

Organizational Analysis of UB (University at Buffalo)

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Abstract: In order to help our group better and more efficiently analyze the evaluation of specific company employees on their job roles, our group research selected the most familiar campus organization (the University at Buffalo – SUNY) as our subdivided target population. In this report, more than 30 UB professors' privacy questionnaires were collected. We sorted out and tabulated 25 valid responses as data, and used the following four different dimensional analysis methods to sort out the surveyed data, analyzing the BIG 5 personality of the UB professors in the organization system, evaluating their job roles and characteristics through Motivating Potential Score (MPS), also reasonably scoring their average personal job satisfaction, and using Leader-member Exchange (LMX) theoretical data model analysis.

Keywords: Organizational Behavior; BIG Five Personality; SUNY- College System; Motivating Potential Score (MPS); Leader-member Exchange (LMX); Job Satisfaction Survey; Job Characteristic Model.

1. Company Overview

The State University of New York at Buffalo is a public research university located north of Buffalo in western New York, USA. The school was founded in 1846 and merged into the State University of New York system in 1962. Up to now, there are 5,787 employees in the school, and more than 2,500 professors serve as undergraduate and graduate professors. Among them, the total number of students exceeds 30,000, in Fall 2021 the Undergraduate student to undergraduate instructional faculty ratio: is 13:1 (2018). According to Indeed's data research report (e. d.), it shows that the average salary at the State University of New York at Buffalo ranges from about \$30,000 to \$80,000. There are many types of job positions involved in UB, such as Assistant Professor, Post-doctoral Fellow, Lecturer, or some other facilities/operations assistants.

2. The Big Five Personality

The Big 5 personality test is an examination that is used to measure a person's most important characteristics, such as openness, conscientiousness, extroversion, agreeableness, and neuroticism. This personality test is the most scientifically validated and reliable psychological model to measure personality. It is beneficial in finding which role in an organization can be the best fit for an individual. Recruiters use the Big 5 to find individuals who have the proper mix of personality and skills to fit the role they are hiring for.

The acronym OCEAN, or Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism, is quite relevant to the Big 5 theory. Openness emphasizes imagination and insight the most out of all five personality traits. Individuals who are high in openness tend to have a broad range of interests and they are curious about the world, others and new experiences. Extraversion can be characterized by sociability, talkativeness, assertiveness and high amounts of emotional expressiveness. Those who are high in extraversion are outgoing, and thrive in social situations. Conscientiousness can be defined as high levels of thoughtfulness, good impulse control, and goal-directed behaviors. One who is high in conscientiousness most likely is organized, mindful of details and often plans ahead.

Agreeableness includes characteristics such as trust, kindness, and affection. People who are high in agreeableness are more cooperative. On the other hand, those who are low in agreeableness are more competitive. Lastly, Neuroticism includes sadness, moodiness and emotional instability. Those who are high in neuroticism experience mood swings, anxiety, irritability, and sadness. If one is low in neuroticism, they are emotionally stable, handle stress very well, rarely feel sad/depressed and are very relaxed.

Table 1. Our Data- Big 5

	Average	Maximum	Minimum
Openness	14.96	25	9
Conscientiousness	16.56	22	10
Extraversion	15.56	21	11
Agreeableness	16.16	21	11
Neuroticism	14.68	21	10

After we collected our survey data from University at Buffalo professors, we were able to analyze each of the OCEAN characteristics. We were able to survey 25 individuals, ranging in age, diversity and tenure. According to the above five numbers, those who are above the mean will be considered *high* and those who are below the mean are considered *low*. The professors at University at Buffalo scored both high and low in various characteristics; Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism.

3. Interventions- The Big 5

Although scoring high in some characteristic sections can positively affect a work environment, there are other OCEAN qualities that can hinder the success of individuals. After looking at our data, I found five individuals that scored greater than 18 on the openness scale. Having a *high* score means they carry a broad range of interests, are curious about their environment, others and new experiences. Having this

attitude as a UB professor can be extremely helpful in being successful in thinking outside the box and having a creative edge.

