MIDDLE EAST TECHNICAL UNIVERSITY

Department of Statistics

Career Expectations and Work Preferences of METU Students

Term Project for Survey and Sampling Techniques (STAT 365)

İdil Bükre Tuzkaya
2614881

Selin Aytan
2614451

Instructor
Prof. Dr. B. Burçak Başbuğ Erkan

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ABSTRACT

Most existing studies on career expectations and job preferences have been conducted in Western countries or in selected Eastern countries such as India and Bangladesh. However, country-specific research focusing on Türkiye's young demographic remains relatively limited, despite the country having one of the largest young population profiles in Europe and the Middle East.

The study examines the students preferences in a work place and investigates their career expectations. An online survey was distributed through social media and messaging chanels to Middle East Technical University students. The survey collected data of 230 participants and their demographic characteristics,the affiliated faculties, and responses to preference-based questions such job priorities, salary expectations, job security and seeking value oriented roles. The data was collected using a google forms document and it was analysed using ranking and categorical variables. Graphs were used to compare preference results of different groups namely between faculties , age groups and primary plans after graduation. Statistical methods were then employed to see if the differences were significant. One-way ANOVA was performed to determine the career expectations, Multiple Linear regression model was used to identify the predictors of salary expectations and one sample t-test were used to measure the attitudes and values of the respondants against a neutral baseline.

The results revealed two key findings. First in terms of financial expectations GPA and Gender proved to be bad predictors they had no statistical significance on expected income. However strongest predictor was found to be the faculty with Faculty of Engineering students expecting significantly higher salaries compared to their peers. Secondly, regarding attitudes and values of respondents there was a clear trend of being open to working abroad and students were disagreeing with the notion of a university diploma alone being sufficient. Moreover participants prioritized flexibility and value-oriented professional goals over prestige while also expressing that they would not require a second job.

These results provide implications that financial expectation of the students are driven by advantage placed on engineering and technical fields rather then grades. The student body has a realistic understanding of the job market recognizing that degrees alone are not sufficient and must be augmented with other skills while maintaining strong aspirations for a global market.

1 Aim and Objectives

1.1 Aim of the study

The main aim of this study is to examine the career expectations of students at Middle East Technical University (METU) and to understand how economic conditions, personal values, and perceptions of the labor market shape their career-related decisions. By focusing on students from one of Türkiye's most prestigious universities, the study seeks to provide insight into the relationship between higher education and the professional world in a developing-country context.

1.2 Objectives of the study

1. Identify students' **primary post-graduation plans** and analyze how these plans differ across faculties, years of study, and academic performance levels.

2. Examine differences in **salary expectations** across post-graduation plans, and assess whether these differences continue when conditioning on faculty and GPA then using these variables to identify which of these domains best predicts certainty in financial expectation.

3. Analyze students' **work-value orientations** by evaluating responses to Likert-scale items related to job security, flexibility, work–life balance, autonomy, and meaningful work, and comparing value patterns across faculties, gender groups, and career plans

4. Investigate preferences by analyzing the relative **rankings of key career priorities** and exploring how ranking patterns vary by faculty and intended post-graduation pathways.

5. Determine which student segments are most **open to working abroad**, with a focus on differences across gender, faculty, and primary post-graduation plans.

2 INTRODUCTION

The career expectations of university students are constantly changing , effected by a variety of factors such as economy, job market and changing personal values. It is really important to understand how young people feel about their future, especially in developing countries because understanding youth is critical as it serves as the leading indicator for future economic and migration trends. For this reason, we decided to examine career goals of students at Middle East Technical University (METU), one of the most prestigious university in Türkiye, in order to understand the relation between higher education and professional world better. The primary goal of this study is to analyze career expectations of METU students' from many perspectives. Main focus was on salary expectations, perceptions of work-life balance, and approach to the idea of working abroad. Study also aims to discover how much they value flexibility, security and if they believe university diploma alone is enough to get a job. Lastly, the study tests whether students think success depends on luck or other factors; and if they are okey with long working hours. By doing this, we aim to understand real reason behind their career paths choices.

The data was collected via online survey created by Google Forms and filled voluntarily by METU students. There are 230 responses overall. Most participants were from the Faculties of Engineering and Arts and Sciences, nevertheless students from the Faculty of Architecture, the Faculty of Education and the Faculty of Economic and Administrative Sciences also took part. In order to reach targeted response number, convenience and snowball sampling techniques were primarily used. Although the selected sample does not provide a proportional representation of the faculties, it can be considered diverse enough to capture the patterns and various career goals of the university. Further details of sample size selection methodology will be discussed.

Existing literature shows that students' career choices are not only dependant on money but are also affected by work-life balance, flexibility and moral values. Moreover, working abroad has become a popular trend for students from highly selective universities. By focusing on METU students, this report targets to contribute to the literature by highlighting the unique patterns in Türkiye and reveal similarities with global trends.

Lastly, this study examines career expectations of METU students' within the framework of economic, psychological and outside factors. Rather than focusing on one single spesific area, the study provides detailed information about how promising young people view their future careers. These findings are expected to provide useful information for career consulting, and educational strategy development

2.1 Literature Review

The issue of understanding what students hope for in their future careers and what they value at work has become a key issue in educational research. A number of studies have analyzed how university students approach their future carreers:

According to Tomlinson, 2007, the subject you study determines how one views the career future. Students in direct career paths like engineering are more likely to feel confident about their job stability and income potential. Meanwhile, students in fields like humanities often express more uncertainty about their long term goals.

Jackson and Tomlinson, 2020 found that having a clear career plan indeed makes much difference to students. Those with defined paths not only feel more confident in terms of employability, but also likely to expect higher starting salaries.

According to Ng, Schweitzer, and Lyons, 2010 today's students seek a balance between pay and purpose in their future careers. Despite the importance of salary, students tend to prioritize other non monetary values like work life balance, supportive environment for personal and Professional growth.

The 2019 study by Nghia and Duyen, 2019 highlights how major fields shape career paths. For example, engineering students are much more income oriented whereas social science students value meaningful work. Also, students who have better academic records tend to have clearer career paths.

Based on the study conducted by METU FEN BİLİMLERİ ENSTİTÜSÜ, 2019, there is a distinct trends in career expectations across different faculties. Most of the engineering students split half between work and continuing to further education. On the other hand majority of social science students favor for graduate education.

All in all, the existing literature highlights students' career preferences are influenced by variety of factors such as economy, their field of study and what they personally value.

3 Methodology

This section describes the procedures used in the study, including the definition of the target population, sampling design, sample size determination, and data collection process.

3.1 Target Population

Target population for this study was chosen to be registered students of Middle East Technical University during 2025-2026 fall semester. Participation was not limited to undergraduates only, all currently registered student were eligible to participate.

