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Physical education students' expectation towards the teachers' nonverbal and verbal behaviors during classes

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Abstract

This study presents the results of research aimed at recognizing the first and second year students' expectations for the teachers' nonverbal and verbal behaviors during classes. Data were gathered from 214 students of the Physical Education Faculty at Gdansk Academy of Physical Education and Sport in Gdansk. Anonymous "Teachers' Communication Behavior – TCB" questionnaire was used in this study. Its first part enabled to know the students expectancy for teachers' both nonverbal immediacy and nonverbal non-immediacy. The second part of this questionnaire contains questions enabling to rate the students' expectation for verbal teachers' behaviors. An analysis of the obtained results revealed four significant differences in the degree of the students' expectations for nonverbal behaviors of the teachers. It was also found that the students want their teachers to show seven attitudes being indicators of their nonverbal immediacy. The obtained results revealed also that the students rather do not accept touching them by the teachers. In case of verbal behaviors, the students want to see teachers' verbal immediacy and clarity of teaching the students expect from their teachers some behaviors pointing their nonverbal immediacy. They more accept the teachers who are smiling to the whole group, and not to the particular person. On the other side, the students do not accept touching. Students also expect for their teachers verbal immediacy, clarity and matter-of-factness. Differences between mean degrees of intensity the first and second year student's expectation proved to be statistically significant for four behaviors.

Keywords: Teachers' nonverbal and verbal behaviors, classes, students' expectations, physical education students

Introduction

The teacher and his students interact during classes. Their interrelations are made not only by the realization of the said taught subject but also by the verbal and nonverbal communication with the students, which is positively correlated with their motivation to study and obtained results [1, 2].

Several authors quote the results of study carried out by Megrabyan in the range of the one-word statements. He distinguished three components important for the receiver of the statement. He also calculated percent of each component in the statement (A) and described it by the following equation: $A = 0.07A_{ver} + 0.38A_{voice} + 0.55A_{expr}$. According to this equation, an attitude to the interlocutor includes: content of his oral statement, i.e. what he states verbally (A_{ver}), being only 7% of the total. Remaining 93% is based on the nonverbal communication and it includes the way of the interlocutor's speech, what are his voice tone (38%) and his facial expression (55%) [3]. In other words, "in perception of our interlocutor we pay an attention not only to the subject of his speech but also the way he speaks and his face expression. Moreover, his verbal signals are 5 times and face expression 8 times more effective than verbal elements of the statement" [4].

An analysis of the available literature indicates that for the destigation of "communication behavior increasing closeness and nonverbal interaction with others", Mehrabian introduced the term "immediacy" at the end of the sixties of the XX century. He also found that "greater immediacy is due to increasing degrees of physical proximity and/or increasing perceptual availability of the communicator to the addressee" [5].

In the late 1970s of the XX century, Andersen used the concept "teacher immediacy" to

determine nonverbal behaviors, which reduce physical and/or psychological distance between the teacher and students [6]. Teacher's movements around the classroom close to the students may increase physical immediacy [7, 8]. It may also be increased by the teacher's relaxed body position and favorable gestures while speaking to the students [9]. Psychological distance may be nonverbally decreased by smiling and direct eye contact with the students. Teacher's nonverbal immediacy is testified by higher speech rate, verbal reinforces, and variations in pitch [10, 11].

In 2005, Harris and Rosenthal carried out meta-analysis of 37 studies of the teachers' nonverbal immediacy. They found that it is strongly connected with several positive students' outcomes such as liking the teacher and taught subject, will to participate in the lessons, and the belief that they can learn a lot [12, p. 164]. Moreover, teachers' immediacy is conducive to the students' increased motivation to study [13].

Among teacher's nonverbal behaviors can be distinguished so-called indicators of his nonimmediacy, which increased physical and/or psychological distance from the students. Teacher's nonimmediacy may be communicated by the teacher's facial expression showing discontent, scarce gesticulation, monotonous/dull voice, use of the physical barriers such as standing or sitting behind the desk as well as tense body position and limited eye contact with the students [14].

In the late 1980s of the XX century, teacher's nonverbal immediacy behaviors was enriched with indicators of his verbal immediacy. They include such behaviors like: addressing students by their first names, using humor during classes, praising students for well done work, asking questions, and encouraging students to speak, using feedback in the process of learning, checking progress in the implementation of tasks assigned to students [15].

