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Representation of social anxiety among engineering students

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Abstract

Social anxiety can be seen in students with special needs such low self-confidence, to feel shy, difficult relationship with roommate, problem with peers, and feeling uncomfortable in hostel. The effect of social life is an important issue among students. In this paper, the representation of social anxiety was presented with different manifestation than prior studies. That was investigated among engineering students. One sample *t*-test was used to examine the possible dimensions of social anxiety. The data collection was used a survey. A total 770 students participated to fill the questionnaire. The students were second years on five engineering faculties in Universiti Malaysia Pahang. The social anxiety designates into seven factors include; (1) problem with peer, (2) Hostel is uncomfortable for study, (3) face problem with roommates, (4) homesick, (5) feel that campus environment uncomfortable for study, (6) racial diversity, and (7) too many roommates are making study difficult. The finding shows a significant of seven factors as creator of social anxiety among engineering students. The instrument can be use to examine social anxiety for university students was recommended.

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Keywords: social anxiety; anxiety, student; engineering students; peer.

1. Introduction

The negative feelings associated with the search for information which usually involves contact with the student at some point have been identified as sources of social anxiety. Anxiety is one of the various types of emotional and behavioural disorders (Rachel and Steege, 2005). Anxiety disorders can manifest in the students' behaviour in the classroom such that those with anxiety disorders are more passive in their study. Social anxious individual then be likely to create highly negative images of their performance in social situation which contribute substantially of anxiety (Purdon et al., 2001). Related with a lot of factors, occasionally university students' comprise difficulty to interactive with social environment (Ozturk and Multu, 2010).

The prior study has been prevalenced of social anxiety problem and potential risk factors that may be associated with social anxiety among 167 final year medical students at University Malaya (Gill and Mohammad, 2010). The similar study was investigate the relationship between subjective well-being, attachment style, happiness in relationship and social anxiety among students at Eski Mehir Osmangazi University (Ozturk and Multu, 2010). Researcher found that most people experiences of social anxiety time to time, and there may be prevalent negative

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attitudes towards anxiety within the general population or within socially anxious individual in particular (Purdon et al., 2001). However, the representation of social anxiety was presented with different manifestation than prior studies. That was investigated among engineering students through seven sources of social anxiety.

In this paper, we present a survey to encounter social anxiety among engineering students. That can be seen in students with special needs such low self-confidence, to feel shy, difficult relationship with roommate, problem with peers, and feeling uncomfortable in hostel. The effect of social life is an important issue among students. In this paper, the representation of social anxiety was investigated among engineering students. One sample *t*-test was used to examine the possible dimensions of social anxiety. The data collection was used a survey. A total 770 students participated to fill the questionnaire. The students were second years on five engineering faculties in Universiti Malaysia Pahang. Factors faces of social anxiety include; (1) problem with peer, (2) Hostel is uncomfortable for study, (3) face problem with roommates, (4) homesick, (5) feel that campus environment uncomfortable for study, (6) racial diversity, and (7) too many roommates are making study difficult. The finding shows a significant of seven dimensions as creator of social anxiety among engineering students. Furthermore, the difference towards social anxiety base on gender was examined.

This paper is organized as follows. Section 2 describes of social anxiety. Section 3 describes the method. Section 4 describes result and discussion. The conclusion of this work is described in section 5.

1.2 Social anxiety

Social anxiety causes individuals to feel fear social situations. People tend to assume that if they feel anxious in a social situation, it is because they are not performing well (Purdon et al., 2001). Kimberley et al. (2007) conceptualized four approaches to understanding social anxiety. The first is the skill deficit model which describes social anxiety as the result of an individual lacking the skills to handle situations perceived to be threatening. The second is the cognitive–self model which states that social anxiety is not a lack of skills, but a perception of personal inadequacy. The third is the classical conditioning model where social anxiety is conditioned when neutral stimulus associated with negative social experiences. Lastly, the personality trait model which describes that social anxiousness is a trait rather than a reaction.

Previous studies have found symptoms of social anxiety as a sign of weakness, incompetence, mental instability, stupidity, and leading to humiliation or embarrassment which is a cardinal feature of social anxiety and accounts for much of the negative self-evaluation in social situations reported by social phobic individuals (Purdon et al., 2001). Another opinion cited by Purdon et al. (2001) is that individuals with social phobia also have a tendency to exhibit social anxiety symptoms. Studies of the negatively perceived symptoms of social anxiety within the general population might be helpful in treating the anxiety. Therefore, those who are concerned with exhibiting anxiety symptoms, and its consequences, in social situations will significantly reduce their anxiety.

