

Appendix B. Supplementary tables 12 and 13.

Table 12. Summary of the literature review. Studies testing effects of nature vs urban/control exposures on BDS test performance and other executive cognitive tests, using a randomized control- or a randomized crossover design.

Studies using BDS ^a	Design	N	Sample characteristics, Age, Gender etc	Type of Nature/Environment Intervention	Cognitive measures	Reported Statistical Values	BDS	FDS	FDS & BDS	ANT-E	NCPC	SART	TMTA	TMTB	Other
Authors (year, experiment)															
Bodin et al, (2003)	RCrT ‡	12	12 runners, from running club. (50% female, mean age 37 (females) 39.7 (males) years. Sweden.	Running in natural (park) vs urban (city streets) setting for 60 min, 1 week apart.	Combined Forward (FDS) & Backwards Digit Span (BDS), Symbol Digit Modalities Test.	Sum of BDS & FDS reported. Time*Env interaction on FDS+BDS (men & women): $F(1, 10)=0.92$; $p=0.36$. Time*Env interaction on Symbol Digit Modalities test: $F(1, 10)=0.02$, $p=0.90$.			n.s. †						Symbol digit modalities test: n.s.
Bratman, Daily, Levy, & Gross (2015).	RCT ‡	60	Adults- univ students or people from the community (33 females, mean age 22.9 years). San Francisco Bay Area, USA.	50-minute walk in natural or urban environment (with 15-minute shuttle each way).	BDS: 3-9 digit strings (2 of each length). Test stops after 2 consecutive errors; DV=nr of correct sequences recalled. Ospan, Attention Network task- Executive component (ANT-E), Change detection	BDS: ANOVA results showed a main effect of time, $F(1,58) = 8.40$, $p < .01$, and no environment \times time interaction, $F(1,58) = .04$, n.s. Ospan: ANOVA results showed a main effect of time, $F(1,43) = 7.94$, $p < .01$, & a time*env interaction, $F(1,43) = 7.85$, $p < .01$. Ospan improvement from pre-to-post-nature walk: $t(22) = 4.08$, $p = .0005$, $d = 0.67$.	n.s. †		n.s.						Ospan *; Change detection n.s
Cimprich & Ronis (2003)	RCT ‡	185	Patients with newly diagnosed breast cancer, at a Univ. Medical center (100% female, mean age 53.8 years). USA.	Patient-led, home-based nature activities, vs logged relaxation time (control), 120 min/week, 36 day period.	BDS, FDS, Necker cube pattern control (NCPC), Trail making test A (TMTA) & B (TMTB).	BDS: Sign. better BDS-scores in nature intervention group than in the non-intervention group at T2 ($p=.002$), but intervention group also had sign better BDS scores at T1. . Differences in pre-post change are not reported. Similar pattern of results for FDS, TMTA & TMTB.	* / n.s.	* / n.s.		n.s.			* / n.s.	* / n.s.	
Emfield, Adam G.; Neider, Mark B. (2014)	RCT □	202	Univ students (128 female; mean age 19.8). Univ. Central Florida, USA.	7 conditions: natural or urban sounds, images of natural or urban environments, or a combination of both, or no exposure/control.	BDS, ANT. BDS: Adaptive version; DV= last string length in which two trials were correct, indicating the participant's digit span capacity.	Indications of practice effects were found, but no sign differential effects of environment condition on BDS or ANT measures.	n.s. †			n.s.					
Gamble, Howard Jr., & Howard (2014).	RCT □	26 + 30	Univ students at Georgetown University (mean age 20.54 years, SD 1.24). 30 older adults from the community (mean age 69.10 years, SD 3.92). Gender NR. USA.	6 min picture viewing- either 50 nature pictures or 50 urban pictures. Same pictures as Berman (2008) study.	BDS: 2-8 digit strings, 2 at each length; DV=nr of strings recalled correctly. ANT.	BDS: No difference in improvement between nature and urban conditions. Sign main effect of time (pre, post,) $F(1, 52) = 25.80$, $p < .001$. Pre-post contrasts for Nature: $t(27) = -3.20$, $p = .004$; Urban: $t(27) = -3.99$, $p < .001$. ANT-E: Sign time*env interaction, $F(1, 52) = 6.88$, $p = 0.01$. Executive Attention improvement from pre-to-post-nature pictures: $t(27) = 5.27$, $p < .001$, $d = 0.76$. No sign time*env interactions were seen for the alerting and orienting attention components.	n.s. †			*					ANT-A & O: n.s.