3.2 Sampling Design

This survey was conducted entirely online and a combination of sampling methods were used throughout the scope of the surveying process, mainly Convenience and Snowball. Initial participants were reached through online department and pool course messaging groups as well as social media, and respondents were encouraged to share the survey with other METU students.

3.3 Sample Size Selection

The required sample size was determined using the Cochran formula (Cochran, 1977) for large populations to find the necessary minimum size to obtain reliable data from the survey.

$$n = \frac{Z^2 \cdot p(1-p)}{e^2} \tag{3.1}$$

Where:

- n is the sample size
- Z is the Confidence level (e.g., 1.96 for 95%)
- p is the estimated proportion
- e is the margin of error

Confidence level of $Z = 1.96$ was chosen, $p = 0.5$ since no prior information about the population proportion was available and $e = 0.05$ for the margin of error which resulted in

sample size being **n=385**.

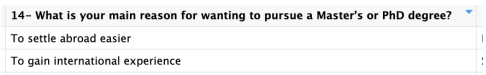
However due to time limitations and challenges in finding participants, this survey was not able to reach its intended limit and will continue its analysis through **n=230**.

3.4 Data Collection

Data was collected using a questionnaire created in Google Forms. It consisted of 29 questions and was opened in 3rd of November 2025 and was open until 1st of January 2026 for a total duration of 9 weeks. Participation was voluntary and entirely anonymous. No sensitive information was collected. It is estimated that the survey reached approximately 1000-1500 students and a total of 230 responses were collected. This results in a unit **non-response rate ranging between 77% and 84.7%**. The high rate was anticipated as online surveys have inherently lower participation.

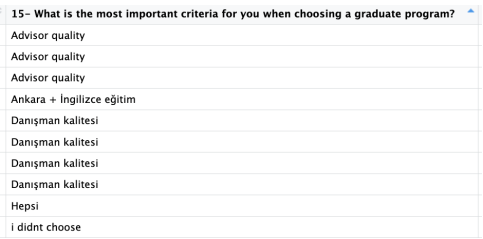
3.5 Data Cleaning and Preprocessing

- The survey was administered in two languages (Turkish and English) to better accommodate the participants. To achieve data consistency all Turkish answers were translated into English using translation function created for this project. After translation both dataset were merged into a single dataset using the consistent variable names.
- All student who answered others to the study year questions were converted to **non-undergrad**.
- All of preparatory years student GPA'S were converted to **Not Applicable** since these students do not possess an GPA yet.
- Written responses corresponding to "Other" options were grouped under a single **Other** category to reduce sparsity and improve interpretability.



14- What is your main reason for wanting to pursue a Master's or PhD degree?
To settle abroad easier
To gain international experience

Figure 3.1. "Other" for Post-Gradution Plans



15- What is the most important criteria for you when choosing a graduate program?
Advisor quality
Advisor quality
Advisor quality
Ankara + İngilizce eğitim
Danışman kalitesi
Danışman kalitesi
Danışman kalitesi
Danışman kalitesi
Hepsi
i didnt choose

Figure 3.2. Cleaned criteria for chosing programs

- Several questions were done by using a likert scale. to preserve the ranks they were converted into ordered categorical variables using `mutate` function inside the DPLYR package

Similarly, frequency-based questions (participation in skill-building activities and professional networking etc.) were standardized into ordered categorical variables to reflect increasing levels of engagement.

- Departments were grouped to create a new variable **Faculty** to allow for comparisons across academic units.
- Question 29 had ranking type form which was cleaned by extracting the number from text based responses such as "1-Most Important".
- Demographic variables such as age group, gender identity, department, and employment status were converted into categorical factors.
- All variables, factors and response categories were carefully checked for redundancy and ensure uniqueness.

3.6 Data Description

Some of the sample questions from the survey are as follows.

ID	Survey Question	Description
Q3	What is your current year of study?	**Categorical (ordinal)**
Q4	Please indicate your age group.	**Categorical (ordinal)**
Q5	Which of the following best describes your gender identity?	**Categorical (nominal)**
Q6	Please indicate your current cumulative GPA (on a 4.00 scale).	**Categorical (ordinal)**
Q13	After completing your degree, what is your primary plan?	**Categorical (nominal)**
Q15d	What is the most important criteria for you when choosing a graduate program?	**Categorical (nominal)**
Q16	Where would you ideally like to work five years from now?	**Categorical (nominal)**
Q17	What is your expected net monthly salary for your first full-time job (in TL)? Please specify an approximate range.	**Categorical (ordinal)**
Q19	Financial security is the single most important aspect when choosing my first job (1 = Strongly disagree $\rightarrow$ 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q20	I expect to stay at my first job for less than three years	**Categorical (ordinal Likert)**.

Continued on next page...

ID	Survey Question	Description
Q21	I believe my diploma alone will be enough for me to find a good job. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q22	I think I might need a second job to maintain a decent standard of living. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q23	Having flexibility (remote work, flexible hours) is a priority for me in a job. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q24	I am open to considering work opportunities abroad. (1 = Strongly disagree → 5 = Strongly agree	**Categorical (ordinal Likert)**)
Q25	I think work–life balance is more important than career prestige. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q26	I would accept a lower salary for a job that aligns with my values. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q27	I believe I need to work more than 40 hours a week to earn a high salary. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q28	I believe my long-term career success depends more on luck than on hard work. (1 = Strongly disagree → 5 = Strongly agree)	**Categorical (ordinal Likert)**
Q29	Please order the following from 1 (most important) to 5 (least important) according to your priorities. Each number can be used only once.	Rank "Work–life balance", "High salary and benefits, "Meaningful work (positive social impact)", "Career stability", "Autonomy and independence" **Categorical (ordinal Likert)**

4 Analysis and Findings

This section presents the results of the analysis conducted on the survey data collected from Middle East Technical University (METU) students. The analysis is structured around the research questions outlined earlier and aims to identify patterns, relationships, and differences in students' career expectations, work values, and post-graduation plans. Comparative analyses explore variations across faculties, demographic groups, and academic backgrounds. Visualizations are employed extensively to support interpretation and to highlight key trends in the data.

4.1 Descriptive Statistics

Table 4.1. Respondent Demographic and Academic Profiles

Table 4.1. Demographic Profile

Variable	*n*	%
Age Group		
Under 18	10	4.35%
18–20	69	30.00%
21–23	129	56.09%
24 and over	22	9.56%
Gender Identity		
Male	136	59.13%
Female	87	37.83%
Non-binary	3	1.30%
Prefer not to say	4	1.74%
Total	**230**	**100.0%**

Table 4.2. Academic Profile

Variable	*n*	%
Faculty		
Engineering	117	50.87%
Arts and Science	72	31.30%
Other Faculties	41	17.83%
Cumulative GPA		
0–2.0	19	8.26%
2.01–2.5	43	18.70%
2.51–3.0	38	16.52%
3.01–3.5	59	25.65%
3.51–4.0	62	26.96%
Not Applicable	9	3.91%
Total	**230**	**100.0%**

The data for the survey reveals that respondant profile is primarily male (**59.13%**) and with Female students accounting for **37.83%** which is as expected from as METU's student profile is predominantly male. The data consist mainly of individuals between the ages of 21 and 23 (**56.09%**). Academically Faculty of Engineering is the most populated faculty with over half of the participants belonging to it (**50.87%**). The surveyee's show high academic achievements with **52.61%** having cGPAs' over 3.01.

