Rehabilitating Offenders with both a formal diagnosis of Autistic Spectrum Disorder and those that present as having ASD traits: a discussion of key issues

Tanya Phillips – HMP Dartmoor Prison

INTRODUCTION

Extract – Special Educational Needs (SEN)

Learning to Fail?

Prisoners with special educational needs

Dr Alana Barton *is a Senior Lecturer in Criminology and Criminal Justice at Edge Hill University.* ***Anita Hobson*** *is a Senior Lecturer in Criminology and Criminal Justice at Edge Hill University.*

Introduction

Young people and adults with special educational needs (SEN) constitute a significant group in the prison estate, in terms of their numbers and the various challenges they face. In recent years a body of academic literature and official reports has emerged which has drawn some attention to this vulnerable group. The academic material has been written predominantly from medical, psychological or psychiatric perspectives and, similar to official reports, is concerned largely with strategies that might help prisoners with SEN

fetishization) of 'education' as a curative strategy for those whose previous experiences of education have been unhappy, inhibiting and disrupted, as is often the case for those with special educational needs.

This article represents a thought piece reflecting on the interplay between schooling, social exclusion and prison for those with special educational needs and its aims are two-fold. First, to outline some of the concerns around incarcerated young people and adults who fall into this category. We will provide some definitional parameters and, whilst acknowledging the often obfuscatory effects of official classifications, draw on these to outline the proportion of the prison population

Introduction

- Within the criminal justice sector there are clear benefits working one-on-one with offenders to identify their neuro-diversity traits and to put in place supportive measures to stop re-offending

- There are limited studies in the UK that have had direct access to offenders to identify their needs and to understand the potential levels of ASD within the prison system

- This study, believed to be unique in terms of survey population size and direct access to offenders, deployed an industry Autism AQ screening tool to better understand the needs of the HM prison system

The Extent of the Issue

- Reoffending rate is in excess of 70%
- Early research shows that applying the 13% probability of autistic traits to the entire HMP Dartmoor capacity population of 640 prisoners represents 84 prisoners
- The combined total capacity of three prisons, Dartmoor, Channings Wood & Portland i.e. 1901 prisoners; 13% represents 248 prisoners. With an overall resource expenditure of £38,000 per prisoner costs the tax payer £9.4-million per annum
- Applied to the total UK prison population of 85,000 (as at 2017) costing £3.23-billion per annum. 11,000 prisoners (13% of population) represents a cost of £420-million per annum

ASD & Offenders

- 700,000 people may be autistic (1 in 100)
- there is a large number of prolific short term offenders that are not in the prison system long enough for any diagnostic testing to take place
- It is these individuals that are harder to rehabilitate. In their meta-analysis of prevalence studies found a range of people with learning disabilities and autism from 15% to 84%, with a mean of 52.6%
- 16% of autistic adults in the UK. are in full-time paid employment

Operational Impact

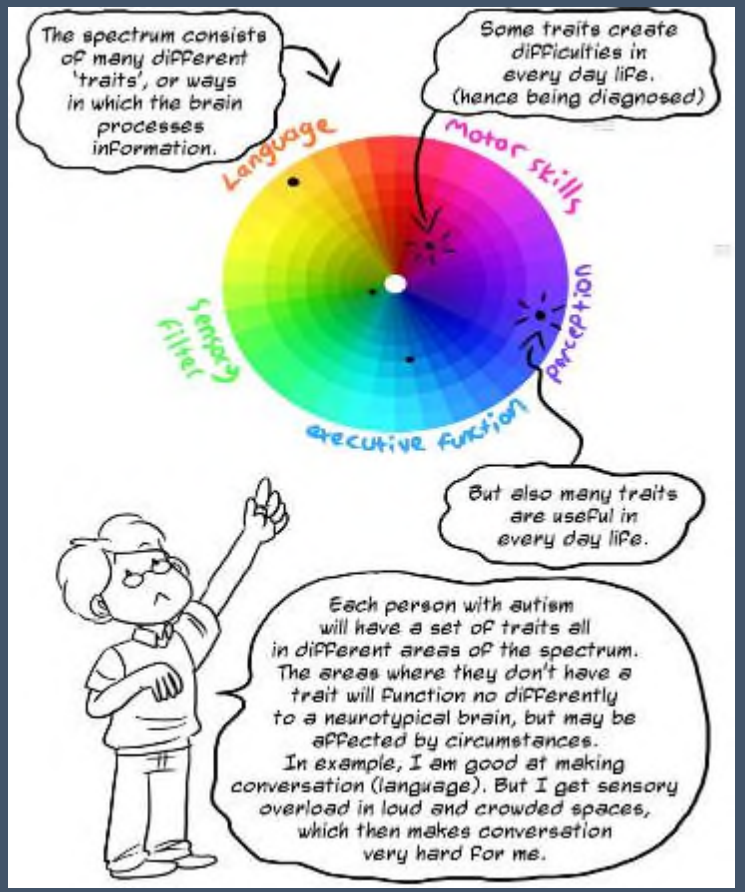
The study is having an operational impact and is benefiting the neurodiverse offenders and officers at HMP Dartmoor Prison.

Data collections are shared and discussed, knowledge and understanding increasing. Assessments are being shared and courses are being delivered.

Research Found

Fazio et al Research

- Identified a **higher rate** of autistic traits within a prison population than found in the general population
- They examined the presence of autistic traits was assessed amongst 431 male prisoners in a maximum-security prison in the United States of America
- Was the biggest prison study taken place globally

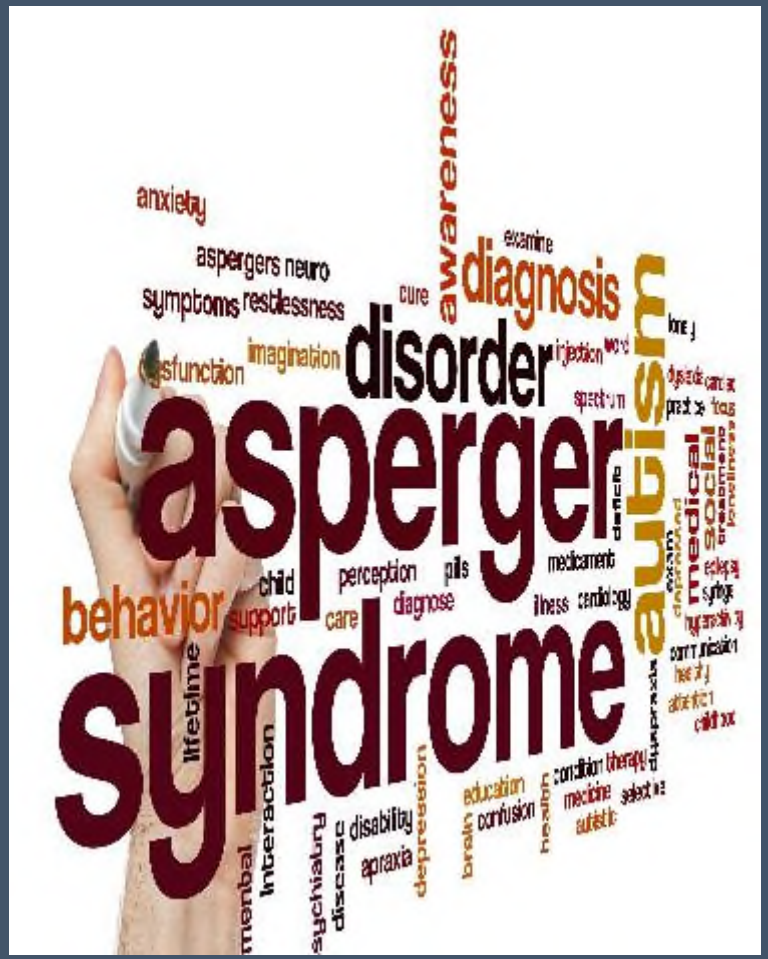


Myer's Research

- The sample included a small number of participants with a formal ASD diagnosis
- Limited to two participants were within a prison setting
- Concluded that the offenders were disadvantaged and were found to be at risk of exploitation, bullying and social exclusion
- Myers found that staff interviewed in this study were poorly equipped to meet the needs of the individuals with ASD by lack of knowledge and training

Paterson's Research

- Paterson explored a range of difficulties that individuals with ASD may face within prisons
- Small sample only two case studies of young male offenders with Asperger's syndrome
- The two participants in Paterson's report varied in the nature of their offending, the severity of autistic traits with which they presented, their comorbid diagnoses and their level of intellectual functioning



Allen's Research

- Sample of 33 offenders with a diagnosis of ASD
- Of these only 6 gave their permission to be interviewed and only four of these were in a prison setting
- Some of the participants welcomed being in a structured environment and so conclusively Allen found that offenders with ASD were no more of less impacted than their neurologically typical counterparts
- One limitation of this study was that he did not look at the offender's journey into the community and at the reoffending likelihood

Robinson's Research

- In a screening for ASD in Scottish prisoners across 12 publicly-run closed prisons
- Of the 2,458 prisoners screened, 4% (98 prisoners) scored above the cut-off threshold of AQ=32
- Although this screening measured autistic traits in this population, sensitivity for a score of 32 or above on the AQ is poor
- Conclusion being the AQ usefulness is limited and not recommended as a routine screening tool for ASD in prisons

