# International Journal of Humanities Social Sciences and Education (IJHSSE) <br> Students' Engagement in Gymnastics Classes: a Case Study in a Public Institution 

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#### Abstract

This article attempts to describe the modalities of student engagement in teaching gymnastics at school in a public institution in Tunisia. We investigate student engagement in the theoretical framework of the ecology of the class and especially according to the current ecology of physical education (Tousignant, 1982). The data were collected through ethnographic observations and video recording of a gymnastics unit conducted by a non-specialized teacher in the discipline. The study was carried according to a macroscopic analysis of students' cooperative behavior during the three observed classes. Through the comparison of forms of opposed student engagement (strong vs weak, girls vs boys), the results highlight recurring and regular features of the degrees of cooperation (differences and similarities) between different school levels and between girls and boys.


Keywords: Physical Education, Classroom Ecology, Student, Engagement, Gymnastics.

## 1. INTRODUCTION

The research fits into a didactic framework for analyzing practices in ordinary classes. It overtakes to understand the modalities of students' engagement in the teaching-learning process in physical and sports education. To do this, it involves the theoretical framework of the class ecology as a frame of reference for better understanding class management. The study aims to describe a particular aspect of the teaching-learning process, which is students' cooperation.

In the first part of the article, we present the problematic and research questions. As for the theoretical framework, it will be presented in the second part. In the third part will present the methods used. The fourth and last section presents the results according to two levels. We focus firstly on student engagement by highlighting the recurrent elements as well as the differences in the findings. We present, subsequently, some elements for discussion. The conclusion returns to the issue of student engagement. It attempts to broaden the scope of research on the relationship between the classroom ecology, the didactic joint action and the productive disciplinary engagement.

## 2. PROBLEMATIC AND RESEARCH ISSUES

The research related to student engagement in physical education developed either within the framework of research on motor learning or within the framework of the sciences of intervention point to the importance of student engagement in the teaching / learning process.

This research, therefore, points to the need to better understand the different modalities of student engagement in physical education classes. In reality, however, teachers make recurrent observations of students who do not progress in physical education.

In this regard, Tunisian teachers of physical and sports education express the difficulties they have in obtaining results with students. They state their low participation and point to differences in the engagement duration among students according to their skill level, their motivation, their interests, etc.

These findings in the literature (Carlier, 2004; Doyle, 1986; Siedentop, 1994) show that the students' activity time can be influenced by the students themselves. These researches clearly show the fact that all students do not engage in the same way in the proposed tasks.

Researchers in didactics, for their part, have shown that following their academic performance (high, medium, or low) students are given tasks by their teacher differentially (Schubauer-Leoni, 1996; Elandoulsi, 2011). In physical and sports education, "strong" students are considered more active than "weak" students.

In an ethnographical approach, the current of the ecology of the physical education (Siedentop, on 1994) shows that the various types of behavior of the students (application, tasks transformation, evasive, deviant) defined by Tousignant ( 1985 ) are translated by a weakening of the academic requirements of teachers that would ensure that students are "busy, happy and good" (Placek, 1983). Therefore, the ecological balance of the class in physical education is hardly turned to acquisition (Siedentop, 1994). However, Hastie and (Siedentop, 2006), in their review of class ecology concerns, underline the fact that content requirements would promote student participation.

So in light of the recurring difficulties mentioned by the Tunisian physical education teachers about their students non engagement, their non-participation in class; as well as the difficulties that they have to obtain significant changes in motor learning, our research problematic is to describe student engagement in teaching gymnastics in Tunisia.

Through the comparison of the forms of student engagement in a public institution, we shall try to identify what are the conditions which allow the students to be active in the classroom.
In this general context, our research questions are the following:

- How do students participate in class?
-Taking into consideration the various school positions which are attributed to them (strong vs. weak), do students participate in the same way in the tasks assigned by the teacher?
-Will be there any difference between the engagement of girls and boys?


## 3. THEORETICAL REGISTRATION

The paradigm of classroom ecology is found mainly in North American works. In the 1980s, this line of research allowed a better understanding of the activity of the class in all its complexity. The ecological paradigm helps studying the relations between the demands of the environment, that is to say, classroom situations, and how participants respond (Doyle, 1986).

