

Shyness effect on interaction withing class**Hedidane Khadra ¹, Mouaia Nadjah ²**¹ University of tebessa, Algeria khadra.hedidane@univ-tebessa.dz² University of tebessa, Algeria mouaianadjah@gmail.com*Received: 14/10/2022**Accepted: 01/04/2023**Published: 31/05/2023***Abstract**

This study aims at revealing shyness impact on interaction within class with 1st year science and technology stream secondary school pupils through studying a sample of 68 pupils. It has intentionally been chosen from 1st year pupils at the secondary schools of Saadi Essediq and Messani Ledjell in Tebessa.

The descriptive method, observation network, Driny's shyness measurement, class interaction measurement and interview have been adopted. Data has been analysed via SPSS v26. The following results have been attained:

There's a great influence of shyness on class interaction with the study sample.

There're no differences with statistical significance in the level of shyness and class interaction, with the study sample, due to gender, age and experience variables.

There're differences with statistical significance in the level of class interaction between teacher and learner, with the study sample, due to gender variable.

Keywords: shyness; class interaction.

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1. INTRODUCTION

Interaction within class is considered as a communication process between teacher and learners and among learners themselves. It consists in their gestures, actions, speech and deeds for the sake of exchanging ideas and feelings to increase the learner's motivation and competency. It also increases teaching quality to make teaching-learning process successful. So, interaction within class process is influenced by several material and psychological factors including shyness, which may directly or indirectly affect participation and interaction process within class. Thus, the following question is asked:

what's shyness effect on interaction within class with 1st year secondary school science and technology stream pupils at Saadi Sediq and Messani Ladjal schools?

The main question has the following subsidiary questions:

Are there differences with statistical significance in shyness level, with the study sample, refer to gender variable?

Are there differences with statistical significance in shyness level, with the study sample, refer to age variable?

Are there differences with statistical significance in shyness level, with the study sample, refer to experience variable?

Are there differences with statistical significance in the level of interaction within class, with the study sample, refer to gender variable?

Are there differences with statistical significance in the level of interaction within class, with the study sample, refer to age variable?

Are there differences with statistical significance in the level of interaction within class, with the study sample, refer to experience variable?

2. Theoretical Side

The theoretical side contains hypotheses and objectives of the study signification.

2.1 Hypotheses

There're differences with statistical significance in shyness level, with the study sample, refer to gender variable.

There're differences with statistical significance in shyness level, with the study sample, refer to age variable.

There're differences with statistical significance in shyness level, with the study sample, refer to experience variable.

There're differences with statistical significance in the level of interaction within class, with the study sample, refer to gender variable.

There're differences with statistical significance in the level of interaction within class, with the study sample, refer to age variable.

There're differences with statistical significance in the level of interaction within class, with the study sample, refer to experience variable.

2.2 Objectives

Identifying the extent of shyness effect, as a guidance problem, on interaction within class with the 1st year secondary school science and technology stream pupils at Saadi Sediq and Messani Ladjal schools in Tebessa.

Revealing the differences with statistical significance between pupils in shyness level refer to study variables (gender, age and experience).

2.3 The study significance

Dealing with shyness, as a guidance problem with learners within class, becomes a necessity for helping them to interact and participate within class and get integrated with one another and with the teacher himself. This research significance lies in:

It addresses one of the most common psychological problem, which is shyness in relation to learners within class with the 1st year secondary school science and technology stream pupils at Saadi Sediq and Messani Ladjal schools in Tebessa.

It enriches the theoretical side about shyness, with the study sample, and its role in hindering interaction and communication process with learners within class.

It highlights the problem significance until it's taken into account by specialists.

2.4 Determining the study concepts

Definition of shyness:

It's defined as a set of behavioral symptoms linked to the individual's behavior. They're characterized with a disorder in the individual's knowledge about himself, self-awareness and being worried about the others' negative estimation and about the ego. Shyness is based on the cognitive constructions forming the character and the relationship between them. This consists in the negative difference between the ideal and the real ego, accepting the performance criteria, the ambitions dominate expectations, a low level of self-acceptance and a feeling of nonconformity and self-awareness and others that they're under the high accepted criteria in terms of ego and social situations dismay consisting in personal threat and being always ready to respond to anxiety (chenaoui, 1992).

