

Brain and Cognitive Science Financial Health Survey 2024

Compiled and collected by Himanshu Ahuja

March 25th 2024

This report compiles the analyses performed on the responses obtained from the graduate students in the Brain and Cognitive Science (BCS) Department at the University of Rochester. The survey was open from 22nd January to 31st January 2024. The link to the form is archived [here](#). In this survey, the students were asked to self report their expenses and their financial situation during their Ph.D. Education. Out of the 31 students appointed in BCS, **25 students** responded. Survey respondents were not asked for any identifying information. In this report, I will first summarize the results from the analyses, followed by a comparison of essential expenses and income between 2019 and 2023. Then, I will discuss the state of graduate student financial health based on the results.

Results

Responder Demographic

Amongst the twenty-five students who responded to the survey, sixteen students (**64%**) were **international**, and **20% of the respondents had one or more dependents**. Twenty respondents were below the age of 30.

Financial Assistance and Additional Income

Students received financial assistance in various categories (**Table 1**). **All respondents sought financial assistance** (24/25, when excluding “travel, leisure or entertainment” category) in one or more categories below. Financial assistance in visiting family was required by the highest proportion — 64% of the respondents. Comparably, 60% of (15/25) of students mentioned that income is a barrier for them in visiting their family.

Table 1: Number of respondents requiring financial assistance for various expense categories.

Category	# respondents
Visiting family	16 (64%)
Car repair, leasing/ buying, auto insurance	10(40%)
Medical emergency or medical procedures	7 (28%)
Assistance in paying utility bills	4 (16%)
Buying groceries/ other essentials	2 (8%)
Family urgency/ parental health issues	3 (12%)
Registering for a conference	1 (4%)

To support their financial condition, 12% of students reported that they have a part time job, and another 40% said that they would like to have one but could not because either they are an international student or their Ph.D. work takes up all their time. Additionally, **over 50% respondents (13/25 students) received monthly assistance from their relatives/ family** (Median = \$300) to support themselves.

Financial Mental Health and Lifestyle

Students were asked whether they feel fairly compensated for their work, while being reminded that Ph.D. training is a combination of both research and coursework. Students rated their answer on a scale of 1 (Not at all) - 5 (Absolutely), with **60% of students responding with a score of 2 or less** (Fig. 1). In another prompt, students were asked to rate whether their financial condition

impacted their Ph.D. education. Of the 25 responses, **48% (12 students) reported a score of 4 or more**. When asked about how often they felt stressed about money, as much as **72% of students said they felt stressed about money at least once or twice a month**, with only one student reporting *never*.

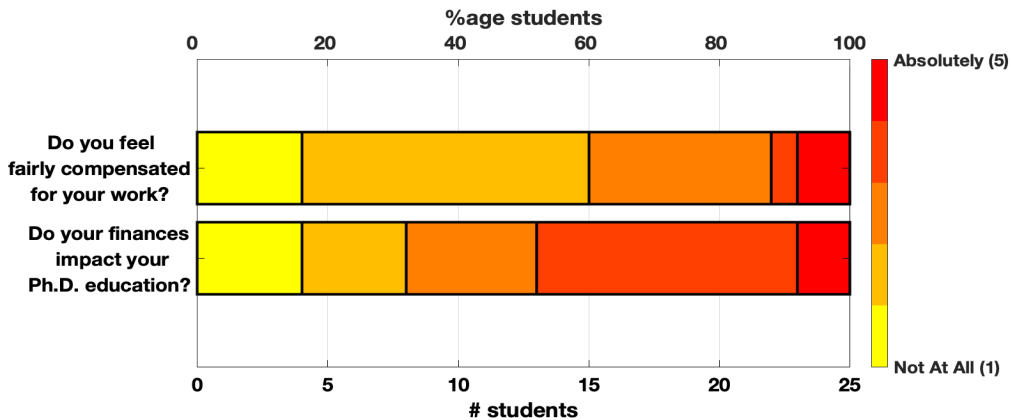


Figure 1: Student report on a scale of 1-5 on two prompts: (1) Do they feel fairly compensated for their work, and (2) if their finances impact their Ph.D. education.