Table 4.2. Comparison of Salary Expectations and Academic Level

Table 4.2. Expected Net Monthly Salary

Salary Range (TL)	*n*	**%**
< 30,000	9	3.91%
30,000–49,999	37	16.09%
50,000–69,999	68	29.57%
70,000–99,999	77	33.48%
100,000+	26	11.30%
Prefer not to say	13	5.65%
Total	**230**	**100.00%**
Expected Salary (Mean)	68,521 TL	
Expected Salary (Median)	60,000 TL	

Table 4.3. Current Year of Study

Year of Study	*n*	**%**
3rd year	80	34.78%
2nd year	50	21.74%
1st year	48	20.87%
4th year	33	14.35%
Non-Undergrad	10	4.35%
Preparatory	9	3.91%
Total	**230**	**100.00%**

Nearly half of the total number of participants in the study (N=230) consist of either 3rd-year or 4th-year students. In terms of salary expectations most prefered range is 70.000-99.999 with **33.48%**. The mean expected salary for the total sample is approximately 68,521 TL.

Table 4.3. Descriptive Statistics for Career Priorities (Ranked 1–5)

Career Priority	**1 (Most)**	**2**	**3**	**4**	**5 (Least)**	**Avg. Rank**
Work–life balance	76	48	45	36	25	**2.50**
High salary & benefits	49	76	42	31	32	**2.66**
Autonomy & independence	48	33	40	50	59	**3.17**
Career stability	24	35	70	65	36	**3.23**
Meaningful work	33	38	33	48	78	**3.43**

When asked to rank five career aspects from 1 (Most Important) to 5 (Least Important), Work-life balance came out as the primary preference, taking the most first-place votes (76) and the lowest average rank of **2.50**. Meaningful work was the lowest collective priority, receiving the most last-place rankings (78) and an average rank of **3.43**. Overall, students prioritize immediate quality of life and salary over social contribution.

4.2 Exploratory Data Analysis

4.2.1 Visualizations and Analysis

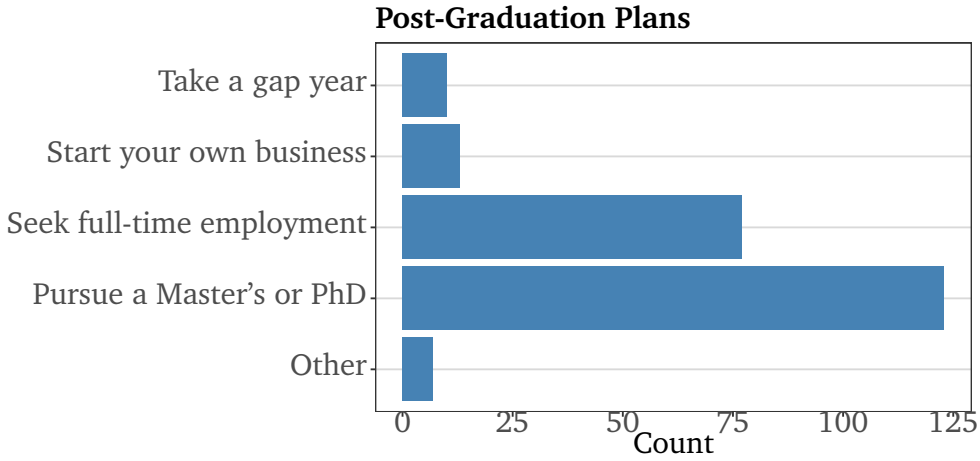


Figure 4.1. Post Graduation Plans

By examining post-graduation plans it can be seen that most participants plan to continue their education after graduation. Fresh graduates more likely to enter the job market immediately after graduation. The findings support the work of Tomlinson, 2007 where its concluded that current labor market conditions have a strong effect on job expectations. The high preference for postgraduate study may indicate that an undergraduate level of knowledge alone is no longer sufficient to find a job that meets expectations. Furthermore, the competitiveness of the industry is increasing highlight the fact that the higher the qualifications are the more the participants gain advantage and stand out.

After those who planning to continue their further education, those who target to seek full time employment make the largest second group, which is an expected outcome. In addition, small number of responses for others options such as taking a gap year or starting one's own business are also in line with expectations, since taking a gap year in Türkiye is not a common practice unlike many European countries. Similarly, starting a business creates challenges because it needs prior funding and handling these financial requirements is not an easy task for newly graduates. The remaining Others part contains participants planning to get married, fullfill military service, or those who have not yet decided their paths.

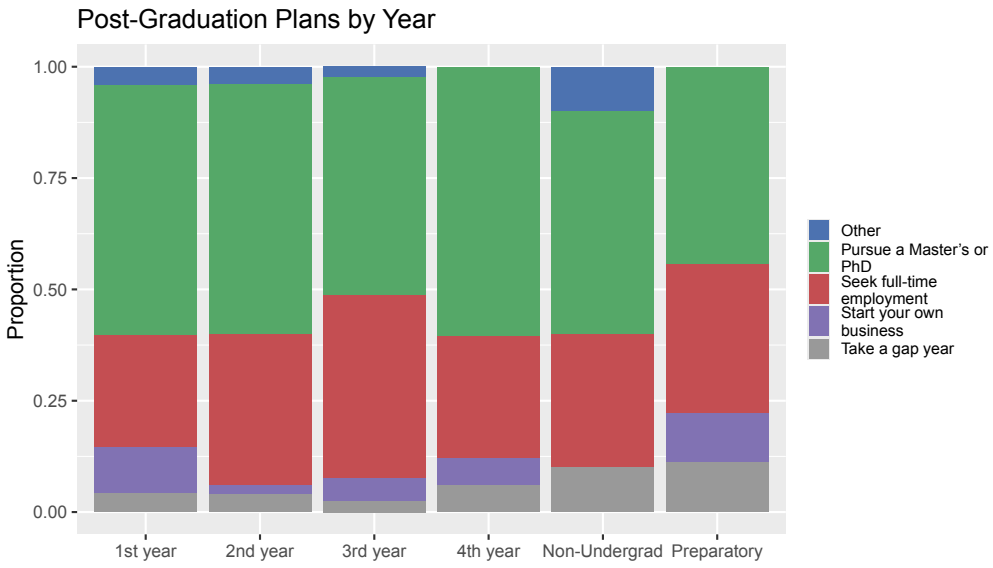


Figure 4.2. Post Graduation Plan by Year

The Figure 4.2 shows the year of study and career expectations after graduation accordingly. It can be seen that the majority of respondents are 3rd year students. This finding is crucial in terms of interpretability and consistency of the results, as the 3rd year is a key phase for shaping career paths. Generally students in their first half academic years consider wide range of possibilities whereas pivotal career decisions tend to become more serious and well defined by the second half. While pursuing Master's or PhD is the most common post graduation plan overall, third year students seem to prefer entering the workforce. One possible explanation for this might be the fact that in earlier academic years students often hold aspirations for continuing education abroad, but the more they make progress on their academic development they realize that such things require long term preparation. Students who feel unprepared for these requirements may automatically shift their focus to job market. For the fourth year students, it is possible to say that they demonstrate more defined career goals. At a rigorous academic institution like METU, decisions are often finalized by this stage and students engage in targeted efforts in order to make their goals into reality. The figures above confirms and effectively presents this progression.

