

The Impact of Mentorship on the Research Performance of LIS PhDs

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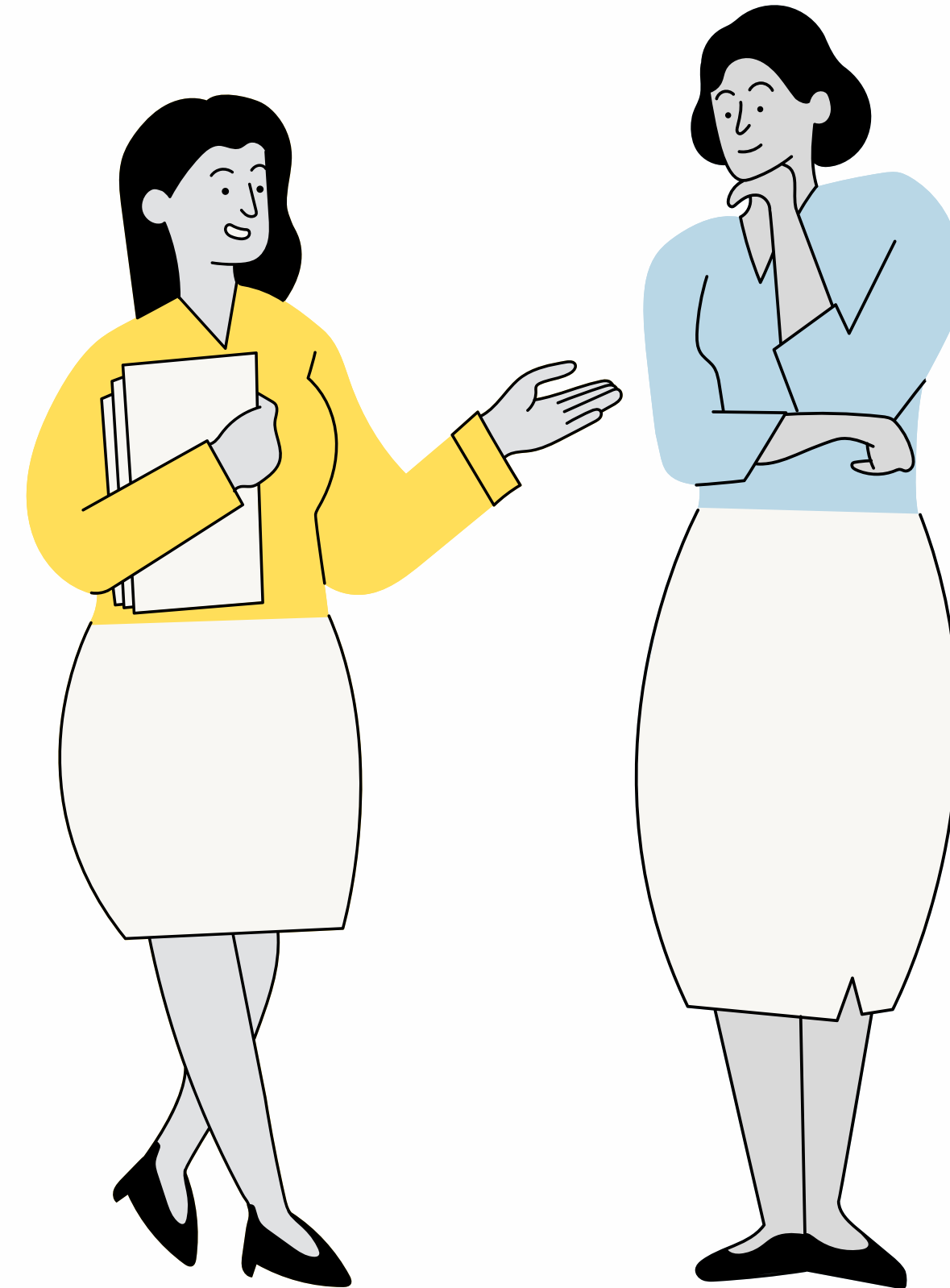
What is mentorship and why does it matter?

Mentorship is:

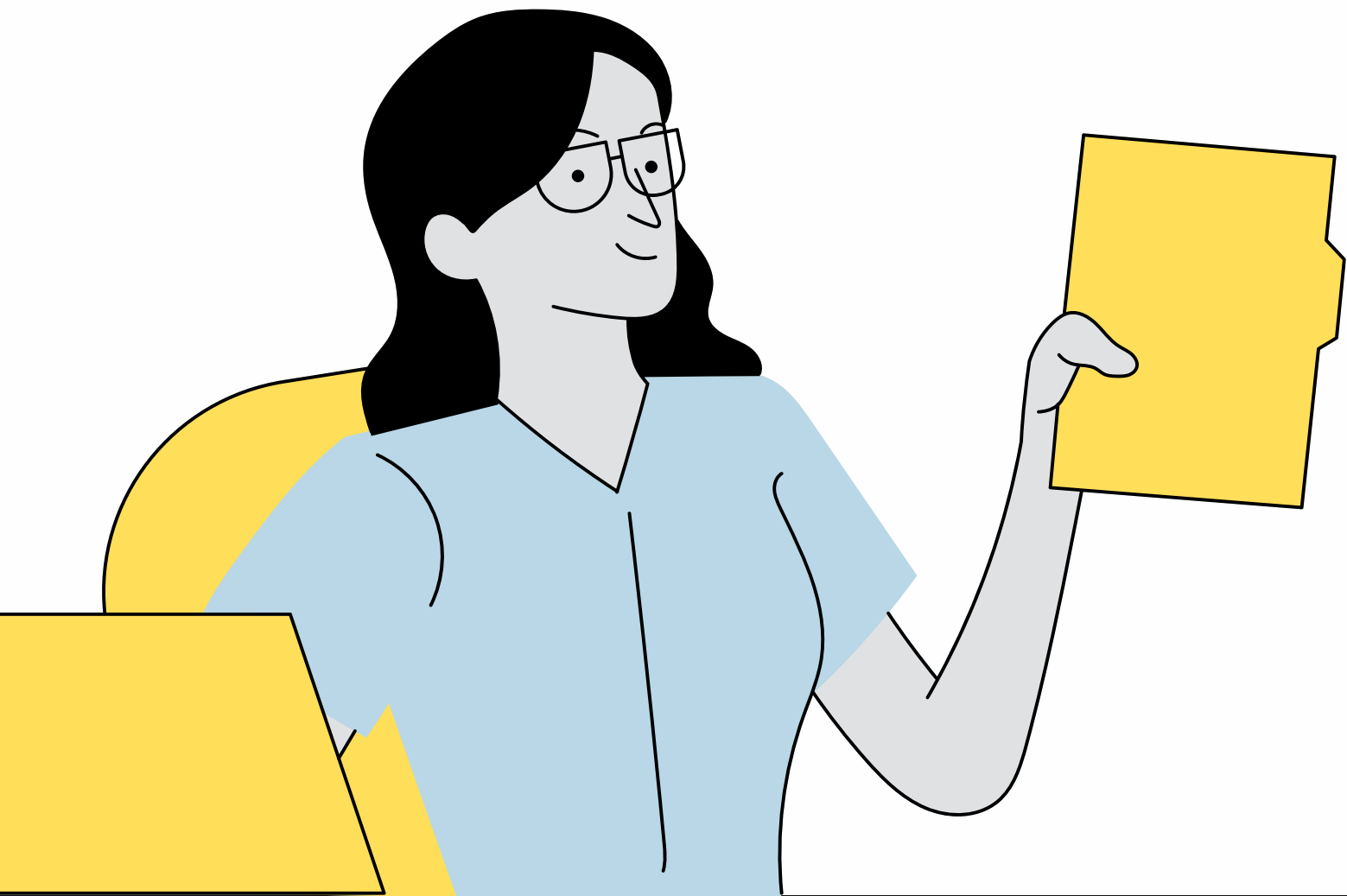
- A prototype of a relationship that enhances career development (Kram, 1985).
- “A nurturing process in which a more skilled or more experienced person, serving as a role model, teaches, sponsors, encourages, counsels and befriends a less skilled or less experienced person for the purpose of promoting the latter’s professional and/or personal development” (Anderson and Shannon, 1988, p. 40).

The benefits of mentorship:

- The doctoral supervisor relationship is arguably the most significant collaborative relationship in one's academic career (Ma et al, 2020).
- Fosters self exploration, career advancement, intellectual development, academic citizenship and socialization, professional identify formation.