Additionally, there were 13 people who were above the average of 16.56 in conscientiousness. Scoring high in conscientiousness shows that an individual tends to be organized, mindful of details and often plan ahead. This was most definitely expected coming from university level professors. To be more successful, I recommend the remaining twelve professors focus more of their attention on detail, organization and planning. Another scoring characteristic is Extraversion. 13 people are less than the average score of 15.56. Scoring low on extra versions are often not outgoing, and do not thrive in social situations. I recommend these individuals work on their social skills when around other adults their own age, and getting out of their comfort zone. The next characteristic is agreeableness. Two individuals surveyed scored a 21 on agreeableness. These two individuals thrive on being cooperative. The other 23 individuals are not cooperative, they are often competitive and do not go with the flow. In some cases, this can hinder a work environment, however, sometimes this can spark a devil’s advocate. There is a time and a place when each individual will thrive. Lastly, 10 professors scored above the average in neuroticism. Those who scored above the average tend to experience mood swings, anxiety, irritability, and sadness.

The future as a professor in university can be overwhelming and may spark stress, anxiety, or irritability. In order to cope with these feelings individuals should take care of their mind and body, exercise, meditate, talk to others, connect with their family and friends, and take time to relax and unwind.

4. Overview of the Job Characteristic Model

The Job Characteristic Model assesses the 5 core characteristics of job design, which are skill variety, task identity, task significance, autonomy, and job feedback. Evaluating these specific things can lead to decreased turnover, increased job satisfaction, and better overall performance.

To understand the purpose of the model, we must define what each category evaluates. Skill variety is the assessment of the variety in everyday workloads. This includes variety in responsibilities as well as variety in daily tasks. Measuring this allows us to examine how diverse people deem their work, which helps every day feel less routine. Task identity will measure how often workers can work through tasks from start to finish. This contributes to how much workers identify with given tasks and responsibilities, and is an integral part of overall satisfaction, due to the importance of seeing your work through to completion. Task significance directly correlates to how important people believe their work to be. The more important people believe their work to be, the more likely they are to ensure they provide quality outcomes. Due to this, it is important to recognize how important the work is to the employees in order to gauge if they believe in what they do and its significance. Autonomy will measure a worker’s independence on given tasks. This can give confidence and freedom to the workers, which will boost overall performance. Being micromanaged and restricted will result in low autonomy, which decreases motivation and overall job

satisfaction. The last core component of this model is job feedback, which measures how people are given feedback for their work. If employees are given constant constructive feedback on their work, they will have benchmarks for improvement as well as specific goals to work towards.

Table 2. Job Characteristics Data

Our Averages	
Skill Variety- 11	Individuals experience meaningfulness in the work they are performing.
Task Identity- 12.04	
Task Significance- 11.48	
Autonomy- 12.56	Individuals experience responsibility of the outcomes.
Job feedback- 11.08	Knowledge of the actual results of the work activities.

According to our data, professors seemed to deem autonomy as a prominent factor in this model. This is great because it allows professors more flexibility and independence in deciding how they want to run and organize their classes and assignments. With that said, both skill variety and job feedback ranked fairly low in comparison to the other core JCM points. That is what we focused on for areas of feedback. The data does show overall satisfaction, however, with the 5 major points averaging over 11/15.

5. Job Characteristics Model (JCM) Interventions

Referencing back the two points of our Job Characteristics Model which average the lowest scores, we aimed our feedback on addressing job feedback and skill variety.

Job Feedback is an interesting one to be low, because class evaluations are pushed very regularly and even rewarded in most classes. One thing we can do is make Class evaluations a mandatory assignment in a class. This will increase the number of responses given by students who are taking the class, which is a great way to get course feedback, as there is no more accurate evaluation than that from someone who just spent 4 months learning from you. Another point of emphasis would be having upper management observe and provide feedback on a more regular basis. Teachers can be evaluated and receive feedback from both students and other faculty, as both have great insight on what is done well from different perspectives.

The other point of data that produced a lackluster average was skill variety. This means that, on average, professors did not feel that they were given a wide breadth of responsibilities, or variety in everyday work. This is understandable, as teachers usually teach a very similar curriculum year over year. Our recommendations for accommodating this is to widen their expertise and allow job rotation. Teachers should always be learning, and widening their knowledge will allow them to add to their curriculum, as well as teach new classes entirely. This will ensure professors feel more variety in their routines. Furthermore, rotating jobs and departments can increase the exposure faculty gets to different tasks and responsibilities, which can help increase variety.