In addition, the results also suggests that students at the begining of their academic journey hold more flexible career goals, which confirms the assumption that professional expectations are not yet fully decided and still evolving.

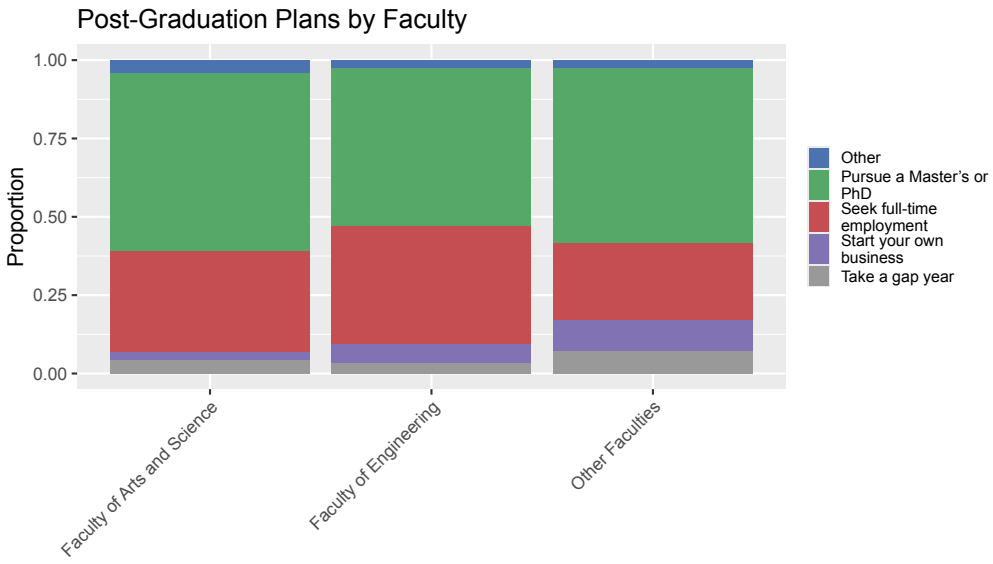


Figure 4.3. Post Graduation Plan by Faculty

Figure 4.3 displays results on a faculty based level. The results seem consistent with the overall pattern. Continuing to further educations and seeking full time employment are still the most common career preferences among faculties. Students from the Faculty of Arts and Sciences where the focus is more on fundamental sciences such as maths, biology, phyiscs and etc. show tendency towards pursuing Master's or PhD degree whereas students from more technical and practice oriented fields such as Engineering are more likely to enter the work-force after graduation, and show a stronger preference for full time employment compared to students from other faculties. Preferences for starting a business or taking a gap year more commonly observed in fields where academic pressure and stress levels are relatively low.

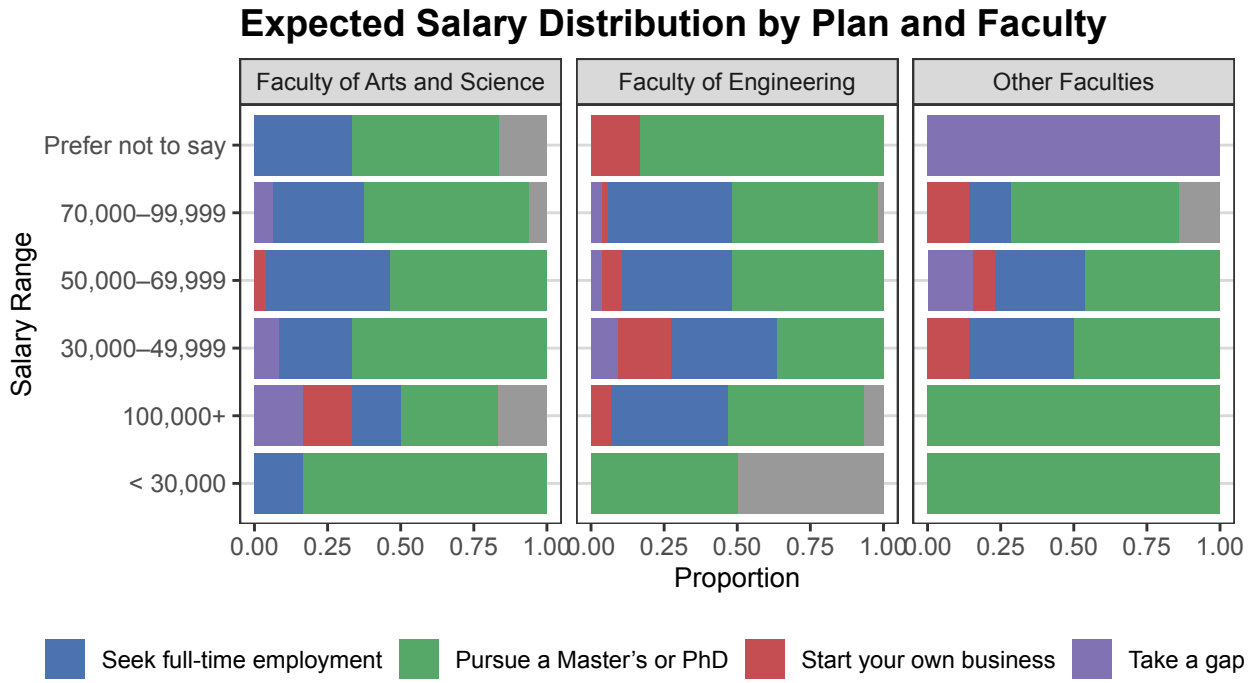


Figure 4.4. Expected Salary Distribution

In 4.4 we added post-graduation plans to our previous analyses and created a new graph. By adding graduation plans, we aim to determine whether high salary expectations are driven by immediate job entry or or academic purposes. An overall view of the graph confirms the vast majority of students plan to pursue Master's or PhD, aligns with the previous findings. Nevertheless, a notable paradox emerges when salary expectations are examined alongside these plans. It was already known that a master's and PhD were the primary plan for most students. They appear in every salary bracket, often as the dominant group. This suggests that most METU students do not see work and further study as an either or choice. Instead, for many, the plan is to do both and combine them. Given Türkiyes' economic pressures and the high cost of graduate education, it is a necessity for most students to fund themselves. Even so, in certain top salary brackets, students who prioritize academia sometimes report higher earning expectations than those who seek immediate full time employment. Perhaps, when answering this question, students were thinking about their expected salary after completing a master's degree, which explains higher expectations, since it is reasonable for employees with a Master's degree to expect higher salaries than those holding only a bachelor's degree.