According to this model, the researcher tries to enter in more depth in the world of the classroom, in order to better understand the meanings that actors (teachers and students) give it in order to make an in-depth description of its functioning while taking place in a more global perspective. The objective of the ecological approach is to provide a coherent description of its functioning. The proponents of this paradigm stipulate that the data collected by ethnographic observation allow new hypotheses to discover variables, patterns or relations that may be important for the life of the classroom.

The ecological model was applied for the first time, in physical education by Tousignant and Siedentop (1983). The "Ecology of Physical Education" is a current of research which has been studied at length in our discipline (Siedentop, 1994; Musard, Latch and Carlier, 2010). The first research concerning student participation in physical education classrooms was developed by

Tousignant (1982). It consists of an account of their engagement by considering the context of the pedagogical action in several dimensions: relating to the institution, to the classroom climate, and finally relating to the types of assigned tasks. To understand the dynamics of the ecological balance of the physical education classroom, the author was interested in how students participated in the course in terms of cooperation.

Tousignant (1985) considers that the cooperation of students in the learning tasks assigned to them is a precondition for learning of these same tasks. In a qualitative study she describes some aspects of the establishment of teacher and students cooperation in physical education classes.

Four categories of student behavior while realizing the tasks required of them, have been highlighted by the author. They are the voluntary and complete cooperation, the circumstantial cooperation, the disguised non-cooperation, the deliberate non-cooperation. These categories, revealing the degree of cooperation are defined as follows:

- The behavior of application as an index to a complete cooperation. The author presumes that when students fulfill the task, as it was indicated by the teacher, they are qualified as "applied". These students are attentive, they participate in the management of the activity and they engage in the learning task.
- The behavior of task transformation is associated to circumstantial cooperation. The author explainedthatwhenstudentsareconfrontedwithatask thatdoesnotcorrespondtotheirlevelofskill and / or to their interests, they most of the time make changes to this task. They can change the rules of a game and / or improvise new ways to make the exercise and even change the nature of the task.
- The evasive behavior is an indicator of a disguised non-cooperation. The author specifies that those types of behavior correspond to those of students who hide their non-cooperation just by dodging the achievement of the task so that teachers think they have realized the assigned task (Tousignant, 1985). These types of evasive behavior do not really disturb the course of the class. They can show learning difficulties that some students meet.
- The deviant behavior is related to a deliberate non-cooperation. The author qualifies as having a deviant behavior a student who refuses completely to cooperate. This category includes classic abnormality such as to speak or fight with a mate during class session and also to modify a task in an unacceptable way in a given context. This incompatible behavior with the objectives fixed by the teacher obviously disrupts the progress of the class and inhibits learning.

The theoretical framework of the model of the ecology of the class in physical education is extremely helpful in looking at the degree of cooperation and engagement of students in the different systematic tasks that the teacher offered. Researches in the classroom ecology are more interested in student engagement in terms of classroom climate, educational relationships or ecological balance than in terms of participation in academic work.

## 4. METHODS

We are interested in what we can call "ordinary didactics" (Schubauer-Leoni, 2008) in a public institution. Our research is a case study which aims at observing modalities in which students engage in the teaching / learning process. Following an ethnographic approach, the research follows a descriptive approach.

### 4.1. Characteristics of the Observed Empirical Contexts

### 4.1.1. Choice and context of the institution

Our choice is of an institution which is situated in the Manouba district. The high school " Ibn

Abi Dhiaf " is a public institution, under the supervision of the Tunisian Ministry of Education. It is located in Manouba: a district situated in the northwest of Tunis and the down town area where the school is located has got the same name. According to the 2013 census, the institution welcomes 1894 students, ranging from the 7th basic year to the 4th year of secondary education (final year of high school). 152 teachers ( $60 \%$ female and $40 \%$ male) belonging to the fulltime staff work there. The institution prepares students for the 9th basic exams (certificate) and the high school diploma (baccalaureate). The latter contains six different sections. The school recorded during the school year 2012-2013, $63.97 \%$ of success rates in the baccalaureate exam of which $29.13 \%$ are admitted in experimental sciences and $21.60 \%$ in technical sciences.