Definition of interaction within class:

Interactive behavior within class is a mean of acquiring and producing knowledge, raising motivation and emotional atmosphere. Therefore, some psychologists like Maslo and Rogers C calls for the human trend i.e. finding a educational, guidance or administrative atmosphere in which the human relations prevail. This atmosphere avails the opportunity to achieve objectives and fulfill needs. Generally, interaction within class implies the process of motivating the pupils in a certain situation (class) with achieving a balance between fulfilling their needs and achieving the wanted educational objectives (Habib, 2009).

Shyness symptoms:

Ennayal (1999) clarified that despite the fact that shyness symptoms and aspects are varied, these aspects and symptoms are gathered in a syndrome, a fella or a clique of symptoms, which are determined as follows with affirming their relativity from one person to another and from one motivation to another (Ahmed, 1999).

Physiological symptoms:

They're not limited to: blushing, the continuous saliva swallowing, increased heart bits, a simple disorder in stomach. As an example, when a teacher suddenly

choices a shy pupil to give an answer, the pupil suffers from the afore mentioned symptoms.

Social symptoms:

They're not limited to: avoiding eyesight, preferring isolation and loneliness and a weak communication and interaction. As an example: when a teacher asks his pupils to work in group, the shy pupil avoids interaction with the group members

3. The field side:

To scrutinize the study hypotheses, we've carried out the field study with respecting the methodological procedures, which they've been described as follows. The descriptive method has been followed, since it's appropriate to this study

3.1 Temporal scope:

The study has been carried out throughout the academic year 2021-2022 starting from March 29th to April 10th.

3.2 Human scope

The original study sample consists in the 1st year secondary school science and technology stream pupils at Saadi Sediq and Messani Ladjal secondary schools in Tebessa, and they've reached 319 pupils. An intentional sample of 68 pupils has been chosen from the original study sample, which are the shy pupils, whose behaviors have been observed by their teachers.

The sample has been distributed, according to the following variables: gender, age and experience.

Table 1. The distribution of the sample individuals, according to gender

Gender	Number	Percentage
Male	27	39.71
Female	41	60.29
Totale	68	100

Source:the two researcher's,field study,2022

3.3 Study tools

The following tools have been used: observation, shyness scale, class interaction scale and interview.

The researcher Houcine Drini's shyness scale, the two researchers' class interaction scale and interview has been made for the sake of knowing more about the study topic and focusing on its various sides and variables, according to the perspective of some teachers, guidance counsellors and school guidance.

3.3.1 Shyness scale

This scale has been created by the Qatari researcher Houcine Drini in 1981 for measuring shyness degree with individuals. This scale is applicable to adolescents and adults. In its preliminary form, the scale may contain 53 paragraphs measuring the shy person's behavioral aspects. Because of the legalization process, which has been operated on the scale, the number of its paragraphs have decreased to 42 paragraphs or expressions in accordance to the arbitrators' agreement. Finally, the scale consists of only 36 paragraphs (Mebarki Imen, 2017).

-The scale psychometric specificities:

The scale psychometric specificities have been checked with calculating validity and reliability.

-The scale validity:

The scale has been applied on the surveyed sample consisting of 30 pupils. The scale internal coherence has been studied; it ranges from 0.32 to 0.62.

The scale reliability:

The scale reliability has been calculated through dividing the scale into single and dual terms, since this way is simple. reliability has been found through using Spearman Brown's equation (0.58).

3.3.2 Class interaction scale:

It has been prepared by the two researchers, and it consists of two parts:

= The 1st part: interaction within class between teacher and learner: this part consists of 6 expressions.

= The 2nd part: interaction within class among the pupils: it consists of 6 expressions.

The way of correction: it consists of positive expressions. So, if the pupil answers with 'yes', he's given the degree (2), and if he answers with 'no', he's given the degree (1).

The scale validity:

The scale internal consistency reliability, coefficients and the axes relationship coefficient have been calculated. They range from 0.31 to 0.80.