Study Objectives

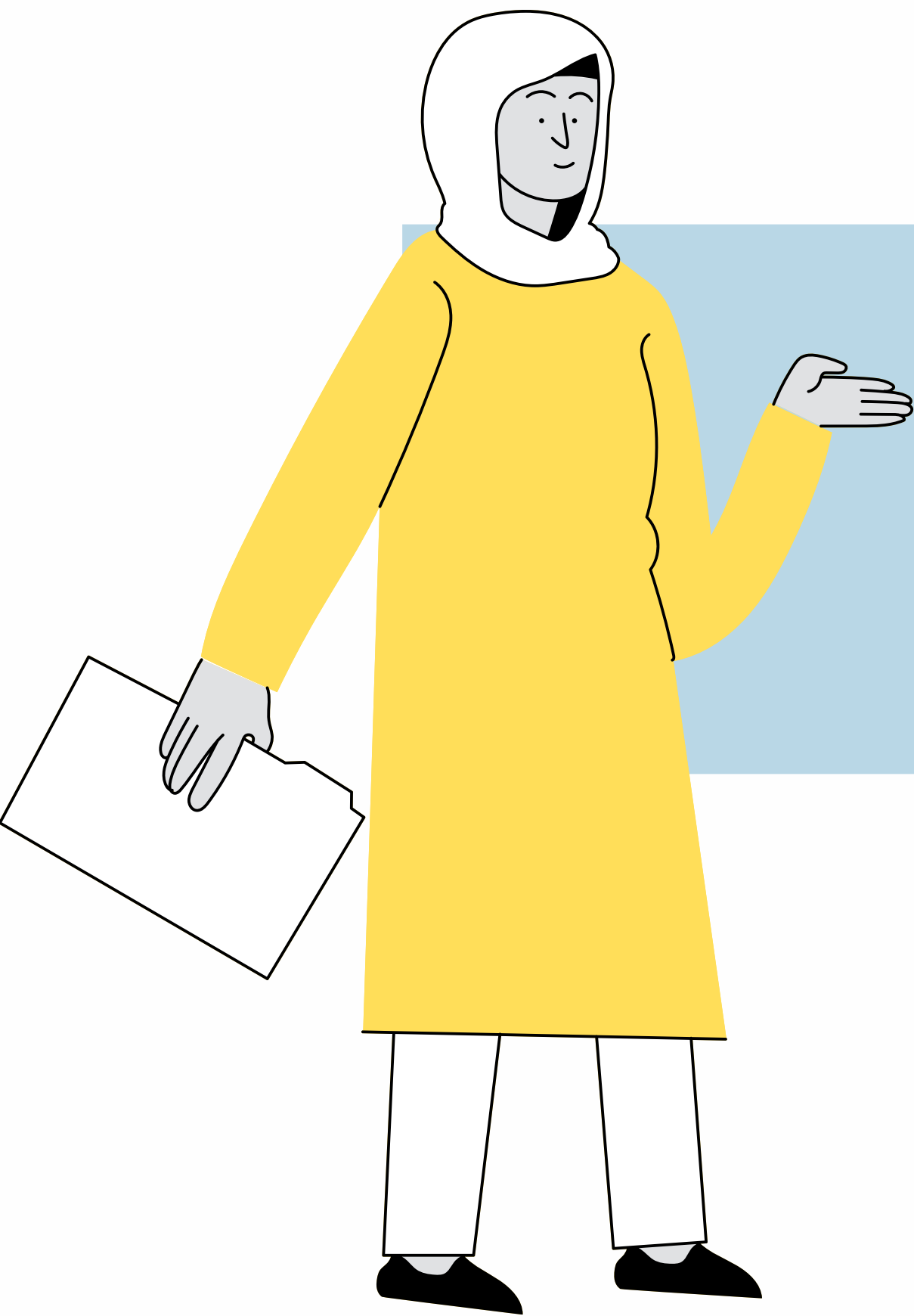


Investigate how the mentor-mentee relationship influences doctoral students' academic careers as measured through research output and impact

Research Questions

1	How does the research productivity and impact of advisors relate to that of the productivity and impact of the advisees?
2	How does the similarity between the advisee's doctoral thesis and the advisor's prior work relate to advisees' productivity and impact?
3	How does advisor-advisee collaboration relate to the advisees' productivity and impact?





Methodology

Data Collection



- Using LIS as a case study, we retrieved records from the ProQuest Dissertation and Theses database using the search query:

"library science" or "library studies" or "information science" or "information studies" or "archival science" or "archival studies" or "ischool"

- Date range: 2008-2012 (five years)

Refining our dataset

Sample dataset of around 250 supervisor-student pairs for which

- Both researchers have at least 2 Web of Science publications.
- The year of the first publication of the student came later than that of the supervisor
- Both the student and the supervisor had a single WoS author match.