Faculty of Arts and Sciences While decisions generally split between work and further study, expectations mostly align with these paths. An exception emerges among those planning to start their own business, many of whom report expectations above 100.000 TL. Such expectations may be unrealistic, contrasts with the realities of early entrepreneurship. Because in general, new entrepreneurs typically earn less in the early stages of their careers compared to

corporate employment.

Faculty of Engineering The distribution is more balanced. Within the most common expectation ranges 70,000–99,999 TL and 30,000–49,999 TL, the number of students seeking full time work is almost the same as those planning to continue their education. Notably, as expectations drop, career paths widen and interest in entrepreneurship becomes more common.

Other Faculties In the extreme brackets $> 100k$ and $< 30k$ the data indicates a 100% preference for graduate study, master or PhD plans. This uniformity is most likely due to the low number of responses in these categories rather than a generalized trend. Yet, in the middle ranges, the distribution becomes similar to that observed in other faculties.

All in all, although the extreme values display certain inconsistencies, the middle ranges suggest that students' expectations are consistent across career paths.

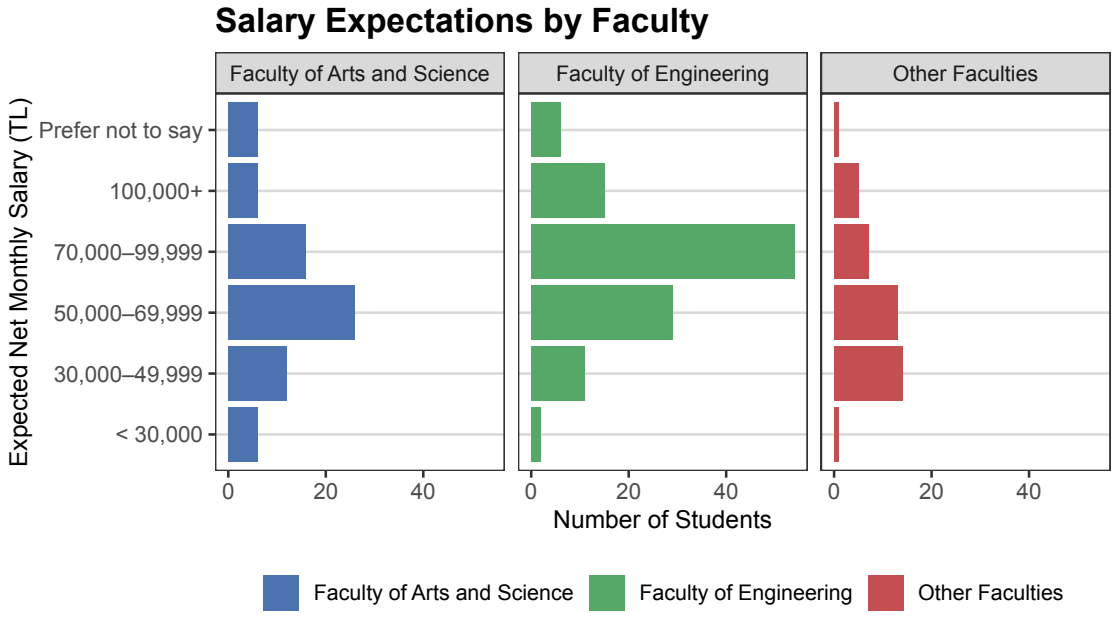


Figure 4.5. Expected Salary Distribution

Upon analyzing the salary expectations, it is possible to observe most METU students gravitate toward 70.000-99.000 TL range. Considering that the minimum wage in Türkiye is 28.075 TL, this range is equivalent to approximately **2.5 to 3** times the minimum wage. For fresh METU graduates, these expectations are quite reasonable and matches market standards. When examined by faculty, there is significant segmentation among faculties. Salary expectations of Engineering disciplines are notably higher compared to others with around 70.000- 99.000 TL band, whereas students in non-engineering departments gather around 50.000-69.999 TL mark. This results is also conclusive with Nghia and Duyen, 2019 where its indicated that engineering graduates tend to expect higher starting earnings.

Survey responses also show a significant number of students expect salaries in the 30.000-

49.999 TL range. This is particulary commmon in education, architecture, and administrative sciences faculties represented as “Others” in the graph. Most probably, this trend can be linked to market dynamics associated with high graduate supply in these fields across Türkiye. When expectations exceed 100.000 TL, the number of students drops significantly, with this range mostly occupied by a small group of engineering students. According to the common belief, starting with a salary higher than 100.000 TL might seem optimistic, since this amount is nearly 3.5 times the national minimum wage. Yet, when viewed within a broader perspective, salary expectations overall demonstrates a consistent and realistic pattern. It can be a said that METU students are navigating their future with a grounded sense of salary expectation.

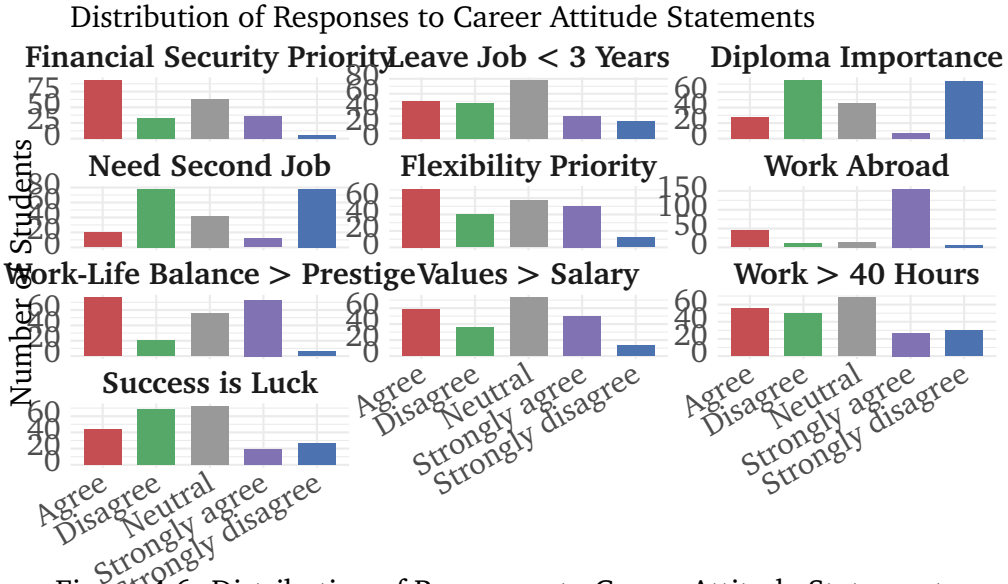


Figure 4.6. Distribution of Responses to Career Attitude Statements

This graph shows the dist of students’s responses to a series of statements measuring their career attitudes. A Likert Scale (Agree, Disagree, Neutral, etc.) was used.

