

## IMPACT OF STUDENTS' SELF-ADVOCACY ON THEIR PERCEPTION IN DESIGN-STUDIO

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### ABSTRACT

In the 21st century, one of the challenging point in education, more deeply, in design education is engaging students to their classrooms. Both of student's self-advocacy level and student's relatedness to their design studios are the key points to students' success. In spite of many studies that dealing with each of self-advocacy issues and student's relatedness separately, there could not find any study so far to show the relationship between students' self-advocacy and their relatedness in design studios. This study tries to find out the impact of students' self-advocacy level on their relatedness in design studios. This research has mixed method with an analytical methodology approach. The results show that the student, who has high level of self-advocacy, has success relatedness in the design studio, and regularly could get a good performance. As a suggestion of this study, despite the last and least impacts of instructor on students' self-advocacy, the instructors could grow up a self-advocate student by teaching them self-awareness through their discussion in design studios on the matter of the course. By this, students' engagement to their design studios may be able to be stronger.

**Keywords:** Students' Relatedness; Interior Architecture Students; Education; Design Studio; Self-Advocacy.

### 1. INTRODUCTION

Interior architecture education in similar with other design educations in terms of using design studios as a set of their center lectures, which are 'ill-defined' problem, analyzing, proposing concept, and solving this problem. Therefore, it could be said that the teaching/learning method of design studios have difference with non-design courses, here, students' perception may be different in other traditional classrooms.

In design studios, student's relatedness with each of the content, other students, instructors are a focal point (Doll et al, 2010). They state that "Students who are behaviorally and cognitively engaged have significantly higher grades, academic test scores, and performance on standards assessments" (p. 204).

However, another important necessity in design studios is the students' self-advocacy which allowed students to speak up and communicate through daily critique or jury times either on their different point of view with instructors related to course contents or to explain their project concepts. Each of the student's family, peer, and instructors are the factors which impact on students' self-advocacy.

The purpose of this study is to find out the impacts of self-advocacy level on students' perception in their design studios.

While each of instructor and peers are the intersectional point between students' correlation to the design studios and their self-advocacy level.

Nonetheless, students' engagement to their classrooms is the crucial point, whereas, design studios are a part of classrooms for design educations such as interior architecture education. There are many researches on students' perceptions in their learning spaces, in one hand. On the other hand, there are some researches on university students' self-Advocacy. In addition, may be able to find a little research on design studios and student's perception in design studios.

However, there is no study has found on the relationship between students' perception and their self-advocacy, when both of them are the students' promote for success.

## **HYPOTHESIS**

Students, who have high level of self-advocacy, they will have high level of relatedness in Design-Studio.

## **LIMITATION**

This study has done to find out the correlation of students' self-advocacy and their perception in design studios. The first year/first semester of design studio became the goal of this study, as a consequence of their perspective changed point from traditional classrooms in their previous study to design studios. There are many factors that impact on students' perception, thus this study focused on social and psychological side.

On the other hand, there are many factors that influence students' self-advocacy, but this research has emphasized the social factors.

## **INTERIOR ARCHITECTURE IN CONTEXT: DESIGN-STUDIO**

Design studios are those environments that could differentiate architecture and interior architecture education from other design disciplines. Sipahioğlu (2012) discussed that architecture and interior architecture education have difference from other disciplines in using design studios. Here, the situation of learning through their projects based on "reflective learning environment" (p. 420).

Architecture and interior architecture education have specific environment, which simplifies lecturing, representing, and practicing due to learning/teaching activities, where student-lecture, student-student, and student-instructor interaction take place (Obeidat & al-Share, 2012).

During 1980's, by several educational theorists, design studios has been dominated as a symbolic of practice of learning. Whereas, both of students and their design problems have combined in the center of learning process, from this, the design studio occupations converted as a complex social-cultural environment (Jahromi, 2015).

Donald Schön (1983 &1984) in his studies on education, points out that the design studio learning as "an education for reflection in action" and as "model broadly applicable to other professional education" (Schön, 1983, 1984).

Based on Schön (1983, 1984) 'learning by doing', through a specific project given to students on a specific site. They interact to the topic of that problem which has given to them, and interact to their instructors to face-to-face or through social medias to get the answers which it means critiques, and students may ask each other that means student-student interaction will be happened.

However, design studios are the main attentive issues for interior architecture education as well. Demirbas & Demirkan also point out that the design-studio classroom could basically be:

- (a) A learning environment that facilitates interior design teaching/learning processes during regular class hours;
- (b) A learning environment that enables interior design students to work on their own project in their spare of time; and
- (c) A learning environment that could serve both concepts at the same time; students could work on their own projects while others are enjoying a class. (Cited in Obeidat & Al-Share, 2012, p. 166)

From this point of view, the factors that impact on students' perception in design studios should be discussed.

## **Factors of students' perception in Design-Studio**

From the discussion in the previous part of this article, since design studios are the center of interior architecture education, students' perception will be different in terms of their relatedness to their design studio.