Limitations of Research Available

- The limited studies examined in this paper are insufficient from which to draw conclusions
- Shown an urgent need for further and in-depth exploration of this topic area as a whole
- However it was clear from all the studies that offenders with traits or a diagnosis of ASD find prison incarceration and then release difficult and often face co-morbid related disorders
- Equally for some offenders prison life is very comforting with its set routines and predictability

Poor Overall Findings of Existing Research

- A systematic search process identified only five original research reports whereby all sample sizes were small and not on a scale large enough to justify change in the way these offenders are managed within the prison setting. The one on a large scale was flawed

- It is hoped that this review will serve to encourage prison support for further exploration in this area and in turn make systematic changes in the way ASD offenders are rehabilitated and managed both in prison and the community

Four Year Research Plan (1) 2017

- Understanding how many prisoners or offenders there are in the criminal Justice System at any one time
- No current study or research to any scale that would generate positive change in prisons
- HMP Dartmoor is the first prison to conduct a whole prison study allowing the researcher unlimited access to offenders from induction to the community

Four Year Research Plan (2) 2018

- Understanding the extent and impact of Neurodiversity in prisons today and how is this data being collated
- A pilot study completed looking at the population of a whole prison population to measure traits and likelihood of an ASD diagnosis
- A further study to identify specific neuro weaknesses
- Delivery of cognitive testing and specialist courses to monitor change and engagement

Four Year Research Plan (3) 2019

- Rehabilitation and Neurodiversity in prisons and local communities
- Signposting
- Multi agency approach
- Positive Assessment and One Page Profiling easily accessible among professionals
- Offenders having their own personal tool kit

Four Year Research Plan (4) 2019/20

- A conclusive operational study to understand and rehabilitate offenders with ASD and AS prisons
- A longitudinal Study to track a group of offenders into the community against a control group without intervention and support pathways
- Finalisation of all research into doctorate thesis and to be shared with the Ministry of Justice to implement change

Pilot Study 1

Identified Support Needs of Neuro-diverse Offenders

Survey - Initial Findings

- The survey was designed to screen for traits of Autism
- Twelve questions were deployed to an assessed population (N) of incarcerated offenders spread across 6-wings within HMP Dartmoor in two rounds of surveys (N=500 total sample size), i.e. Survey-A : N=248, Survey-B : N=252
- Considered an Autism Quotient (AQ) of 12 (AQ12); also referred to a DSM-V test. The questions were reframed to be ‘ASD friendly’
- Psychologist Simon Baron-Cohen and his colleagues at Cambridge's Autism Research Centre have created the Autism-Spectrum Quotient, or AQ, as a measure of the extent of autistic traits in adults

Survey - Deployment

- The survey is considered an Autism Quotient [1] (AQ) of 12 (AQ12); also referred to a DSM-V test [2].
- Each question carefully selected to identify or mark for an autism trait each question weighted 1-mark per question answered – Score Range 0 - 12
- A score of 4 considered the threshold of detection

Survey Score	AQ12 Autistic Marker
< 4	Lacking Traits
= 4	Threshold (Borderline case)
> 4	Positive Traits
> 6+	Strong Traits

Survey - Extracts from Doctorate Paper

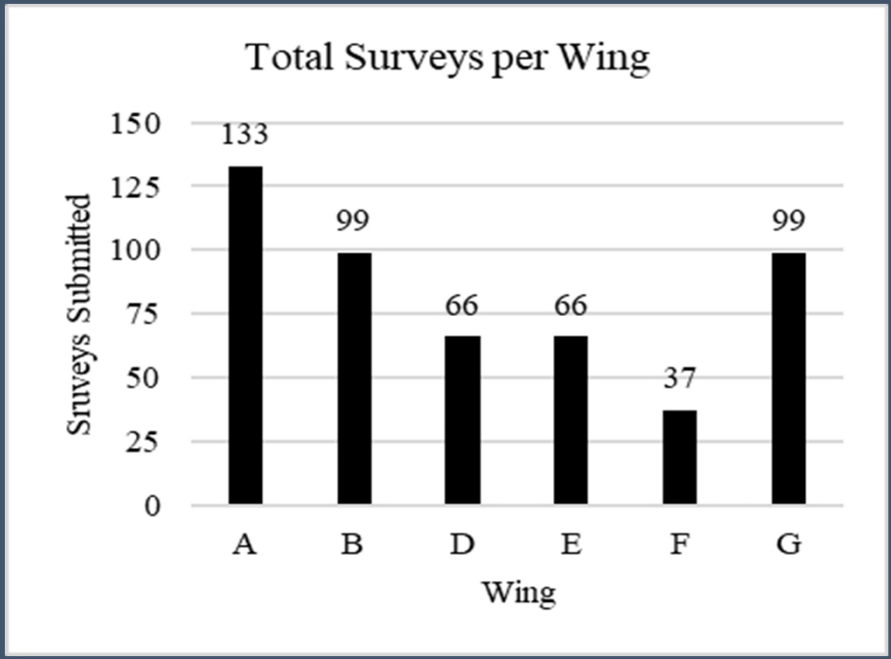
Data was collected scored in two separate surveys:

- Survey-A: N=248 completed March 2018
- Survey-B: N=252 completed March 2019

Wing	Survey-A	Survey-B	Total
A	43	90	133
B	51	48	99
D	40	26	66
E	25	41	66
F	10	27	37
G	79	20	99

Score	Survey-A	Survey-B	Total
<4	205	201	406
4-6	38	40	78
7-8	4	10	14
9-10	1	1	2
11-12	0	0	0

Survey – Data Collected per Wing



Some wings were happier to participate
If a couple of people agreed then more would follow
If key people did not take part then entire landings would follow
Used people on my caseload to be present to create a trusting platform
Being employed in the prison was a huge factor

