

Pilot Study of Gen Z Candidates For Successful Employment on the U.S. Job Market

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Pilot Study of Gen Z Graduates For Successful Employment on the U.S. Job Market

Abstract

Organizations face several challenges in retaining skilled talent due to the unpredictable job market and the rise of Gen Z employees. Studies reveal that this generation, born in or after 2000, is likely to change at least ten to fifteen jobs throughout their careers and tends to stay at a single job for less than three years on average. Then, highlighting the importance of understanding the factors that influence job retention among Gen Z, particularly within the context of international STEM graduates who is crucial in addressing workforce shortages in the U.S. While existing literature has explored general trends in Gen Z employment behaviors, there is limited research focusing on international graduate students in STEM fields, especially those from Asia and India, who contribute significantly to the U.S. economy. Gen Z faces several barriers in finding jobs that align with their skills and aspirations. However, their specific employment preferences and retention factors remain underexplored. This study investigates the employment priorities of international graduate students from a U.S. regional university in the Midwest, focusing on factors that will keep them in or chase them from an organization. The study seeks to provide insights into what motivates these individuals to remain employed at a single workplace for over three years or to leave within the first year. The research utilized survey responses from two cohorts of international graduate students, collected in Fall 2023 (referred to as Cohort 1) and Spring 2024 (referred to as Cohort 2). A total of 50 participants (25 from each cohort) completed questionnaires addressing two key topics: (a) factors that would encourage them to stay with the same organization for more than three years, and (b) factors that would lead them to leave within one year of employment. The collected data was categorized into different tables by counting the occurrences of each factor. This data was then plotted in Microsoft Excel to uncover insights. The findings reveal that international graduates in the U.S. list factors such as salary increase, positive relationships with colleagues, and a supportive work environment when considering long-term employment. Conversely, dissatisfaction with these elements often drives early job transitions. The study highlights actionable insights for organizations aiming to retain international Gen Z STEM talent. By addressing the unique preferences and challenges faced by this demographic, employers can create strategies that not only improve retention rates but also foster a more inclusive and sustainable workforce.

Literature Review

U.S. Education System and Opportunities

The U.S. higher education system is among the top due to its advanced infrastructure, diverse academic and career-oriented programs, reason for its preferred destination for international students. Factors such as access to cutting-edge research facilities, innovative teaching methods, and wide professional networks contribute to this appeal. Moreover, the integration of technology in education advances learning and innovation, which enhances the educational experience [1], [2], [3]. Despite these strengths, international students encounter challenges in adapting to academic environments characterized by different teaching methods, language barriers, and social integration issues. These challenges feature the need to implement support mechanisms that encourage smoother, cultural, and academic adjustments. In the workforce, the transition from education to employment poses additional obstacles. According to [4], during the pandemic, while remote work provided flexibility, it blurred boundaries between personal and professional lives, impacting work-life balance. At the same time, many organizations seek to attract young talent by aligning benefits with generational preferences, particularly those of Gen *Z*, who are entering the workforce with distinct expectations [5].

Gen Z Expectations in the Workplace

Gen Z professionals are reshaping workplace dynamics with their focus on technological proficiency, flexible work arrangements, and meaningful job roles. For example, [6] showed that this generation prioritizes work-life balance, growth opportunities, and positive organizational cultures. However, employers struggle to meet these expectations, which necessitate adaptive management strategies to attract and retain Gen Z talent. Moreover, motivational factors for Gen Z include job satisfaction, goal achievement, and strong interpersonal relationships at work. Conversely, traditional factors like job security and workload are less significant to them [7]. To appeal to this generation, organizations should provide benefits, including practical learning opportunities and rewarding career paths, alongside financial encouragement [5].

Comparing Gen Y, also known as millennials, to Gen Z, there exist differences despite many similarities. For example, both generations would prefer an increase in base pay and a technology-driven workplace. However, regarding rewards, Gen Y prefers benefits and increased salary, while Gen Z would go for growth and other non-financial rewards [8]. On the other hand, [9] analyzed the workplace expectations of Gen Y and Gen Z and found that higher salary, recognition, flexible hours, and a good work environment constitute the most prominent factors for both generations.

