SURVIVING ARCHITECTUREAN EXPLORATION OF THE DESIGN STUDIO'S HIDDENCURICCULUM

MOHAMED IBRAHIM Assistant Professor in Architecture, Faculty of Architecture - Design and Built Environment
Beirut Arab University, Lebanon, m.ibrahim@bau.edu.lb

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Abstract

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MOHAMED IBRAHIM [1]

[1] Assistant Professor in Architecture, Faculty of Architecture - Design and Built Environment, Beirut Arab University, Lebanon

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KEYWORDS: *Design Education, Education Psychology, Psychological wellbeing, mental health*

As design instructors, we tend to structure our education around a claim that: we know our students and what is best for them. Our pedagogy becomes a challenge of activities to be crafted, materials to be learnt, and tasks to be planned within an effective coordination, evaluation and feedback system. As much as we are accountable for the transition of our students to the best practice, our responsibility is undeniably to produce healthier, more optimistic and engaging architecture school graduates. The psychological and mental aspect affecting the students' performance remains neglected. A hidden culture is commonly promoted by the studio's habits and the students' actions and events loop.

The research here tries to identify key motives contributing to the incident of students' mental health issues. A survey is passed to the architectural students in Beirut Arab University, aiming to explore the common sources of frustrations, anxiety and hesitation; the habits that crossed the fine line between working hard and exploitation. Sources are found either generated by the very nature of the profession (as a creative domain) or by its inherited culture. Grouped and classified by levels and gender, The results then indicate how not only does this disorder hamper the healthy transition to the state of enjoyment and purpose, it also negatively affect the students state of wellbeing in which they realise their own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and are able to make a contribution to his or her community.

1. INTRODUCTION

> *"Ah college years, those were the days. Pure freedom ... leaving home for the first time…the parties…"*
> *"What about the tutorials, the lectures, the large building with all the books called the 'library'?"*
> *"Is that what those were?" Gerry blithely replied."*
>   Bucchianeri (2011) in his novel "Brushstrokes of a Gadfly"

University students are constantly seen as a socially advantaged population: how fortunate they are? A freer career's choice, new life pattern, social life,..etc .From another perspective, the last couple of decades

were busy with several studies claiming that : University students are not mentally well. Various measures – including the American Freshman: National Norms annual tally and the national survey of college counseling centers (Gallagher and Taylor, 2014, Eagan et al., 2016, Eagan et al., 2015, Eagan et al., 2014) have reported declining emotional health among university students.

Searches used a combination of the terms depression, depressive symptoms, depressive disorders to describe the problem (Ibrahim et al., 2013, Beiter et al., 2015, Buchanan, 2012, Hill et al., 2015). They all explore the prevalence of depression symptoms in university campus, this significant sign of poor mental health believed to be caused mostly by the students' transition from high school to university life(Gorczynski, 2018), coursework deadlines, exams and financial difficulties. The results suggest also that university students experience rates of depression that are substantially higher than those found in the general population(Ibrahim et al., 2013) .

Such results are chocking not only because it affects how students learn, but because it also impacts whether they actually finish their degrees (According to the guardians (Marsh, 2017) The number of students leaving university because of mental health problems increased by 210 per cent in five years). Ultimately, symptoms of poor mental health affect the career potential and overall lives of students greatly.

Among all the university careers, Architecture is probably one of the most intensive careers one can pursue, and architecture schools have another layer of stress and rigor placed upon its students. Architecture schools have a reputation for pressuring students, and according to the first mental health survey conducted by the Graduate Architecture, Landscape, and Design Student Union (GALDSU) of the University of Toronto (2013), 61% of students felt the faculty was 'not doing enough' to address the mental health needs of students.

As academics, we implicitly knew that it is not always the healthiest experience:

"As an architecture student I was a miserable wretch and I was treated as such by my design tutors. At my part-time architecture job I slept at nights under the dyeline machine in the back of the office I worked in. Every week when I presented my studio work at the crits it was torture. ………. I was a pretty ordinary student and for the most part I was a sullen martyr who just sucked it up."

Prof. Peter Raisbeck (2016) , Melbourne university   in his blog "surviving the design studio"

"While no one is forcing students to stay up all night, the current studio subculture encourages it. Studios are usually accessible 24 hours a day. Well-meaning professors sometimes offer criticism so late in the process that students have to stay up all night just to address their concerns"

Prof. Kathryn H.Anthony (1991) , University of California in her book "Design Juries on Trial"

In 2016, The Architects' Journal surveyed 450 architecture students in the UK, revealing the untold truth with number and statistics. The results were chokingly showing that just over a quarter (26 %) of architecture students had received medical help for mental health problems (Waite and Braidwood, 2016) resulting from their course, and a further 26 % feared they would need to seek help in the future. Of course, some students in all fields of study might be experiencing mental health problem as stated earlier, but this issue is intensified amongst architecture students . and now it is even clearer being reported in numbers.

Academics responded with different solutions (Hill, 2016) calling for new models of architectural education that increase access to architectural education from different backgrounds and reduce the mental health pressures on architecture student. Other responses raised questions and inquiries about further work to explore the mental health of those studying architecture.