## **Relatedness**

Individuals are socially interrelated; they regularly attempt to find the purposes to support their social interaction. Students also need to interact socially and academically in their classroom. Consequently, creating a supportive learning environment for practicing their interaction in successful way is vital (Obeidat & al-Share, 2012).

On the other hand, in this technology era, the information could be in hand very easily, so students need to be attracted by their educational environment by having a strong relate with the content of class, their peers, and their instructors.

To take place these interactions, the emergence of an active classroom has to be kept in mind. According to Boud & Fletti (1997), successful classroom merely could be achieved through bringing a problem and solving it, which is the basic goal of design-studio as they said:

using stimulus material to help students discuss an important problem; presenting the problem as a simulation of professional practice or a 'real-life' situation; appropriately guiding students' critical thinking and providing limited resources to help them learn from defining and attempting to resolve the given problem; having students work co-operatively as a group, exploring information in and out of class, with access to a tutor; getting students to identify their own learning needs and appropriate use of available resources; reapplying this new knowledge to the original problem and evaluating their learning processes (cited in Dochy et al, n.d, pp. 234)

As Afacan (2014) states the nature of design studios are "to be the core of the curriculum in interior architecture/design education, where designing is a matter of analyzing, synthesizing, evaluating and presenting ideas for a solution to a design issue" (p. 84).

During these activities in design studios, the student's relatedness is a focal point to students' success in their projects. The below figure explains the factors affecting relatedness of students to the content, student-student and student-instructor.

#### **A. Student-content relatedness**

One of the important points which engages students to any course, including design studios, is the content. As Roberson (2013) states "...content is one of the most important aspects of teaching and learning" Aktas (2013) mentioned that the learner's relatedness to their course-content would be happened positively as "metacognition, motivation and behavior". He believes that "active participants in their own learning process and they self-generate thoughts, feelings, and actions to attain their learning goals". In consequence, they may benefit from recognizing their own action towards the content and to point out their interesting to the course component. Aktas (2013) continues and argues that "In this way they can see themselves as owners of their behavior" (p.130).

Margulis, who is a professor of Psychology Middlesex Community College, Eastern Florida University, argues that "Course structures and processes which facilitate the students' ability to relate more effectively to each other, their teacher, as well as the course content appear to increase motivation levels".

#### **B. Student-Student Relatedness**

Student-student relatedness refers to the student's engagements to her/his classmates, even if they are not close friends, which these connections include both positive and negative interactions. Friendship could be defined as whenever student-and-student is desired to spend time with each other. As Doll et al (2010) describe friendship and state that it "provide students with companionship, assistance, comfort, and make school more fun". Also they believe that "Students who have friends at school are more interested in academic activities and are more active participants in the classroom" (p. 205). Which is meaningfully emphasized that the there is a strong relation between friendship and academic achievement.

#### **C. Student-Instructor Relatedness**

Student-instructor relationship contains *the caring, trust, respect, and fairness*, which is occur between students and instructors. This relationship is parallel to the attachment bonds that exist between parents and their children in remarkable points of view (Kesner, 2000). But it is dissimilar to parent-children relationship, in student-instructor relationship, the students have more responsibilities regarding to duties and assignments than their instructors. Whereas, the relationship is still quite strong in terms of the latter connection is affected by both students and teachers (Greene, Abidin, & Kmetz, 1997). Each of students' behavioral outcomes, academic progress, and social success have been affected by the capability of student-instructor relationships (Pianta & Stuhlman, 2004; Murray & Malmgren, 2005). As Doll et al (2010) mention "In a practical sense, when students feel valued and respected by their teachers, they are more committed to learning and are able to cope better with adverse events in their lives" (p.205).

### **Students' Self-Advocacy and Impact Factors**

Self-advocacy is the one's ability to speak up and communicate with others. From structured and guided educational process of high school. Students' alteration starts to a self-directed track, since the importance of self-advocacy increases in students' university life. While many of university students may have not interrelated in the most of essential practices of self-advocacy (Daly-Cano et al, 2015).

Daly-Cano et al (2015) define self-advocacy as "the ability to communicate one's needs and wants and to make decisions about the supports needed to achieve them" (p.215). Also Test et al (2005) point out the Key constituents of self-advocacy, which are:

- a. Ability to know self, rights, to communicate, to be leader.
- b. Having awareness of self that denote to sympathetic one's aims, strengths and weaknesses, culture and favorites
- c. On the other hand, awareness of public rights brings up to be considerate on individual rights, educational rights, and steps to advocate for variation (Test et al., 2005).

However, there are many factors participating in developing a self-advocate person, such as, family factor, peers factor, and educator's factor.

#### **A. Family Factor**

Researchers have initiated that family support is allied with the development of self-advocacy, while learning to advocate can start from childhood. Family can encourage students to be successful. Murray and Naranjo (2008) found that family has significant role in this process. It has observed that students with family responsibilities are more determinant and show more performance. Also researchers found that college students, who had higher scores on self-reported measures of self-advocacy and family support, are categorized themselves as highly adjusted too.

Mitchell (2010) argues that the first step of self-advocacy influences starts with family impacts which individuals should start to opine at home with daily alternatives to higher decision; and "this will inevitably affect roles, relationships and perceptions" (p.43).

