those who were abnormal on the externalising one.

360

361   Table 1: t-tests of belonging and social relations for different groups of pupils

	Belonging			Relations with Teachers			Relations with Peers		
	N	M (SD)	*t*-test	N	M (SD)	t-test	N	M (SD)	t-test
Typical	1038	32.23 (5.4)	2.14*	988	35.47 (6.1)	2.28*	923	38.25 (5.5)	4.49**
Pupils with SEND	283	31.41 (5.5)		263	34.37 (6.8)		240	36.21 (6.0)	
SEMH	31	30.29 (5.3)	-1.25	30	32.83 (6.0)	-1.78	26	34.12 (6.9)	-1.10
MLD	90	31.60 (5.0)		90	35.16 (6.2)		82	35.76 (5.5)	
MLD	66	32.58 (4.5)	3.86**	66	37.03 (5.1)	8.71**	63	35.84 (5.7)	.447
Abnormal_exter	180	29.43 (6.0)		168	30.42 (5.3)		156	35.47 (5.6)	
Abrnomal_inter	46	32.22 (5.0)	2.99**	46	37.02 (5.7)	7.01**	43	32.26 (5.7)	-3.97**
Abnormal_exter	178	29.28 (6.2)		165	30.63 (5.4)		151	35.98(5.3)	

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

363   *Relationship between the perception of pupils with SEND on social relations (i.e. with*

364   *teachers, TAs, and peers) and their sense of school belonging*

365   The perceived sense of school belonging of pupils with SEND was significantly

366   correlated with all measures of social relations. There was a positive correlation between

367   the perceived sense of school belonging of pupils with SEND with their social relations

368   with teachers (r = .475, n = 1251, $p < .001$). The correlation was of medium size and

369   explained nearly 23% of the variance in the scores of pupils with SEND on their perceived

370   belonging; the highest of all amongst their social relations. A positive correlation was

371   also found between the perceived sense of school belonging of pupils with SEND and

372   their relations with TAs (r = .367, n = 45, $p < .001$). It is a medium correlation: 13% of

373   the variation is explained. Finally, the interrelationship between perceived relations with

374   peers and sense of school belonging indicates a positive correlation between variables (r

375   = .269, n = 1163, $p < .001$), with high levels of perceived relations with peers associated

376   with high levels of perceived belonging. The correlation was small and explained nearly

377   7% of the variance.

378   *Relationship between the perception of pupils with SEND on ethos with their sense of*

379   *school belonging, and social relations*

380   Perceived ethos, as measured by pupils themselves, was significantly correlated with all

381   measures (i.e. belonging, and social relations). There was a strong positive relationship

382   between the perceived ethos of pupils with SEND and their sense of school belonging (*r*

383   = .575, n = 1321, $p < .001$), thus suggesting that the more positive perceptions pupils with

384   SEND hold about their school ethos, the more likely they are to score high in their sense

385   of school belonging. It was a large correlation: 33% of the variation was explained. Ethos

386   was also positively correlated with social relations with teachers (*r* = .456, n = 1251, *p* <

387   .001), and teaching assistants ($r = .521$, n = 45, $p < .001$). Perceived ethos helps to explain

388   21% of the variance in the respondents' scores regarding social relations with teachers,

389   and 27% with TAs, whilst the correlations between variables are medium and large,

390   respectively. Finally, the correlation between the perceived ethos of pupils with SEND

391   and their relations with peers was found to be weak and not statistically significant.

392   ***Relation of inclusiveness of school ethos with pupils with SEND, sense of school***

393   ***belonging and social relations***

394   Table 2 contains descriptive statistics of the variables for the three different settings. The

395   findings indicate that there was a statistically significant difference in pupils' perceived

396   school ethos in the three schools, $F(2, 1260) = 5.557$, $p = .004$ for school ethos; $F(2,$

397   $1310) = 10.249$, $p > .001$ for the behaviour management sub-scale; and $F(2, 1264) = 4.20$,

398   $p = .015$ for the school inclusivity sub-scale. Post hoc comparisons on school ethos

399   indicated that less inclusive school ($M = 55.37$, $SD = 9.08$) was found to be statistically

400   significantly lower than the just inclusive ($M = 56.9$, $SD = 9.99$), and the very inclusive

401   ($M = 57.46$, $SD = 8.97$), while no statistically significant difference in the mean scores

402   between the just inclusive and the very inclusive was found Post hoc comparisons in

403   behaviour management and inclusivity sub-scales indicated that the less inclusive school

404   was scoring lower than the just inclusive and the very inclusive school.