Trying to comprehend the figures, a persisting question is constantly popping up: "Was it totally unexpected?" and "Didn't we see it coming?" In fact, nothing is more revealing of the studio's unhealthy mental environment than the habits and pattern exhibited by its staff and students. Together, they promote specific values and culture, known in simple terms as "hidden curriculum".

2. THE HIDDEN CURRICULUM

Dutton (1991) describes the hidden curriculum as those unstated values, attitudes, and norms which stem tacitly from the social relations of the school and classroom as well as the content of the course. In many cases, the habits and patterns exhibited in this curriculum are not the planned product, but merely a byproduct. These byproducts have the potential to be either positive or negative(Koch, 2002) .Habits and culture are passed on throughout the years, and patterns are built upon generations of students, educators, and practitioners.

Most of the time, this culture- studio culture - was praised by scholars , simply for -theoretically- providing students with opportunities to construct and determine their own learning styles(Tumusiime,

2013). Yet, the extensive periods of occupation of the studio as well as its social dynamics are likely to have a substantial impact on students' university experience (Groat and Ahrentzen, 1996) .

Perhaps the most comprehensive description of such impact was provided in the introduction of the AIAS report on studio culture: *"Late nights, exciting projects, extreme dedication, lasting friendships, long hours, punishing critiques, unpredictable events, a sense of community, and personal sacrifice all come to mind. Those aspects are not usually written into the curriculum or even the design assignments, but they are likely the most memorable and influential. The experiences, habits, and patterns found within the architecture design studio make up what we have termed "studio culture.""*(Koch, 2002)

Myths also form an important aspect of the hidden curriculum. Promoted by the studio culture, These myths influence the mentality of students and encourage certain behaviors and patterns in the design studio that are less than desirable. For example: the romantic notion that staying up all night needs to be part of a architecture student's life; the best designs come in the middle of the night; or that design requires social and cultural deprivation and personal sacrifices.. etc (Koch, 2002, Abdullah et al., 2011).

These are serious flaws of a studio system; flaws that are actually considered sound teaching practice and the right attitude. How can we expect future architects to design our built environment when they themselves are train to live a dysfunctional life. If we want our students to graduate as professionals leading balanced, healthy lives, we must first study their actions to promote such culture.

3. CREATIVITY :MENTAL ILLNESS AND THERAPY

"The black dog of depression is a frequent companion to those of a creative disposition"
(Gosling, 2016)

According to Karklins and Mendoza (2016), Mental health is considered to be a 'state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community'.Researchers have long examined links between creativity and mental illness and disorders (Andreasen, 2008, Ludwig, 1989), suggesting that those in creative industries may be more likely to suffer mental health issues. Some of them even found a strong relationship between levels of an adrenal steroid (DHEAS) previously linked to depression and artistic creativity (Akinola and Mendes, 2008); Suggesting that those with naturally more creative disposition were far more likely to be affected by intensive negative emotion than others. A 2014 report published in the Guardian found similar links, stating that "painters, musicians, writers, and dancers were, on average, 25% more likely to carry the gene variants [for depression] than professions the scientists judged to be less creative

Conversely, the act of creation itself can also be therapeutic and liberating. Mihaly Czisikszentmihalyi, a psychology professor, in his study of happiness and creativity investigated what he called "optimal experience". In his (1990) book :"Flow-The Psychology of Optimal Experience" he revealed that what makes an experience genuinely satisfying is a state of consciousness "flow":*"A state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will continue to do it even at great cost, for the sheer sake of doing it."*
So, According to Mihalyi (1997), it is the full involvement of flow, rather than happiness, that makes for excellence in life. in other words, the happiness that follows this mental state is of our own making. And it lead to increasing complexity and growth in consciousness. No wonders some psychologists (Borchard, 2015) believe the mental state of flow serves as an antidote to depression and anxiety. Research indicates that people who experience flow on a regular basis have lower levels of depression and anxiety. The lack of flow in one's life sustains anxiety. Conversely, anxiety impedes flow.

The description of these fleeting moments of focus and single-mindedness sounds familiar to all architecture professionals. It is definitely this desired state that we struggle to reach during our design process, and it is also the same state that when we perform within, everything clicks; everything feels harmonious, holistic and effortless. Hill (2005) discussed that educations psychologists have been busy trying to focus more on the development of a student that is aware of his/her inner processes and is cognizant of his/ her ability to achieve "flow" state. This particular skill in students is carried into all their classes, not just design classes. Relaxation and "flow" help maintain optimum behavior even in rote memory classes and their grades in all their classes improve.

4. THE RESEARCH

With statistics, the research tries to expose the less desired habit and attitude patterns and believes promoted by the studio culture, developed mainly to keep up with the stressful and demanding workload. The resulted figures should expose the negative impact it has on the students' health and wellbeing. The research also provides insights into the current students' flow pattern, revealing the occurrence likelihood of the most stimulating, relieving and enduring mental state that might help maintain positive engagement with the act of creation emotionally, psychological; and physically.