Survey – Score Grouping

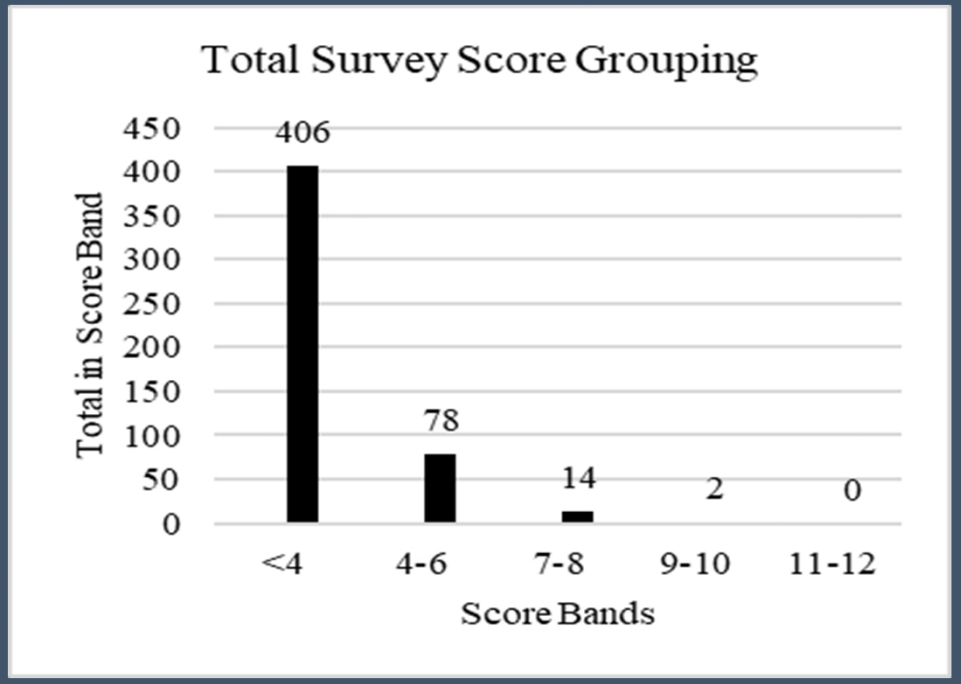


Chart shows totals for Score Bands

Survey - Raw Score Data

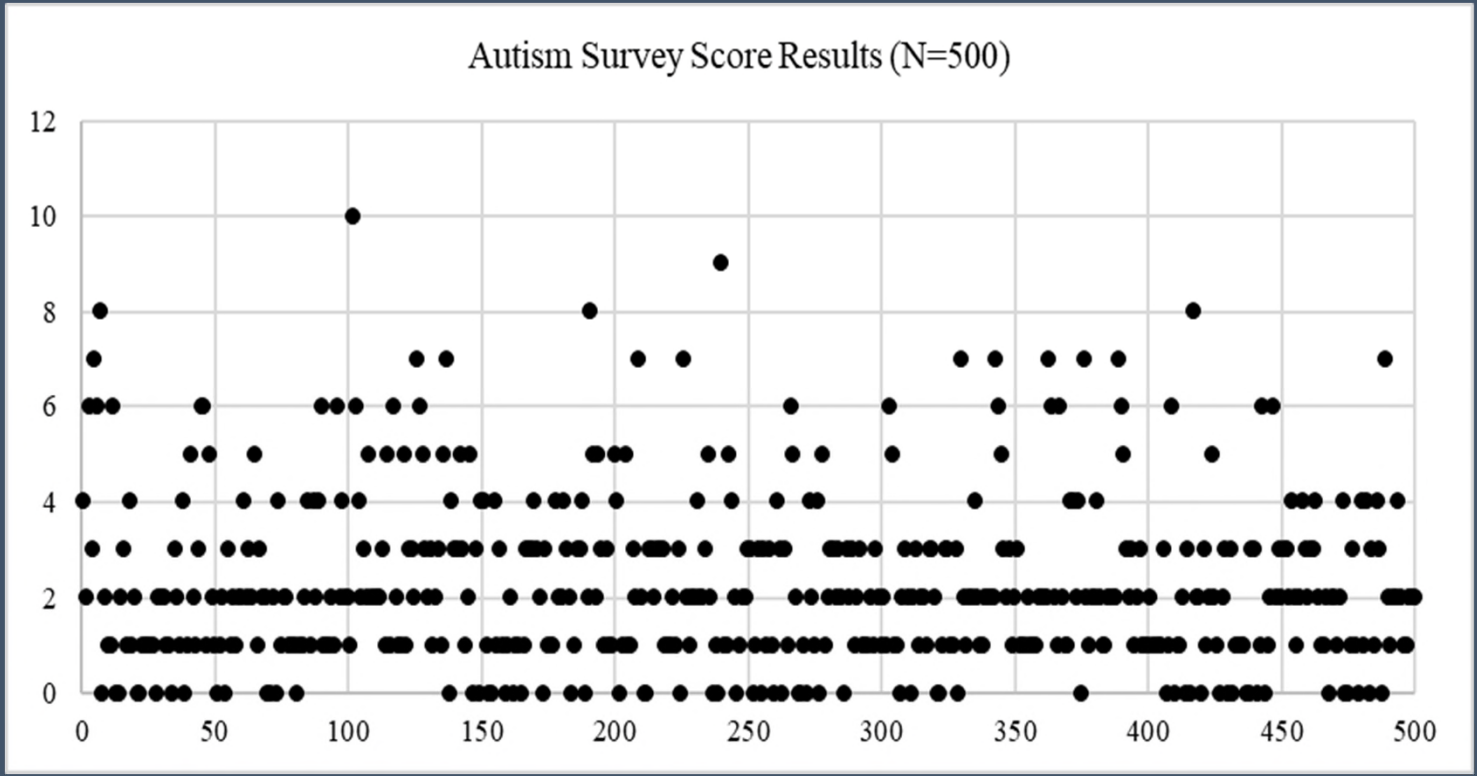
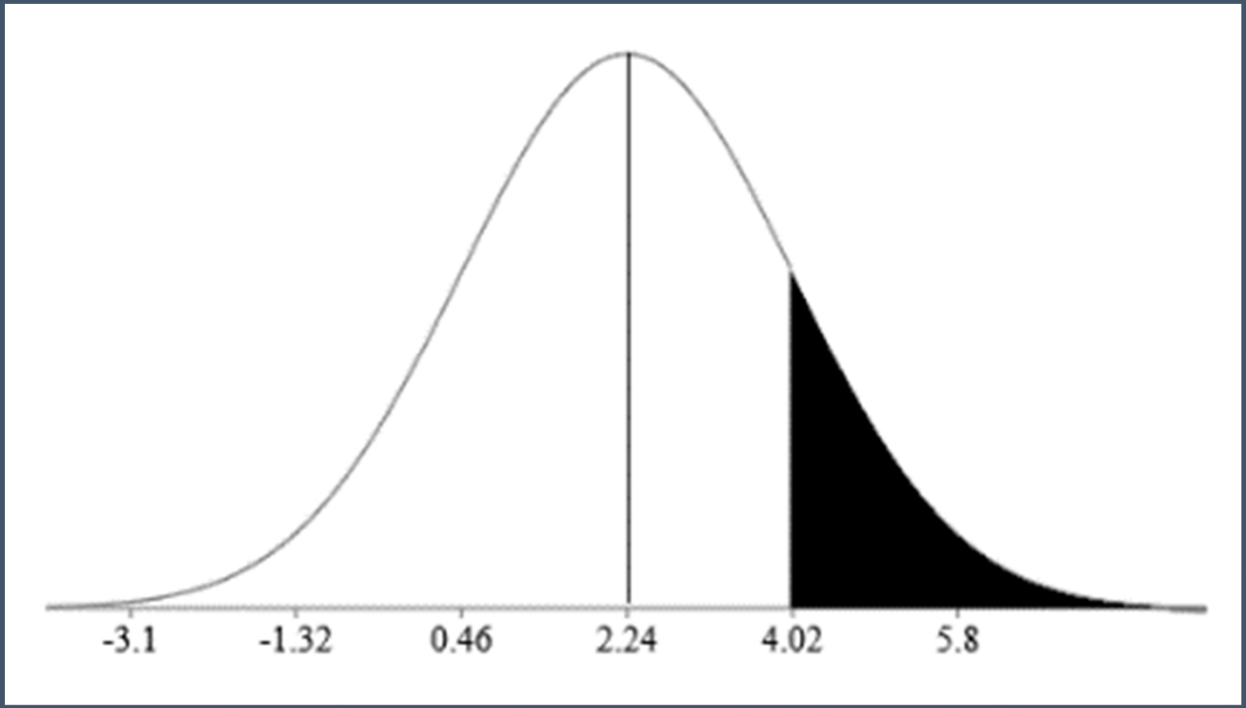


Chart shows raw data for the 500 samples vs Score Range 0-12

Survey - Normal Distribution



Plot shows Normal Distribution Plot of survey data, and region of probability Score >4, i.e. 19%

Survey - Statistics

Score	Survey-A	Survey-A	Total
<4	205	201	406
>4	43	41	84
Total	248	252	500
<4 (%)	83%	80%	81%
>4 (%)	17%	20%	**19%**

Statistic	Survey-A	Combined	Change
[N] Population	248	500	Increase
[μ] Mean (Avg.)	2,04	2,24	Increase
[σ] SD	1,77	1,78	Increase

[N] = population ; [x] = sample ;
[μ] = Sum(x)/N ; [σ] = sqrt[Sum[$(x-\mu)^2$]/[N-1]]

Statistics for Survey-A & Combined (Survey-A with Survey-B added)

Data Collection Results

- Two N=250 population Autism Spectrum Disorder (ASD) surveys conducted during 2018 across six wings of HM Prison Dartmoor
- Analysis of the combined N=500 survey showed 19% (approx. one-in-five) of the population exhibiting borderline to strong autistic traits

- Extending the survey resulted in the normal distribution probability of seeing a threshold score increasing from 13% to 16%. When applied to the UK HM Prison population translates to 13,600 neuro-diverse offenders at a cost to the taxpayer of £517-million annually

- With the UK reoffending rate now in excess of 70% both expenditure and offenders benefit from preventative measures such as early AQ screening, and ongoing assessments both during sentence and parole duration such as that administered by Genius Within CIC

Survey - Observations

- The N=500 survey resulted in 406 offenders scoring below threshold (81.2%) and 94 offenders scoring above (18.8%). Maximum score observed was 10 and a statistical survey mean of 2.24 with a Standard Deviation (SD) of SD=1.78
- From analysis of HM Prison Dartmoor, there is a 16% probability the offender population will show autistic traits, with actual figures at 19%
- This survey concurs with the 1.73<SD<2.12 range of early independent AQ testing of 6,934 participants conducted 2001-2014
- The survey mean and SD for the pre-set threshold appears realistic, i.e. Mean+SD = 2.24+1.78=4.02 (e.g. Score>=4)

Survey - Summary

- This study has so far indicated a one-in-five HM Prison offender population showing Autistic traits. It has also proved that the AQ12 score threshold is accurate

- The mean and standard deviation values when analysing the survey score data also concur with the early independent ASD screening studies so considered accurate

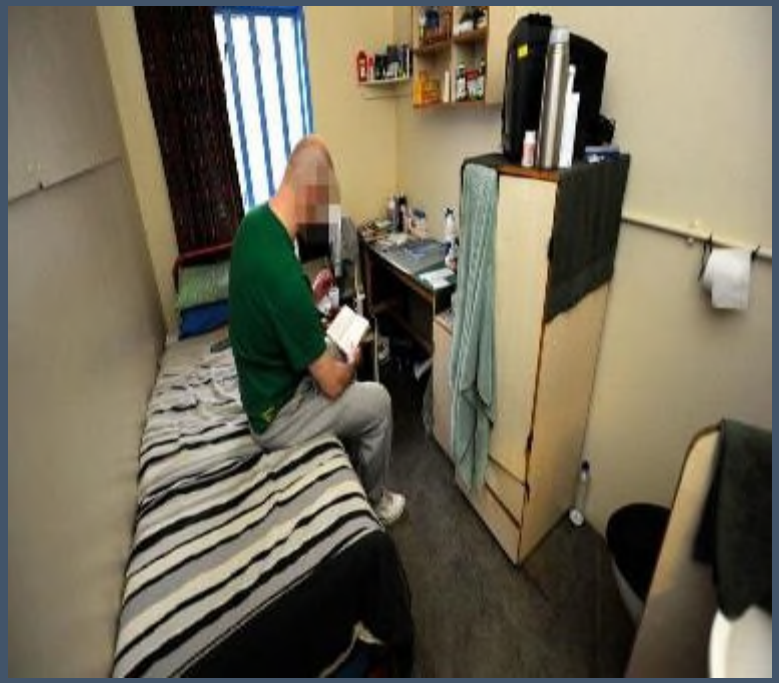
Pilot Study 2

Offender Neuro-Profiling

Pilot Study 2

Targeted Study

This a presentation of data from 80 male offenders surveyed at HMP DARTMOOR for their personal response to questions on various subject matter.