405   Similarly, findings indicated a statistically significant difference in the mean

406   scores on the sense of school belonging between the three settings, $F(2, 1318) = 4.020$, p

407   $= .018$. Post hoc comparisons show that the mean score on the sense of school belonging

408   for the very inclusive school ($M = 32.41$, $SD = 5.3$) was significantly different from the

409   less inclusive ($M = 31.4$, $SD = 5.2$), with the very inclusive school scoring higher than

410   the less inclusive. However, the just inclusive did not differ significantly from either of

411   the other two.

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412   Statistically significant differences were also found in pupils' perceived social

413   relations with teachers according to the three different school settings $F(2, 1248) = 3.840$,

414    $p = .022$. Post hoc comparisons indicate that the mean score for the just inclusive school

415   ($M = 34.72$, $SD = 6.2$) was significantly lower than the very inclusive ($M = 35.86$, $SD = $

416   6.0), while the less inclusive did not differ significantly from either of the other two. No

417   significant difference across the settings was found in pupils' perceived relations with

418   peers nor with the TAs.

419   Table 2 Ethos, belonging and social relations scores for different school settings

Variable	Just Inclusive M (SD)	Very Inclusive M (SD)	Less Inclusive M (SD)	F	p
Ethos	56.92 (10.0)	57.46 (9.0)	55.37 (9.1)	$F(2,1260)$	.004**
BM	21.04 (4.5)	20.75 (4.1)	19.78 (4.2)	$F(2, 1310)$	$< .001$**
Inclusivity	35.87 (6.5)	36.68 (6.0)	35.49 (5.9)	$F(2,1264)$	.015*
Belonging	32.16 (5.7)	32.41 (5.3)	31.41 (5.2)	F(2,1318)	.018*
Relations with Teachers	34.72(6.2)	35.86(6.0)	35.04(6.4)	F(2, 1248)	.022*
Relations with TAs	41.33(8.4)	38.63(9.0)	33.67(11.6)	F(2, 42)	.177
Relations with pupils	37.83(5.8)	37.89(5.3)	37.73(6.1)	F(2, 1160)	.919

420   Note. N =, M = Mean, SD = Standard deviation; *p < .05, **p < .01

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Discussion

The objective of this study was to explore whether pupils with SEND attending secondary mainstream English settings have a sense of school belonging and positive social relations, along with whether these vary according to the inclusiveness of the school ethos.

It is clear from the analysis that the sense of school belonging varies between different groups of pupils. At a descriptive level, the findings show that pupils with SEND are less likely to have a sense of belonging than their typically developing peers. Differences were also observed among pupils with SEND, whereby their feelings of belonging were affected by their type of special need. In particular, pupils reporting behavioural difficulties or hyperactivity were more likely to have a lesser sense of belonging compared to those with learning difficulties or those with emotional difficulties.

In order to understand any differences in the sense of school belonging among pupils with SEND, we also examined their perceived relations with teachers, peers and TAs, as the literature shows that the sense of school belonging is very much influenced by the quality of social relations at school (e.g. Bouchard and Berg, 2017; Cemalcilar, 2010). Analysis for the current study revealed that pupils with SEND perceive their relationships with teachers as well as peers more negatively than their typically developing counterparts, which is consistent with McCoy and Bank's (2012) finding from the Irish context.

Differences in the social relations with teachers were also observed among pupils with SEND. Specifically, those reporting externalising disorders were found to be the most dissatisfied with their relations with their teachers than their counterparts with learning difficulties as well as those with emotional difficulties. One possible explanation

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447 for this outcome is that it reflects the bi-directional nature of relationships. Pupils with

448 behavioural difficulties may lack social skills, which negatively affect their ability to

449 build and maintain satisfactory social relationships (Frostad and Pijl, 2007). These may

450 in turn elicit negative reactions from teachers, who may have received insufficient

451 training in the management of challenging behaviours and how it makes them feel (Allan,

452 2015).