6. Job Satisfaction

According to “Mastering Organizational Behavior” volume 14.0 by Cecily D. Cooper, Don Hellriegel, and John

W. Slocum Jr., “**Job satisfaction** reflects the extent to which individuals find fulfillment in their work”. Workplaces whose employees possess high levels of job satisfaction tend to see better employee retention, less costly turnover, and higher overall performance, because of this organizations have an incentive to promote job satisfaction amongst their workers. When testing job satisfaction within an organization it is important to note that each individual’s personality plays an important role in how they derive satisfaction from a job, and from what jobs they will find fulfillment. Sources of employee satisfaction/dissatisfaction listed in the text include the degree of mental challenge, physical demands, individual’s interest in work, reward structures, experiences with others in the organization, working conditions, organizational procedures, and more. By surveying the levels of job satisfaction within the UB faculty we hope to gain a better understanding of the attitudes of those questioned toward their jobs, and of the organizational culture.

The job satisfaction survey sent out by our team to the University at Buffalo faculty contains 5 facets that we measured in our data: pay satisfaction, security satisfaction, social satisfaction, supervisory satisfaction, and growth satisfaction. The survey asked participants to respond to 14 statements on a scale of 1 to 7 (1 being extremely dissatisfied, 7 being extremely satisfied). The statements in each facet asking for the individual's satisfaction with things such as: “the amount of pay and fringe benefits I receive, the amount of job security I have, the people I talk to and work with on my job, the degree of respect and fair treatment I receive from my boss”, and “the amount of personal growth and development I get in doing my job”, respective to the listed facets.

7. Our Data- Job Satisfaction

Below are data and statistics taken from the 25 participants of the Job Satisfaction survey.

Table 3. Data and statistics taken from the 25 participants of the Job Satisfaction survey

Facet	Sample Range of Individuals	Mean of Individuals
Pay Satisfaction	2.0-7.0	5.02
Security Satisfaction	1.0-7.0	5.08
Social Satisfaction	4.3-7.0	5.7
Supervisory Satisfaction	3.3-7.0	5.5
Growth Satisfaction	3.0-7.0	5.63
Mean of Five Facets	3.82-7.0	5.39

Note from text: “Scores lower than 4 suggest there is room for change”.

Points of Interest:

1) Each of the five facets’ sample ranges except for “Social Satisfaction” contains individuals who scored below the 4.0/7.0 deemed acceptable. This is not currently cause for concern as individual job satisfaction does not display any known correlation to an organization’s overall productivity.

2) The mean score of each facet is well above the acceptable 4.0, indicating overall healthy levels of job satisfaction by the faculty. The mean average scores of the individual facets ranged from 5.02 for pay satisfaction to 5.7 for social satisfaction, with an overall mean of 5.39 among all

facets.