Gidlow, C.J., Jones, M.V., Hurst, G., et al. (2016).	RCrT ‡	38	Adults (35% female; mean age 40.9 years, SD 17.6). West Midlands, UK.	30-min walks: residential (urban), natural (green), and natural with water (blue). Pre, post, and delayed (30 min) post walk measure.	BDS: 3-9-digit strings. Stop after 2 failures. DV=length of the longest correct sequence.	BDS: interaction effect of time*environment a significant environment*time, $F(4, 148)=2.89$, $p=.02$, such that improvements in cognitive task performance persisted at T3 following exposure to both natural environments, but reduced to below baseline levels in the urban condition: Blue vs. Urban (T1 vs. T3), $F(1, 37) = 9.26$, $p = .004$; Green vs. Urban (T2 vs. T3), $F(1, 37) = 4.35$, $p = .044$.	* †									
Li, D., & Sullivan, W. C. (2016).	RCT □	94	High school students across 3 conditions (53 females, age NR). No window=32; barren window=32; and greenwindow=30. Five public high schools in central Illinois, USA.		BDS, FDS.	Regression model on combined FDS & BDS score change: Students with green window views improved with (unstandardized B coefficient) 0.7 units more than their peers assigned to a barren window view ($p<0.001$), after controlling for the other variables. The difference in digit span score changes/restoration between the no window condition and the barren condition was not significantly different ($p = 0.67$). Mean BDS scores are not reported.			* †							
Lin, Y-H., Tsai, C-C; Sullivan, et al. (2014)	RCT □	138	138 univ undergraduate students (73 females, age NR). National Taiwan University, Taiwan.	Image conditions (5 images, total expo 100 sec): (a) streetscapes with absolutely no trees; (b) streetscapes with flashes of trees in which participants had minimal awareness of the content; (c) streetscapes with trees; and (d) streetscapes with trees to which participants were told to pay attention.	BDS: 4-10 digits (2 trials at each length); DV=length of longest correct sequence recited.	Awareness level had an effect on BDS score change (difference between BDS pre-test and post-test) even after controlling for participant's baseline (pre-test BDS), where $F(3, 133) = 11.84$, $p < 0.001$. Paired comparison showed that BDS change in the Heightened Awareness treatment was sig greater than in all other groups. There was no difference between the Moderate Awareness and the Minimal Awareness treatments, but both groups' scores were higher than the No Tree treatment group.	* †									
Perkins et al. (2011)	RCT ‡	26	Univ. Students, (73 % female, age 19-24 years). USA.	Walk in natural (woods) vs urban (residential vs parking lot) setting, 20 min.	BDS, FDS, Logical Memory.	No sign difference between nature & urban exposures in BDS score changes, nor FDS or Logical memory .	n.s.	n.s.								Logical memory n.s.
Rogerson, M., & Barton, J. (2015).	RCrT □	12	Adults from Univ. of Essex (50% female, mean age 27.8 years, SD 5.5). UK.	Visual exercise environments (video : forest run vs Boston marathon route/ control), during Exercise at 60% VO2peak for 15-mins.	BDS: 3-11 digits. DV=max string-length recited. Cognitively fatiguing tasks were done before pre-exercise BDS testings.	Time*Env interaction for BDS ($F_{2,22} = 6.267$, $p = 0.007$). Scores sign. improved in the nature condition ($p < 0.001$) but did not in the built or control conditions.	* †									
Stark et al. (2003)	cluster RCT ‡	57	57 pregnant women from a prenatal class (mean age 29.1 years). USA.	Outdoor activities vs discussion on pregnancy discomforts.	BDS, FDS, Category Matching, TMTA, TMTB, Error Scale.	No sign effect on BDS (Test statistics not reported). Sign better Error scale performance after nature but the time*env interaction is NR.	n.s.	n.s.					n.s.	n.s.		Error Scale */n.s; Category matching n.s.
Triguero-Mas M, Gidlow CJ, Martínez D, et al. (2017)	RCrT. ‡	26	Adults (15 females, median age 44.32). Barcelona, Spain.	Walks in Green, Blue, & Urban environments in groups of 2–6. BDS at time 1, 3, 5, 7, 9.	BDS: 3-9 digit strings (two of each length). Test stop after 2 consecutively errors. DV= total nr of correct sequences recalled.	BDS: Multilevel mixed-effects linear regression models were used with subject and BDS baseline levels at time 1 entered as random effects to evaluate the impact of exposure environment on changes in BDS: Coefficients (CI) and p-values (urban env exp is the reference): Green: -0.38 (-0.97, 0.21), $p=0.20$. Blue: 0.19 (-0.39, 0.77), $p=0.52$. Mean BDS scores are not reported.	n.s.									