#### **B. Peers Factor**

There are a few studies that address the impact of peers on the development of self-advocacy and self-determination. Dowrick et al (2005) found that university students will learn self-advocacy skills from discussions with and observations of university-aged peers during class time. They also indicated that peers can have a reciprocal relationship through providing information about services, supports, and advocacy (Dowrick et al., 2005).

#### **C. Educators Factors**

The transition planning process from instructors to students is an important part of the education process. It is a natural time for students to engage in self-advocacy behaviors. Trainor (2005) states that the students are willing to seek support from teachers and are determined. Inappropriately, university students do not always have this opportunity and they are not prepared to self-advocate, as well as many students did not practice self-advocacy in class (Trainor, 2005).

From documenting the above literature, this article hypothesized that the students' who are well self-advocate, whose have strong relatedness with design studio and its components. In below, by taking a case study from 1<sup>st</sup> year/1<sup>st</sup> semester, Faculty of Architecture, Eastern Mediterranean University, North of Cyprus; this article tries to test the hypothesis.

### **METHOD**

This qualitative-quantitative article has an analytical approach; different methods of data collection have been used, such as:

- Documents review from the literature, which data had been collected from, books, journals, and internet sites.
- A structured questionnaire has been done with mixed design studio of both Architecture and Interior Architecture Department, in Faculty of Architecture, Eastern Mediterranean University in Famagusta/North of Cyprus.
- Since the researcher of this study is an assistant in that design studio, during Spring Semester 2016/2017 the observation on the students had been done at that time.
- During the same time, from time to time informal interviews with the samples that taken for this survey had been done.

- After evaluation of the literature, the results of the questionnaire have put in charts, on the other hand, the results of observation and interview have put in a table.

**RESULTS**

Faculty of Architecture in Eastern Mediterranean University, Famagusta, North of Cyprus, consists of two departments, which are Department of Architecture and Department of Interior Architecture. In the first year of study in under graduation, both of departments use the same design studios, i.e. the students of both departments work on the same problem to solve.

In this descriptive research which has analytical approaches. Because the researcher of this study was an assistant in one of design studios for basic design studio-FARC101, 1<sup>st</sup> year/1<sup>st</sup> semester, in Faculty of Architecture, both of Department of Architecture and Interior Architecture, EMU, North of Cyprus, spring 2016-2017; through the semester, she did observation on students’ relatedness and their self-advocacy.

In this course, there were 107 students that were divided on 4 design studios. One of these studios has been taken as a study field for this paper, which contained of 29 students, but 28 students has involved in the process. Also a structured questionnaire was done with them. The questions of this questionnaire related to the four major parts which are student-content relatedness, student-student relatedness, student-instructor relatedness, and self-advocacy levels. 22 close-ended questions had asked.

**A. Questionnaire Results**

**Results of Student-Content Relatedness**

In this part, three questions have asked to evaluate the students’ engagement with the course content. According to their answers, 64.28% of students believed that the assignments of this course helped them to understand more about interior/architecture. In contrast, 17.85 percent of them refused it. While 17.86 percent of the participants showed neither agree nor disagree.

In addition, 57.14 percent of the students stated that they have lecture note that helped them to learn. Since 21.43 percent of them believed that their lecture notes did not help them. Whereas 21.43 percent of them have not decided that their lecture notes helpful or not.

In the last question of this part, 64.28% of contributors believed that they can easily ask for explanations on areas of a lecture that not understandable. In contrary, 3.57 percent of them disagreed. Also 25.00 percent of them were neutral about this issue.

