Graduate income and profession linkage: Tracer study of public relations graduates

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ABSTRACT

Background: Higher educational institutions must prepare graduates for careers by monitoring their performance. They must also evaluate academic relevancy to practical needs. The PR program at Universitas Padjadjaran strives to deliver the best education and monitor graduates' performance. Purpose: This paper aims to study how graduates' first income is associated with GPA, study duration, and job wait time. This study also linked public relations education with graduates' current position in their work based on their self-assessment. Methods: Using tracer study data from the Career and Development Centre of Universitas Padjadjaran, exploratory data analysis was done to examine the characteristics of graduates based on the observed variables. The bivariate analysis investigated the association between income, GPA, study duration, and job wait time. Conclusion: Findings of this study show no statistical evidence of the relationship between first salary, GPA, and duration of the study. Exploratory data analysis shows that PR program graduates perform well when comparing the average income of undergraduates on a national level. Graduates' self-assessment of study relevancy indicated that most graduates possess the relevant educational background and appropriate level of education for their current occupational position. As the statistical testing for this study was conducted post hoc, careful considerations need to be taken when taking the results at face value, considering potential flaws in the sampling frame and the power of the tests. **Implications:** The findings in this study would serve as a platform for future references on graduates or tracer study, more specifically public relations graduates, as it provides a starting point for measuring graduates' performances. As the database provides more data with more graduates in future years, an updated finding of this particular study would be very important to measure how well graduates fare postgraduation.

Keywords: Public relations; pr education; tracer study; pr profession; pr graduates

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INTRODUCTION

The gold standard for an educational institution is to prepare graduates for the working world, as ready-to-use workforce or as entrepreneurs. Other than preparing graduates to be ready for work, educational institutions also need to evaluate the linkage and match their education system with the need for competent professionals. One of the benchmarks for the success of the implementation of education, both in quality and quantity, is the output (graduates) of the study program. This parameter is essential considering that the productivity and performance of study programs can be measured through the number of graduates, graduate GPA, and study duration.

Universities are expected not only to be able to produce undergraduate graduates every year following the ratio of the number of incoming students but more than that. One indicator of the success of higher education is the extent to which its graduates can be absorbed in the job market, are highly valued by the labor market, and on the other hand, are also able to create jobs. The reality faced by university graduates is very abundant, not proportional to the number of job vacancies. Meanwhile, not all university graduates can systematically design for entrepreneurship. From this situation, you must look at the relevance and the relationship

between graduate competencies and market needs.

The quality of education is indicated by the level of satisfaction possessed by all components, both internal and external, of the education system. The inner part consists of actors directly involved in the process, including lecturers. non-academic staff, students, stakeholders, and institutional organizations. At the same time, external quality can be measured by the level of satisfaction felt by users of educational outcomes (graduates). In addition to the quality of education, higher education institutions (universities) face the issue of relevance which describes the relevance between university student outcomes and user demand (Schomburg, 2003).

The low level of relevance of education causes university graduates to be less able to be absorbed by the labor market and has an impact on increasing unemployment. Most recent data from Statistics Indonesia showed that 7.07% of people of productive age are unemployed for various reasons (BPS, 2020). Education institutions do not want to contribute to this number; hence, studying how well students perform in the workforce post-graduation is crucial.

Profession linkage for Public Relations (PR) professionals is critical for institutions to perform PR tasks well. A study about perceptions

of public relations education in the US concluded that most educators and practitioners agree that public relations program is on track to producing graduates who perform well as PR specialists (Stacks et al., 1999), which may still be lacking in Indonesia, shown in a 2015 study of government officials in Indonesia, showing stereotypical views of PR professionals (Lukman, 2015). A study in 2020 showed that even most government institutions in Indonesia lack PR professionals with relevant educational backgrounds, with persons appointed for the positions having a non-relevant background and lacking proper training for the duty (Sani et al., 2020).

Often, Public Relations specialists are not someone with appropriate backgrounds or graduates of a PR education. In 2015 the ministry of communications and informatics Indonesia recruited 100 experienced people to be trained as government PR specialists and will be distributed to various government institutions. This program was created to accelerate the need for professional PR specialists in government institutions, as someone typically fills this position with no background in communications and PR (Priyatna et al., 2020). The study also critically addresses several issues on the importance of PR specialists' role in government institutions, particularly in which many government officials

lack an understanding of the vital role of PR in an institution.