A qualitative research is carried out in the context of the faculty of architecture, design and built environment, Beirut Arab University, Lebanon. In this study, the literature about the studio culture, hidden curriculum and the flow aided drafting the outline of a survey conducted among a sample of 303 undergraduate students between the ages of 18 and 24 attending the same faculty.

An instructive session was given prior to each survey, clarifying the scale used as well as the definition of the state of flow. The first section includes six personal questions about the students' gender, educational level, reason for enrolment, ambition, level of confidence and self-esteem. Another 13 questions section concerning the common symptoms of mental (and physical) health disorder (The hidden Curriculum), including details about their emotional, physical and financial states in addition to the "Flow" question. The final section is a shortened questionnaire from seven questions that investigates the prevalence of some myths perpetuated by the studio culture; each myth influences the mentality of students in a certain direction. The responses are then analyzed and sometimes broken down by gender or school years.

5. THE FINDINGS

"High fees, debt, the fear of debt, low wages, poor working practices and educational models that reflect aspects of practice based on individualism and competition rather than collective action and mutual support have put intolerable pressure on those students who can still study and has excluded many more."

Prof. Robert Mull in (Winston, 2016)

The students' responses were linked to its relevant/expected disorder risks in order to communicate the results as well as raise concern and urgency. The following data presentation provides an overview and summary of key analytical points of the survey. The analysis identified key threats, points that demonstrate the negatively effects of the studio's hidden curriculum over the students' mental health. These effects are not instant nor simple, some are very complicated that it might need an adequate time to recover from (according to Taylor and Barron (1963), it takes 3-5 years for a person to recover from their SIMPLE university experience before they create any new knowledge).

5.1 Uncertainty and Anxiety

For a long journey like the students of architecture has, Clarity is a must; everything must be clear: the goals ahead, the intentions, and the means. Most of all, students need to be confident about the career choice they made, about their future. This ability is directly related to our level of certainty regarding future events – how likely they are, when they will occur, and what they will be like. Uncertainty makes it difficult to prepare properly for future events. Uncertainty about a possible future threat disrupts our ability to avoid it or to mitigate its negative impact(Grupe and Nitschke, 2013, Butzer and Kuiper, 2006). It is believed to diminish how efficiently and effectively we can prepare for the future and thus results in anxiety and depression.

It's difficult to find any accurate and reliable data to describe the overall prevalence of anxiety in the region (especially between youth). The data for the MENA region is scattered: A 2009 study (Mahfouz et al., 2009) screened 1,552 adolescents in Saudi Arabia and found the most common mental-health problem was anxiety, while a 2005 study cited by Mahfoud et al. (2011) concluded that 16 percent of Lebanese adolescents had suicidal thoughts.

The survey records show some sources of hesitation and uncertainty, analyzed from the respondents' answers as following:

5.1.1   Thinking to quit Architecture (constantly)

Firstly, as tutors we love to think that all students have enrolled in architecture out of passion. Only with passion they can tolerate the physical and mental pressure of their coming

years. In Our School, passion counts for the reason of most of our students' enrollment (81%). The remaining (19%) , On the other hand, is a percentage that should be cautiously study, approximately one fifth of our adult students enrolled following a family decision or just the advice that architecture is "*a respectable job that earns good money*." – as one of our students stated. With consideration, this percentage provides some explanation for the hesitation and uncertainty that reflects on the following phenomena.

According to the following data (fig.1), 43% of our students once or more thought of seriously quitting and leaving school, while a less fortuned 18% experienced the same thinking regularly during their whole study years. The likeability of this thought increases progressively reaching its possibility (30%) at the threshold of the final year. An Interesting observation is the increased percentage of female students thinking to leave architecture regularly 23% than their male colleagues 13%. The numbers sadly reflects several facts: one is that the number of females in architecture is actually dropping (Duncan, 2013). For example, according to the Royal institute of British Architects' (RIBA) (Morris, 2018), only 1 in 5 chartered architects are women), despite the number of women architecture students growing to almost 50%.
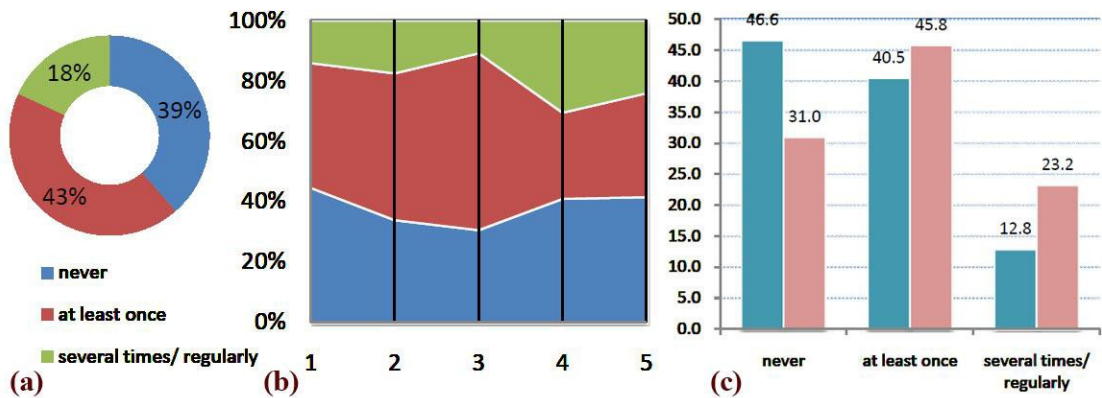