Challenges for International Students STEM Graduates

International STEM students, particularly from Asia, bring exceptional qualifications and unique cultural perspectives to the U.S. workforce. However, they often struggle with adapting to new cultural and professional environments, including navigating language barriers and acculturation challenges, which can affect their mental health and job performance [10]. While [11] stated that the number of Asian students in U.S. universities has been increasing in STEM degrees for many decades, other authors support that the U.S. remains the largest destination country for Asian students, with China being the largest source country for enrollment, followed by India, South Korea, and Saudi Arabia at both undergraduate and graduate levels [12]. Despite many obstacles, the U.S. continues to attract a significant number, particularly in STEM fields, where they consistently outperform other ethnic groups academically due to a strong cultural emphasis on education [11], [13]. Yet, cultural differences, such as collectivist versus individualist values, can create misalignment between their expectations and the realities of the U.S. job market. Additionally, restrictive immigration policies, including visa constraints, limit their ability to secure jobs up on their qualifications. These often force them to accept positions below their skill level or leave the country entirely, resulting in higher turnover rates [12], [14].

Strategies for Workforce Integration

Given the evolving demands of the global workforce, policies that promote the inclusion of international STEM graduates are critical. For example, reforms in immigration processes, targeted mentorship programs, and tailored support systems are needed to address cultural and professional adaptation [15]. Simultaneously, strategies to meet Gen Z's expectations, such as flexible work environments, tailored training programs, continuous professional development, mentorship, and inclusive organizational cultures, can enhance their integration and retention [16]. Recent studies [17], [18] highlighted that technological advancements align with Gen Z's preferences and provide opportunities to leverage their skills, particularly in remote settings.

Role of Technology and Future Directions

Technological advancements and the rise of artificial intelligence have amplified the demand for skilled professionals. This perfectly aligns with Gen Z and international STEM graduates' interests, as they are eager to engage with cutting-edge technologies upon graduation [16]. Also, remote work technologies, in particular, offer flexible options that resonate with Gen Z's priorities for work-life balance and career satisfaction [7]. Also, international Asian STEM students in the U.S. primarily focus on information and technologies. Therefore, Gen Z international Asian STEM graduates could become even more attractive job candidates if their education emphasizes practical experience and soft skills development, including interactions with business professionals. By preparing these students to adapt to various work environments, they would be better positioned to enter the workforce successfully [17].

Despite some employers' commitment to accommodate younger workers, particularly Gen Z, the U.S. system presents numerous challenges for international graduates seeking employment. These obstacles include strict visa regulations, work permit issues, retention challenges in a globally competitive market, cultural and social differences, work-life balance concerns, and the underrepresentation of minority groups [2], [19]. Therefore, by addressing barriers such as visa restrictions and employment authorization and providing an environment with cultural and professional growth, organizations can better position themselves to leverage the talents of this highly skilled, diverse workforce.

This pilot study is a non-experimental, quantitative survey analysis. The study examines the job expectations and motivations of Gen Z international Asian STEM graduate students in the U.S. Then, provide actionable insights to help employers align their strategies to attract and retain this invaluable talent pool. In addition, it identifies factors that influence Gen Z's decisions to stay with or leave a company, focusing on their expectations when entering the U.S. job market post-graduation. The research is valuable for employers to understand and potentially meet these applicants' expectations. The study surveyed 50 international Asian STEM graduate students from Cohort 1 and Cohort 2 in the Midwest U.S. in Kansas. Participants were asked about factors that would keep them at a company for over three years and those that would cause them to leave within a year. The paper presents the case study results, analyzes the data, and concludes with the findings.

Case Study

The qualitative study presented in this paper is an exploratory study that involved a total of 50 participants, divided into two cohorts of international Asian graduate students. Data from Cohort 1 were collected in Fall 2023, and data from Cohort 2 were collected in Spring 2024, each cohort made up of 25 participants. The study focused on international Asian graduate students as they constitute a large proportion of international students in the U.S. and, therefore, are likely to make up a significant share of graduates entering the job market.