The scale reliability:

The 1st and the 2nd axes' expressions constancy has been calculated. According to Spearman Brown's equation, it's found that it's 0.58.

3.4 The statistical ways:

The statistical ways, provided by the Statistical Pack for the Social Sciences (SPSS) v26, have been used. They consist in:

frequencies, percentage, Pearson's relationship coefficient, (t) exam for the independent samples, the mono-variation exam and ITA square exam for calculating the effect volume.

3.5 Discussing results:

To know the relationship between shyness and interaction within class, the relationship coefficient between the variables has been calculated through using the Pearson's relationship coefficient. The following results have been attained:

-The relationship coefficient between shyness and class interaction between the teacher and the learner: (-0.13) we deduce that it's a reversive linear relationship.

-The relationship coefficient between shyness and class interaction among learners: (**-0.35) we deduce that it's a reversive linear relationship.

- The relationship coefficient between shyness and total class interaction: (*-0.29) we deduce that it's a reversive linear relationship.

-The relationship coefficient between shyness and total class interaction: (*-0.29) we deduce that it's a reversive linear relationship i.e., when the 1st variable (shyness) level increases, the 2nd variable (class interaction) decreases.

Showing and analyzing the general hypothesis results:

The study general hypothesis provides for: “there’s a shyness effect on interaction within class with the 1st year secondary school science and technology stream pupils at Saadi Essediq and Messani Ladjal secondary schools in Tebessa”. To check this hypothesis, ITA square exam has been operated for calculating the effect volume. The result is as follows:

-Shyness effect volume on class interaction between the teacher and the learner has been calculated. The result is (0.12); it’s quite great effect, which corresponds with the obtained result of using interview with teachers, which consists in the proportion of (92.86%) of the responses asserting the existence of shyness effect on class interaction between the teacher and the learner, with the study sample,.

-Shyness effect volume on class interaction among the learners has also been calculated. The result is (0.20). It’s a great effect. This corresponds with the obtained result of using interview, which consists in the proportion of (78.57%) of responses asserting this effect.

-Finally, shyness effect volume on the total class interaction has been calculated. The result is (0.25), which signifies that there’s a great effect of shyness on class interaction. This corresponds with the obtained results of using interview, which consists in the proportion of (85.72) asserting the existence of shyness effect on class interaction process, with the study sample.

Thus, the general hypothesis has been achieved i.e., there’s shyness effect on interaction within class, with the study sample. This result corresponds with Djadidi et al (2018), which has concluded that there’s a relationship between shyness and class interaction with 4th year primary school pupils. This result can be interpreted as follows: the shy learner may think a lot about what the others say about him and his colleagues’ impressions about what he’ll say or achieve. He has a prior expectation that they’ll have negative opinions and mindsets. This has been mentioned by the cognitive emotional trend; Albert Allis thinks that the emotional situation refers to the feeling of the individual, who believes that people’s beliefs affect his behavior, belief and abilities to deal with the social situations. The unreal ideas he’s convinced with are the reason behind the psychological disorder. He also suffers from various physiological symptoms like red-faced, stutter and confusion while talking. This leads to the desire to the prompt escape and withdraw from the situation. Thus, the shy learner avoids interaction within class

whether with his teacher or with his classmates.

Showing and analyzing the 1st partial hypothesis:

This hypothesis provides for: “there’re differences with statistical significance in shyness level, with the study sample,, refer to gender variable”. To check this hypothesis, (t) exam for the independent samples has been operated.

Table 2. (t) exam results of the differences between shy average, according to gender variable

Gender	Number	Arithmetic Average	The standard deviation	(t) value	The potential value	The significance
Male	27	40.07	8			insignificant
Female	41	41.09	9.82	0.45	0.30	

Source: the two researcher’s, field study,2022

Through this table, we observe that shyness average with males is 40.07 with a standard deviation of 8.00. It’s less than shyness average with females, which has reached 41.09 with a standard deviation of 9.82. (T) exam value has been estimated with 0.45 with a potential value of 0.30, which is more than significance level 0.05. Thus, there’re no differences with statistical significance at the significance level 0.05 in shyness level with the sample individuals, refer to gender variable. So, we deduce that the 1st partial hypothesis hasn’t been achieved.