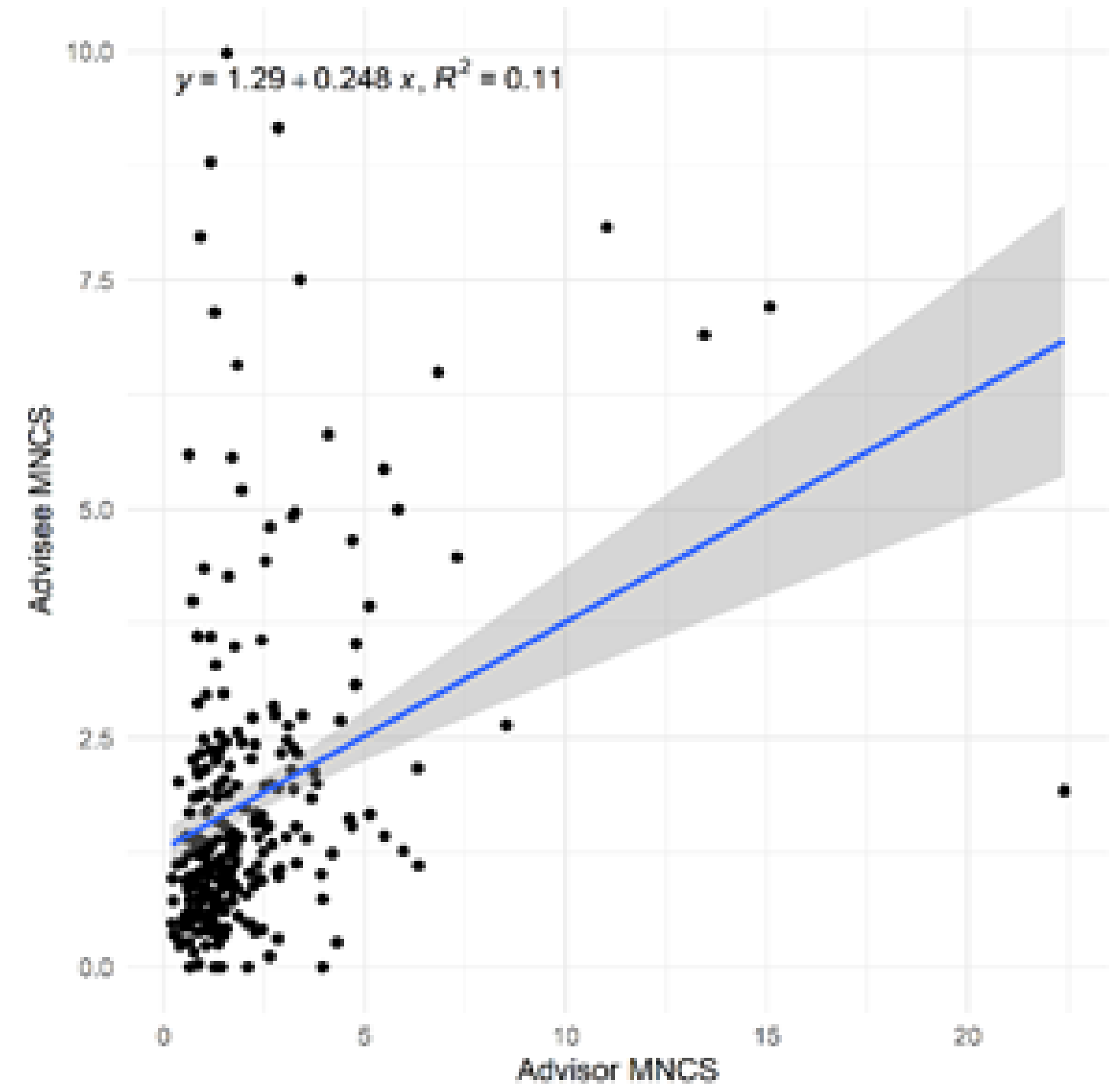
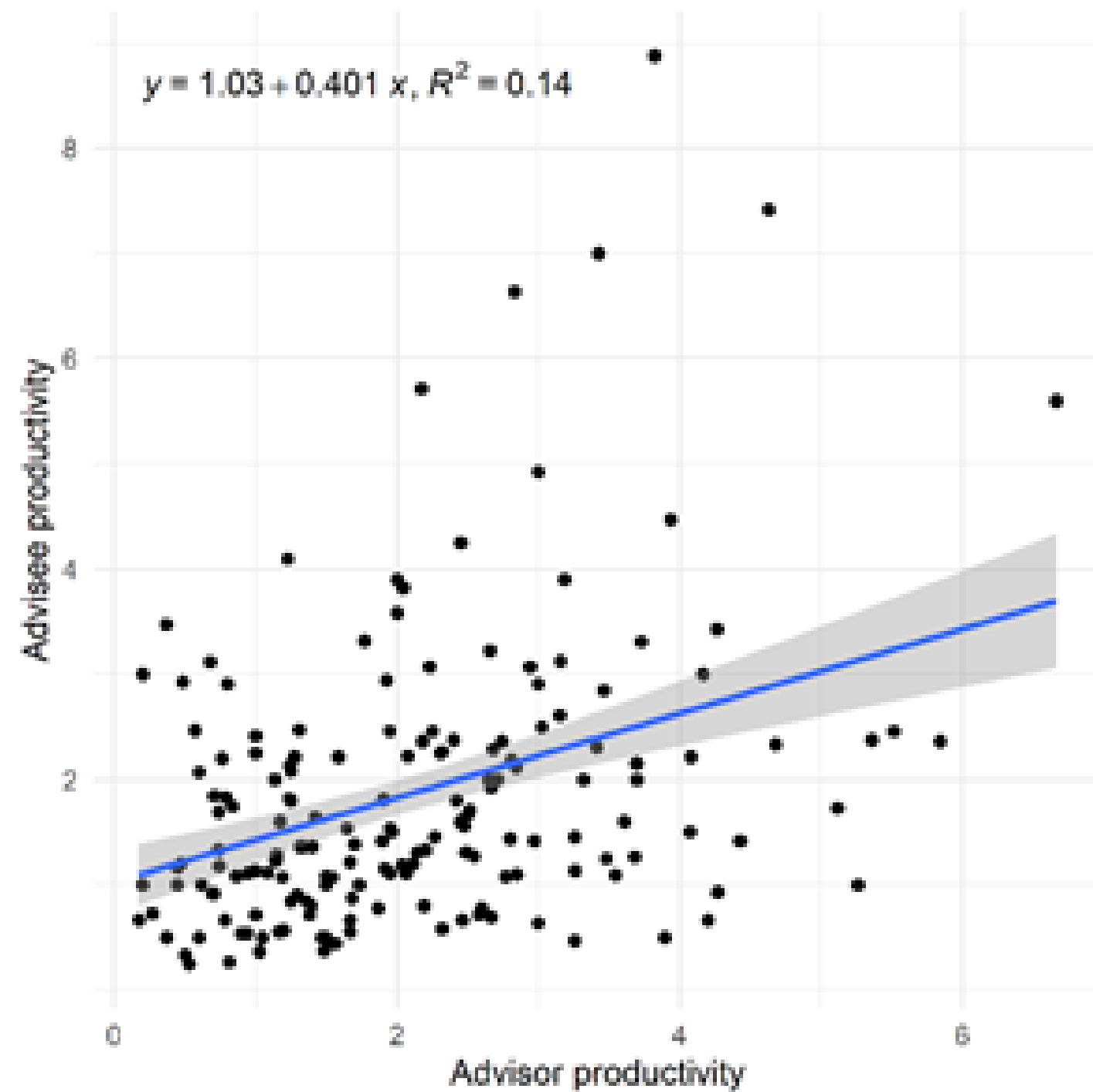
Variables

Concept	Indicator
Impact	MNCS of advisors and advisees (citation scores normalized by WoS subject categories and publication year)
Productivity	Average # of publications per year
Topic similarity	Topic similarity (defined as the maximum cosine similarity between the title and abstract of the advisee's dissertation and the prior publications of the advisor not co-authored by the student)
Collaboration	Co-authorship between the mentor and mentee

