
Supplementary Materials

Table S1: Biomedical Science majors at California State University, Northridge (CSUN) that qualify for BUILD PODER participation

CSUN Colleges	BUILD Eligible Majors
Engineering & Computer Science	Computer Science Electrical & Computer Engineering Mechanical Engineering
Health & Human Development	Child and Adolescent Development Communication Disorders and Sciences: Speech & Hearing Sciences Environmental and Occupational Health Family and Consumer Sciences: Dietetics & Food Health Sciences Kinesiology Nursing Physical Therapy
Science & Mathematics	Biology Chemistry & Biochemistry Geological Sciences Physics & Astronomy Mathematics
Social & Behavioral Sciences	Anthropology Geography and Environmental Studies Psychology Sociology

Study Measures

Table S2: Survey Items, Construct, Scale, and Reliability Indices

Item	Construct	Scale	SAFS19	CSS20
			Reliability	Reliability
			Cronbach's α / Separation/ Reliability	Cronbach's α / Separation/ Reliability
1. I have strong sense of belonging to the community of scientists	Science Identity	5-point scale	0.87/	0.92/
2. I derive great personal satisfaction from working on a team that is doing important research			2.57/	2.68/
3. I have come to think of myself as a scientist			0.87	0.88
4. I feel like I belong in the field of science				
1. Use technical science skills (use of tools, instruments, and/or techniques)	Science Self Efficacy	5-point scale	0.93/	0.96/
2. Generate a research question			3.02/	3.48/
3. Determine how to collect appropriate data			0.9	0.92
4. Explain the results of a study				
5. Use scientific literature to guide research				
6. Integrate results from multiple studies				
1. Academic ability	Academic Self-concept	5-point Likert scale	0.75/	0.53/
2. Drive to achieve			1.84/	1.38/
3. Mathematical ability			0.77	0.66
4. Self-confidence (intellectual)				

Table S3: Factor Loadings for Science Identity, Science Self-Efficacy, and Academic Self-Concept

Item	SAFS19			CSS20		
	Science identity	Science self-efficacy	Academic self-concept	Science identity	Science self-efficacy	Academic self-concept
1	0.79	0.64	0.80	0.86	0.78	0.69
2	0.51	0.79	0.65	0.76	0.88	0.68
3	0.86	0.84	0.56	0.93	0.94	0.33
4	0.80	0.87	0.62	0.88	0.89	0.63
5		0.86			0.89	
6		0.85			0.85	

Note. Factor loadings are all > .30

Figure S1: Science Identity Trajectories across time between BUILD and non-BUILD students

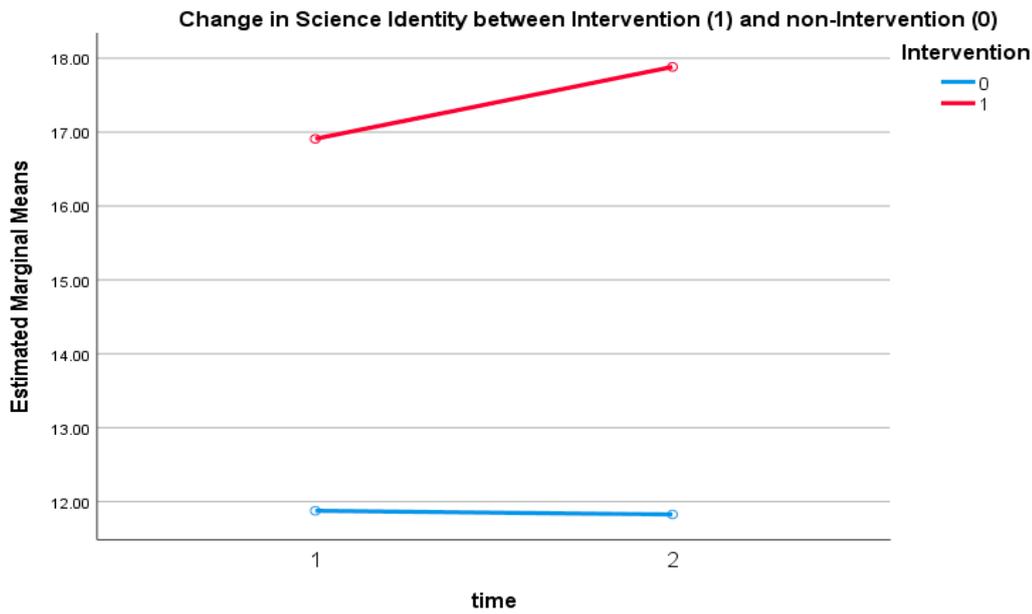


Figure S2: Science Self-efficacy Trajectories across time between BUILD and non-BUILD students