Other studies have attained similar results including Djadidi & all (2021), which has been operated on a sample of 4th year primary school pupils. However, there’re other studies concluding with results that don’t correspond to our studies’ results including Luduring (1981), which has been operated on a sample of 103

pupils in 4th and 5th year primary school. It has concluded that there's a variation in shyness level, refer to gender variable in favour of females. Boothe talc study (1992) has been operated on a sample of 100 university students. It has concluded that males are shier than females. This result can be interpreted that societies' nature is different than what was in the past. They were conservative societies in terms of some traditions, which gave males more liberty in various fields. So, they were given the opportunity to make various relations. Nowadays, we observe that the two genders' open-mindedness, especially females; they're given a high status. They deal with the other gender with breaking fear and suspicion barriers. Moreover, parents encourage their sons to make social relations. Thus, the level of their shyness becomes low, especially with females, who get use of being mixed with males at schools and universities. Females freely express their opinions, attitudes and egos.

Showing and analysing the 2nd partial hypothesis results:

It provides for: "there're no differences with statistical significance in shyness level, refer to age variable". To check this hypothesis, the mono variation exam (ANOVA) has been operated. The results have been as follows:

Table 3. The results of mono variation exam (ANOVA) of shyness level, according to age variable

Age	Number	arithmetic average	Standard deviation	(t) value	Potentiel value	Significance
14	1	40.00	9.20			
15	34	41.88	9.76	0.84	0.50	insignificant
16	17	41.47	8.01			
17	15	36.99	8.84			
18	1	44.00				
Total	68	40.69	9.10			

Source: the two researcher's, field study,2022

Through this table, we observe that there're no differences with statistical significance in shyness level, with the study sample,, refer to age variable; (t) value has been estimated with 0.84 with a potential value of 0.50, and it's more than 0.05. So, we deduce that the 2nd partial hypothesis has been realized. This result may refer to the fact that shyness doesn't differ with the age variation at school. This may refer to the sample individuals' environment; they live in the same social environment. the psychological education is the basis of making the healthy psychological health fulfilling the child's various needs like: peace, safety, liberty and estimation, which lead to the individual's good coping in his age various stages so that he'll never be introvert and shy regardless of his age.

Showing and analysing the 3rd partial hypothesis results:

It provides for: "there're no differences with statistical significance in shyness level refer to experience variable". To check it, (t) exam has been operated on the independent samples.

Table 4. (t) exam results of differences in shyness average, according to experience variable

Experienc e	Numbe r	Arithmeti c average	Standar d Deviation	(t) valu e	Potentia l value	Significant
yes	25	39.76	8.27			Insignifican t
no	43	41.23	9.60	-0.64	0.48	

Source: the two researcher's, field study,2022

Through this table, we observe that shyness average with repeaters has reached 39.76 with a standard deviation of 8.27, which is less than successful pupils' shyness average, which has reached 41.23 with a standard deviation of 9.60. (t) value has reached -0.64 with a potential value of 0.48, which is more than 0.05. So, there're no differences with statistical significance in shyness level, with the study sample, refer to experience variable. We deduce that the 3rd partial hypothesis has been realized.

This hypothesis provides for: "there're no differences with statistical significance in shyness level, with the study sample, refer to experience variable". This result can be interpreted that the repeated pupils don't have false ideas about their

repetition. This has helped them to correspond with the academic society, and they're not shy. This corresponds with the social learning theory, which is a theory of educational guidance; the acquired experiences through repeating the year have enabled them to cope with the school.