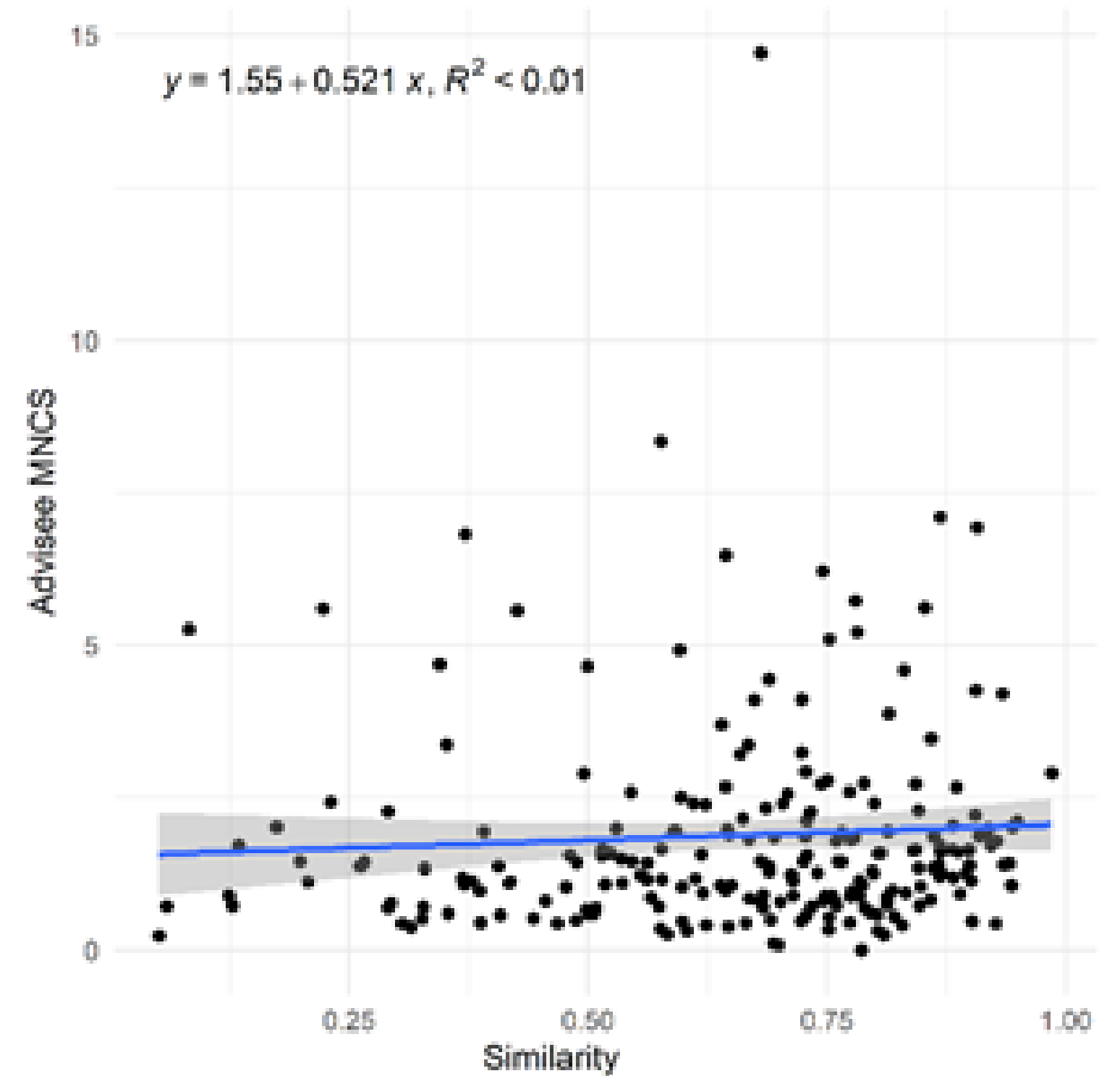
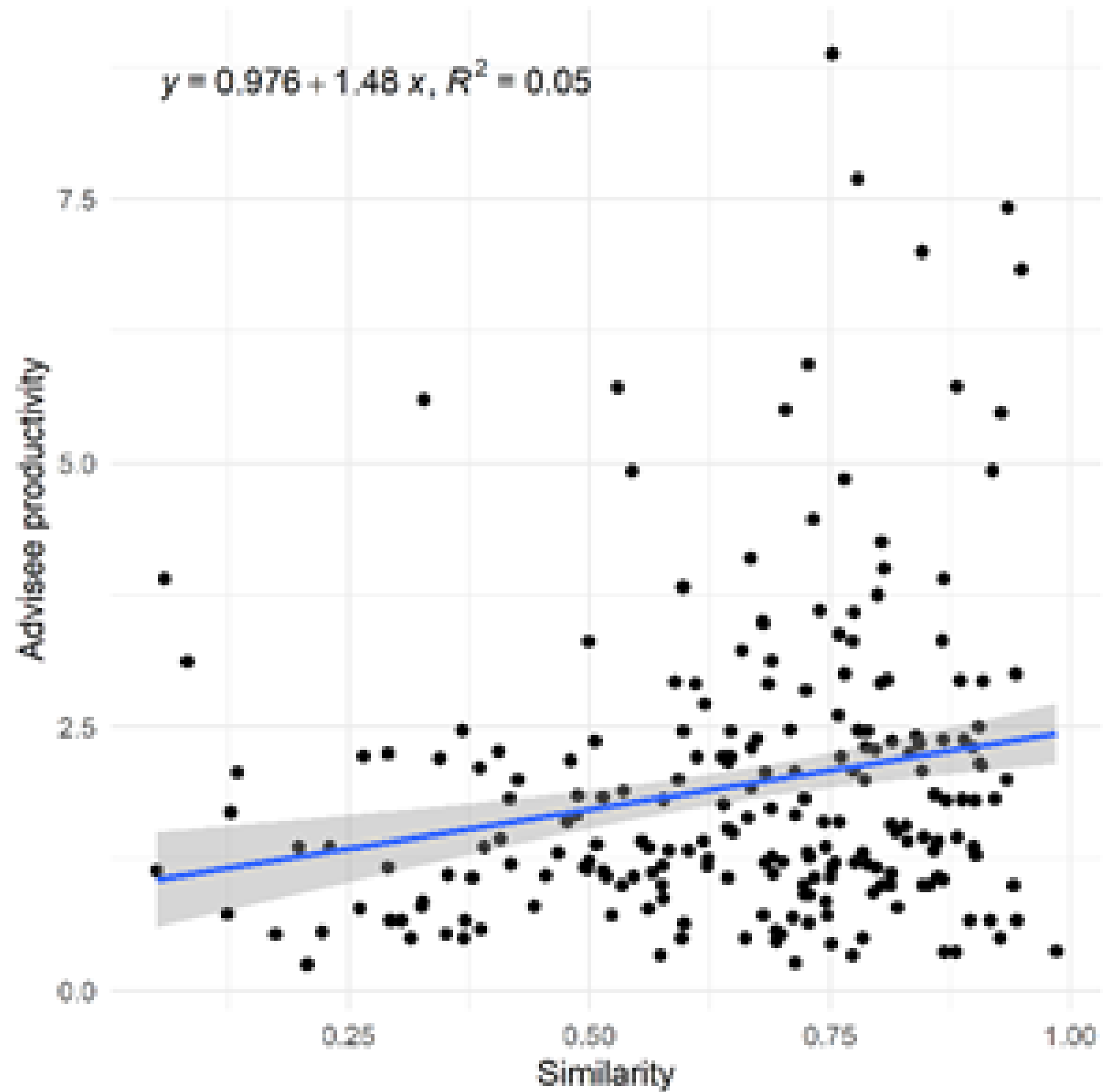
Preliminary Results