Choosing graduate education had further impacts on student life choices. These impacts were recorded using three prompts regarding affording to have kids, affording medically necessary treatment, and supporting their family (Fig. 2). From the responses, it was apparent that students are compromising on these life choices to advance their academic goals: **60% of students reported that they could not support their family** because of their own financial condition, **over 50% of students were unable to afford medically necessary treatment**, and **over 40% of students were refraining from having (more) kids**.

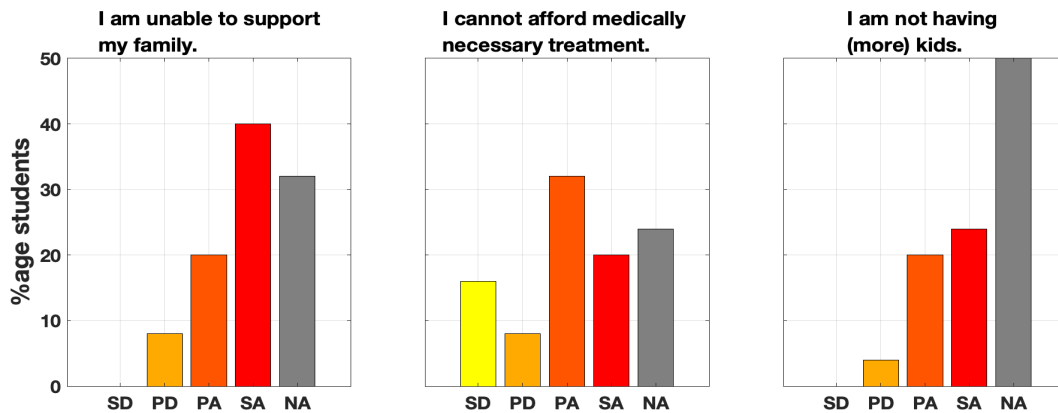


Figure 2: Student agreement level to three prompts pertaining the effect of graduate training on their life choices. SD= *Strongly Disagree*, PD= *Partially Disagree*, PA= *Partially agree*, SA= *Strongly Agree*, NA= *Not Applicable*

Graduate Student Income Over Time (2019-2023)

Effective changes in income can be derived from adjusting the income to the inflation rate. For this calculation, I will use the time period starting in 2019 (when I first joined the BCS program) to 2023. BCS provides a ~3% salary increase per year. This results in a net 12.5% increase in salary across 4 years (from \$28,870 to \$32,496). Contrastingly, the cumulative rate of inflation from 2019-2023 is 19.2%. If stipends were inflation adjusted, a BCS students' stipend should have been \$34,413 for 2023. **This results in a deficit of \$1,916 in the current BCS pay when compared to 2019 levels.**

This effect is further exaggerated when one considers inflation in essential expense categories (Fig. 3, see *Methods*). Performing such an analysis is especially important in this scenario because Ph.D. students have a stagnant income regardless of their training year or expertise. In this analysis, students spent 60% of their annual income on essentials (housing, utilities, taxes, etc.) in 2019, and 65% of their annual income on essential expenses in 2023.

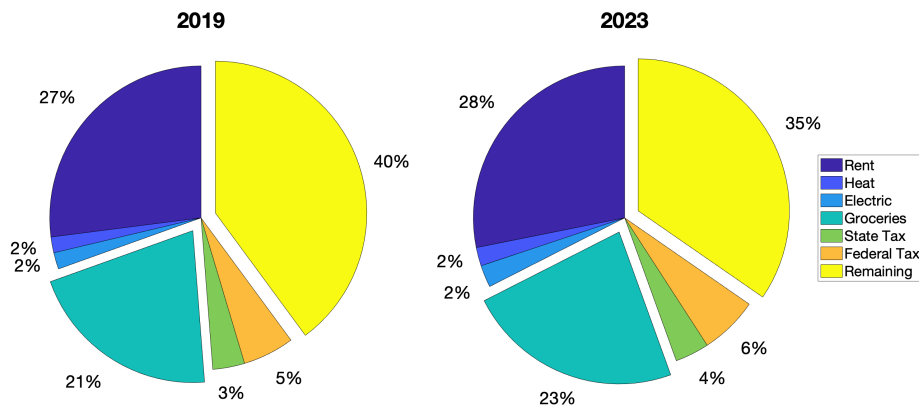


Figure 3: Comparison of essential expenses for BCS graduate students in the year 2019 vs 2023.