453   Within the group of pupils with SEND, their perceived relations with teachers had

454 the strongest association with their sense of school belonging (r = .475), followed by their

455 relations with TAs (r = .367), while the relations with peers, although still significant,

456 showed the weakest association (r = .269). Whilst the important role teachers play in

457 shaping pupils' sense of school belonging has been confirmed by the findings of a number

458 of international studies (e.g. Cemalcilar, 2010; Chiu et al., 2016; McCoy and Banks,

459 2012), for pupils with SEND, one would expect their relations with TAs to have the most

460 significant effect on their belonging. According to Webster and Blatchford (2013),

461 teachers may neglect pupils with SEND, handing over much responsibility to TAs, with

462 the belief that they have more expertise to offer regarding this cohort. One possible

463 explanation therefore for this finding might be that pupils with SEND might have the

464 need to have more intimate relations and social interactions with their teachers in class

465 marking the responsibility teachers have in shaping positive schooling experiences for

466 pupils.

467   Another factor that was found to associate positively with the sense of school

468 belonging of pupils with SEND was their perceptions on their school ethos. This means

469 that pupils who perceive as satisfactory the applied inclusive policies and behaviour

470 management strategies that their school implements are more likely to foster a favourable

471 sense of school belonging than those who do not. For example, analysis of this study

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472   revealed that pupils at the very inclusive school, who perceived the ethos of their school

473   as more inclusive, scored higher in their sense of belonging than those at the less inclusive

474   one, who perceived the ethos of their school as less inclusive. The link between school

475   ethos characteristics and typical pupil sense of school belonging is supported by other

476   international studies (Bouchard and Berg, 2017; Cemalcilar, 2010; Ma, 2003). However,

477   very few studies have found an association between the inclusivity of a school setting and

478   the sense of school belonging of pupils with SEND, either nationally or internationally.

479   Last it must be noted that the analysis of this study also found a positive

480   association between the perceived ethos of pupils with SEND and their social relations

481   with teachers and TAs. The relations of these pupils with their TAs explained

482   considerably more of the variance of their perceived school ethos than their relations with

483   their teachers. This result could be explained by the fact that pupils with SEND receive

484   more attention and care from their TAs than their teachers within class, as demonstrated

485   by Webster and Blacthford (2013). Thus, it is logical to expect that the relationship with

486   TAs is the one that contributes most to a pupil's perception about school.

487   In sum, it appears that the sense of school belonging for pupils with SEND within

488   secondary mainstream English settings is affected by two factors: their perceived quality

489   of social relations with teachers, and their perceived inclusiveness of their school ethos.

490   Pupils with SEND, particularly those with behavioural difficulties, find it harder to feel a

491   sense of belonging towards school as well as finding it more difficult to form positive

492   relations with their teachers than those with learning difficulties and emotional

493   difficulties. The results of the current study highlight the inefficiency of two practical

494   implications: firstly, the inability of teachers to tackle pupils' challenging behaviour

495   without conflict; and secondly the ineffectiveness of schools to implement successful

496   behaviour management strategies. A further study with more focus on the voices of pupils

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497 with behavioural difficulties to elicit the reasons they feel less belonging is therefore

498 recommended.

499   Finally, a number of important limitations need to be considered. Firstly, the

500 findings of this study were correlational in nature and hence, assumptions about the causal

501 relationships of variables cannot be made. Secondly, due to time restrictions only a small

502 number of schools were recruited. Thirdly, because of the small sample size of schools,

503 it is recognised that the findings are not generalisable. Another limitation of the study

504 refers to the validity of the sample as identification of pupils was based on school

505 recorded categories which leaves a pupil's behaviour and attainment open to subjective

506 interpretations. Similarly, some of the data were collected from participant self-reports

507 and the pupils might have misrepresented their levels of belonging to school, for example,

508 to project a more favourable image. Finally, demographic information beyond age and

509 gender was not collected at pupil level and has not been included in analysis here.

510 However, despite these limitations, this study adds to the literature of special education

511 as it offers ways of enhancing the sense of school belonging of pupils with SEND in

512 mainstream settings.

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