### 4.1.2. Choice and Characteristics of the Teacher

The teacher (that we shall call Najoua) pursued her studies at the Higher Institute of Sports and Physical Education at Ksar-Saîd to obtain a bachelor degree in the sciences and techniques of physical and sports activities with handball as a specialty. She has twenty six years of experience as a teacher of physical education and has always taught gymnastics during her career. Najoua was promoted to the rank of headmaster, having passed the "aggregation" exam successfully. With her dynamism, her seriousness and her investment in this discipline, she was able to create a favorable climate to work with students.

### 4.1.3. Classroom Characteristics and Choice of Selected Students

Following the recommendations of Schubauer-Leoni and Leutenegger (2002) about the "carottage du terrain" it was convenient to agree with the teacher about the students it would be appropriate to observe more specifically. In order to have a representative sample of different grade levels, we opted for two categories of students: two "strong" students who are supposed to follow the instructions as expected and two "weak" students supposed not to be able to follow the same instructions. The selection of students is made following two criteria: first, the choice of the teacher of students considered strong or weak and their attendance throughout the unit. To maintain the ecological character of our observations, we also wanted to see girls and boys since the teaching of physical education and sport in Tunisia is made in coeducation school. Finally, the observations took place in a coeducational class of twenty-six students, in final year of high school mathematical section.

We selected four students, girls and boys of different levels of skill and who fulfill the characteristics which we summarize in the following table:

Table 1: Characteristics of students selected for the research.

| Names | Codes | Gender | Skill levels | Parents' socio-economic levels |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Myriam | F13 | Girl | Strong | Teacher | Mothers |
| Rami | G3 | Boy | Strong | Jobless in a bank | Head of department at the <br> Ministry |
| Marouan | g10 | Boy | Weak | School teacher | Clerk at post office |
| Rim | f9 | Girl | Weak | Jobless | Teacher |

### 4.2. Data Collection

We collected data concerning students' activity as well as the teacher's in an ordinary class. We video recorded three consecutive sessions of learning activities in the gymnastics unit, in connection with the preparation of baccalaureate exams according Tunisian programs. We used a camera with integrated microphone.

The camera placed in wide plan allowed to record all the students in the part of the gymnasium where the activities take place. We also took notes of the behavior of students and the teacher. For the three filmed and observed classes, we examined the teacher's planning to learn about what is taught and we also took notes at random of the tasks proposed to students. We took notes on motor actions of students and on their evolution during the class session, on their relations with peers, and during interactions with the teacher during or after the action. We particularly noted impressions of the class and / or the teacher of the elements on the content taught, on unexpected incidents and the general functioning of the class. We took, for example, notes on devices, methods of organization, types and degree of difficulty of the proposed situations. These notes allowed us to take the position of an outside and help us stay far from our trainer's position.

### 4.3. Processing and Data Analysis

Processing and data analysis are made according to the class ecology description. The analysis allows to take into account student engagement. It allows, according to our theoretical framework, understanding the involvement of students in the teaching / learning process.

A "behavior chronic" was interested in the engagement of four students selected in teaching / learning situations in gymnastics. This is to study the engagement of two "strong" students and two "weak" students based on the degree of cooperation of Tousignant (1985). For practical reasons linked to diagram, abbreviations of thesebehaviors are used as follows:AB for applicationbehavior; TTB for task transformation behavior; EB for evasive behavior; and DB for deviant behavior.

The behavior chronic presents, on a double entry table, temporal dimensions of student engagement. Horizontally, the table presents the various successive tasks of the class session by indicating for each of them the global time dedicated for each task by the teacher. On the vertical axis, are present the behavior of student engagement using a sequential method of observation every fifteen seconds. Are listed vertically application, transformation tasks, evasive or deviant behavior as students perform the task.

