

Interpersonal Relationship between Lecturers and Students of Technological and Vocational Education

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Abstract— this study aims at finding out to: 1) the dimensions of interpersonal relationship between lecturers and the students of technology and vocational education, 2) the profile of interpersonal relationship between the lecturers and the students, and 3) the most dominant dimension of interpersonal relationship between lecturer and students. This research can be categorized as survey research. The population of this research was all students of Faculty of Engineering Yogyakarta State University and the research sample was 210 students who were taken randomly from each department. Data were collected by questionnaire with scale 4. Data analysis was done with descriptive statistics and Confirmatory Factor Analysis (CFA). The study showed that: 1) the dimensions of significant interpersonal relationships between lecturer and student consist of leading, helpful, understanding, freedom, uncertain, and strict; Meanwhile the dissatisfied and admonishing dimensions were not significant. 2) In the scale of 5-20, the mean of the leading dimensions = 13.614, understanding = 13.569, freedom = 12.662, helpful = 12.152, strict = 11.636, dissatisfied = 8.881, admonishing = 8.657, and uncertain = 7.957. 3) Based on the mean score, the most dominant interpersonal relationship was leading, while based on the factor load was helpful.

Keywords — *interpersonal; relationship; lecturers; students*

I. INTRODUCTION

Teaching is a very complex activity and it was influenced by the subject matter, the availability of time, the teacher character, the students' character, the resources and others. A classroom is a micro system which is characterized by various interpersonal relationships. Interpersonal relationship between lecturers and students greatly affect the process and the results of teaching and learning activities. The interpersonal relationship model that occurs in teaching and learning activities is complex and it can be viewed from different angles.

Interpersonal relationships between students and their teachers have been studied in many researches. The result showed that the interpersonal relationships between students and teachers have an effect for both side (Ridwan Maulanaa, et al, [1]. Den Brok et al. [2] found that the students' perceptions of teacher interpersonal behavior were strongly related to the student motivation and achievement in all subjects. Brekelmans, Slegers, & Fraser [3] found that good relationships between students and teachers contributed to the student participation in the learning activities.

Interpersonal relationships are a strong bond between two or more people referring to interpersonal relationships. The appeal between individuals brings them close to each other and ultimately produces strong interpersonal relationship. The relationship can have a short duration or for a quite long time.

The interpersonal relationship between student and teacher is a dynamic system that can change. Like living organisms, relationships have a start, an age, and an ending. This relationship tends to grow and increase gradually, starting when students are accepted in school, attending the learning process, and it ends when they graduate from school. Though, some students are still in an interpersonal relationship with their teachers after they have graduated. But there are also some students who have a bad relationship with their teachers while they are still being student in the school.

There are many models of interpersonal relationships. The famous interpersonal model is Model Interpersonal Teacher Behavior (MITB). This model is based on Timothy Leary's research on personality interpersonal diagnosis [4]. The Leary model has been extensively studied in clinical psychology and psychotherapy and it was effective to describe human interaction. This model is also cross-cultural [5] [6] [7]. MITB has two dimensions, namely Dominance - Submission (power - obedient) and Opposition - Cooperation (against - cooperation). If depicted in an orthogonal coordinate system, the Dominance-Submission dimension is on the Y axis, whereas the Opposition-Cooperation is on the X axis.

The application of this model in the learning process performed by Wubbels, Creton, & Hooymaners [8]. Even Wubbels & Brekelmans [9] have developed models of interpersonal relationships between the teacher and the student. The model had been implemented in QTI (The Questionnaire on Teacher Interaction). QTI was a tool to measure the interaction between the teacher and the student. According to Wubbels & Brekelmans [9] there are eight dimensions of teacher interpersonal relationships with students: leading or leadership behaviour, helping/ friendly behaviour, understanding behavior, student responsibility/freedom behaviour Giving students freedom), uncertain behavior (uncertainty), dissatisfied behavior, admonishing behavior, and strict behavior (very strict / disciplined).

II. RESEARCH METHOD

This research categorized as a survey research. The data was in the form of quantitative. The research was conducted at the Faculty of Engineering, Yogyakarta State University. The Population of this research was all student of Faculty of Engineering, Yogyakarta State University. The students who made the sample at least already in the semester of 7, because, in this semester, the students have already been taught by all lecturers in the department. The sample technique was done randomly. The sample size was 210 students.