Purpose

This is a continuation study from Pilot Study 1, profiling the same population for their neuro-diverse needs aiming to look at **where else** offenders exhibit strong deviations from everyday thought processes.

Survey - Data Collection

A survey of 65 questions each with a Yes or No answer submitted to 80 offenders, a total of 5,200 data entries.

The next two slides present the questions asked categorised by:-

- Communication
- Memory & Concentration
- Organisation & Time Management
- Written Word
- Numerical Skills
- Orientation & Dexterity
- Interpersonal Skills
- Creativity
- Visual & Practical Skills
- Problem Solving

Identified Neuro Strengths

Survey - Questions 1 - 32

CATEGORY	#	QUESTION	YES	NO
COMMUNICATION	1	It is hard for me to pronounce words correctly.	17	63
	2	Sometimes, it is hard for me to understand what someone is saying.	28	52
	3	I find it easy to explain what I am thinking.	52	28
	4	Do you sometimes misinterpret what someone has asked you to do or 'get the wrong end of the stick'?	39	41
	5	Do you get stuck and lose your thread when public speaking or reading out loud?	30	50
	6	Do you find it difficult to communicate your work flow with your supervisor?	11	69
	7	I tend to misinterpret when speaking to others as I take things literally	21	59
	8	I find it easier to talk to someone rather than write it down.	46	34
	9	I find it very confusing when rules change or when people don’t seem to be following them	35	45
MEMORY & CONCENTRATION	10	Does your thinking quickly change from one topic to another?	45	35
	11	I find it easy to remember what someone has said to me.	48	32
	12	When doing a new task I often have to check what I am meant to be doing.	47	33
	13	I find it hard to concentrate when there is lots going on around me.	46	34
	14	I often start a task without completing the first one.	28	52
	15	I have a good visual memory for things that have happened to me.	58	22
	16	I find it hard to remember things when I am going somewhere.	22	58
ORGANISATION & TIME MANAGEMENT	17	I find it easy to remember my appointments.	61	19
	18	I am good at meeting deadlines.	64	16
	19	I find it hard to know what to do first.	23	57
	20	I find it hard to get tasks done.	13	67
WRITTEN WORD	21	My eyes hurt when I look at a computer for too long.	41	39
	22	I find the words blur when I read.	29	51
	23	I make mistakes when copying down numbers or words.	29	51
	24	I find it easy to take notes.	54	26
	25	I find it hard to know what to write.	33	47
	26	I find it easy to spot mistakes in my work.	53	27
	27	I make mistakes when filling out forms.	37	43
	28	I find spelling easy.	42	38
	29	When writing, my sentences do not always make sense.	35	45
	30	I know what full stops and commas are and where to use them.	67	13
	31	I read slowly.	40	40
	32	I find it easy to remember what I have read.	45	35

Survey - Questions 33 - 65

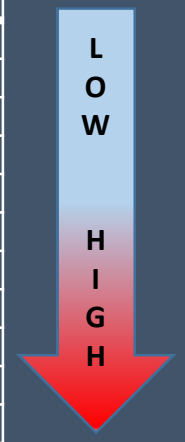
CATEGORY	#	QUESTION	YES	NO
NUMERICAL SKILLS	33	I find maths hard.	25	55
	34	Do you need a calculator to do simple maths equations?	18	62
	35	Do you get confused by maths symbols?	20	60
	36	I find it hard to judge speed, distance or size	20	60
	37	I find telling the time hard, or judging how long things will take.	9	71
ORIENTATION & DEXTERITY	38	I find it easy to learn tasks where I use my hands.	66	14
	39	I find it hard to use a computer mouse or key pad.	11	69
	40	I often bump into things.	13	67
	41	Other people find my handwriting easy to read.	47	33
	42	I mix up my left and right.	8	72
	43	I find it easy to find my way from one place to another.	61	19
INTERPERSONAL SKILLS	44	I prefer to do things with others rather than on my own	22	58
	45	I find social situations easy	47	33
	46	I find it difficult to make small talk with other people.	37	43
	47	I struggle to understand other people's emotions	23	57
	48	I suffer from sensory overwhelm – sometimes things are too loud, bright or crowded.	35	45
	49	I feel 'on the go' all the time and restless	26	54
	50	I frequently feel frustrated by work or colleagues	34	46
	51	I tend to overwork and then burn out in cycles	27	53
	52	I often feel stressed	41	39
CREATIVITY	53	I am good at coming up with new ideas.	57	23
	54	I do tasks in a different way to others.	53	27
	55	I am good at making pictures, diagrams or rhymes and stories to explain ideas and emotions	45	35
	56	I am good at telling stories.	46	34
VISUAL & PRACTICAL SKILLS	57	I am good at working out how to put something together.	67	13
	58	I find it hard to imagine what something would look like.	22	58
	59	I like to learn by looking at pictures or watching videos.	61	19
	60	I am not good at building flat pack furniture or models	30	50
	61	I am good at reading body language	49	31
PROBLEM SOLVING	62	I can predict problems before they occur	53	27
	63	I can spot errors and inaccuracies easily	54	26
	64	I can rise above "the way things are done around here" and find new, more straightforward ways to do or organise	60	20
	65	I can manage complex environments or structures	51	29

Survey – Strengths vs Weaknesses

The table below presents all questions deemed a Strength versus a Weakness in terms of the Yes and No answer. It also presents the Strength as a percentage (% Strength) of the sum of strength and weakness totals

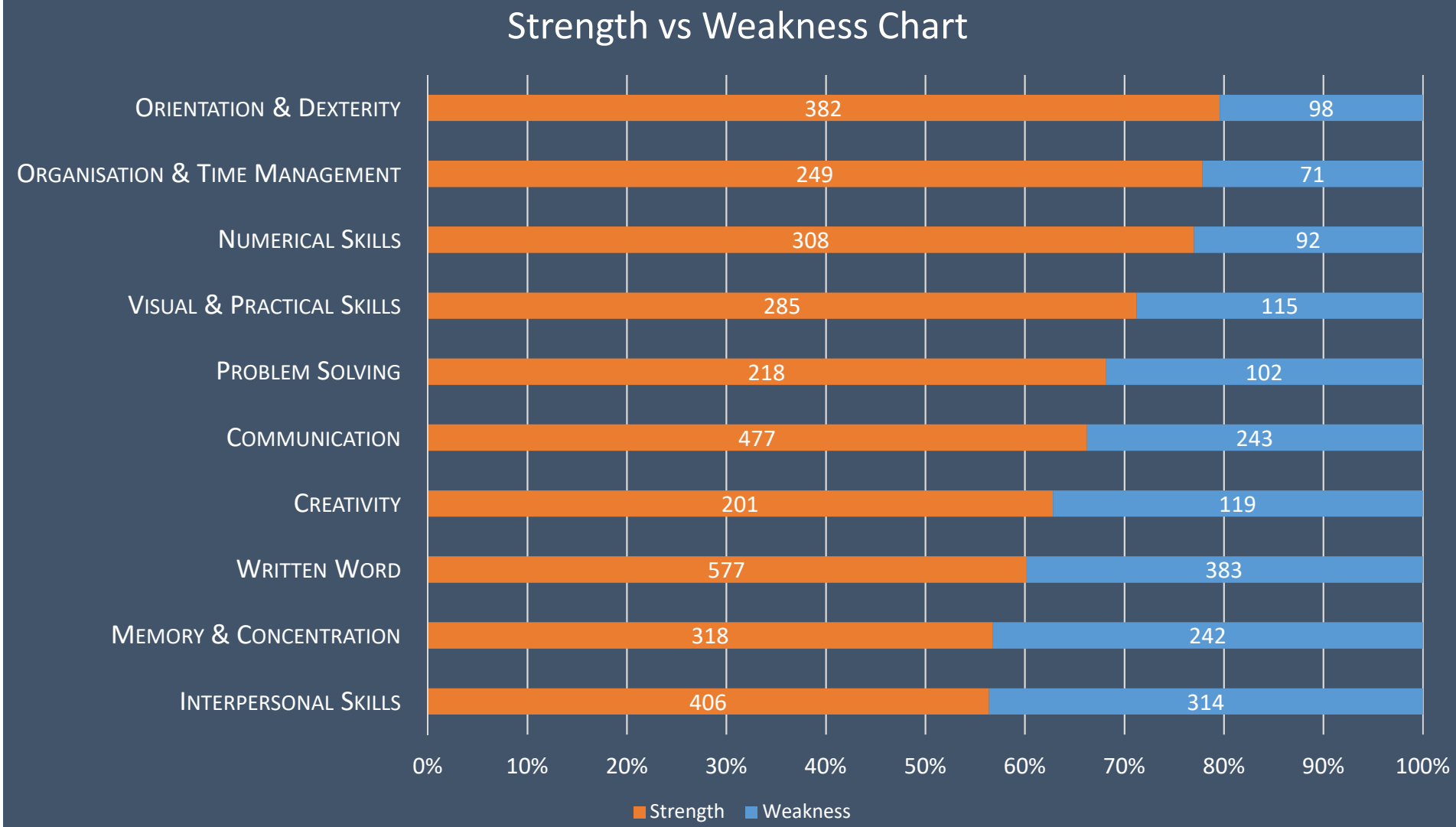
CATEGORY	STRENGTH	WEAKNESS	% STRENGTH
INTERPERSONAL SKILLS	406	314	56%
MEMORY & CONCENTRATION	318	242	57%
WRITTEN WORD	577	383	60%
CREATIVITY	201	119	63%
COMMUNICATION	477	243	66%
PROBLEM SOLVING	218	102	68%
VISUAL & PRACTICAL SKILLS	285	115	71%
NUMERICAL SKILLS	308	92	77%
ORGANISATION & TIME MANAGEMENT	249	71	78%
ORIENTATION & DEXTERITY	382	98	80%
TOTAL QUESTIONS ANSWERED	**3421**	**1779**	**5200**