The behavior chronic appears as follows:
Table 2: Behavior chronic extract of strong and weak students following the degree of cooperation of Tousignant (1985). Task 1, session 1.

|  | Tasks/ Durations | $\begin{aligned} & \text { Task } 1 \text { : } \\ & 16^{\prime}: 49^{\prime \prime} \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Students | F13 | G3 | g10 | f9 |
| Time | Duration | Behavior |  |  |  |
| 16' ${ }^{\prime}$ :49" |  |  |  |  |  |
|  | $15^{\prime \prime}$ | EB | $A B$ | AB | AB |
| From 17' $\mathbf{1 7}{ }^{\prime \prime}$ at $20^{\prime} \mathbf{3 4 \prime}$ |  |  |  |  |  |
| '20' 49 | 4min | $A B$ | EB | EB | EB |
|  | $4^{\prime}$ : $15^{\prime \prime}$ | $A B$ | $A B$ | TTB | EB |
|  | $4^{\prime}: 30 \prime$ | $A B$ | $A B$ | TTB | EB |
|  | $4^{\prime}$ :45" | $A B$ | DB | EB | EB |
| '21' ${ }^{\prime \prime}$ | 5 min | AB | DB | EB | EB |
|  | $5^{\prime}: 15^{\prime \prime}$ | AB | DB | AB | AB |
|  | $5^{\prime}: 30 \prime$ | DB | TTB | AB | AB |
|  | $5^{\prime}: 45^{\prime \prime}$ | DB | AB | EB | DB |
| 22':49" | 6 min | DB | $A B$ | TTB | DB |
|  | $6^{\prime}: 15^{\prime \prime}$ | TTB | TTB | TTB | DB |
|  | $6^{\prime}: 3{ }^{\prime \prime}$ | TTB | EB | TTB | AB |

The analysis reflects the degree of cooperation of "strong" and "weak" students. For each of the observed students, we first analyzed his behavior for each scheduled tasks. This analysis allows us to have a global understanding of the degree of student engagement and an estimation of the frequency of the various behaviors during the session.

## 5. RESULTS AND DISCUSSION

We characterize first the particularities of the observed educational system by a contextualization of the observed session. We present thereafter, the modalities according to which students engage in the teaching / learning process.

The three sessions answering three different objectives are of highly different duration, number of students, and number of tasks. This variability is summarized as follows in the table below:

Table 3: context of the observed sessions.

|  | Present students | Session duration | Session objectives | Tasks' number | Tasks' duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Session 1 | 17 : <br> 10 girls <br> 7 boys | $50^{\prime}$ | " Perform a correct cartwheel... the improvement and the connection of the cartwheel with the first part of the sequence of movements" | 5 | 29' : $25^{\prime \prime}$ |
| Session 2 | 13 : <br> 9 girls <br> 4 boys | 72' | " Improvement of the technical elements already taught from the beginning of the year " | 6 | $63^{\prime}$ |
| Session 3 | 12 : <br> 8 girls <br> 4 boys | $52^{\prime}$ | " Improvement and review of the round off and the handstand backward roll " | 7 | 42' |

When we use the categories of the ecology of the class in physical education, we find altogether and during the three sessions that:
-The four students seem to perform the tasks assigned by their teacher carefully. For, these students we record time application behavior more important than other categories, reflecting the predominance of complete cooperation. Only the student $\mathfrak{f 9}$, of low school position, develops evasive behavior of important duration during session 3, exceeding the application behavior time which reflects a disguised non-cooperation for this particular student.

- In addition, in sessions 2 and 3, we record for weak students (g10 and f9) values of application behavior that approximate those of deviant behavior, reflecting a participation for these two students that fairly oscillates between complete cooperation and deliberate non-cooperation in session 2.
- According to the recorded time durations, if the degree of cooperation does not seem to be affected by the school position of students, it is more in favor of girls than boys, a fact that was highlighted by previous studies.
- The analysis also shows that all students whatever are their school positions develop a transformation tasks behavior during the sessions. We note that it is a boy, of high school position (G3), who takes the freedom to perform transformation tasks, highly exceeding the three other students.

The table below shows the results in terms of percentages, to the degrees of cooperation of the
four selected students across the three observed sessions:
It appears from these results that student engagement in learning tasks depends on classroom organization types, on its composition, and on the teacher's ability to regulate the motor student productions.

Regarding modes of classroom organization, we underline that the teacher offers gymnastics classes with level groups working in parallel on different tasks. This type of organization reports to differentiated teaching (Perrenoud, 1997).

This mode of organization of the classroom may condition the student engagement. The organization of the classroom in level groups, as opposed to an organization of whole classroom helps to diversify the time spent on the task and thus respects the rhythm of each student while
avoiding penalizing those who are the slowest. This organization also allows to vary the places of progress of activities: the student moves in the gymnasium in an organization through workshops with multiple teaching materials and on various apparatus (beam, horse, wall bars, etc.).