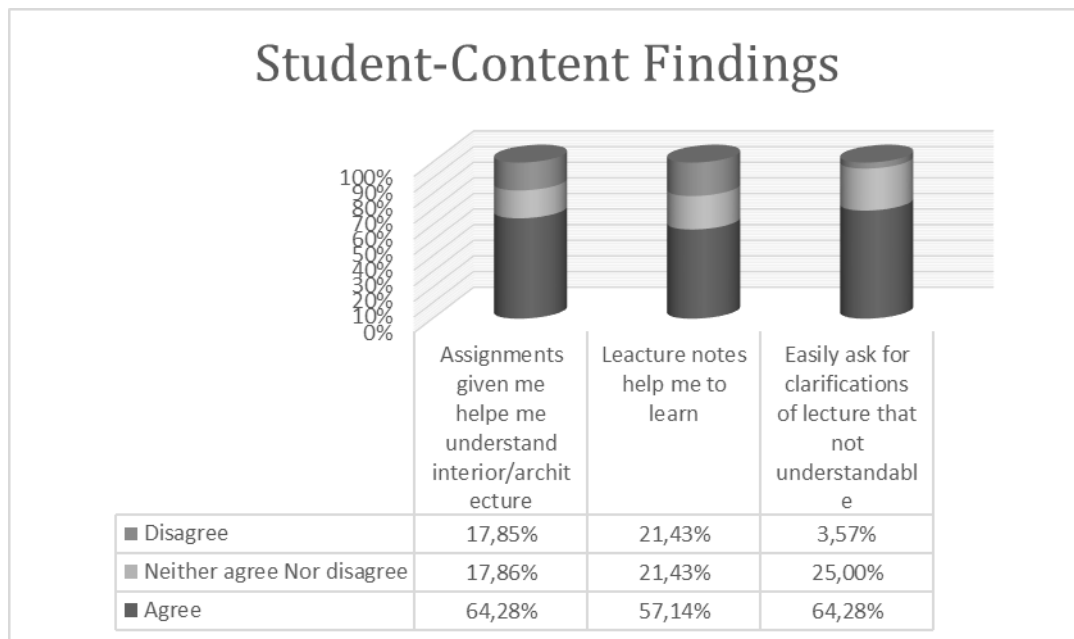


Fig.2: showing the relatedness of student-content in design studio

**Results of Students’ Relation with their Peers**

To know the relationship between students, five questions have been asked. Firstly, it was asked, “being in class with other students helps me learn better”, 67.86 percent of contributors agreed, 21.43 percent of them neither agreed nor disagreed, and 7.14 percent of students disagreed.

Secondly, it was asked that whether they help other students in their study or not, 67.86 percent of participants answered yes, 25.00 percent of them still not sure, and 7.14 percent of the students disagreed.

Thirdly, 75.00 percent of the participants stated that “I discuss lectures with other students”, in the same time, 21.43 percent of them did not discuss the lecture matters with her/his classmates, and 3.57 percent of them were neutral.

Fourthly, 67.57 percent of the students believed that they learn a lot from their classmate, while 10.71 percent of them did not think so, and only 3.57 percent of them neither agree nor disagree.

At last question of this part, it was asked “I learn from other students’ mistakes” in replying to it, 78.57 percent of them agreed, but only 3.57 percent of them disagreed, also 17.86 percent of the students were neither agree nor disagree.

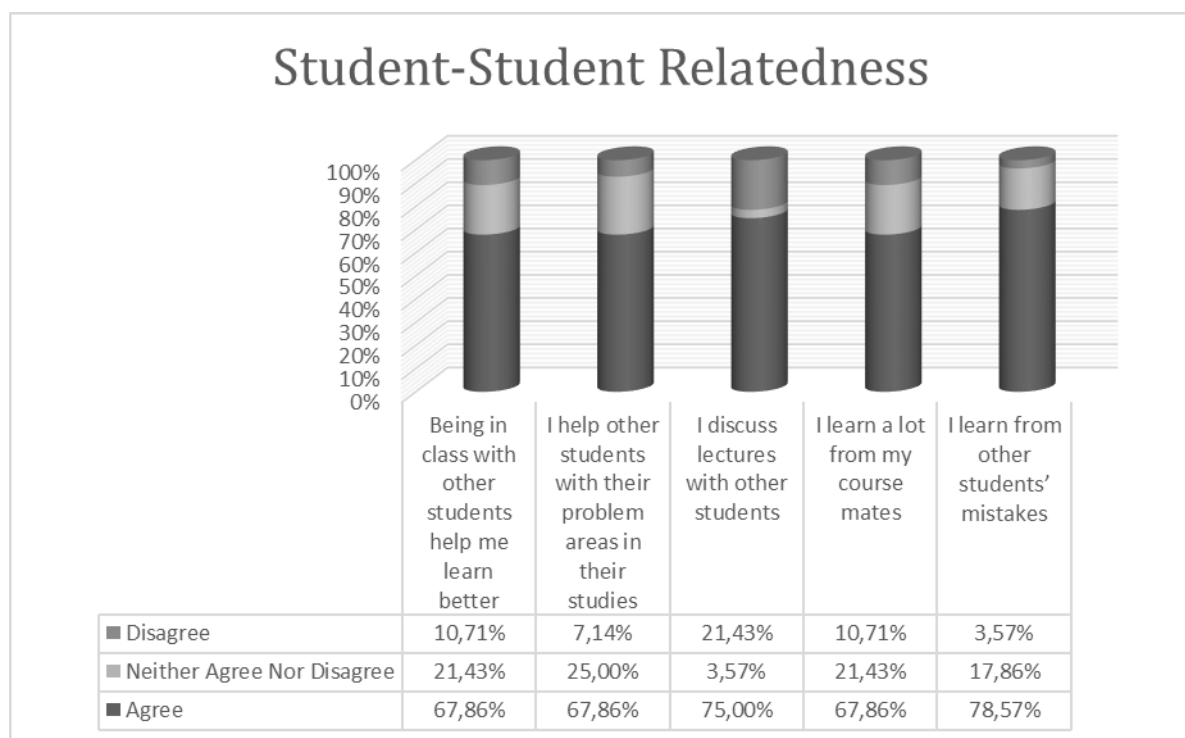


Fig.3: showing the relatedness of student-student in design studio

**Results of Students’ Relation with their Instructors**

As a consequence of the importance of instructors’ influences on students in both their perceptions of the class and their self-advocacy, this study had asked 7 questions to understand the students’ relationship with their instructors.