For PR education institutions to stay relevant, it is also important to incorporate current issues and trends with the syllabus so graduates can apply the science they received in classrooms to the real world of PR practices (Freberg et al., 2013). Local context is also paramount in PR education, as past studies have shown the dominant influence of PR education from the US perspective in PR education in China (A. Zhang et al., 2011b). Yes, the US can be considered the "Mecca" of global PR education; however, the local context is critical as the actual PR practices need local values in everyday practices (Ahmad & Putra, 2013; A. Zhang et al., 2011a, 2012).

University education in PR must stay relevant and comply with various regulations and standards, such as the Bologna standard for higher education in the EU (Baladrón-Pazos et al., 2022). In Indonesia, the accreditation of higher education is the responsibility of BAN-PT (National Accreditation Board for Higher Education), the only authorized government institution for accreditation under the ministry of education of Indonesia. PR program of Universitas Padjadjaran (Unpad), the object of this study, has received an 'A' accreditation since 2016 (Akreditasi Dan Penghargaan – Program Studi Hubungan Masyarakat), indicating the

highest accreditation from BAN-PT.

Ideally, three different perspectives need to be accounted for for the quality of a PR education: the practitioner perspective, the client perspective, and the evidence-based perspective (Freberg et al., 2013). This tracer study is an evidence-based study to support the quality justification of the PR program in Unpad, although lacking in findings from the client perspective, which are the users of PR graduates, which includes companies, government institutions, and various organizations. The client's perspective on the quality of education is one of the assessments from the BAN-PT, not accounted for by this study.

However, an education designed to fulfill accreditation targets does not necessarily answer the industry's need, which requires ready-to-work PR professionals with the preparedness for current trends and issues (Rosso et al., 2020). Accreditation may incentivize PR education institutions and improve their reputation, but at the same time, impeding the development of the institution that has a dynamic tendency to adjust its curricula to suit current needs (Rosso et al., 2020).

To obtain information on whether graduates' quality of PR education accurately answers the industry's needs, it is necessary to carry out an activity related to improving quality and accountability in the form of "Tracer Study"

activities. Tracer study is an approach that allows higher education institutions to obtain information about deficiencies that may occur in the educational process and learning process and can be the basis for planning activities for future improvements, as analyzing data from tracer studies is essential for policy-making and improving learning (Nudzor & Ansah, 2020; Romadlon & Arifin, 2021).

Thus, the information provided by successful graduates is needed, for example, information about relevant knowledge and appearance (relationship between knowledge and skills and job demands, work area, professional position). In addition, graduates can also be asked to assess the conditions of study they experienced during the education and learning process (Schomburg, 2003).

As tracking graduates presents challenges in establishing contact, several higher degree institutions widely adopt an online method, utilizing a dedicated IT infrastructure (Dewi et al., 2020; Harianto et al., 2019; Nudzor & Ansah, 2020; Romadlon & Arifin, 2021). Unpad also adopts this system, using an online platform with a dedicated IT infrastructure provided by the university's career and development center (CDC). Although the platform has experienced several changes, the current system, established in 2018, is a stable version that provides tracer study questionnaires referring to a unified

questionnaire developed by the Ministry of Higher Education of Indonesia in 2021. The same questionnaire format can be found on the official website of the Ministry of Education and Culture of Indonesia, specifically on the tracer study page (https://tracerstudy.kemdikbud.go.id/).

To see how well graduates perform in the workforce, past studies are typically conducted from the practitioners' and clients' perspectives (Freberg et al., 2013). For this study, we will examine the practitioners' perspective, who are the graduates of the PR program of Unpad, by looking at their first salary and linkage with their current positions.

Studies have shown that salary is associated with GPA and other predictors that may or may not interact with GPA. A study that predicted the compensation of MBA graduates by accounting for their personality, age at graduation, business aptitude, and GPA showed that GPA is a significant predictor of earnings (Harrell et al., 1977). Regression analysis of management information system graduates showed the association between starting salary, internship experience, GPA, job market, and employer size (Sandvig et al., 2005).

Aside from GPA, this study would also consider other observed variables associated with salary, which include duration of the study, job wait time, education relevancy with current

position, and educational level relevancy (corresponding) with the need of the current position. The following part of the research method will elaborate more on how the study would approach and use the data, also providing justifications related to the absence of a sampling frame as the study utilizes existing tracer study data. To conclude, this paper presented a tracer study examining the relationship between graduates' initial salary and GPA, length of study, and job search time. This study also examined the relationship between graduates' self-reported current employment status and public relations education.