LACKING VERBAL & WRITTEN COMMUNICATION SKILLS LACKS CONCENTRATION AND ABILITY TO RETAIN INFORMATION



EXCELS IN NUMERACY, SOLVING PROBLEMS, PRACTICAL WITH DEXTERITY, VERY ORGANIZED AND GOOD AT PLANNING

Survey – Strengths vs Weaknesses



Survey – ASD Specific Question Markers

The table below presents three ASD specific categories showing markers for the Yes and No answers for each, and those answers identifying as a positive marker indicated in RED and those as a negative marker indicated in GREEN :-

CATEGORY	#	QUESTION	YES	NO
COMMUNICATION	2	Sometimes, it is hard for me to understand what someone is saying.	28	52
	3	I find it easy to explain what I am thinking.	52	28
	4	Do you sometimes misinterpret what someone has asked you to do or 'get the wrong end of the stick'?	39	41
	5	Do you get stuck and lose your thread when public speaking or reading out loud?	30	50
	6	Do you find it difficult to communicate your work flow with your supervisor?	11	69
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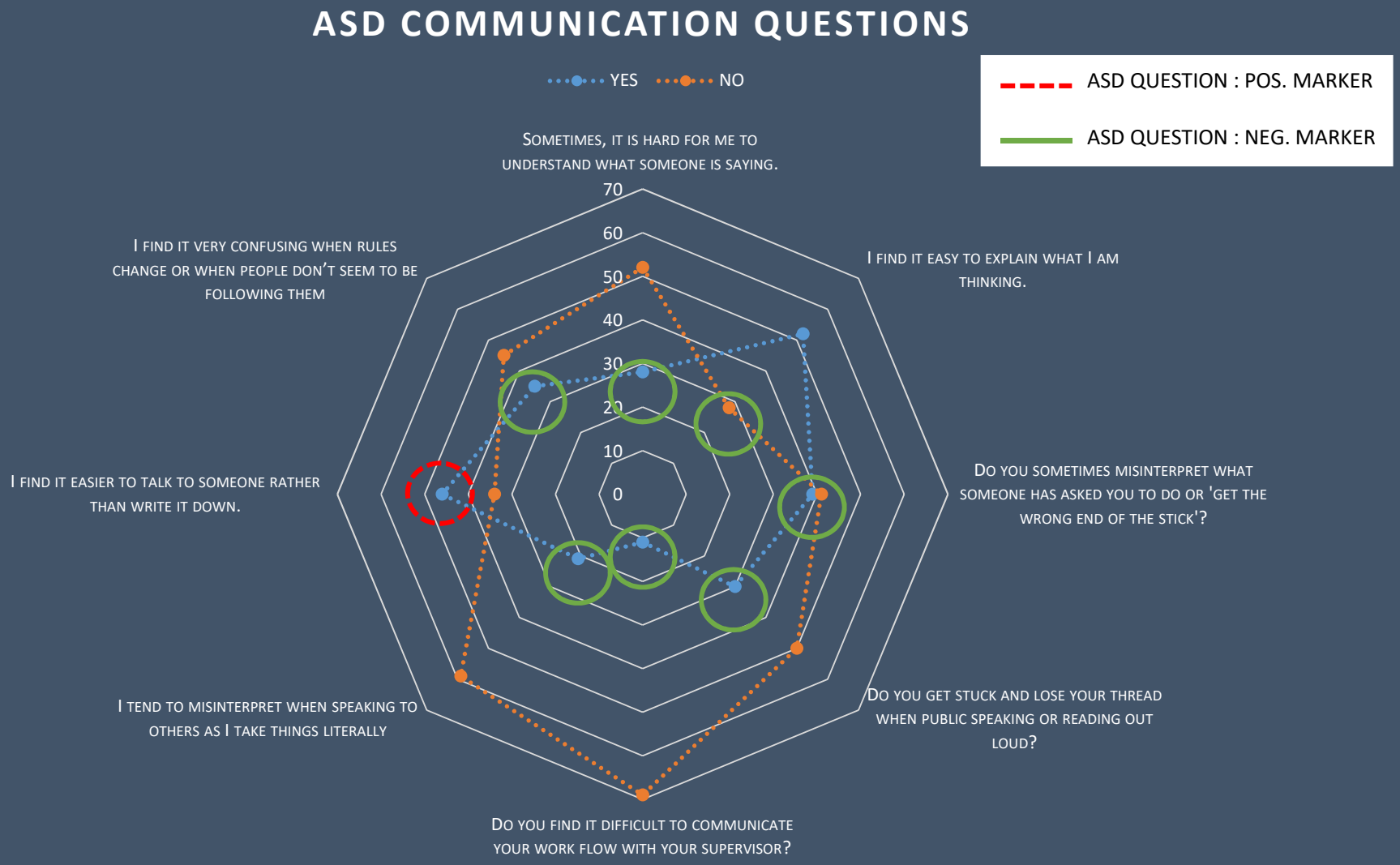
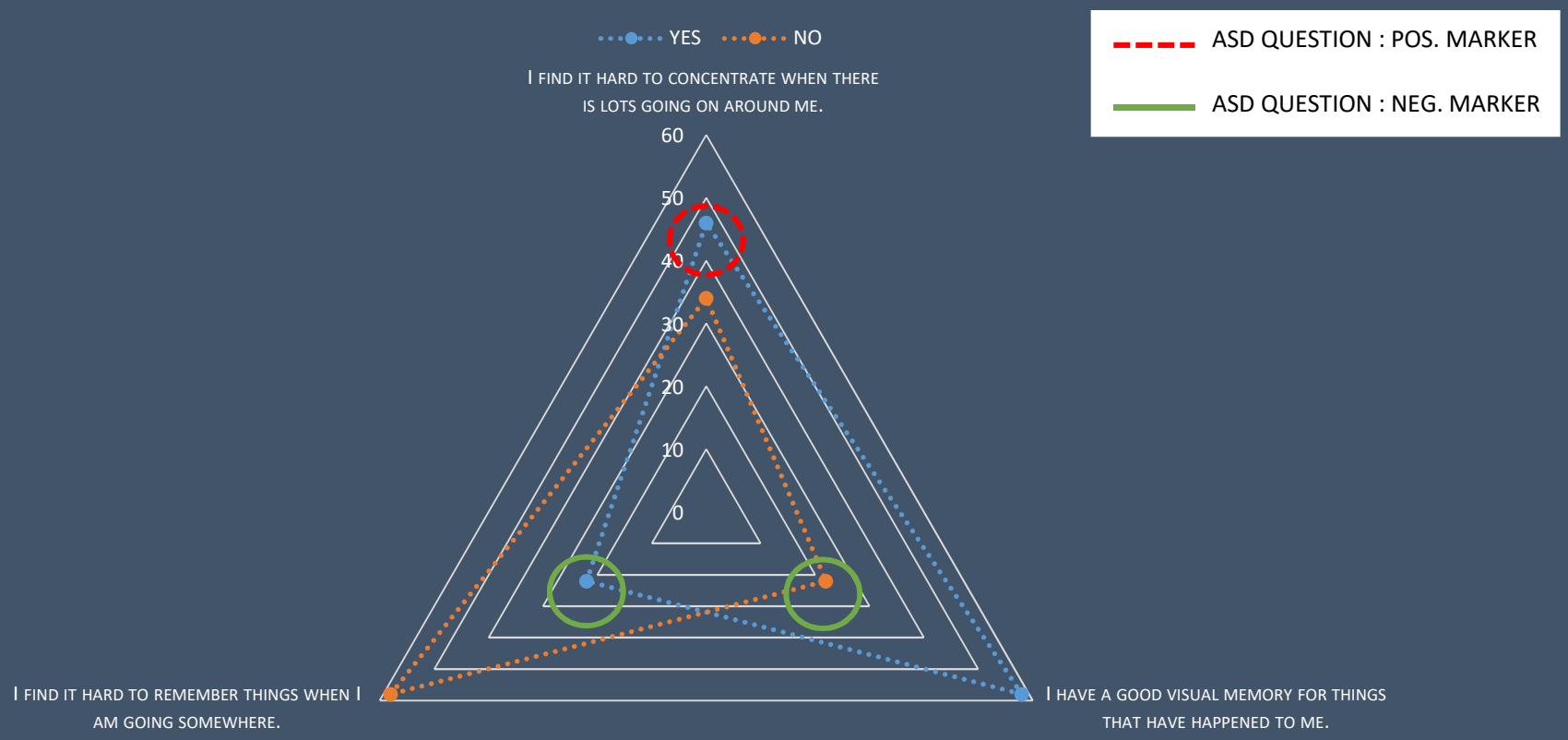
MEMORY & CONCENTRATION	13	I find it hard to concentrate when there is lots going on around me.	46	34
	15	I have a good visual memory for things that have happened to me.	58	22
	16	I find it hard to remember things when I am going somewhere.	22	58
INTERPERSONAL SKILLS	44	I prefer to do things with others rather than on my own	22	58
	45	I find social situations easy	47	33
	46	I find it difficult to make small talk with other people.	37	43
	47	I struggle to understand other people's emotions	23	57
	48	I suffer from sensory overwhelm – sometimes things are too loud, bright or crowded.	35	45
	52	I often feel stressed	41	39

