### Advances in Autism



## Can the "Current View" show that autistic young people referred to mental health services have more comorbidities and complex needs?

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### **Introduction**

Autism is a neurodevelopmental disorder associated with deficits in reciprocal social interaction and communication, and restricted, stereotyped, repetitive behaviour or interests (American Psychiatric Association, 2013). Approximately one in a hundred (1%) young people in the UK have autism (BMA, 2020). Around 70% of young people with autism have at least one coexisting mental health condition and 41% have two or more (Simonoff et al., 2008).

Autism is increasingly being recognised and diagnosed in childhood, thus increasing the demand on local diagnostic and intervention services for young people. Young people with autism are more likely to be able to contribute and be affirmed in their community if they are able to access adequate support from health and care services in terms of receiving timely, proactive, and evidence-based community interventions (Council for Disabled Children, 2017).

However, in the absence of adequate support or understanding of their needs they can miss out on an education (Totiska et al., 2020), and/or fail to benefit from employment and training, and become isolated from their community (Locke et al., 2010). This can result in complex mental health difficulties (Simonoff et al., 2008), behavioural difficulties (Horner et al., 2002; Matson et al., 2008) and low self-esteem (Van der Cruijsen and Boyer, 2021). Inadequate support may also lead to increased long term costs to the National Health Service and Local Authorities (Foundation for People with Learning Disabilities, 2007), as individuals with potentially avoidable and treatable issues may show signs of deterioration and the issues become more severe and/or chronic requiring specialist interventions (Children's Commissioner, 2019; National Autistic Society, 2020).

Supporting young people with autism can be challenging, due not only to their neurodevelopmental needs, but accompanying medical diagnoses and/or other difficulties in their life (Rydzewska et al., 2018). Wee et al. (2021) suggest that a multiagency approach between mental health, neurodevelopmental, physical health, social care and education services is required for young people with autism to have the best outcomes possible. At present there is limited information available on the comorbidities, complexity, contextual and educational factors of young people referred to Children and Young People's Mental Health (CYPMH) services. A considerable amount of data on each young person is routinely gathered via the "Current View" Tool (Jones et al., 2013) including provisional problem description, selected complexity factors, contextual problems and difficulties with education, employment and training. So far, there has been limited use of this data to develop an understanding of the comorbidities and complexities of this population. One study used the "Current View" Tool to estimate problem severity amongst young people accessing mental health services, but they did not use contextual problems to inform this estimate (Edbrooke-Childs and Deighton, 2020). Another study used the "Current View" Tool to assess the presence and impact of psychosocial difficulties and complex problems, but did not assess contextual issues (Liverpool et al., 2021).

The aim of this study was to use data from the "Current View" Tool to understand the multiagency support needs of autistic young people accessing mental health services. The objectives were:

- To describe the clinical characteristics of autistic young people accessing CYPMH services.
- To describe associations between comorbidities and complexity needs in autistic young people and compare it with non-autistic young people accessing CYPMH services.
- To understand areas for service development and multi-agency focus in order to improve outcomes and reduce health inequalities for autistic young people.

## METHOD:

Study Design:

This was a cohort study using primary data, collected in a mental health out-patient setting, as part of an initial assessment appointment.

### Setting:

This study was carried out in a large mental health trust in the North West of England, serving a population of approximately 1.5 million and providing health and care services, including mental health, intellectual disability, community physical health and all-age disability care.

### Study population:

The study population included all young people aged 5-18 years who were referred to the Children and Young People's Mental Health (CYPMH) service and participated in an initial assessment between January 2019 and December 2019. Participants were identified from the electronic patient records.

## Data variables, sources of data and data collection:

All the data were obtained from the electronic patient record system. The "Current View" Tool (Jones et al., 2013) is completed routinely by Children and Young People's Mental Health service clinicians (e.g. mental health nurses, learning disability nurses, clinical psychologists) at initial assessment to collect clinical data in England. There are 50 items, broken down into 4 groups - "provisional problem description" (e.g. social anxiety, psychosis) "selected complexity factors" (e.g. young carer status, looked after child), "contextual problems" (e.g. home issues, community/engagement issues) and "education, employment and training issues" (e.g. attendance difficulties, attainment difficulties). Each item was recorded as yes, no or unknown. "Unknown" included missing data.

