Construct	Subconstruct	# of items		items				e checks			pulse checks					pulse checks					
	(if applicable)				pre ch1	ch1				mid1 ch4						mid2 ch9					pos ch1
Expectancy	(pulse check)	1		I am confident in what I have learned so far in this course.			exp_pulse2	exp_pulse3	exp_pulse4		exp_pulse5	exp_pulse6	exp_pulse7	exp_pulse8	exp_pulse9		exp_pulse10	exp_pulse11	exp_pulse12	exp_pulse13	
ntrinsic Value	(pulse check)	1		I think what I have learned so far in this course 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	
Utility Value	(pulse check)	1		I think this class is 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	
Cost	(pulse check)	1		I am unable to put in the time needed to do well in this course.			cost_pulse2	cost_pulse3	cost_pulse4		cost_pulse5	cost_pulse6	cost_pulse7	cost_pulse8	cost_pulse9		cost_pulse10	cost_pulse11	cost_pulse12	cost_pulse13	
Expectancy		2	1	I am confident i can learn the material in this course.																	exp
Expectancy		2	2	I expect to do well in this class.																	exp2
Values	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_f
	Utility Value (for Job)		2	Good grades in this class will improve my job and career chances.																	uv_j
	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_d
	Intrinsic value		4	I think this class will be interesting (pre) I think this class is interesting (mid/post)																	iv1_
	Intrinsic value		5	I will like this class (pre) I like this class (mid/post)																	iv2
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)																	cost
			2	I think this course is going to be too stressful for me (pre); This course is too stressful for me (mid/post).																	cost
Programming Sentiment		1	1	In this course, you will use r (a programming language) to analyze data. how do you feel about this?																	sent_p
			1	PRE: I think that learning R programming will be enjoyable. POST: I think that learning R programming is enjoyable.																	r_jo
Programming Anxiety		4	2	I welcome the possibility of having a job in the future that involves R programming.																	r_jol
Anxiety			3	PRE: I believe that learning R programming will be difficult. POST: I believe that learning R programming is difficult.																	r_diffic
			4	I am anxious/nervous about learning R programming.																	r_an
Confidence	Confidence in R	1	1	How confident are you in your R skills?																	cont
Anxiety		1	1	In general, i tend to feel very anxious about mathematics.																	anx_r
Course concerns		1	1	When I think about this course, I'm concerned that(write not at all if you so choose)																	
Couse challenges		1	1	What, if anything, made it hard to succeed in this class?																	obs
Behavioral intention	Future interest		1	I look forward to learning more about math, statistics, or data science.																	fl_
	Future interest	3	2	I want to take more math, statistics, or data science classes in the future.																	f2_
	Future interest		3	l would be interested in having a job someday that involves things like math, science, statistics, or data science.																	f3_
STEM Identity	STEM identity	1	1	I see myself as a statistics person.																	identi
	Class belonging	2	1	I matter as a student in this class																	blc1

Goal Orientation	Performance	2	To be honest, it is very important for me to do well compared to others in this class.	goal1_1				goal1_4
doar Onentatio	Mastery	2	Honestly, the most important thing for me in this class is to understand the content as thoroughly as possible.	goal2_1				goal2_4
Course perceptions	Memorization	2	<ol> <li>I expect that this course will require a</li> <li>lot of memorization (pre); This course required a lot of memorization (post)</li> </ol>	mem_1				mem_4
	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	Math mindset	2	You can learn new things, but you can't really change your basic math ability (reverse code)	ms1_1	msl_2	ms1_3		msl_4
beliefs	Math mindset	2	My math ability is something about me 2 that I can't change very much (reverse coding)	ms2_1	ms2_2	ms2_3		ms2_4
	Instructor Value		1 My instructor demonstrates how what we are learning is useful.		tv1_2	tvl_3		
	Instructor Value		2 My instructor explains how what we are learning may be important.		tv2_2	tv2_3		
Perception of instructor	Instructor Mindset	4	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