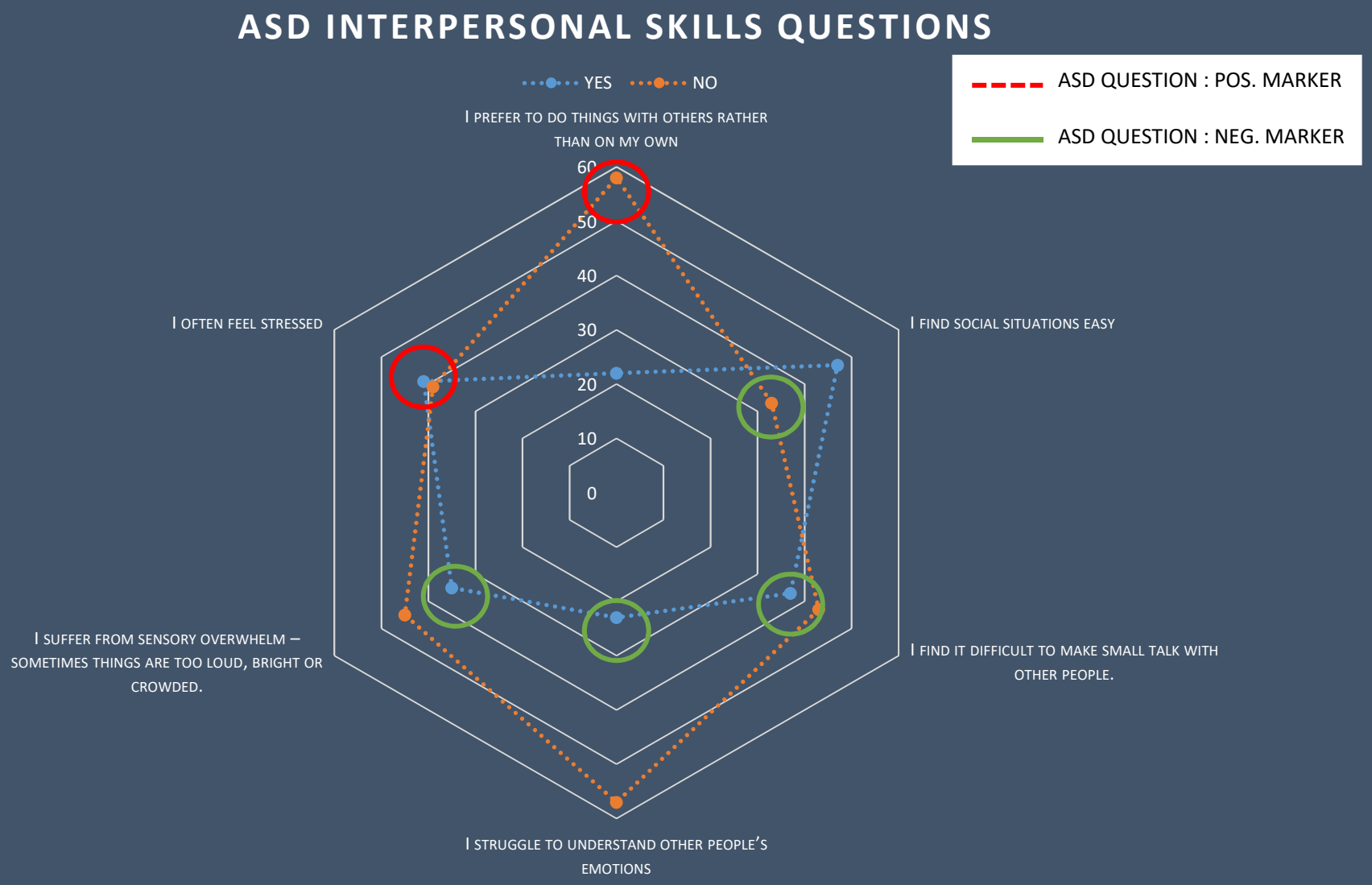
ASD Specific Markers – Category 1



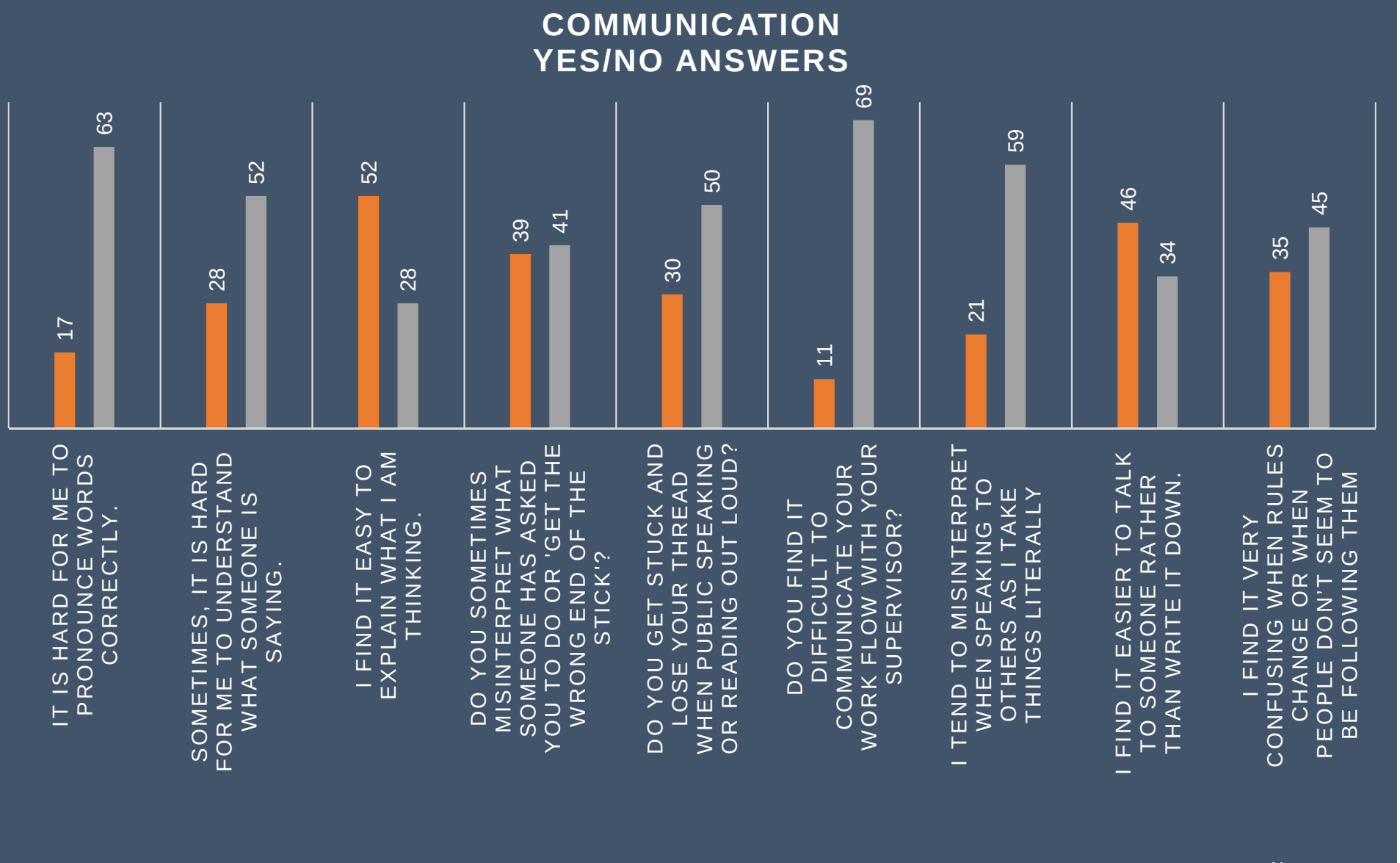
ASD Specific Markers – Category 2



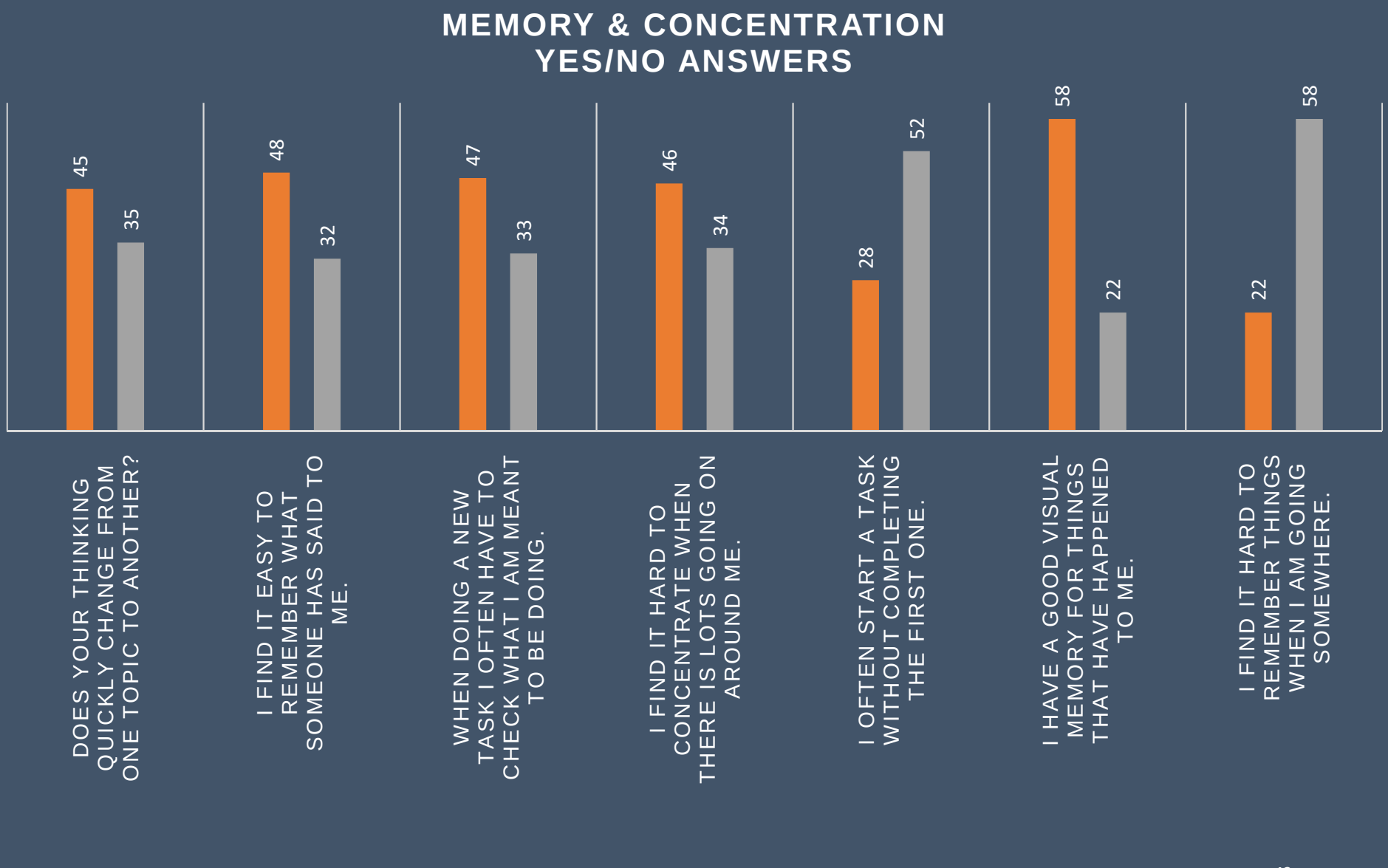
ASD Specific Markers – Category 3



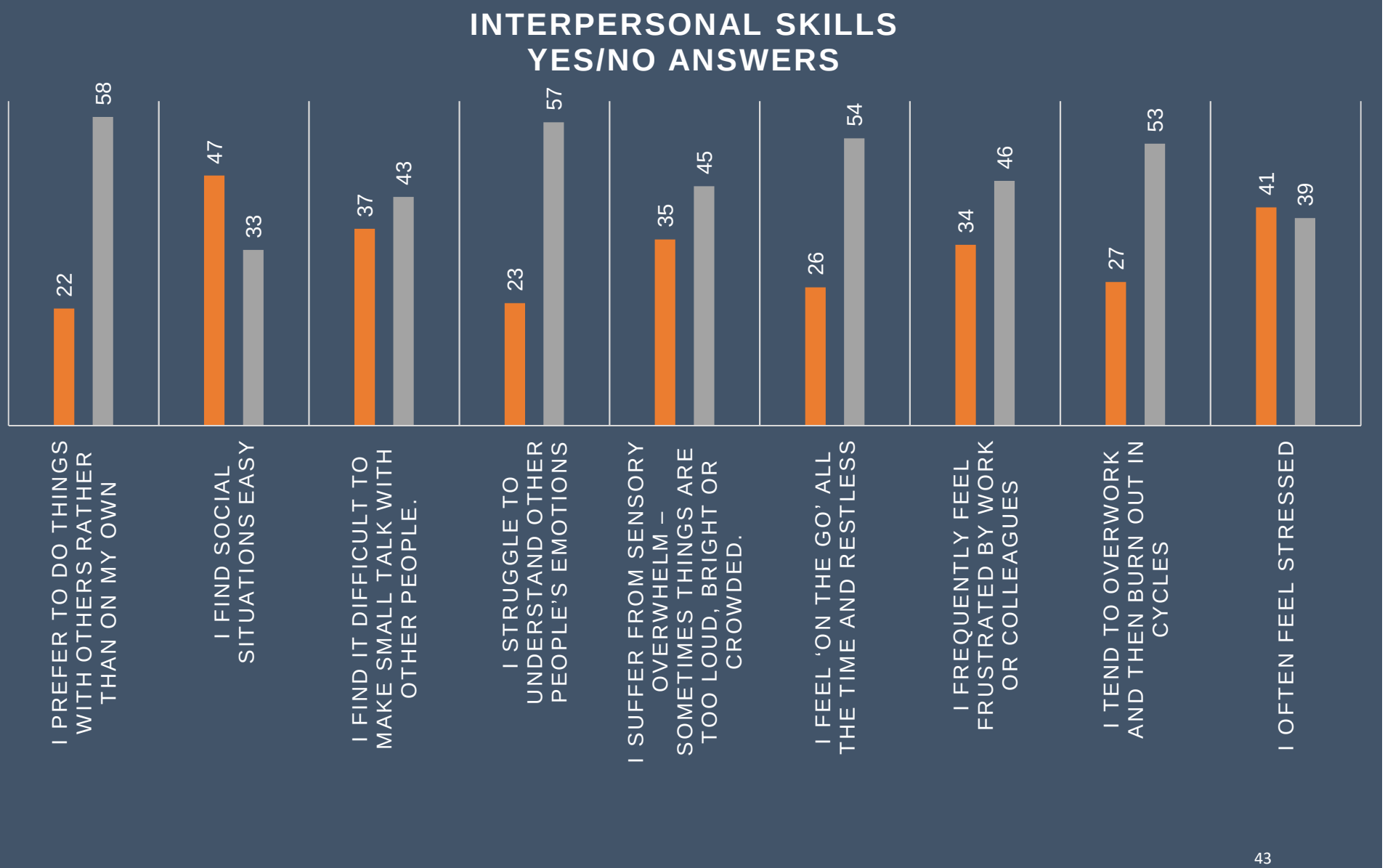
Survey - Communication



Survey - Memory & Concentration