Variables collected included: basic demographic data, reason for referral and responses to all the "Current View" Tool items.

Postcodes were used to identify indices of multiple deprivation deciles based on the Index of Multiple Deprivation 2019 (IMD, 2019) which is the official measure of relative deprivation in England. These are commonly reported in deciles ranging from the wards in the most deprived 10% in England to the 10% in the least deprived.

The predominant mental health issue experienced by young people were used to identify the main reason for referral. Young people referred to CYPMHS can present with multiple mental health comorbidities.

### Analysis and statistics:

Data were extracted from the electronic patient records system in an anonymised form and imported to Excel and *Stata Statistical Software: Release 17* for analysis (StataCorp, 2021). Numbers and percentages were calculated. Odds ratios (OR) with 95% confidence intervals (CI) were calculated for the differences between the "Current View" Tool items for autistic young people and non-autistic young people. Differences at the 0.1% level (p<0.001) were regarded as significant as we were using multiple comparisons. Differences between group means were analysed using T-Tests. The Mean and Standard Error of both groups were reported, and we accepted statistical significance at p<0.05.

### **Results:**

### Demographic factors

The demographics for the 2259 young people referred to a CYPMH service in 12 months from January 2019 are in Table 1. Of these, 302 (13%) were recorded as autistic, 1409 (63%) were non-autistic and 548 (24%) where it was reported to be unknown if the young person was autistic or not. Of those recorded as autistic, the majority (71%) were male. Almost half of young people referred to the CYPMH service were aged 14-18 years; the majority were from white British background and indices of multiple deprivation (IMD) deciles were evenly distributed across the population. There was no statistically significant

difference in these demographic profiles between autistic young people and non-autistic young people.

## Reason for referral

The main reasons for referral to the CYPMH service as identified at referral are shown in Table 2. The most common reason for referral was anxiety 452 (20%), followed by self-harm 240 (10%), depression 229 (10%) and behaviour issues 223 (10%). Autism was the main reason for referral for 73 (3%) of young people.

### "Current View" Tool

The number of records that were marked as unknown or missing varied with each item. This ranged from 21 (1%) for "looked after child" to 1083 (48%) for "current protection plan". The mean number of records with unknown or missing data for an item was 158, but this was a skewed distribution with a median of 105 records (Interquartile range 71 to 147). There were 7 items were the records were less than 90% completed.

## "Current View" Tool: "Provisional Problem Description"

In the "Current View" tool category "provisional problem description", 19 items were significantly associated with autistic young people (p<0.001) (Table 3). They included a higher prevalence of mental health issues. These were internalized anxiety issues ("anxious away from care givers", "anxious generally", "avoids specific things", "anxious in social situations", "compelled to do or think things"), and items related to neurodevelopmental issues ("difficulties sitting still or concentrating", "unexplained developmental needs") and behavioural issues ("behavioural difficulties"). Further items that were associated with autistic young people may highlight barriers to accessing healthcare ("carer management of the child/young person's behaviour", "does not speak", "avoids specific things", "adjustment to health issues"). There were also items associated with autistic young people indicating social and developmental difficulties ("peer relationship difficulties", "self-care issues").

Four "provisional problem description" items ("drug and alcohol difficulties", "depression/low mood", "repetitive problematic behaviours", and "disturbed by traumatic event") were significantly negatively associated (p<0.001) with autistic young people compared to non-autistic young people.

# "Current View" Tool: Selected Complexity Factors, Contextual Problems, Education/Employment/Training Issues

The "Current View" Tool categories "selected complexity factors", "contextual problems", and/or "education, and employment and training issues" showed seven of the twenty items across these categories were significantly associated with autistic young people (p value <0.001) (Table 3). One of the items ("experience of abuse or neglect") was significantly negatively associated (p<0.001) in autistic young people compared to non-autistic young people. The remaining 6 items that were positively associated with autistic young people are listed in (Table 3).