Fig.1 Thinking to quit pattern
(a) Generally (b) In relation to the study years (c) Gender wise

5.1.2   Intention to work as an architect

The question of "*do you intend to work as an architect after graduation?*" might sounds normal if asked to high school students, of course not to architectural students. Despite the peculiarity of the question (especially regarding its context), the results (Fig. 1) shows a significant percentage (19%) of the students' population either not able to decide or even more certain of not pursuing an architectural career. Throughout the study years, students get more and more confused about their future, and it is shown again with a percentage of 33% at the threshold of the final year.
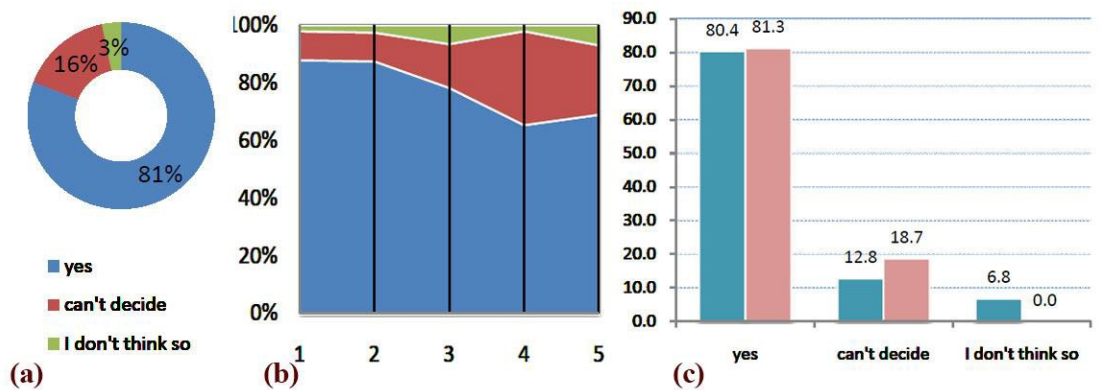

Fig. 1 Intention to work as an architect
(a) Generally (b) In relation to the study years (c) Gender wise

5.1.3 Low Self Esteem

Although low self-esteem is not categorized as a mental health condition in itself (Gold, 2016), there are clear links between the way we feel about ourselves and our overall mental and emotional wellbeing, some researches also claim that low self esteem and depression are strongly related (Sowislo and Orth, 2013). Our study reveals a positive indicator; low self esteem begins with a good percentage at the freshman year (16%) reaching (0%) at the final year (Fig. 2). According to Butzer and Kuiper (2006), low self esteem at this early stage predicts social problems not academic ones. The dramatically transformation of the number in the later years reflects a picture of their self-worth, self-regard and self-respect
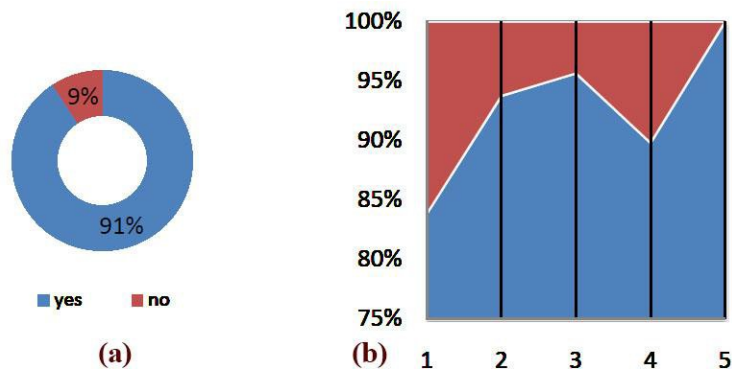

Fig. 2 Intention to work as an architect
(a) Generally (b) In relation to the study years

5.1.4 Academic Injustice

One student's belief that either himself or someone else has been treated unfairly, can lead to serious demotivation among other students. 38% of the students replied with "constantly" when asked if they experienced injustice during their study. Another 56% reported they have experienced it once or twice while a minor of 6% denied ever been subjected to such injustice. o The students' feeling of being academically oppressed might to a great extent concerns the way they think they were evaluated by. Normally, Design evaluation is Ambiguous, ill-defined, surrounded by doubts and difficult to comprehend. It is not always a one way process and it contradicts with the prior pre-university methods of assessments. Lisa Phillips (2014b) (2014a) tried to explore the students feedback about their formative and summative assessments and they were mostly negative, it is expected. Still a 38% of students with different backgrounds (gender, race, age, believes) feeling constant injustice is a matter that is surely worth further investigation.
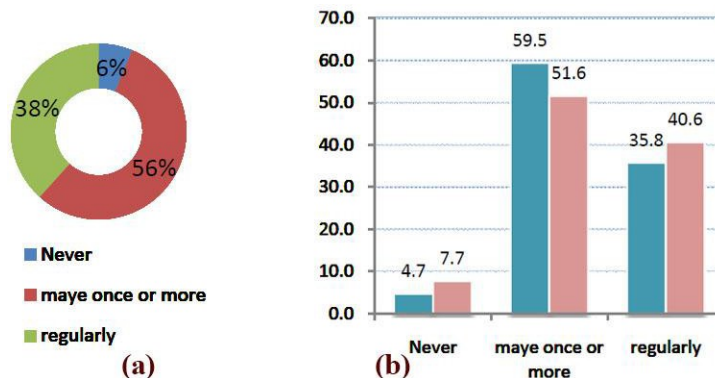