Showing and analysing the 4th partial hypothesis results:

It provides for: “there're differences with statistical significance in class interaction level, with the study sample, refer to gender variable”. To check it, (t) exam has been operated on the independent samples. The results have been as follows:

Table 5. (t) exam of differences of class interaction average, according to gender variable

	Gender	Number	Arithmetic Average	Standard Deviation	(t) value	potential value	significance
1 st axe	female	41	10.83	1.02	4.50	0.05	S at 0.05
	Male	27	9.48	1.45			
2 nd axe	Male	27	9.37	1.69	2.03	0.76	insignificant
	female	41	10.20	1.60			
Total degret	female	41	21.02	2.30	3.56		insignificant
	male	27	18.85	2.70			

Source: the two researcher's, field study,2022

We observe that class interaction average in the 1st axe, which consists in class interaction between the teacher and the learner with females, has reached 10.83 with a standard deviation of 1.02, which is more than class interaction average with males, in the same axe, which has reached 9.48 with a standard deviation of 1.45. (t) exam value has reached 4.50, which is less than 0.05. Thus, there're differences with statistical significance in class interaction level between the teacher and the learner, with the study sample, refer to gender variable.

We also observe that class interaction average with females in the 2nd axe, which consists in class interaction among learners, has reached 10.20 with a standard deviation of 1.60, which is more than class interaction average in the 2nd axe with males reaching 9.37 with a standard deviation of 1.69. (t) exam value has

reached 2.03 with a potential value of 0.76, which is greater than 0.05. Thus, there're no differences with statistical significance in class interaction level among them refer to gender variable.

According to the table, we find that the total class interaction average with females has reached 21.02 with a standard deviation of 2.30, which is more than the total class interaction average with males reaching 18.85 with a standard deviation of 2.70. (t) exam value has reached 3.56 with a potential value of 0.37, which is more than 0.05. Thus, there're no differences with statistical significance in class interaction level, with the study sample, refer to gender variable. So, we deduce that the 4th partial hypothesis hasn't achieved.

Our study results correspond with Meddahi and Bou Ghmara (2018), which has been operated on a sample of secondary school pupils. It also corresponds to Djadidi et al (2021), which has been operated on a sample of 4th year primary school pupils.

This result may refer to the contemporary societies' nature, which is characterized with no differences between the two genders in various domains. Thus, learners of two genders have the same objective, which is to look for imposing ego on others with no shyness.

Showing and analysing the 5th partial hypothesis results:

It provides for: "there're no differences with statistical significance in class interaction level, with the study sample, refer to age variable". To check it, the mono variation exam (ANOVA) has been operated. The results have been as follows

Table 6. The results of mono variation exam of class interaction level, according to age variable

	Age	Number	Arithme average	Standard deviation	(t) value	Potent value	significance
1st axe	14	1	9		1.43	2.53	Insigni
	15	34	10.65	120			
	16	17	10.06	1.34			
	17	15	9.93	1.67			
	18	1	9				
	Total	68	10.29	1.37			
2nd axe	14	1	11		0.23	0.92	Insigni
	15	34	9.94	1.59			
	16	17	9.71	1.79			

	17	15	9.87	1.88			
	18	1	9				
Total	68	9.87	1.67				
Total degret	14	1	20		0.93	0.71	Insigni
	15	34	20.59	2.51			
	16	17	19.76	2.68			
	17	15	19.80				
	18	1	18	3.14			
Total	68	20.16	2.69				

Source: the two researcher's, field study,2022

We observe that there're no differences with statistical significance in class interaction level in the 1st axe consisting in interaction within class between the teacher and the learner, with the study sample, refer to age variable; (t) value has reached 1.42 with a potential value of 2.35, which is more than 0.05. We also observe that there're no differences with statistical significance in class interaction level in the 2nd axe consisting in interaction within class among learners, with the study sample, refer to age variable; (t) value has reached 0.22 with a potential value of 0.92, which is more than 0.05. Finally, we notice that there're no differences with statistical significance in the total degree of class interaction level, with the study sample, refer to age variable; (t) value has reached 0.53 with a potential value of 0.71, which is more than 0.05. So, the 5th partial hypothesis has been achieved.

This result can be interpreted with the sample individuals' ages proximity. Thus, they belong to the same age stage, which is adolescence. Among the individual's psychological features in this stage is proving ego and independence. The ability to communicate with others, the reasonable discussion and convincing the others increase. Therefore, they interact with the teacher and among themselves.