For each individual, the number of items that were scored yes on the "Current View" Tool in "complexity factors", "contextual problems", and "education, employment and training issues" were totalled. The mean number of these items for autistic young people was 5.1 (SE = 0.16) and non-autistic young people was 3.45 (SE = 0.07), p value <0.05.

## **Discussion:**

This is the first UK based study to use the data routinely entered in the "Current View" Tool to assess the profile of autistic and non-autistic young people referred to CYPMH services, using "provisional problem description", "selected complexity factors", "contextual problems" and "education, employment and training issues". There were a number of key findings.

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For autistic young people there were a number of associations with comorbidities identified in the category "provisional problem description" indicating the complexity of needs. These included internalising issues (e.g. generalised, social and separation anxiety), neurodevelopmental conditions, including problems with concentration, and behavioural difficulties. This is in line with previous findings (Simonoff et al., 2008). There were associations between "behavioural difficulties", "self-care issues", "doesn't get to the toilet in time", "carer management of the child/young person's behaviour" and "poses risk to others" and autistic young people. Behavioural difficulties are common amongst autistic young people, and they can place others at risk (Gorlin et al., 2016). A number of factors including problems understanding their environment, due to a lack of structure and consistency, may account for behavioural difficulties displayed by autistic young people (Totsika et al., 2010). Providing structure and routine for autistic young people who display high levels of comorbidities and complexities is likely to prove challenging to parents/carers without the right multi-agency support, that is involvement from health, social care and education. For example, while CYPMH services are commissioned to respond to comorbidities identified as mental health issues, and any associated "behavioural difficulties", supporting "carer management of the child/young person's behaviour" may require respite support via social care (Salomone et al., 2017). Additionally, to prevent behavioural difficulties escalating, and any associated risk to others, a multi-agency response to risk management may be required (NHS England, 2015a).

Autistic young people were assessed as having more complex needs at the initial assessment. Autistic young people had on average a significantly higher number of items (5.1 v 3.5 p<0.05) scored in the three "Current View" Tool categories: "selected complexity", "contextual problems" and "education, employment and training issues" than non-autistic young people. The items in these categories ranged from "parental health issues", "deemed child in need" to the young person's own "attainment difficulties". These different categories once again reflect the challenges inherent in supporting autistic young people and indicate the need for a multi-agency response to improve health, social care, and educational outcomes, alongside reducing health inequalities (NHS England, 2015b; NHS England, 2017).

There were several associations identified on the "Current View" Tool (e.g. "avoids specific things", "does not speak") that could contribute to barriers for autistic young people accessing and engaging with services and achieving good health outcomes. The item "adjustment to health issues" was associated with autistic young people. People with neurodevelopmental needs are known to struggle to access health care services, due to the lack of reasonable adjustments (Westminster Commission on Autism, 2016), which may account for difficulties adjusting to both emotional and physical healthcare issues.

In this study there was a significant association between "engagement issues" and autistic young people. This may mean in some instances that they did not attend the first assessment, due to difficulties communicating, and parents/carers may have had to attended in the absence of the young person. Where mental health and neurodevelopmental needs have been identified following the initial assessment, effectively addressing these needs requires continued engagement with services (Crane et al., 2019).

These different factors such as avoidance of specific situations and difficulties communicating, as well as co-morbid mental health issues (e.g. anxiety), commonly experienced by autistic young people, will impact negatively on engagement across school, home and community environments. This can have other effects such as autistic young people having difficulties accessing community short breaks provision and engaging with healthcare systems. These all may prove challenging for these young people, once again leading to poorer health outcomes.