Fig. 3 Feeling Injustice Pattern
(a) Generally (b) Gender wise

5.1.5 Financial Loads

Studying Architecture is known to be expensive not least because of the course fees. Architecture students often carry significant costs for model-making and drawing materials, study trips, printing and computer software. In addition, studying architecture is time-consuming; for a working student, the ability to work to generate income might become more and more difficult.

The data revealed just over a quarter of the students (26%) receives financial aid from difference resources. A similar figure (28%) reported working under the burden of serious financial troubles, 24% are expecting financial problems in the near future while 8% are certain that they will not be able to continue due to accumulated debts.
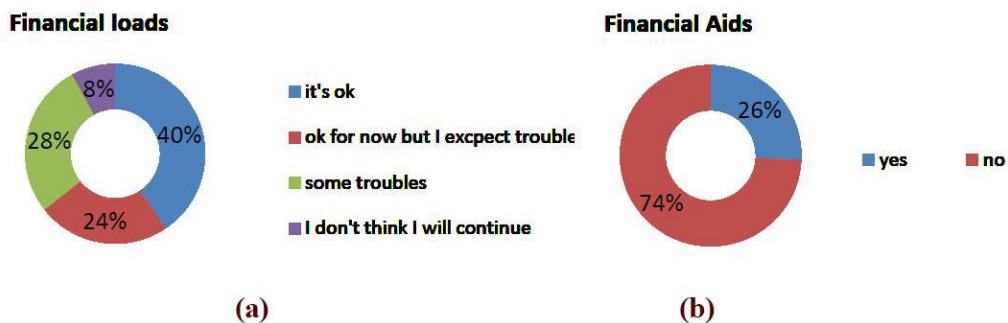

Fig. 4 Financial Aspects
(a) Loads (b)Aids

5.1.6 Uncertain Job Opportunities

Being part of the construction industry, Architecture is vulnerable to economic cycles (Hamer, 2016). This cyclical nature can lead to uncertainty in the Job Market. A Survey conducted by BD(Klettner, 2013) has revealed that 22% of qualified architects in the UK are currently unemployed, where in the USA, architecture graduates face the highest unemployment rate between recent college graduate 13.9% (Carnevale et al., 2013). Youth unemployment in general is also the highest in the world standing at around 25% of the population. The Arab world has the highest rate of unemployment among youth in the world (UNDESA and ECE, 2017).

The previous facts can be obviously seen reflecting in the students responses. 44% of students were less optimistic in their expectation for their future chances; while seniors reported 60% uncertainty about the same matter. Female students reported higher amount of doubts and pessimism (51.6%) than their male colleagues (35.1%) regarding the same subject.
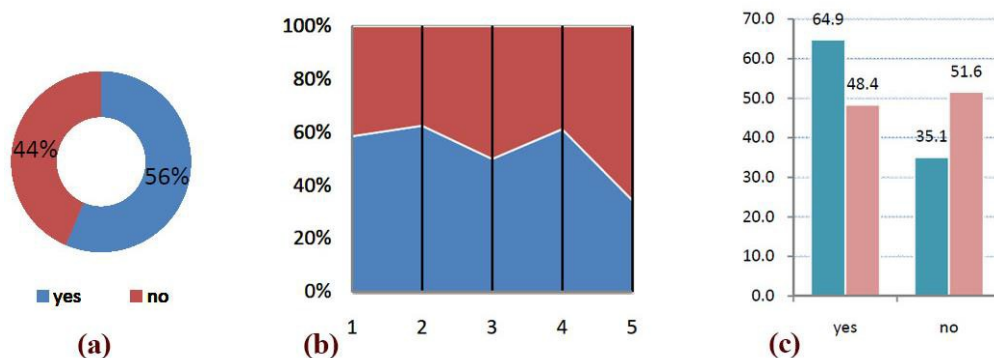

Fig. 5 Job Opportunities anticipation

(b) Generally (b) In relation to the study years (c) Gender wise

5.2 Social Isolation and Loneliness

It is generally agreed that social ties play a beneficial role in the maintenance of mental health and psychological well-being (Kawachi and Berkman, 2001, Wang et al., 2017). Family and friends support is one direct and effective ways to cope with pressure, stress that lead to mental disorder. Karklins and Mendoza (2016) named "having someone close to talk to" as one of the effective factors contributing to being mentally healthy.

