



Division of
Occupational Psychology

Collaborative research on Dyslexia: incidence, adjustments, and health outcomes

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What are the does the literature tell us?

Journals and basic terms	Dyslex*	Adult limitations added to searc	Excl. HE, child, student or education	treatments	Additional terms employment Career
Psych Info Business Source Complete CJ Abstracts Behavioural Science collection 1995+ English	11,117 (9,600 research papers)	2010 (1,814 research papers)	802	463 (377 research papers)	41 (22 research papers)

Of the final 41 papers that directly related to the adult experiences of dyslexia and employment, the following disciplines were represented (as judged by the journal / publication type). Of these 41 papers, only four related to treatment evaluations.

Education / Dyslexia	18
Human Resources	9
Occupational Health	6
Management	4
Other (for example Social Work)	4



Standard AtW Adjustments. Are these appropriate adjustments?
Note – these are all aimed at individual changing, not organisation

Assistive Technology

- Spellcheckers & auto-correct
- Text-to-speech & Speech-to-text software
- Mind mapping software
- Adaptive use of everyday software

Strategy Coaching

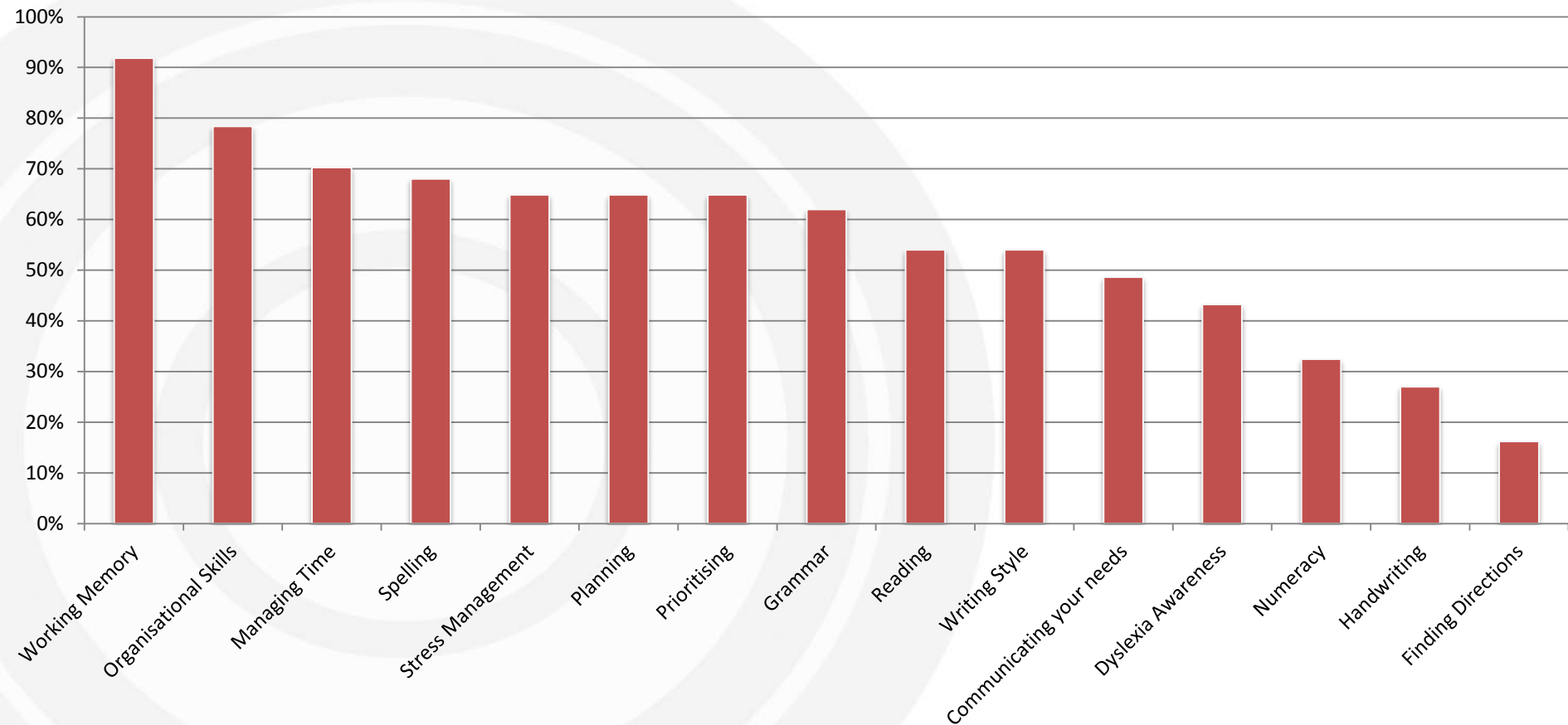
- Literacy support
- Memory skills
- Organisational skills
- Timekeeping
- Dyslexia awareness
- Working to strengths

Ergonomics

- Adaptive pens, mouse, keyboard
- Double screens for computer work
- Reading stands
- Environmental noise management



What are the needs of people with Dyslexic people in the workplace?