The differences observed in terms of cooperative behavior between students can be explained also by the mixed classes parameter and by gender stereotypes that mark gymnastics discipline as a sport and physical activity having a female connotation. We should not forget that our observations are in the context of coeducation. Our hypothesis is that this interpretative component of mixed classes could first explain engagement variations between girls and boys, but also those among girls of various school positions.

In the context of coeducational teaching, Mosconi (1989) states that class dynamics seem often organized around the dominance of the group of boys. Boys or at least a part of the group of boys monopolizes the didactic space of the class (uses knowledge to be valued), or the sound space (the use of deviant behavior to get noticed). As for girls, in addition to an withdrawal and silence attitude, are characterized by a "spirit of seriousness" in order to better respond to the teacher's requirements and those of the school in general.
However, it should be noted that these differences in student behavior, directly related to their degree of cooperation can be modulated by their social belonging. Indeed, if some behavior is related to sex (such as heckling for boys), others depend on social class. The author notices that when it comes to answer a question, it is the students of the lower classes (boys and girls) who abstain. We consider that these factors explain in part the observed differences in behavior of application, including the observed difference between boys and girls.

The differences in the behavior of application between girls and boys can also be explained by the gender stereotypes that mark the school subjects. Mosconi (ibid.) refers to the existence of a bi-sexual categorization of disciplines in the "implicit social cognition." According to her, starting from high school, boys and girls, even if they agree to classify physical education first, express differences in the ranking of other disciplines. In physical education, moreover, the masculine and feminine connotations of sports and physical activity are likely to elicit differential engagement of girls and boys (Verscheure, 2005). Female connotation of gymnastics discipline, due to its aesthetic and artistic dimension, may partly explain the more important application behavior of girls than that of boys (globally $49 \%$ vs. $41 \%$ ). Besides, in mixed classes, teachers unconsciously interact much more with boys than girls. This general trend is observed at all levels of education whatever the sex of the teacher. These differences of intervention widen even more when it comes to scientific and technical disciplines. We cannot completely document this point since we have collected the data only with four contrasted students. But it should be noted that the gymnastic elements in the study are of an important acrobatic degree including girls more than boys. One of the possible explanations is that teaching gymnastics in mixed classes in order to attract more boys makes sure to increase the difficulties of the proposed tasks or to emphasize some dimensions.

Our final interpretive track is the one that relates to the practical epistemology of teachers. This is explained by the fact that student engagement depends on the nature of the situations prescribed for the class.

The didactic regulations of the teacher are not always targeted and rarely concern the knowledge issue. These regulations come under a limited verbal and tactile repertory. However, we pointed out the many visual regulations that are relevant and which highlight relevant features in the tasks. This teacher, although not an expert in gymnastics, is able to favor students' involvement.

The precision of regulations refers, according the concepts of classroom ecology, to the idea that active supervision must be targeted and allow students to engage effectively in learning tasks. We
find again what was highlighted by several studies about the importance of teachers' expertise in didactic management or about the determining role of practical epistemology of the physical education teacher in the evolutionary dynamics of didactic processes (Amade-Escot, 2013; Elandoulsi, 2011). Our hypothesis is that in different forms, the practical epistemology of the teacher partially explains the forms of engagement and cooperation of the students highlighted in the macro-didactic level of the three classes observed.

## 6. CONCLUSION

The contribution of this paper was to report on the various modalities of student participation. Students play on different modalities of engagement to develop social relationships, to develop fun activities, or to reduce the request of tasks so as to avoid the costs of learning.

However, to go beyond these observations, we should ask ourselves about the effects of these modalities of engagement on the teaching-learning process.

By focusing on how students participate in the didactic processes, Bennour (2014) in her doctoral thesis showed how the classroom ecology can be compatible with the didactic analysis of joint action teacher / student.

Her research highlighted that the transformation task behavior, produced by students under circumstantial cooperation can have positive outcomes on their learning and can lead to a productive disciplinary engagement, while too often, especially in the professional literature, it is considered that transformation task behavior weakens class ecology.

