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ABSTRACT

A study explored the extent to which preexisting characteristics influenced a student's performance in class by examining students' "willingness to communicate," "conflict mode," and general personality traits. Sixty-five male and 160 female undergraduate students at an eastern university participated in the study. The sample represented the actual distribution of males and females in all sections of the introductory course in interpersonal communication. Students completed the Willingness to Communicate Scale, the Thomas-Kilmann Conflict Mode Instrument, and Eysenck Psychoticism Questionnaire. Results indicated that psychoticism correlated negatively with final grades, and that both collaborating and compromising modes of conflict resolution correlated positively with final grades. (Two tables of data are included, and 16 references are attached.) (PRA)

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The Influence of Individual Differences on Academic Performance in a University Course on Interpersonal Communication¹

by

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Abstract

The present study examines the relationship of Willingness to Communicate, Conflict mode and general personality traits to individual performance in the basic course in interpersonal communication. Students (N =225) completed the Willingness to Communicate Scale, Thomas-Kilmann Conflict Mode Instrument, and Eysenck Psychoticism Questionnaire. Psychoticism correlated negatively with final grades. Both Collaborating and Compromising modes of conflict resolution correlated positively with final grades.

Key word: Grades, interpersonal communication, conflict mode, Psychoticism

The Influence of Individual Differences on Academic Performance in a University Course on Interpersonal Communication

Introduction

One of the continuing concerns of teachers is whether preexisting characteristics influence a student's performance in a course. For those who teach interpersonal communication, this concern is magnified by the underlying assumption that students are not only acquiring information in the course, but also are expected to become more skilled in managing interpersonal relations. If there are individual characteristics that strongly influence academic performance in an interpersonal communication course, instructors need to be able to assess these characteristics early in the semester. Such data will help instructors provide appropriate interventions for students who are likely to have difficulty in the course, and increase the likelihood that these students will learn and perform as effectively as possible.

Grades may be influenced by factors other than achievement, and faculty have widely differing views about the basis for assigning grades (Geisinger, Wilson, & Nauman, 1980; Milton, Pollio & Eison, 1986). Some researchers theorize that personality traits (e.g. extraversion), social facilitation, as well as verbal and written competence, have an influence on performance as measured by grades (Eysenck & Eysenck, 1976). A series of studies by McCroskey and Anderson (1976) revealed that students with high communication apprehension had lower academic achievement than students with low communication apprehension in interaction-oriented educational systems. Moreover, since the school environment requires effective communication skills, quiet individuals may tend to fare less well than their more talkative peers (Richmond & McCroskey, 1989). Thus willingness to communicate may also be a characteristic that predicts academic performance.

Additionally, students begin courses with preexisting characteristics that may exert considerable influence on their academic performance. One might expect that students who enter a course in interpersonal communication with skills in managing interpersonal relations would therefore be at an advantage in performance evaluation when compared to students lacking such skills. A question that emerges from these concerns is: Can we predict a student's academic performance in an interpersonal communication course by assessing certain attributes related to communication. The purpose of this study is to identify such factors that may consciously or unconsciously affect the evaluation of a student's performance.

Study variables and measures

This study explores the extent to which preexisting characteristics influence performance in class. Measures of factors hypothesized as relating to individual performance served as independent variables. They were the Eysenck Psychoticism Questionnaire (EPQ), the Willingness to Communicate Scale, and the Thomas Kilmann Conflict Mode Instrument. The criterion variable, performance in class, was operationalized as the final grade in the course.