First of all, and according to contributors’ answers, 85.71 percent of the students supposed that their relationship with their instructors is very friendly. Since 10.71 percent of them believed that they do not have strong relationship with their instructor, and only 3.57 percent neither agreed nor disagreed.

71.43 percent of the participants approved that their teachers encourage them, while, 14.29 percent disagreed, and 14.29 percent of them indifferent.

In one question it was asked that if the students got good advice from their instructors or not, 64.26 percent of them affirmed it, 28.57 percent neutral for it, since 28.57 percent of the students refused it.



Moreover, 42.86 percent of the contributors showed that the instructors are sometimes unfair, in the same time, 28.57 percent of them did not care, and 28.57 percent of them were disagree.

Furthermore, the students were faced to a question that “My teachers assist me when I ask for their assistance”, 35.71 percent of them agreed, 35.71 percent in different, and 28.57 percent of them disagreed.

However, 42.86 percent of the respondents approved that they are free to express their disagreement with their instructors’ point of view. Whereas, 35.71 percent of them were uncaring, and 17.86 percent were disagreeing.

Lastly, 39.29 percent of the students that participate affirmed that the grading system used by instructors is fair, 25.00 percent of them did not believed in it, and 35.71 percent of the contributors neither agree nor disagree.

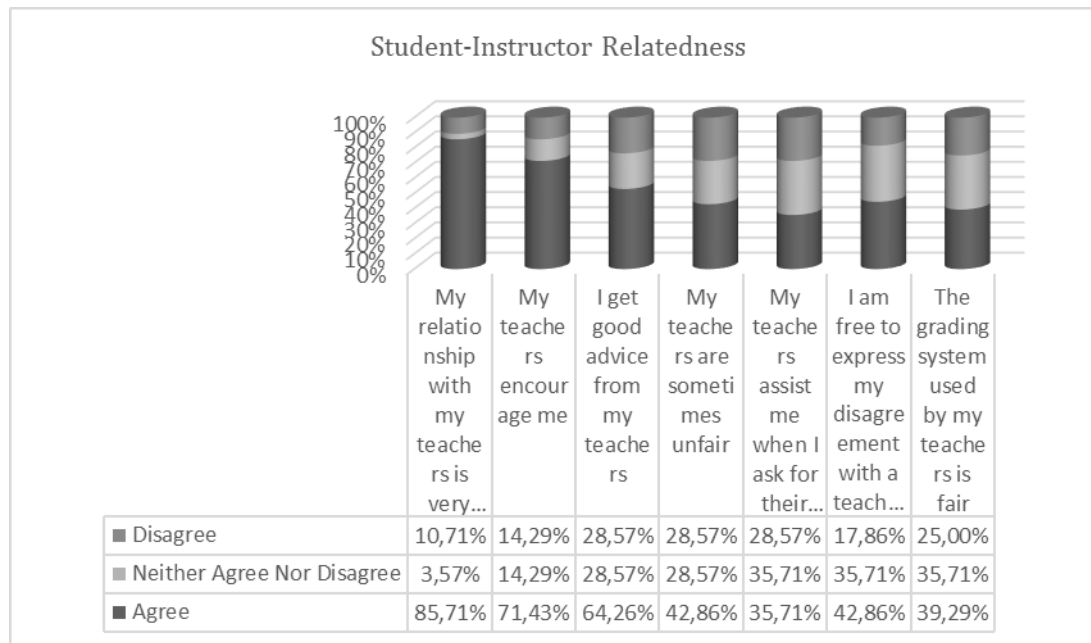


Fig.4: showing the relatedness of Student-Instructor in design

### Results of Student’s Self-advocacy level

To evaluate the participants’ self-advocacy level, 7 questions were asked. In below, one by one has illustrated.

Firstly, it was asked if they can describe their strengths and weaknesses, or not. According to the participants, 57.14 percent of them believed that they can, 39.29 percent of them indifferent, and only 3.57 percent of them cannot.

Secondly, 75.00 percent of the contributors approved the question that stated “I know my interests”, for 17.86 percent of them were uncaring, and only 7.14 percent of them did not believe in it.

Thirdly, they were asked if they can ask for help from their teachers without upset or not, 71.43 percent of them said yes I agree, 21.43 percent of them did not decide yet, and 7.14 percent of them it seems to can’t say it.

Fourthly, 75.00 percent of students supposed that they can say what they want to do when they graduate, while, 17.86 percent of them they can’t say, and 7.14 percent indifferent.

Fifthly, 67.86 percent of them affirmed that they know how to set goals for themselves. 10.71 percent of them did not know, and 21.43 percent of the students were not care.

In addition, 67.86 percent believed that they know how to get information to make decisions, 10.71 percent did not know, and 21.43 percent neither know nor doesn’t know.

Finally, 75.00 percent supposed that they can solve problems that come up in their life, only 3.57 percent of them did not think so, and 21.43 percent of them in between.

