First Name:	Last Name:	Last Name:	
Student ID #:			
PSC 041	Research Methods in Psychology	WQ 2024	

Unit 4 Exam Version A Research Summary

Please answer the following questions in the space provided. Only write on the lines.

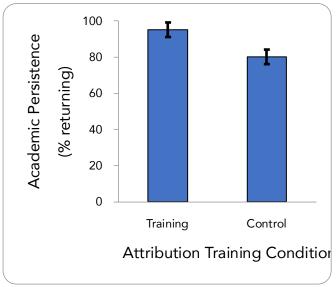
Adapted from: Hamm, J. M., Perry, R. P., Chipperfield, J. G., Hladkyj, S., Parker, P. C., Weiner, B. (2020). Reframing achievement setbacks: A motivation intervention to improve progress toward graduation for students in Science, Technology, Engineering, and Mathematics (STEM) fields. *Psychological Science*.

Why do some people finish a college degree and others drop out?

One thing that sets apart students who graduate from those who drop out is the amount of responsibility they take for their own academic performance. Those who graduate tend to take responsibility for their own actions and those who drop out tend to blame things beyond their control (i.e., imagining that a poor grade was due to an unfair professor rather than time spent studying.)

Can we train students about how to attribute their academic successes and failures in a way that can help them persist with their studies and earn sufficient units each year? To answer this question, researchers recruited almost 1,000 first-year students at a large public university who had earned low grades in high school and were majoring in Science, Technology, Engineering, or Mathematics (STEM). The poor performance in high school meant that these students were at risk for dropping courses.

Half of the participants were randomly assigned to participate in an attribution training condition, while the other half were in a no-training (control) condition. Those in the attribution training condition completed one-hour in-person training each week of the semester for both semesters of their freshman year. The training happened in groups of 20 and focused on helping them identify their own role in their college success. Participants were guided in understanding how their own actions and



choices (e.g., effort and study time) impact their academic performance and discussed ways to take responsibility for their academic experience. Participants in the control condition did not complete any training. At the beginning of the following year, the researchers looked up the university records and discovered which students returned for their second year and which students did not return. Results showed that the attribution training increased the proportion of students returning for the second year, $X^2(N=992) = 17.43$, p = .003. Overall, more than 88% of the students returned for their second year, 95% of those in the treatment condition and around 80% of those in the control condition.

Predictor Variable

Thinking about the Predictor / Independent Variable: <u>Attribution Training Condition</u>

Partial operational definition: Participants were either enrolled in one-hour per week attribution training or were not given any training

3 pts	 The Predictor / Independent Variable is (fill in Continuous 		box) Categorical
3 pts	2. How was the Predictor / Independent VariabDobservationSelf-Report		easured? (fill in the box) Physiological It was manipulated
5 pts	3. Is this a causal or associative claim? (fill in the Causal		() Associative
5 pts	4. This variable is (fill in the box) ☐ within group		between groups
	Use this information only for the next two questions: Another researcher wants to extend this finding address the same research question. This resear they want to take part in the attribution training sessions indicates that they are in the training gr	rchei g or n	r asks each student to choose if not. Attendance at the training
3 pts	5. How was this new Predictor / Independent Vol. Observation Self-Report		ole measured? (fill in the box) Physiological It was manipulated
5 pts	6. Is this new claim a causal or associative claim Causal	-	ll in the box) Associative

Outcome Variable

Thinking about the outcome / dependent variable: <u>Academic persistence</u>

10 pts 1	7. How did the researchers operationally defin variable? Describe it using your own words. Be and indicate how the codes will be interprete	e sure to include the levels or values	
3 pts	8. The outcome / dependent variable is (fill in t	he box) Categorical	
3 pts	9. How was the outcome / dependent variable Observation Self-Report	e measured? (fill in the box) Physiological It was manipulated	
10 pts	10. Evaluate the construct validity of the outcome / dependent variable. ProTips: Give an overall evaluation. Think about the face validity, the procedure, and the method-match to inform your decision. Use specific vocabulary. Be sure to only discuss this one variable.		
	_		
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Evaluate Internal Validity and Research Design

