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Department of Psychology
200 University Avenue West
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Dear Colleague,

The Attention-Related Cognitive Errors Scale (ARCES) is in the public domain and special permission is not required to use it for any purpose. It is a measure of everyday mistakes that people make as a result of not paying sufficient attention to the task at hand. The ARCES has been validated against the SART as a measure of attention-related errors in both its original (Cheyne, Carriere, & Smilek, 2006) and revised (Smilek, Carriere, & Cheyne, 2010) form, and has been used with several large student and community samples. Here we present the current version of the scale, along with psychometric and normative data comparing ARCES deciles with a number of relevant measures, including the MAAS-LO, MFS, SART, CFQ, BPS, BDI-II, DASS, GSE, and ESS. The ARCES is scored either by simple summation or by calculating item mean scores, as used below.

Feel free to contact any of us if you have any questions about the use of the ARCES or our research.

Sincerely,

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Jonathan Carriere, MA jcarrier@uwaterloo.ca
Dan Smilek, PhD dsmilek@uwaterloo.ca

For more of our research visit http://oops.uwaterloo.ca

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ARCES

The following statements are about minor mistakes and absent-mindedness everyone notices from time to time, but we have very little information about just how common they are. The great majority of time these little foibles are harmless, though they do have serious safety implications in industry and everyday life. We want to know how frequently these sorts of things have happened to you.

There are 12 Questions. Please answer by circling a number on the scale provided below each question.

---

1. I have gone to the fridge to get one thing (e.g., milk) and taken something else (e.g., juice).

never	rarely	sometimes	often	very often
1	2	3	4	5

2. I go into a room to do one thing (e.g., brush my teeth) and end up doing something else (e.g., brush my hair).

never	rarely	sometimes	often	very often
1	2	3	4	5

3. I have lost track of a conversation because I zoned out when someone else was talking.

never	rarely	sometimes	often	very often
1	2	3	4	5

4. I have absent-mindedly placed things in unintended locations (e.g., putting milk in the pantry or sugar in the fridge).

never	rarely	sometimes	often	very often
1	2	3	4	5

5. I have gone into a room to get something, got distracted, and wondered what I went there for.

never	rarely	sometimes	often	very often
1	2	3	4	5

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6. I begin one task and get distracted into doing something else.

never	rarely	sometimes	often	very often
1	2	3	4	5

7. When reading I find that I have read several paragraphs without being able to recall what I read.

never	rarely	sometimes	often	very often
1	2	3	4	5

8. I make mistakes because I am doing one thing and thinking about another.

never	rarely	sometimes	often	very often
1	2	3	4	5

9. I have absent-mindedly mixed up targets of my action (e.g., pouring or putting something into the wrong container).

never	rarely	sometimes	often	very often
1	2	3	4	5

10. I have to go back to check whether I have done something or not (e.g., turning out lights, locking doors).

never	rarely	sometimes	often	very often
1	2	3	4	5

11. I have absent-mindedly misplaced frequently used objects, such as keys, pens, glasses, etc.

never	rarely	sometimes	often	very often
1	2	3	4	5

12. I fail to see what I am looking for even though I am looking right at it.

never	rarely	sometimes	often	very often
1	2	3	4	5

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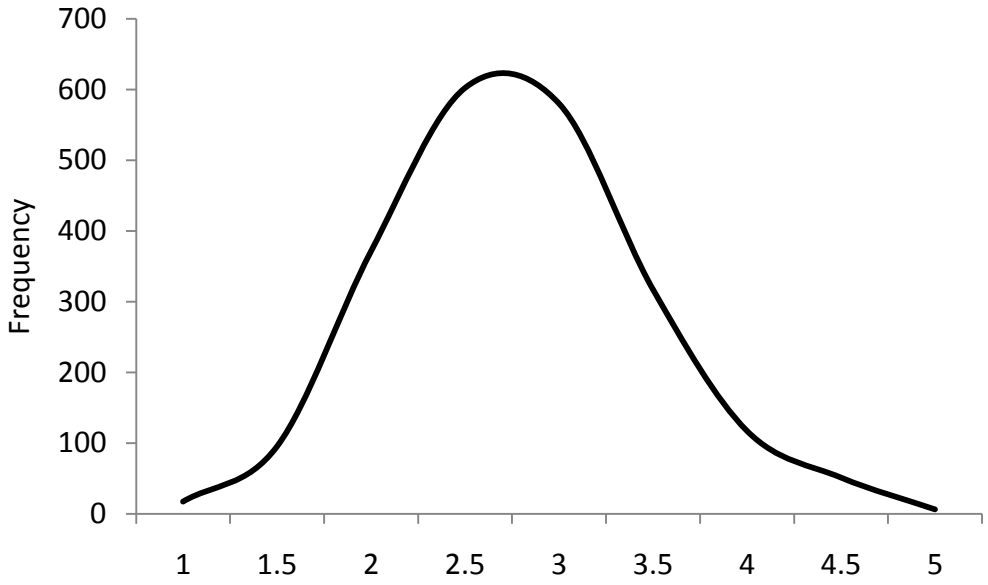
ARCES Item Mean