Young people with autism are vulnerable to traumatization due to their deficits in social communication and emotional regulation (Hoover, 2015). However, we found that "Depression/low mood" and "disturbed by traumatic event" were negatively associated with autistic young people. This may be because trauma-related presentations may be more difficult to identify in young people with autism, compared to young people without autism. This may be due to the complexity of how trauma-related disorders are experienced and expressed by young people with autism, and cause difficulties for their accurate identification (Ng-Cordell et al., 2022). Autistic young people referred to CYPMH services often experience problems communicating their feelings and emotions when accessing

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services. Diagnostic overshadowing may lead to symptoms consistent with low mood (e.g. withdrawing from activities) and trauma responses, being attributed to their autism, as opposed to the symptoms indicating a deterioration in mood or post-traumatic stress disorder. We are therefore uncertain if this is a true finding.

Autism is a risk factor for substance misuse (Butwicka et al., 2017), leaving individuals susceptible to negative consequences in daily functioning and physical health (Weir et al., 2021). In contrast, "Drug and alcohol issues" were negatively associated with autistic young people. Identify drug and alcohol use may have been a challenge due to the sensitive nature of this topic. Autistic young people participating in this study ranged up to 18 years old, and use of drugs and alcohol may be more prevalent in young adulthood. Furthermore, we know that autistic young people are more likely to struggle to access a peer group due to social and communication difficulties. Consequently, they may be less likely to experience peer interactions, where adolescent exploration of drug and alcohol use takes place. The item "experience of abuse or neglect" was found to be negatively associated with autistic young people. This finding may be correct but could be interpreted in different ways. For example, it may be that autistic young people struggle to recognise and understand experiences of abuse and neglect and then to articulate them.

We found no associations between "eating issues", "gender discomfort issues" and autistic young people. This is in contrast to the growing evidence base (Autistica, 2019; Baraskewich et al., 2021; Van Der Miesena et al., 2016). However, this study analysed the data of the "Current View" Tool items completed at initial assessment following referral to a CYPMH services. It is possible that such issues had not been identified by clinicians at this point. It may be that additional training could be beneficial in developing both clinical skills and knowledge to recognise such issues and inform intervention responses accordingly. In about a quarter (548) (22%) of young people, it was unknown if they were autistic or not. Clinicians may have failed to ask if the young person had autism or not when the "Current View" Tool was completed at initial assessment accounting for unknown responses. Also, some young people may have been awaiting an autism diagnostic assessment, which may also account for unknown responses.

Additional items that were not completed in more than ten percent of records included; "parental health issues", "living in financial difficulty" and "current protection plan". Parent/carer health issues and financial challenges are all pertinent to informing an understanding of the environment in which autistic young people live and informing a multiagency response to need. Clinicians may have avoided asking what they considered sensitive questions. This may be due to concerns this would impact negatively on the therapeutic alliance, but this does not seem likely for all of the items (e.g. "parental health issues"). Failure to complete all items on the "Current View" tool may mean a less effective care package is initiated.

The clinical implications of this study are firstly, taking all the different issues together, the findings highlight that autistic young people referred to CYPMH services experience a greater number of comorbidities and complexities than non-autistic young people.

The comorbid issues as highlighted in the category "provisional problem description" included anxiety issues. Therefore, mental health clinicians need to ensure that anxiety symptoms are not being dismissed as part of autism, as they are not core symptoms of autism and may require treatment. Both pharmacological and non-pharmacological interventions need to be available to treat anxiety. Capacity needs to be developed within services to deliver non-pharmacological interventions including, specifically adapted anxiety management approaches.

In order to respond appropriately to these comorbidities and complexities, in designing and delivering services for autistic young people, a multi-disciplinary team approach may be recommended. This study found that "self-care issues", "behavioural difficulties" and "unexplained developmental difficulties" were all associated with autistic young people. Consequently, input from occupational therapy, speech and language therapy is likely to be useful as part of a team approach to informing intervention responses required (Department of Health and Social Care, 2021).

Secondly, given the varied needs of this population, they are likely to benefit from such needs being addressed using a multi-agency approach. "Integrated care systems" (NHS

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England, 2019) are aimed at organisations that meet the health and care needs of the population, and their focus is to promote the coordination and planning of services to improve population health and reduce health inequalities.