67% of dyslexics request support for stress at work
54% request support with reading

52% reported significant
sleep difficulties

23% reported some
insomnia and 25%
reported none

This is significantly different to the UK
population norms of 37%
experiencing insomnia

(Morphy, 2007) [$X^2(1)=7.67, p=.006$]

37% had been to their GP for help
with stress, anxiety or depression in
the past year

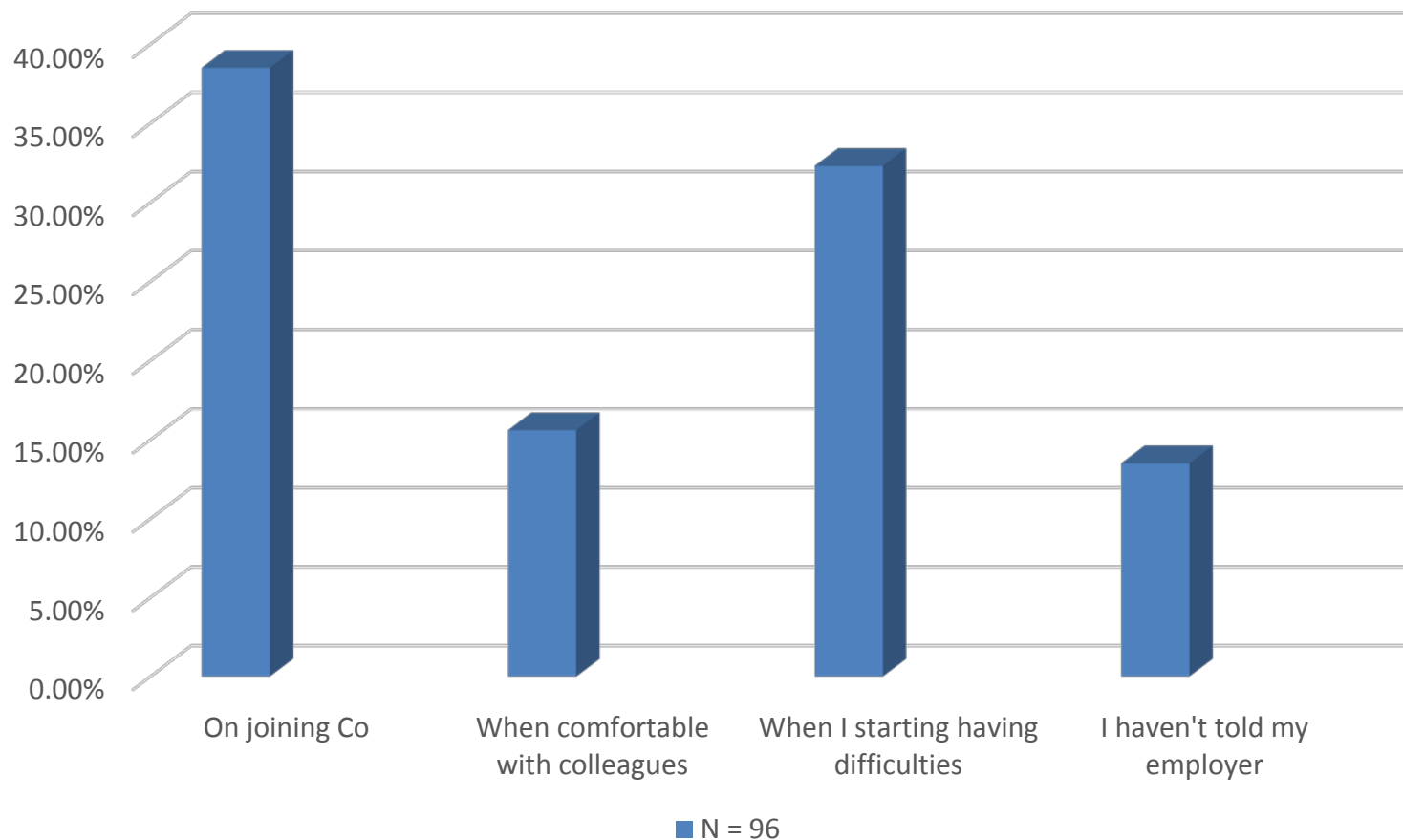
DYSLEXICS, UNDIAGNOSED AND NON-DYSLEXICS DIFFER ON OUTCOME MEASURES...

