

AN ANALYSIS OF THE EFFECT OF MOTIVATIONAL COMPLEX
UPON THE ATTITUDE OF COMMITMENT TO THE STUDY OF
ENGLISH IN SELECTED GROUPS OF POLISH STUDENTS

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This is a report on a pedagogical experiment whose objective was to make an analysis of motivation for studying English in selected groups of Polish students. Among the factors affecting students' learning achievement, motivation for studying is one of the most crucial determinants of that achievement. If well examined and analyzed, this complex psychological entity may be used by the English teacher for effectively enhancing student achievement. In this project we have attempted to check and suggest a number of ways this objective could be realized.

In the first part of the article basic problems and notions from motivation theory are presented on which we base our theoretical model of the effect of motivational complex upon the students' linguistic achievement. In the second part, our research hypotheses and assumptions are presented, as well as the methodology of our investigation. In the third part of the article the data obtained in the experiment are analyzed and some conclusions formulated.

I

1.1. The notion of motivation is one of the most fundamental notions in psychology. It is also commonly used in many fields other than psychology. Generally, motivation is defined as the complete set of motive operating within an individual (Murray 1968). P. T. Young (1961: 24) states that motivation is "... a process that initiates activity, sustains it, and modifies its course". Another definition that we have found useful for our purpose is that by E. R. Hilgard, which reads as follows:

Motivation is the general term referring to the controlling of activity aimed at satisfying needs and attaining goals (Hilgard 1968:978).

Hilgard's definition stresses a close relation between such concepts as motives and needs. In fact, some authors identify motives with needs, as will be discussed below. The difference between the more general term *motivation* and the narrower one *motive* depends on the understanding of the particular use of the categories, and sometimes is rather subtle. J. P. Guilford, for instance, gives the following definition of a motive:

A motive is any particular internal factor or condition that tends to initiate and sustain activity (Guilford 1956: 91).

Based on the definitions quoted above is the threefold division of the kinds of motives or constituents of motivation, that we suggest for the purpose of our project. The three significant components making up motivational complex are: 1. factors initiating activity, 2. factors sustaining activity, and 3. factors modifying activity. Activity in our case is studying the English language, or more precisely, the amount of effort a student is willing to put into studying the language. The effort the student might be willing to spend in active study, i.e., his perseverance, will naturally be the most immediate determinant of his language achievement. In terms of psychology we are discussing here one of the aspects of student's attitude toward the English language and the studying of it.

1.2. Since needs constitute the action-initiating factors, they are often identified with motives. Any human individual begins to act when he feels a need for something. B. Wolman's *Dictionary of behavioral science* offers two definitions of a need. According to one of them a need is:

A construct representing a force in the brain which directs and organizes the individual's perception, thinking, and action, so as to change an existing, unsatisfying situation. A need may be evoked by internal processes or environmental forces and is accompanied by particular emotions and modes of behavior designated to change the initiating circumstance and satisfying the organism (Wolman 1973:250).

The other definition reads that a need is:

The condition of lacking, wanting, or requiring something which if present would benefit the organism by facilitating behavior or satisfying a tension (Wolman 1973:250).

It can be assumed that most students take up studying English because they are driven to do so by some kind of need evoked either externally or internally, i.e., they want to learn English in order to satisfy the need or needs. This action-initiating quality of a need makes for its close relation to goals. By learning the language the students intend to achieve some goals, even if the mere pleasure of studying it is an end itself. The science of psychology divides all goals one may set for himself to achieve into internal and external. Goals are internal if they are characterized by the subject's desire to broaden his knowledge, interests, way of thinking, etc. If his goals are more material

in nature, such as getting a better job, making more money, etc., they are said to be external. This division corresponds roughly to the well known classification of motivational orientation in the field of psycholinguistics, i.e., the so-called integrative orientation (internal goals) and instrumental orientation (external goals) (Jakobovits 1970, and Lambert 1963).

Goals constitute the first kind of motivation components, i.e., the activity-initiating motives. Wanting to reach the goals causes one to take up studying English.