Opennes to Working Abroad is the highest agreement appearing here indicating that this is a core career goal for METU students. It can be said that most students are aware that diploma alone is not sufficient or luck outweighs hard work and they seem to emphasize skill development and hard work. There is a strong disagreement with needing a second job suggesting the belief that a regular income from a single role being enough. Despite Work-Life Balance being prioritized over prestige, neutral responses to long working hours suggests acceptance of industry demands.

Figure 4.7. Career Priorities

Here career priorities were analyzed using a ranking scale where 1 = most important and 5 = least important.

The data reveals Work-Life Balance stands out as the highest priority among students. In both the private sector and academia, concepts like flexible working hours and having autonomy often foster an always-on culture, where the boundaries between professional obligations and personal life become blurred, lengthening the workday without a clear end. Clearly METU students are responding to this reality by prioritizing their well being and personal boundaries. Ranked second is the High Salary and Benefits. Naturally, financial security is one of the fundamental reasons for an ideal job, so seeing this as high priority is expected. Although high salary often ranks among the top priorities, there is a noticeable shift in student awareness. As mentioned earlier, students are now putting themselves first. They are well aware of the importance of money, but they value to have a balanced life rather than a high paycheck. Career stability is generally ranked as third or fourth priority. From this, it can be understood that students certainly want security and stability, however it is not a primary concern. This trend can be interpreted as reflection of METU students' confidence in their own employability. It is known that as long as an individual improves their skills and enhance their ability to quickly adapt to innovations is unlikely to face difficulties maintaining a job. When we look at Autonomy and Independence, we see that the responses are considerably mixed. To some students it is high priority, others place it last, resulting in a relatively balanced distribution across all rankings. Students consider Independence as a nice to have bonus, rather than a core necessity. The general conception is that while autonomy is appreciated, it is not a deal breaker if the job does not offer it. Lastly, Social Impact is observed often placed at the bottom of the list. For a generation where career planning becomes more self focused, personal mental health and

financial security are prioritized, it is a rational outcome that broader social impact is viewed as secondary concern. The analysis supports the conclusions drawn in Ng, Schweitzer, and Lyons, 2010.

In general, the responses show that students are globally focused, aware of skill demands and willing to work hard, but expecting financial security and a balanced use of their time in return.

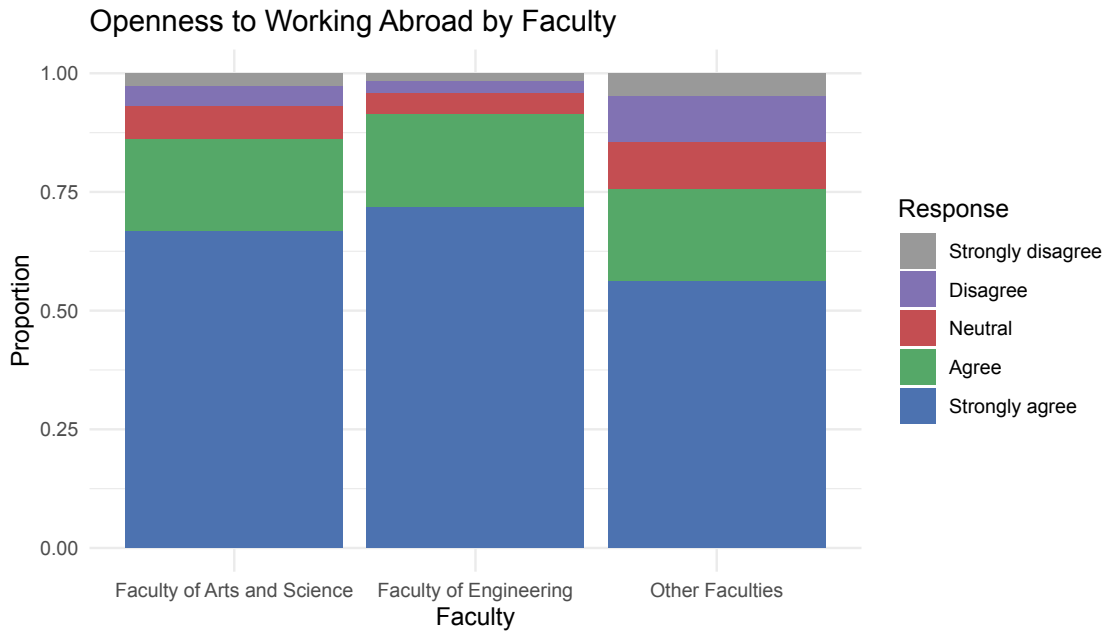


Figure 4.8. Openness to Working Abroad

This graph adresses one of the core research questions of our survey: the potential for Brain Drain. There is currently a strong desire among students at Türkiye's top tier universities to start careers abroad, with METU being one of the centers of this trend. Across all faculties, the vast majority has a strong inclination to work abroad. While some plan to go immediately after graduation, others may prefer to gain local industry experience first; the concept of an international career remains a widely accepted open door. Students are primarily motivated by the belief that work opportunities, life quality and social welfare are better abroad. However, it is an undeniable fact that reality of living abroad does not always align with expectations. As a result, although the desire to migrate is strong, its long term sustainability relies on factors thet extend beyond salary considerations.

Table 4.4. Kruskal-Wallis Test Results: Openness to Working Abroad by Faculty

Variable	χ^2 **Statistic**	**df**	***p*-value**
Openness to Working Abroad	0.784	2	0.676