The instrument of this research is a questionnaire of interpersonal relationship between lecturers and students which had 8 indicators according to the concept of Wubbels & Brekelmans [9], namely leading, helping, understanding, student responsibility, uncertain, dissatisfied, admonishing, and strict. The questionnaire was using Likert scale model with 4 alternative answers based on the frequency range of indicator occurrence performed by the lecturer. The total number of the questionnaires was 40. The instrument guideline of this study was shown in Table 1.

TABLE 1. THE INSTRUMENT GUIDELINE OF INTERPERSONAL RELATIONSHIP BETWEEN THE LECTURER AND THE STUDENT

| No. | Dimension | Number of Item | Item Number |
|-----|---------------|----------------|--------------------|
| 1. | Leading | 5 | 1, 2, 3, 4, 5 |
| 2. | Helpful | 5 | 6, 7, 8, 9, 10 |
| 3. | Understanding | 5 | 11, 12, 13, 14, 15 |
| 4. | Freedom | 5 | 16, 17, 18, 19, 20 |
| 5. | Uncertain | 5 | 21, 22, 23, 24, 25 |
| 6. | Dissatisfied | 5 | 26, 27, 28, 29, 30 |
| 7. | Admonishing | 5 | 31, 32, 33, 34, 35 |
| 8. | Strict | 5 | 36, 37, 38, 39, 40 |

The assessment of instrument validity was done through expert judgment. To verify the questionnaire items, a correlation test for all item was performed based on empirical data. The reliability of this multi-dimensional instrument was known by calculating the Cronbach coefficients on each dimension and Stratified Alpha for all dimensions [10]. The result of the empirical data analysis showed that all item had positive correlation coefficient > 0.3 with the measured indicator, Alpha coefficient of each indicator > 0.65, and Stratified $\alpha = 0.931$.

Data analysis technique was using Confirmatory Factor Analysis (CFA). The multivariate normality of the data was

checked before the CFA. Model compatibility was done by looking at χ^2 , CFI (Comparative Goodness of Fit Index), and RMSEA (Root Mean Square Error of Approximation). The model was declared suitable if χ^2 had a significance level (p) 0.050; CFI 0.9; and RMSEA 0.080. Testing significance of factor load from indicator (λ) using t test with 5%

significance level. The data were also analyzed with descriptive statistics, by calculating mean, median, and mode, categorization of indicators, as well as graphs presentation.

III. RESEARCH RESULT

A. Dimension of Interpersonal Relationship of Lecturer and Students

The result of CFA with Mplus software 7.4 was $\chi^2 = 439.090$ and $p = 0.000$, CFI = 0.455; and RMSEA = 0.317. This showed the model was not fit. The significance test showed that the leading, helpful, understanding, freedom, uncertain, and strict dimensions were significant, while dissatisfied and admonishing were not significant. The CFA result was presented in Fig. 1. The understanding dimension had the highest factor load, which was 0.820 with residual variance 0.327, while the dissatisfied was the lowest factor load, i.e. 0.051 with residual variance 0.997.

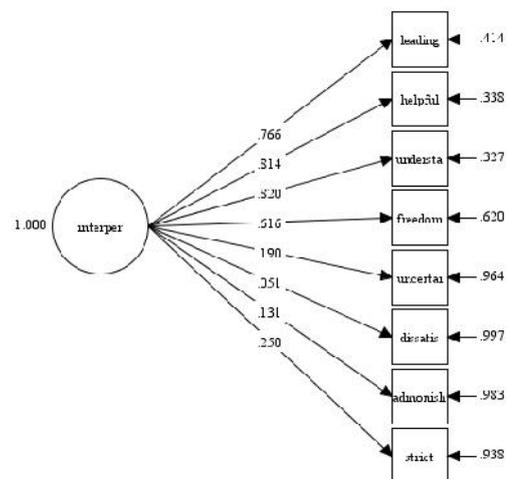


Fig. 1. The CFA Result of Interpersonal Relationship in Default Score

The modification of interpersonal relationship model was tried by making correlation (error covariance) between dissatisfied with uncertain, admonishing with uncertain, admonishing with dissatisfied, strict with uncertain, strict with dissatisfied, and strict with admonishing. It also made a correlation between freedom with helpful, uncertain with understanding, and uncertain with freedom. The CFA results of the modifications were presented in Fig. 2.