The mere existence of the goals does not constitute a sufficient incentive for the student to continue his effort despite all the hardship and obstacles he is likely to encounter during the course of his study. He must get some degree of satisfaction from studying English in order to carry on with his plans. The degree of satisfaction makes up the second group of motives for studying English. They are motives that sustain students' activity aimed at reaching their goals.

The amount of effort and its intensity that characterize a student's work may vary considerably, too. This amount of effort will be modified by his level of aspiration. The level of aspiration constitutes the third group of motives that affect the final outcome of a student's work, i.e., his mastery of English. The level of aspiration is in some ways related to goals. Yet, the differences between the two concepts seem to be significant enough to justify their isolation, at least for purely theoretical purposes. Level of aspiration is an awareness on the part of the student of to what extent the particular goals may be reached. It is an awareness of what level of perfection or mastery can be arrived at within a particular goal; while goals initiate and direct one's activity (effort), level of aspiration determines and modifies its intensity.

Those are the three components of what we refer to as the motivational complex in this article. The learner's attitude toward studying English, the major determinant of his success, is a function of the three components and as such will be measured through an analysis of the components. Our task, then, is to examine the relation between the motivational complex and the attitude toward studying English.

1.3. It has been generally recognized by theoreticians in the field of psycholinguistics that attitudes toward foreign language study are major determinants of linguistic achievement (Jakobovits 1970). While discussing motivation (needs, goals, and satisfaction) we have to refer to attitudes because there are numerous mutual relationships between those two notions. B. Wolman's dictionary presents a rather concise but quite exhaustive definition of attitude.

It states that an attitude is

...a learned predisposition to react consistently in a given manner (either positively or negatively) to certain persons, objects, or concepts. Attitudes have cognitive, affective, and behavioral components (Wolman 1973:34).

The first component, the cognitive one, is made up of beliefs and opinions about the object. In our case, the English language and the process of learning it are the objects of attitude. A student may think of English as of a very valuable language, one that is absolutely indispensable to good education, or necessary for international communication. On the other hand, the student may be of the opinion that the knowledge of English is undesirable and the language itself very bad.

The second one is the emotional or affective component of attitudes. It pertains to emotions related to the object. Due to this component the attitude object is thought of as pleasing or displeasing, nice or disagreeable. A student engaged in the study of English will persevere in his effort if accompanying it are the feelings of pleasure and satisfaction. On the other hand, he will discontinue his effort if the feelings of displeasure and dissatisfaction prevail in the course of his study.

Finally, the third component differentiated here is the action tendency component. It includes all the behavioral readinesses related to the attitude. In our case, this third component will mainly concern students' eagerness to commit themselves to the study of English or their unwillingness to do so. Students' disposition to act will manifest itself by their readiness to put some effort into studying English. The amount of effort will naturally be directly proportional to their achievement, i.e., the degree of their mastery of English. The more the student is committed, the better his mastery of English will be. Therefore, it is the students' attitude of commitment to the study of English that we are primarily concerned with in this project. We are interested in how the teacher can make use of and manipulate the student's motivational factors in order to ensure the development of such an attitude.

In other words, in this project we have made an attempt at analyzing how the motivational complex can mould the attitude of commitment to studying the language under the conditions that hold in various types of instruction in Poland. One of the methods commonly employed in attitude and motivation measurement is an analysis of verbal reactions of the subjects involved. This was the method we used in our experiment which was carried out by means of questionnaire testing.

II

2.1. As we stated previously, goals an individual may set for himself are generally divided into internal and external, a division that corresponds to the integrative and instrumental orientations distinguished by psycholinguists. It has been demonstrated by a number of investigators, chiefly in America, that the two different goal orientations may bring about varying linguistic achievements in many students. In general, the reports seem to agree on one

issue, i.e., that the integrative kind of orientation tends to produce better effects in a foreign language study.