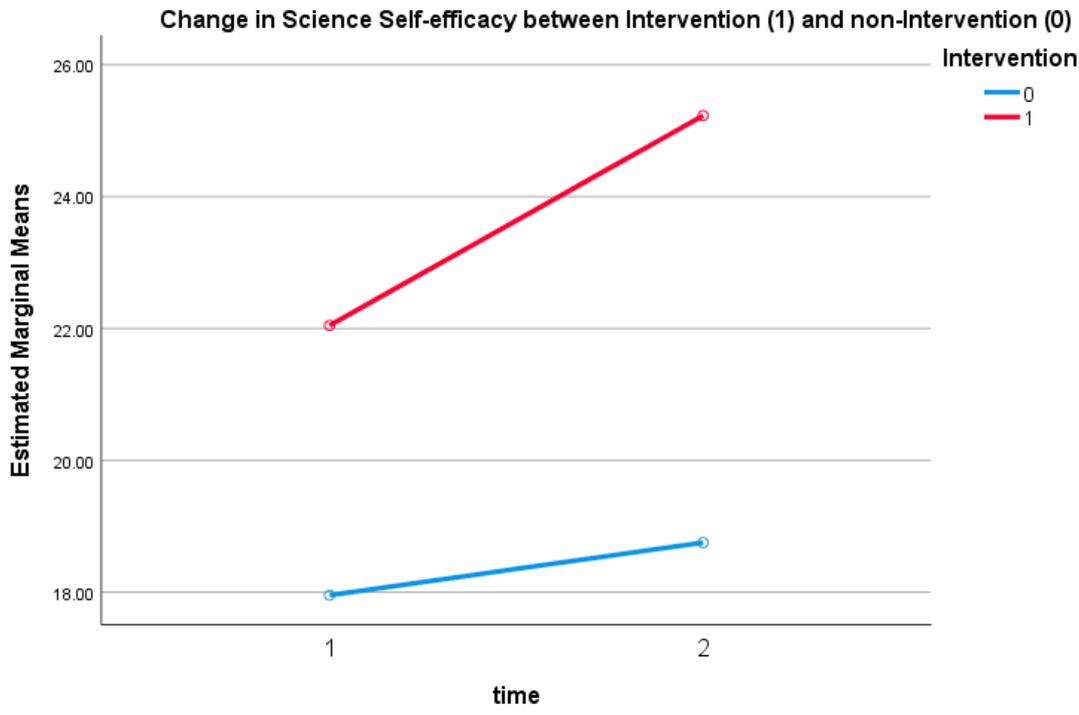


Figure S3: Academic Self-concept Trajectories across time between BUILD and non-BUILD students

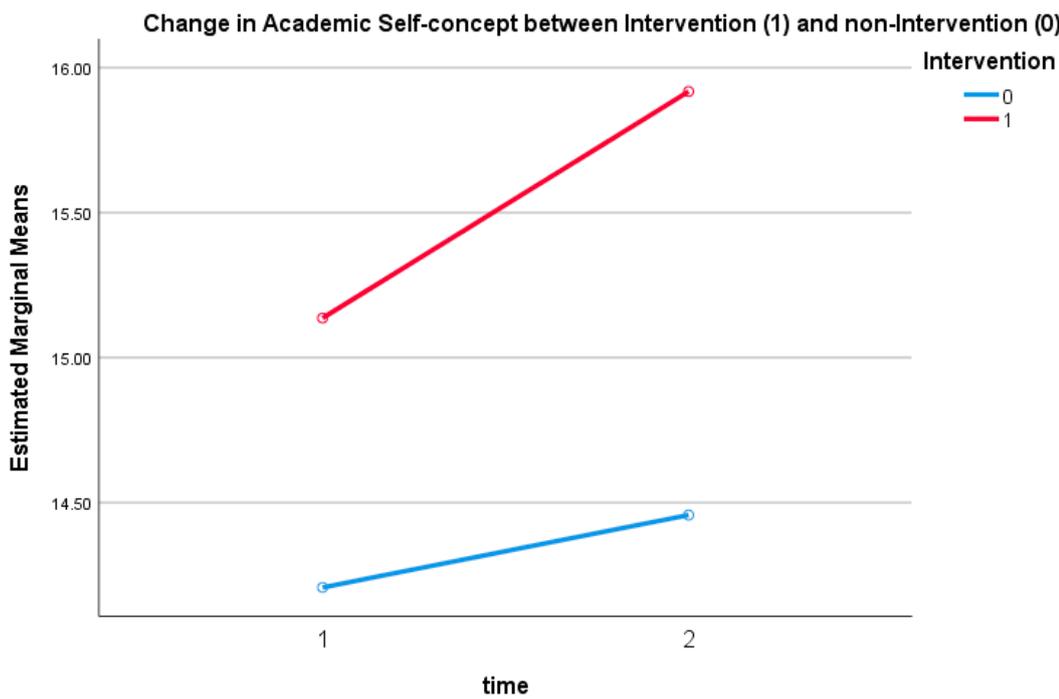


Table S4: Correlation Matrix for Sense of Belonging

Item	BUILD				Non-BUILD			
	1	2	3	4	1	2	3	4
1. Sense of belonging	-				-			
2. Science Identity	0.43**	-			0.15	-		
3. Science Self-efficacy	0.35*	0.34*	-		0.48	0.62***	-	
4. Academic Self-concept	0.33	0.23	0.47**	-	0.26**	0.30**	0.35***	-
<i>M</i>	9.68	17.40	23.64	15.53	9.04	11.85	18.35	14.33
<i>SE</i>	0.44	0.77	1.00	0.45	0.21	0.34	0.45	0.20

Note. *** $p < .001$. ** $p < .01$. * $p < .05$.