RESEARCH METHOD

The objective for this study was out of the need to analyze existing data from the alums of the PR Program, Unpad, with the anticipation of using the findings in the survey as references for improvement in the education system for t the program. Although the results of such research are often referred to as "low-hanging fruit," the importance of the findings would likely provide data-driven evidence on whether the education system is working appropriately.

This study addresses how well graduates perform in the workforce by observing their first salary and accounting for several variables typically associated with the variable. The independent variables are GPA (*Indeks Prestasi Kumulatif*), job wait time, study duration, education relevancy, and whether the education level of graduates corresponds with the requirements for the current position (see table 1.).

This research uses the tracer study data from the career and development center (CDC) of Unpad, which can be found online on the CDC website, an online questionnaire at http://cdc. unpad.ac.id/tracer-study/. This online survey is communicated to graduates and current students alike, in which graduates are strongly encouraged to fill out the questionnaire for tracer study purposes. The online survey was made available in 2018, with the earliest recorded data from that year. The study used available data up to date by 20 September 2022, with the number of PR program Unpad graduates 327 during the period, and available questionnaires for data analysis were 135 responses. In terms of proportion, the survey accounted for 41% of graduates from 2018 to 2022. With this number, we need to account for potential nonresponse bias, whether a 41% response rate is representative of the population or not (Babbie & Roberst, 2018; Stockemer, 2019). To account for potential bias, this study would utilize a post hoc power analysis to confirm the statistical power of the analysis.

As the sample size has already been pre-

determined, rather than created by following a set of rules in a typical sampling frame, the study utilized a posthoc power analysis to justify the number of samples with the help of the G*Power application (Newsom, 2021). Sample size will critically affect the hypothesis and study design, and incorrect sample size may lead to inadequate study results (Cohen, 1988; Serdar et al., 2021). There is an argument that post hoc power analysis may need to be conceptually flawed and analytically misleading (Y. Zhang et al., 2019). However, due to the nature of the data, which was already available before the research design stage, a post hoc power analysis is the best option for this study.

This study addresses how well graduates perform in the workforce by observing their first salary and accounting for several variables typically associated with the variable. The independent variables are GPA (Indeks Prestasi Kumulatif), job wait time, study duration, education relevancy, and whether the education level of graduates corresponds with the requirements for the current position (see table 1).

The first salary received by graduates is a response to the question of their salary using Indonesian Rupiahs as the currency; the responses were in number. GPA is a continuous variable representing their grade point average.

Coursework graded with "A" would yield a

Table 1 Summary of observed Variables

| Variables | Type of data | Unit |
|---|--------------|---|
| Independent Variable | , | |
| First Salary | Continuous | Rupiah |
| Dependent variable | | |
| GPA | Continuous | Points (Max 4) |
| Job Wait time | Discrete | Month |
| Study Duration | Ordinal | Category based on years of completion |
| Education Relevancy | Ordinal | Very Relevant, Relevant, Not Quite, Irrelevant, Very Irrelevant |
| Education Level Corresponds with Job | Ordinal | One level Above, Corresponding Level, One level below, Higher Education not needed. |

Source: Research data,

four points grade, "B "three points, "C" two points, "D" one point, and "E" with no points or zero, although no observations have zero GPA, as it would mean an academic expulsion for a student.

Job wait time is how long graduates must wait before obtaining a job, with months as the unit. This measurement needs to be revised as graduates who can secure a position before graduation would write 0 rather than a negative value. It would be more accurate if the graduates could respond using negative values, representing how they managed to get a job months before graduation. However, the mechanism of the online questionnaire does not allow for a negative value to answer this question. Two additional ordinal data were also used, education relevancy and whether education level corresponds with the current position, both variables are measured using

ordinal category.

The first step of the study is conducting exploratory data analysis to examine the proportional characteristics of the PR program graduates of Unpad based on the observed variables of GPA, and job wait time, study duration, education relevancy, and education level relevancy. This step will be beneficial to establish the typical characteristics of graduates based on the variables. To do this, this study will employ descriptive cross-tabulation of frequency on the variables.

Bivariate analyses were conducted to test whether the independent variable is associated with the dependent variables. A correlational test was used to examine associations between continuous variables, a t-test was used to determine whether dichotomous categories are related to different means of income, and one-way ANOVA was used to determine whether

categorical variables are related to differences in pay.

This study planned to proceed with regression analysis after bivariate analyses were completed. However, as the bivariate analyses were not statistically significant, we cannot proceed with regression analysis, which will be explained in the following part of the results and discussion.