One of the objectives of our project is to examine goals and needs as one aspect of the motivational complex. We have selected three different student populations for the questionnaire testing. We assume that both internal (integrative) and external (instrumental) goals occur in all three groups, but the preference hierarchy of particular goals will vary with different groups. Another assumption we make concerns a relationship between the particular kinds of goals and the attitude of commitment. Following the findings of Lambert's and Jakobovits's reports, we assume that some goals will prevail in the case of low committed students and others will coincide with the attitude of high commitment. Our basic hypothesis is that the internal, or integrative, goals are related to the attitude of high commitment. We expect that the internal goals will predominate in the case of those students who will display a high degree of commitment to the foreign language study.

In our model of the motivational complex we distinguished another factor affecting a learner's attitude toward the foreign language study, which we have decided to take into account as an object of our measurement. We are speaking here of the degree of satisfaction with the kind of instruction a student is exposed to. The activity initiated by certain needs and goals is more likely to be carried on and brought to a successful completion if it is accompanied by a relatively high degree of satisfaction. Strictly speaking, satisfaction makes for a student's perseverance in his language study and as such considerably affects his commitment, and, consequently, his final achievement. Based on these assumptions is our second major hypothesis concerning the relationship between the degree of satisfaction and the attitude of commitment. We believe that the higher the degree of satisfaction is, the higher the attitude of commitment will be.

Since we were to examine three populations (a high-school group, an evening course-for-adults group, and a university-student group), we decide to include a minor hypothesis to be verified, as well. We presume that among those particular groups the following differences will occur: 1. varying attitude of commitment, 2. different degrees of satisfaction, 3. specific preferences in the goal-hierarchy scale.

2.2. We will briefly discuss now the measurement methods of the three variables we have distinguished as the objects of our investigation, i.e., goals, the degree of satisfaction, and the attitude of commitment (the scope of our project did not permit us to include the level of aspiration as a separate measurement object).

The method we have decided to use in measuring learners' satisfaction and attitudes is the scaled inventory method. A basic assumption in this kind of procedure is that it is possible to sum up a number of particular answers de-

describing an attitude and thus arrive at a general conclusion, i.e., what kind of attitude the subject represents. An analysis of the inventories by means of various statistical techniques makes it possible to examine the specific components of attitudes. In our study we have used an attitude scale of the Likert scale type, which is also known as the method of summated ratings. It is a type of attitude scale which requests the subjects to indicate the degree of agreement or disagreement, on a three- or five-step scale, with stated attitudes (Wolman 1973). Some basic assumptions in the method of summated ratings are that each statement in our scale covers the entire attitude continuum; that specific points on this scale can be indicated by alternative responses to each statement; and that an individual's attitude can be determined from a summation of his responses to all statements in the scale. (For a more detailed description of the method see Ferguson 1952).

We prepared two lists of statements concerning the two objects involved, i.e., the attitude of commitment and the degree of satisfaction. The number of items were 22 statements for each scale. The statements were so formulated that half of them were negative in nature and half of them were positive, i.e., the response "strongly agree" to half of them indicated a positive attitude toward the object or a high degree of satisfaction with it; the same response to the other half indicated a negative attitude or a low degree of satisfaction. We used a five-step scale, and the alternative responses we decided to allow were: "strongly agree", "agree", "undecided", "disagree", "strongly disagree". We assigned scoring weights to each alternative response. The most positive response was given the numerical value of 4, and the least positive was given the numerical value of 0. As an illustration, here are two statements from the attitude scale and the way of their ratings.

1. I study English systematically.

strongly agree	agree	undecided	disagree	strongly disagree
4	3	2	1	0

5. It takes a long time for me to get warmed up to the task of studying English.

strongly disagree	disagree	undecided	agree	strongly agree
4	3	2	1	0

The subjects were asked to underline this category of response to each statement which best described their feelings with regard to the statement. After the questionnaire forms were filled out, we scored the scales by summing all the responses of an individual. Since there were 22 items in the scale and the maximal value for each item was 4, a theoretically maximal score a subject could have received was 88 ($22 \times 4 = 88$). This would mean an extremely positive or high attitude of commitment. A completely negative attitude would be represented by the 0 score. Likewise, in the degree of satisfaction scale, a high

score would stand for a high degree of satisfaction, and a low one would represent an amount of dissatisfaction. By arranging the scores of all subjects in a specific population from the lowest to the highest, we obtained a continuum of attitude ranging from an extremely negative to the maximally positive. We applied the same procedure in the case of measuring the degree of satisfaction.