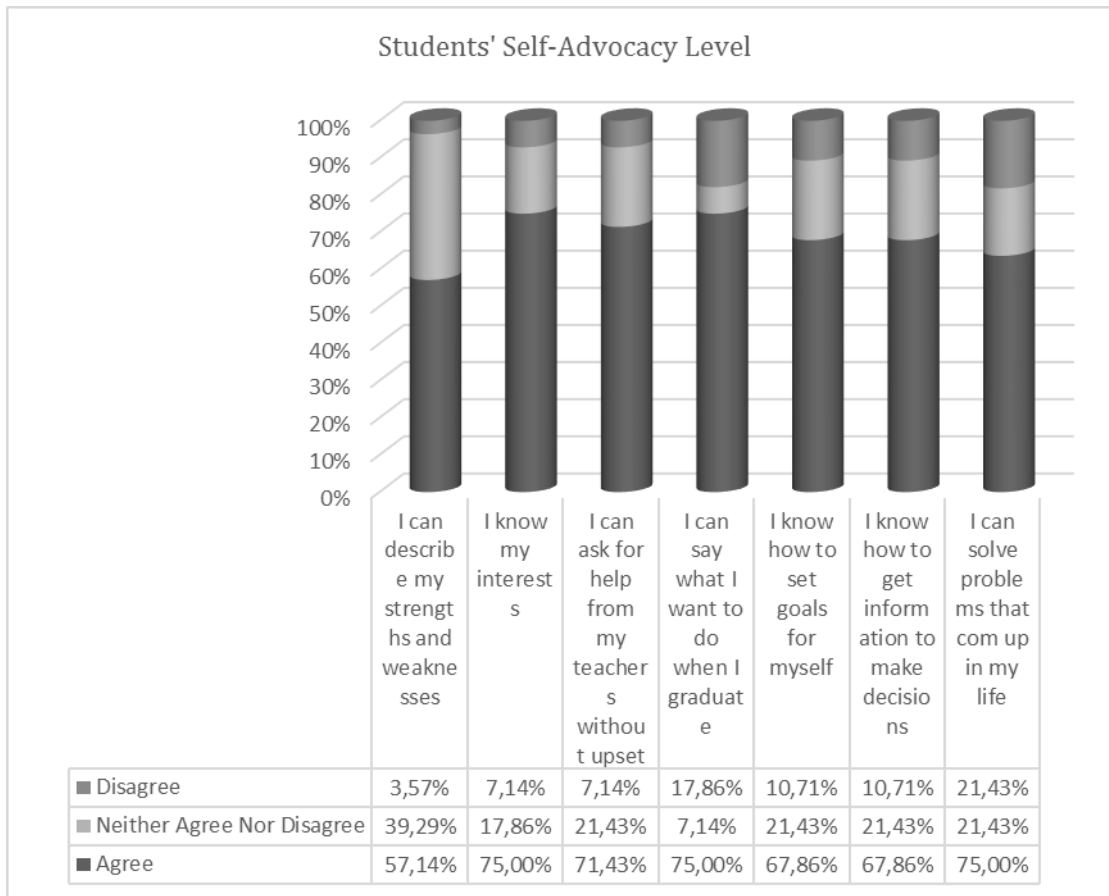


Fig.9: showing the students' self-advocacy level in design

### B. Observation Results

Despite doing questionnaire with students, during the semester observation had been done in both daily critiques and jury times. Five students of the same design studio environment have taken as samples. These samples have been observed through the semester. Also in informal ways the interviews were done with all of them. The result of the observation has presented in the table below.

Table1: presenting observation results for 1<sup>st</sup> year/1<sup>st</sup> semester during spring 2016-2017.

#	Samples of Students	Description	Results of Students' Statements
1	Student A	Male, he is from Nigeria; he is with high level of self-advocacy.	He has good relatedness with course content, he had imagination for solving the course design problem, and he got high grade for the course through all instructors' assessment. He had good relationship with all other students most of time he was listening to other students' critique to more understands. Finally he had good relationship with instructors and assistant, he always asked for more illustration, he stated his opinion in a way that he could take other's attention.



2	Student B	Female, she is from Iran; she is in a low level of self-advocacy.	Her voice never had been listening in front of others. She always tries to be far of the class she did not want to take critique, and she did not make friendship with her classmate and did not let herself to be open to anyone.
3	Student C	Male, he is from Turkey, because of his low level of self-advocacy he came to Department of Interior Architecture, EMU. In addition, he wants to enter history department, since his parents forced him to enter this department.	In the studio, he has two friends, he was not participating in the discussions were happened, he did not understand the interior architecture essentials for the mentioned semester. He was always sitting at the end of the studio with his friends. He did not want to take critiques, because he did not like to have any communication with instructors, as he, himself, explained to course assistant.
	Student D	Male, he is from Turkey. Because of his father's forces and his low self-advocacy level, he entered Department of Interior Architecture. He wants to be fashion style, while his father gave him two choices; he can enter to Interior department, or he has to marry and go to military. He chose first suggestion. In the same time, he was for four year in the same education level.	He has limited friends; he did not want to concentrate on the course contents. He has restricted relationship with instructors. He stated that for first time he could talk to any assistant.
	Student E	Female, she is from Syria. Because of her parents' forces for sending her with his brother and she could not find her interested department in EMU she entered Architecture Department.	She had limited friends; she did not communicate with others who were not her close friends. When instructors asked her to take critiques she was escaping from them, she did not have respond to her assignments during the semester, as she mentioned; she came for spending time till she can find her interested department.