RESULTS AND DISCUSSION

The first step of this study is to conduct exploratory data analyses for the variables of interest. Cross-tabulation tables with proportional frequency are an excellent and simple method for providing sample characteristics based on the observed variable, showing the proportion of each variable relative to its category (Babbie, 2014; Babbie & Roberst, 2018)

Table 1 provides a summary table of observed numerical variables of first salary, GPA, and wait time before their first job graduates of the PR Program of Unpad, 2018-2022. The mean of graduates' monthly first salary (or income) is 5.17 million rupiahs. According to Statistics Indonesia, the average salary for undergraduates in Indonesia based on the National Labour Force Survey (Sakernas Survei Angkatan Kerja Nasional) is 5.51 million

rupiahs across various industries (BPS Statistics Indonesia, 2022). It is essential to acknowledge that this number does not represent the average first salary, indicating that PR program graduates from Universitas Padjadjaran are performing well compared to the whole workforce. When we pit the first average wage of a PR program graduate exceeds the average salary for working Indonesians belonging to the 20-24 years old age group, which is 2.21 million rupiahs (BPS Statistics Indonesia, 2020). Based on the comparison of PR program graduates' starting salary with the national average salary of young people aged 20-24, we can conclude that PR program graduates are performing well above the average, with an average of nearly more than 3 million rupiahs (2.96 million).

Another essential comparison is how well the average salary of graduates is compared to the minimum wage. The highest minimum wage in Indonesia is the minimum wage of DKI Jakarta at 4.6 million rupiahs per month in 2022 (Keputusan Gubernur DKI Tentang Upah Minimum Provinsi Tahun 2022), which the average first salary of PR program graduates exceeds by more than half of a million rupiahs (0.57). We need to account that the tracer study data reflects all graduates working in various locations in Indonesia, with their respective minimum wage regulations applied differently. Knowing that the average first salary of

Table 2 Summary table of numerical variables (First salary, GPA, and Wait time)

| Variable | Obs. | Mean | Std dev. | Min | Max | Unit |
|-----------------------|------|--------------|--------------|-----------|------------|---------|
| First Salary | 135 | 5.17 million | 2.04 million | 1 million | 16 million | Rupiahs |
| GPA | 135 | 3.55 | 0.20 | 2.38 | 3.9 | - |
| Wait time Duration | 135 | 4.7 | 4.42 | 0 | 18 | months |

Source: Research data,

PR program graduates of Unpad performs well against the highest minimum wage is encouraging, indicating how well the graduates are valued in the workforce.

Of 135 graduates who reported that they are currently working, 100 have managed to secure their job less than six months after graduation; the number includes graduates with zero or no waiting time before landing their first job. It is a good indicator of how long graduates need to wait before securing their first employment, as six months is typically used as the benchmark of whether graduates can quickly secure a job.

Most graduates finished their education at the PR Program Unpad in under four years (57) or between 4-5 years (67). Only eight graduates completed their studies between 5-6 years, and one finished between 6-7 years, with two graduates taking seven years or more to finish their education (see Table 2.). It is a good indication that most PR Program students of Unpad managed to graduate on time, even though students are allowed to spend seven

Table 3 Proportion of Study duration of Graduates from the PR program

| Duration | F | % |
|-----------------------|-----|-------|
| Under four years | 57 | 42.22 |
| 4-5 years | 67 | 49.63 |
| 5-6 years | 8 | 5.93 |
| 6-7 years | 1 | 0.74 |
| Seven years or longer | 2 | 1.48 |
| Total | 135 | 100 |

Source: Research data,

years completing their bachelor's education according to government regulation (Peraturan Menteri Pendidikan Dan Kebudayaan Republik Indonesia No. 3 Tahun 2020 Tentang Standar Nasional Pendidikan Tinggi, 2020). It is also very encouraging to see that most graduates can finish their study under five years.

105 out of 135 graduates believed their educational background was relevant to their current position, and 15 thought it was pertinent to their position in their respective professions. This account for 89% of the respondents regarding the relevance of their educational

Table 4 Proportion of Education Relevancy with Current Profession

| Response | F | % |
|--------------------|-----|-------|
| Very Relevant | 15 | 11.11 |
| Relevant | 105 | 77.7 |
| Quite Relevant | 10 | 7.4 |
| Not quite Relevant | 5 | 3.7 |
| Irrelevant | 0 | 0 |
| Total | 135 | 100 |

Source: Research data,

background from the PR program of Unpad. Although this study cannot compare similar studies to provide comparative analysis and the responses were from the graduates' self-assessment, the proportion reflects a very high level of professional linkage, indicating most graduates work within the scope of skilled PR professions (see Table 4.). However as this response is from the graduates' perspective, we need to acknowledge the absence of clients' or users' perspective in assessing PR professional's profession linkage with their educational background in this study.