This implies that current BCS students have less money for their remaining “non-essential” expenses such as paying off student debt, affording medical/dental care, transportation, supporting their family, raising kids, and traveling than when they first started graduate school. **In exact dollar amounts, the 40% remaining salary in 2019 is \$11,512, while the 35% remaining salary in 2023 is actually lower — \$11,246, even without adjusting for inflation.** Inflation-matching the 40% of the remainder salary results in \$13,720 in 2023. So, when adjusted for both inflation and accounting for essential expenses, **a BCS student’s salary has effectively decreased by \$2,474 (\$13,720 - \$11,246) since 2019**, so, a fifth year-graduate student is earning \$2,474 less than they were earning in their first-year, or new students hired into a graduate student position are paid effectively ~\$2500 less than they were in 2019.

Discussion

The above analyses offer a quantitative measure of student financial health in the Brain and Cognitive Sciences Department at the University of Rochester. With

current financial provisions, supporting a family member while pursuing a Ph.D. degree appears infeasible. This is evidenced by only 20% of respondents having dependents, with 15 students partially or strongly agreeing that they are unable to support their family members. Additionally, 11 students refrained from having (more) kids due to their financial situation. Not only are they unable to provide support to dependents, but all respondents except one have sought financial assistance to meet their own needs. The dissatisfaction arising from a lack of functional income is quantified in feelings of unfairness and stress, which students say have impacted their Ph.D. education. Furthermore, far from a marked improvement in graduate student stipends, there has been an effective decrease in stipends compared to 2019 levels. When students express dissatisfaction with income levels and request a raise, they are often presented with one of two arguments: Firstly, that everyone desires a pay increase, as it is widely acknowledged that academics are underpaid and overworked. It is crucial to recognize that the lack of inflation-matched income disproportionately affects lower-income bracket earners due to the marginal utility of each additional dollar. So, offering assistance in this income bracket is the most pressing. Secondly, the argument is made that we are still students, in training. Financially, this classification offers minimal tax benefits, if any (and only for residents for tax purposes) and makes us ineligible for worker's rights and benefits. While we are still in training to be scientists, our low pay is justified by the courses we take, which the University covers. I lack any quantitative argument against this due to a lack of understanding of how funds are sourced from NIH grants to the University pockets. However, whatever the deciding

factors, they have definitely come at the cost of graduate student pay. A missing seat at the table representing graduate student interests — which form the backbone of research, teaching and funding at any academic institution- is a contributing factor for this oversight. Understanding the fraction of money the University directly receives and its distribution henceforth from every federal grant dollar will definitely be a fruitful exercise to understand this better.

Acknowledgements

Thank you to all the respondents for taking the time to fill the survey. Thanks to Chigusa Kurumada for providing consistent motivation and affirmation, and to Prof. Duje Tadin and Prof. Ralf Haefner in their feedback to the survey.

Methods

Assumptions for the analysis in Fig. 3

- All analyses were done for a single-person household.
- Only essential expense categories were considered. These included rent, heat, electricity, groceries/ house essentials, federal and state taxes.
- The total income earned by graduate students in BCS was based upon my paycheck. For 2019, this amount is \$28,870. For 2023, this amount is \$32,496.
- Rent baseline was considered to be cost of housing in University student housing — Goler House (Studio apartment).
- The units of heat and electricity consumed were considered equal across the two years. Cost per unit was determined using past price releases from RG&E.
- The Federal and State taxes were calculated for a resident for tax purposes using tax tables for the respective years.
- The cost of groceries/ house essentials was estimated for 2019, and a 25% increase in that amount was assumed based on [this report from USDA](#). In exact dollar amounts, monthly expenditure for food was considered to be \$500 and \$625 respectively.