## Detailed Psychological Constructs v5.3

Construct	Subconstruct (if applicable)	# of items		items	pulse checks							pulse checks				mid2	pulse checks				
						ch1	ch2			ch4						ch9					
xpectancy	(pulse check)	1		I am confident in what I have learned in the previous chapter			exp_pulse2	exp_pulse3	exp_pulse4		exp_pulse5	exp_pulse6	exp_pulse7	exp_pulse8	exp_pulse9		exp_pulse10	exp_pulse11	exp_pulse12	exp_pulse13	
tility Value	(pulse check)	1		I think what I have learned in the previous chapter is useful			uv_pulse2	uv_pulse3	uv_pulse4		uv_pulse5	uv_pulse6	uv_pulse7	uv_pulse8	uv_pulse9		uv_pulse10	uv_pulse11	uv_pulse12	uv_pulse13	
trinsic Value	(pulse check)	1		I think the previous chapter was interesting			iv_pulse2	iv_pulse3	iv_pulse4		iv_pulse5	iv_pulse6	iv_pulse7	iv_pulse8	iv_pulse9		iv_pulse10	iv_pulse11	iv_pulse12	iv_pulse13	
ost	(pulse check)	1		I was unable to put in the time needed to do			cost pulso?	cost_pulse3	cost pulso/		cost pulsos	cost pulsos	cost_pulse7	cost pulsos	cost pulsos		cost pulsoi0	cost pulsoll	cost pulse12	cost pulsol7	
Jose	(pulse check)			well in the previous chapter			cost_puisez	cost_puises	cost_puise4		cost_puises	cost_puiseo	cost_puise/	cost_puiseo	cost_puises		cosc_puiseio	cost_puiseii	cost_puiseiz	cost_puiseis	
Expectancy		2	1	I am confident i can learn the material in this course.	expl_l																ex
			2	I expect to do well in this class.	exp2_1																ex
	Utility Value (for Future)		1	What I'm going to learn in this class will be useful in the future (pre)/What I am learning in this class will be useful in the future (mid & post)	uv_f1_1																uv.
	Utility Value (for Job)		2	Good grades in this class will improve my job and career chances.	uv_j1_1																uv
Values	Utility Value (for Daily Life)	5	3	What I'm going to learn in this class will be relevant to my everyday life (pre)/ What we learn in this class is relevant to my everyday life (mid/post)	uv_d1_1																uv_
	Intrinsic value		4	I think this class will be interesting (pre) I think this class is interesting (mid/post)	iv1_1																iv
	Intrinsic value		5	i like this class (mid/post)	iv2_1																iv
Cost		- 2	1	I think I will have to give up too much to do well in this class (pre); I have to give up too much to do well in this course (mid/post)	cost2_1																со
		_	2	I think this course is going to be too stressful for me (pre); This course is too stressful for me (mid/post).	cost3_1																co
Programming Sentiment		1	1	In this course, you will use r (a programming language) to analyze data. how do you feel about this?	sent_pro_1																sent
Programming Anxiety		4	1	PRE: I think that learning R programming will be enjoyable. POST: I think that learning R programming is enjoyable.	r_joy_1																r_j
			2	luture triat involves it programming.	r_job_1																r_j
			3	PRE: I believe that learning R programming will be difficult. POST: I believe that learning R programming is difficult.	r_difficult_1																r_diff
			4	I am anxious/nervous about learning R programming.	r_anx_1																r_a
Confidence	Confidence in R	1	1	How confident are you in your R skills?	conf_1																cc
Anxiety		1	1	In general, i tend to feel very anxious about mathematics.	anx_ma_1																anx
Course		1	1	When I think about this course, I'm concerned that(write not at all if you so choose)	con_course																
Couse challenges		1	1	What, if anything, made it hard to succeed in this class?																	ob
	Future interest		1	I look forward to learning more about math, statistics, or data science.	fl_1																f
intention	Future interest	3	2	I want to take more math, statistics, or data science classes in the future.	f2_1																f.
	Future interest		3	I would be interested in having a job someday that involves things like math, science, statistics, or data science.	f3_1																1
TEM Identity	STEM identity	1		I see myself as a statisics person.	identity_1																ider
elonging	Class belonging	2		I matter as a student in this class	blc1_1																bl
	Class belonging	_	2	I belong in this class	blc2_1																bl
Goal Orientation	Performance	2	1	To be honest, it is very important for me to do well compared to others in this class.	goal1_1																go
Joan Orientation	Mastery		2	Honestly, the most important thing for me in this class is to understand the content as thoroughly as possible.	goal2_1																go
Course	Memorization	2	1	I expect that this course will require a lot of memorization (pre); This course required a lot of memorization (post)	mem_1																me

perceptions	Deep Understanding		2	this course required deep thinking and understanding of concepts.							unders_4
Course advice		1		What advice would you give to future students who want to do well in this course?							adv_4
Student mindset beliefs	Math mindset	2		You can learn new things, but you can't really change your basic math ability (reverse code)	msl_l	ms1_2		msl_3			msl_4
	Math mindset			My math ability is something about me that I can't change very much (reverse coding)	ms2_1	ms2_2		ms2_3			ms2_4
	Instructor Value			My instructor demonstrates how what we are learning is useful.		tv1_2		tv1_3			
Perception of instructor	Instructor Value		2	My instructor explains how what we are learning may be important.		tv2_2		tv2_3			
	Instructor Mindset	4	3	My instructor seems to believe that students have a certain amount of intelligence, and they really can't do much to change it (reverse code)		im1_2					im1_4
	Instructor Mindset		4	My instructor seems to believe that students can learn new things, but they can't really change their basic intelligence (reverse code)		im2_2					im2_4