17	95	371	602	580	317	117	51	6	Frequency
0.8	5.2	22.4	50.3	77.2	91.9	97.4	99.7	100	Percentile
0.8	4.4	17.2	27.9	26.9	14.7	5.4	2.4	0.3	Percentage
									Measure (N)*
-	2.42	2.65	3.09	3.44	3.85	4.16	4.79	-	MAAS-LO (2146)
-	2.03	2.36	2.63	2.88	3.31	3.53	3.78	-	MFS (1120)
-	0.33	0.37	0.40	0.46	0.53	0.54	0.63	-	SART Errors (1074)
-	1.07	1.30	1.69	2.07	2.40	2.66	3.07	-	CFQ (443)
-	3.09	3.28	3.52	3.71	4.02	4.31	4.67	-	BPS (919)
-	0.39	0.36	0.51	0.64	0.86	1.03	1.21	-	BDI-II (682)
-	0.54	0.62	0.72	0.97	1.17	1.53	1.69	-	DASS-Dep. (842)
-	0.42	0.42	0.56	0.86	0.91	1.27	1.54	-	DASS-Anx. (842)
-	0.68	0.80	0.92	1.23	1.41	1.57	2.01	-	DASS-Stress (842)
-	3.33	3.06	3.06	2.96	2.87	2.74	2.75	-	GSE (618)
-	0.84	0.88	1.01	1.11	1.37	1.46	1.62	-	ESS (1210)

* Cells with n < 20 are excluded

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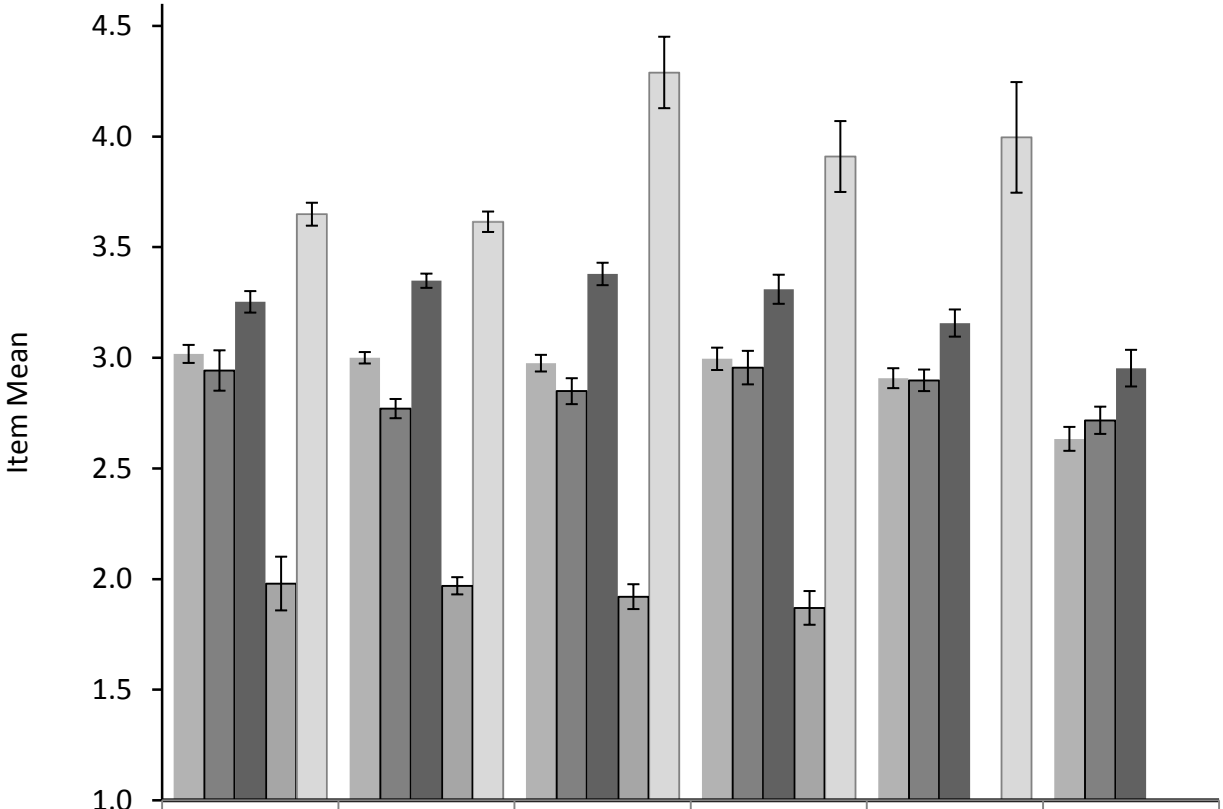
Measure by Decade