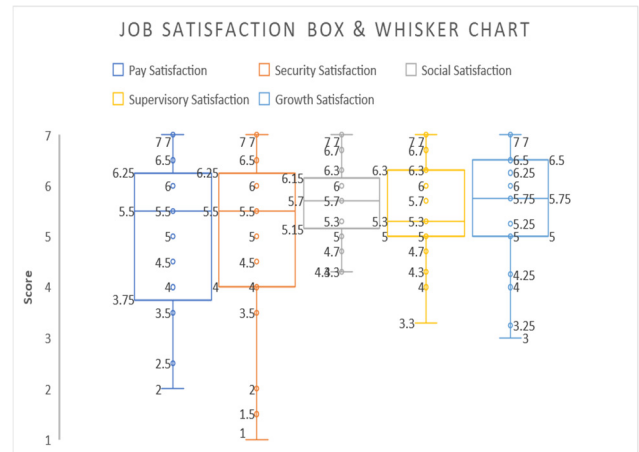


Fig 1. Job satisfaction box&whisker chart

8. Interventions- Job Satisfaction

The survey numbers heavily imply that there is strong job satisfaction among the UB faculty, with all facets averaging at least an entire point over the acceptable level. While there are outliers in the data dragging down the averages of 4 out of 5 facets, only 2 of those appear potentially concerning. The pay and Security satisfaction scores of our respondents have the 2 lowest thresholds of any of the 5 facets; this may not be an issue if caused by an individual outlier, however, we found multiple individuals who scored below 4 in these categories. In pay satisfaction, 20% of all respondents were less than satisfied with their pay, and in security satisfaction, 16% did not feel they had adequate job security. In security satisfaction specifically, 3 individuals scored within the area of “dissatisfied” to “extremely dissatisfied”. An obvious intervention for a lack of pay satisfaction would be to increase employee pay, though we know that’s not always so simple. Alternatively, an adjustment to supplementary benefits such as health insurance may be able to improve faculty outlook on pay. If the university is able to improve how its faculty perceive the organization’s reward system, they may be able to achieve higher pay satisfaction. Security satisfaction may be a difficult area for any university to improve given the competitive nature of teaching positions. Behavioral changes may be one of the only ways for employee attitudes to improve on security satisfaction. If the organization can promote the idea that an individual faculty member's degree of control over their position is high then job security satisfaction may go up.

9. Leader - Member Exchange

The Leader-Member Exchange (LMX theory) was the final test conducted in our survey. The LMX test assesses the quality of leader-member relationships (i.e., manager-employee relationship). The LMX theory considers how leadership behavior can translate to employee job satisfaction and productivity. The LMX test we conducted assesses the relationship between your supervisor and yourself. After completing this test, we gather data to determine the level of mutual affection you have for your boss, the level of loyalty you have for your boss, the level of contribution towards work activities productivity, and level of professional respect for your boss. In order to calculate each aspect of the LMX test we calculate the sum of questions 1, 5, 9 to get the score of

mutual affection, sum of questions 2, 6, 10 to get the score of level of loyalty, sum of questions 3, 7, 11 to get the score of level of contribution to work activities, and sum of questions 4, 8, 12 to get the score of level of professional respect. For each category a score 3 through 6 is considered low, and a score of 12 through 15 is considered high and anything in between is medium. The total LMX score is calculated with the sum of each group of questions to analyze a score above the mean is the in-group and a score below the mean they are considered the out-group. High-quality interactions between the leader and the employee characterize an in-group leader-member exchange relationship. This might be expressed as increased organizational behavior on the part of the team member, as well as increased concentration and interest on the part of the supervisor. In-groups are strong and want to do even better because of the relationship provided by the leader. Employees who lack mutual trust with their employer, on the other hand, are most likely out-group members in their

supervisor's perspective. This may result in increased turnover intentions among these members, as well as lower job satisfaction and less willingness to perform to the best of their abilities.

10. Leader-member Exchange (LMX) Data

The table below is the data gathered from the LMX test after surveying 25 faculty and staff members at the University at Buffalo.

From analyzing this data, the mean score was 49.32 and 48% of the staff and professors are considered the In-group and 52% of the staff and professors are considered the Out-group. From our data we can interpret there is an even distribution between UB faculty and staff that are in the In-group and Out-group. The lowest average score from faculty and staff members at UB was the level of mutual affection.

Table 4. The data gathered from the LMX test after surveying 25 faculty and staff members at the University at Buffalo

Level of Mutual Affection	Level of loyalty	Level of contribution to work activities	Level of professional respect	Overall Score	Group
15	14	13	15	57	In-Group
13	15	15	15	58	In-Group
10	15	13	14	52	In-Group
13	14	15	15	57	In-Group
9	9	9	9	36	Out-Group
13	13	12	14	52	In-Group
13	14	12	14	53	In-Group
14	14	13	14	55	In-Group
8	14	14	12	48	Out-Group
14	13	14	14	55	In-Group
12	11	11	11	45	Out-Group
11	9	11	12	43	Out-Group
10	11	10	9	40	Out-Group
9	11	13	11	44	Out-Group
11	13	10	11	45	Out-Group
11	12	13	12	48	Out-Group
12	13	12	12	49	Out-Group
7	14	14	10	45	Out-Group
12	13	13	9	47	Out-Group
15	13	12	13	53	In-Group
13	14	13	10	50	In-Group
7	12	9	9	37	Out-Group
12	15	14	15	56	In-Group
15	15	15	15	60	In-Group
13	11	12	12	48	Out-Group
11.68	12.88	12.48	12.28	49.32	48.00%

***Note: Score greater than the mean = In-group and score less than the mean = Out-group*

11. LMX Interventions

The level of mutual affection from faculty and staff at UB was the least of the four averages. The LMX theory can predict phases such as role-making. Supervisors will begin to create additional duties and roles for team members with whom they have positive connections as the development of leader-member exchange relationships progresses. Leaders, on the other hand, will leave individuals in the out-group with fewer tasks and chances owing to their lack of connection.