10 pts	11. For this research summary, there is not a history effect because
10 pts	12. For this research summary, "making friends with the students in their 20-person weekly meetings during the training" is a confound because
-	
	Sampling
5 pts	16. This is a sample of all college students in the USA.
- 1	□ probability □ non-probability
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Summarize the findings

5 pts	 13. How did the researchers summarize the fir ☐ indicate strength and direction of the over ☐ compare group frequency ☐ compare group means 	,
5 pts	 14. The error bars overlap. Therefore, the between the variables? (fill in the box) □ do not; is □ do not; is not 	nere likely a real relationship do; is do; is not
5 pts	15. The p value is Therefore, there between the variables? (fill in the box) ☐ greater than 0.5; is ☐ greater than 0.5; is not ☐ less than 0.5; is ☐ less than 0.5; is not	□ greater than 0.05; is □ greater than 0.05; is not □ less than 0.05; is □ less than 0.05; is not
	Evaluate Extern	al Validity
10 pts 17. For this research, evaluate one aspect of external validity . You evidence for either a strength or a weakness. (e.g., is this authentic generalize to other situations? does this generalize to other individu		. (e.g., is this authentic? does this

	participants, they did not have and They just selected participants from studying STEM. They then carefully	replicate this study. However, when they selected y information about the students' intended major. In the entire incoming class rather than just those replicated every step of the procedure. They did nts in the attribution training condition were just as
pts	18. This is a failure to □ replicate □ generalize	
pts	19. This new finding brings into dou colored external validity internal validity	bt the
pts	20. This new finding □ can be explained in a way that □ indicates that one of the finding	
	box to the left of your selection. Do not to change your answer and are uncle.g., draw an arrow or circle it). 2.5	est answer. Indicate your choice by filling in the not put stray marks in the other boxes. If you need able to erase fully, clearly indicate your final choice points each. Icare, and Medicaid make up the largest portion
2	of the U.S. federal budget.	e belong in a scientific report opinion, could opinion, could not
2	reference citation Representing another's work of	opied without using quotation marks and a as your own opied and substituting a few words with their
2	23. In which section of a research arti that describe the findings of the st Introduction Method	cle would a reader find the descriptive statistics udy? Results Discussion

group Participating in research is voluntary	definition of justice? ch study is kept confidential ats should be minimized ct their business professionally and reported honestly apply broadly and not only to a particular y and participants can quit at any time o understand the research and make an
group Participating in research is voluntary	ch study is kept confidential ats should be minimized at their business professionally and reported honestly apply broadly and not only to a particular and participants can quit at any time and understand the research and make an
26.To examine the use of phones during ma restaurant. Should this researcher obtour Yes No	neals, a researcher observes people dining at ain informed consent?
study's purpose learned during a debric	cipant may share critical information about a efing with other potential participants and onding. To avoid this potential bias, it be t to include a debriefing.
28. Population: Enrolled undergraduate stu Sample: Stand outside the MU at lunch participate in the study. This sampling technique is best described. Cluster Convenience Snowball Quota	time. Approach students and ask them to

	/hich one of the following st ection of a research report?		opriate for the methods
[[Past research shows mentage from the average was 7.4 minutes. While the three men and measured time spent talk. Contrary to popular beliewomen, interrupt more the	generally talk more than ne talking was 10.7 minute three women discussed t king by starting and stopp ef, in groups of mixed gen	es while for women the the issue, the experimenter ing stopwatches
	topics		
se [[Past research report? Past research shows men For men, the average tim average was 7.4 minutes While the three men and measured time spent talk Contrary to popular belie	generally talk more than ne talking was 10.7 minute three women discussed t king by starting and stopp ef, in groups of mixed gen	the issue, the experimenter ing stopwatches
	andom sampling impacts _ internal; external internal; construct	_ validity. Random assigr □ external; internal □ external; construct	construct; internal
sc [Thich of the following is true ampling? Every member of popula Stronger external validity The sample may not be s	tion has same likelihood c	,
fre	the outcome variable is me equency and percent. I categorically I continuously		observation
	ll claims must have strong _ Internal, value Internal, associative Internal, causal		quire strong external validity Construct, value Construct, associative Construct, causal