	Teens	Twenties	Thirties	Forties	Fifties	Sixties
ARCES	3.02	3.00	2.98	3.00	2.91	2.63
MFS	2.94	2.77	2.85	2.96	2.90	2.72
MAAS-LO	3.25	3.35	3.38	3.31	3.16	2.95
CFQ	1.98	1.97	1.92	1.87		
BPS	3.65	3.61	4.29	3.91	4.00	

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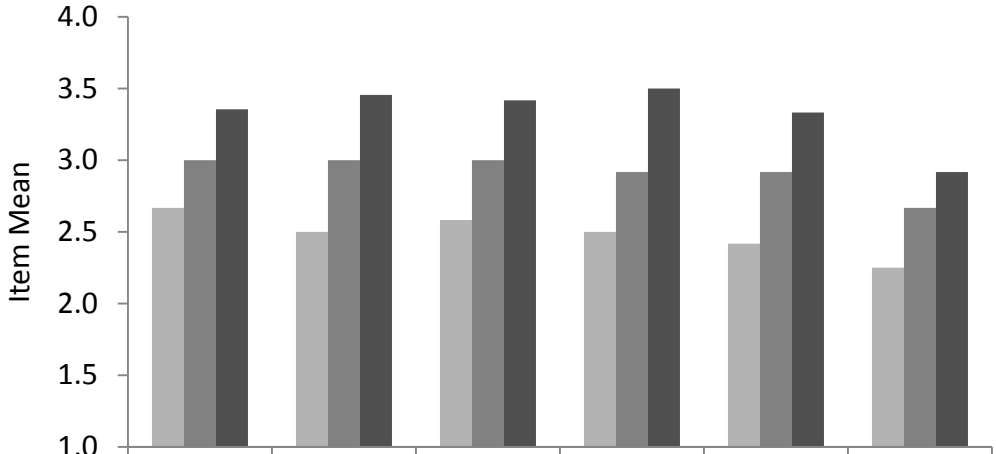
Score Quartiles by Decade



	Teens	Twenties	Thirties	Forties	Fifties	Sixties
25	2.67	2.50	2.58	2.50	2.42	2.25
50	3.00	3.00	3.00	2.92	2.92	2.67
75	3.35	3.45	3.42	3.50	3.33	2.92

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Measures Included

ARCES: Carriere, Cheyne, & Smilek (2008). Everyday attention lapses and memory failures: The affective consequences of mindlessness. *Consciousness and Cognition, 17*, 835-847. doi:10.1016/j.concog.2007.04.008

BDI-II: Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory–II*. San Antonio, TX: The Psychological Corporation.

BPS: Farmer, R., & Sundberg, N. D. (1986). Boredom proneness: The development and correlates of a new scale. *Journal of Personality Assessment, 50*, 4-17. doi:10.1207/s15327752jpa5001_2

CFQ: Broadbent, D. E., Cooper, P. F., FitzGerald, P., & Parkes, K. R. (1982). The cognitive failures questionnaire (CFQ) and its correlates. *British Journal of Clinical Psychology, 21*, 1-16.

DASS: Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck depression and anxiety inventories. *Behaviour Research and Therapy, 33*, 335-343. doi:10.1016/0005-7967(94)00075-U

ESS: Johns, M. W. (1991). A new method for measuring daytime sleepiness: The Epworth Sleepiness Scale. *Sleep, 14*, 540-545.

GSE: Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs*. (pp. 35-37). Windsor, UK: NFER-Nelson.

MAAS-LO: Carriere, Cheyne, & Smilek (2008). Everyday attention lapses and memory failures: The affective consequences of mindlessness. *Consciousness and Cognition, 17*, 835-847. doi:10.1016/j.concog.2007.04.008 (See also the original MAAS in: Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822-848. doi:10.1037/0022-3514.84.4.822)

MFS: Carriere, Cheyne, & Smilek (2008). Everyday attention lapses and memory failures: The affective consequences of mindlessness. *Consciousness and Cognition, 17*, 835-847. doi:10.1016/j.concog.2007.04.008

SART Errors: Robertson, I. H., Manly, T., Andrade, J., Baddeley, B. T., & Yiend, J. (1997). 'Oops!': Performance correlates of everyday attentional failures in traumatic brain injured and normal subjects. *Neuropsychologia, 35*, 747-758. doi:10.1016/S0028-3932(97)00015-8