Prior research suggests that a student's willingness to communicate with others can influence the communicative impact that a student has in classroom participation. This relationship would be even more salient in a course highly dependent on oral participation. Booth-Butterfield (1988) reported that, when high communication apprehensive students were informed that they would have to talk to another classmate recalling information that they learned, they lost about 20 percent of the information in contrast to high communication apprehensive students in other classes who were not required to talk about what they learned. And, as Richmond and McCroskey (1989) have

concluded, communication apprehension directly influences student preferences for instructional systems and student communication in the classroom. Assessment of communication apprehension seems particularly important considering that communication apprehension may affect up to 20 percent of the population (Richmond & McCroskey, 1989). The Willingness to Communicate scale was used to measure a student's desire to communicate. The data generated by the Willingness to Communicate Scale can provide a valid construct of a respondent's predisposition to be either willing or unwilling to communicate (McCroskey & Richmond, 1990). McCroskey and Richmond (1987) report that the overall score of the WTC and the subscores for the communication contexts and receivers are highly reliable and the face validity is strong.

Another assumption about being a skilled interpersonal communicator is that one is able to manage conflict in relationships, an inevitable feature of everyday life. The management of conflict also implies that one is able to use various methods for approaching and resolving conflict, dependent upon one's goals and the complexity of the issues. The ability to diagnose whether one should collaborate, compete, accommodate, or compromise with another party is an important diagnostic skill at the heart of an interpersonal course with direct implications for the management of relationships (Folger and Poole, 1984). Recent research documents that the most effective and appropriate means of arriving at integrative solutions is the ability to collaborate and compromise (Canary & Spitzberg, 1987). Based on these considerations, our assumption was that flexibility in approaching conflict situations would correlate positively with classroom performance. The Kilmann and Thomas Conflict Mode Instrument was selected to assess conflict mode because it is a widely used questionnaire that measures orientation to how an individual would approach a conflict situation.

Eysenck & Eysenck (1985) discuss the different trait characteristics of three personality types. Psychoticism appears to involve a lack of empathy and is associated with cold, impersonal and aggressive traits. Extraversion relates to active, lively, sociable traits, and Neuroticism consists of traits such as low self-esteem, guilt feelings, depression, and moodiness.

The EPQ Scale was employed to provide insight into the relationship of personality factors and performance. H. Eysenck (1947); H. Eysenck & S. B. G. Eysenck (1976); H. J. Eysenck & M. Eysenck, 1985) proposed a psychobiologically based model of personality consisting of three primary dimensions: extraversion, neuroticism, and psychoticism. The model is conceptualized as involving a hierarchical structure with each of the three broad dimensions subdivided into narrower and more specific traits.

Eysenck's personality types appear to have a bearing on educational considerations in several respects: they can affect the overall level of achievement and influence preference for academic subjects. One might also expect that Eysenck's personality types influence the way a student relates to his or her classmates, especially during group activities, and depending upon the personal experiences of students affect how they will process course content.

The following research predictions were formulated.

- R1 Willingness to communicate will correlate positively with performance in the course.
- R2 Psychoticism and Neuroticism will correlate negatively with performance in the course.
- R3 Extraversion will correlate positively with performance in the course.

R4 Collaborating and Compromising will correlate positively with performance in the course.

Method

Subjects. Sixty-five male and 160 female undergraduate students at an Eastern university agreed to participate in this study. Subjects were informed that all of their records used in this study would be kept confidential and the results would be reported only in terms of summary statistical data. The subject sample represents the actual distribution of males and females in all sections of the introductory course in interpersonal communication in the Spring of 1989. These sections were taught by four graduate teaching assistants, supervised by a senior faculty member. Class size was between 25 and 33 students. The interpersonal communication course under study here is more interactive and more personal than many other courses students take in college. But it also provides a considerable amount of content which is novel to the students, and it may attract students who are interested in studying social interaction. The course format features a mixture of lecture, active class participation, and experiential group projects.

Procedure. Early in the semester and prior to any instruction on empathy or conflict resolution, subjects were asked to respond to an "Interpersonal Communication Survey." The first part of the survey contained standard demographic questions. The second part involved a measure to assess social self-perceptions: the Eysenck Psychoticism Questionnaire (EPQ; Eysenck & Eysenck, 1976). The third part of the questionnaire included the Thomas-Kilmann Conflict Mode Instrument (1974) and the Willingness to Communicate scale (Richmond & McCroskey, 1989).