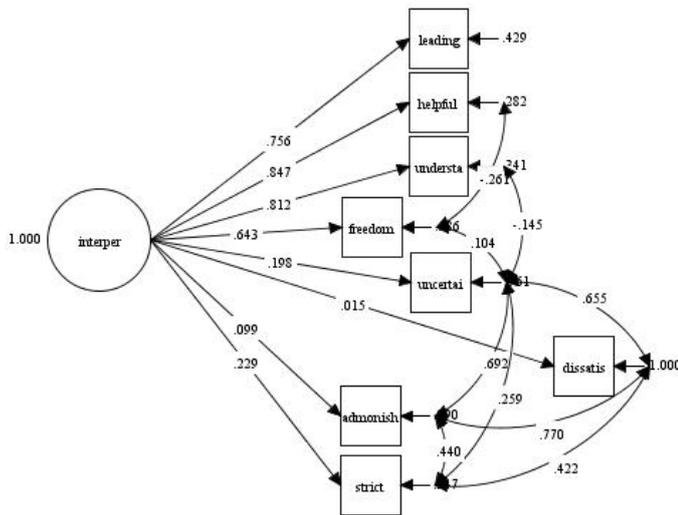


Fig. 2. The Result of CFA Modification of Interpersonal Relationship in Default Score

The model in Fig. 2 declared fit, where $\chi^2 = 19.276$, $p = 0.0563$, $CFI = 0.989$; and $RMSEA = 0.060$. The significance test of the factor load for each dimension showed leading, helpful, understanding, freedom, uncertain, and strict was significant, while dissatisfied and admonishing remain insignificant. The highest factor load was helpful dimension, i.e. 0.847, while the lowest was dissatisfied with the score 0.015. The CFA results in standard scores which showed significant Fig.s were presented in Fig. 3.

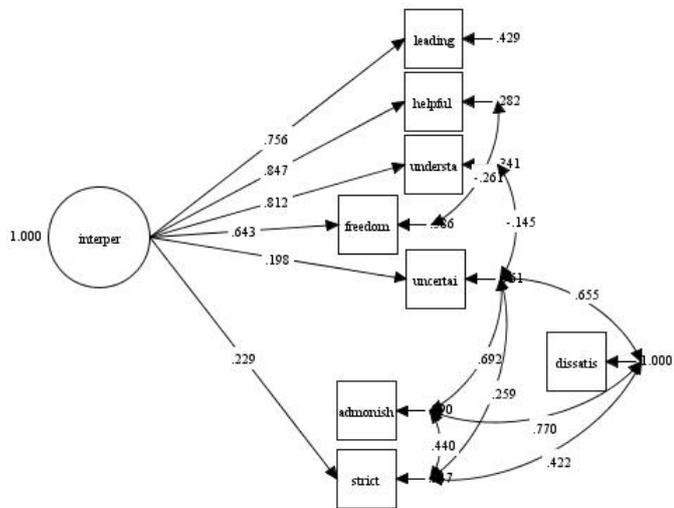


Fig. 3. CFA Results of Modified Interpersonal Relationships in Standardized Significant Score

B. The profile of Interpersonal Relationship between Lecturer and Students of Technology and Vocational Education

The number of questionnaire item in each dimension of interpersonal relationship between lecturers and students was 5 with Likert scale model of 4 alternative answers where each dimension had a minimum score of 5 and a maximum score of 20. The Descriptive analysis of this research obtained the mean of each dimension of interpersonal relationship of

lecturers and students in the form of radar diagram as presented in Fig. 4.

