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## School-to-University Transition: The Paradox of Motivated but Undecided Students

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### *Abstract*

Educational research on university transitions has repeatedly highlighted that inequalities related to cultural origin still persist even though intergenerational upward mobility has been facilitated over the last fifteen years due to the huge enrollment rates documented across countries in the Western world. In contrast to this line of research in which differences between social or cultural groups are investigated, the unit of analysis in this article is a demographically homogeneous group of families in which the parents invest in university studies as the main route for their children's post-18 pathways. Through a variable-based research design we explore the conditions which affect high-school students' motives for following university studies. The main finding has to do with the fact that it is how late or early students make their decision that is the factor differentiating the families within this group and affecting the students' transition to university.

**Keywords:** motives, university transition, peer-group influence, family influence, decision-making.

### 1. Introduction. Three variants of sociologically-oriented educational research

Since the sixties, the social-class conditions affecting the transition to higher education have constituted one of the much-debated issues in educational studies as far as the sociological and socio-psychological fields are concerned (Devine, 2004; Gambetta, 1987). The reason for this has been repeatedly highlighted and concerns the fact that holding a higher education degree impacts one's occupational, social or health status (Dudal, Verhaest & Bracke, 2018; Morley, 2012) and that by mediating between class origin and occupational destination it can reduce (or not) the reproduction of inequalities across generations. In the last twenty years there has been an explosion in demand for higher education studies due to transformations related to the credentialization of specific jobs in the job market. In particular, according to OECD (2020: 54-66), Greece:

- has the fourth highest tertiary enrolment rate among OECD countries and has experienced an increase in tertiary education attainment over the last decade.
- has the highest enrolment rates in bachelor's programs of all OECD countries among 19–24-year-olds, and the second highest rates among 25–28-year-olds. Overall tertiary enrolment rates for 19–20-year-olds and 21–22-year-olds are the

fourth highest across OECD countries, and the rate for 23–34-year-olds is the third highest. Women make up 52% of new entrants into tertiary education.

➤ between 2008 and 2018, there was a noticeable increase in the share of 25–34-year-olds attending tertiary education in Greece, from 28% to 43%; the increase was greater among women (from 32% to 51%) than among men (from 25% to 35%), leading to a higher share of tertiary-educated women compared to men. Women also have a higher completion rate (81% compared to 74%) at the bachelor's level.

These data suggest a departure from Comi's (2003, as cited by Symeonaki & Stamatopoulou, 2014: 685) findings that Mediterranean countries, including Greece, are the most immobile in education, since the enrollment rate has increased regarding both the 2008-2018 period and women's share of tertiary education. The data seem to confirm Daouli, Demoussis and Giannakopoulos' research (2010) which found that there is substantial cross-generational educational mobility over time and that daughters seem to have a greater likelihood of upward transitions. Symeonaki and Stamatopoulou (2014) reveals that individuals' likelihood of attaining a higher educational level than that of their parents has increased in the last twenty years and that intergenerational cohort comparisons attest that upward mobility predominates over downward transitions and seems to increase over time, even though this increase has halted for the younger birth cohort.

Sociological researchers devoted to educational inequalities have demonstrated that students' university choice is the most crucial dimension not only because educational credentials are considered the major determinants of transition to the labor market but also because differences in choice patterns point out how and why class inequalities persist through the workings of cultural capital (Bunn, Threadgold & Burke, 2019). In Greece, Sianou-Kyrgiou and Tsiplakides (2011), in examining whether and to what extent students from different socio-economic backgrounds but with similar performance make different choices, underline the fact that the familial habitus of lower-middle-class and working-class students have explanatory power. In particular, these students “present a family-inculcated habitus of ‘unemployment aversion’ strategy, with the assurance of permanent employment in the public sector” (Sianou-Kyrgiou & Tsiplakides, 2011: 94). In other research, Sianou-Kyrgiou (2010) has demonstrated that the choice of university is a process that disadvantages lower-class students while those from privileged classes with high academic performance do not simply seek entry to university but entry to the ‘correct’ university and make decisions about the department and subject of study on the basis of their interests and preferences. They make choices leading to elite professions and the so-called traditional professions or to modern professions with prospects of a career that will ensure the reproduction of their privileges.

In addition to intergenerational studies focusing on educational mobility and to educational studies researching inequalities, a third strand of educational research focuses on the concept of transition. In this strand, various typologies of transition have been formulated. Gale and Parker (2014) have proposed a three-part conceptualization of students' school-to-university transitions. In the first type, the transition as induction, transition is approached not as “access” but mainly as a “journey” or “pathway” the form of which is linear and attention is focused on how students encounter HE when they initially enter. In this type, the most crucial period is the students' first-year experience at university and the most studied topic is their adjustment to university culture. The second type of transitions emphasizes identity change during the transition from childhood to adulthood and explores transitions as a time in which students develop their identity as university students. This is why this kind of transition is defined as development and the metaphor that is used for describing it is “trajectory”. In the third type, the main theoretical assumptions framing these two approaches to transitions are questioned. In particular, representing “student transition into HE as (i) a particular time of crisis, (ii) part of a linear progression, and (iii) universally experienced and normalized”, is disputed because none of these

reflects students' multifaceted and complex life experiences. Instead of presenting transitions in terms of success and failure, in the "transition-as-becoming" type, transitions are not viewed as if there is a singular HE transition but as expressing subjectivities in a flux. More recently, Coertjens et al. (2016) note that the transition from school to university concerns mainly (a) the empowerment of students' "learning identity", and (b) the extent to which they will be engaged in the university's social or cultural activities in order to build social ties with the institution. It is against this background that our research is positioned. In particular, while educational research is focused on intergenerational or cultural inequalities between groups (working classes/upper classes, or advantaged/disadvantaged groups) and research interested in university transitions is centered on specifying the explanatory links connecting initial conditions with educational outcomes by using mostly qualitative methods, we aspire to describe in a variable-oriented way how decisions for university studies are taken within a socially homogeneous group and to bring to light differences within this group.

## 2. Research aims and scope

In this study we aim to enrich the transition strand of educational research not by implementing a qualitative research design, but through specific quantitative variables. Our goal is mostly to highlight some of the parameters affecting the reasons secondary school students forge in order to frame their choice to follow university studies. We have stressed the role of family and peer influence, how strong or weak their motivations are for pursuing university studies and the time period in which their decision to invest in university studies crystallized. This is mostly a social profile of how these parameters frame students' decision making to go to university. Although quantitative, the research design isn't geared to make causal claims or see the school-to-university transition as a linear path in which one variable leads to another and the final outcome is entry to university. On the contrary, we use variable-oriented research to bring to light the interdependence of the variables which frame an outcome that has a high degree of unpredictability, that is students' decision making regarding their transition into the university. In that sense, our research questions are:

- 1) To what extent do family and peer influences affect how strong or weak students' motives for following university studies will be?
- 2) Is the length of time it takes to decide to follow university studies related to the reasons for choosing a university and future job?
- 3) To what extent do students' motives for going to university affect the reasons they deploy for following university studies?

## 3. Methodology

### 3.1 *The sample*

Data was collected from students attending general high schools which are located in the three capital towns of the three prefectures composing the regional unit of Western Greece. The cross-sectional survey design was the research plan we put in motion<sup>1</sup>. Stratified random

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<sup>1</sup> The research entitled "From high-school to university" took place under the aegis of the workshop "Educational Policy, Economy and Lifelong Learning" which is a member of the Higher Education Policy Network (<http://hepnet.upatras.gr>) and was self-funded. The members of the research team were (a) Dr Giorgos Aggelopoulos, Educational Sciences PhD, (b) Penny Evagelakou, Educational Sciences PhD student and (c) Dr Michalis Christodoulou, Sociologist, PhD and Assistant Teaching Staff at the Department of Philosophy, University of Patras. Research principal was Professor Giorgos Stamelos and the research lasted from spring 2018 until December 2019.

sampling was the sampling method we used and we took as a sampling frame the records of secondary schools held by the administration of Western Greece. Given that our research purpose concerns the school-to-university transition, our sampling reasoning contained two steps. First, we focused only on general high schools called “Genikon Lykeion” in Greek, in which students are between 15 and 18 years old. Then, by implementing systematic random sampling for students who are in the final grade (18 years old, 11<sup>th</sup> grade) of the senior high school, questionnaires were administered in person by visiting the schools in these three towns. Data collection lasted three months (January 2018 to March 2018) because of the distance separating the towns and of the entry requirements we had to satisfy in order to get permission to carry out the research (DeVaus, 2002: 85-100). We collected 794 questionnaires.

### 3.2 Data collection method

Data were collected through a questionnaire which was composed of seven sections. Besides the first section which contains students’ demographics, the rest of the sections are related to our main conceptual constructs. In particular, the second section contained items aimed at tapping the concept “students’ motives” and in which students were asked to rate their views on a five-point Likert-type scale (from “strongly disagree” to “strongly agree”). The third section contained items aimed at tapping the concept “peer-group influence” and in which students were asked to rate their views on a five-point Likert-type scale (from “strongly disagree” to “strongly agree”). Similarly, the fourth section contained items aimed at tapping the concept “family influence” and in which students were asked to rate their views on a five-point Likert-type scale (from “strongly disagree” to “strongly agree”). The items pertaining to these three conceptual constructs and the value of Cronbach  $\alpha$  are presented in Table 1.

Table 1. Items for the conceptual constructs of “motives”, “peer group influences” and “family influence”

	Number of items						Cronbach $\alpha$	
	1	2	3	4	5	6		
<b>Conceptual constructs</b>	<b>Motivation</b>	I think that university studies are extremely important	I want to go to university	I think that I am capable of going to university	I will go to university		0.81	
	<b>Peer group influence</b>	My friends think that I will go to university	Most of my friends will go to university	Most of my friends think that it is important for them to go to university	Most of my friends want to go to university	Most of my friends will try to go to university	Most of my friends think that they are capable of going to university	0.86
	<b>Family influence</b>	My family thinks that I will go to university	My family thinks that it is important for me to go to university	Most of my family members hold a university degree	Most of my family members were good students at school	Most of my family members wanted to study at university	Most of my family members tried to go to university	0.73

The next three sections concerned students’ reasons for decision making regarding the university, their preferred future job and the possibility of choosing the local university. The fifth



section contained items aimed at tapping students' reasons for choosing a university, the sixth section contained items aimed at tapping students' reasons for choosing a future job and the final section contained items aimed at tapping students' reasons for choosing the local university ("Local" means the university which is located in the regional unit of western Greece). In all these items students are asked to rate their views on a five-point Likert type scale (from "strongly disagree" to "strongly agree"). The items pertaining to these concepts are presented in Table 2.

Table 2. Items related to students' reasons for choosing a university, for choosing a future job and for choosing the local university

	Number of items							
	1	2	3	4	5	6	7	
<b>Conceptual constructs</b>	<b>Students' reasons for choosing a university</b>	I would choose a university which is very close to my home	I would choose a university where the subject areas are close to my scientific interests	I would choose the most prestigious university	I would choose a University at some distance from my home	I do not care about the choice of university		
	<b>Students' reasons for choosing a future job</b>	Wage is the most important reason for choosing a job	Prestige is the most important reason for choosing a job	Self-realization is the most important reason for choosing a job	My family has determined my career choice	I do not want my future job to be tiring or time-consuming	I want my future job to enable professional advancement	Career guidance lessons have influenced my criteria for choosing a job
	<b>Students' reasons for choosing the local university</b>	I would choose the local university because it is close to my home	I would choose the local university because its subject areas are close to my scientific interests	I would choose the local university because my friends are studying there	I would choose the local university because a degree from there will never lose its value	I would choose the local university because of my school achievements	I have heard that the local university department in which I want to study is one of the most reputable in our country	

### 3.3 Data analysis techniques

In the next sections we will present one-variable graphs for depicting crucial information concerning the distribution of the answers in the sample for specific variables. In addition, we use Pearson chi square in order to highlight statistically significant correlations between variables which reflect tendencies in the population and simple linear regression in order to explore the intensity of the correlation. Finally, we use correspondence analysis to graphically bring to light how closely specific variables are connected.

## 4. Results

### 4.1 Descriptive statistics

The sample is composed of 383 boys (48.7%) and 404 girls (51.3%), students' fathers are mostly office employees (18.1%), professionals (31.7%), farmers (13.5%), skilled workers

(18.4%), employers and executives (5%) and unskilled workers (5%), while students’ mothers are mostly office employees (27.7%), professionals (44.7%), farmers (3.2%), skilled workers (1.7%), employers and executives (2.7%) and unskilled workers (7.2%). In Table 3 we present more details regarding the students’ living standards.

Table 3. Students’ living standards

items	%
I have a personal computer	50.7
Internet connection	93.2
PC possession	87
I have my own bedroom	78.7
My parents own the house I live in	85.2
I have brothers/sisters	90
I have 1 brother/sister, 2, 3 or more	57.2 – 27 – 15.5
I have a maximum of 25 books at home, 26-100, over 100	21.5 – 45 – 34

It seems that most of the students come from families who experience a kind of safety regarding the parents’ job conditions and the social milieu they grow up in. All of them grow up in four (or more)-member families in which the house belongs to their parents, they have their own bedroom, PC and internet connection. It is a sample of students whose parents, judging by the number of books at home, more or less invest in university studies as the main route for their children’s post-18 pathways. In Diagram 1 we see the students’ reasons for choosing university studies.