Table 12 continued.

Studies using only other executive cognitive tests							BDS	FDS	FDS & BDS	ANT-E	NCPC	SART	TMTA	TMTB	Other
Berman et al. (2008, exp 2)	RCrT □	12	Univ students, (75% female, mean age 24.25 years). University of Michigan, USA.	10-min nature vs urban picture viewing.	BDS, ANT (executive, alerting, orienting components).	ANT: The picture type-by-time interaction was of most interest and was significant only for the executive portions of the ANT according to predictions, whereby pictures of nature led to more improved executive attention performance than did exposure to urban pictures, $F(1, 10) = 17.089$, $prep = 0.99$.	(*)			*					ANT alerting & orienting: n.s.
Berto (2005, exp 1)	RCT □	32	Students (50% female, mean age 23 years). Italy.	Viewing images, natural Viewing images, urban 25 images, displayed 15 sec each.	Sustained Attention to Response Task (SART): DVs reaction time, d-prime, correct & incorrect responses.	SART: Reported sign lower reaction times at T2 after the nature conditions, compared to the urban: $t(30) = -2.19$; $p = .03$. No group differences at T2 on Nr of correct or incorrect responses, or d-prime. Time*env interaction NR.					*/n.s.				
Berto (2005, exp 3)	RCT □	32	Students (50% female, mean age 22 years). Italy.	Viewing images, natural Viewing images, urban 25 images for duration of their choice.	SART	SART: Reported no sign difference between env groups on reaction time, the Nr of correct or incorrect responses or d-prime.					n.s.				
Chen, Lai & Wu (2011, exp 1)	RCT □	48	Senior secondary school students (58% female, age NR/range about 16-19 years). China.	Viewing images: natural, city, urban nightscape, sports. For each condition: 10 images x 15 sec each.	Colored number pictures (DV=reaction time)	Env (nature, city, urban nightscape, sports)*Time (T1, T2, T3): $F = 8.27$; $p < .001$. Reaction times increased in the city cond., and decreased in the nature cond. and in the urban night cond. (greatest RT decrease) from T1-T3.									Colored nr pic * (mixed findings)
Evensen, K.H., Raanaas, R.K. Et al. (2015)	RCT ‡	85	85 univ. students (out of which 34 from Raanas et al. 2011): 57 F, 28 M, Age $M=24.9$ y, $SD=5.7$ y. Norway.	Office setting during cognitive tasks: pants vs inanimate objects * window vs no window. Measures at T1/baseline, T2/after a demanding task, & T3/after a 5-min break.	Reading Span Task (RST).	No superior RST improvement in plant condition vs inanimate objects condition for neither window nor no-window condition.									RST n.s.
Geniole, SN.; David, J.P. F.; Euzébio, R.F.R. et al. (2016)	RCrT ‡	31	Univ students (100% male, mean age 24.61, $SD = 3.88$). Ontario, Canada.	15 min walk. Nature: naturalized landfill area (visible methane gas pipes throughout). Urban: neighbouring urban area/city center.	Stroop (computerized, 3 keypress responses for 3 different font colors). DV= difference in RT between congruent vs incongruent trials.	An ANOVA with two within-subject factors (Location: urban vs. naturalized landfill; Time: prewalk vs. postwalk) on the Stroop scores revealed only a marginal effect of Time ($F(1,30) = 3.15$, $p = 0.09$, $\eta^2 = .10$), with better attentional control after the walks than before the walks (other ps > .64)									Stroop n.s.
Greenwood, A., & Gatersleben, B. (2016)	RCT ‡	120	College students (55% female, aged 16–18 years). South-West London, UK.	20 min outdoors in nature vs indoors, alone vs. with a friend vs. playing a game on a mobile phone. There were 20 participants in each experimental condition.	NCPC	Sign. main effect for time, with reduced NCPC scores/reversals in all conditions ($Mpre = 5.54$, $SD = 2.16$, $Mpost = 4.2$, $SD = 2.14$; $F(1,114) = 58.21$, $p < 0.001$, $\eta^2 = 0.34$). Sign time*env interaction, with NCPC scores reducing more in the outdoor env ($Mpre = 5.76$, $SD = 1.99$, $Mpost = 3.84$, $SD = 1.69$) than in the indoor env ($Mpre = 5.32$, $SD = 2.32$, $Mpost = 4.59$, $SD = 2.46$; $F(1,114) = 11.85$, $p < 0.001$), $\eta^2=0.09$. There was a marginally significant interaction effect for context ($F(2,114) = 2.71$, $p = 0.07$, $\eta^2= 0.05$). Whilst mean reductions in scores were greater in the 'with a friend' context ($M = -1.70$, $SD 1.89$) and the 'alone' context ($M = -1.50$, $SD 1.71$) than the 'with a phone' context ($M = -0.76$, $SD = 2.27$), they were only significantly so in the 'with a friend' context compared with 'with a phone' ($t(78) = 2.01$, $p = 0.05$). There was				*					