Final grades were recorded from departmental copies of official end-semester grade rosters and converted from letter grades (including "+" and "-") to grade points ("A" = 4.00, "A-" = 3.7, etc.).

The EPQ consists of 90 self-descriptive statements associated with the three dimensions discussed by Eysenck and Eysenck (1976): Psychoticism, Neuroticism, and Extraversion. Using an 11 point scale, subjects indicated for each statement to what extent each statement applied to them, "0" indicating "never" and "10" indicating "always." Scores for the four dimensions were computed for each subject.

The "Conflict Mode Instrument" consists of 30 sets of paired forced-choice statements. Subjects chose one of two alternatives in each set. Based on these choices, each subject's score on five dimensions of conflict style was computed: Collaborator, Compromiser, Competitor, Accommodator, and Avoider.

The Willingness to Communicate scale, (McCroskey and Richmond, 1987), consists of 20 items that provide a measure of a person's desire to communicate in four contexts--public speaking, meetings, discussions, and interpersonal conversation, and with three types of receivers--strangers, acquaintances, and friends.

Results

Subjects' final course grades were correlated with the measures from the Eysenck Personality Questionnaire(EPQ), the conflict mode, and the willingness to communicate scales, using Pearson Product Moment correlations. Table 1 shows that the Psychoticism subscale of the EPQ correlated significantly with the final course grade. None of the other personality measures revealed any significant correlation with final grade.

Insert Table 1 About Here

Two subscales of the Conflict Mode Inventory, **Compromising** ($p < .005$) and **Collaborating** ($p < .05$) produced significant correlations with final course grades. (See Table 2). No significant correlations emerged between **Willingness to Communicate** and final grade.

Pearson Product Moment correlations were calculated between variables that had been found to correlate with grades. Psychoticism correlated positively with **Competitiveness** ($r = .25$, $p = .0002$) and negatively with **Accommodating** styles of conflict management ($r = -.14$, $p = .0377$). **Accommodating** correlated negatively with **Competitiveness** ($r = -.3377$, $p = .0001$).

Correlations between all instruments used and final grades were also computed for females and males separately. Due to the smaller number of male respondents ($N = 65$), none of the correlations was significant for this subgroup. However, a number of significant results emerged for females. The subscale **Willingness to Communicate with a Friend**, proved to be positively related to final grades. The correlation is high for females who show a preference for **Compromising** in handling conflict, while it is virtually nonexistent for males.

Insert Table 2 About Here

Discussion

The present study revealed statistically significant correlations between final grades in an Interpersonal Communication course and subscales of two of the instruments used: the Eysenck Psychoticism Questionnaire (EPQ) and the Thomas-Kilmann Conflict Mode Instrument.

Contrary to our prediction, Willingness to Communicate did not correlate significantly with final grades in the course. However, the correlation coefficient was in the predicted direction: the more willing a student was to communicate, the higher the grade the student received in the course. Presumably, most students who enroll in an interpersonal course know that communication with others will be strongly emphasized. Students who would be reluctant to participate in this way may have opted to fulfill their communication skills requirement with an additional writing course.

As predicted of the EPQ subscales, psychoticism correlated negatively with performance in the course; neuroticism did not correlate significantly with performance. Intuitively, one would expect that a skilled interpersonal communicator would score relatively low on the psychoticism scale, for such a person would be more empathic and cooperative. Thus, a person scoring relatively high on the psychoticism scale would probably be unknowledgeable or unwilling to be empathic or cooperative in interpersonal relations. The data reflect that those respondents in the sample who received relatively high psychoticism scores tended to receive lower course grades, and vice versa. This finding also confirms Wilson's (1981) conclusion that high psychoticism scores correlate with poorer academic performance.

