# Part 1: Training, Satisfaction, and Performance

This part focuses on the relationships between training, employee satisfaction, and performance, diving deep into how different demographics respond to training opportunities.

## Member 1: Training's Impact on Performance

### How do TrainingOpportunitiesWithinYear and TrainingOpportunitiesTaken affect employee performance ratings (i.e., SelfRating and ManagerRating)?

* 1. **Gender**: Do male and female employees experience different impacts from training opportunities?
  2. **Age Group**: Are younger employees benefiting more from training compared to older employees?
  3. **Department & Job Title**: Which departments and job roles experience the most performance improvement from training?
  4. **Distance to Work**: How does the distance between an employee’s home and workplace affect the impact of training on performance?
  5. **Job Role & Department**: Are highly educated employees concentrated in certain roles or departments with better performance outcomes?

### SatisfactionLevel and Training Opportunities: How do employees who undergo more training programs compare in terms of both JobSatisfaction and performance across:

* 1. **Education Level**: Are more highly educated employees more satisfied with the training programs they take?
  2. **Job Role**: Which job roles or departments show the highest satisfaction and performance gains after completing more training programs?

### How does the work environment affect employee performance?

* 1. Does the physical or cultural environment (e.g., teamwork, resources, office setup) influence performance in the same way across departments or job roles?
  2. How does work environment satisfaction vary across gender, age, and other demographic factors?

## Member 2: Job Satisfaction and Training Opportunities

### How do SatisfactionLevel and Training Opportunities impact job satisfaction and performance?

1. **Education Level**: Are more highly educated employees more satisfied with training opportunities, and how does this reflect in their performance?
2. Job Role: Which job roles or departments are linked to higher satisfaction post-training?
3. **Performance**: How do employees who undergo more training programs compare in terms of both JobSatisfaction and Performance?

### How does employee JobSatisfaction affect their performance, and does this relationship differ across gender, job role, and department?

1. **Gender**: Do male or female employees show stronger correlations between satisfaction and performance?
2. **Job Role & Department**: Are some departments better at maintaining both high satisfaction and high performance?
3. **Age Group**: Does the relationship between satisfaction and performance vary by age group?

How do employees who undergo more training programs compare in terms of both JobSatisfaction and performance across education level and job role?

1. **Education Level**: Are more highly educated employees more satisfied with training opportunities?
2. **Job Role**: Which job roles or departments are linked to higher satisfaction post-training?

# Part 2: Overtime, Work-Life Balance, and Attrition

This section explores how overtime and work-life balance affect employee performance, satisfaction, and retention, with a focus on demographic variations.

## Member 3: Overtime and Performance

### Does working overtime impact employee performance differently depending on demographics?

1. **Education Level**: Are highly educated employees less affected by overtime in their performance?
2. **Job Role**: Are managers more or less affected by overtime compared to non-managers?
3. **Income**: How does salary influence how overtime affects employee performance?
4. **JobSatisfaction**: Do employees with higher overtime hours also have lower job satisfaction ratings?

### Does working overtime impact employee performance based on education level, job role, and income?

1. **Education Level**: Are highly educated employees less affected by overtime in their performance?
2. **Job Role**: Are managers more or less affected by overtime compared to non-managers?
3. **Income**: How does salary influence how overtime affects employee performance?

## Member 4: Work-Life Balance and Performance

### How does work-life balance influence employee performance?

1. **Gender and Age Group**: Do certain genders or age groups show a stronger correlation between work-life balance and performance?
2. **OverTime**: Do employees with higher overtime hours also have lower work-life balance ratings, and how does this impact performance?

### Is there a correlation between WorkLifeBalance and higher/lower performance ratings (SelfRating, ManagerRating) based on gender, age group, and overtime?

1. **Gender and Age Group**: Do certain genders or age groups show a stronger correlation between work-life balance and performance?
2. **OverTime**: Do employees with higher overtime hours also have lower work-life balance ratings, and how does this impact performance?

## Member 5: Work-Life Balance and Attrition

### How does work-life balance affect both performance and attrition?

1. **Gender and Age Group**: Do certain genders or age groups show a stronger correlation between WorkLifeBalance and Performance (SelfRating, ManagerRating)?
2. **OverTime**: Do employees with higher overtime hours have lower work-life balance ratings, and how does this impact their likelihood of attrition?
3. **Attrition**: Do employees with better work-life balance ratings tend to have lower attrition rates, analyzed by Gender and Job Role?

### Are employees who regularly work overtime more likely to report lower JobSatisfaction and WorkLifeBalance, and how does this trend differ by age group and gender?

1. **Age Group & Gender**: Are younger employees more tolerant of overtime, or do older employees show more satisfaction with work-life balance despite overtime?
2. **Department & Job Title**: Do certain departments or job titles suffer from lower satisfaction levels due to overtime?

# Part 3: Manager Roles, Retention, and Loyalty

This part examines how demographic factors influence managerial roles and dives into the long-term metrics of retention and loyalty, including attrition rates, tenure, and promotions.

## Member 6: Manager Role and Retention Analysis

### What are the demographic patterns in managerial roles?

1. **Gender**: What is the percentage of male and female employees in managerial roles? Are there gender imbalances in leadership positions?
2. **Age Group**: How do different age groups compare in terms of percentage in managerial positions? Are older employees more likely to be in leadership roles?
3. **Education Level**: What is the percentage of employees with different education levels in managerial roles?
4. **Hiring Over Time**: What are the trends in hiring over time, and how do they correlate with workforce development and managerial growth?

### What are the key factors driving retention and loyalty in the company?

1. **Hiring Over Time**: What are the trends in hiring over time, and how do they correlate with workforce development and managerial growth?
2. **Average Tenure at Company**: How long do employees stay with the company, and what patterns emerge by Department, Job Role, and Education Level?
3. **Attrition Rate**: Calculate attrition rates by Department, Role, and JobSatisfaction. Are employees with higher satisfaction or work-life balance less likely to leave?
4. **Promotion Rate**: Track promotion rates by Department and Job Role, and investigate whether training opportunities correlate with faster promotions.
5. **Education Level and Salary**: Do employees with higher education levels receive higher salaries, and how does this compare across Job Role & Department?
6. **Training and Development’s Role in Retention**: Assess whether providing training opportunities improves employee loyalty.
7. **Impact of Job Satisfaction and Work-Life Balance on Retention**: Do employees with higher job satisfaction and better work-life balance stay longer?