Consent and Welcome

Online Survey Consent

Dear Survey respondent,

You are invited to participate in a web-based online survey on graduate students research journey. The goal is to improve the graduate research journey through a better understanding of the dynamics of DIVERGENCE of the students from their original research path and their CONVERGENCE back to the path during their study. This is a research project being conducted by Raafat Zaini, a research scientist at Worcester Polytechnic Institute and Saeed Langarudi, a postdoc researcher at New Mexico State University. The survey will take approximately 5 minutes to complete.

PARTICIPATION

Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason.

BENEFITS

You will receive no direct benefits from participating in this research study. However, your responses will benefit the graduate students’ community at large.

RISKS

There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life.

CONFIDENTIALITY

Your survey answers will be sent to a link at wpi.qualtrics.com where data will be stored in a password protected electronic format in the cloud. Qualtrics does not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study.

CONTACT

If you have questions at any time about the study or the procedures, you may contact Raafat Zaini <rzaini@wpi.edu> or Saeed Langarudi <lang@nmsu.edu>.
If you feel you have not been treated according to the descriptions in this form, or that your rights as a participant in research have not been honored during the course of this project, or you have any questions, concerns, or complaints that you wish to address to someone other than the investigator, you may contact the Worcester Polytechnic Institute Institutional Review Board by email irb@wpi.edu

ELECTRONIC CONSENT: Please select your choice below. You may print a copy of this consent form for your records.

Clicking on the “Agree” button indicates that

You have read the above information You voluntarily agree to participate You are 18 years of age or older

☐ Agree
☐ Disagree

Graduate Students Research Journey Survey

Thank you for taking the time to participate in this research. The following survey is part of an academic study on graduate students research journey. It targets those who went through graduate life as well as those who are still pursuing their degree. The goal is to improve the graduate research journey through a better understanding of the dynamics of DIVERGENCE of the students from their original research path and their CONVERGENCE back to the path during their study. These terms are explained further on the next page.

Introduction

Introduction:

Graduate students usually start their graduate programs with a preconceived research idea in mind to pursue in their thesis or dissertation. As they share their ideas with their advisors, professors, and peers, they will become exposed to new ideas they feel curious to explore. Throughout their research journey, graduate students could experience DIVERGENCE and CONVERGENCE:

- DIVERGENCE happens when students start exploring new research ideas that are different from their initial research focus.
- CONVERGENCE happens when students start narrowing or combining ideas into a research focus that is necessary for producing a meaningful research thesis or dissertation at the end of their program.
About your university

1- Your current primary occupation

- Student
- Researcher
- Professor
- Other

2- Which university or institute did you attend for your graduate studies?


About your graduate degree

3- Program duration

Start date (mm/dd/yyyy)
(Expected) end date (mm/dd/yyyy)

4- For the majority of your graduate studies you were:

- Full time
- Part-time

5- What was your area of study?

- Science
- Engineering
- Management
- Social Science
- Art
- Other (please specify):

6- How many years were you?

- A Teaching Assistant (TA)
7- How many years did it take you to graduate? (if you are still enrolled, then select the number of years you have spent in the program)

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
</table>

8- How many credit-hours were needed to fulfill the course requirements?

- [ ] Number of credits
- [ ] No course requirements

### About your research

9- Did you start the program knowing the topic you wanted to research?

- [ ] I had a clear idea
- [ ] I had a relatively clear idea
- [ ] I had a vague idea
- [ ] I had no idea
- [ ] I do not remember

10- How close was your thesis or dissertation to your initial research idea?

(1) not close at all: completely new research topic, totally new research questions
(3) almost the same: small tweaks to the topic and the research questions
(5) completely the same: no change in the research topic nor in the research questions

<table>
<thead>
<tr>
<th>Not close at all</th>
<th>Almost the same</th>
<th>Completely the same</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11- How many research ideas did you consider before converging to your final research topic?
12- How complementary were your research topics fitting under a common theme?

<table>
<thead>
<tr>
<th>not complementary</th>
<th>fully complementary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>7 8 9 10</td>
</tr>
</tbody>
</table>

13- When did you converge on your research topic?

- During the 1st year in the program
- During the 2nd year in the program
- During the 3rd year in the program
- During the last year in the program
- Still did not converge

14- How did the divergence change over the course of the program? (Choose one of the graphs below that is closest to your case)

Solid line: Actual research path
Dotted line: Envisioned research path
Divergence: any departure, however small, to explore new ideas different from the original research focus you started with (solid line goes away from the dotted line).
Convergence: continually narrowing down or combining your research ideas to reach a research focus (solid line approaches the dotted line).

- 1: minimum or no divergence
- 4: divergence
15- How frequently did you informally share your working research ideas with colleagues, faculty, or committee?

- Weekly
- Monthly
- Once every semester
- Once every academic year
- Other [ ]
16- When did you start sharing your work-in-progress in seminars, colloquia, or conferences?
- During the 1st year in the program
- During the 2nd year in the program
- During the 3rd year in the program
- During the last year in the program

17- How many presentations did you give on each of your research ideas over the course of the program?
- Less than 5
- Between 5 and 10
- More than 10

18- When did you first publish your research (working papers, conference papers, journal papers, book chapters, full book)?
- During the 1st year in the program
- During the 2nd year in the program
- During the 3rd year in the program
- During the last year in the program
- After graduation
- Didn't publish, can you share the reason?