Survey - Interpersonal Skills

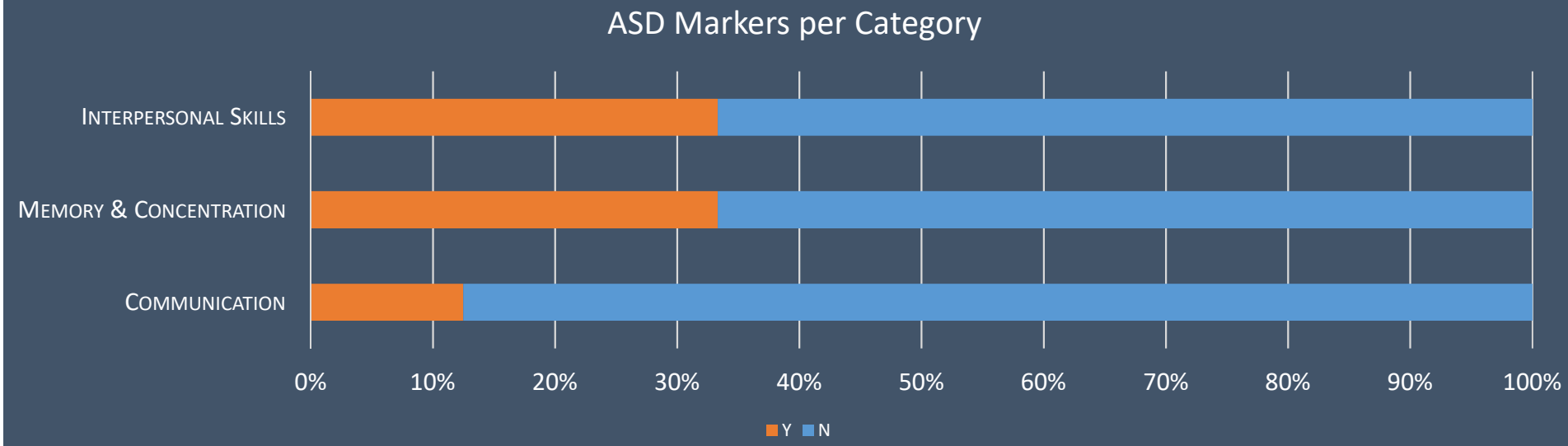


Survey – ASD Specific Question Markers

The table and graph below presents positively marked specific answers for each ASD specific category. As can be seen Interpersonal Skills & Memory & Concentration categories dominate and are typical of ASD.