It is recommended that the adapted 'Thrive' model for CYPMH services, developed specifically for autistic young people (Wee et al., 2021), is adopted to facilitate a multiagency approach to address the comorbidities and complexities of this population. The focus on health, social care, and education working in partnerships to coordinate and plan services to respond effectively to autistic young people, and their families, thereby promoting positive outcomes and reducing health inequalities for this population.

Thirdly, large amounts of data are collected via the "Current View" Tool in CYPMH services. This data does not appear to be being used fully to inform how services are planned, delivered or monitored. As we have shown, information about the comorbidities and complexities is available for the population. This could be used alongside other routine data to assess concordance with intervention pathways, if there are problems with loss to follow up with different diagnostic groups and in some cases poorer outcomes.

Fourthly, as trauma related incidents are experienced and expressed differently by autistic young people compared to non-autistic young people, mental health clinicians may fail to identify a trauma presentation. Therefore, training for clinicians focusing on an understanding of the unique effects of trauma on autistic young people is recommended to promote the identification and assessment of trauma, alongside effective treatment strategies. Training focusing on reasonable adjustments, for professionals working with autistic young people will contribute to supporting access and engagement with community and healthcare provision.

Finally, additional research is required to assess how the data entered on the "Current View" Tool correlates with the daily health and care support required by autistic young people and so increase the understanding of the complex multi-agency needs of autistic young people accessing CYPMH services. This could then inform the development of clinical pathways across multi-agency services responsible for meeting the needs of this group of young people. This approach should be used when implementing the proposed "Integrated care systems".

### Strengths and Limitations:

The study had a number of strengths. This was the first study in England that looked at the routinely collected data using the "Current View" Tool to understand the needs of autistic young people accessing mental health services. The study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement (von Elm E et al., 2007). The study looked at a large data set and used a large sample size for data analysis. As the study was considering a large number of variables for comparison, it set a robust significance level at p< 0.001.

There were some weaknesses to the study. It explored the "Current View" Tool category "provisional problem description" using a dichotomous scale, as opposed to the mild/moderate/severe scoring levels which may have reduced the sensitivity of the analysis. Also for 548 (22%) of participants it was unknown if they were autistic or not. It is possible that they did not have autism but this is not certain. If a moderate proportion of them did have autism this could change our findings. By only using the main reason for referral we may have over-simplified the presenting situation of the young people. Some of the concomitant co-morbidities are also likely to have had an impact on the behaviour and care needs of the young person, but including this in the analysis of the reason for referral was going to be too complex.

The majority of participants in the study were white British. To enhance knowledge of the needs of autistic young people from different ethnic backgrounds, and the multi-agency response required to meet their needs, further work with minority groups is required.

### Conclusion:

This study demonstrates that autistic young people accessing CYPMH services had a greater intricacy of health and care needs than non-autistic young people. These needs were varied including mental health, neurodevelopmental, behavioural, engagement and care needs. The fact that this group have greater needs should be taken into account when planning services, ensuring sufficient emphasis is placed on multi-agency partnerships.

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## **Ethical information:**

The study was approved through Cheshire and Wirral NHS Foundation Trust research ethics approval process. Data was extracted and anonymised from the standard electronic patient record system used in routine clinical care. According to the Health Research Authority algorithm (see <a href="http://www.hra-decisiontools.org.uk/research/">http://www.hra-decisiontools.org.uk/research/</a>) this study was not defined as research and therefore did not require submission to the Integrated Research Application System (a single system for applying for the permissions and approvals for health and social care / community care research in the UK).