2.3. In trying to assess the hierarchy of goals within the particular populations as well as within the total number of subjects, we used the polidiagnostic method of multiple forced-choice ranking that was developed and applied in ergonomics diagnosing by Edward M. Bennett (1961). It is a questionnaire method by means of which the investigator can obtain such data as the subjects' assessments or evaluations concerning the importance, usefulness, appropriateness, value, etc., of an object. Here is a brief account of the procedure in the case of goal-hierarchy measurement.

This time various goals people set for themselves when they undertake the study of English were the object of our investigation. We collected a list of 18 statements ($n=18$) describing these various goals. Nine of the statements pertained to instrumental goals, and nine of them to integrative goals. The scale sensitivity we used for our purpose was 6 ($h=6$), i.e., the process of item selecting consisted of six steps. That also means that the person involved had to select three items at a time ($q=3$). In fact the subjects were asked to do only five choices and to leave the last three items unselected. They were asked to select first those three statements which best characterized their own needs and goals that underlay their decision to study English. Then, from the remaining 15 statements they were to select again three items that they would place just next to the first ones in the hierarchy of goals preference; in the next choice they were supposed to select the three goals that were still a little less important for them, and so on until they completed the fifth choice and three items left unselected. Now we scored the particular five choices. The items in the first choice (the most important goals) were scored 5 each. Those in the second choice were scored 4 each, in the third 3 each, in the fourth 2 each, in the fifth 1 each, and the unselected ones were scored 0 each. Theoretically, each item could have received the highest total score equalling the number of subjects being tested times the highest single score, that is 5, had it been selected in the first choice by all subjects. In fact, by comparing the actual score a particular item gained with the theoretical total sum, we obtained a number representing the proportion of choice of the particular item. All such proportions within a specific population could be arranged from the lowest to the highest, thus giving us a goal hierarchy continuum ranging from the least popular goals to the most popular ones. By calculating the mean proportion of choice for internal and external goals separately, and this being done in the case of all populations individually, as well as the total number of subjects tested, we achieved a very con-

venient tool with which to carry out a number of analyses concerning the hierarchy of goals and their correlation with the attitude of commitment.

2.4. The three subject samples we tested were the following:

1. a high-school student population; mainly second year students, and some fourth year students

2. a composite group of students enrolled in a number of evening courses for adults sponsored by TOWARZYSTWO WIEDZY POWSZECHNEJ in Poznań

3. a group of second-year university students from the English Institute at Adam Mickiewicz University.

In the high-school population there were 30 subjects, 8 male and 22 female, their ages ranging from 16 to 19. In the evening course population there were also 30 subjects, 10 male and 20 female, ages ranging from 19 to 39. The university population consisted of 20 subjects, 2 male and 18 female, with ages ranging from 18 to 23. The testing was carried out in April 1975. All the instructions and statements in the questionnaire forms were in the Polish language.

III

3.1. The data we obtained in the experiment were analyzed both for the total number of subjects we tested ($n=80$), and for the particular groups individually. First we present the total population analysis. After we had computed the attitude scores of all eighty subjects, as well as their satisfaction scores, we arranged the total number of subjects along a continuum ranging from those that ranked the lowest in the attitude scale to those ranking the highest. The lowest attitude score we obtained was 18, while the highest one was 79. To each subject in this continuum we assigned his or her respective satisfaction score. Then we arbitrarily divided the whole continuum into two forty-subject subgroups. The first forty subjects that came in the lower attitude scoring subgroup were to be regarded as the low-committed students, and the higher attitude scoring forty subjects were to be regarded as the high-committed students.