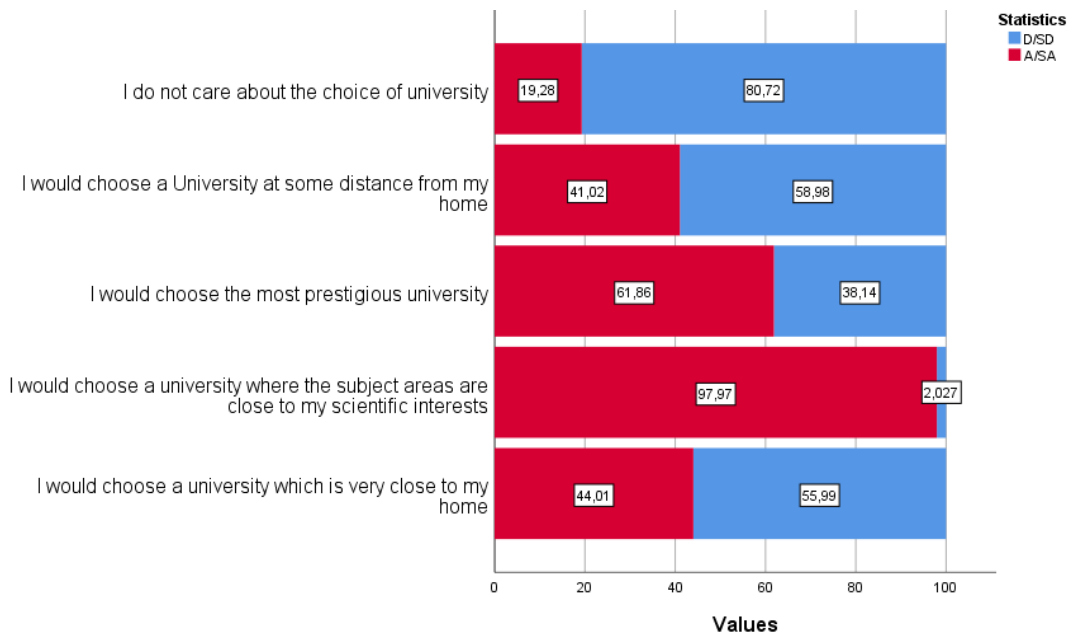


Diagram 1. Students’ reasons for choosing university studies

It seems that one of the most hard-to-solve problems in their decision-making concerns the location of the university and whether it will be a university close to or distant from their home. The difficulty of this decision is intensified by the fact that students want the subject of their study to satisfy their scientific interests which, in some cases, is not possible in the university departments of the local university. In Diagram 2 we present students’ reasons for choosing a future job.

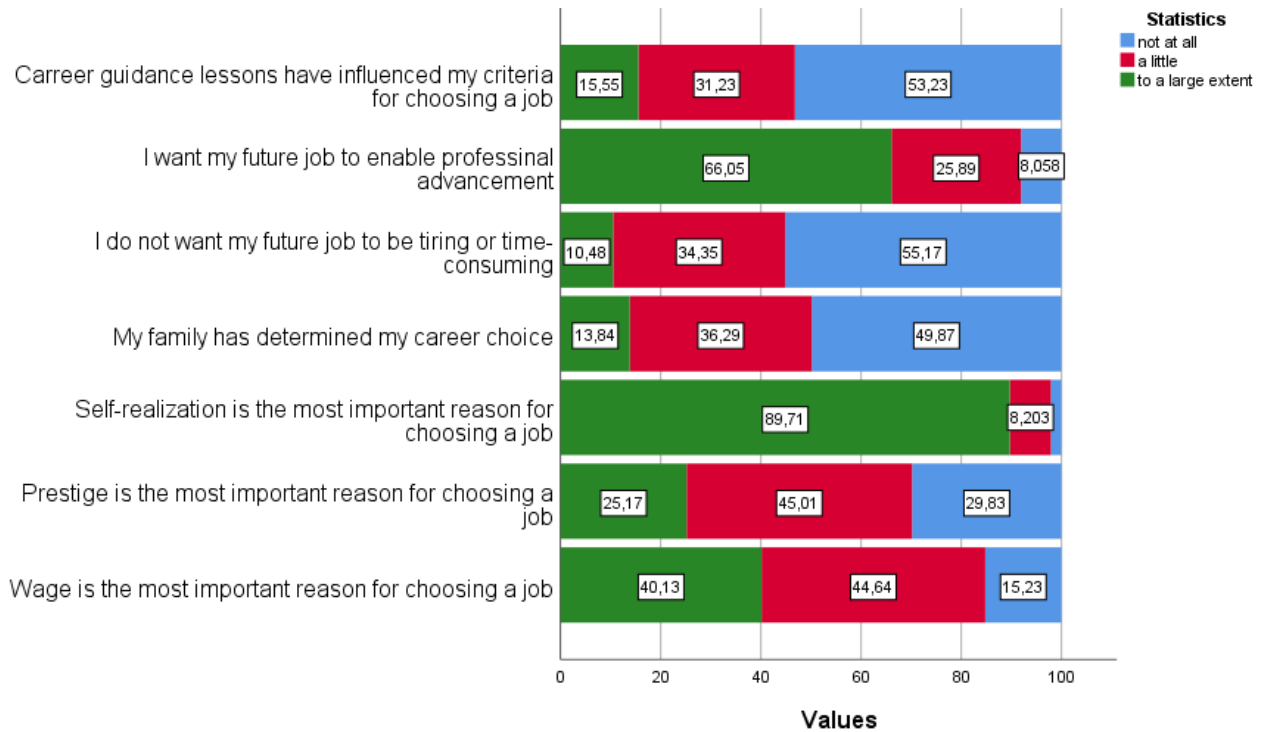


Diagram 2. Students' reasons for choosing a future job

We see that the students' choice is not affected by their schools' lessons on career guidance or by what parents expect their kids to become in the future (or they believe this is so). What matters the most has to do with self-realization or professional advancement and to a lesser extent with the prestige of the job. This finding is close to the previous one in which students want the choice of university to reflect their personal scientific interests. However, given that the local university is one of the most respected in Greece, we asked students to give reasons as to whether they would choose it. In Diagram 3 we provide students' reasons for choosing the local university.

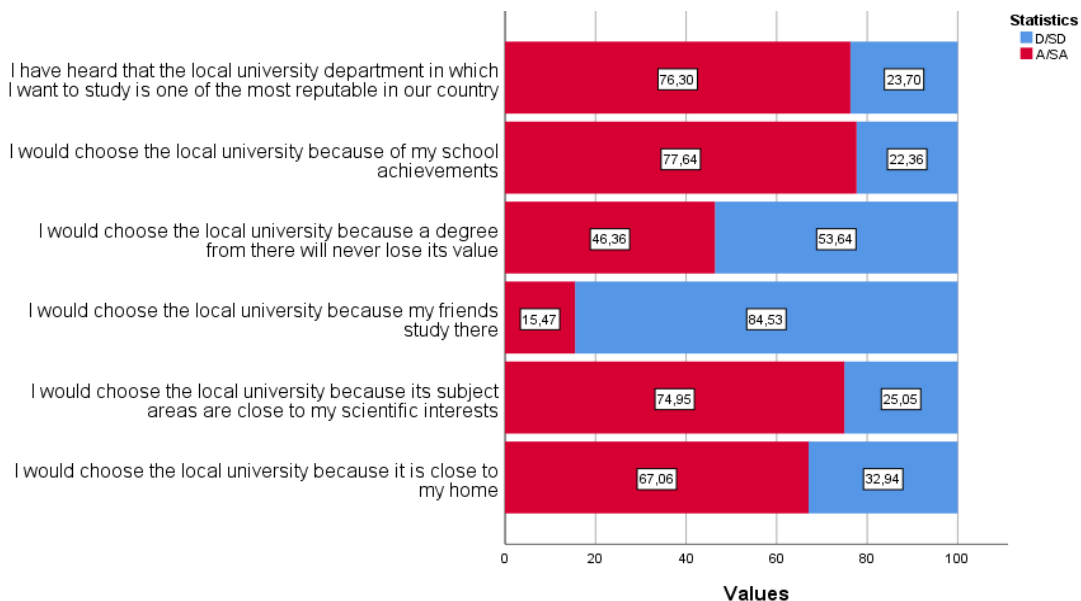


Diagram 3. Students' reasons for choosing the local university

It is obvious that the local university attracts students not just because of its location but also because its subject areas reflect personal scientific interests or school grades, and because of its prestige and the fact that a degree from the local university will “never lose its value” in the job market. Finally, we present a variable which deserves to be separately analyzed and concerns the time period over which the students’ decision regarding their post-18 plans became crystalized (Diagram 4). We have demarcated grade 9 and grade 10 as turning points because in the Greek educational system students have to decide whether they will attend vocational or general high schools before they enter grade 9 and during grade 10 they have to choose the cluster of courses (humanities or sciences) related to the scientific field they aspire to follow at university.

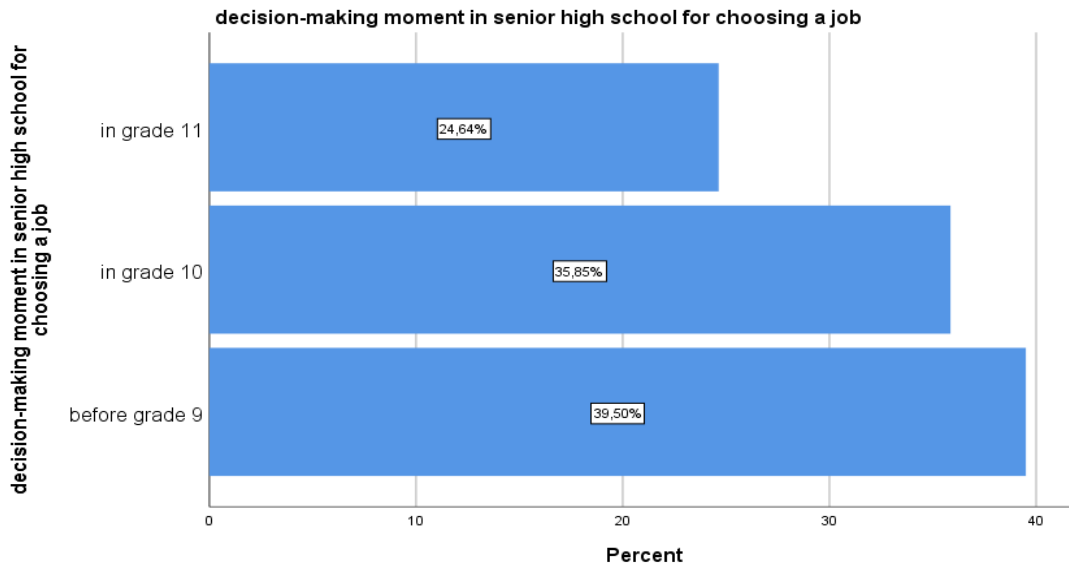


Diagram 4.

Here the important thing to note is that to a large extent (60%) the students’ decision concerning their university studies is taken too late in their school career, to be precise, when they are in 10<sup>th</sup> and 11<sup>th</sup> grade and are 16 or 17 years old. In the next sections we will explore possible connections between this finding and students’ motives and their choice of university.

#### 4.2 To what extent does family and peer group affect students’ motivations.

It seems that family and peer groups act as formative influences upon students’ motives. In order to explore this relation, we carried out the Pearson chi square test in two steps, first for the variable “family influence” and “students’ motives” and then for “peer group influence” and “students’ motives”. The categories for these variables are “strong” (denoting strong influence), “neither/nor” (denoting that the influence is neither weak nor strong) and “weak” (denoting weak influence). The same holds for the “students’ motives” variables. The crosstabulation for peer group influence and students’ motives (Table 4) shows that there is a huge difference in the percentages of specific cells. In particular, 40% of those with “weak” peer group influence have “weak” motives, while only 1.1% of those who have “strong” peer influence have a “weak” motive. This relation is inversed when one observes the third row. In particular, 50% of those with “weak” peer influence have “strong” motive while 92,8% of those with “strong” peer influence have strong motive. In addition, the correlation between these two variables is statistically significant for the population ( $v=175.975$ ,  $df=4$ ,  $p=0.000$ ).

Table 4. Crosstabulation of “peer group influence” and “students’ motives”

		Peer_group_influence			Total
		weak	Neither/no r	strong	
Motives	weak	Count	4	2	8
		% within Peer_group_influence	<b>40.0%</b>	3.9%	<b>1.1%</b>
					1.8%
	neither nor	Count	1	23	42
		% within Peer_group_influence	10.0%	45.1%	6.0%
					8.7%
	strong	Count	5	26	646
		% within Peer_group_influence	<b>50.0%</b>	51.0%	<b>92.8%</b>
					89.4%
Total		Count	10	51	696
		% within Peer_group_influence	100.0%	100.0%	100.0%
					100.0%

The same holds for the variables “family influence” and “students’ motivation” (Table 5). In particular, 50% of those with “weak” family influence have “weak” motives, while only 0.5% of those who have “strong” family influence have a “weak” motive. Inversely, 35.7% of those with “weak” family influence have “strong” motive while 94.9% of those with “strong” family influence have strong motive. In addition, the correlation between these two variables is statistically significant for the population ( $v=265.476$ ,  $df=4$ ,  $p=0.000$ ). In other words, the more strongly family and peer group influence students’ motives for their university studies, the stronger these motives are and, inversely, the weaker the influences, the weaker the motives.

Table 5. Crosstabulation of “family influence”

		Influence_of_Family			Total
		weak	neither nor	strong	
Motives	weak	Count	7	4	3
		% within Influence_of_Family	<b>50.0%</b>	3.1%	<b>0.5%</b>
					1.8%
	neither nor	Count	2	36	29
		% within Influence_of_Family	14.3%	28.3%	4.7%
					8.8%
	strong	Count	5	87	591
		% within Influence_of_Family	<b>35.7%</b>	68.5%	<b>94.9%</b>
					89.4%
Total		Count	14	127	623
		% within Influence_of_Family	100.0%	100.0%	100.0%
					100.0%

However, this statistically significant relation does not enlighten us regarding the intensity of the impact of peer group and family influence (independent variables) on students’ motives (dependent variable). In order to explore this issue, we implemented linear regression with the method “enter”. Model summary (Table 6) shows that the two independent variables have a moderate effect (0.64) on the dependent variable and that 41% of the variance in the “students’ motives” variable is explained by the independent variables.

Table 6. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.646 <sup>a</sup>	.418	.416	2.15705

a. Predictors: (Constant), Family\_Influence, Peer\_influence

The value of the F test ( $F= 266.588, p=.000 < 0.05$ ) shows that these findings reflect what happens in the population and Table 7 shows that there is no difference regarding the weight each independent variable exerts upon the dependent (Beta=0.27 for both “peer group influence” and “family influence”).

