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STUDY OVER STUDENT PERSONALITIES AND THE IMPACT OF EXTRINSIC FACTORS TO IMPROVE STUDENTS' ACADEMIC PERFORMANCE AND EMPLOYABILITY

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Abstract: Study of Tata Institute of Social Sciences and independent study of UGC have identified that employability of higher education students is a big concern. As per this study only 20% to 30% students of higher professional studies are employable for prescribed jobs. It reflects that the system and student material are not compatible to achieve the desired outcome. Present practices are focused over improving the education system and quality for betterment of students' employability. The higher professional education became very challenging now a day's therefore monitoring of students' performance and increment in their employability became the winning card for any academic institution. Many practical studies are carried out to investigate factors affecting student performance and employability. This study tries to classify various students' personality on the basis of their academic performance and discipline, amalgamated with Holland and Derrich theories of personalities. The focus of this research is to find out the extrinsic factor affecting the personalities of students and their impact in improving employability as a whole.

Keywords: Personality, Performance, Discipline, Employability, Academic

INTRODUCTION

The social and economic development of the country is directly linked with student academic performance. The students' performance (academic achievement) plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country's economic and social development. It is very difficult for any person to give the 'n' types of grooming and development atmosphere for 'n' type personalities in a class or group. The most challenging aspect of being a teacher is that there is no set mold on the types of students in a single class. A class of twenty students will likely have twenty

different personalities at twenty different places academically. What are one student's strengths will be another student's weakness and vice versa. This is very challenging for even the most effective teachers. It is difficult to reach all students with a single approach, thus the good teachers are excellent at differentiating instruction. This can be done through interest inventories, personality surveys, and benchmark assessments. Students have primary differences in several different areas in both personality and academics.

Holland's (1973, 1985, 1997) theory of vocational choice provides a powerful framework for studying students' college experiences. The theory links psychological factors (i.e., students' personality types) with sociological factors (i.e., the characteristics of academic disciplines) to create a model of person--environment fit that can be used to explain students' selection of academic majors, socialization into a major, and student learning and development during college (Smart, Feldman, and Ethington, 2000). Holland's theory has evolved over three decades from a general description of six personality types and corresponding environments to an empirical framework consisting of three components: persons, their environments, and the interactions between persons and their environments (Swanson, J. L., & Fouad, N. A., 1999). In the context of higher education, Holland's framework consists of students, their academic majors, and the fit or interaction between students and their majors (Smart, Feldman, and Ethington, 2000).

DERRICK MEADOR

There are many combinations of two, especially in the area of personality. Here we examine several of the more common personality traits that you are likely to see in just about any classroom.

OBJECTIVES:

1. To establish the relation in between classroom discipline and academic performance specifically for identify students' personalities.
2. To find out the distribution of academic performance over various in classroom discipline behavior.
3. To study the impact of extrinsic factors for transition of various students personalities.

HYPOTHESIS:

1. Academic performance of student is independent to his/her classroom discipline behavior.
2. Academic performance and classroom discipline behavior is significantly associated with employability.
3. Extrinsic factors have significant impact over students' personalities.

RESEARCH METHODOLOGY:

For this study the researcher used casual/Experimentation as well as Descriptive Research design. The researcher selected the youth of pursuing MBA from UPTU, Uttar Pradesh as the targeted population. For the study 101 sample units are selected randomly from various colleges of Ghaziabad district. Secondary data were collected from students' college records, whereas primary data were collected by questionnaire and interview method. Various college records were used as sample frame. The questionnaire used contains psychometric questions to measure the attributes of various personalities. For the data analysis descriptive as well as inferential statistical tools-Chi square, correlation and others were used.

NINE CELL MATRIXES OF STUDENT PERSONALITIES:

On the basis of the study over 101 students of UPTU, researcher classified the students into three classes-on the basis of academic performance, and on the basis of classroom attendance. It was found that one can easily segment these students on this matrix and these cells are significantly different from each other.

Methodology for classification of Students

The researcher used two dimensions to classifying the student personalities. The dimensions are- Academic Performances & Classroom Attendance.

On the basis of Academic performance students are categorized in to three groups- Strong, Average & Poor performers. The range of performance was considered as- the difference in between Best performer & least performer within the sample.