## REFERENCES

1. Amade-Escot, C., L’épistémologie pratique des professeurs et les recherches sur l'intervention. Perspectives pour de futurs dialogues. In B. Carnel et J. Moniotte (dir.), Intervention, recherche et formation : Quels enjeux, quelles transformations? Amiens : Université de Picardie et ARIS, 2013, pp.37-58.
2. Bennour, N., Lengagement disciplinaire productif des élèves dans l’action didactique conjointe en gymnastique. Études de cas dans deux établissements contrastés en Tunisie. Thèse de doctorat, Université Toulouse II- Jean Jaurès, France, (2014).
3. Carlier, G., Si l’on parlait du plaisir d'enseigner l’éducation physique. Montpellier : Éditions AFRAPS, 2004.
4. Doyle, W., Paradigmes de recherche sur l'efficacité des enseignants. In M. Crahay et D. Lafontaine (dir.), L’art et la science de lenseignement. Bruxelles : Labor, pp. 435-481 (1986).
5. Elandoulsi, S., Lépistémologie pratique des professeurs : effets de l'expérience et de l'expertise dans l’enseignement de l'appui tendu renversée en mixité. Analyse comparée de 3 enseignants d'éducation physique et sportive en Tunisie. Thèse de doctorat, Université Toulouse II, Le Mirail, France, (2011).
6. Hastie, P. \& Siedentop, D., The classroom ecology paradigm. In D. Kirk, D. MacDonald, M. O'Sullivan (dir.), The handbook of physical education . London: sage, pp. 214-225 (2006).
7. Mosconi, N., La mixité dans l'enseignement secondaire : un faux-semblant ? Paris : PUF, 1989.
8. Musard, M., Loquet, M. et Carlier, G., Sciences de l'intervention en EPS et en sport. Résultats de recherche et fondements théoriques. Paris: Aris et Editions de la revue EPS, 2010.
9. Perrenoud, P., Pédagogie différenciée, des intentions à l’action. Paris : ESF, 1997.
10. Placek, J. H., Conceptions of success in teaching: Busy, happy and good ? In T.Templin \& J. Olson (dir.), Teaching in physical education. Champaign : Human Kinetics, pp. 46-56, (1983).
11. Schubauer-Leoni, M. L., Étude du contrat didactique pour des élèves en difficulté en mathématiques. Problématique didactique et/ou psychosociale. In C. Raitsky et M. Caillot (dir.), Au-delà des didactiques, le didactique. Débats autour de concepts fédérateurs. Paris, Bruxelles : De Boeck, pp.160-189 (1996).
12. Schubauer-Leoni, M. L., La construction de la référence dans l’action conjointe professeur-élève. In N. Wallian, M,-P. Poggi et M. Musard (dir.), Co-construire des savoirs : les métiers de l'intervention par les APSA. Besançon : PUFC, pp.67-86 (2008).
13. Schubauer-Leoni, M. L. et Leutenegger, F., Expliquer et comprendre dans une approche clinique-expérimentale du didactique ordinaire. In F . Leutenegger et M. Saada-Robert (dir.), Expliquer et comprendre en science de l’éducation. Bruxelles : De Boeck, pp.227-251 (2002).
14. Siedentop, D., Apprendre à enseigner léducation physique. Montréal : Gaëtan Morin, 1994.
15. Tousignant, M., Analysis of the task structures in secondary physical education classes. Thèse de doctorat, ÉtatsUnis : Ohio State University (1982).
16. Tousignant, M., Le degré de coopération des étudiants : Une source d'hypothèses d’actions pour l'enseignant.

## Dr. Nabila Bennour

La revue québécoise de l'activité physique, 3, 69-74 (1985).
17. Tousignant, M. \& Siedentop, D., The analysis of task structures in physical education. Journal of teaching in physical education. 3(1), 47-57(1983).
18. Verscheure, I., Dynamique différentielle des interactions didactiques et co-construction de la différence des sexes en Éducation Physique et Sportive : Le cas de l'attaque en volley-ball en lycées agricoles. Thèse de doctorat, Université Paul Sabatier, Toulouse III, France (2005).

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Citation: Dr. Nabila Bennour (2015) Students' Engagement in Gymnastics Classes: a Case Study in a Public Institution. IJHSSE 2(4), pp: 211-220.