Social anxiety can also be seen in students with special needs as they are more likely to face this anxiety due to the low self-confidence they feel about being a rarity (Cowden, 2010). Symptoms of social anxiety often vary among students (Cooley, 2007). University students describe situations that cause them to feel shy, and people who feel socially anxious are often quiet, inhibited, and withdrawn (Mark and Robin, 1997). The effect of social life is an important issue in social anxiety, as seen in difficult relationship with roommate, problem with peers, and feeling uncomfortable in hostel. Social anxiety will negatively influence an individuals' cognitive and affective behaviour (Kimberley et al., 2007). The similar study found that campus environment as part of social anxiety has universal access to increase anxiety among students (Vitasari et al., 2010).

2 Method

A total 770 students consists of 394 males and 376 females. The respondents are undergraduate students from five engineering faculties at Universiti Malaysia Pahang. The questions ask students' experiences related with social anxiety. It contains seven items, each item has five scales that ask respondents to answer of questions base on student experiences, feeling, and thought about social anxiety. The scale format uses answering ranging from 1 being an answer of never, 2 for an answer almost never, 3 for an answer undecided, 4 for an answer fairly often and 5 being an answer of very often. Reliability and validity test have been conducted, with alpha score yielded 0.7.66 and accessing construct validity with shows KMO = .822 ($>.30$), Bartlett's test of sphericity = .000 ($p=.000$). Pearson correlation and independent samples *t* test used to find out coefficient correlation factor to factor and examine significance for each factor towards social anxiety.

3 Results and Discussion

The results represents of factors face toward social anxiety among engineering students. The analysis of data used parametric SPSS 16.0. This survey has large of sample size and consider with normal distribution of the data. Results presented as follows

3.1 Demographic of respondents

The questions were given to 770 engineering students at Universiti Malaysia Pahang assessing of gender, faculties and age. Demographic of respondent presents of 51.2% male and 48.8% female, 28.1% Faculty of Chemical and Natural Resources Engineering (FCNRE), 13.6% Faculty of Electrical and Electronic Engineering (FEEE), 29.4% Faculty of Mechanical Engineering (FME), 23,1% Faculty of Civil Engineering and Earth Resources (FCEER), 5.8% Faculty of Manufacturing Engineering and Technology Management (FMETM), and average in 19-25 years old.

3.2 Factor faces of social anxiety

Pearson correlation was use to found the correlation of each factors and One sample t-test was use to examine the significant contribution, mean and standard deviation. Table 1 and 2 present the results as follows.

The Pearson correlation examines the relationship of the factors. The result show correlation of item includes:

- Significant correlation between “problem with peer” (S1) and “face problem with roommate” (S3) with ($p=.000$) and coefficient correlation is .364. Problem with peer also possible to face problem with roommate, that were contribute to increase anxiety among students. Some of students’ peer was his/her roommate but not at all their roommate was peer. Student who has problem with peer and roommate will influence on their study performance.
- Significant correlation of the statement “hostel is uncomfortable for study” (S2) and “feel that campus environment uncomfortable for study (S5) show ($p=.000$) with coefficient correlation yield .473. The positive correlation describes that campus environment effect on comfortable feeling to study at hostel.
- Significant correlation of “face problem with roommate” (S3) and “hostel is uncomfortable for study” (S2) found ($p=.000$) with coefficient correlation is -.413. The negative correlation meaning that hostel is uncomfortable to study because effect from problem with roommate.
- Significant correlation of “homesick” (S4) and “feel that campus environment uncomfortable for study” (S5) found ($p=.000$) with coefficient correlation is .401. Positive correlation explains that uncomfortable of campus environment make student feel homesick.
- Significant correlation of “feel that campus environment uncomfortable for study” (S5) and “hostel is uncomfortable for study” (S2) found ($p=.000$) with coefficient correlation is -.473. Similar finding with point b, negative correlation describes that campus environment effect on comfortable feeling to study at hostel.
- Significant correlation of “racial diversity” (S6) and “feel that campus environment uncomfortable for study” (S3) found ($p=.000$) with coefficient correlation is -.420. Negative correlation describes that students’ feel racial diversity contribute to create uncomfortable in campus environment.
- Significant correlation of “too many roommates are making study difficult” (S7) and “face problem with roommates” (S3) found ($p=.000$) with coefficient correlation is .330. Positive correlation meaning that problem with roommate was created because too many roommates in one room, average each for 4 students. Finally, the sample size yield $n=770$.