24% of positively marked ASD questions for the 80 sample size correlate closely with the 19% of ASD identified offenders from the 500 sample size in Pilot Study 1

CATEGORY	Y	N	Y%	TOTAL
Communication	1	7	13%	8
Memory & Concentration	1	2	33%	3
Interpersonal Skills	2	4	33%	6
ASD Markers	**4**	**13**	**24%**	**17**



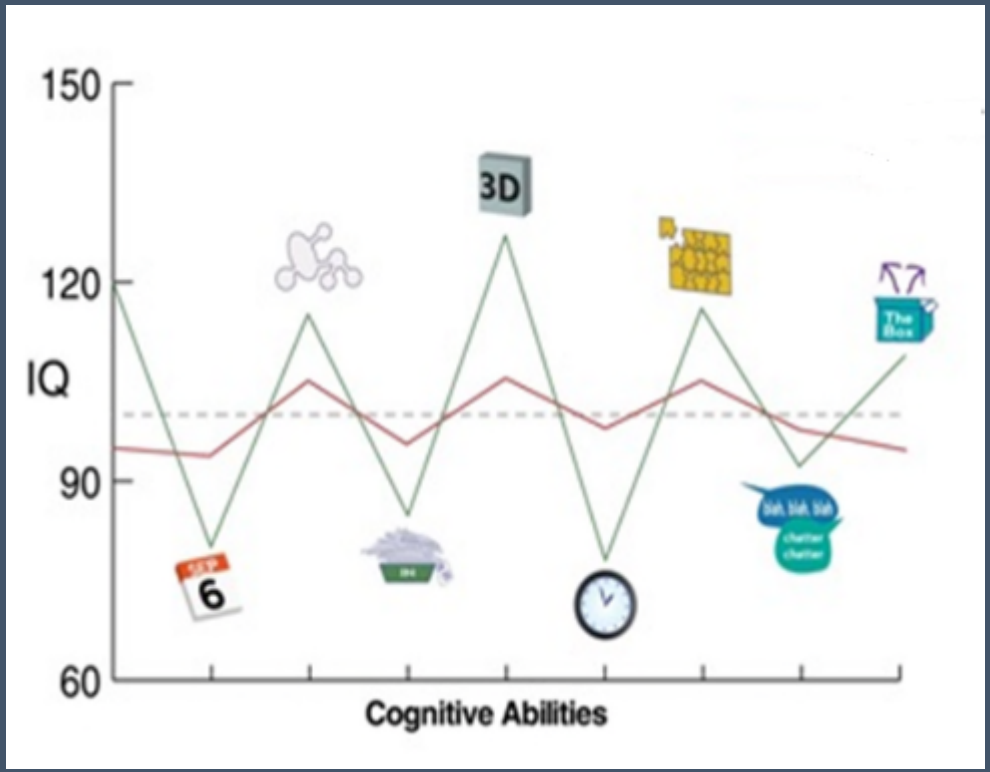
Interventions

Person Centred One to One Work

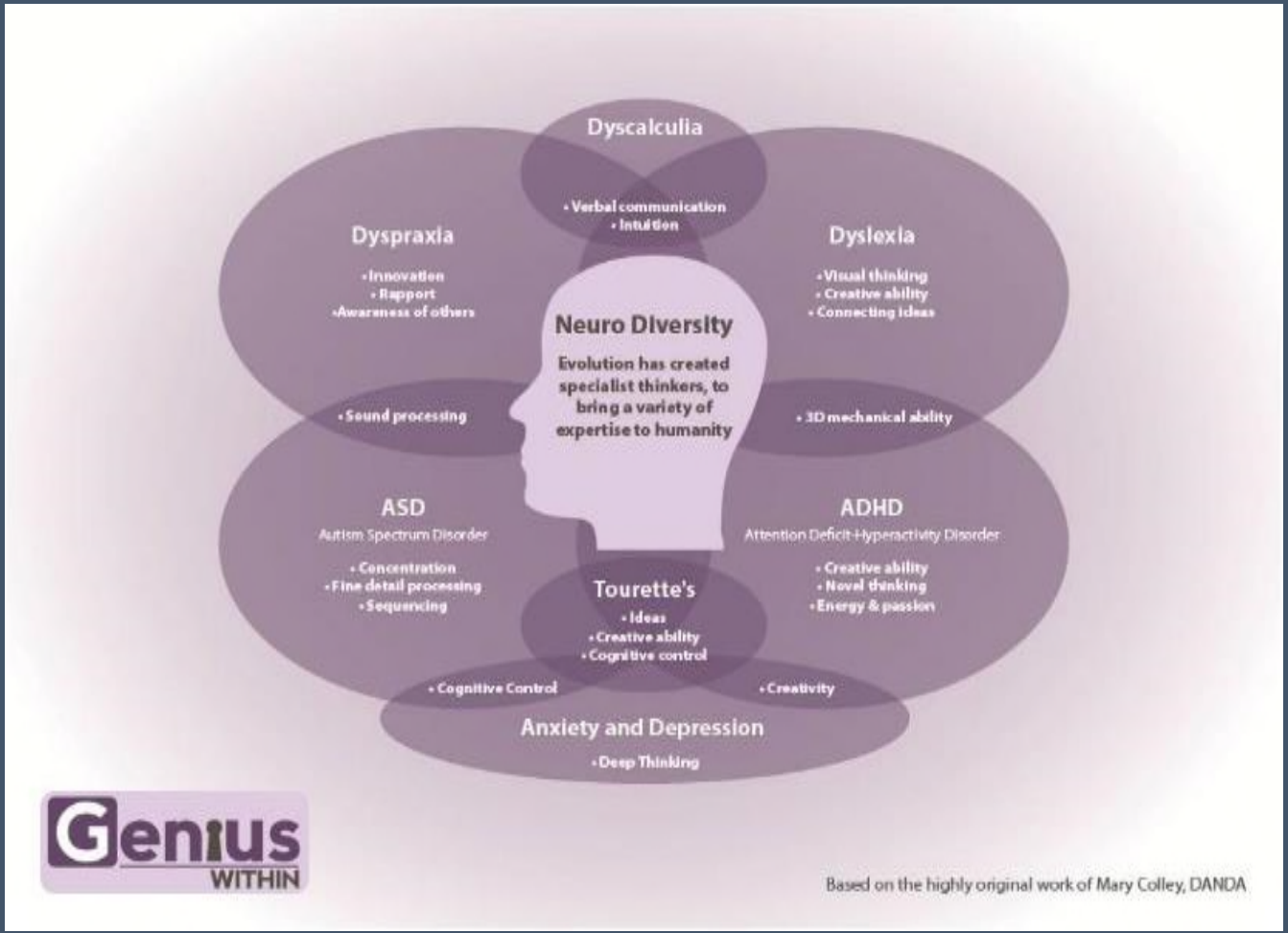
- Long term one to one coaching
- Psychotherapy
- Linking of professional services
- Care plan contribution
- Understanding reports and diagnostic information
- Sharing knowledge
- Building trust

Positive Assessments

At Genius Within we've always ensured that the diagnostic assessments highlight strengths, as well as weaknesses. This is really important, because you cannot be diagnosed with a neurodiverse condition without strengths. This means you are not neuro diverse Without strengths.



Group Learning – Achieving Qualifications



"Gaining my ILM in effective team skills helped me to prove to my employers that I could manage my time and communicate more effectively"

Case Study One

Josh

HMP Dartmoor

Josh from HMP Dartmoor

- Self isolating
- Not engaging
- Mental Health Difficulties
- Communication Difficulties
- Social Anxiety
- Depression

Interventions Accessed

- One to one coaching
- Strategy Profiling
- Positive Assessment
- Group Training
- Psychotherapy

Outcomes Achieved

- In the community
- Achieved a First Aid Qualification
- Managing emotional health
- Accessing further training
- Completed psychotherapy
- Engaging well with Case Manager

Case Study Two

Michael

HMP Dartmoor

Michael
HMP Dartmoor

- Self isolating
- Not engaging
- Mental Health
- Communication
- Social Anxiety
- Depression
- Revolving door Offender
- Care System

Interventions Accessed

- One to one coaching
- Clean Language Training
- Strategy Profiling
- Positive Assessment
- Group Training
- Psychotherapy

Outcomes Achieved

- In the community for the longest time frame
- Achieved a First Aid Qualification
- Achieved an ILM Qualification
- Managing emotional health
- Living independently
- Accessing further training
- Completed psychotherapy
- Engaging well with Case Manager

Research Conclusions

- Pilot Study 1 conducted in two parts each with sample sizes of N=250 (N=500 total) indicated that 19% or approx. one-in-five offenders show ASD traits based on standard AQ testing
- Pilot Study 2 indicated that 24% of the 80 sample size showed ASD traits linked with Interpersonal Skills, Memory & Concentration and Communication
- Both studies indicate that incarcerated offenders show statistically higher ASD traits than previous studies of the normal population, typically just 13%, and in category areas expected
- These studies also infer that by addressing additional needs in offender institutes targets a larger ASD audience than first thought and should benefit HMP rehabilitation and bring down reoffending rates

For the future

- Move away from diagnostic testing
- Screening support needs on entry to prison
- Identify who needs further testing
- Testing to take place
- Earlier information sharing
- Offender Passports to be introduced

Changing Practice

To create a sound and measureable support plan that provides ongoing foundations for future research of hard to help individuals in the prison services whilst being of operational value to the officers that work with the prisoners themselves

We aim to produce a standardised method of support for prisoners that are **NeuroDiverse** that can be taken from one establishment to another and can be used both operationally and multi-professionally

A Final Note

- Future research is essential
- Increase of knowledge and understanding in this area needed
- Provide a basis from which to inform recommendations regarding the sentencing, rehabilitation and management of offenders with a diagnosis of ASD or those that display traits

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QUESTIONS