Table 7. Coefficients

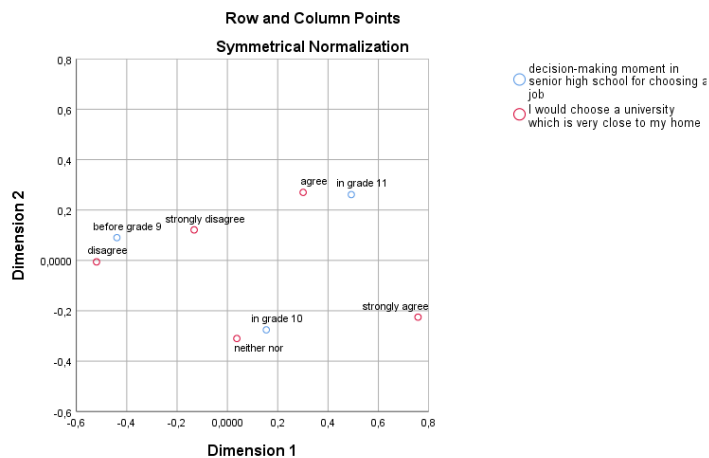
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.587	.563		6.374	.000
	Peer_influence	.276	.023	.367	11.922	.000
	Family_Influence	.279	.021	.402	13.054	.000

a. Dependent Variable: Motivation

In other words, both family and peer group are related in a statistically significant and linear way to the students’ motivation. The stronger the influences, the more powerful the students’ motives are for attaining a university degree. However, this relation is not too intense which means that one cannot predict that whenever a strong or weak influence prevails, the motivation of students will be strong or weak respectively.

#### 4.3 The decision-making period and the reasons for choosing a university and future job.

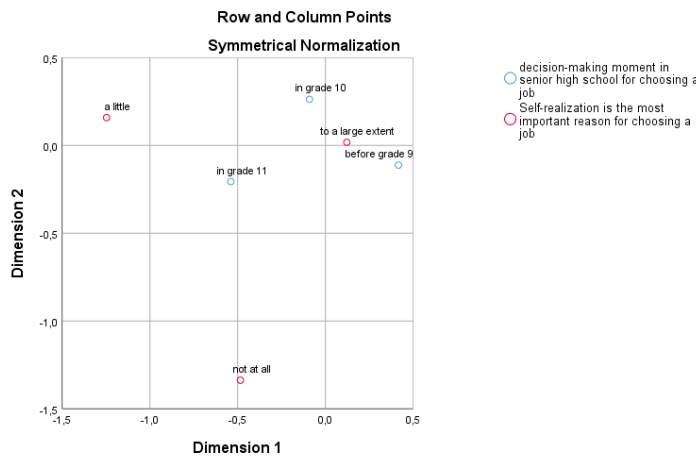
What does it mean for an adolescent when he decides late (or early) on his/her post-18 life plans? Given that 2/3 of the sample decide after 10<sup>th</sup> grade (16 or 17 years old), we think that this variable deserves separate examination. By focusing only on statistically significant relations of the variable “decision-making period” with students’ reasons for choosing a university and a future job, we implemented a correspondence analysis in order to show graphically how closely the variables are connected. Graph 1 shows that those who have decided before grade 9 about their university studies do not consider the location of the university to be an important factor in their decision and, inversely, those who agree that whether the university is close to their home matters, are 11<sup>th</sup> grade students.



Graph 1.

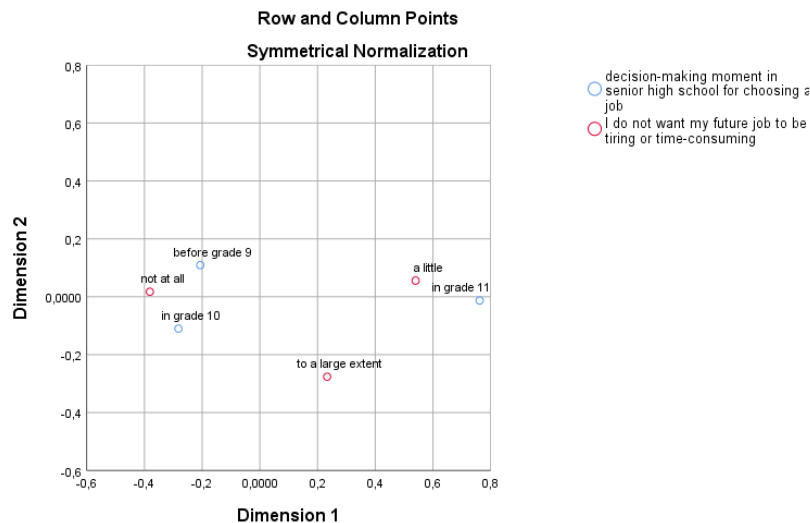
In addition, it seems that self-realization matters most as a reason for choosing a future job for those who have taken this decision before grade 9, while those who take this decision

during grade 11 do not reason that self-realization matters when selecting their future job (Graph 2).



Graph 2.

Finally, a non-tiring and relaxed future job matters for those who have decided during grade 11 but it is not relevant for those who have taken this decision before grade 9 or grade 10 (Graph 3).



Graph 3.

In other words, for those whose decision on their future job has been taken before grade 9, the location of the university does not matter but they put emphasis on how the future job will satisfy personal interests. On the contrary, those who take this decision after grade 10 and mostly during grade 11 prioritize how close to their home the university will be and are indifferent to self-realization. This finding is confirmed by the fact that 11<sup>th</sup> grade students care about finding a non-tiring and relaxed future job, while this is something irrelevant for those who have decided on their future job before grade 9. These findings highlight the fact that the moment of decision informs us about the students' motives in the sense that the earlier the decision for post-18 routes is made, the more committed students are to their motives and the less their motives are affected by external or ephemeral reasons.

## 5. Discussion

Given that in Greece there are no “elite” universities like “Oxbridge”, families in Greece aspire for their children to get a degree from any university and for that reason their influence puts pressure on students’ motives (Byrom, Thomson & Gates, 2007). In that sense, what matters in the case of Greece is not so much “university choice” as how students come to take decisions regarding their post-18 life plans or how a university degree reflects their self-conception. This is close to what happens in other cases (e.g., Spruyt & Kuppens, 2015) in which education serves as a status marker based on perceived competence. What matters are not specific educational credentials but the position people occupy in the hierarchy of the highly and the not so highly educated. The fact that the university’s prestige is one of the main reasons that the students in our sample choose a university supports this line of research.

This is not to say that cultural capital is not a difference maker but that one has to explore the intermediate mechanisms through which this capital frames students’ decision-making. However, we have shown that the students in our sample care about the prestige of the university they aspire to study at even if they are uninformed about the details of what “prestigious university” means, as the high percentages of indecision attest. In addition, given that our sample is composed of students whose parents’ cultural capital predisposes them for university studies, one has to examine how this decision is formed within a group which is “homogeneous”, as we have shown from the main demographic findings. In other words, our findings concern within-group differences, not between group.

We believe that the main finding of our research has to do with the fact that while students are highly motivated to follow university routes, most of them remain undecided even during the last grade of their school trajectory. This means that most of the students’ parents, although culturally educated, don’t have the resources to inform their kids’ decision making. It has been underlined that the more informed the decision making for university studies is, the more successful the adjustment. A smooth adjustment to the “learner identity” of the university may concern either how students connect high-school friendships with new friends at university or how neophytes become familiar with the discourse of the university (Yorke & Thomas, 2003; Pascarella & Terenzini, 2005). Undoubtedly, cultural capital differences play a significant role in this process since, for some students, university is a “natural development” while others are in need of encouragement or counselling in order to create a future self as a “university student” (Byrom, 2009).

Besides family influences, sociologists of education as early as the 90’s highlighted how peer groups act as an intermediate mechanism in decision-shaping. Brooks (2003) has brought to light the importance of the nature of intimacy in the extent to which students will disclose personal hopes, fears and plans about their future selves to their friends. One of the puzzling findings concerns the fact that adolescents do not talk with their friends about their university aspirations. Instead of taking this finding as proof of decision making being an individualized issue, Brooks suggest that hierarchical differences within peer group friendships block students’ self-disclosure. Such kinds of differences might be created either by means of students’ school grades or by means of the type of university they would like to attend (for example social sciences or humanities) or they might concern the fact that some students are in different phases in the process of decision making (some are preoccupied while others are not). These remarks are in line with the finding of our research that strong peer group pressures can predict neither students’ motivation nor how certain they are about their university choice.

Since schools act as important developmental contexts for the academic and socioemotional development of late adolescents it follows that the degree of affiliation that students feel towards university and school belongingness are linked to higher academic motivation (Pittman & Richmond, 2008). Our research extends this line of inquiry because it



underlines the perplexing ways undecidedness, school belongingness and 1<sup>st</sup>-year university adjustment are connected. We think that research has to take account of the fact that even if school belongingness is a good predictor of social adjustment, undecidedness might undermine this relation. The reason is that should the undecidedness be prolonged during the first year at university, then university adjustment is at stake because students are not sure about their choice regarding, for example, the subject matter of their studies or the town in which university studies will take place. It is obvious that the more undecidedness is prolonged the more students will face difficulties related to forming new friendships, dealing with course workload or other university requirements and the more demanding the university transition will be. This is a hypothesis supported by McGhie (2016) who states that successful adjustment presupposes not only encouragement received from their families and friends but that students be knowledgeable as to what university study entails. An additional implication of undecidedness concerns the fact that it may block students' agency conceived as either life plans competence or self-efficacy. This is verified by Millman and McNamara (2018) whose research has shown that the determination to act in an agentic way in challenging situations (such as the decision about university studies) is put in jeopardy whenever one is uncertain about his goals. Besides the fact that undecidedness puts students' first-year adjustment to the university in jeopardy and blocks their agency, it differentiates them in relation to how they approach university studies. In particular, the more undecided one is, the more he/she prefers closeness to home as a reason for choosing university and the more he/she tends to prefer a non-tiring and relaxing future job. Conversely, the earlier the decision is made, the more probable it is that self-realization will be provided as a reason for choosing a future job.

## 6. Conclusion

In this article we investigated the extent to which family and peer influences affect the strength of students' motives for following university studies and the relevance of the time period during which students decide to pursue university studies. In Greece, the students' decision is framed in relation to three basic challenging issues: the prestige of the university, its location and the alignment of personal scientific interests with university subject areas. This is in line with the fact that professional advancement, self-realization and how close or distant the university is, are the most prominent reasons for choosing a future job and the local university respectively. However, the core finding of our research concerns the fact that the group we researched, although homogeneous regarding these parameters, presented specific socially meaningful differences. In particular, even though family and peer group influences are highly correlated with students' motives, it seems that the time period in which students take decisions makes a difference since two out of three students remain undecided even when they reach grade 11. In other words, a paradox sustains Greek students' school-to-work transition because, although strongly motivated to follow university studies, they are highly undecided. This is a finding which differentiates the students of our group and which has to be taken seriously because it may put in jeopardy students' first-year adjustment to university and block their agency even when their transition has been realized.

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## References

- Bunn, M., Threadgold, S., & Burke, P. J. (2019). Class in Australian higher education: The university as a site of social reproduction. *Journal of Sociology*, 1-17. <https://doi.org/10.1177/1440783319851188>
- Brooks, B. (2003). Discussing higher education choices: Differences and difficulties. *Research Papers in Education*, 18(3), 237-258. <https://doi.org/10.1080/0267152032000107310>
- Byrom, T., Thomson, P., & Gates, P. (2007). 'My school has been quite pushy about the Oxbridge thing': Voice and choice of higher education. *Improving Schools*, 10(1), 29-40. <https://doi.org/10.1177/1365480207073718>
- Byrom, T. (2009). 'I don't want to go to a crummy little university': Social class, higher education choice and the paradox of widening participation. *Improving Schools*, 12(3), 209-224. <https://doi.org/10.1177/1365480209348819>
- Coertjens, L., Brahm, T., Trautwein, C., & Lindblom-Ylänne, S. (2016). Students' transition into higher education from an international perspective. *Higher Education*. <https://doi.org/10.1007/s10734-016-0092-y>
- Comi, S. (2003). *Intergenerational mobility in Europe: Evidence from ECHP*. Paper published by Centre for Household, Income, Labour and Demographic Economics, Italy. [http://www.childcentre.unito.it/papers/child18\\_2004.pdf](http://www.childcentre.unito.it/papers/child18_2004.pdf)
- Daouli, J., Demoussis, M., & Giannakopoulos, N. (2010). Mothers, fathers and daughters: Intergenerational transmission of education in Greece. *Economics of Education Review*, 29(1), 83-93.
- DeVaus, D. (2002). *Surveys in social research*, 5th ed. London: Routledge.
- Devine, F. (2004). *Class practices. How parents help their children get good jobs*. Cambridge: Cambridge University Press.
- Dudal, P., Verhaest, D., & Bracke, P. (2018). Educational inequalities in depression: Do labor markets matter? *Society and Mental Health*, 8(2) 93-107. <https://doi.org/10.1177/2156869317713553>
- Gale, T., & Parker, S. (2014). Navigating change: A typology of student transition in higher education. *Studies in Higher Education*, 39(5), 734-753. <https://doi.org/10.1080/03075079.2012.721351>
- Gambetta, D. (1987). *Were they pushed or did they jump? Individual decision mechanisms in education*, Cambridge: Cambridge University Press.
- Millman, T., & McNamara, J. (2018). The long and winding road: Experiences of students entering university through transition programs. *Student Success*, 9(3), 37-49.
- Morley, L. (2012). Researching absences and silences in higher education: Data for democratization. *Higher Education Research & Development*, 31(3), 353-368. <https://doi.org/10.1080/07294360.2011.63438>
- McGhie, V., (2016). Entering university studies: Identifying enabling factors for a successful transition from school to university. *Higher Education*. <https://doi.org/10.1007/s10734-016-0100-2>

- OECD (2020). *Education at a glance 2020: OECD indicators*. OECD Publication, Paris.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA, Jossey-Bass.
- Sianou-Kyrgiou, E., & Tsiplakides, I. (2011). Similar performance, but different choices: Social class and higher education choice in Greece. *Studies in Higher Education*, 36(1), 89-102. <https://doi.org/10.1080/03075070903469606>
- Sianou-Kyrgiou, E. (2010). Stratification in higher education, choice and social inequalities in Greece. *Higher Education Quarterly*, 64(1), 22-40, <https://doi.org/10.1111/j.1468-2273.2009.00427.x>
- Spruyt, B., & Kuppens, T. (2015). Warm, cold, competent or incompetent? An empirical assessment of public perceptions of the higher and less educated. *Current Sociology*, 63(7), 1058-1077. <https://doi.org/10.1177/0011392114554843>
- Symeonaki, A. M., & Stamatopoulou, A. G. (2014). Exploring the transition to higher education in Greece: Issues of intergenerational educational mobility. *Policy Futures in Education*, 12(5), 681-695.
- Yorke, M., & Thomas, L. (2003). Improving the retention of students from lower socio-economic groups. *Journal of Higher Education Policy and Management*, 25(1), 63-74.
- Pittman, D. L., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *The Journal of Experimental Education*, 76(4), 343-362. <https://doi.org/10.3200/JEXE.76.4.343-362>





## Profiling of Accreditation in Libyan Higher Education Institutions

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### *Abstract*

Institutional accreditation is often implemented as a tool for service enhancement or as a vehicle for educational change in broadly different settings. There is little evidence of the effect of accreditation, although there are indications in developed countries that facilities complying with initial low standards substantially increase their compliance levels as a result of engaging in accreditation programs funded by quality improvement interventions. This review intends to highlight on the profiling of accreditation in Libyan higher education institutions.