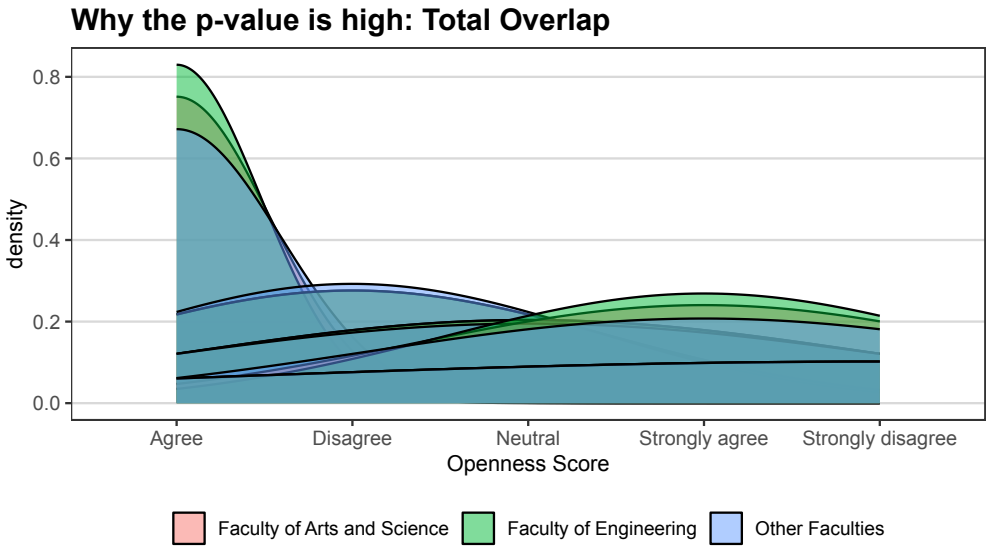


Figure 4.9. P-value Visualization

This graph explains why the p-value is high by showing that the distribution curves overlapping for all faculties. It indicates opennes scores do not vary and are consistent across majors which suggests faculty alone is not a distinguishing factor.

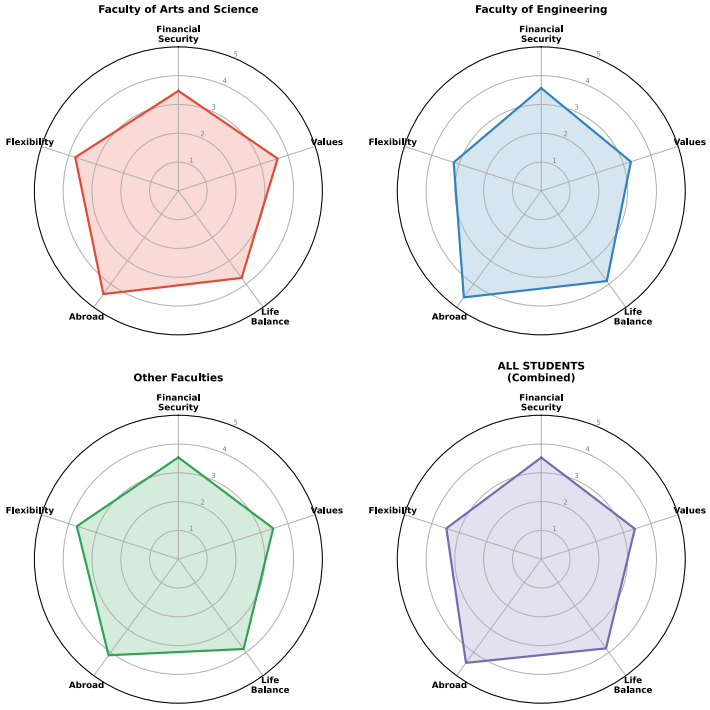


Figure 4.10. Spider(Radar) Chart for Ranking Priorities

The radar charts illustrates the distribution of five key career motives: Financial Security, Flexibility, Abroad, Life Balance and Values across different faculties. It is possible to say that

there is a structural homogenity accross disciplines, they almost overlap with the overall student profile. It suggests that to METU students, academic major is not a primary indicator of career drivers, instead a common generational attitudes or socioeconomic set of priorities seem to be shared university wide. The charts obviously highlights two dominant motivators : Financial Security and Abroad, which perfectly aligns with our previous findings. These categories peak sharply on every chart, representing top priorities. Conversely, other career drivers can be classified as secondary and hold less weight. Factors such as Flexibility or Values score notably lower. Although Life Balance is moderately important, it is still overshadowed by the top concerns discussed earlier. All in all, the data reveals an outcome-focused mindset. METU students seek tangible rewards of financial stability and international career by ranking Financial Security and Abroad as top regardless of their field of study.

4.2.2 Statistical Analysis

Table 4.5. Kruskal-Wallis Test Results: Career Priorities by Faculty

Career Priority Aspect	**Chi-squared (χ^2)**	**df**	**p-value**
Work–life balance	1.7389	2	0.4192
High salary & benefits	4.8709	2	0.0876
Meaningful work	0.2579	2	0.8790
Career stability	1.5179	2	0.4682
Autonomy & independence	0.5228	2	0.7700

All tested career priorities showed $p-value$'s greater than standard alpha value of 0.05 against faculties which indicates no significant differences between each priority and faculty.Each aspect is prioritized similarly regardless of whether a student is in Engineering or Arts and Science .

Table 4.6. One-Way ANOVA: Expected Salary by Primary Post-Graduation Plan

Source of Variation	**df**	**Sum Sq**	**Mean Sq**	**F-value**	**Pr(>F)**
Primary Plan	4	3.36	0.8396	0.605	0.659
Residuals	225	312.12	1.3872		
Total	**229**	**315.48**			

The One-Way ANOVA was conducted to determine if there is a statistically significant difference in mean salary expectations across different primary post-graduation plans among the respondents. The assumption of homogeneity of variance was assessed using.`levene.test`.The results were $F-value = 2.2228$, $p-value = 0.1107$ meaning the variances in salary expectations were constant across faculties. The assumption of the ANOVA test was satisfied.

The results show that the primary plan does not significantly influence a student's expected income, as the F-value of 0.605 yielded a $p-value = 0.659$. Since the p-value is higher than

the standard significance level of 0.05, we fail to reject the null hypothesis. Which means there is no significant difference in salary expectations regardless of the students primary plans.

This finding also supports the Kruskal-Wallis results, which also showed no significant salary variation across Faculties ($p - value = 0.08756$).

Table 4.7. Multiple Regression Analysis: Predictors of Expected Salary

Predictor	**Estimate (β)**	**Std. Error**	**t-value**	**Pr($>|t|$)**
(Intercept)	3.0844	0.2350	13.125	$< 2 \times 10^{-16}$ ***
GPA (numeric)	-0.0070	0.0530	-0.133	0.8943
Gender	-0.0217	0.1442	-0.151	0.8804
Faculty: Engineering	0.5950	0.1575	3.777	0.0002 ***
Faculty: Other	-0.1029	0.2040	-0.505	0.6144
F-statistic: 4.673 on 6 and 203 DF, p-value: 0.0001783				
Multiple R-squared: 0.1214, Adjusted R-squared: 0.0954				

A multliple regression analysis was conducted to see if the salary expectation could be predicted by other variables. Diagnostics plots were checked to asses the models validity.The Residuals vs. fitted line showed a relatively horizontal trend line despite being a discrete variable. The Normal Q-Q plot indicated that residuals followed the theoretical diagonal line closely, supporting the assumption of normality. Small deviation were detected however due to sample size(n=230)the model fell under Central Limit Theorem and thus was normal and no outliers were found. All of the assumptions of regression were met.