To obtain the data, participants completed a survey consisting of two questions. The first question asked them to list and rank factors that would motivate them to stay at the same company for more than three years. The second question asked about factors that would lead them to leave a company within a year. For the first question, participants ranked their responses on a scale of 1 to 4, with 1 representing the highest preference and 4 the lowest preference. For the second question, they ranked their responses on a scale of 1 to 2. Additionally, participants provided brief explanations for each factor provided for each question. The responses are summarized in Tables 1 and 2.

| Questions | Rank | Factors | Description | Questions | Rank | Factors | Description | | |
|---|------|--------------------------------------|---|---|------|--|---|--|--|
| /ou at 10re | 1 | Recognition | Appreciating the work done by each worker | /ou at 10re | 1 | Professional growth | Growing to senior-level positions and working on good projects. | | |
| keep y y for n | 2 | Salary | Hikes in salary at equal intervals of time | keep y for n | 2 | Salary increments | Efficient pay | | |
| What factors will keep you at the same company for more than 3 years? | 3 | Development/Gr owth | Growth in one individual position | What factors will keep you at the same company for more than 3 years? | 3 | Flexibility/ Good work environment | Flexibility in the workplace and time. Good relationship with colleagues | | |
| What factors the same com than 3 years? | 4 | Work environment | A positive work environment among employees | What factors the same com than 3 years? | 4 | Job security | Not taking off projects suddenly. Need to give a notice period. | | |
| ce n | 1 | Improper work en | vironment | n | 1 | Improper work e | nvironment | | |
| What will force you to leave in less than a year? | 2 | Hostile relationshi | ps | What will force you to leave in less than a year? | 2 | Lack of progress | , support for growth | | |
| at the an 3 | 1 | Challenging work/Career growth | Work should be interesting and not monotonous | at the an 3 | 1 | Work-life balance | Having flexible work timings | | |
| keep you r more th | 2 | Salary | Salary is based on my efforts to get the work done. Salary increments | keep you r more th | 2 | salary | Salary needs to be paid or matched to my expectations and worth | | |
| What factors will keep you at the same company for more than 3 years? | 3 | Work environment | Friendly colleagues, stress- free environment, unbiased treatment | What factors will keep you at the same company for more than 3 years? | 3 | Growth | Professional growth should be continuous | | |
| What fac same cor years? | 4 | Job security | During a recession or layoffs, one should not be fired for lame reasons | What fac same cor years? | 4 | Continuous learning | Expansion of knowledge and skill set | | |
| | 1 | Career growth | | | 1 | Stress from work | ting long hours | | |
| What will force you to leave in less than a year? | 2 | Biased gender trea | tment | What will force you to leave in less than a year? | 2 | Not getting recog | gnized | | |
| t at the an 3 | 1 | Relationship with employees | Healthy, competitive relationships with employees | t at the an 3 | 1 | Salary | Regular salary increments, bonuses, and health insurance | | |
| ill keep you at the for more than 3 | 2 | Extra benefits | Insurance, paid vacations, extra bonuses, and appreciation for extra efforts | ill keep you at the for more than 3 | 2 | Work environment | Friendly people around us, managing the behavior of employees and equipment | | |
| tors w npany | 3 | Flexibility in time | Enough time to complete work | tors w npany | 3 | Quality time of vacation | Yearly paid holidays, resorts provided, company trips | | |
| What factors will same company foi years? | 4 | Work environment | Good atmosphere, providing resources to employees | What factors will same company for years? | 4 | Appreciation for the work done | Recognition, giving feedback, and awarding rewards for particular projects | | |
| to ss r? | 1 | | not appreciate the work done | to SS r? | | | | | |
| What will force you to leave in less than a year? | 2 | Improper work en | vironment | What will force you to leave in less than a year? | 2 | Negative work e | nvironment | | |

Table 1: Factors that will keep international student employees in the same company for over three years and force them to leave in less than a year – Cohort 1.