*Keywords:* accreditation, institutions, higher education, Libya.

### 1. Introduction

The expansion and employment of active mechanisms for quality assurance and accreditation are crucial for effective higher education everywhere. Every nation and its university graduates are challenging by the local and global prospects and standards. The impacts of the latter are increasing. As a consequence, these prospects and standards will affect the achievement and productivity of graduates in tertiary institutions. Instructors, faculty members, and policymakers would be well counseled to evaluate their own tertiary systems in that context and struggle to set suitable standards and criteria of their own which also reflect the requirements and prospects of the nation.

Extending and employing active quality assurance and accreditation systems is essential for successful higher education everywhere. The local and global prospects and norms are daunting for every nation and its university graduates. The influence of the latter is rising. As a result, these expectations and opportunities will affect the achievement and productivity of graduates in tertiary institutions.

## 2. Impact of accreditation

Education accreditation is often implemented, in broadly differing situations, as a mechanism for service enhancement or as a vehicle for education reform. Accreditation requires thorough planning including the compilation of information related to the necessary criteria that are used to analyze how well qualified the organization is to handle any investigations and concerns that may arise. There is limited evidence of the impact of accreditation in Libya, although in developing nations there are indications that facilities with preliminary low levels of standards compliance significantly enhance their levels of adherence as a result of contributing in accreditation programs supported by quality improvement interferences (Shaw, 2013). Profiling descriptions of accreditation organizations are scarce. Despite several studies have tracked accreditation organizations in Europe, yet there has been no comparable local picture (Shaw, 2010).

- Institutional accreditation is often applied as a vehicle for educational change.
- Every nation and its university graduates are challenging by the local and global prospects and standards.
- Extending and employing active quality assurance and accreditation systems is essential for successful higher education everywhere.
- Of the total 33 registered higher educational institutions, only 12 (36.3%) has granted the institutional accreditation, with only 7 (21.2%) offered the programmatic accreditation.
- It is now the mission of the National Center for Quality Assurance and Accreditation (NCQAA) to assist and guide universities and other institutions in Libya to adapt the national accreditation standards.

The raised worry about the quality of education offered in higher institutions is partly motivated by market demands, such as increased competition for the share of the global student market, which has also fueled demand for quality education and institute accountability. This means that the educational undertaking has been affected by universal structures that threaten the autonomy of national education systems, and that there are often major changes in the basic conditions of the institute system aimed at integrating into a society defined by proximity and familiarity.

Needless to mention, it is still mostly through accreditation that higher educational institutions develop their credibility among their various stakeholders, students, employers, other institutions, government and funding agencies. Accreditation processes are used for self-improvement and targeted preparation of future institutional growth. Accreditation allows institutions to assess whether a credential from another institution or a course taken elsewhere is of appropriate quality to be recognized.

## 3. Accreditation in the Libyan higher education

Accreditation in the Libyan higher education institutions are the method of assessing an educational institution and officially acknowledges that it has met or failed to meet the National Center for Quality Assurance and Accreditation (NCQAA) standards. There are two basic forms of accreditation for educational institutions; institutional (nine criteria) and academic; (eight criteria). It requires a visit to the site for at least three days with each form of accreditation by the accreditation committee applying the essential auditing, with the decision to grant accreditation to those institutions that meet their criteria.

Even with all the measures taken by NCQAA to highlight the accrediting of higher education institutions, it is clear that there is a lack of fundamental and necessary components to create an ideal learning atmosphere that improves knowledge, innovation and professionalism to

meet international learning standards. Indeed, the Libyan higher education system has faced several difficulties over the last few years leading to a system that does not meet international expectations and more importantly social needs. It was therefore the concern to gather calculable insights on the profiling accreditation of Libyan higher educational institution from the available information assorted by the NCQAA database in December 2020 (<https://qaa.ly/>). Of the total 33 registered higher educational institutions, only 12 (36.3%) has granted the institutional accreditation, with only 7 (21.2%) offered the programmatic accreditation. Interestingly, only private institutions have obtained the programmatic accreditation, exhibiting a challenge facing the public higher education to meet these criteria.

Challenges to accreditation are not new, but they have seldom been noticeable to the general public. Across the past of the process of accreditation, by adapting their procedures, accreditors have responded to changing contexts and pressures from inside and outside the academy. For example, in response to the growing cost burden associated with regional and technical accreditation reviews, agencies have enabled organizations to integrate these reviews into existing administrative processes, such as strategic planning or evaluation of programs (Atia & Elfard, 2020). Recognizing the growing consensus that student learning results are the ultimate test of the quality of instructional programs, accreditors have also re-focused their requirements, reduced the emphasis on quantitative indicators of inputs and services, and necessary decisions on educational efficacy from observable outcomes.

#### 4. Conclusion

After passing fourteen years of its initiation, it is now the mission of NCQAA to assist and guide universities and other institutions in Libya to adapt the national accreditation standards. Notwithstanding the difficulties that the Libyan higher education system faces, it has become a mandatory task for all sectors of Libyan higher education to pursue accreditation for all universities in the country. The ability to achieve an effective higher education system would therefore be a simple and attainable objective. The vulnerabilities found in higher learning institutions and their processes can be resolved effectively, and the next step for NCQAA is to inspect progress and ensure that all requirements have been compiled by all educational institutions. NCQAA is also recommended to recognize the latest international reform of the education system and to go through the process of revising the accreditation criteria and standardizing the process to meet the global task force on accreditation for higher education. We are hopeful that vigorous efforts to enhance the quality of higher education in Libya will be maintained.

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## References

- Shaw, C. D., Braithwaite, J., Moldovan, M., Nicklin, W., Grgic, I., Fortune, T., & Whittaker, S. (2013). Profiling health-care accreditation organizations: an international survey. *Int J Qual Health Care*, 25(3), 222-231. <https://doi.org/10.1093/intqhc/mzt011>
- Shaw C, Kutryba B, Braithwaite J, Bedlicki M, Warunek A. (2010). Sustainable healthcare accreditation: messages from Europe in 2009. *Int J Qual Saf Health Care*, 22, 341-350.
- Recognized universities* (2020). National Center for Quality Assurance and Accreditation. Available from: <https://qaa.ly/> (last accessed 11 December 2020).
- Atia, A., & Elfard, S. (2020). Medical school accreditation in Libya: Current trends and future challenges. *Egyp J Med Edu*, 2(2), 1-4. <https://doi.org/10.33328/ejme.2020.004>







## Social Life of Senior Citizens: A Review of Therapeutic Effects of Gardening for Wellbeing in Urban Nepal

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### *Abstract*

This paper provides the insights for a better understanding of individual, familiar, and social factors of loneliness that influence wellbeing of people in later life. The review offers a thematic analysis on loneliness in elderly people and the therapeutic effects of gardening activities for healthy ageing. Five key themes related to loneliness of elderly people emerged across the papers: loneliness-an issue for wellbeing in life after retirement; the effects of gardening and plants on loneliness; gardening – a therapeutic tool to combat loneliness; elderly’s loneliness during the pandemic and home gardening; and national and international initiatives to decrease loneliness in the elderly population. The review found a significant gap in literature directly connecting loneliness in the elderly with gardening activities for happy and healthy life ageing. The review found that there is a limited number of literatures on the loneliness situation of elderly people during the pandemic, where gardening plays a vital role to reduce the psychological problem while maintaining the social distancing and isolation.

*Keywords:* social life, senior citizen, therapeutic effects, wellbeing, Nepal.

### 1. Introduction

Worldwide population ageing is considered one of the most important demographic phenomena, as the elderly population is increasing almost all around the world. The gradual process of ageing is a universal and multidimensional phenomenon, leading all individuals through life in its course from birth to death. Ageing brings about many morphological and physiological and social changes (Dangal & Singh, 2019), which affect often adversely to the social life of senior citizens (Panda & Nayak, 2012). For older people who are living in their own homes, it is extremely important to understand how to help them continue to live healthy, fulfilling lives. The prevalence of loneliness is quite common among the older population (ranging between 28% and 63%), enough for it to be recognized as a serious public health issue of human beings in later life (Pimlott, 2018).

The review found a significant gap in the literature directly connecting loneliness in the elderly with gardening activities; however, this study aims to explore the issue of loneliness in

old age along with the therapeutic effect of gardening for healthy ageing. This study provides a thematic analysis of loneliness in older people after retirement and their wellbeing.

Human life is divided and understood at different stages such as infancy, babyhood, childhood, adolescence, adulthood and old age (Nayak & Panda, 2012). Humans are social creatures and no most people are unable to live without the social web, but modernization has brought about more feelings of isolation and “the age of loneliness”. In an era characterized by population ageing, more and more people are living longer and alone. Thus, loneliness among senior citizens has become a social issue in contemporary societies (Guo, 2009). Yet, the study of loneliness itself comes with its own problems. The knowledge of the effects of loneliness is complicated by studies which measure constructs that are similar to loneliness or may include aspects of loneliness such as “being alone”, lack of closeness”, lack of confiding relationships and social isolation. It is broadly agreed that loneliness is not directly the result of social isolation or living alone but it is the absence of healthy relationships with other people. Loneliness is defined as the negative outcome of a cognitive evaluation of a discrepancy between the quality and quantity of existing relationships and relationship standards (Singh & Kiran, 2013).

During ageing life or life after retirement, people tend to gravitate towards different hobbies and pastime activities like playing card games, gardening, reading, travelling, social work, social gatherings etc. to reduce loneliness or to cope with retirement. Among these activities, the elderly people who get involved in gardening do so out of pure interest without fully understanding the range of social, economic and health benefits of this activity. Currently, there is a lack of scientific studies conducted on the effects of gardening on elderly health and well-being of people, especially on an individual level. Available studies are mainly focused on hospital patients suffering from ailments like dementia, Alzheimer’s, and mental retardation, among others. Regarding elderly people who are engaged in the horticultural activities by their own knowledge and interest at the individual household level, it is difficult to find research about the impact of gardening on their wellbeing from social, economic, cultural and health perspectives.

Most elderly people express the desire to die in peace before having to depend fully on the next generation for minor issues and daily life requirements, expectations which form a part of 'functionally' able ageing. Hence, functional stability and independence from core criteria of happy and healthy ageing (Chalise, 2006). The World Health Organization (WHO) has defined healthy ageing as a process of maintaining functional ability to enable wellbeing in older age. The time frame of 2020 to 2030 has also been named “The Decade of healthy Ageing”. According to a demographic projection, the number of people age 60 years and older will be 34% higher by the end of this decade (2020-2030), increasing from 1 billion to 1.4 billion. By 2050, the global population of older people will have more than doubled to 2.1 billion (WHO, 2020). Similarly, in developing countries, the number of people aged 60 years and older will increase most rapidly from 652 million in 2017 to 1.7 billion in 2050 (Kandel, 2020). Along with other nations, Nepal is also experiencing a demographic shift towards an ageing population, presenting a challenging situation in the context of wellbeing of senior citizens (Chalise, 2006).

## 2. Loneliness- an issue for wellbeing in life after retirement

Loneliness is generally defined as “an emotional state in which a person experiences a powerful feeling of emptiness and isolation.” It is a state where a person feels isolated, abandoned, rejected and neglected by the near and dear ones or the societies (Nayak & Panda, 2012). Loneliness can greatly impact the well-being of elderly people as it is a cause of emotional distress and is linked to a variety of health problems in older individuals. Gender, social and cultural factors influence the experiences of loneliness in older people (Singh & Kiran, 2013).

Human beings have an intrinsic need for social connections and an engagement with the social environment. Lack of or unhealthy social relationships lead to feelings of isolation and loneliness in older people (Brownie & Horstmanshof, 2011). In 2017, The UK Government commission issued the results of a year-long investigation which studied the prevalence of loneliness in the UK. Accordingly, 9 million Britons or 14% of the population was reported to be suffering from loneliness. Among the more vulnerable, such as the elderly and those living with disabilities, the rates are much higher (Pimlott, 2018). Loneliness and resulting health issues became prominent enough to prompt former British Prime Minister Theresa May to appoint a “Loneliness Minister” in January 2018 (Paudel, 2020).

Traditionally, Nepalese society had joint and extended family structures and the society had norms and values of showing respect, looking after, and caring for the elderly parents or grandparents of their family. They were also provided respect in the society in different ways. Nowadays, due to many reasons like nuclear family, migration from rural to urban or abroad, the trend towards modernization, rise in individualism and increasing technology (easy access to technical devices), elderly people are suffering from increased disrespect and loneliness.

Although it is not discussed often, it is a commonly accepted belief that with old age comes loneliness. Loneliness in the current age may even be termed as an “epidemic.” Although Nepali society has traditionally been structured to provide a calming touch to its seniors through its close-knit circles of friends and family, this characteristic is now in decline. Family touch is quite valued in Nepal, and its absence becomes a glaring and major cause of sorrow especially in old age (Paudel, 2020).

Reviewing the available data, most retired people suffer mental stress immediately after retirement because they are used to an active working life and have no way to engage themselves without their job. This is especially the case in the retired male population because most males in Nepalese societies are not habituated or interested in doing household work.