Our next step was to compute the mean attitude scores for the low- and high-committed subgroups, and their respective mean degrees of satisfaction. The mean attitude score for the low-committed subgroup was 40.88. The mean attitude score for the high-committed subgroup was 61.58. The satisfaction mean scores were $M=49.35$ and $M=56.87$, respectively. This confrontation seems to confirm, with respect to the whole population tested, one of our basic hypotheses concerning a correlation between the attitude of commitment and the degree of satisfaction. There is a definitely higher satisfaction mean score corresponding to the higher attitude mean score.

The subsequent stage of our analysis concerned the goal hierarchy scale.

Since the number of subjects under examination equaled 80, and the highest single score for a statement was 5, the highest total score any particular statement could have received was $5 \times 80 = 400$. By dividing the actual scores for the particular statements by the theoretical 400, we obtained the proportion of choice for each item. We carried out this operation separately for the low-committed subgroup and the high-committed subgroup.

Following this, we computed the proportions of internal and external goals in each of the subgroups. We obtained this result by summing the proportions of internal goals and dividing the sum by the number of internal goals, i.e., 9; we did the same in the case of external goals. In the tables below we present the mean choices for external and internal goals in both the low- and high-committed subgroups.

The low-committed subgroup		
	external goals	internal goals
mean choice	$M=0.47$	$M=0.53$

The high-committed subgroup		
	external goals	internal goals
mean choice	$M=0.40$	$M=0.60$

From the two tables presented above we can infer that internal goals have been more popular in general. They predominate both in the low-committed subgroup and in the high-committed subgroup. However, their predominance over the external goals is much more definite with the high-committed students. These results seem to confirm the other basic hypothesis concerning the relationship between internal goals and the attitude of commitment. In the total population we tested, a definite predominance of internal goals over the external ones coincides with the attitude of higher commitment.

3.2. Next we computed the mean proportion of choice for internal and external goals within the particular groups, and the total population as a whole, i.e., undivided into any subgroups. The results were as follows:

	high school	course	university	total
ext. goals mean choice	$M=0.44$	$M=0.43$	$M=0.44$	$M=0.44$
int. goals mean choice	$M=0.56$	$M=0.57$	$M=0.56$	$M=0.56$

As we can see, the results obtained for the particular groups generally confirm those for the total population. On the whole, the internal goals are more popular than the external, although their mutual proportions are not quite identical in all the groups. This would partly confirm our assumption regarding the differences in the goal hierarchy among the groups.

3.3. Let us now present the high-school population analysis. On the basis of attitude scores, arranged from the lowest to the highest, we divided the whole thirty-subject group into the low- and high-committed subgroups. The division was arbitrary, i.e., fifteen lower scoring students and fifteen higher scoring students came in the respective subgroups. Respective satisfaction scores were assigned to the attitude scores. Mean attitude scores and mean satisfaction scores were computed for the low-committed and the high-committed groups. Below we present the results of these calculations.

	attitude mean score	satisfaction mean score
low-committed subgroup	M=34.2	M=44.2
high-committed subgroup	M=57.06	M=48.13

In the case of the high-school group a higher degree of satisfaction is correlated with the attitude of higher commitment, as well. These data confirm the applicability of one of our major hypotheses to the high-school conditions of instruction.

Next we proceeded to the comparison of internal and external goals preference within the two subgroups. Our procedure was very much the same as in the total population analysis. Here are the results:

	external goals mean choice	internal goals mean choice
low-committed subgroup	M=0.49	M=0.51
high-committed subgroup	M=0.39	M=0.61

These data support very obviously the hypothesis concerning the coincidence of internal goals and the attitude of commitment.

3.4. The procedure of data computing for the evening-course population was essentially the same as in the case of high-school population. Here are the

results:

	attitude mean score	satisfaction mean score
low-committed subgroup	M=47.73	M=62.53
high-committed subgroup	M=69.6	M=67.06

What is specific about this group as compared with the previous one is a definitely higher attitude and satisfaction scoring in either of the subgroups. What it seems to imply is the fact that students enrolled in this kind of course tend to display both higher commitment to the study of English and a higher degree of satisfaction as compared with other populations. This finding may be regarded as a kind of verification of part of our minor hypothesis concerning the differences among the particular groups.