| Questions | Rank | Factors | Description | Questions | Rank | Factors | Description | | |
|---|------|--|--|---|--|---|--|--|--|
| at e than | 1 | Adjusted to the work culture | Process of work delivery, colleagues' mindsets | at e than | 1 | Annual salary | Annual salary needs to be \$10,000 per month | | |
| ep you or more | 2 | Comfort zone | Make local friends and build new relationships | sep you or more | 2 | Job location | Flexibility to go to work | | |
| rs will ke ompany f | 3 | Promotion | Get a promotion based on experience | rs will ke ompany f | 3 | Better job opportunity | Flexibility in the workplace and time. Good relationship with colleagues; promotions | | |
| What factors will keep you at the same company for more than 3 years? | 4 | Avoidance of risks in a new environment | Cannot take risks to start again and adjust to a new company's culture | What factors will keep you at the same company for more than 3 years? | 4 | Work recognition | Work recognition by the manager | | |
| ill u to less ear? | 1 | Raise in pay at a r | new company | ill u to less ear? | 1 | Frequent chang | es in the work domain/software | | |
| What will force you to leave in less than a year? | 2 | Chance of meetin other countries | g new people and traveling to | What will force you to leave in less than a year? | 2 | Work location | cation | | |
| ଧୁ | 1 | Salary | Annual salary package \$100,000 | ə | 1 | compensation | Increase every 6 months by 7% | | |
| you at th e than 3 | 2 | Good relationship with the boss | Cannot work where not getting along with the boss | you at the the the the the the the the the th | 2 | Work benefits | Rewards and appreciation for performance | | |
| What factors will keep you at the same company for more than 3 years? | 3 | Work-life balance | Balance in personal and professional life | What factors will keep you at the same company for more than 3 years? | 3 | Flexible work | Professional growth should be continuous and reviewed each month (medical allowance) | | |
| What facto same com years? | 4 | Growth | Number of years of experience; Learning new things | What facto same comp years? | 4 | Job location | Providing travel facilities | | |
| to ess ar? | 1 | Culture - Adaptability of employees | | l to ess ar? | 1 | Toxic relationships with other employees | | | |
| What will force you to leave in less than a year? | 2 | Leadership – If m | y leader is unable to lead me | What will force you to leave in less than a year? | 2 | Lack of growth lonely work-life | (professionally, skills, and a e) | | |
| same company | 1 | Monetary rewards | Provide insurance, bonuses, and trips | same company | 1 | Good work balance | Good work balance is essential to complete daily tasks efficiently and maintain healthy relationships with family. | | |
| | 2 | Job security | Not laying off according to the profits or losses of the organization | at the sa | 2 | Timely salary revision | Regular quarterly increment of 20% of the annual salary | | |
| keep you ears? | 3 | promotion | Receiving promotions regularly | keep you ears? | 3 | Regular extracurricula r activities | Build a friendly environment in the workplace | | |
| What factors will keep you at the for more than 3 years? | 4 | Good relationship with upper management / Work-from- home | Being friendly with managers and team members / Opportunity to work from home, not from the office | What factors will keep you at the for more than 3 years? | 4 | Cooperative manager and colleagues | An understandable manager who approves of leaves | | |
| ill u to less ear? | 1 | Work pressure – A salary | Assigning more work for less | ill u to less ear? | 1 | | environment – Be on the bench ation for more than 6 months. | | |
| What will force you to leave in less than a year? | 2 | Unfair politics – employees | What will force you to leave in less than a year? | 2 | Personal reasons – No salary increments for one year | | | | |

Table 2: Factors that will keep international student employees in the same company for over three years and force them to leave in less than a year - Cohort 2.

Tables 1 and 2 present survey results from participants in Cohort 1 and Cohort 2, respectively. Each table includes six subgroups of responses, with four factors rated 1 to 4 that encourage international student employees to remain with a company for over three years. Conversely, two factors rated 1 and 2 are associated as reasons for these employees to leave a company within a year. The following section offers an in-depth analysis of the data in Tables 1 and 2, focusing on the key factors identified by participants.

Data Analysis and Interpretation

The participant responses presented in Tables 1 and 2 were organized based on the frequency of factors identified by each cohort. Rankings were subsequently assigned according to these responses. Using this approach for each cohort generated the data in Tables 3 to 6.

| Table 3: Factors | that will kee | p international | graduate | student | employees | in the | same |
|------------------|----------------|-----------------|------------|---------|-----------|--------|------|
| company for over | three years an | d their ranking | s - Cohort | 1. | | | |

| Ranking and Total | Rank 1 | Rank 2 | Rank 3 | Rank 4 | Total Points | Rank of each factor |
|----------------------|--------|--------|--------|--------|-----------------|------------------------|
| Factors | | | | | | |
| Recognition | 1 | 0 | 0 | 1 | 5 | 5 |
| Salary | 1 | 4 | 0 | 0 | 16 | 1 |
| Growth | 2 | 0 | 2 | 0 | 12 | 2 |
| Work Environment | 0 | 1 | 1 | 2 | 7 | 4 |
| Flexibility | 1 | 0 | 2 | 0 | 8 | 3 |
| Job Security | 0 | 0 | 0 | 2 | 2 | 8 |
| Continuous Learning | 0 | 0 | 0 | 1 | 1 | 9 |
| Relationship with | 1 | 0 | 0 | 0 | 4 | 7 |
| Employees | | | | | | |
| Benefits | 0 | 1 | 1 | 0 | 5 | 5 |