However, from the observation results, it is obvious that there is a significant and strong interrelation between students' self-advocacy and their relationship in their design studio. Especially, there is a strong correlation between family factor for student's self-advocacy level and student's relatedness with content.

### **Impact of Student's Self-Advocacy Level on Their Relatedness**

The results of this study have specified to find out the relationship of students' self-advocacy and their relatedness in their design studios. For university students, especially, for those design educations that have design studios and juries, self-advocacy is a significant point to engage any student in the design studios successfully. The factors that affect students' self-advocacy, such as family, peers, instructors, have crucial role in succeeding a student, while, instructors may have an important act in the student's first perception in design studio.

### **Students' Relatedness in Design-Studio**

It could be realize that all of the students do not have the same level of relatedness. The lowest relationship was student-instructor, which unconsciously this relationship has effects on student-content relatedness. Through the observation, the students that have a strong relation with content, peers, and instructor, has finished the semester successfully. In addition, the student that has poor engage to the content, peers, instructors, has not understand the essentials of the course and could not pass.

Student-instructor relatedness has direct impacts on students' interrelation to design studio, while peers has indirect effect on a student and the same student has effect on other student, therefore, student-student is a two-way influence.

However, student-content correlation has effect on student-instructor relationship, this comes after others, i.e. if the student has good relatedness with instructor after that his friends, s/he will have good relatedness with content of the course.

### Students' Self-Advocacy in Design-Studio

To hear students' voice, to could present her/his project, and to point out strengthens and weakness of her/his project, every students should be a strong self-advocate so as to be speak up and communicate during her/his critique and juries time.

Although the students did not pretend the actual level of their self-advocacy through the questionnaire, some of them obey to be strongly disagreeing to some of questions. Some of the students wrote messages on it and they believed that they do not have power and they don't have trust in themselves.

Family factor of self-advocacy is the strongest factor that impact on students' engagement to the content of design studio. Through observing informal interview and communication has been done with five students, who was strong self-advocate, has not any forces from family and he came on his likeness to Architecture. In contrary, the other sample students have direct force from family that obeyed the student to enter Architecture and Interior Architecture Department. During the communication one of the students said to show reaction against his parents' force, he did not attend in any activities, seminars, or symposiums. So it could be assumed that to educate a successful generation, a strong self-advocate person is needed.

### Self-Advocacy and Its Factors' impacts on Students' Relatedness in Design studio

From the questionnaire could not found the strong connection between students' self-advocacy and their relatedness. Whereas, who did strongly disagree the point out their strengths and weakness, their speaking up to attract other student, to trust themselves to solve their problems, who were have weak relations to their instructors and the content of the design studio.

However, it was obvious that the family impact on student's self-advocacy level, their self-advocacy level has direct impact on student's relatedness with course component and instructors. Instructor has last and least impact on student's self-advocacy, on one hand, the student-instructor relatedness has impact on student-content relatedness, on the other hand.

Peers correlation has indirect effect on both self-advocacy and relatedness in design studio, in the same time, it is two-direction relation, which means that the affect each other.

Depending on the above discussion, it is clear that the student, who has high level of self-advocacy, has high level of relatedness in Design-Studio.

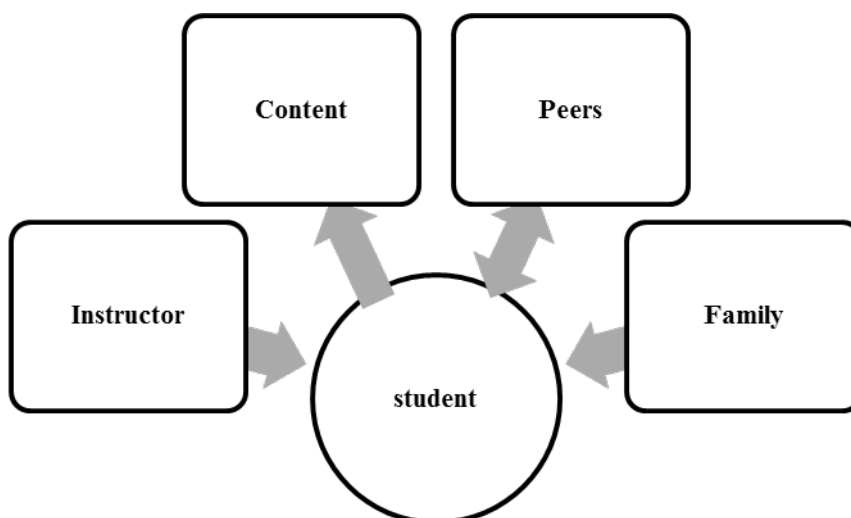


Fig.11: showing the correlation between student's self-advocacy and relatedness in design studio.