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Characteristic	Total N	Autistic N (%)	Non-autistic N (%)	Unknown N (%)
Characteristic	N	14 (70)	IN (70)	IN (70)
Gender				
Male	1018	215 (21.1)	495 (48.6)	308 (30.3)
Female	1230	86 (7.0)	907 (73.7)	237 (19.3)
Other	11	1 (9.1)	7 (63.6)	3 (27.3)
Age				
4-6	128	29 (22.7)	47 (36.7)	52 (40.6)
7-10	437	82 (18.8)	203 (46.5)	152 (34.8)
11-13	611	79 (12.9)	364 (59.6)	168 (27.5)
14-18	1083	112 (10.3)	795 (73.4)	176 (16.3)
Ethnicity				
White British	1455	218 (15.0)	862 (59.2)	375 (25.8)
Asian British	13	3 (23.1)	9 (69.2)	1 (7.7)
Black	3	2 (66.7)	0 (0.0)	1 (33.3)
Mixed	25	1 (4.0)	21 (84.0)	3 (12.0)
Other	4	1 (25.0)	2 (50.0)	1 (25.0)
Missing	759	77 (10.1)	515 (67.9)	167 (22.0)
ndex of Multiple Dep	rivation			
Decile 1	364	54 (14.8)	231 (63.5)	79 (21.7)
Decile 2	268	34 (12.7)	164 (61.2)	70 (26.1)
Decile 3	214	26 (12.1)	122 (57.0)	66 (30.8)
Decile 4	168	19 (11.3)	96 (57.1)	53 (31.5)
Decile 5	129	17 (13.2)	84 (65.1)	28 (21.7)
Decile 6	152	25 (16.4)	94 (61.6)	33 (21.7)
Decile 7	229	24 (10.5)	151 (65.9)	54 (23.6)
Decile 8	209	34 (16.3)	130 (62.2)	45 (21.5)
Decile 9	197	28 (14.2)	130 (66.0)	39 (19.8)
Decile 10	317	40 (12.6)	199 (62.8)	78 (24.6)

Table 1. Key demographic variables for autistic young people and non-autistic youngpeople referred to a CYPMH service between January 2019 - December 2019

Referral Reason	Total No.	%
Anxiety	452	20
Self-Harm	240	10
Depression	229	10
Behaviour	223	10
Emotional Problems	126	6
Suicidal Thoughts	117	5
Autism	73	3
Eating Disorder	68	3
Attention Deficit Hyperactivity Oisorder	61	3
Post-Traumatic Stress Disorder	57	3
Unknown	152	7
Other	461	20
Total	2259	100

## Table 2 – Reason for referral to a CYPM service

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Table 3. The relationship of different items in the "Current View" tool to autistic young people and non-autisticyoung people referred to a CYPMH service during 2019

Current View Item	Total for this item† N	Tota this with a N (	item iutism	item v aut	for this with no tism (%)	OR	(95% CI)	P value
ovisional Problem Description								
1. Anxious away from caregivers	758	189	(25)	569	(75)	1.9	(1.5-2.4)	<.0001*
2. Anxious in social situations	1080	218	(20)	862	(80)	2.0	(1.5-2.7)	<.0001*
3. Anxious generally	1154	263	(23)	891	(77)	1.8	(1.4-2.3)	<.0001*
4. Compelled to do or think things	366	110	(30)	256	(70)	2.2	(1.7-2.9)	<.0001*
5. Panics	692	121	(17)	571	(83)	0.8	(0.6-1)	0.7
6. Avoids going out	484	122	(23)	372	(77)	1.3	(1-1.7)	.05
7. Avoids specific things	300	86	(29)	214	(71)	1.9	(1.4-2.5)	<.0001'
8. Repetitive problematic behaviours	272	111	(41)	161	(59)	0.1	(01 - 02)	< .0001
9. Depression/low mood	1144	182	(16)	962	(84)	0.5	(0.4-0.6)	< .0001
10. Self-harm	755	151	(20)	604	(80)	1	(0.8-1.2)	0.7
11. Extremes of mood	290	75	(26)	215	(74)	1.5	(1.1-2)	0.007
12. Delusional beliefs/hallucinations	61	11	(18)	50	(82)	0.9	(0.5-1.7)	0.7
13. Drug and alcohol difficulties	156	16	(10)	140	(90)	0.4	(0.2-0.7)	<.0001
14. Difficulties sitting or concentrating	516	195	(38)	321	(62)	4.4	(3.4-5.6)	< .0001
15. Behavioural difficulties	501	176	(35)	325	(65)	3.2	(2.5-4.1)	< .0001
16. Poses risk to others	350	134	(38)	216	(62)	3.3	(2.5-4.2)	< .0001
17. Carer management of behaviour	497	145	(29)	352	(71)	2.1	(1.7-2.7)	< .0001
18. Doesn't get to the toilet in time	94	48	(51)	46	(49)	5	(3.3-7.6)	< .0001
19. Disturbed by traumatic event	482	54	(11)	428	(89)	0.5	(0.3-0.6)	< .0001
20. Eating issues	368	70	(19)	298	(81)	0.9	(0.7-1.2)	0.4
21. Family relationship difficulties	848	144	(17)	704	(83)	0.7	(0.6-0.9)	0.005
22. Problems in attachment to parent	466	80	(17)	386	(83)	0.9	(0.6-1.1)	0.3
23. Peer relationship difficulties	917	235	(26)	682	(74)	2.3	(1.8-3)	< .0001