						no sign 3-way interaction effect between env and context over time ($F(2,114) = 2.00, p = 0.78$).									
Hartig et al. (1991, exp 2)	RCT §	102	102 students (50% female, mean age 20 years).Univ. & local area, USA.	Walking in natural (regional park) vs urban (city centre) env, vs reading magazines in comfortable laboratory setting, for 40 min.	Proofreading Task (% errors detected)	Greater error detection in the nature compared to the urban and indoor conditions at T2 were reported: $t(94) = 2.45; p < 0.01$. But it is unclear which of the 3 env groups are contrasted in the t-test and baseline measurements were not reported.									Proofreading task */n.s.
Hartig, Evans, Jamner et al. (2003)	RCT §	112	Students, Univ. & local area, USA. 50% female, mean age 20.8 years.	Sitting, natural view; then walking in nature reserve, vs. sitting, no view; then walking, urban (city streets), 1 h (10 min passive; 50 min active). Half of the participants performed fatiguing cognitive tasks for about 1 h before the view + walk.	NCPC, Search and Memory Test. Testing was done pre environment exposure (T1), mid walk (T2) & post-walk (T3).	NCPC: There were time*env interactions in favour of the nature group (incl. both the fatiguing task group and no task group) from T1-T2: $F(1,98) = 13.15; p < 0.001$; and from T1-T3: $F(1,100) = 5.59; p = 0.02$. Search & Memory Test: No sign effect of env or time*env interaction (results NR).					*				Search & memory test NR
Jaggard, Charles (2016), Master thesis, Indiana State University.	RCT □	109	University students, (81.7% female, mean age 19.2 years, range 18-43). Indiana, USA.	Viewed nature or urban pictures (5 pics for 1 min each= 5 min expo), with the instruction to watch the pics freely, vs. Instruction to direct their attention to the pictures.	NCPC	Free-Nature participants showed greatest recovery from directed attention fatigue ($M = .55, SD = 1.95$), followed by Free-Urban participants ($M = .07, SD = .64$), Directed-Urban participants ($M = -.17, SD = 1.50$), and finally with Directed-Nature participants exhibiting the least recovery of any group ($M = -.41, SD = 1.41$). Comparing pre-post scores, those watching freely showed greater recovery than those instructed to direct attention, $t(86) = 2.21, p = .03$. No significant differences were found between the “free” and “directed” urban conditions, $t(86) = .58, p = .57$, or between the Free-Nature and Free-Urban conditions, $t(86) = 1.14, p =0.26$.					n.s.				
Johansson et al. (2011)	RCrT §	20	Univ students (50% female, mean age 24.2 years (males) & 22.4 years (females)). Sweden.	Walking, natural (park) vs. Urban (streets) for 40 min. Four walks, 1 week apart (natural vs urban, alone vs with a friend).	Symbol Substitution Test.	A sign time*env interaction was found, whereby the nr of correct substitutions decreased more after the nature walk than the urban (combined conditions of being alone and with friend): $F(1, 18) = 5.99, p = .025$, $\text{Eta}^2 = 0.250$. Higher baseline/T1 scores in the nature condition suggest regression to the mean may explain results, according to the authors.									Symbol substitution: (reverse effect)
Laumann et al. (2003)	RCT □	28	Univ students (100% female, age 18-24 years). Norway.	Watching video, natural (island waterside) Watching video, urban (city streets) 80 scenes x 15 sec each.	ANT- Orienting component.	No raw data or statistical tests for type of stimuli by time effects on cognitive performance are presented.									ANT-orienting: NR
Lee, K. E., Williams, K. J., Sargent, L. D., et al. (2015)	RCT □	150	150 Univ.students (71% female, mean age 20). Melbourne, Australia.	40 sec viewing of flowering meadow green roof or a bare concrete roof.	SART: DVs included SD in response times, fast frequency variability in response times, slow-frequency/gradual changes in response variability, commission & omission errors.	Green roof viewing resulted in lower omission errors, and lower response variability, but not concrete roof viewing. SD in response times: Reduced response variability was seen post green roof viewing [$F(1, 141) = 5.00, p =0.027, r =0.19$], while response variability increased pre to post viewing of the concrete roof [$F(1, 141)=7.86, p=0.006, r=0.23$]. Fast-frequency response variability in 2nd half of the test, post treatment, was higher in the concrete roof group compared to the green roof group [$U=1994, p=0.012, r=0.19$]. Response time: no overall difference in mean response times for the green or concrete roof groups [$F(1, 145)=0.10, p=0.754$], but results are not distinguished for pre vs post exposure testings. Omission errors: Post exposure, in the 2nd half of the					*/n.s.				