As regards the other major hypothesis of ours, the correlation of internal goals and the attitude of commitment, it seems to have been confirmed in the case of this population, too. Here are the relevant numbers we obtained:

	external goals mean choice	internal goals mean choice
low-committed subgroup	M=0.47	M=0.53
high-committed subgroup	M=0.39	M=0.61

3.5. The university student group was the one whose results concerning the correlation between the commitment and satisfaction degrees deviated the most from the general results. In fact, this particular hypothesis was not confirmed here at all. Here are the attitude and satisfaction mean scores for the low- and high-committed subgroups respectively.

	attitude mean score	satisfaction mean score
low-committed subgroup	M=42.4	M=46.1
high-committed subgroup	M=53.9	M=45.9

We have already mentioned that the number of subjects in this group was twenty. Consequently, in either of the subgroups we included ten subjects. This somewhat insufficient number of subjects may partly account for the strikingly different results we obtained here. On the other hand, the higher degree

of satisfaction in the low-committed subgroup may be accounted for in another way. University students are generally confronted with a wider variety of kinds of instruction and are thus in the position to make a fuller comparison of the particular courses they are taking. As a result, a more critical attitude develops on the part of these students. One might assume that the more committed a student is (that is, the more he wants to learn, the more he knows, the higher his requirements and expectations are), the more critical he will be with respect to the kind of instruction he is exposed to. It does not seem unreasonable, then, that the committed students would tend to display a higher degree of dissatisfaction than others, simply because their higher requirements and expectations are more difficult to meet.

The mean proportions of choice for the internal and external goals in the two subgroups were as follows:

	external goals mean choice	internal goals mean choice
low-committed subgroup	M=0.44	M=0.56
high-committed subgroup	M=0.43	M=0.57

The results obtained in this computation also confirm the major hypothesis assuming a predominance of internal goals in the case of attitude of high commitment, although perhaps not as expressly as in the other groups.

3.6. Summing up the survey of the results of our investigation, we will resort again to the model of student motivation that we presented in the first part of the article. We stated there that an indispensable and most immediate factor affecting the student's linguistic achievement was an attitude of commitment to the study of English (the amount of effort and time he is willing to spend studying the language), which in turn is determined by a number of motivational complex components, two of which were chosen as objects of our study. The two motivational components we distinguished were:

- a) goals set by learners, subsequently divided into internal and external,
- b) the degree of satisfaction with the study of English.

We formulated two major hypotheses to be verified in the course of our investigation: one assuming a concurrence of high preference of internal goals with the attitude of commitment to the study of English; another one assuming a concurrence of a high degree of satisfaction with the attitude of commitment.

The results of the experiment confirmed completely the first hypothesis (concerning internal goals). This assumption turned out to be true with regard to all subjects we tested.

The second hypothesis (concerning the degree of satisfaction) was confirmed only partly. It did not hold true for the university student population.

A general conclusion we would like to offer is that it seems justifiable to discriminate among the needs and expectations of different student populations and to take those differences into consideration while preparing teaching materials for specific purposes. It also seems highly probable that a more extensive incorporation of materials designed specifically to meet those needs and goals that were generally most popular with the subjects, would considerably increase the effectiveness of teaching English in various types of instruction in Poland.

We also believe that another implication worth considering is the fact that our project has demonstrated the applicability to the Polish school conditions of some methods and criteria used by W. Lambert in measuring student motivation. We are speaking here of his division of student motivation into integrative and instrumental, and the predominance of the former in case of more successful students. Since our project seems to have confirmed Lambert's findings with respect to some Polish students, we might expect that the correlation we have studied is a more universal regularity. Therefore, it would seem worthwhile to continue investigation and experiments in this field in order to find out to what extent this regularity applies to various Polish students.

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