The results show that GPA ($p - value = 0.8943$) , Gender ($p - value = 0.8804$) are insignificant. there is no statistically meaningful differantiation between students with higher GPA and lower GPA and in between male and female students. Faculty of engineering is highly significant ($p - value = 0.000208$). when other factors are constant for every one unit increase of faculty of engineering stundents salary expectations are expected to inrease by 0.5950.

The model is a significant ($p - value = 0.0001783$) but bad fit. It only explains about 12.14% of the total variability in the model.

Table 4.8. One-Sample t-test Results: Are Student Opinions Significantly Different from Neutral (3.0)

ID	Topic Description	Mean	SD	p-value	Result
Q19	Financial Security Priority	3.53	0.99	$< .001$	Significant (Agree)
Q20	Leave Job < 3 Years	3.06	1.17	0.431	Not Significant
Q21	Diploma is Enough	2.21	1.11	$< .001$	Significant (Disagree)
Q22	Need Second Job	2.17	1.15	$< .001$	Significant (Disagree)
Q23	Flexibility Priority	3.47	1.16	$< .001$	Significant (Agree)
Q24	Work Abroad	4.45	0.97	$< .001$	Significant (Strong Agree)
Q25	Work–Life Balance > Prestige	3.83	1.06	$< .001$	Significant (Agree)
Q26	Values > Salary	3.42	1.16	$< .001$	Significant (Agree)
Q27	Work > 40 Hours	3.00	1.21	0.956	Not Significant
Q28	Success is Luck	2.83	1.12	0.022	Significant (Slight Disagree)

Note: Tested against test value $\mu = 3$ *(Neutral). Significance level* $\alpha = 0.05$.

Even though these items in the Likert scales were ordinal and did not attain perfect normality, the conduct of One-Sample t-tests was justified by The Central Limit Theorem in consideration of the very large sample (N=230). The t-test results ($\mu = 3$, $\alpha = 0.05$) revealed significant differences from neutral positions across most career-related attitudes. Students demonstrated strong agreement with working abroad ($p - value < 0.001$) and prioritized work-life balance over prestige ($p - value < 0.001$). Financial security emerged as a significant priority ($p - value < 0.001$), while students significantly disagreed with needing second jobs ($p - value < 0.001$) and attributing success to luck ($p - value = 0.022$).

Agreement was also found regarding diploma importance ($p - value < 0.001$), flexibility priority ($p - value < 0.001$), and salary values ($p - value < 0.001$). Students showed no significant differences in opinions on leaving jobs within three years ($p - value = 0.431$) and working over 40 hours weekly ($p - value = 0.956$).

4.3 Findings

- Anova table revealed that there is no significant difference in salary expectation across faculties
- Multiple Linear Regression model provided only Faculty of Engineering was significant in predicting salary expectations.
- Kruskall-Wallis test showed openness to working abroad does not cause variations among different faculty
- Students agreed on diploma sufficiency , flexibility in the work place and expection a lower salary tofind a job that aligns with their values were of importance to them.

5 Conclusions and Discussion

This chapter summarizes the key findings of the study regarding the post-graduation plans and career motivations of university students. It synthesizes the results presented in the previous analysis chapters to answer the research questions defined at the beginning of this project. Additionally, this chapter discusses the limitations encountered during the data collection process and provides recommendations for future research to address these challenges.

5.1 Discussion

The purpose of this study was to explore METU students' career expectations after graduation. When considered alongside existing literature, the results point to clear patterns in economic goals, work related values and global mobility preferences.

Salary Expectations Across Faculties The analysis reveals clear faculty based differences in salary expectations. Engineering students mostly expect starting salaries in 70.000 -100.000 TL range, whereas students from other faculties point 50.000-70.000 TL band. This finding aligns with Tomlinson, 2007 and Nghia and Duyen, 2019, who argue that students in technically oriented fields expect higher salaries due to their perceptions of the labor market.

Work-life balance emerged as the highest ranked career priority,whereas meaningful work or social impact was often ranked last. While this finding is consistent with Ng, Schweitzer, and Lyons, 2010regarding the importance of balance for Gen Y/Z, our results suggest a more pragmatic orientation. METU students prioritize their well being and financial security over social impact suggesting a move toward self preserving priorities rather than idealistic ones. n

The strong desire to continue further education and work abroad is consistent with previous findings on METU students (METU FEN BİLİMLERİ ENSTİTÜSÜ, 2019). High agreement on openness to international work, along with well defined salary expectations among students with clear career goals support Jackson and Tomlinson, 2020, who associate career planning with greater confidence and certainty.

Perhaps the most notable contribution of our study is the total overlap observed in Radar Charts and Density Plots regarding student values such as openness and flexibility. While Tomlinson, 2007 suggests significant disciplinary differences in career attitudes, our findings suggest values remarkably homogeneous across faculties.

In summary, despite disciplinary variation in financial expectations, students share common core values emphasizing balance, stability and international mobility; reflecting a generation

that acknowledges market conditions with strong expectations for quality of life.

5.2 Conclusion

This study was conducted within the scope of STAT365: Sampling and Survey Techniques Course, aimed to examine the post-graduation career goals of METU students. Data were collected through a combination of face to face and online methods, followed by careful data cleaning and statistical analysis. After these steps, findings were compared to existing literature to maintain consistency.

In general, the results supports our initial hypothesis and reflect common generational trends. The data points to a stable, realistic and well-defined student mindset characterized by self awareness.

METU students show clear understanding of job market dynamics, emphasizing that success requires more than a diploma. They prioritize sustainable career paths, value personal life, and financial independence, and acknowledge working abroad as a strategic option.

Overall, the study presents a generation that values realism alongside ambition, actively shaping career plans by combining personal well being and professional growth.

6 References

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Tomlinson, Michael (2007). "Graduate employability and student attitudes and orientations to the labour market". In: *Journal of Education and Work* 20.4, pp. 285–304. DOI: 10.1080/13639080701650164. URL: https://doi.org/10.1080/13639080701650164.

APPENDIX A

SAMPLE CODES

```
library(dpylr)
data_clean <- data_clean %>%
  mutate(
     temp_gpa = as.character(‘6- Please indicate your current cumulative GPA (or
    temp_gpa = case_when(
      ‘3- What is your current year of study?‘ == "Preparatory" ~ "Not Applicabl
    ‘6- Please indicate your current cumulative GPA (on a 4.00 scale).‘ = factor
      temp_gpa, levels = gpa_levels_exact, ordered = TRUE) )

    # Rank distribution plot
p13 <- ggplot(ranking_vars, aes(x = Rank, fill = Factor)) +
  geom_bar() +
  facet_wrap(~ Factor) +
  labs(title = "Career Priorities", y = "Frequency", x = "Rank") +
  theme(legend.position = "none") +
  scale_fill_manual(values = career_palette)
```

All codes and data used for this analysis are available on GitHub: https://github.com/idiltuzkaya/stat365_project