In our early design studio, we always encourage students to maintain relationships outside architecture schools. But the facts shows that only 31% of our students managed to keep their social connection outside the school. The percentage diminishes dramatically throughout the study years to reach 10% before graduation (fig 7).
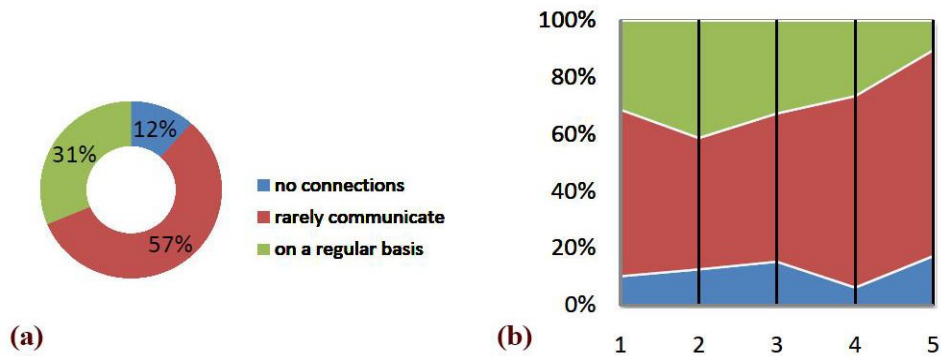

Fig. 6 Maintaining Social Connections outside the architecture school
(a) Generally (b) In relation to the study years

On the other hand, the architecture studio was always known for its long-lasting friendship and social life; by definition, it is one of its distinctive features. Even in such environment, more than half of the students (60%) were incapable of creating new close friendships. Fortunately, the ratio decreases progressively showing more females students capable of creating new close connections (Fig. 8).
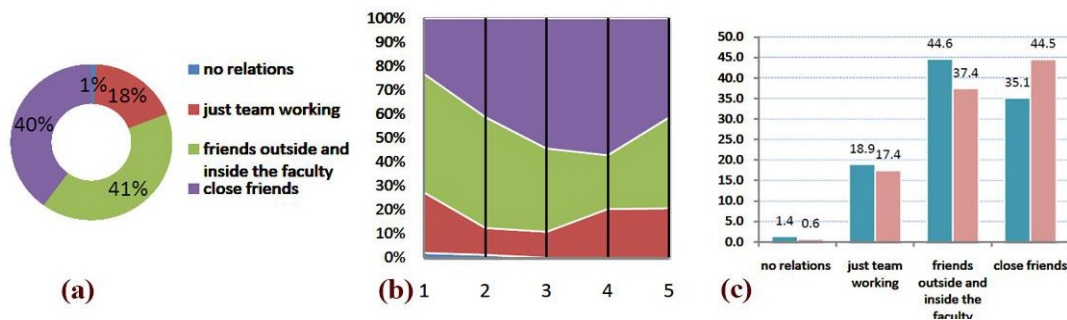

Fig. 7 Creating long-lasting relations in architecture schools
(a) Generally (b) In relation to the study years (c) Gender wise

The information from the previous two questions reveals a worrying 41% of the students suffering from social isolation (Fig. 9). This isolated group reported both: total disconnection from the pre-university social relations and incapability to develop a close friendship in architecture. It is worth mentioning that social isolation can be either a result of the symptoms of many mental health problems or a consequence of the associated stigma, disadvantage and social exclusion that people with mental illness can face.
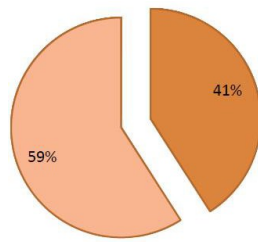
Fig. 8 Complete Social Isolation ratios

5.3 Unhealthy Lifestyle Choice

Students are often very busy doing work. Sometimes, they are so busy that other important aspects of life - including down time, exercise, eating well or even getting proper sleep- get left out.

Moreover, in order to keep up with the stressful and demanding workload, survey respondents confessed to having developed many bad habits. (99%) students reported working through the night for their studies at some point- and almost 1 in two (48%) of respondents said they did it on a regular basis. A similar figure (46%) of respondents admitted to pulling an all-nighter only on submissions (Fig.10).
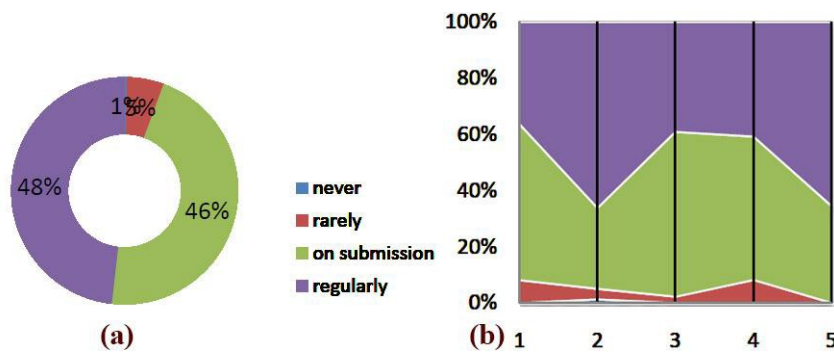

Fig. 9 All-nighters pattern
(a) Generally (b) In relation to the study years

The study revealed (85%) transformation of the students sleeping habits and (45%) of their exercising pattern. Leaving only nearly a third (36%) who are still exercising regularly (Fig. 11).