Results of the studies showed that teachers's nonverbal and verbal immediacy behaviors helps to reduce physical and/or psychological distance between the teacher and his students [11, p. 212]. In the other words, such behaviors helps to build close relations between teachers and students [16] and promote more effective education of students and increase of their cognitive achievements [17, 18].

Teachers' enthusiasm during classes demonstrates itself by both "his lively, energetic, and exuberant teaching style" and "nonverbal expressiveness" showed by the "(1) vocal animation, (2) wide-opened eyes and eye contact, (3) demonstrative gestures, (4) body movement, (5) meaningful and significant facial expression, (6) a descriptive selection of words, (7) acceptance of students' ideas and feeling, and (8) an overall high level of energy" [19, p. 746]. Results obtained by Wood indicates that teachers' enthusiasm is demonstrated by both verbal (use of humor) and nonverbal (expressive speech, different speech volume, smiling or laughing during lecture, moving around the classroom, gestures, facial expressions, and maintaining eye contact) [20, 21].

Positive effect on the students learning during classes has teacher's clarity [22]. It expresses by understandable way of transferring knowledge and use properly structured verbal and nonverbal communications [23, 24]. Results of the studies carried out at all levels of education explicitly indicate a close association between teachers' clarity and students' satisfaction from the process of learning [25, 26].

Verbal clarity and structural clarity are the elements characteristic for clear teaching. Verbal clarity is characteristic for teachers' clearly explaining the concepts and presenting examples, which are not confused. Structural

clarity means well organized teachers' presentation in the educational process [27]. The available studies confirm that unclear teachers' communications decrease students' achievements. Similarly, confusion in the students' heads reduces their achievements [28].

Objectives

The purpose of the study was to recognize the expectations of physical education students towards teachers' nonverbal and verbal behaviors during classes. An answer to the following research questions was sought:

1. What are expectations of the physical education students towards teachers' nonverbal and verbal behaviors during classes?
2. Are there statistically significant differences between expectations of the students beginning the study and after the first year towards nonverbal and verbal behaviors of the teachers during classes?

Material and Methods

Two hundred fourteen students (133 women and 81 man) of the Physical Education Faculty at the Gdansk Academy of Physical Education and Sport participated in the study. Their age was 18 to 23 years ($M=20.16$; $SD=1.14$). The group of the first year of study included 140 students (91 man and 49 women), aged between 18 and 22 years ($M=19.56$; $SD=0.80$), and 74 responders (42 male and 32 female students) of the second year of the Sport Faculty, aged between 20 and 23 years ($M=21.26$; $SD=0.84$). The study was carried out during psychology classes, two weeks after the start of the academic year 2018/2019.

A two-part anonymous questionnaire "Teachers' Communication Behavior – TCB" was used for survey. The first part contained 13 items. Eight of them (2, 4, 5, 7, 8, 11, 12, 13) enabled to assess students expectations towards the teachers' nonverbal immediacy. Remaining 5 items (1, 3, 6, 9, and 10) described teachers' nonverbal behaviors, indicating their non-immediacy [29].

The responders were asked to mark the degree of teachers' nonverbal behaviors compliancy with their expectations. Answers were scored from 1 to 7 (1 – very low degree; 2, 3, 4, 5, 6, 7 – very high degree). Therefore, if they thought that the teacher should display the behavior to a very high degree, they scored 7. In case of the lowest degree – they score 1. If their attitudes were not so strongly defined, the students' scores were within medium of the scale.

The second part of TCB questionnaire contained 10 questions, which enabled to assess students' expectation for the teachers' verbal behaviors during classes. Material available in the literature was used to design this part of questionnaire [30, 31]. The questions concerned: way of teachers' addressing to the students, their attitude to the students and caring, degree of verbal clarity and providing feedback as well as receiving feedback from the students, humor, used vocabulary, grammatical correctness of the speech and his enthusiasm. The students marked one of two answers "a" and "b" describing specific behavior of the teacher. They could also describe different expected behavior of the teacher (answer "c").