Most graduates, 128 out of 135, believed their level of education corresponds to their current workforce position requirements, accounting for 95% of the respondents. Similar to the previous explanation of education relevancy, this study cannot compare the findings with data from similar studies. Although the responses were of self-assessment of the graduates, the proportion indicates a very high level of professional

Table 5 Proportion of Education Level corresponding to the requirements of current position

| Corresponding Level of Education | F | % |
|-------------------------------------|-----|-------|
| One level above | 4 | 2.96 |
| Corresponding level | 128 | 94.81 |
| One Level below | 10 | 7.7 |
| Higher education is Not required | 0 | 0 |
| Total | 135 | 100 |

Source: Research data,

linkage, indicating that most graduates work within the scope of professional PR, graduating with the corresponding education degrees for their current position (see Table 5.). Similar to the previous explanation on educational background relevancy, as this response is from the graduates' perspective, we need to acknowledge the absence of clients' or users' perspectives in assessing PR professionals' profession linkage with their educational level relevancy in this study.

Table 6 presents the correlation matrix between variables of continuous data of salary, wait time, and GPA. There is no evidence of a correlation between salary, wait time, and GPA within a 95% level of the confidence interval. Graduates' GPA is not associated with the amount of the first salary they received, as the correlation test was not statistically significant at $r_{(133)} = 0.11$, p = 0.18. The number of months waited before getting a job was not correlated

Table 6 Correlation Variable Matrix of Continuous Data

| | Salary | Wait Time | GPA |
|-----------|--------|--------------|-----|
| Salary | 1 | | |
| Wait Time | -0.12 | 1 | |
| Sig. | 0.16 | | |
| GPA | 0.11 | -0.081 | 1 |
| Sig. | 0.18 | 0.34 | |

Note: no variables are correlated at p<0.05

Source: research data

with income at $r_{(133)} = -0.12$, p = 0.16.

Based on the correlation analysis of this study, we can conclude that there is no statistical evidence that the first salary of PR program graduates is associated with GPA and wait time before finding a job. It is an exciting finding, as past studies have shown an association between GPA and income (Sandvig et al., 2005; Harrell et al., 1977; Saksilowati, 2007), which is not found in this study.

The absence of a correlation between starting salary and GPA may be due to this study's insufficient sample. To account for this, we need to confirm whether the number of available samples (135 observations) has enough statistical power to explain the statistical analysis conducted in this research. As explained in the previous part on research methods, post-hoc power analyses were employed to confirm the statistical power of the bivariate tests using G*Power. It is a user-friendly application that

provides a detailed protocol of power analyses by providing users with the ability to enter the input parameters according to the type of statistical test used and providing output parameters, with information on the actual power of the statistical test, including information on whether a predetermined number of a sample have adequate explanation power (Erdfelder et al., 2009).

To confirm the statistical power of the correlations test, this study utilizes the G*Power application to conduct a post-hoc achieved power estimation by giving a small coefficient correlation ($\rho = 0.3$) and inputting a 0.05 α error probability for a 95% confidence interval. The post-hoc power test resulted in a 0.94 statistical power for 135 sample size, concluding that the sample size has adequate statistical power for correlation analysis with 0.8 as the lower limit threshold.

The next step of this study is to examine whether the differences in study duration are associated with the first salary of graduates. The distribution for categories of study duration was not normally distributed (see Table 2.), with 57 students graduating less than four years of study and 67 graduating within 4-5 years. The sample size for graduates finishing their studies over five years needs to be bigger, with eight graduates finishing their studies between 5-6 years, only one student finishing between 6-7 years, and only two students taking more than

seven years to graduate. To complete statistical testing, the categorical variable was recoded into two categories, graduating under four years (57 obs.) and over four years of study (78 observations).

After recording the variables into two categories, a t-test was used to compute whether there is enough evidence of a difference in means of the first salary between graduates' spending four years or less for studying with graduates' studying more than four years. The result of the t-test showed no statistical evidence of a difference in means of the first salary under a 95% confidence interval between groups of graduates studying under or over four years $t_{133} = -0.96$, p = 0.33. After removing outlier observations with significantly high first salary, the t-test results were identical, concluding that study duration is not associated with graduates' income.