## CONCLUSION

Students' interrelations to their design studios have a significant role in students' success. There are many factors that impact on student's perception in their design studios, such as, the physical environment, social factors, and psychological factors. This study mainly focuses on the influences of social psychological factors, which is students' relatedness. Students' correlations are the level of understanding of the course's content, her/his classmate relationship, and her/his instructors' connection.

On the other hand, another point of view of students' success in their design studio is their self-advocacy level. Who is self-advocate could speak up and communicate with their instructors and their classmates during the daily critique and jury times. There are many factors that affect students' self-advocacy level. In this study, family, peers, and instructor factors has been considered.

In both students' relatedness and self-advocacy level the factors of peers and instructors are mutual, which could be stated that these two factors have impacts on students' success, in the same time; self-advocacy has nonreciprocal impact on students' relatedness.

This study has some recommendation for further study on the same issue, which are illustrated in below:

- This study had done all of questionnaire, observation, and informal interview, as consequence of the results, it is obvious that the questionnaire will not be the rightest choice for collecting data for evaluating students' self-advocacy and their relatedness, because they don't show their real level of their self-advocacy and their relationship.
- Instructors have crucial role in improving students' self-advocacy and their engagement to design studios. From this point of view, instructors could instruct students to self-awareness which enhances self-advocacy after all.

## REFERENCES

- Afacan, Y. (2014) Introducing sustainability to interior design students through industry collaboration. *International Journal of Sustainability in Higher Education*, 15 (1), 84-97.
- Boud, D. & Feletti, G. (1997). Changing problem-based learning. In D. Boud & G. Feletti (Eds.), *The Challenge of Problem-Based Learning*, (pp. 1-14). London Kogan Page.
- Daly-Cano, M. Vaccaro, A. & Newman, B. (2015). College Student Narratives About Learning and Using Self-advocacy Skills. *Journal of Postsecondary Education and Disability*, 28(2), 213 – 227.
- Demirbas, O. O., & Demirkan, H. (2000). Privacy dimensions: a case study in the interior architecture design studio. *Journal of Environmental Psychology*, 20, 53-64.
- Dochy, F., Segers, M., Van Den Bossche, P. & Struyven, K. (n.d) *Students' Perceptions of a Powerful Learning Environment*. Netherlands: Learning Environments Research, Kluwer Academic Publishers. Retrieved in (<https://perswww.kuleuven.be/~u0015308/Publications/StudentsperceptionsPBLopmaak%20Kluwer%20double%20space.pdf>). Accessed on (28/4/2017)
- Doll, B., Spies, R. A., LeClair, C. M., Sarah A. Kuriën, S. A. & Foley, B. P. (2010) Student Perceptions of Classroom Learning Environments: Development of the ClassMaps Survey. *School Psychology Review*, 39(2), 203–218.
- Dowrick, P. W., Anderson, J., Heyer, K., & Acosta, J. (2005) Postsecondary education across the USA: Experiences of adults with disabilities. *Journal of Vocational Rehabilitation*, 22(1), 41-47.
- Greene, R. W., Abidin, R. R., & Kmetz, C. (1997) The Index of Teaching stress: A Measure of Student-teacher compatibility. *Journal of School Psychology*, 35, 239–259.
- Kesner, J. E. (2000) Teacher characteristics and the quality of child-teacher relationships. *Journal of School Psychology*, 28, 133–149.
- Margulis, D. S. (n.d.) *The Development of a Motivation Based College Course*. Retrieved in (<http://www.easternflorida.edu/faculty-staff/cte/enhance-learning/documents/motivation-based-class.pdf>). Accessed on (3/5/2017).
- Mitchell, P. (2010) *The Impact of Self-advocacy on Families, Disability & Society*, 12:1, 43-56,
- Murray, C., & Naranjo, J. (2008). Poor, black, learning disabled, and graduating: An investigation of factors and processes associated with school completion among high-risk urban youth. *Remedial and Special Education*, 29(3), 145–160.
- Murray, C., & Malmgren, K. (2005). Implementing a teacher-student relationship program in a high-poverty urban school: Effects on social, emotional, and academic adjustment and lessons learned. *Journal of School Psychology*, 43, 137–152.
- Murray, C., Lombardi, A., & Kosty, D. (2014) Profiling adjustment among postsecondary students with disabilities: A person-centered approach. *Journal of Diversity in Higher Education* 7(1), 31-44.

- Obeidat, A. & Al-Share, R. (2012) Quality Learning Environments: Design-Studio Classroom. *Asian Culture and History*. Vol. 4, No. 2; July 2012. Canadian Center of Science and Education
- Pianta, R. C., & Stuhman, M. W. (2004) Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33, 444-458.
- Sipahioğlu, I. R. (2012) Opening the "black-box" of interior design education: The assessment of basic design project work. *Procedia - Social and Behavioral Sciences*. 57, 420 – 426.
- Test, D. W., Fowler, C. H., Wood, W., Brewer, D. M., & Eddy, S. (2005) A conceptual framework of self-advocacy for students with disabilities. *Remedial and Special Education*, 26(1), 43-54.
- Trainor, A. A. (2005). Self-determination perceptions and behaviors of diverse students with LD during the transition planning process. *Journal of Learning Disabilities*, 38(3), 233-249.