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Table 13. Descriptive statistics for mean Backwards Digit Span (BDS) scores by time and environment condition, for studies by Berman et al. and all other studies identified when reviewing the literature.

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			NATURE						URBAN						OTHER/CONTROL						
Studies by Berman et al. ‡			Pre Nature		Post Nature		Change		Pre Urban		Post Urban		Change		Pre Control		Post Control		Change		Reported results/ comment
Author, year (experiment), type of environment exposure, location	Design (BDS measure)	N	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	
Berman et al. (2008(1)). Walk, UM.	RCrT (‡)	37	7.86	2.28	9.43	2.48	1.57	1.99	7.86	1.80	8.43	2.02	0.57	2.02	.	.	.	.	.	.	The location-by-time interaction was sign., $F(1, 36)=6.055$, $p_{rep} = 0.95$, indicating that improvement on BDS was greater after the nature walk than the urban walk.
Berman et al. (2008(2)). Picture study, UM.	RCrT (‡)	12	7.92	3.32	9.33	2.96	1.42	1.68	7.83	3.59	8.83	3.13	1.00	2.41	.	.	.	.	.	.	The location-by-time interaction was not sign., $F(1, 10) = 0.486$, $p_{rep} = 0.68$. But there was sign. Improvement in BDS after the nature ($t(11) = 2.972$, $p_{rep} = 0.96$) but not the urban ($t(11)=1.436$, $p_{rep}=0.83$) image condition.
Berman et al. 2011. Walk, healthy sample, UM.	RCrT (‡)	21	8.27	3.08	9.54	2.66	1.26	1.89	8.46	2.63	9.82	2.39	1.36	2.46	.	.	.	.	.	.	New / unpublished data.
Berman et al. (2012). Walk, MDD sample, UM.	RCrT (‡)	19	7.42	3.01	8.63	2.87	1.21	1.44	8.20	2.48	7.84	2.24	-0.36	1.03	.	.	.	.	.	.	A time-by-location interaction was found, $F(1, 18)=20.5$, $p<.001$, $\eta_p^2=0.53$, indicating that improvement on BDS was greater after the nature than the urban walk. BDS performance improved sign. after the nature walk, $t(18)=3.67$, $p<0.005$, while there was a trending decrease in BDS performance after the urban walk, $t(18)=-1.91$, $p=0.07$.
Berman et al. 2015. Picture study, UC.	RCrT (‡)	45	9.24	2.19	9.47	2.14	0.22	2.25	9.02	2.39	9.02	2.29	0.00	1.99	.	.	.	.	.	.	New / unpublished data.
Berman et al. 2015. Picture study, UM.	RCrT (‡)	37	8.62	2.55	9.30	2.34	0.68	1.80	9.00	2.36	9.19	2.36	0.19	2.09	.	.	.	.	.	.	New / unpublished data.
Berman et al. 2016. Walk, UC.	RCrT (‡)	49	9.65	3.15	10.18	3.10	0.53	2.48	9.39	2.60	9.49	2.91	0.10	2.03	.	.	.	.	.	.	New / unpublished data.
Berman et al. 2016. Virtual Reality study, UC.	RCrT (‡)	82	9.71	2.77	10.34	2.83	0.63	2.11	9.67	2.61	10.28	2.66	0.61	2.16	.	.	.	.	.	.	New / unpublished data.
Berman et al. 2016. Virtual Reality study-with habituation, UC.	RCT (‡)	N=42; U=40; C(habituation)=82	9.95	2.41	10.12	2.84	0.17	2.09	10.40	2.85	9.85	2.76	-0.55	2.10	8.87	2.44	9.66	2.37	0.79	2.26	New / unpublished data.
Van Hedger et al. (2018). Composite study- Sounds. UC.	RCT (‡)	Nat=22; U=22	9.77	2.56	10.64	2.52	0.86	2.14	8.50	3.19	8.77	2.88	0.27	2.55	.	.	.	.	.	.	Published in: Van Hedger, Nusbaum, Clohisy, et al. (2018)
Van Hedger et al. 2016. Composite study- Pictures. UC.	RCT (‡)	Nat=19; U=21	9.42	2.67	9.95	2.20	0.53	2.25	8.33	2.58	9.19	2.64	0.86	2.20	.	.	.	.	.	.	New / unpublished data.
Bourrier et al. (2018). Video study, UBC.	RCT (‡)	Nat=30; U=30; C=30	7.53	2.78	8.83	2.52	1.30	2.05	7.73	3.17	7.80	3.31	0.07	2.85	7.17	3.17	7.70	2.79	0.53	2.39	Published in: Bourrier, Berman & Enns (2018)