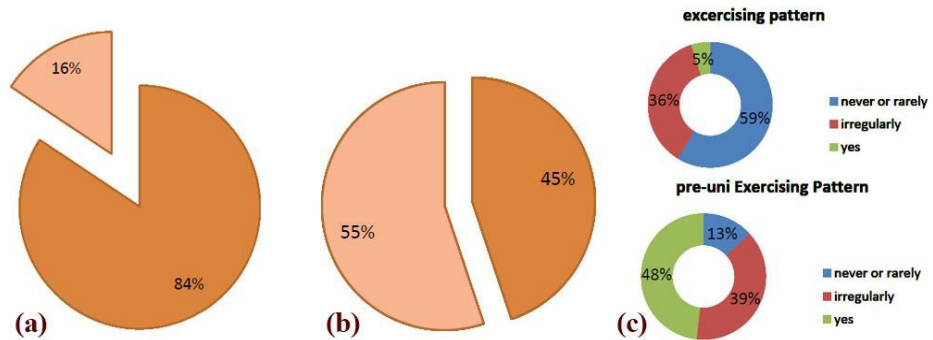Fig. 10 (a) Sleep Pattern transformation (b) Exercising pattern transformation
(c)Existing vs. pre-university exercising pattern

More physical changes can be noted when asked about their eating habits. 2 out of 3 students (67%) said they frequently skip meals, other (28%) admit eating several intermediate meals and snacks, leaving only 5 % of the students living on a balanced and healthy diet.
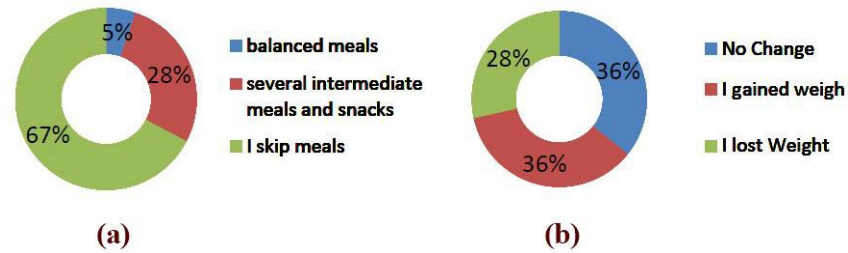
Fig. 11 (a) Eating habits (b) Physical/Body Transformation

5.4 Students and their White moment(s) / THE FLOW

The results positively show a good percentage (69%) able to recognize thus trigger/or just experience their individual "flow". Moreover 14% of those students were able to experience the moment regularly, recognizing a path to their creative conscious. Fig. 13b shows how (by experience) the regular flow probability reaches 32% by the final year.
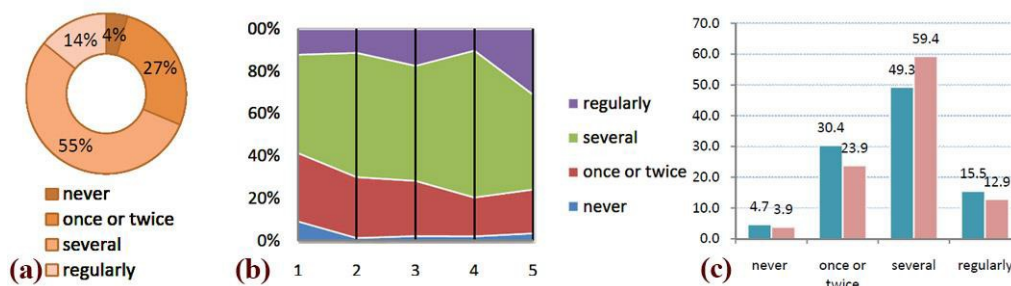

Fig. 12 The students' Flow Experience Generally (b) In relation to the study years (c) Gender wise

The emerged result backs Czisikszentmihalyi (1990) claim that *"Aloneness"* is usually required for the student not trained in the art of "flow", and that the act of creation is a self-involvement and is usually not a public performance. Students are more creatively fluid working nights when they have more opportunity for uninterrupted "flow". For a certain degree, this might provide explanation for the students' all-nighter pattern and their social isolation.

The numbers also reveals an interesting insight on how passion can affect the Flow? The study shows that: those who have enrolled in architecture out of passion are more likely to experience the flow regularly (62%) than others.