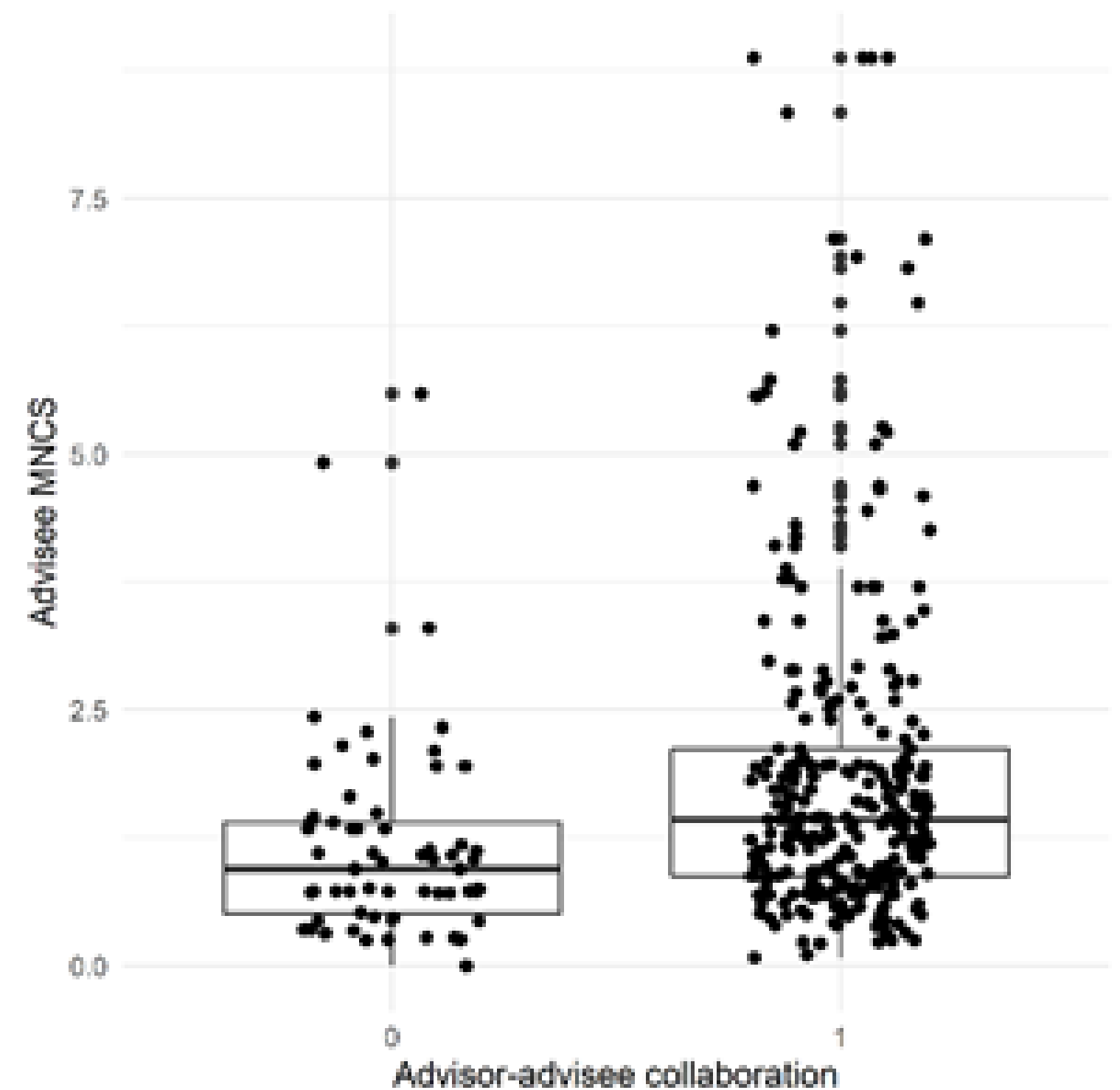
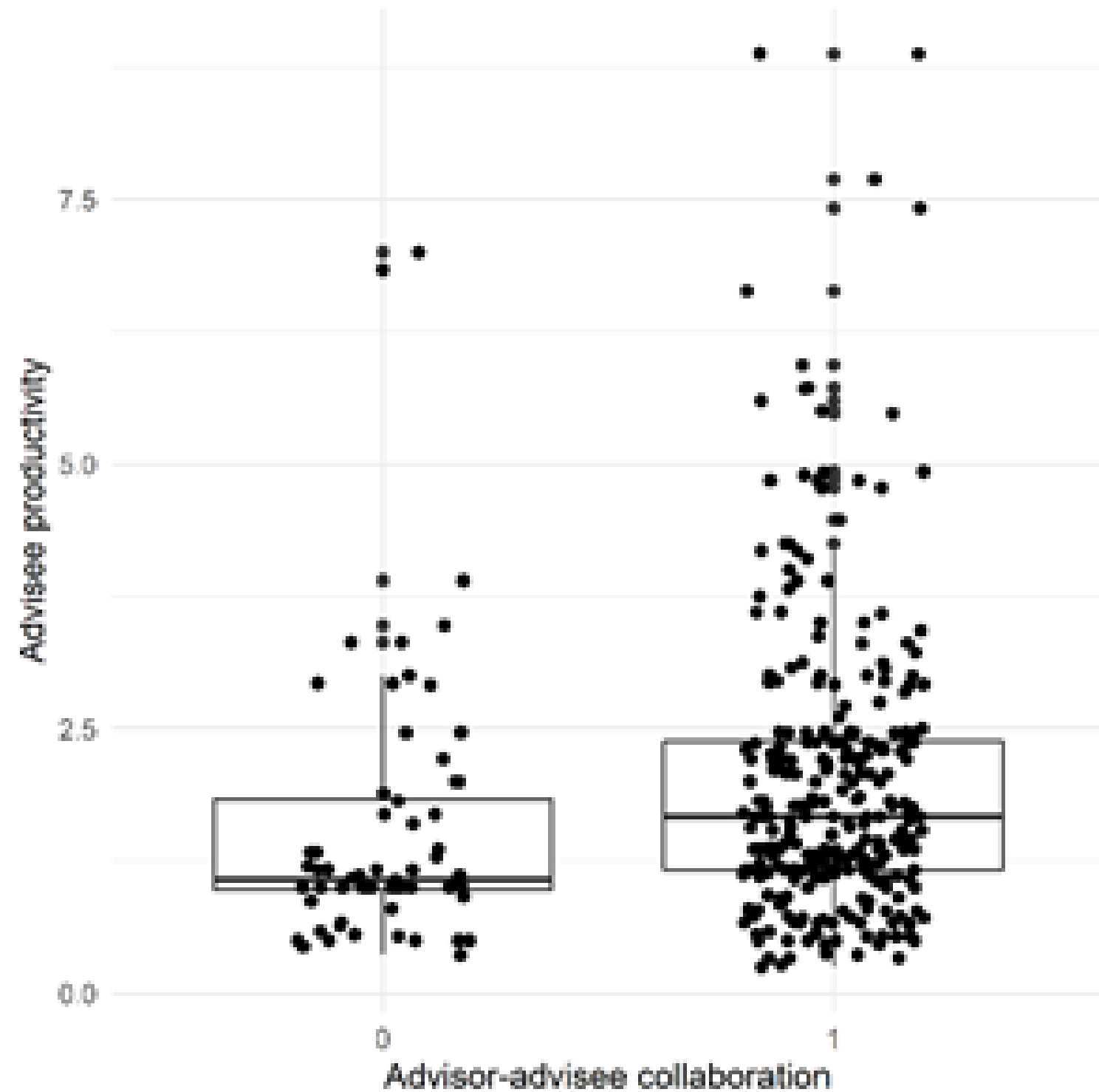
Relationship between the advisors' and advisees' productivity (left) and impact (right)