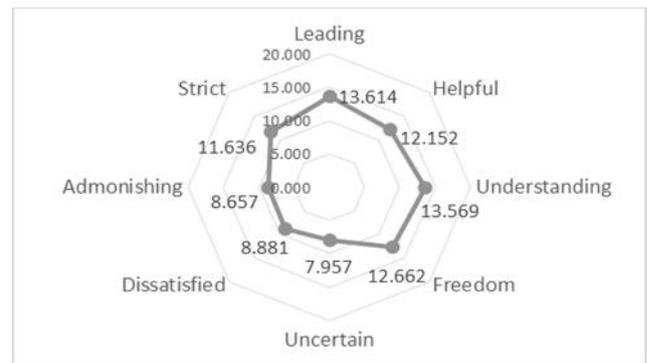


Fig. 4. Radar diagram of Mean Score for Each Dimension of Interpersonal Relationship between Lecturer and Student

Fig. 4 showed that the mean of Interpersonal Relationship of the lecturer and student was leading, i.e. 13,614, while the lowest was uncertain with the score of 7,957.

Based on the content of the fit model factors shown in Fig. 2, the interpersonal relationship profiles of lecturers and students was presented in Fig. 5. This Figure showed that the dimension with largest of role in the interpersonal relationships of lecturers and students was helpful, i.e. 0.847; while the lowest was dissatisfied with the score of 0.015.

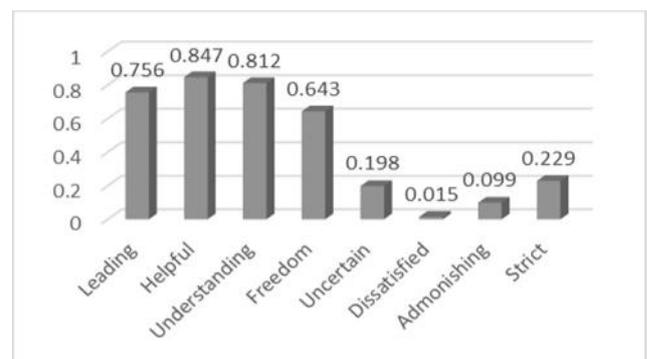


Fig. 5. Barchart Loading Factor for Each Interpersonal Relationship Dimension between Lecturer And Student

IV. CONCLUSION

This research found that the dimension of Interpersonal Relationship Dimension between lecturer and student of technology and vocational education, namely “leading”, “helpful”, “understanding”, “freedom”, “uncertain”, and “strict” were significant; meanwhile “dissatisfied” and “admonishing” were insignificant. The mean for each dimension was leading = 13.614, understanding = 13.569, freedom = 12.662, helpful = 12.152, strict = 11.636, dissatisfied = 8.881, admonishing = 8.657, and uncertain = 7.957 which was calculated based on the scale of each dimension between 5 till 20 scale. Based on the mean score, the most dominant dimension was leading and based on the factor load was helpful.

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REFERENCES

- [1] Ridwan Maulanaa*, Marie-Christine Opendakker, Perry den Brok and Roel Bosker. Teacher–student interpersonal relationships in Indonesia: profiles and importance to student motivation. *Asia Pacific Journal of Education*. Vol. 31, No. 1, March 2011, 33–49. 2011.
- [2] Den Brok, P. J. Teaching and student outcomes. A study on teachers' thoughts and actions from an interpersonal and a learning activities perspective. Utrecht: W.C.C. 2001.
- [3] Brekelmans, M., & Wubbels, T. Student and teacher perceptions of interpersonal teacher behavior: A Dutch perspective. *The Study of Learning Environments*, 5, 19–30. 1991.
- [4] Leary, T. (1957). *Interpersonal diagnosis of personality*. New York: Ronald.
- [5] Lonner, W. J. The search for psychological universals. In H. C. Triandis & W. W. Lambert (Eds.). *Handbook of cross cultural psychology*. (vol.1) pp. 143-204. Boston: Allyn and Bacon. 1980.
- [6] Brown, R. (1965). *Social psychology*. London: Collier-McMillan.
- [7] Dunkin M. & Biddle, B. *The study of teaching*. New York: Holt, Rinehart & Winston. 1974.
- [8] Katama, A., Turhan, A., & Darandari, E. Estimating reliability for multidimensional composite scale scores. Paper presented at the annual meeting of American Educational Research Association, Chicago. April 2003.
- [9] Wubbels, T., Creton, H. A., & Hooymayers, H. P. (1985, April). Discipline problems of beginning teachers: Interactional teacher behavior mapped out. Paper presented at the annual meeting of the American Association Research.
- [10] Wubbels, T., & Brekelmans, M. Two decades of research on teacher-student relationships in class. *International Journal of Educational Research*, 43, 6–24. 2005.