Showing and analysing the 6th partial hypothesis results:

It provides for: "there're differences with statistical significance in class interaction level, with the study sample, refer to experience variable". To check it, (t) exam has been operated on the independent samples. The results have been as follows:

Table 7. Table title (this is an example of table 1)

	Experience	Number	Ari Ave	Std Dev	(t) value	Pot value	Significance
1 st axe	Repeater	25	9.72	1.54	-2.76	0.08	Insignificant
	Successful	43	10.63	1.16			
2nd axe	Repeater	25	6.60	1.83	-1.00	0.27	Insignificant
	Successful	43	10.02	1.58			
Total degree	No	25	19.32	3.02	-2.03	0.77	Insignifiant
	yes	43	20.65	2.34			

Source: the two researcher's, field research, 2022

We observe that class interaction average in the 1st axe consisting in class interaction between the teacher and the learner with repeaters has reached 9.72 with a standard deviation of 1.54. It's less than class interaction average between teacher and learner, with successful pupils, which has reached 10.62 with a standard deviation of 1.15. (t) exam value has reached -2.75 with a potential value of 0.07, which is more than 0.05. Thus, there're no differences with statistical significance in class interaction between teacher and learner, with the study sample, refer to experience variable.

We also observe that class interaction average in the 2nd axe consisting in class interaction among learners, with repeaters, has reached 6.60 with a standard deviation of 1.82, which is less than class interaction average among learners, with successful pupils, reaching 10.02 with a standard deviation of 1.58. (t) exam value has been estimated with -1.00 with a potential value of 0.26, which is more than 0.05. Thus, there're no differences with statistical significance in class interaction level among learners refer to experience variable.

We notice that the total degree average of class interaction level with repeaters has reached 19.32 with a standard deviation of 3.02, which is less than class interaction average, with successful pupils, reaching 20.65 with a standard deviation of 2.33. (t) exam value has been estimated with -2.02 with a potential value of 0.77, which s more than 0.05. Thus, there're no differences with statistical significance in class interaction level, with the study sample, refer to experience variable. So, the 6th partial hypothesis hasn't been achieved.

The obtained result can be interpreted as follows: class interaction doesn't differ with the experience variation (repetition), since the experts know about the curricula elements, which makes them freely interact within class whether with teacher or with their classmates, in order to make use of the previously acquired experiences and knowledges, which makes them feel more trust. As per the successful pupils, they interact for the sake of achieving a set of objectives including the desire to prove their egos within class and perhaps to compete with the experts. They may interact for the sake of better understanding and to get good results in exams. This has been discussed by the human brain adjustment theory (teacher-learner) in achieving the individual's desires and introducing positive interaction within class.

4. CONCLUSION

This study aims at identifying shyness effect of interaction within class with the 1st year secondary school science and technology stream pupils at Saadi Essediq and Messani Ladjal in Tebessa. After operating the field study and analysing the results, we've concluded with the following:

There's an effect of shyness on class interaction, with the study sample.

There're no differences with statistical significance in shyness level, with the study sample, refer to gender variable.

There're no differences with statistical significance in shyness level, with the study sample, refer to age variable.

There're no differences with statistical significance in shyness level, with the study sample, refer to experience variable.

There're differences with statistical significance in class interaction level between teacher and learner, with the study sample, refer to gender variable.

There're no differences with statistical significance in class interaction level among learners, with the study sample, refer to gender variable.

There're differences with statistical significance in class interaction level, with the study sample, refer to gender variable.

There're no differences with statistical significance in class interaction level, with the study sample, refer to age variable.

There're no differences with statistical significance in class interaction level, with the study sample, refer to experience variable.

Recommendations and suggestions:

According to what has been addressed and the obtained results, the following suggestions can be formulated:

Looking after the communication between the two axes of teaching-learning process (teacher and learner) and acquiring skills to attain all the learners' personalities kinds, especially the shy learner.

Varying the ways and methods of teaching to achieve the didactic objectives.

The teacher has to look after the learners' psychological sides before giving them lessons.

A special care should be given by teacher and family to the learners suffering from psychological problems.

The teachers' diligence to increase the learners' motivation through the learning situation.

Constructing guidance programs to decrease shyness level with learners and applying them on various academic levels.

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