5.5 Prevailing Myths

The study also aimed at studying the prevalence of some classical myths of the studio firstly uncovered in a report made by the AIAS Studio Culture Task Force (2002). These Myths influence the students' mentality (Koch, 2002, Kucker and Perkins, 2005), providing rational foundation for some of the studio's undesirable social and behavioral patterns and ideas. In short, Fig.14 shows our students believing that:

- Architecture education should require personal and physical Sacrifice (99.1%).
- The best students are those who spend the most hours in studio (44%).
- The Best Design ideas only come in the middle of the night (56%).
- Creative energy only comes from the pressure of deadlines (57%)
- It is more important to finish a few extra drawings than sleep or mentally prepare for the design review (62%)
- It is difficult to become a successful architect unless you excels in the architecture design course (40%).
- Creativity and innovation in architecture should be a solo not team work.(58%).

Embracing these ideas will certainly lead to emotional, physical, and cultural deprivation.With more than half of our students believing in it, all of these myths and byproducts reinforce the negative notion

about the studio. Issues of studio culture are commonly made into items endorsed by the actions of staff and students and sometimes by humor. It also promotes a reputation that non-architecture students hold of our students
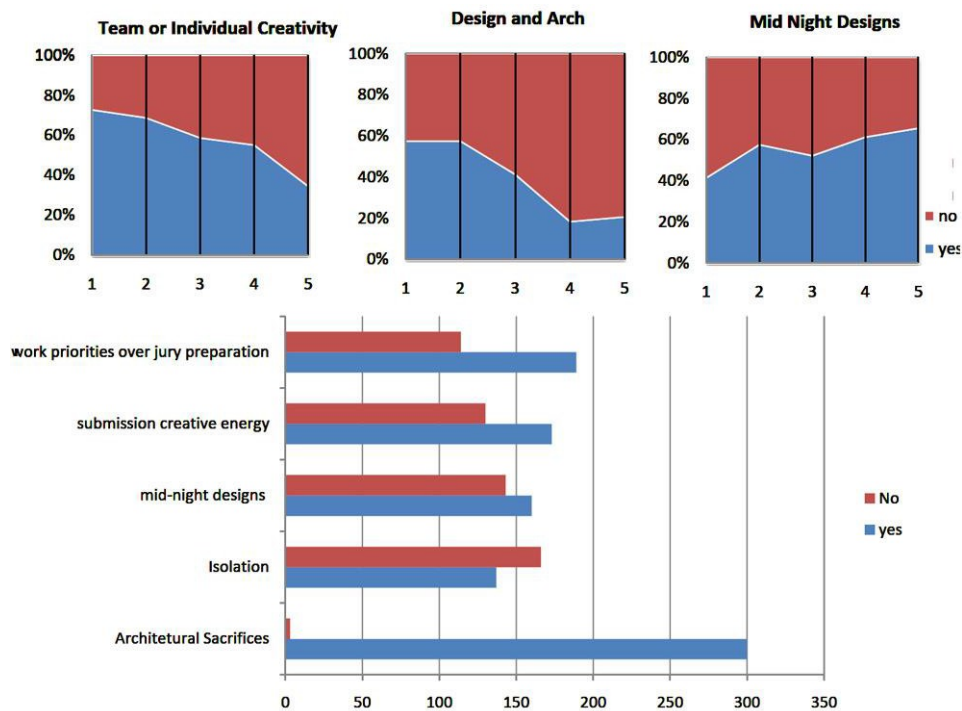

Fig. 13 Prevailing Studio Myths Survey

6. CONCLUSIONS

"eating well, exercising often, and talking openly," and "when you have a down day recognize that you might need to take some time out—and don't beat yourself up." (Gosling, 2016)

Mental health of the architecture students is an area of concern that needs more attention, awareness and considerable research. The survey's results place a question mark over the emotional wellbeing of the next generation of architects. The figures are a worrying indication of the pressure architectural students are under. Change is necessary to produce more optimistic and more engaging individuals .

There are many elements contributing in the studio culture disorder is the perception of the architecture profession. It is mostly seen as the one requiring excessively long study hours and intense commitment during education and excessive work hours and isolating project focus in practice. Lasting cultural change must come from within the architecture school, and require more than just students and educators to bring about. Schools are obliged to rethink their existing practices, learning objectives need to be re-examined to identify the best necessary improvement of the studio culture. Architecture school administration needs to promote adequate on campus support facilities for all students seeking mental health help. Studio instructors have the responsibility to educate students in a way that promotes successful learning, creative discovery and healthy lifestyles. They need to integrate education psychology into their design teaching, not depending on prior traditions nor tending to teach, "As one has been taught". The students' *"flow"* experience needs to be taken into consideration during the studio/design for the significant role it plays in maintaining the students' positive attitude and morals despite the usual studio pressure.

Further researches are needed to investigate the same topic on a general level of other architecture schools. There is also a necessity to focus on developing educational models that could influence behavior of students by creating supportive environment that foster and maintain mental health and wellbeing .

At the end, students are entitled to a healthy environment as much as they deserve a successful education. Their voice should be heard when a difference is required and a change is to be done. At issue is not the value or even the necessity of hard work, commitment or dedication, we believe there is no lack of that among students and recent graduates who are serious about becoming architects. The real question was once asked by Fisher (2000) in his article (Patterns of exploitation): *"When do we cross the fine line between hard work and exploitation?"*

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