Age in Years

2022 Faculty Motivation Study Results Summary: FULL SAMPLE

Principal Investigator: Robert Stupnisky (<u>Robert.Stupnisky@und.edu</u>) and Graduate Research Assistant: Makinde Omojiba, University of North Dakota Co-PIs: Nathan Hall, McGill University; Vincent Lariviere, University of Montreal <u>Faculty Motivation Research Group</u>

Overview

Purpose. To examine what emotions university <u>STEM</u> faculty members experience regarding their research, and test how emotions relate to their research success.

Methodology. STEM faculty from 10 Doctoral Universities (R2 Higher Research Activity Carnegie Classification) completed an online survey in February of 2022. Their survey responses were paired with Web of Science bibliometric data on the number of publications and citations. All figures/plots below represent the full study sample, with descriptive statistics from NDSU provided for comparison.

Below is a summary of the results. Thanks for participating!

Who participated?

		Full Sample		Full <i>M</i> – 48 7
		Count	Percent	
Gender Identity	Man	318	54.8	60 -
	Woman	253	43.6	
	I prefer not to respond	7	1.2	
	Another gender identity	2	0.3	Country of the second se
racial Identification	White	466	80.3	
	Asian	62	10.7	20-
	Multiracial	21	3.6	
	Black or African American	9	1.6	
	Other	17	2.9	0-
	No response	5	0.9	40 60 80
Ethnicity	Not of Higponia Lating Spanish origin	522	01.0	Career Age (Years since PhD
Emmenty	Not of Hispanic, Latinx, Spanish origin	355	91.9	
	No receptores	40	0.9	Full $M = 1$
	No response	/	1.2	
Disability	No	548	94.5	
·	Yes	28	4.8	0.03 -
	No response	4	0.7	
International	No	120	75 5	tis u 0.02 -
International	NO X	438	/5.5	
	Yes	158	23.8	
	No response	4	0.7	0.01 -
Underrepresented	No	344	59.3	
minority	Yes	234	40.3	0.00 -
(self-identified)	No response	2	0.3	0 20 40
Primary Disciplinary	Life sciences	142	24.5	Average Contract % Effe
Area	Social sciences	80	13.8	40 - 38 76
	Engineering	79	13.6	35.46
	Psychology	49	8.4	30 -
	Geoscience	40	6.9	
	STEM education learning research	39	6.7	*
	Mathematical sciences	33	5.7	0 20 -
	Chemistry	28	4.8	a
	Computer, info science and engineering	27	4.7	10-
	Physics and astronomy	27	4.7	10.61
	Materials research	5	0.9	
	No response	31	5.3	
Academic Rank	Full Professor	198	34.1	reaching research Service Other Task
· readenne rank	Associate Professor	149	25.7	Rank
	Assistant Professor	135	23.3	
	Instructor/teaching professor	50	10.2	
	Other	31	53	
	Research scientist/analyst	7	1.2	
Taman Stat	Tanana	224	50 6	
Tenure Status	$\frac{1}{2}$	534	59.6 22.1	Full 34%
	On tenure track but not tenured	128	22.1	
	Not on tenure track	112	19.3	Assist 23
	Ouler	6	1.0	

• The full sample included 580 participants.

• Participants were from a variety of demographic backgrounds and job types.

• Similarities suggest institution samples were highly generalizable to the full sample.

22.8

5 Strong Agree

Do faculty think their research motivation and productivity can improve?



Are you intentionally attempting to improve your research productivity?



Research professional development... what have faculty done? What are they likely to do in the future?

	In the past In the future (moderately or very muc			ry much so)		
	Yes, I have	it would improve	it would improve	I would you		
	participated	my motivation	my productivity	like to		
				participate		
Designated research time (course release, sabbatical)	40.1	73.8	80.0	77.9		
Monetary awards and/or recognition for research	22.5	61.9	62.6	68.5		
Research writing group with other faculty	33.6	46.7	51.6	48.1		
Faculty-to-faculty research mentorship	38.6	46.4	47.1	48.3		
Research skills training/workshop/seminar	48.4	41.7	46.2	46.7		
Research group involving graduate students	51.7	47.6	46.0	55.3		
Changing workplace research culture	8.9	42.6	45.2	48.3		
Time management training	22.2	31.6	37.2	35.3		
lote. Full sample results outside of parentheses						

Note. Full sample results outside of parentheses.

- "Research groups involving graduate students" and "Research skills training" were the most common past research professional development interventions faculty participated in.
- Alternatively, "Designated research time" and "Monetary awards and/or recognition for research" were the research professional development interventions faculty most strongly agreed would improve their motivation, productivity, and likelihood to participate.