### 3. The effects of gardening and Plants on loneliness

Plants have been present in history since the beginning of life on this planet and play a very crucial role in the life of every human being. Home gardening is a branch of horticulture. Over the past few decades, horticulture has been used as a suitable treatment for the elderly in long term care. The word originates from the roots *hortus*, meaning “garden” and *culture*, referring to the development, improvement or modification of the mind, feelings, interests, behaviors, tastes, ideas, customs, skills, art etc. Here specifically, it refers to “soil cultivation”. In horticulture treatment programs, plants and home gardening are used to improve the mind, body and morale of the people involved. This may be the new approach to promoting mental, social, and cognitive functioning of the elderly. It is found that engaging in outdoor surroundings benefit older people in three main ways: participation in outdoor physical activities, improved mental health and function, and social interaction with others (Pouya, 2018).

The reciprocal relationship between humans and plants through gardening can knowingly and unknowingly serve therapeutic benefits to promote wellbeing (especially hedonic and eudaimonic wellbeing) (Rae, 2013). Additionally, many studies have also found that a physically active lifestyle reduces the risk of developing cardiovascular disease, obesity, osteoporosis, dementia, several forms of cancer and depression in health-conscious people who are residing in urban areas. Hence, it is important to find ways to keep people physically active even after retirement (Rappe, 2005). Due to limited recreational spaces at home, lack of public facilities like parks and the unavailability of elderly people focused recreation centers in the urban areas of developing countries like Nepal for exercise or interactions with community people, most retired people have turned to gardening at their homes a pastime.

Typically, a home garden is a kind of integrated cropping pattern in the urban areas. In most urban settlements, families have been doing subsistence home gardening with a combination of vegetables, spices (turmeric, ginger, garlic, chili, coriander, rosemary, oregano etc.) and at least one or two fruit varieties (such as lemon, guava, etc.) necessary for everyday for cooking.

#### 4. Gardening – A therapeutic tool to combat loneliness

Plants play a very important role in the life of every individual. They have been present in human history since the beginning of its development. The effectiveness of garden and plants were noted when used as therapeutic tools in the 1<sup>st</sup> half of 20<sup>th</sup> century on the 1<sup>st</sup> and 2<sup>nd</sup> world war veterans who suffered from stress disorder and post-camp asthenia (Gulczynska, Horticultural Therapy and Gardening-Comparison of Dimension, 2019). Seniors especially can benefit from interacting with nature through horticultural activities. Planting and enjoying the results of a therapeutic garden is considered one of the many proven holistic treatments for those in need of rehabilitation and healing, stimulation, social engagement and more. Seniors experience remarkable benefits from connecting to the earth. The practice of planting flowers and vegetables, getting their hands dirty and watching their efforts turn into beautiful results gives them a sense of empowerment that too often vanishes with age. According to Haas et al. (1998), “With older adults, all types of horticultural activities from planting and weeding to making a flower arrangement can be used in therapy”.

The therapeutic garden environment has been documented since ancient times. The first person to document the use of horticulture as therapy was Dr. Benjamin Rush, according to the American Horticultural Therapy Association-AHTA. Recognized as the “Father of American Psychiatry”, he reported the positive effects of gardening for individuals with mental illnesses. Later, in the 1940s and 1950s, the practice was used in the rehabilitation of war veterans and from the treatment of different types of diagnosis (AHTA, 2020). A famous British gardener designer Gertrude Jekyll (19<sup>th</sup>/20<sup>th</sup> century) wrote that a garden is a miraculous teacher of patience; diligence, thrift and most of all- limitless generosity (Gulczynska, HT and Gardening-Composition of Dimension, 2019).

Gardening is a popular pastime in the United States, worth investigating because of its potential for important effects on the individual as well as on the ecosystem. A 2003 survey by the National Gardening Association found that it is a popular activity among Americans, where 78% or 84 million US households participate in some do-it-yourself lawn and garden activities. It is one of the principal ways in which they experience nature (Clayton, 2007).

Plants have positive impacts on the functional and cognitive abilities of elderly people, affecting their psyche through both observation of gardens as well as involvement in horticulture activities. Studies have shown that exposure to plants can create positive emotions and reduce mental stress as well as increase the emotional and cognitive health of the elderly. Horticultural activities allow reciprocal relationships with nature and other people; where the elderly are not only recipients of care but can give nurturing and valuable things to others (Rappe, 2005).

Gardening practices can describe more generalized aspects of the social identity as well; traditionally, well- kept lawns signified higher social status. By serving as a locus for social interaction, gardening can not only reflect, but also create social connection (Clayton, 2007).

Activities can be done indoors, outdoors or even virtual, with flowers and plants used as supporting instruments to make the population feel better, including the situation experienced by the period seclusion (Reis, Reis & Nascimento, 2020). The home garden is a small part of the farming system which is usually located around the family home to supply fresh food and herbs.

### 5. Elderly's loneliness during the pandemic and home gardening

Social workers and other gerontological scholars have increasingly voiced concern about loneliness (subjective perception of lack of meaningful relationships) and social isolation (social engagement and contacts) among older adults. In 2015, one of the twelve Grand Challenges for Social Work was to "Eradicate Social Isolation". By 2017, the term "loneliness epidemic" was used by the U.S. Surgeon General Vivek Murthy proclaimed that the adult population was suffering a global epidemic. The COVID-19 pandemic has brought even more attention to the issues of social isolation and loneliness (Dangal & Bajracharya, 2020) for all ages, particularly older adults who are the most vulnerable, at-risk segment of the population (Berg-Weger & Morley, 2019). Older people's sense of fear, isolation and loneliness has been recognized to be an emotional feature of COVID-19. Social isolation refers to the lack of physical contact with, or separation from family, friends, and social networks as well as the lack of involvement in outside activities. During the COVID-19 pandemic, where there are many social restrictions (Dangal & Maharjan, 2021) applied especially to elderly people, gardening can be a safe and extremely beneficial activity for them to engage in.

Social isolation, one of the recommended practices to curb the spread of the disease, can lead to the development of several problems such as loneliness, depression, stress, and apathy. However, practices associated with the cultivation and contemplation of flowers and ornamental plants can be an option to aid in the care for the mental health of the population.

Home gardening has long been used to satisfy different types of human needs on a daily basis. Connecting with nature is crucial to the development process and, in times of social isolation, limiting access to green areas tends to aggravate the damage to people's physical and mental health. Home gardening associated vegetables and ornamental plants (indoor/outdoor) for aesthetic value under the horticultural practices particularly contribute to the requirement in nutrition, vitamins, calories, oxygen and medicinal herbs as well as cultural ecosystem for human well-being (Reis, Reis & Nascimento, 2020).

During the pandemic, all social relationships have taken a toll with restrictions being applied to all events including parties, festivals, meetings, conferences, wedding, sports events, get-togethers, and picnics etc. There have been difficulties in affording materials even for middle and high-income people due to barriers internationally in production and distribution. The rush to buy food materials again poses safety hazards during the global pandemic. The COVID-19 pandemic has disrupted the food supply chain in urban areas due to lengthy lockdowns. Those infected with the disease were forced to self-isolate in their own homes. During this pandemic, as senior citizens are highly vulnerable, they have the most restrictions in social engagement.

Logistically, a home garden provides easy day to day access to fresh vegetables, fruits, spices, ornamental (indoor & outdoor plants) and herbal plants. In the context of Nepal, a home garden is an integrated part of the landscape and culture for centuries but due to limited land and busy schedule in the life of urban people have limited the scope of home gardens in leisure time. At this time, home gardening has an increased significance as a way to support household food security, utilize time, ensure and enhance family bonds, contribute to mental health, health safety and the overall contribution to well-being of the people while creating green and healthy spaces (Dissanayake & Dilini, 2020).

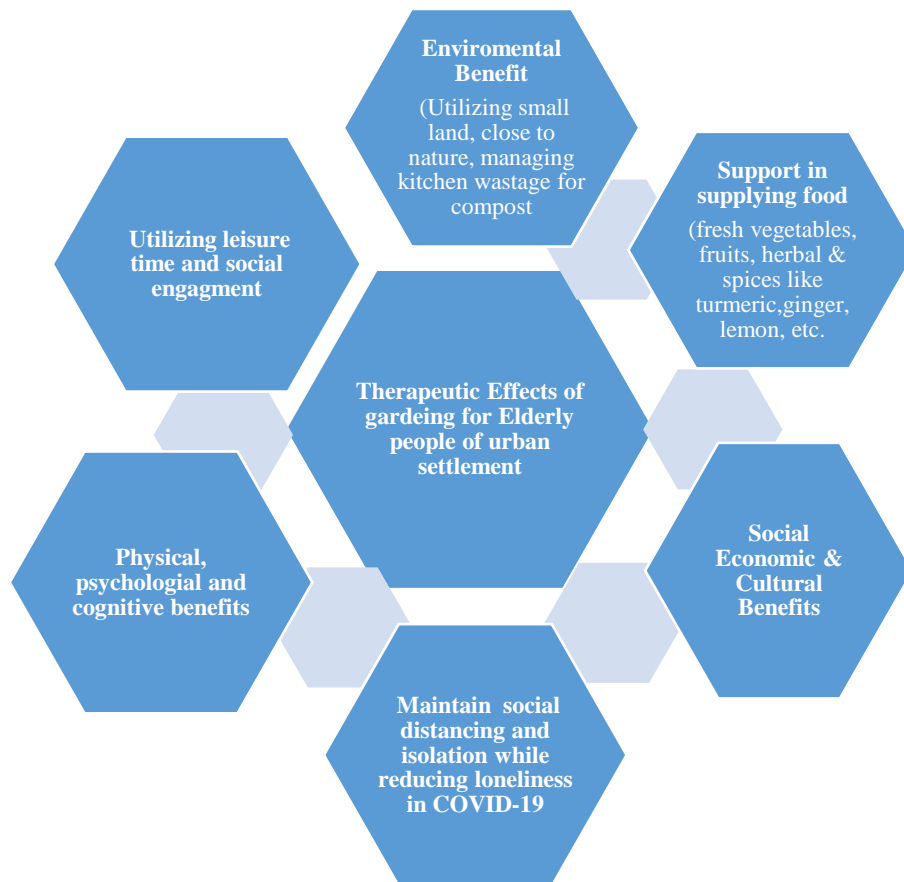


Figure 1. Review analysis from various literature regarding loneliness of elderly citizens and therapeutic effects of gardening

#### 6. National and international initiatives to decrease loneliness in elderly population

The issues of social isolation and loneliness in older people are being brought more into the forefront of both national and international health and social care policies and campaigns, and are increasingly recognizing the importance of tackling social isolation and loneliness among older people. In 2011, *The Campaign of End Loneliness* was run in 2011 as a network of national, regional, and local organizations working together to make sure loneliness is treated as a public health priority. Similarly, the New Zealand government has committed to a vision of positive ageing principles which promote community participation and prevent social isolation (Clare, Geldenhuys & Gott, 2018).

The fact that solitary confinement is used as a form of punishment and torture shows how distressing social and isolation and loneliness is to humans. Yet, loneliness is found to be on the rise in most nations including the US, Germany, Australia and the UK, suggesting that we are facing loneliness (Holt-Lunstad, 2018).

The concern for the study of the elderly increased following the adoption of the International Plan of Action on Ageing by the United Nations (UN) in Vienna, Austria in 1982. Twenty years later, an action plan was outlined during the Second World Assembly on Ageing held in Madrid, Spain which targeted to increase awareness of ageing issues at national and regional levels, and develop concrete plans of action for ageing. However, advances have been few and far

between in much of the developed world and virtually overlooked in developing countries like Nepal (Bhandari, 2075). Following the Madrid Plan of Action, the Government of Nepal (GoN) has formulated a National plan of Action 2062 (2005) for senior citizens, developed various aspects such as economic and social security, health and nutrition, participation and involvement, education and entertainment and legal condition and reforms. It identifies the elderly as one of its main target groups (Country Report/Nepal, 2007).

As a member state of the UN and as a signature country of the Universal Declaration of Human Rights (UDHR) and various other important international conventions, Nepal has expressed international commitment to develop social security services in line with constitutional provisions of the country. In response to tackling ageing issues and addressing their needs and challenges, the government of Nepal has formulated national policies and security programs for senior citizens and has committed itself to various regional and international conventions to promote healthy ageing (Bhandari, 2075).

## 7. Conclusion

Loneliness is often considered a major problem for the increasing older population. While the study of loneliness of elderly people is a multidimensional area covering several issues and problems, this review focused on how gardening can be used by the elderly in combating loneliness and maintaining a healthy and happy later life. Plants play a very important role in physical, mental, and social aspects of human life. Since gardening activities are regarded as therapeutic for people with health problems and especially helpful in dealing with loneliness in later life, implementation of gardens and indoor plants is recommended in their homes. The elderly generally has limited possibilities to promote wellbeing of their own health, and there are many national and international policies and program interventions to promote the wellbeing of elderly people to reduce social isolation and loneliness. Similarly, the COVID-19 pandemic was also a great challenge for all countries as the elderly faced greater social isolations and loneliness during this period. During this time, gardening was the most effective therapeutic tool to reduce risks and vulnerabilities pertaining to elderly health.

Research studies of loneliness in elderly population and its relation to gardening is still in infancy stages in Nepal. This review study concluded that human-plants interactions through gardening brings about six main types of therapeutic effects for the ageing process i.e. environmental benefits, support in supplying food, social economic and cultural benefits, utilization of leisure time, social engagement and maintenance of social distancing and isolation during pandemics such as COVID-19.