TABLE 1: SAMPLE ACADEMIC PERFORMANCE

Criteria	Marks %
Min	42.5
Max	76.40
Range	33.9

The equal class interval for each cell was considered.

$$\begin{aligned} \text{Therefore the class interval Considered} &= \text{Range}/3 \\ &= 33.9/3 \quad \text{or} \quad 11.3\% \end{aligned}$$

Thus, on the basis of academic performance in their previous semester, sample was segmented as:

TABLE 2: SEGMENTATION OF SAMPLE ON THE BASIS OF ACADEMIC PERFORMANCE

Category	Cell-Range of Academic Performance	Number
<i>Strong Academic Performer:</i>	76.40% to 65.10%	19
<i>Average Academic performer</i>	65.10% to 53.8%	58
<i>Poor Academic Performer</i>	53.8% to 42.5%	24
	Total	101

Similarly, the sample was re-classified into three categories, on the basis of students' classroom attendance. The computation are given below

TABLE 3: COMPUTATION FOR CLASSIFICATION OF SAMPLE ON THE BASIS OF CLASS-ROOM ATTENDANCE

Criteria	Attendance
Min	11.76%
Max	95.30%
Range	83.54%
Class-Interval	27.85%

Regular Student	95.30% to 67.45%
Average Attendance	67.45% to 39.61%
Poor Attendance	39.61% to 11.76%

Therefore, on the basis of students' class room attendance in their previous semester, sample was segmented as:

TABLE 4: SEGMENTATION OF SAMPLE ON THE BASIS OF ACADEMIC PERFORMANCE

Category	Cell-Range of Class-Attendance	Number
<i>Regular Student</i>	95.30% to 67.45%	87
<i>Average Attendance</i>	67.45% to 39.61%	13
<i>Poor Attendance</i>	39.61% to 11.76%	01
	Total	101

The cross matrix of Table-2 & Table-4 gives Table-5, a Nine Cell Matrix. This matrix reflects the distribution of sample units on both the above mentioned dimensions- Academic Performance & Class-room.

TABLE-5: NINE CELL MATRIX OF STUDENT BEHAVIOR

<i>Academic Attendance</i>	<i>Academic Performers</i>	<i>Average Students</i>	<i>Poor Academic Performer</i>	Total
Regular	19	51	17	87
Average	0	7	6	13
Poor	0	0	1	1
Total	19	58	24	101

EMPLOYABILITY SKILLS ASSESSMENT:

The sample was measured on Human Resources Development Canada (HRDC) Employability Dimensions, has established a three dimensional employability framework (Patsula, 1998). These Dimensions are:

- Communicating
- Managing Information
- Using Numbers
- Thinking & Problem Solving
- Teamwork Skills: Working with Others
- Personal Management Skills
- Participating in Projects & Tasks
- Demonstrating Positive Attitudes & Behaviors

- Being Adaptable
- Learning Continuously
- Working Safely

To test the employability researcher used Employability Skill Assessment Tool (ESAT) based on HRDC guidelines. The questionnaire composed of 49 Close-ended questions, having three categories- Definitely Agree, Somewhat Agree, and Disagree. On the basis of question researcher categorized three levels of Employability- Excellent, Average & Poor. The outcomes are as follows:

TABLE-6: EMPLOYABILITY TEST RESULT (BEFORE EXPOSURE OF EXTRINSIC FACTORS)

Employability Skill	Criteria	Communicating	Teamwork Skills	Personal Management Skills
Excellent Employability	Academic %	71%	68%	72%
	Attendance %	73%	70%	67%
	Total	32	8	68
Average Employability	Academic %	59%	63%	58%
	Attendance %	43%	52%	43%
	Total	59	48	25
Poor Employability	Academic %	47%	51%	47%
	Attendance %	20%	27%	30%
	Total	10	45	8

Considering all factors- Academics, Attendance & Employability Skills, together, researcher identified nine different student personalities:

1. **Trouper:** The student-personalities identified by Excellent Academic Performance & Regular Presence in Class Rooms. The word meaning identified the person who is loyal and hard worker with positive attitude. These student personalities are Go-Getter in nature.
2. **Struggler:** The students, who are quite regular in classrooms, but are average in academic performance, lie in this category. This personality of are not able to perform in academic as they wish to be.
3. **Trailer:** These personalities are highly disciplined but have poor academics. Such personalities are basically native of underdeveloped environment.
4. **Adrift:** These personality are quite competent, but have lost his/her focus on their core mission. The major challenge with these personalities is to remain them on track.
5. **Stereotyped:** They are mediocre inclined toward academics and discipline. These personalities basically belong to middle class families. The students are recognized to pursue their academic courses without any big ambition in mind.
6. **Concitor:** These students who are poor in academic due to less motivation. Such personalities feel difficulty in involvement with the academics, therefore their class room presence remain average only. Such personalities require motivation & extra attention.

7. **Geek:** These are high IQ personality & identified good retention & learning ability. These are full of energy, which negatively affect their class room presence. The personalities have risk to easily deviate from their focus. People within this personality group are highly inclined toward academics but remain less disciplined.
8. **Swellhead:** The personality somewhat careless & live life without any ambition. Such personality majorly belongs to the political or Mid-size business families. The personality remain in their world & try to fulfill only the most required duties. People falling in this category are mediocrity interested toward academic along with very less disciplined.
9. **Castaway:** People falling in this category do not have a set goal hence they lose interest in academic as well as disciplined (Non-performer). Such personalities set their rules to live & try to force others to live accordingly.

TABLE-7: NINE CELL MATRIX OF STUDENT PERSONALITY ON THE ACADEMIC PERFORMANCE & CLASS-ROOM ATTENDANCE

<i>Class-room Attendance</i>	<i>Academic Performers</i>	<i>Average Students</i>	<i>Poor Academic Performer</i>
<i>Regular</i>	Trouper	Struggler	Trailer
<i>Average</i>	Adrift	Stereotyped	Concitor
<i>Poor</i>	Geek	Swellhead	Castaway

DATA ANALYSIS & HYPOTHESIS TESTING

Hypothesis 1: Academic performance of student is independent to his/her classroom discipline behavior.

To test the hypothesis researcher used Chi-Square Test. The test was applied on Table-5. Outcome of the test are as follows:

TABLE-8: CHI-SQUARE TESTS

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.524 ^a	4	.049
Likelihood Ratio	11.059	4	.026
Linear-by-Linear Association	8.340	1	.004
N of Valid Cases	101		

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .19.

TABLE-9: SYMMETRIC MEASURES

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by Pearson's R	.289	.078	3.001	.003 ^c
Ordinal by Spearman Correlation	.281	.083	2.919	.004 ^c
N of Valid Cases	101			

- Not assuming the null hypothesis.
- Using the asymptotic standard error assuming the null hypothesis.
- Based on normal approximation.

The Null hypothesis gets rejected. It proves that- the Classroom Attendance having significant impact over the academic performance of the students.

Hypothesis 2: Academic performance and classroom discipline behavior is significantly associated with employability.

The researcher applied Multivariate analysis to test the impact of two independent variables- Academic Performance & Classroom Attendance on the Employability of the students. The outcomes are as follows-

TABLE-10:MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.910 ^a	.828	.824	.25734	.828	235.668	2	98	.000

a. Predictors: (Constant), Academic Performance, Attendance

In this table, R-square is the proportion of variation in the dependent variable (Employability) that is explained by the three independent variables. It is expressed as a percentage. So 82.8% of the variation in Employability of students can be explained by two independent variables in the model.

TABLE-11: ANOVA TABLE

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31.213	2	15.607	235.668	.000 ^b
	Residual	6.490	98	.066		
	Total	37.703	100			

a. Dependent Variable: Employability

b. Predictors: (Constant), Academic Performance, Attendance

The table shows whether the proportion of variance explained in the first table is significant. It also tells whether the overall effect of the three independent variables on overall satisfaction is significant. The sig. (or p-value) is .000 which is below the .05 level; hence, we conclude that the overall model is statistically significant, or that the variables have a significant combined effect on the dependent variable.