24	. Persistent relationship difficulties	292	80	(27)	212	(73)	1.7	(1.3-2.2)	0.0005
25	. Does not speak	68	44	(65)	24	(35)	8	(4.8-13.4)	< .0001
26	. Gender discomfort issues	44	13	(30)	31	(70)	1.9	(1-3.6)	0.1
27	. Unexplained physical symptoms	102	22	(22)	80	(78)	1.4	(0.8-2.3)	0.2
28	. Unexplained developmental needs	75	33	(44)	42	(56)	3.4	(2.1-5.5)	< .0001
29	. Self-care issues	205	82	(40)	123	(60)	3.2	(2.3-4.3)	< .0001
30	. Adjustment to health issues	143	44	(31)	99	(69)	1.9	(1.3-2.8)	<.0001
Soloct	ed Complexity Factors								
<u>1.</u>		122	18	(15)	104	(85)	0.6	(0.4-1.1)	0.1
2.	Young carer status	67	11	(16)	56	(84)	0.7	(0.4-1.4)	0.4
3.	Learning disability	124	88	(71)	36	(29)	124	(9.2-21)	<.0001
4.	Serious physical health issues	90	22	(24)	68	(76)	90	(0.8-2.1)	0.3
5.	Pervasive developmental disorder	302	302	(100)	0	(0)	ref	. ,	
6.	Neurological issues	50	22	(44)	28	(56)	3.4	(1.9-6)	<.0001
7.	Current protection plan	196	35	(18)	161	(82)	0.7	(0.5-1.1)	0.1
8.	Deemed child in need	179	64	(36)	115	(64)	2.4	(1.7-3.4)	<.0001
9.	Refugee or asylum seeker	7	0	(0)	7	(100)	0.3	(0-4.6)	0.4
10	. Experience of war/torture	7	3	(43)	4	(57)	4.1	(0.9-18.6)	0.1
11	. Experience abuse or neglect	362	43	(12)	319	(88)	0.5	(0.3-0.7)	<.0001
12	. Parental health issues	432	69	(16)	363	(84)	0.8	(0.6-1.1)	0.2
13	. Contact with youth justice system	74	12	(16)	62	(84)	0.7	(0.4-1.4)	0.4
14	. Living in financial difficulty	78	9	(12)	69	(88)	0.6	(0.3-1.2)	0.1
Conte	extual Problems								
1.	Home issues	1021	210	(21)	811	(79)	1.1	(0.9-1.4)	0.3
2.	School issues	1162	245	(21)	917	(79)	1.2	(0.9-1.6)	0.1
3.	Community issues	595	144	(24)	451	(76)	1.5	(1.2-1.9)	<.0008
4.	Engagement issues	474	123	(26)	351	(74)	1.7	(1.3-2.2)	<.0001

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8		Education/emple	oyment/training								
		1. Attendanc		609	128	(21)	481	(79)	1.1	(0.9-1.4)	0.4
9		2. Attainmen		558	169	(30)	389	(70)	2.7	(2.1-3.5)	<.0001*
10		2. / ((diffinition	135465	550	105	(30)	305	x - 7	2.7	(2.1 3.3)	4.0001
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