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## References

- AHTA (2020). *History of horticultural therapy*. American Horticultural Therapeutic Association. <https://www.ahta.org/>.
- Berg-Weger, M., & Morley, J. (2019). Loneliness and social isolation in older adults during the covid: Implications for gerontological social work. *J Nutr Health Ageing*, 456-458. <https://link.springer.com/content/pdf/10.1007/s12603-020-1366-8.pdf>.
- Bhandari, K. (2075). Social security system of elderly population in Nepal. *NUTA JOURNAL*, 18-24. <https://www.nepjol.info/index.php/nutaj/article/view/23223>.
- Brownie, S., & Horstmanshof, L. (2011). The management of loneliness in aged care residents: An important therapeutic garget for gerontological nursing. *Elsevier-Geriatric Nursing*, 318-325. <https://www.sciencedirect.com/science/article/pii/S0197457211003375>.
- Callow, D. D. (2020). The mental health benefit of physical activity in older adults survive the COVID-19 pandemic. *The American Journal of Geriatric Psychiatry*, 1046-1057. <https://doi.org/10.1016/j.jagp.2020.06.024>
- Chalise, H. N. (2006). Demographic situation of population ageing in Nepal. *Kathmandu University Medical Journal*, 4 3(15), 354-362. <http://www.kumj.com.np/issue/15/354-362.pdf>.
- Clare, G., Geldenhuys, G., & Gott, M. (2018, June 9). Interventions to reduce social isolation and loneliness among older people. *Health and Social Care in the Community*, 147-157. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/hsc.12367>.
- Clayton, S. (2007). Domesticated nature: Motivations for gardening and perceptions of environmental impact. *Journal of Environmental Psychology*, 10. <https://www.sciencedirect.com/science/article/pii/S0272494407000485>.
- Country Report/Nepal (2007). *Economic and social commission for Asia and the Pacific*. [https://www.unescap.org/sites/default/files/No.%2044%20PB\\_fin%20inclusion\\_12July16.pdf](https://www.unescap.org/sites/default/files/No.%2044%20PB_fin%20inclusion_12July16.pdf).
- Dangal, M. R., & Bajracharya, L. S. (2020). Students anxiety experiences during COVID-19 in Nepal. *Kathmandu University Medical Journal*, 70(2), 53-57. <http://www.kumj.com.np/issue/70/53-57.pdf>.
- Dangal, M. R., & Maharjan, R. (2021) Health problems experienced in online learning during COVID-19 in Nepali Universities. *International Journal of Online Graduate Education*, 4(1), 1-14. <https://doi.org/10.5281/zenodo.4509020>
- Dangal, M. R., & Singh, A. R. (2019). Girls bullying in Nepali schools: A perception study on awareness level of verbal and non-verbal bullying among teenagers. *Open Journal for Psychological Research*, 4(1), 1-16. <https://doi.org/10.32591/coas.ojpr.0401.01001d>
- Daoust, J. F. (2020). Elderly people and responses to COVID-19 in 27 countries. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0235590>
- Dissanayake, L., & Dilini, S. (2020). COVID-19 outbreak and urban green space food security and quality of life: Case of urban home gardens in Kandy, Sri Lanka. *Scientific Research Open Access*, 13. [https://www.scirp.org/html/13-1763830\\_102981.htm](https://www.scirp.org/html/13-1763830_102981.htm).
- Girija, P., & Sivan, N. (2020). *Ayurvedic treatment of COVID-19/SARS-CoV-2: A case report*. <https://www.sciencedirect.com/science/article/pii/S0975947620300425>.
- Gulczynska, A. (2019). Horticultural therapy and gardening - Comparison of dimension. *Research Gate*, 347-355. <https://doi.org/10.13140/RG.2.2.14049.97129>
- Gulczynska, A. (2019). HT and gardening - Composition of dimension. <http://hdl.handle.net/10593/23719>.



- Guo, z. (2009). Loneliness of older adults in rural China. *Gerontology Institute*. [https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1016&context=gerontology\\_theses](https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1016&context=gerontology_theses).
- Holt-Lunstad, J. (2018). The potential public health relevance of social isolation and loneliness: Prevalence, epidemiology and risk factors. *Public Policy and Ageing Report*. <https://academic.oup.com/ppar/article-abstract/27/4/127/4782506>.
- Lal, R. (2020). Home gardening and urban agriculture for advancing food and nutritional security in response to the COVID-19 pandemic. *International Society for Plant Pathology and Springer Nature B.V 2020*. <https://doi/10.1007/s12571-020-01058-3>
- Nayak, L. M., & Panda, B. L. (2012). National and international approaches to reduce vulnerability among elderly in India. *Indian Streams Research Journal*, 1-4. <https://www.academia.edu/download/33019165/elderly.pdf>.
- Panda, B., & Nayak, L. M. (2012). National and international approaches to reduce vulnerability among elderly in India. *Indian Streams Research Journal*, 1-4. <https://www.academia.edu/download/33019165/elderly.pdf>.
- Paudel, A. (2020). The Annapurna Express. <https://theannapurnaexpress.com/news/loneliness-among-the-elderly-a-growing-social-problem-2296>.
- Pimlott, N. (2018). *The ministry of loneliness*. Canadian family physician. Retrieved from <https://www.cfp.ca/content/cfp/64/3/166.full-text.pdf>.
- Pouya, S. (2018). The importance of horticulture therapy and gardening for older adults in nursing home. <https://dergipark.org.tr/en/pub/sanattasarim/issue/43408/529734>.
- Rappe, E. (2005). The influence of a green environment and horticultural activities on the subjective well-being of the elderly living in long-term care. <https://helda.helsinki.fi/bitstream/handle/10138/20703/theinflu.pdf;sequence=1>.
- Reis, S., Reis, M., & Nascimento, A. (2020). Pandemic, social isolation and the importance of people-plant-plant interaction. *SciELO*. [https://www.scielo.br/scielo.php?pid=S2447-536X2020000300399&script=sci\\_arttext](https://www.scielo.br/scielo.php?pid=S2447-536X2020000300399&script=sci_arttext).
- Singh, B., & Kiran, U. (2013). Loneliness among elderly women. *International Journal of Humanities & Social Invention*, 1-6. [https://www.researchgate.net/profile/UV\\_Kiran2/publication/236161239\\_Loneliness\\_among\\_elderly\\_women/links/00b495180e38020628000000.pdf](https://www.researchgate.net/profile/UV_Kiran2/publication/236161239_Loneliness_among_elderly_women/links/00b495180e38020628000000.pdf).
- WHO (2020). COVID-19 and the Decade of Healthy Ageing. [https://www.who.int/docs/default-source/decade-of-healthy-ageing/decade-connection-series---covid-19-en.pdf?sfvrsn=d3f887bo\\_7](https://www.who.int/docs/default-source/decade-of-healthy-ageing/decade-connection-series---covid-19-en.pdf?sfvrsn=d3f887bo_7).
- WHO (2020). *Ageing*. [https://www.who.int/health-topics/ageing#tab=tab\\_1](https://www.who.int/health-topics/ageing#tab=tab_1).
- WHO (2020). *Constitution*. <https://www.who.int/about/who-we-are/constitution>.





# The Effect of School Space on Pedagogical Practices and Students' Learning Outcomes: A Review of Scientific Sociological Literature

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## *Abstract*

School space is an important factor in the realization of educational work since it shapes the material conditions for the implementation of the educational process. The aim of this paper, which focuses on a review of contemporary sociological scientific literature, is to investigate and highlight the effect of school space on the shaping of pedagogical practices, as well as on the pupils' learning outcomes. Study and analysis of the content of research findings and relevant scientific papers reveal that school space is chiefly "mono-functional" and that both teachers and pupils remain caught up in the implementation of what are largely traditional pedagogical practices. School space clearly needs to be adapted to the new pupil-centered pedagogical methods, and this can only be achieved through the initiative and agency of the teachers. Finally, it is also clear that the pupils' learning outcomes are to a great extent linked to the position they occupy in the space within the school classroom.

*Keywords:* School space, pedagogical practices, learning outcomes.

## 1. Introduction

During the four last decades, the importance of school space in the shaping of the way educational work is carried out, has been highlighted (Christie, 2002; Wasnock, 2010). School space is defined as a versatile material reality and as an anthropogenic environment which reflects the humanitarian values and models of behavior of the society that produces it, and it actively, dynamically and experientially embodies the role of the school (Lim, O'Halloran & Podlasov, 2012; Urwick & Junaidu, 1991).

School space, where pupils of various ages with different interests, educational needs and characteristics come together every day, is a field for the provision of knowledge and education, the acquisition and cultivation of skills, for socialization and communication, game-playing as well as the holding of events (Germanos, 2009; Gislason, 2007; Koustourakis, 2018b). In addition, the school environment is sometimes approached as an inanimate structure and not as a space created in the context of certain educational beliefs aimed at enveloping and supporting the pupils' learning processes and consequently the complex and multi-level work of the teachers (Berris & Miller, 2011; Neill & Etheridge, 2008).

Study of the contemporary scientific literature reveals that school space is the fundamental field in which both the interaction between teachers and students, and the deployment of pedagogical practices are realized. Hence, the role played by school space is extremely important since it may influence either directly or indirectly the quality of the interpersonal relationships. The formation and suitability of the school space, with the essential material conditions which ensure the existence of a pleasant and creative learning environment are the goals for meeting the needs and demands of daily school activities (Alterator & Deed, 2013; Berris & Miller, 2011; Cheryan, Ziegler, Plaut & Meltzoff, 2014; Christie, 2002; Figueroa, Lim & Lee, 2016; Ghaziani, 2010; Gislason, 2009a; Kaya & Burgess, 2007; Koustourakis, 2018c; Kuuskorpi & Cabellos Gonzalez, 2011; Martin, 2002; McGregor, 2004; Perkins & Wieman, 2005; Sztainberg & Finch, 2006; Urwick & Junaidu, 1991; Wasnock, 2010). With this in mind, criteria for the design of a contemporary school unit are both the actual needs of the subjects that will experience it and use it on a daily basis, and the interactive processes that are expected to govern the relationship that develops between them (Gislason, 2009b; Leiringer & Cardellino, 2011; Marx, Fuhrer & Harting, 1999). Consequently, the study, evaluation and improvement in the quality of the school space is one of the important parameters of the educational processes of everybody concerned with educational policy, programming, design and with the shaping of educational work (Douglas & Gifford, 2001; Germanos, 2009).

The aim of this paper, which focuses on a review of contemporary scientific literature, is to investigate and highlight the influence of school space on the shaping of the teachers' pedagogical practices and the pupils' learning outcomes.

Following on from the section with the theoretical notes, the review of the scientific literature is classified into three specific units based on the thematic content of the relevant research studies. In the case of each thematic chapter there is a selective or brief presentation of the findings of certain representative papers, which shed light on the findings of the particular units. The paper closes with the concluding comments.

## 2. Theoretical notes

The approach to the issue under investigation is directly related to the utilization of Basil Bernstein's sociological theory. Code is a central concept in Bernstein's (1989, 1996) theoretical schema and is defined as a regulative principle which contains within its power relations and principles of social control. The code of educational knowledge refers to the fundamental principles that form the curriculum, the pedagogy, as well as the ways in which teachers evaluate pupils. These elements are the actualizations of the educational code (Bernstein, 1990). In addition, as a regulatory principle, the code is acquired silently by the subjects, shaping the forms for the implementation as well as the contexts for the expression, of their pedagogical practices. From this perspective, we can suppose that the code of the school space is an educational code which is decisive in defining, shaping and influencing the pedagogical practices implemented by the teachers at the micro-level of the school classroom.

Closely interwoven with the concept of code in Bernstein's theoretical framework, are the concepts of *classification* and *framing* (Asimaki, Lagiou, Koustourakis & Sakkoulis, 2018; Bernstein, 1989, 1990; Koustourakis, 2018a). More specifically, classification depends on the power which determines what can be placed with what to form a category. What's more, it is linked to the realization of certain categories through the imposition of strong, or weak, borders and separations between these categories, such as school classrooms, for example (Bernstein, 1989; Hoadley, 2007). Framing refers to the "nature" and structure of the pedagogical relationship (teachers-pupils), as well as to the opportunity for the teacher and pupils to choose, organize, shape the time limits and pace the knowledge that is transmitted within each communicative framework (Bernstein, 1989: 68; Koustourakis, 2018a: 1212). In this case, we

guess that the school spaces shaped for the realization and transmission of educational knowledge will be governed by strong classifications and framings and consequently will shape the pedagogical practices implemented by the teachers.

Closely linked to the concept of code, is the concept of pedagogical practices, which according to Bernstein (1989, 2000) are understood as the social framework through which cultural reproduction takes place. More specifically, two genetic types of pedagogical practice can be distinguished: the visible pedagogy, which places emphasis on strict procedures for the transmission and evaluation of knowledge, as well as on specialized forms of it. This kind of pedagogical practice is defined by strong classifications (C++/C+) and framings (F++/F+) of knowledge. In contrast, the invisible pedagogical practice is defined by weak classifications (C--/C-) and framings (F--/F-) and is oriented towards an autonomous course of learning for the acquisition of knowledge as well as towards more or less informal evaluation practices, based on a relaxed hierarchical relationship between teacher and pupils (Bernstein, 1989).

Bernstein (1989, 2000), assigns particular importance to the pedagogical relationship that develops between teachers and pupils, maintaining that its internal logic is based on three interconnected rules: (a) the hierarchical rules, which are necessary for shaping the appropriate behavior in each pedagogical relationship and which are linked to learning the roles of transmitter and receiver, which define rules of conduct, morals and social order, and (b) the rules of sequencing and pacing which concern the order in which school knowledge is transmitted, as well as the time frame for the pupils to acquire it (Bernstein, 1989: 115). Finally, through the acquisition and implementation of the criteria rules, the pupil understands which forms of communication, social relationship or position in the school field are permitted, and which not (Asimaki et al., 2018; Bernstein, 2000; Koustourakis, 2018a).

Bernstein (1989, 1990) proposes a model for the investigation of pedagogical practices that can reveal and interpret the interactions between teachers and pupils on the micro-level of the school classrooms that take place for the realization of the daily educational work. In the case of our research, the assumptions of the invisible pedagogical practice will be of great interest to us as these are analyzed and “illuminated” in relation to the space, as much on an economic level, as on a symbolic one. We suppose that the variables of space will determine the teachers’ implemented pedagogical practices to a large extent, as well as the pupils’ learning outcomes. In particular, the rules upon which the school space is built in the case of a visible pedagogy include implicit social and cognitive messages and strong explicit rules are implemented which determine the practices and the communications, applying the rule “*leave the space as you found it*” (Bernstein, 2000; Koustourakis, 2018b, 2018c). In contrast, in the case of an invisible pedagogical practice the rules that regulate the communications and the practices in the space are less restrictive and are characterized by the rule “*make your mark*” encouraging the individual action of each receiver (Bernstein, 1989, 2000).