Transforming members of the Out-group to the In-group is an example of effective leadership in an organization. Being fair to each member, respectfully, can improve an employee's LMX score. Giving each member the opportunity to succeed and having mutual affection is an essential component of high-quality LMX interactions. Coworkers, whether bosses or team members, must believe they are all working toward the same objective and have each other's best interests at heart. When it comes to out-group personnel, as a leader, attempt to play a mediating position between employees and in your

own thinking. When you adopt a view like this, you enable all of your team members to perform to their full capacity.

12. Our data- Correlations

Usually, the correlation coefficient is used to measure the linear relationship between two different variables, and it can reflect the closeness of the correlation between two different variables. It is worth noting that the range of the correlation

coefficient is usually between -1 and +1. When the correlation coefficient is closer to 0, the relationship between the two variables is weaker. When $R > 0$, it is a positive correlation, which means that a variable higher or the increase, the other variable will also show a high trend; on the contrary, when $R < 0$, it is negatively correlated, which means that the value of one variable is higher or increased, but the other related variable will become a low trend. (McLeod, 2019)

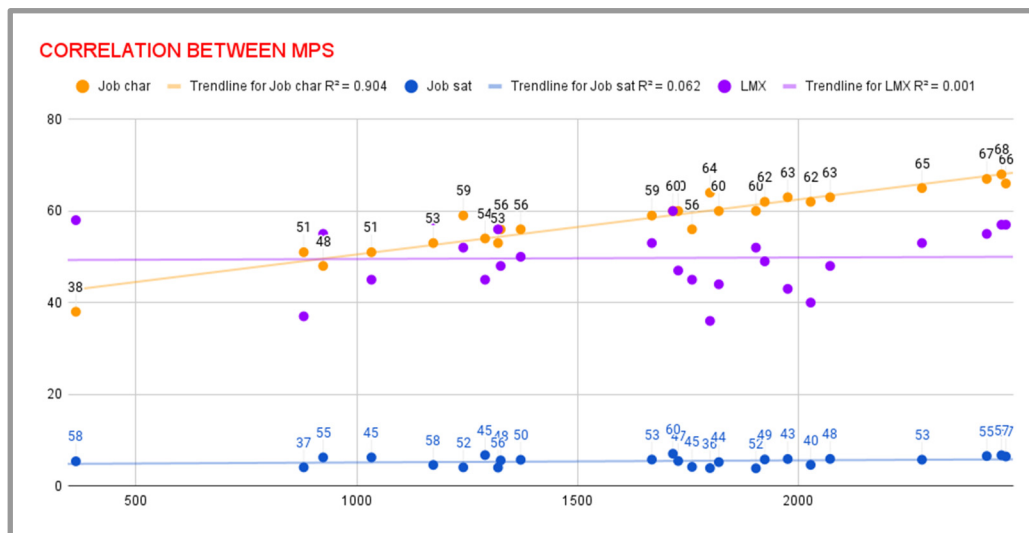


Fig 2. The processing and analysis of the data (Correlation between MPS)

Table 5. The processing and analysis of the data

	MPS	Job char	Job sat	LMX
MPS	1	0.9507793314	0.2490592393	0.02604197873
Job char	0.9507793314	1	0.1591437679	-0.04258484491
Job sat	0.2490592393	0.1591437679	1	0.3833584053
LMX	0.02604197873	-0.04258484491	0.3833584053	1

According to the processing and analysis of the data (the charts above), we draw the following conclusions: 1) There is a positive correlation (strong) between MPS and Job Satisfaction, which means that the more satisfied professors are with their work, the more positive their work enthusiasm and Potential Motivation is also relatively higher; 2) Job characteristics are weakly correlated with LMX, which shows that the relationship between UB’s leaders and subordinates in this university organization does not have much impact on their job functions and roles. On the contrary, professors who have more academic freedom management (not limited to work such as education within the organization) will have a higher teaching functional role to play. 3) Whether it is the nature of the job, role distribution or potential work motivation, there is a positive correlation with job satisfaction, which means that the higher the potential motivation, the more opportunities to improve in organization or more care and trust received from the school’s management, the professors will be more interested in their position and with a higher Job satisfaction.

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