Table 4: Factors that will keep international graduate student employees in the same company for over three years and their rankings - Cohort 2.

| Ranking and Total Factors | Rank 1 | Rank 2 | Rank 3 | Rank 4 | Total Points | Rank of each factor |
|---------------------------------|--------|--------|--------|--------|-----------------|------------------------|
| Recognition | 0 | 0 | 0 | 1 | 1 | 10 |
| Salary | 4 | 1 | 0 | 0 | 19 | 1 |
| Growth | 0 | 0 | 0 | 1 | 1 | 10 |
| Work Environment | 1 | 0 | 2 | 0 | 8 | 2 |

| Flexibility | 0 | 1 | 1 | 1 | 6 | 3 |
|-----------------------------|---|---|---|---|---|----|
| Job Security | 0 | 1 | 0 | 0 | 3 | 7 |
| Relationship with Employees | 0 | 1 | 0 | 1 | 4 | 5 |
| Benefits | 0 | 1 | 0 | 0 | 3 | 7 |
| Comfort Zone | 0 | 1 | 0 | 0 | 3 | 7 |
| Promotion | 0 | 0 | 2 | 0 | 4 | 5 |
| Work-Life Balance | 1 | 0 | 1 | 0 | 6 | 3 |
| Job Location | 0 | 0 | 0 | 1 | 1 | 10 |
| Risks to start again | 0 | 0 | 0 | 1 | 1 | 10 |

 Table 5: Factors that will force international graduate student employees to leave a company in less than a year and their rankings - Cohort 1.

| Ranking and Total Factors | Rank 1 | Rank 2 | Total Points | Rank of each factor |
|---------------------------------|--------|--------|--------------|---------------------|
| Improper work environment | 2 | 2 | 6 | 1 |
| Hostile relationships | 0 | 1 | 1 | 4 |
| Lack of Growth | 1 | 1 | 3 | 3 |
| Bias Treatment | 0 | 1 | 1 | 4 |
| Stress | 2 | 0 | 4 | 2 |
| Absence of Recognition | 1 | 1 | 3 | 3 |

 Table 6: Factors that will force international graduate student employees to leave a company in less than a year and their rankings - Cohort 2.

| Ranking and Total Factors | Rank 1 | Rank 2 | Total Points | Rank of each factor |
|---------------------------------|--------|--------|--------------|---------------------|
| Improper work environment | 2 | 0 | 4 | 1 |
| Hostile relationships | 1 | 1 | 3 | 2 |
| Lack of Growth | 0 | 1 | 1 | 3 |
| Bias Treatment | 0 | 1 | 1 | 3 |
| Raise in Pay | 1 | 1 | 3 | 2 |
| Exploring other places | 0 | 1 | 1 | 3 |
| Absence of Work Flexibility | 2 | 0 | 4 | 1 |
| Work Location | 0 | 1 | 1 | 3 |

Tables 3 through 6 present the factors identified by participants and their rankings, based on the responses provided in Tables 1 and 2. Zeros in these tables indicate that participants did not mention those particular factors in their responses. To calculate the total points for each factor in Tables 3 and 4, a weighted scoring system was used: Rank 1 was given 4 points; Rank 2, 3 points; Rank 3, 2 points; and Rank 4 was allocated 1 point. The sum of these weighted scores is shown in the "Total Points" column (column 6) of the tables. This system was implemented to reflect the relative importance of each rank more effectively in evaluating the factors based on participant responses to the first question. The "Rank" column (column 7) was then derived by sorting the "Total Points" column in ascending order, assigning identical ranks to factors with the same total points.