### 3. The structure, organization and modifications of the school space

Recent scientific research has revealed that the structure and organization of school classrooms in many countries have remained unchanged for years. In other words, the regulative code of the school space seems to favor the implementation of mainly “visible” pedagogies that are linked to the implementation of strong classifications and framing (Bernstein, 1996, 2000). In particular, the features that characterize most of the contemporary school classrooms seem to bear a startling resemblance to older school classrooms (Berris & Miller, 2011; Gislason, 2007; Szeinberg & Finch, 2006; Urwick & Junaidu, 1991; Wasnock, 2010). More specifically, it is noted that the organization of the space in school classrooms is based on the reproduction of the traditional features of older school buildings. A characteristic example of this is the arrangement of the desks, which cannot be easily altered, and as a result, even today they are arranged in parallel

rows and columns facing the board and the teacher's desk. In addition, the position of the teacher's desk continues to be next to the board and the positions occupied by the pupils and teachers within the school classroom remain static, being constant and well-established (Germanos, 2009; Lim, O'Halloran & Podlasov, 2012; Ghaziani, 2010; Gislason, 2009a; Kaya & Burgess, 2007; Kuuskorpi & Cabellos Gonzalez, 2011; Leiringer & Cardellino, 2011; Martin, 2002; Marx, Fuhrer & Hartig, 1999; McGregor, 2004).

From a study of the scientific works that focus on the structure and organization of the school space, it is noted that the classrooms at all levels of education (pre-school, primary, secondary, tertiary) seem to have remained unchanged, stagnant and mono-functional for many decades, despite the developments in contemporary pedagogical approaches. Consequently, there is a need for the immediate conversion and redesign of the school space to make possible the implementation of appropriate and contemporary teaching methods (Koustourakis, 2018b). In other words, interventions are necessary so that the environment in the school classrooms can become more flexible and approachable in order that quality learning actions can be developed (Abrentzen & Evans, 1989; Douglas & Gifford, 2001; Espey, 2008; Koustourakis, 2018c). From the content of studies that focus on the investigation of the attitudes of teachers and pupils concerning the space where the educational process is carried out, it emerges that they would like to see radical changes in the arrangement and organization of the spaces in their schools in order for them to be more functional. In particular, they would like to see changes in the furniture, the teaching aids in the classrooms, as well as changes in the internal decor. In addition, they would like to participate more in the design, arrangement and operation of their classrooms (Berris & Miller, 2011; Douglas & Gifford, 2001; Germanos, 2009; Ghaziani, 2010; Kuuskorpi & Cabellos Gonzalez, 2011; Leiringer & Cardellino, 2011; Neill & Etheridge, 2008; Koustourakis, 2018b).

The findings of research by Berris and Miller (2011), which was carried out in kindergartens and primary schools in Australia, are characteristic. This research showed that the ideal way to shape school classrooms required two specific characteristics, which are: to be "familiar" to the pupils and the teachers, to be welcoming, to have appropriate lighting and ventilation, to be spacious and offer security to all those who use it. Teachers, pupils and parents emphasize the importance of the existence of the aforementioned features in the school classrooms so as to speed up the better development of the educational work for the pupils' benefit. In addition, the results of this research also revealed the need for the opportunity for greater flexibility, to be linked to the existence of windows for the provision of natural light and the circulation of cleaner air. Moreover, the need appeared for the existence in the classrooms of materials that could catch the pupils' interest, like mirrors and colorfully painted walls. A significant finding from the teachers' point of view was the need for the school classrooms to be spacious, so that they could implement alternative pedagogical practices and educational activities to better meet their pupils' needs. Finally, the teachers stressed the importance of linking the use of the internal with the external (outdoor) school space for the achievement of better learning outcomes (Berris & Miller, 2011).

From the study of the scientific literature, it emerged that the code for the shaping of school space generally and the school classrooms in particular doesn't appear to correspond effectively to the development of educational processes and work that are based on contemporary needs. Consequently, the research findings that depict the views of the teachers and the pupils advocate the need for the "transformation" of the dominant code regarding the shaping of school space and the classrooms (Bernstein, 1989, 1996).

#### 4. The impact of school space on the pedagogical practices implemented by the teachers

School space, as a learning environment, can create the conditions so that the educational process may become more effective and pleasant. The impact of the structured school environment on the performance and conduct of teachers and pupils has been approached in research by scientists from various scientific fields, such as the pedagogical field, as well as sociologists, environmental psychologists and architects (Gislason, 2007; Martin, 2002). The findings from a lot of the research agree on the discovery that school space is an especially significant factor in the implementation of everyday educational activities and the shaping of the relationships that develop within the school environment. This is because a good quality school environment makes a significant contribution to the improvement in the quality of the educational work provided. In addition, it is ascertained that teachers are directly affected by the quality of their working environment, strengthening their ability to provide good quality educational work to their pupils. This in turn creates a positive attitude in the pupils and contributes to their active participation in the educational process and improves their pedagogical interactions with their teachers (Kuuskorpi & Cabellos Gonzales, 2011; Martin, 2002; McGregor, 2004; Perkins & Wieman, 2005; Szteinberg & Finch, 2006).

However, the findings from contemporary studies reveal that school space is chiefly “mono-functional”, in other words it always functions in a way that is linked to the implementation of traditional “visible” pedagogical practices (Bernstein, 1989, 2000; Bernstein, 2000; Koustourakis, 2018b). The formation of pedagogical relationships that correspond to the ‘mono-functional’ nature of the space is also discerned in its one-dimensional character. In other words, it functions in one direction, which is from the teacher towards the pupils and not the other way around, which leads to stereotypical and inflexible pedagogical practices (Byers, Imms & Hartnell-Young, 2014; Gislason, 2007; Martin, 2002; Marx, Fuhrer & Hartig, 1999). The ‘model’ for the organization of the school space influences the shaping of the teachers’ pedagogical practices depending on the “openness” or the “closedness” of the orientation of the educational environment (Leiringer & Cardellino, 2011). Consequently, the organization of the space and its dynamic make an important contribution to the appearance of different types of work in the school classroom and as a result, to the development of alternative forms of pedagogical practices (Alterator & Deed, 2013; Wasnock, 2010).

The research by Szteinberg and Finch (2006), which took place in 2004 with secondary education teachers in five different cities in Poland, is characteristic. From the findings of this research, it was ascertained that most teachers saw the learning environment within which they worked as more focused on a teacher-centered approach, which is linked more to the implementation of a “visible” pedagogical practice (Bernstein, 2000). In this case the teaching actions were a “combination” of learning activities that moved mainly from the teacher and required the pupils to implement them, following his instructions and allowing the pupils themselves limited to no opportunity for autonomy. In addition, the results revealed that the teachers who based their teaching on a teacher-centered model, depended on and used more a traditional arrangement in the classroom, where the pupils’ seats were strictly placed in rows and columns (Szteinberg & Finch, 2006: 504-505). In contrast, teachers who adopted a pupil-centered approach, and moved towards the implementation of an “invisible” pedagogical practice (Bernstein, 1996, 2000), made more use of classrooms with a horse-shoe shape arrangement of desks. However, in both cases it was noted that the teachers didn’t modify the organization and arrangement of their classrooms during the school year, since they didn’t want to “upset” the communicative relationship that they had developed with their pupils (Szteinberg & Finch, 2006: 502-506). Irrespective of the layout of the space and the arrangement of the pupils’ seats that the teachers chose during the implementation of their teaching work (traditional, horse-shoe, circle or other), it appeared that they recognized the impact of other conditions that they could create in

the school classrooms and which could contribute to the acquisition of knowledge. In particular, the teachers recognized the significance of group work and the pupils' active participation in the educational process. So, regardless of the pedagogical practices that they implemented based on the shaping of the space in their classrooms, it appeared that they recognized that a pupil-centered type of approach could be implemented, as long as they themselves had the knowledge and the willingness to modify and re-shape the traditional 'sterile' learning environment within which they worked (Szteinberg & Finch, 2006: 5017-510).

The research studies recognize the importance of the teacher's ability to develop a creative relationship with the space, to use it as a pedagogical tool and to make use of it in the framework of his teaching. In this case, the teacher needs to have the ability to transform, rearrange and decorate the space, creating a learning environment that can encourage the creative movement of the pupils in the space in order to achieve positive learning outcomes. The way in which the teacher organizes the space reveals the framing choices he considers appropriate for the realization of his pedagogical work (Bernstein, 2000; Koustourakis, 2018b), and which are related to behaviors that are either permitted or not, favoring particular learning processes. In particular, from the study of the scientific literature it emerges that school space doesn't need to be approached as something immutable, or an obstacle, but can be approached as a "tool" that can support, enrich and modify the teachers' pedagogical practices (Betoret & Artiga, 2004; Brooks, 2012; Byers, Imms & Hartnell – Young, 2014; Gislason 2009b; Kristin & Torfi, 2011; Marx, Fuhrer & Hartig, 1999; Tanić, Nikolić, Stanković, Kondić, Živković, Mitković & Keković, 2015; Wasnock, 2010).

Betoret & Artiga's research (2004) which was carried out in the school year 2002 – 2003 with secondary education teachers, is representative of the previous observation. Its findings showed that most of the teachers that participated in it largely approved the implementation of an "invisible" pedagogical practice (Bernstein, 2000), linked chiefly to a pupil-centered model of teaching since they held idealistic and altruistic values regarding their pupils' education. However, they pointed out that the real 'world' of teaching, behind the closed door of the school classroom, is very different to the one they had originally imagined. The teachers who implemented the teacher-centered model of teaching, which gives precedence to the implementation of a "visible" pedagogical practice with explicit hierarchical rules, rules of sequencing and rules of criteria (Bernstein, 2000), worked in school classrooms in which there was a traditional front-facing arrangement of desks, which favored the teaching of specific contents of school knowledge (compulsory subjects, or subjects of choice) (Betoret & Artiga, 2004). In addition, as far as the relationship between pedagogical practices and spatial layout within the school classroom is concerned, it appeared that the teachers who worked based on a teacher-centered method preferred a vertical or front-facing arrangement of desks. However, when the teachers implemented a pupil-centered approach they modified the space and used a semi-circular, group or Pi-shaped arrangement of desks. Consequently, the results of this research showed that the different preferences for the layout of desks in the school classrooms is closely connected to the teachers' choices regarding the manner of implementation of their educational work for the transmission of school knowledge (Betoret & Artiga, 2005: 369-372).

##### 5. The impact of school space on the pupils' learning outcomes

Classrooms with a "traditional" arrangement of seating that includes desks placed in rows, focus solely on the teacher and may increase the pupils' ability to concentrate as much on the lesson as on the other activities the teacher sets them to do (Figuerola, Lim & Lee, 2016; Kaya & Burgess, 2007; Perkins & Wieman, 2005). In school classrooms where the desks are placed in rows and columns, lessons tend to be carried out that focus mainly on the teacher, which reveals the implementation of strict hierarchical rules of framing (Bernstein, 1996, 2000), as he is the



main focal point in the room (Budge, 2000; Kalinowski & Taper, 2007; Martin, 2002; Marx, Fuhrer & Hartig, 1999). When learner-centered teaching approaches are chosen, then the lessons take place in school classrooms with a small number of pupils, and desks arranged in ways that permit teaching through group-work. In this case weak hierarchical rules of framing (Bernstein, 1996, 2000) are given precedence. In particular, in group type arrangements, two or four desks are placed together so that small groups of pupils can interact and work together. Groups are a common way of arranging desks where pupils work on a variety of learning projects and the teacher is able to work closely with them both individually and with the whole group (Benedict & Hoag, 2004; Patton, Snell, Knight & Gerken, 2001; Perkins & Wieman, 2005).

A number of scientific studies that investigate the relationship between pupils choosing where to sit in the classroom and their learning outcomes have shown that children who choose to sit at the back of the classroom wish to be out of the teacher's line of sight and do not wish to participate in the learning procedure. In addition, in school classrooms where desks are arranged in rows and columns it was noted that the pupils sitting in the front rows participated more than the pupils who had chosen to sit at the back of the classroom (Gislason, 2009b; Holliman & Anderson, 1986; Tagliacollo, Volpato & Junior, 2010). It should be noted that the correlation between where the pupils sit in the classroom and school performance has hardly been studied at all.

At the beginning of the 20<sup>th</sup> century Griffith (1921) published some of the first important research on this matter and noted that pupils who sit in the back row have a low academic performance. In other words, the connection between where the pupils sit and the implementation of criteria of framing is apparent (Bernstein, 1996, 2000). Later scientific studies showed that the pupils that sat near the board usually performed better at school, were absent less and participated more in class, paying greater attention during the teaching of each cognitive subject (Holliman & Anderson, 1986; Pedersen, 1994; Benedict & Hoag, 2004; Perkins & Wieman, 2005). Perkins & Wieman (2005) observed that pupils who sat at the back of the classroom participated less in the educational process and had a lower final grade. In addition, Kalinowski and Taper (2007) observed that the desks at the back of a classroom didn't appear to have a negative impact on the pupils' performance in the final exams. Most scientific studies reveal that where pupils sit affects their performance. Consequently, these findings lead teachers to the conclusion that if they change where the pupils sit, and move the pupils closer to the board and the front rows of desks then these pupils will perform better.

Research by Tagliacollo, Volpato and Junior (2010) which was carried out in primary schools in the city of Botucatu in Brazil studied whether where pupils sat in the classroom was correlated to their learning performance, as well as the factors that were likely to influence it. The research results revealed that the distance of the desks from the board correlated with the pupils' performance, as well as also being directly related with each pupil's total number of school absences. These relationships however are presented here as a result of a third component, which is the pupils' motivation for learning. The findings of this study showed that the pupils who sat in the front rows of desks received higher marks and were mostly present in class. In addition, it was discovered that pupils who sat in the front rows were more interested in learning and participation in the educational process. Moreover, it appeared that important reasons that influenced the choice of where to sit in class were friendship and social 'isolation' from the other pupils. Finally, significant too was the conclusion that pupils with motivation for more learning preferred to be close to the teacher, while those who were more occupied with the development of social relationships with their classmates remained at a distance from the teacher and were mainly found sitting at the back of the class (Tagliacollo, Volpato & Junior, 2010: 200-201).