Results

Students' expectation for teachers' nonverbal behaviors during classes

An analysis of the rate of students' expectation for nonverbal teachers' behavior during classes has shown that the

respondents highly appreciated behavior characterized by the warm attitude to the students. The students indicated that the teacher should express “very relaxed body position when talking” to his students (M=5.97). The second place occupied these teachers who “smiles at the class as a whole, not just individual students” (M=5.87), and “looks at students when teaching” (M=5.51). The students thought that the teacher should be characterized by “gestures when speaking to a group of students” (M=5.31). Moreover, the students

expected that their teachers “uses a variety of vocal expressions” (M=4.90) and “moves around the classroom when teaching” (M=4.70). According to responders, the opposite of these behaviors should to small extent characterize the teachers during classes. Searching analysis of the obtained data reveal appreciated and not approved behaviors of the teachers known to the students of the Gdansk Academy of Physical Education and Sport. Arithmetic mean values of evaluated behaviors are given in Figure 1.

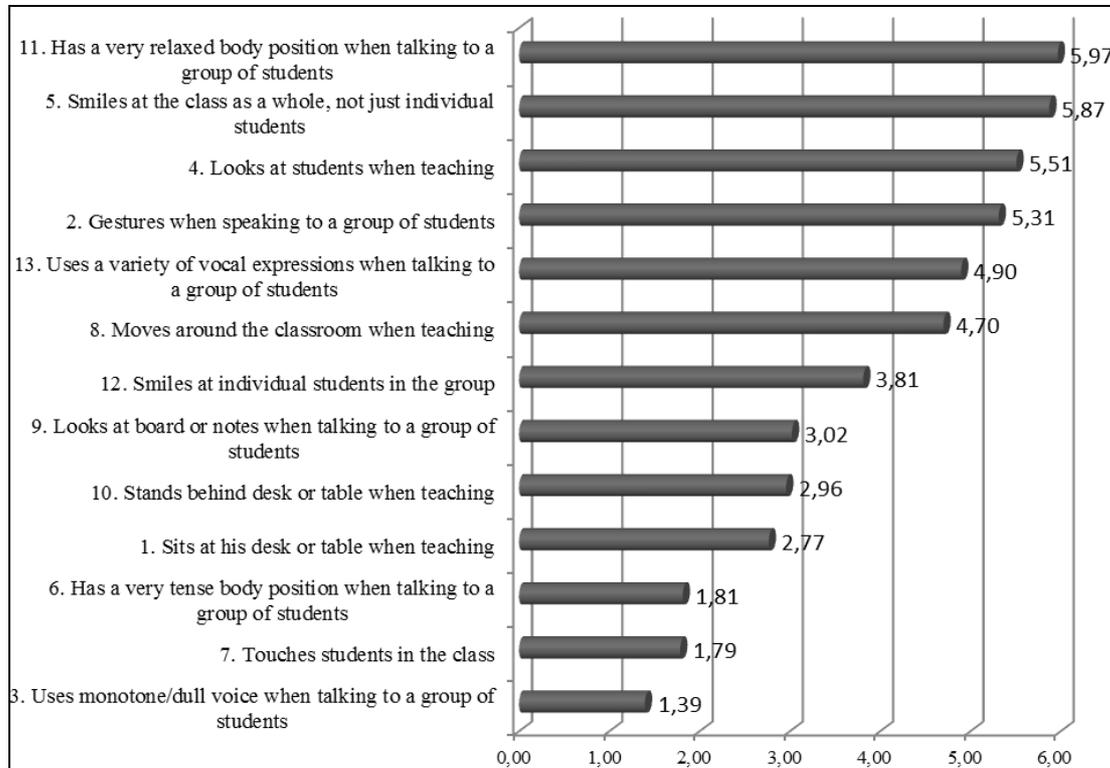


Fig 1: Means scores assigned by the male and female students to nonverbal behaviors of teachers (N=214)

Students' expectation for teacher's verbal behavior during classes

An analysis of the obtained answers to the questions in the second part of TCB questionnaire related to students' expectations for the teachers verbal behaviors during classes enabled to see decidedly positive choice of the answer to all defined aspects. They paid particular attention to the teacher's attitude to towards them. The students would like the teacher to create “good climate of the mutual relation” (96.73%). Moreover, the students expected “more enthusiasm from the teacher” which will increase their interest in the study (96.26%). The students expected also “a degree of verbal communication clarity”. They wanted the teacher to provide “detailed explanation and be completely understandable” (96.26%). Finally, the students expected care and sympathy showed by the teacher (95.79%). Lower number of responders

paid attention to the “degree of using humor by the teacher”, waiting for presentation of the light jokes and fun stories (93.46%). They also wanted the teacher to ask questions and encourage the students to speak and present their opinion (92.99%). Teacher should “always select words suitable to the subject of lecture and students' knowledge (92.99%), and paid an attention to the grammar correctness of his statement so that it “will be grammatically faultless” (92.99%). “Feedback with teacher” was also important for the responders in the form of “praising the students for well done work or activities” (86.92%).