Similarly, the calculations for Tables 5 and 6 followed the same rationale but used a different weighting system: Rank 1 was assigned 2 points, and Rank 2 was given 1 point. These adjustments helped prioritize factors based on responses to the second question. The rankings highlighted the most and least prominent factors across different participant cohorts. **Error! R eference source not found.** provides graphical representations of the factors and their total points as shown in Tables 3 and 4.



Figure 1: Factors that will keep international graduate student employees in the same company for over three years for Cohorts 1 and 2.

Figure 1 visually represents the responses from Cohort 1 and Cohort 2, respectively, to the question "What will keep them in the same company for more than three years?" Both groups identified salary as the most significant factor influencing their decision to stay. This aligns with the findings of [2], where nearly half of employed alumni reported dissatisfaction with salaries that did not match their skills and qualifications. The current finding points out that recent graduates anticipate salaries that allow for comfortable living. Similarly, [20] highlighted salary as a key reason to retain Gen Z international STEM employees, noting that some expect salaries sufficient to repay educational loans. The current study also listed career advancement opportunities, benefits, professional development, a supportive work environment, competitive compensation, and work-life balance as factors that may encourage retention. Furthermore, technological advancements and industry trends could also be listed, as they play a pivotal role, particularly for Gen Z international Asian STEM professionals, who seek innovative, impactful, and dynamic career paths in the U.S. market.

Conversely, the factors ranked lowest in priority varied between the two cohorts. Cohort 1 participants identified continuous learning and job security as the least significant, whereas Cohort 2 listed recognition, growth, job location, work environment, and the risks associated with starting over. These differences likely reflect the diverse backgrounds and unique life experiences of the participants. Figures 2 illustrate participant responses, as outlined in Tables 5 and 6, to the question, "What will force them to leave a company in less than a year?"



Figure 2: Factors that will force international graduate student employees to leave a company in less than a year for Cohorts 1 and 2.

Figure 2 reveals that for Cohort 1, respondents prioritized improper work environments as the primary reason for leaving a company within a year, followed by stress, lack of growth, and absence of recognition. As for Cohort 2 participants, they equally prioritized improper work environments and lack of work flexibility as top reasons for leaving, followed by poor relationships with management or colleagues and inadequate pay raises. On the other hand, hostile relationships and biased treatment were deemed the least important factors for Cohort 1, while Cohort 2 considered lack of growth, biased treatment, the desire to explore other opportunities, and work location. These findings align with previous research, such [5], [7], [8], [9], [17].

Conclusions

This study explored the factors influencing Gen Z international STEM graduates, particularly Asian students, in their decisions to stay with or leave a company in the U.S. job market within a specific year interval. The findings showed that these graduates expect high salaries, growth opportunities, a supportive work environment, and flexibility in working hours. However, barriers such as visa restrictions, limited employment authorization, and cultural differences can significantly impact their paths to employment. The results align with existing literature, which also highlighted that workplace expectations and visa barriers significantly shape the experiences of international graduates. While visa restrictions were not explicitly listed by participants as a priority factor in this study, their hidden importance is evident, highlighting an area often overlooked in similar studies.

On the other hand, this study contributes to the ongoing dialogue on workforce diversity and inclusivity by emphasizing the unique challenges and expectations of Gen Z international STEM graduates. It underlines the need for employers to consider these expectations when shaping policies and practices to retain such talent, particularly in sectors that rely heavily on STEM expertise. One of the strengths of this study lies in its focus on a specific demographic, Asian international graduates, which adds depth to the understanding of how cultural and systemic factors intersect to influence career decisions. Nevertheless, certain limitations should be acknowledged, such as the relatively small sample size and the focus on one demographic group, which may not fully capture the diversity of experiences across all international graduates.

Despite these limitations, the study provides valuable insights, especially regarding the interplay of expectations and systemic barriers, which are critical for fostering an inclusive workforce. Future research will conduct a similar survey on different geographical areas of the U.S. and expand on these findings by incorporating larger, more diverse samples requesting participants from multiple institutions of higher education that have similar programs and numerous international students on campus, and exploring the perspectives of employers to bridge the gap between graduate expectations and workplace realities. Additionally, studies could investigate long-term career trajectories of international STEM graduates to better understand the cumulative impact of these challenges and expectations. By addressing these areas, future research can further contribute to developing comprehensive strategies for attracting and retaining international talent in the U.S. STEM workforce.

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