Relationship between the similarity of the advisee's dissertation and the advisor's past research and advisee's productivity (left) and impact (right)



Relationship between advisor-advisee collaboration and advisees' productivity (left) and impact (right)



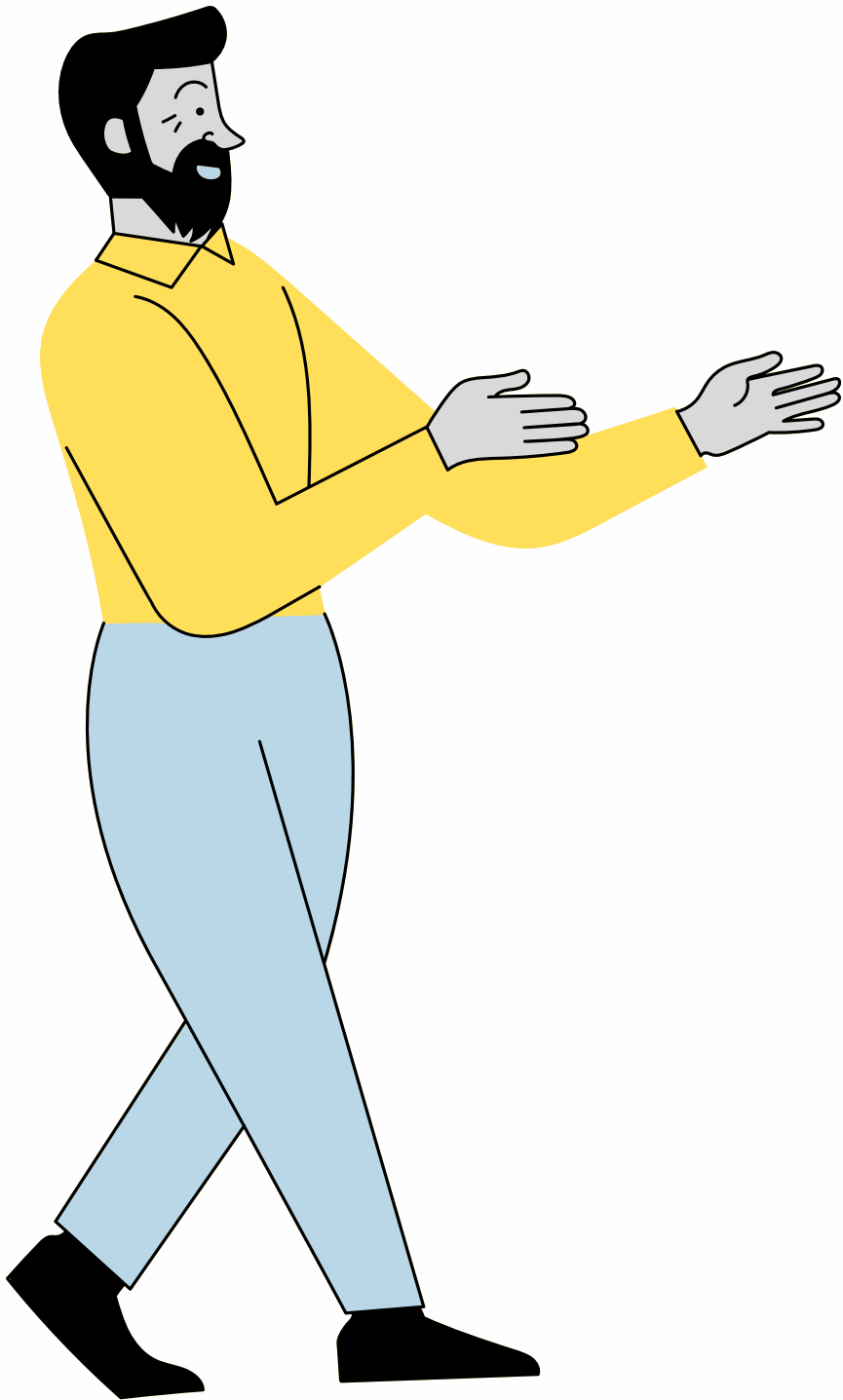
Linear regression model predicting advisee productivity (top) and impact (bottom)

	Estimate	S.E.	t	P-value
Intercept	0.76	0.29	2.59	0.01
Collaboration	0.12	0.22	0.55	0.59
Advisor MNCS	0.01	0.03	0.30	0.76
Advisor productivity	0.00	0.00	1.80	0.07
Similarity	1.24	0.38	3.28	0.00

	Estimate	S.E.	t	P-value
Intercept	0.67	0.39	1.70	0.09
Collaboration	0.33	0.29	1.12	0.26
Advisor MNCS	0.37	0.04	9.22	0.00
Advisor productivity	0.00	0.00	0.34	0.73
Similarity	0.12	0.51	0.23	0.82



Discussion



The findings of our study suggest that the doctoral mentorship relationship may play a significant role in student research performance in terms of both output and impact.

Collaborating and providing co-authorship opportunities are useful ways for advisors to support their advisees, as it helps increase their research output and impact.

The models explain 5% of the variance in productivity and 23% of the variance in impact, which indicates that while choosing the right advisor may positively influence one's academic achievements, that decision alone does not tend to make or break one's research career.

Significance

"From global indicators to local applications"

- Our study offers practical advice relevant for anyone looking to increase their research impact and output on either side of the mentor-mentee relationship.
- This study helps make visible the contributions of mentors in the development of early career scholars (Sugimoto, 2014).



Thank you for listening!

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qsslab.ca

References

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