Single responders paid attention to negative teachers' verbal behaviors seen during the classes, like “excluding possibility to present students' opinion” (5.14%) or “no care of grammatical correctness” (5.14%), and “keeping distance with students” (2.34%). Detailed data are shown in Table 1.

Table 1: Number (N) and percent (%) of students' answers to the questions in the second part of TCB questionnaire

Statement	N	%
1. Way of addressing students		
a) Formal, addressing students by family name	12	5.61
b) Addressing students by the first name	193	90.19
c) Other (What?)	9	4.21
2. Attitude to the students		
a) Keeping distance	5	2.34
b) Creating a good atmosphere of mutual interactions	207	96.73
c) Other (What?)	2	0.93
3. Care shown to the students		

0	1	0.47
a) Seems that teacher does not like his students (doesn't care)	2	0.93
b) Seems that teacher likes his students (care of them)	205	95.79
c) Other (What?)	6	2.80
4. Degree of the teacher's statement clarity		
a) Tangling his communications, is unclear	3	1.40
b) Providing detailed explanation, high clarity	206	96.26
c) Other (What?)	5	2.34
5. Providing feedback		
0	1	0.47
a) Criticizing the students	9	4.21
b) Praising students for well done work or activity	186	86.92
c) Other (What?)	18	8.41
6. Receiving feedback from the students		
a) Definitely exclude possibility of presenting students' opinion	11	5.14
b) Asking questions, encouraging students to speak	199	92.99
c) Other (What?)	4	1.87
7. Presenting humor by the teacher		
a) No jokes and lightheartedness	8	3.74
b) Light jokes, funny stories	200	93.46
c) Other (What?)	6	2.80
8. Teachers' verbalization		
a) Wording creates problems for students	11	5.14
b) Nearly always using words adequate to the subject and students' level	199	92.99
c) Other (What?)	4	1.87
9. Grammatical correctness of the communication		
a) Not caring of grammatical correctness	11	5.14
b) Grammatically correct communications	199	92.99
c) Other (What?)	4	1.87
10. Teachers' enthusiasm		
a) Students are not interested and bored during lecture	7	3.27
b) Students are interested in the taught subject	206	96.26
c) Other (What?)	1	0.47

It should be noted that 59 responders (27.57%) chosen point "c" in the second part of TCB questionnaire, being able to present other expectation for the teachers' verbal behaviors during classes. All responders emphasized the way of

teachers' addressing them, demonstrated care, feedback, clarity of the communications, vocabulary, degree of humor presented by the teacher and enthusiasm. Register of the most frequent answers are given in Table 2.

Table 2: Other expectations of students for teachers' verbal behaviors during classes

Other behaviors of the academic teachers expected by some students
Way of addressing students
By the first name or known in the group nickname of the said students, „hi friend”; „by nicknames” as they are unknown, by some funny way, e.g. „homie, guy”, „mate”, „friend” or „miss”, „mister”
Care of the students
Teacher is helpful, likes his students and have time for them; liking students is not his „must”, but he should be just and stands out from someone
Feedback from the teacher
Praises but also criticizes, if it is necessary, pointing out the mistakes and praises for well done work; does not criticize or praise; praises but also points, if something is not well done (not criticizes)
Degree of the teacher's verbal communication clarity
Teacher says what should be learned, his speech must be under stable; gives a lot of details; difficult subjects and concepts presents in a simple way; clearly explains the said concepts
Teacher's verbalization
Teacher explains difficult words; introduces new words but only if it is necessary; his verbalization is understandable; simple, sometimes with jokes
Teacher's degree of humor use
Teacher often jokes, is amusing; tells jokes, funny stories but he never jokes of students
Teacher's enthusiasm
His subject is interesting, lectures are carried out properly in a positive manner

Statistical analysis

Trying to answer to the research question: Are there statistically significant differences between expectations of the students beginning the study and after the first year towards nonverbal and verbal behaviors of the teachers during classes? the obtained data were analyzed with various statistical analyses. Basic measures of central tendency and

size distribution of measurements, such as score mean (M) value given by the students for each of 13 items in the first part of TCB questionnaire and standard deviations values (SD), were calculated. To define statistical significance of the difference between score mean values *t*-Student test was used. Results of detailed analysis are presented in Table 3.