Table-12: Coefficients^a

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-1.015	.194		-5.235	.000
Attendance	.917	.070	.574	13.109	.000
Academic Performance	.525	.041	.560	12.783	.000

a. Dependent Variable: Employability

Look at the sig. (p-values) first. We can see that Attendance (.000) and Academic Performance with Employability (.000) are significant predictors. The standardized beta tell us the strength and direction of the relationships (interpreted like correlation coefficients). Attendance is positively related to Employability (.574) as well as Academic Performance is also positively related with Employability (.560). High levels of these values correspond to higher Employability.

Moreover, Based on Table-12, the equation for the regression line is:

$$Y (\text{Employability}) = -1.015 + 0.917(\text{Attendance}) + 0.525(\text{Academic Performance})$$

Using this equation, given values for “Attendance,” and “Academic Performance” you can come up with a prediction for the “Employability of the Students” variable.

Hypothesis 3: Extrinsic factors have significant impact over students' personalities.

The researcher analyzed Holland and Derrick theories of personalities & identified four most acclaimed extrinsic factors, to study their impact over student personalities. The factors considered are:

1. **Motivation:** It is associated with no of counseling session.
2. **Opportunities:** This factor is associated with the number of opportunities given to a student to express his/her self on any/specific subject.
3. **Classroom Culture:** The classroom culture defines the learning environment within the class.
4. **Environment/Extra class culture:** We can measure of the health of outside class environment with the no. of healthier participation in extra class activities.

EXPERIMENT:

All the sample members are pre-tested to find out their employability. Afterwards all the sample members are exposed to above mentioned extrinsic factors. The researches gave them twenty non-disclosed sessions to expose them to these extrinsic factors. The post exposure test conducted to measure the change in their employability, overall Attendance & Academic Performance. The results are as follows:

TABLE-13: POST-TREATMENT OBSERVATIONS

<i>Academic Attendance</i>	<i>Academic Performers</i>	<i>Average Students</i>	<i>Poor Academic Performer</i>	Total
<i>Regular</i>	45	39	10	94
<i>Average</i>	3	2	2	07
<i>Poor</i>	0	0	0	00
Total	48	41	12	101

TABLE-14: PRE & POST TREATMENT EMPLOYABILITY OBSERVATIONS

S. No.	Employability Level	Pre-Test Observation	Post-Test Observation
1	Poor Employability	7	3
2	Average Employability	24	16
3	Excellent Employability	70	82
	Total	101	101

TABLE-15: PRE TEST EMPLOYABILITY * POST TEST EMPLOYABILITY CROSS-TABULATION

			Post Test Employability			Total
			Poor Employability	Average Employability	Excellent Employability	
Pre Test Employability	Poor Employability	Count	3	4	0	7
		Expected Count	.2	1.1	5.7	7.0
		% within Pre Test Employability	42.9%	57.1%	0.0%	100.0%
	Average Employability	Count	0	12	12	24
		Expected Count	.7	3.8	19.5	24.0
		% within Pre Test Employability	0.0%	50.0%	50.0%	100.0%
	Excellent Employability	Count	0	0	70	70
		Expected Count	2.1	11.1	56.8	70.0
		% within Pre Test Employability	0.0%	0.0%	100.0%	100.0%
Total		Count	3	16	82	101
		Expected Count	3.0	16.0	82.0	101.0
		% within Pre Test Employability	3.0%	15.8%	81.2%	100.0%

TABLE-CHI-SQUARE TESTS

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	88.199 ^a	4	.000
Likelihood Ratio	71.406	4	.000
Linear-by-Linear Association	64.316	1	.000
N of Valid Cases	101		

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .21.

SYMMETRIC MEASURES

	Value	Asymp. Error ^a	Std.	Approx. T ^b	Approx. Sig.
Interval by Pearson's R	.802	.043		13.358	.000 ^c
Ordinal by Spearman Correlation	.764	.058		11.773	.000 ^c
N of Valid Cases	101				

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

EXPERIMENT INFERENCE:

The tests show that there are variation of performance distribution among different categories of student attendance. It shows the significant correlation in between two also. Moreover, the Experiment reflects the significant improvement among subjects after the treatment. This establishes the association of identified extrinsic factors over the employability of students.

CONCLUSION:

The study establishing a model for classifying the various categories of students on the basis of their class-room attendance & academic performance. Moreover, it also establishes a model for enhancing the employability of students' by using extrinsic factors.

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