## 6. Concluding remarks

Based on all of the above, we reach the following conclusions:

- From the analysis of the research findings, it emerges that the model of the school space in many countries in the western world is still characterized today as “stationary”, favoring the development of visible pedagogical practices (Bernstein, 1996, 2000). In particular, the layout of the school building, the arrangement of a typical school classroom, and the relationship between inside and outdoor school space remain the same today, without any meaningful changes. The identical organization in school classrooms reveals a standardization of the spatial relations in the educational environment, which reinforces the teacher-centered character of the educational process (Ahrentzen & Evans, 1989; Douglas & Gifford, 2001; Espey, 2008). The quality of the educational process, the role of the “teacher/orator” and the “pupil/executor of instructions”, the pupils’ limited or non-existent opportunity to act autonomously and intervene in the educational process, to develop their critical skills and creativity, as well as the way in which the lesson is conducted, which resembles an unwritten ‘educational ritual’, are some of the important features of educational reality. Recent scientific data lead to the conclusion that school space is mainly “mono-functional”, in other words it can function “in only one, and always the same, way”. In addition, it was noted that teachers and pupils are “entrapped”, in conditions for the arrangement of space and implementation of pedagogical practices that are a far cry from the framework determined by the educational and cultural dynamic of the school spatial environment. Consequently, initiatives for intervention and change in the conditions of the educational act appear to be essential, so as to activate a creative relationship between the members of the school community and the material space of the school classroom (Ghaziani, 2010; Gislason, 2009a; Kaya & Burgess, 2007; Koustourakis, 2018b; Kuuskorpi & Cabellos González, 2011; Leiringer & Cardellino, 2011).

- School space needs to adapt to new pedagogical methods, which favor the implementation of “invisible” learner-centered pedagogical practices, in order to facilitate a new means of acquiring school knowledge (Bernstein, 1996, 2000). The front-facing arrangement of the desks needs to give way to a non-linear organization and large desks need to be abandoned and replaced with desks to be used in shapes appropriate for group work. The results of much research have shown that communication between teachers and pupils as well as the instructional – pedagogical practice for the transmission of knowledge remains largely teacher-centered. Regarding the relationship of communication to the form of desk arrangement in the school classroom, study results show that teachers’ learner-centered behavior is expressed more in group and horse-shoe shaped desk arrangements than in the front-facing arrangement. In contrast, the teachers’ teacher-centered practice seems to be associated more with the front-facing arrangement of desks, as opposed to a group-work arrangement (Kuuskorpi & Cabellos González, 2011; McGregor, 2004; Perkins & Wieman, 2005; Szteinberg & Finch, 2006). However, an “ideal” space doesn’t necessarily promote activities and pedagogical practices that originate in a contemporary pedagogy. The teacher has an important and decisive contribution to make to this relationship, and with the right knowledge and education he will contribute to the shaping of alternative and appropriate educational spaces. Recent research data reveal that for changes in teachers’ pedagogical practices to come about, only one ‘change’ in the school space is not enough. An alternative spatial arrangement of the school classroom is pointless if not accompanied by corresponding changes in the pedagogical practices implemented by the teachers. Consequently, the role of the teacher in the pedagogical upgrading of the classroom and the use of space as a pedagogical tool, is decisive (Byers, Imms & Hartnesll-Young, 2014; Gislason, 2007; Koustourakis, 2018b; Marx, Fuhrer & Hartig, 1999).

- An important factor that is directly related to the improvement in pupil achievement is the arrangement of the school classroom, as well as where they sit. A number of

scientific studies have highlighted the fact that the pupils who sit at the front of the class tend to be more active and achieve better results in meeting learning goals (Benedict & Hoag, 2004; Patton, Snell, Knight & Gerken, 2001; Perkins & Wieman, 2005). These pupils appear to have a better interaction with the teachers in comparison with their classmates who sit at the back of the class and are 'hidden' from the teacher. Consequently, it is noted that in a school classroom, where the pupils sit is crucial as it determines their access to learning resources and opportunities for greater interaction with the teachers. The related literature reveals that pupils who sit near the board perform better at school in comparison with those who sit further away from it (Gislason, 2009b; Holliman & Anderson, 1986; Tagliacollo, Volpato & Junior, 2010). In addition, it is noted that the teachers' space of action is chiefly close to the board and their desk, and so it appears that teachers tend to address more questions to the pupils sitting at the front of the class. Moreover, in a number of cases, it is noted that the pupils who sit at the back of the class interact more with each other, talking and creating noise, something that disrupts the smooth conduct of the educational process and reduces their opportunities for learning and for achieving the expected learning outcomes (Benedict & Hoag, 2004; Perkins & Wieman, 2005).

To conclude this paper, we believe that a long-term bibliographical review of the scientific papers concerning the pedagogical redesign of the school space taking into account criteria regarding the organization and the instructional and psycho-social aspects of its operation would be of interest to the scientific community.

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#### References

- Ahrentzen, S., & Evans, G. (1984). Distraction, privacy, and classroom design. *Environment and Behavior*, 16(4), 437-454. <https://doi.org/10.1177/0013916584164002>
- Alterator, S., & Deed, C. (2013). Teacher adaptation to open learning spaces. *Issues in Educational Research*, 23(3), 315-330.
- Asimaki, A., Lagiou, A., Koustourakis, G., & Sakkoulis, D. (2018). Training adequacy and pedagogic practices of teachers in reception facilities for refugee education in Greece during the economic crisis: A case study. *Journal of Studies in Education*, 8(3), 79-97. <https://doi.org/10.5296/jse.v8i3.13396>
- Benedict, M. E., & Hoag, J. (2004). Seating location in large lectures: Are seating preferences or location related to course performance? *Journal of Economic Education*, 35, 215-231. <https://doi.org/10.3200/JECE.35.3.215-231>
- Bernstein, B. (2000). *Pedagogy, symbolic control and identity. Theory, research, critique*, Revised Edition. Lanham, Boulder, New York, Oxford: Rowman and Littlefield Publishers Inc.
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity. Theory, research, critique*. London: Taylor & Francis Ltd.
- Bernstein, B. (1990). *The structuring of pedagogic discourse: Vol. IV Class, codes & control*. London: Routledge.

- Bernstein, B. (1989). *Pedagogical codes and control*. Athens: Alexandria.
- Berris, R., & Miller, E. (2011). How design of the physical environment impacts early learning: educators' and parents' perspectives. *Australasian Journal of Early Childhood*, 36(4), 1-17. <https://eprints.qut.edu.au/46928/2/46928.pdf>.
- Betoret, F., & Artiga, A. (2004). Trainee teachers' conceptions of teaching and learning, classroom layout and exam design. *Educational Studies*, 30(4), 357-372. <https://doi.org/10.1080/0305569042000310309>
- Brooks, C. (2012). Space and consequences: The impact of different formal learning spaces on instructor and student behavior. *Journal of Learning Spaces*, 1(2), 1-10.
- Budge, D. (2000). Secret is in the seating. *Times Educational Supplement*, No. 4396, 26-27.
- Byers, T., Imms, W., & Hartnell-Young, E. (2014). Making the case for space: The effect of learning spaces on teaching and learning. *Curriculum and Teaching*, 29(1), 5-19. <https://doi.org/10.7459/ct/29.1.02>
- Cheryan, S., Ziegler, S., Plaut, V., & Meltzoff, A. (2014). Designing classrooms to maximize student achievement. *Policy Insights from the Behavioral and Brain Sciences*, 1(1), 4-12. <https://doi.org/10.1177/2372732214548677>
- Christie, F. (2002). *Classroom discourse analysis. A functional perspective*. London: Continuum.
- Douglas, D., & Gifford, R. (2001). Evaluation of the physical classroom by students and professors: a lens model approach. *Educational Research*, 43(3), 295-309. <https://doi.org/10.1080/00131880110081053>
- Espey, M. (2008). Does space matter? Classroom design and team-based learning. *Review of Agricultural Economics*, 30(4), 764-775. <https://doi.org/10.1111/j.1467-9353.2008.00445.x>
- Figueroa, L., Lim, S., & Lee, J. (2016). Investigating the relationship between school facilities and academic achievements through geographically weighted regression. *Annals of GIS*, 22(4), 273-285. <https://doi.org/10.1080/19475683.2016.1231717>
- Germanos, D. (2009). Le réaménagement éducatif de l'espace scolaire, moyen de transition de la classe traditionnelle vers une classe coopérative et multiculturelle. *Synergies Sud-Est Européen*, 2, 85-101. [http://gerflint.fr/Base/SE\\_europeen2/germanos.pdf](http://gerflint.fr/Base/SE_europeen2/germanos.pdf).
- Ghaziani, R. (2010). School design: Researching children's views. *Childhoods Today*, 4(1), 1-30.
- Gislason, N. (2007). Placing education: The school as architectural space. *Paideusis*, 16(3), 5-14. <https://journals.sfu.ca/pie/index.php/pie/article/view/87/82>.
- Gislason, N. (2009a). Mapping school design: A qualitative study of the relations among facilities design, curriculum delivery, and school climate. *The Journal of Environmental Education*, 40(4), 17-34. <https://doi.org/10.3200/joee.40.4.17-34>
- Gislason, N. (2009b). Building paradigms: Major transformations in school architecture (1798-2009). *The Alberta Journal of Educational Research*, 55(2), 230-248.
- Griffith, C.R. (1921). A comment upon the psychology of audience. *Psychological Monographs*, 30(3), 36-47. <https://psycnet.apa.org/doi/10.1037/h0093148>.
- Hoadley, U. (2007). The reproduction of social class inequalities through mathematics pedagogies in South African primary schools. *Journal of Curriculum Studies*, 39(6), 679-706. <https://doi.org/10.1080/00220270701261169>
- Holliman, W., & Anderson, H. (1986). Proximity and student density as ecological variables in a college classroom. *Teaching of Psychology*, 13(4), 200-203. [https://doi.org/10.1207/s15328023top1304\\_7](https://doi.org/10.1207/s15328023top1304_7)
- Kalinowski, S., & Taper, M. L. (2007). The effect of seat location on exam grades and student perceptions in an introductory biology class. *Journal of College Science Teaching*, 36, 54-57.

- Kaya, N., & Burgess, B. (2007). Territoriality. *Environment and Behavior*, 39(6), 859-876. <https://doi.org/10.1177/0013916506298798>
- Koustourakis, G. (2018a). Analysing the curriculum for students with mild and moderate learning difficulties concerning the teaching of pre-vocational skills. *British Journal of Sociology of Education*, 39(8), 1210-1225. <https://doi.org/10.1080/01425692.2018.1497948>
- Koustourakis, G. (2018b). Classroom space and kindergarten curriculum: a sociological approach to teachers' discourse on the status of space and its use in teaching. *European Journal of Alternative Education Studies*, 3(2), 47-65. <https://doi.org/10.5281/zenodo.1422864>
- Koustourakis, G. (2018c). A sociological approach to the determination and implementation of rules for the pedagogical use of kindergarten classroom space. *American International Journal of Social Science*, 7(4), 20-28. [https://www.ajjssnet.com/journals/Vol\\_7\\_No\\_4\\_December\\_2018/3.pdf](https://www.ajjssnet.com/journals/Vol_7_No_4_December_2018/3.pdf).
- Kristín, A., & Torfi, H. (2011). School buildings for the 21<sup>st</sup> Century – Some features of new school buildings in Iceland. *Center for Educational Policy Studies Journal*, 1(2), 25-43. <https://files.eric.ed.gov/fulltext/EJ1130811.pdf>.
- Kuuskorpi, M., & Cabellos González, N. (2011). The future of the physical learning environment. *CELE Exchange, Centre for Effective Learning Environments*, 2011/11, OECD Publishing, Paris. <https://doi.org/10.1787/5kgolkz2d9f2-en>
- Leiringer, R., & Cardellino, P. (2011). Schools for the twenty-first century: School design and educational transformation. *British Educational Research Journal*, 37(6), 915-934. <https://doi.org/10.1080/01411926.2010.508512>
- Lim, F., O'Halloran, K., & Podlasov, A. (2012). Spatial pedagogy: mapping meanings in the use of classroom space. *Cambridge Journal of Education*, 42(2), 235-251. <http://doi.org/10.1080/0305764X.2012.676629>
- Martin, S. (2002). The classroom environment and its effects on the practice of teachers. *Journal of Environmental Psychology*, 22(1-2), 139-156. <https://doi.org/10.1006/jevp.2001.0239>
- Marx, A., Fuhrer, U., & Hartig, T. (1999). Effects of classroom seating arrangements on children's question-asking. *Learning Environments Research*, 2(3), 249-263. <https://doi.org/10.1023/a:1009901922191>
- McGregor, J. (2004). Space, power and the classroom. *FORUM*, 46(1), 13-18.
- Mills, C. (2003). Contesting the political: Butler and Foucault on power and resistance. *Journal of Political Philosophy*, 11(3), 253-272. <https://doi.org/10.1111/1467-9760.00177>
- Neill, S., & Etheridge, R. (2008). Flexible learning spaces: The integration of pedagogy, physical design, and instructional technology. *Marketing Education Review*, 18(1), 47-53. <https://doi.org/10.1080/10528008.2008.11489024>
- Patton, J. E., Snell, J., Knight, W. J., & Gerken, K. (2001). *A survey study of elementary classroom seating designs*. Annual Meeting of the National Association of School Psychologists, Washington, DC.
- Pedersen, D. (1994). Privacy preferences and classroom seat location. *Social Behavior and Personality: An International Journal*, 22(4), 393-398. <https://doi.org/10.2224/sbp.1994.22.4.393>
- Perkins, K., & Wieman, C. (2005). The surprising impact of seat location on student performance. *The Physics Teacher*, 43(1), 30-33. <https://doi.org/10.1119/1.1845987>
- Sztejnberg, A., & Finch, E. (2006). Adaptive use patterns of secondary school classroom environments. *Facilities*, 24(13/14), 490-509. <https://doi.org/10.1108/02632770610705275>
- Tagliacollo, V., Volpato, G., & Junior, A. (2010). Association of student position in classroom and school performance. *Educational Research*, 1(6), 198-201.

- Tanić, M., Nikolić, V., Stanković, D., Kondić, S., Živković, M., Mitković, P., & Keković, A. (2015). Interconnection between physical environment and pedagogical process in elementary schools in Niš, Serbia. *Current Science*, 108(7), 1228-1234.
- Urwick, J., & Junaidu, S. (1991). The effects of school physical facilities on the processes of education: A qualitative study of Nigerian primary schools. *International Journal of Educational Development*, 11(1), 19-29. [https://doi.org/10.1016/0738-0593\(91\)90006-t](https://doi.org/10.1016/0738-0593(91)90006-t)
- Wasnock, D. (2010). *Classroom environment: Emphasis on seating arrangement* (Master Thesis). St. John Fisher College. [https://fisherpub.sjfc.edu/mathcs\\_etd\\_masters/17](https://fisherpub.sjfc.edu/mathcs_etd_masters/17).



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