Table 3: Significance of mean score differences assigned by the first and second year students to each of 13 items in the first part of TCB questionnaire

Description	First year students (N=140)		Second year students (N=74)		t (p)
	M**	SD	M**	SD	
1. Sits at his desk or table when teaching	2.86	1.55	2.58	1.25	1.340 (0.182)
2. Gestures when speaking to the group of students	5.17	1.38	5.58	1.16	2.211* (0.028)
3. Uses monotone/dull voice when talking to a group of students	1.49	1.15	1.20	0.55	2.047* (0.042)
4. Looks at students when teaching	5.32	1.37	5.96	1.28	3.324* (0.001)
5. Smiles at the class as a whole, not just individual students	5.79	1.39	6.03	1.38	1.204 (0.230)
6. Has a very tense body position when talking to a group of students	1.87	1.17	1.72	0.87	0.970 (0.333)
7. Touches students in the class	1.76	1.19	1.84	1.32	0.450 (0.653)
8. Moves around the classroom when teaching	4.47	1.58	5.14	1.41	3.060* (0.025)
9. Looks at board or notes when talking to a group of students	3.01	1.36	3.05	1.35	0.205 (0.838)
10. Stands behind desk or table when teaching	3.01	1.55	2.85	1.31	0.756 (0.450)
11. Has a very relaxed body position when talking to a group of students	6.00	1.11	6.00	1.09	0.000 (1.000)
12. Smiles at individual students in the group	3.96	1.86	3.53	1.80	1.626 (0.105)
13. Uses a variety of vocal expressions when talking to a group of students	4.85	1.79	5.08	1.71	0.908 (0.365)

* - value *t* statistically significant at $p < 0, 05$.

** 1- in very low degree; 7 – in very high degree in a 7-point scale.

Analysis of the differences between score mean values showed four significant results in the degree of expectation for the nonverbal teachers' behaviors during classes. It was found that the second year students significantly more frequently wanted their teachers: 1) gesticulated when speaking to a group of students (statement 2; $t=2.211$; $p=0.028$); 2) looked at students when teaching (statement 4; $t=3.324$, $p=0.001$), and were moving around the classroom when teaching (statement 8; $t=3.060$; $p=0.025$). This group of students was expecting to lower degree for teachers' voice was monotone/dull when talking to the students in comparison to the first year students (statement 3; $t=2.047$; $p=0.042$).

Discussion

The aim of our study was to recognize the expectations of physical education students towards teachers' nonverbal and verbal behaviors during classes. The results of two previous studies conducted among the students of Pedagogy at the Opole University were very similar to the results of the present study. In one of these studies conducted in 2002, 199 students evaluated their expectations for teachers' nonverbal behaviors in a 7-point scale with the aid of the first 13 items of TCB questionnaire. The obtained results revealed that the students expected the most behaviors showing the teachers' immediacy. They expected teachers to smile to the whole group, not just individual student ($M=6.3$), present a relaxed body position when talking to the students ($M=6.0$), use a variety of vocal expressions ($M=5.8$), and look at the students when teaching ($M=5.6$). In this study, responders in the least degree expected three behaviors. They did not want to be touched by the teachers ($M=1.7$), they also did not want the teacher being tense while speaking to them ($M=1.4$). The students did not accept the teacher of the monotone/dull voice ($M=1.2$), sitting at his desk or table or standing behind his desk or table during classes ($M=2.8$), and looking at board or notes when talking to a group of students ($M=2.2$). It should be emphasized that the students decidedly preferred teacher's smile to the whole group ($M=6.3$) and not to individual students ($M=2.1$) [4, 14, 32].

In the second study, carried out in 2003 among 456 students (356 women and 100 man), they had to choose 10 out of 32 verbal and nonverbal teachers' behaviors, which they would like to see during classes. The following were chosen by more than 50% responders out of 10 most expected behaviors:

teacher effectively presents teaching material in easy to understand way (92.8%). Next, teacher explains, how to learn specific material (78.3%), openly answers to the students' questions (78.1%), and accepts students' feelings and opinions (75.4%). Other behaviors include: help in an explanation and development of the students' ideas (68.4%), praising the students for well done work (65.4%), and teacher has sense of humor (58.6%), often smiles to the whole group (58.1%). Other behaviors were less appreciated, e.g. teacher asks questions and encourages the students to speak (51.8%) [33].