Contrary to the third research prediction, extraversion did not correlate significantly with performance in class, and the correlations were not in the predicted direction. Although 65 of the 225 subjects participating in this study were male, extraversion effects emerged strongly for males, but not for

females. Instructors may respond more negatively to extraversion in males, than they do with respect to females. This gender difference appears worthy of further exploration.

As predicted, collaborating and compromising correlated positively with performance in the course. A major research interest in examining conflict styles was to discern when and how each of these approaches affects the resolution of conflict. Although each style has been found to have advantages and disadvantages, most theorists proclaim the superiority of a collaborative solution (Hocker and Wilmot, 1985). The results of this study indicating that students who typically used a collaborative or a compromising mode of conflict resolution received higher grades raise questions for further research. Are students who prefer to be collaborative or compromising more likely to be perceived as more compliant? Is there a relationship between cooperativeness and a perception of compliance? Are instructors more likely to give higher grades to those with more "compliant" interpersonal styles? Further research is needed to explore the role of perceived cooperativeness and its influence on grades.

The question explored in this study was whether factors other than academic performance predicted performance in a course. This question was directed especially to an interpersonal communication course, where the influence of other than academic factors may be potentiated. That results in general were not very strong may be reassuring to classroom teachers both in this course and in general. A concern is not that factors such as cooperativeness and empathy fail to have an effect; rather, despite the strong emphasis on interpersonal interaction and the establishment of personal relationships, grading relies in the main on traditional academic procedures and requirements.

There are limitations to this study. Only three preexisting attributes were examined, whereas they may be several other characteristics that influence performance in class. Although this study was exploratory in nature, the findings point to an important direction in classroom research in communication and perhaps in other disciplines. A number of variables which instructors may not consider appear to enhance classroom performance for some students. For example, future research could determine whether instruction in compromise and collaborative modes improves student performance in the basic interpersonal course as well as in other courses. Given that prior research demonstrates willingness to communicate helps determine a person's communicative impact on others (Richmond and McCroskey, 1989), future research should examine the influence of willingness to communicate on performance both in communication skills courses and in lecture and discussion courses. A better understanding of these factors may provide us with additional tools to help target classroom teaching to meet individual student needs, and to improve both student and teacher effectiveness.

Results from this study suggest that students who enter an interpersonal communication course with a preference for compromising and collaborative modes of conflict management are more likely to perform well. Conversely students who lack such preferences are less likely to receive higher grades in the course. Students who score high on Psychoticism are less likely to perform well. If instructors can assess student preferences for conflict management and determine their Psychoticism scores, instructors can then identify students who are unlikely to perform effectively in an interpersonal communication course. Following assessment, instructors can offer special training to students with these preexisting characteristics and thus enhance the students' opportunity for academic success.

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Table 1

Correlations Between Final Grade in an Introductory Interpersonal Communication Course and Respondent Scores on the Eysenck Psychoticism Questionnaire.

Personality Measures	Gender		
	Combined	Females	Males
Extraversion	-0.031	-0.057	-0.160
Psychoticism	-0.200**	-0.109	-0.148
Neuroticism	0.021	-0.005	-0.062

** $p < 0.005$

Table 2

Correlations Between Final Grade in an Introductory Interpersonal
Communication Course and Conflict Mode and Willingness to Communicate

Measure	Gender		
	Combined	Females	Males
Conflict mode			
Accommodator	-0.035	-0.053	-0.058
Competitor	-0.099	0.011	-0.173
Collaborator	0.129*	0.142 ¹	0.118
Compromiser	0.210**	0.283**	0.001
Avoider	-0.042	-0.031	-0.082
Willingness to			
Communicate	0.017	0.109	-0.106
with a Stranger	0.026	0.105	-0.073
with a Friend	0.103	0.174*	-0.037

¹ $p = 0.073$

*significant at $p < 0.05$.

**significant at $p < 0.005$.