Li, D., & Sullivan, W. C., 2016. Window views. †	RCT (NR)	94. No window=32; , barren window=32; and green window=30.	NR	NR	NR	NR	(0,7 units)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Regression model with DV digit span score (forwards & backwards) change: Students with green window views improved with (unstandardized B coefficient) 0.7 units more than their peers assigned to a barren window view (p<0.001), after controlling for the other variables. †NB: Mean digit span scores/change are not reported, only digit span unit change in nature compared to urban condition.
Lin et al. 2014.	RCT (¥) 3 awareness levels.	Minimal awareness, Nat=31; Urb=34.	6.45	NR	7.06	NR	0.61	NR	7.12	NR	6.53	NR	-0.59	NR	.	.	.	.	.	.	Pre-score compared to post-score (negative=improvement). Low awareness: No nature: T= 2.385*; Nature: T= -2.31*.
Ibid.		Medium awareness, Nat=36	6.28	NR	6.83	NR	0.55	NR	.	.	.	.	.	.	.	.	.	.	.	.	Medium awareness, Nature pre-post: T= -2.28*
Ibid.		High awareness, Nat=37	6.57	NR	8.05	NR	1.48	NR	.	.	.	.	.	.	.	.	.	.	.	.	High awareness, Nature pre-post: T= -5.68***
Perkins, 2011. Walk.	RCT (NR)	26	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	.	.	.	.	.	.	No sign difference between nature & urban exposures in BDS score changes. Test statistics not reported.
Rogerson et al. 2015. Video †	RCrT (¥)	12 (Nat + Urb + Control=12)	3.70	.	5.10	.	1.40	NR	4.00	.	4.20	.	0.20	NR	4.15	.	4.30	.	0.15	NR	Time*Env interaction for BDS (F2,22 = 6.267, p = 0.007). Scores sign. improved in the nature condition (p < 0.001) but did not in the built or control conditions. †Means were interpreted from the graph of means in the original research paper.
Stark, 2003. Outdoor activities vs indoor.	cluster RCT (NR)	57. Nat=29; Control=28.	5.10	1.30	5.40	1.60	0.30	NR	.	.	.	.	.	.	4.70	1.10	5.00	1.60	0.30	NR	No sign effect of nature compared to control on BDS changes. Test statistics NR. Means reported by Ohly et al. 2016.
† = Descriptive statistics are not reported in means pre- and post each environment condition. See comment in "Reported results". ‡ = total nr of correct trials in the digit span test is the dependent variable. ¥ = maximal string length in the digit span test is the dependent variable. M=mean; SD=standard deviation; NR=not reported; RCT=Randomized controlled trial; RCrT=Randomized Crossover Trial. UC=University of Chicago; UM=University of Michigan; UBC=University of British Columbia. * p ≤ 0.05, ** p ≤ 0.01, ***p≤0.001.																					

References in Table 12 & Table 13:

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