Available literature provides interesting results of studies on the students' rating of nonverbal behaviors of the academic teachers. In 2004, Babad, Avni-Babad, and Rosenthal in their study used video to determine nonverbal behavior of 47 academic teachers seen during instructions and during interactions with the students. They found that the students better rated the teachers who oriented their bodies toward them, gesticulated, moved around classrooms space, more often were standing than sitting, were relaxed, and did not show undesirable nonverbal behavior such as frowns. In good teachers' nonverbal behaviors, particularly important for the students were also such vocal features like: fast pace of speaking in a hard voice, attention to the right accent in sentences, changes in the voice volume and intensity, and speaking which guarantee understanding of the taught material [34, 24-25].

Results of other studies proved also that better effects of learning resulted from the teachers' clarity and richer verbalization. It means that teachers "well know what he wants to say. His communications forms in such way, that the idea is "seen". Communications are straight, exact, and efficiently passed on. Its fragments are hierarchically subordinated. The teacher uses known terms. His communication is concise and simple. He tries to use not very complicated phrases. His vocabulary is rich" [30].

Results of studies conducted with the participation of 1237 students of one American university revealed that they distinguished in the teachers several features and behaviors contributed to creation of the effective climate of teaching. According to the responders, the teacher dynamic, energetic, enthusiastic, sincerely interested in his students guarantees an atmosphere conducive to good work. Moreover, such a teacher should know his subject of teaching, be well prepared to conduct classes, which should be useful, comprehensible,

reliable, and appropriate. Teacher should speak fluently and be clearly audible. He should explain his communication to be well understood. His questions and presentation should provoke the students to thinking. His answers to the students' questions should be exact, making use of facts and concepts in the said field of science, compare different use of various theories. Teacher should use various teaching aids and often summarize key ideas of his presentation ^[35].

The results of the study described in this article revealed that the physical education students are expecting teachers' clarity and immediacy, except the touch. They did not approve the touch (See table 1, statement 7; M=1.76 – first year students; M=1.84 – second year students). The results show that the students more like teachers smiling to the whole group (See table 1, statement 5; M=5.79 – first year students; M=6.03 – second year students) and not to the individual person (See table 1, statement 12; M=3.69 and M=3.53 – students of the first and second year, respectively).

The students wanted to the less degree to hear monotone/dull voice of their teachers and tense body position during classes (See table 1, statement 3 and 6). They also did not accept the teacher standing behind his desk (table) or sitting at his desk (table) when teaching, and looking at board or notes while speaking to them (See table 1, statements 1, 9, and 10).

The degree of the students' expectation for nonverbal and verbal behaviors of their teachers during classes determine quality of education, as each higher education institution university should satisfy the students with its services, among others in the didactic sphere ^[36, 37].

An academic teacher during classes perform a social role to which he has been authorized by a higher education institution. This role is very responsible. Therefore, the teacher should have genuine substantive and methodological knowledge in the field of teaching subjects. His nonverbal behaviors should provide his accessibility, emotional warm, and readiness to communicate with the students. His communications, being important for the students, require fluent speaking and effective explanations of the taught material. Academic teacher should be interested in the students well-being, encourage them to express their thoughts and feelings during classes. He should also stimulate their cognitive curiosity and motivate to learn.

Conclusions

Analysis of the obtained data enables to formulate the following conclusions.

1. The students expect from their teachers seven behaviors pointing their nonverbal immediacy (See table 1; statements 2, 4, 5, 8, 11, and 12). They more accept the teachers who are smiling to the whole group, and not to the particular person. On the other side, the students do not accept touching.
2. Students expect for their teachers verbal immediacy, clarity and matter-of-factness.
3. Differences between mean degrees of intensity the first and second year student's expectation proved to be statistically significant for four behaviors. Students of the second year of the study accepted to the higher degree the teacher gesticulating while speaking to them, looks at them, am moves around the classroom. They less accepted the teacher speaking monotonously/dull during classes in comparison with the students of the first year.

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