Table 1: Correlation of factors

Factors	Coefficient correlation (r)	Significant (p)
S1-S3	.364	.000*
S2-S5	-.473	.000*
S3-S2	-.413	.000*
S4-S5	-.401	.000*
S5-S2	.473	.000*
S6-S5	.420	.000*
S7-S3	.330	.000*

* Correlation is significant at $p < .01$

Table 2: Significant contribution toward social anxiety

Factors	Mean	Std. deviation	t	Significant (p)
S1	3.01	.959	115.313	.000*
S2	2.89	1.145	99.721	.000*
S3	2.86	1.144	100.409	.000*
S4	2.66	1.217	98.818	.000*
S5	2.81	1.123	103.499	.000*
S6	2.87	1.026	111.607	.000*
S7	3.22	1.116	93.913	.000*

*significant factor is $p < .05$

- Problem with peer (S1)
The factor show a significant contribution with $t=115.313$, $p=.000$, this item was found highest score of mean towards social anxiety dimension with $M=3.01$, $SD=.959$. Students feel anxious if having problem with peer. They cannot focus on study and more of them choose to avoid the problem than try to resolve.
- Hostel is uncomfortable for study (S2)
The result shows a significant that hostel uncomfortable for study with $t=99.721$, $p=.000$, with $M=2.89$, $SD=1.145$. In Malaysia especially, each university was provide hostel for students' stay during study. Some of student felt hard with this situation. They must be living so far from home for several times. Here, student should be independent person who want survive as success students.
- Face problem with roommates (S3)
The result shows a significant that Face problem with roommates with $t=100.409$, $p=.000$, with $M=2.86$, $SD=1.144$. Problem with roommate is common happen at hostel, is the problem has come, student feel uncomfortable to stay in the one room. The hostel management was providing to change room with reasonable report.
- Homesick (S4)
The result shows a significant that homesick with $t=98.818$, $p=.000$, with $M=2.66$, $SD=1.217$. The feeling was common for 1st year students (freshmen). It was might the first time he/she stay far away from their home. Homesick is negative feeling interfere human performance. People who feel homesick cannot do their tasks smoothly.
- Feel that campus environment uncomfortable for study (S5)
The result shows a significant that feel that campus environment uncomfortable for study with $t=103.499$, $p=.000$, with $M=2.81$, $SD=1.123$. The previous study has found that campus environment as part of social anxiety. That has universal access to increase anxiety among students (9).
- Racial diversity (S6)
The result shows a significant that racial diversity with $t=111.607$, $p=.000$, with $M=2.87$, $SD=1.026$. Malaysia has three groups of race such Melayu, Chinese, and Indian. Melayu is majority race here. Racial diversity, the issue commonly appear from minority groups.
- Too many roommates are making study difficult (S7).
The result shows a significant that too many roommates are making study difficult with $t=93.913$, $p=.000$, with $M=3.22$, $SD=1.116$. The effect of social life encounter of important issue in social anxiety, as seen in difficult to face relationship with roommate. One room for more than two students were different character, behaviour, social background, and race. That was possible to generate problem each other.

4 Conclusion

Social anxious individual then be likely to create highly negative images of their performance in social situation which contribute substantially of anxiety. Most of people's experiences of social anxiety time to time, and there may be prevalent negative attitudes towards anxiety. Related with a lot of factors comprise with social anxiety, the prior studies found one of the factor such difficulty to interactive with social environment. In this paper, the representation of social anxiety has been presented with different manifestation in comparison with prior studies that

investigated for engineering students, through seven sources of social anxiety. The questionnaire were given to 770 engineering students consists of 51.2% male and 48.8% female from five engineering faculties with average age in 19-25 years. The social anxiety designates into seven factors include; (1) problem with peer, (2) Hostel is uncomfortable for study, (3) face problem with roommates, (4) homesick, (5) feel that campus environment uncomfortable for study, (6) racial diversity, and (7) too many roommates are making study difficult. The finding shows the correlation items to examine relationship between factor to factor. Base on the findings that “Too many roommates are making study difficult” (S7) was lead as a factor to create social anxiety among students. One room for more than two students were different character, behaviour, social background, and race, as seen in difficult to face relationship with roommate. The instrument was recommended for university students who stay in hostel/ dorm with high prevalence of problems to examine of social anxiety.

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Appendix

A number of statements which student had used to describe a feeling, thought, and experience toward social anxiety. Social anxiety is feel fear in social situations. Please read each statement then sign the appropriate option to describe your present preeminent feelings.

Statements	Never	Almost never	Undecided	Fairly often	Very often
How often do you face problems with your peers					
How often do you feel that living in hostel is uncomfortable to study					
How often have you ever faced any difficulty of study due to problems with your roommates					
How often do you feel homesick during study at the university					
How often do you find that campus environment is uncomfortable to study					
Have you ever experienced racial diversity while studying here					
Have you ever experienced any difficulty of study when there are too many members in a room					