IV: Dyslexic Status yes / undiagnosed / no		ANOVA & Tukey HSD
DV: Organisational Support (Eisenberger, 1986)	Yes: $M = 46.83, SD = 17.79$ UnD: $M = 49.25, SD = 17.91$ No: $M = 49.35, SD = 11.99$	$F(2, 113) = 0.305, p = .737$ <i>No sig. diffs between groups</i>
DV: Well-being** (Warr, 1990)	Yes: $M = 52.49, SD = 8.26$ UnD: $M = 55.21, SD = 10.25$ No: $M = 59.86, SD = 7.94$	$F(2, 142) = 9.998, p < .001$ <i>'No' sig diff to 'Yes' and 'UnD'</i>
DV: Insomnia** (Morphy et al., 2007)	Yes: $M = 18.83, SD = 5.23$ UnD: $M = 19.54, SD = 5.81$ No: $M = 16.16, SD = 5.52$	$F(2, 152) = 5.307, p = .006$ <i>'No' sig diff to 'Yes' and 'UnD'</i>
DV: General Health** (Spence et al., 1987)	Yes: $M = 32.55, SD = 12.73$ UnD: $M = 31, SD = 10.62$ No: $M = 23.41, SD = 13.33$	$F(2, 202) = 11.727, p < .001$ <i>'No' sig diff to 'Yes' and 'UnD'</i>



Assessment: a vulnerable time?

When did you tell your employer about your dyslexia?





Detailed results – how different were the coachees' scores after coaching?

Topic	Average before	Average after	% improve	Statistic
Overall	3.97 (SD=1.02)	6.30 (SD=1.20)	59%	$t(92) = 19.35, p < .001, d = 1.94$
Memory	3.37 (SD=1.77)	5.43 (SD=1.98)	61%	$t(79) = 8.76, p < .001, d = 1.04$
Organisation	4.43 (SD=1.82)	6.96 (SD=1.58)	57%	$t(67) = 10.03, p < .001, d = 1.39$
Time	4.46 (SD=2.08)	6.74 (SD=1.95)	51%	$t(53) = 8.16, p < .001, d = 1.1$
Spelling	3.73 (SD=1.56)	5.77 (SD=1.75)	55%	$t(58) = 10.43, p < .001, d = 0.94$
Stress Mgmt	3.71 (SD=2.00)	6.36 (SD=1.75)	71%	$t(50) = 7.67, p < .001, d = 1.11$



Detailed results – how different were the managers' scores after coaching?

Topic	Average before	Average after	% improve	Statistic
Overall	4.91 (SD=1.65)	6.31 (SD=1.12)	29%	$t(40) = 10.72, p < .001, d = 0.85$
Memory	4.94 (SD=1.86)	6.24 (SD=1.06)	26%	$t(30) = 5.17, p < .001, d = 0.7$
Organisation	4.79 (SD=2.15)	6.73 (SD=1.28)	41%	$t(27) = 6.09, p < .001, d = 0.9$
Time	5.50 (SD=1.61)	7.02 (SD=1.17)	28%	$t(25) = 7.56, p < .001, d = 0.94$
Spelling	4.36 (SD=2.38)	5.60 (SD= 1.61)	28%	$t(24) = 2.97, p = .007, d = 0.51$
Stress Mgmt	4.92 (SD=2.38)	6.40 (SD=1.78)	30%	$t(23) = 4.98, p < .001, d = 0.62$



Scores converging

The coachees' average 'before' scores were significantly lower [M=3.96, SD=1.02] than their managers' [M=4.91, SD=1.65] [$t(57) = -3.84, p < .001$].

However after the coaching, there was no difference between the two, demonstrating that coachee [M=6.30, SD=1.20] and manager [M=6.31, SD=1.12] were on the same page about performance levels [$t(38) = -0.047, p = .96$].

We think the difference before may come from **low confidence** and **self esteem** on the dyslexic coachees' part and we are investigating this further in our current research, as well as focusing on how we can work effectively with memory and in Action Learning Sets.