To confirm the statistical power of the t-test, this study utilizes the G*Power application to estimate post-hoc achieved power by giving a medium size of Cohen's d (d = 0.5). This effect size indicates the standardized difference between the two means, and 0.5 is a medium tolerable number for a t-test. The number α error probability of 0.05, representing a 95% confidence interval, was also inputted, with the sample size for group 1 (57) inputted for the first group, meaning students who graduated

under four years and in group 2 (78) of students studying more than four years. The post-hoc power test resulted in a 0.88 statistical power for 135 sample size, concluding that the sample size has adequate statistical power for t-test analysis with 0.8 as the threshold.

The next step of the study was to examine whether categorical variables of education relevancy with current occupation position (see Table 3.) are associated with income. We also want to investigate differences in the corresponding level of education from graduates' self-assessments (see Table 4.) are associated with gain or not.

After removing outliers of significantly higher first salary, there was no statistically significant difference in the first salary between groups of education relevancy and groups of the corresponding level of education, with the ANOVA result of $F_{(3,126)} = 0.68$, p = 0.56 for education relevancy and $F_{(2,127)} = 2.7$, p = 0.06. However, the result is statistically significant under a 90% confidence interval for the corresponding education level categories. However, the responses for the variable were not normally distributed as they did not pass the Shapiro-Wilk test for normality of data (W=0.99, p=0.9), violating the normality assumption required for the one-way ANOVA test. Therefore, we can conclude that education relevancy and level (degree) of corresponding

education are not associated with graduates' income.

To confirm the statistical power of the one-way ANOVA to compare the difference in means of five groups, this study utilizes the G*Power application to conduct a post-hoc achieved power estimation by giving a medium ANOVA effect size (f = 0.4). This number measures the degree of association between an effect (e.g., the main effect, an interaction, and linear contrast) and the dependent variable, and 0.4 is a medium tolerable number for an ANOVA. 0.05α error probability for a 95% confidence interval was also inputted, and the number 5 for groups of five categories and the number 4 for four categories. The post-hoc power test resulted in a 0.97 and 0.99 statistical power for five and four categories, respectively, using a 135-sample size, concluding that the sample size has adequate statistical power for ANOVA analysis.

As bivariate analyses showed no statistical evidence of associations between the first salary with the dependent variables of GPA, job wait time, study duration, education relevancy, and degree relevancy, we cannot proceed with regression analysis, and the study ended with exploratory analysis and bivariate analysis only.

CONCLUSION

This study shows no associations between the first salary of PR program graduates of Unpad with dependent variables of GPA, wait time, duration of the study, education relevancy, and degree relevancy with the current job position based on the correlation test and ANOVA test. Taking at face value, the PR program graduates of Unpad have successfully performed well in the workforce after observing their income and professional linkage. However, there is a potential for an overstatement of the findings, as this study has several design flaws.

As previously explained, the questionnaire was designed solely for tracer study by The Ministry of Higher Education, with additional data obtained from student service of the Faculty of Communication Sciences Unpad and not explicitly created for this study. The selected observed variables may need to be revised, as the current tracer study form questionnaire was developed for a descriptive study.

Although the dataset for this study may have representation issues as a large chunk of responses were censored due to missing responses, this paper still provides essential insights into the relationship among variables of GPA, duration of the study, gender, and first salary/income. However, we must emphasize the potential sampling bias, in which respondents

who did not provide complete answers in the questionnaire were censored, resulting in a smaller number of graduates included in this study. It indicates a flawed system in the Unpad Career and Development tracer study form, where the completeness of data is optional for graduates who participate in the survey.

We also must acknowledge graduates' reluctance to participate in the tracer study survey, allowing the available data not to portray the overall characteristics of graduates from the PR program. Although statistical measures have justified the current number of samples to have adequate power in explaining the characteristics of graduates, a repeated study of a similar approach with a broader scope in the future, anticipating a more significant number of samples, would provide better information than the current study with the hope of obtaining a more conclusive finding.

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Data Availability Statement: The data used in this study was data obtained from the career and development center (CDC) of Unpad is not available for study outside Universitas Padjadjaran, without permission from the Managerd of CDC

Conflicts of Interest: As a member of the academics in the Public Relations program Universitas Padjadjaran, the primary author acknowledges a conflict of interest as the object of study is associated with the institution of the author. However, the process of collecting, analyzing, and interpreting the data, followed by manuscript writing, was done with the highest academic integrity that upholds objectivity to contribute to the body of knowledge of public relations studies.

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