

The Relationship Between Irrational Belief System and Stress Among Fully Residential School Students in Johor

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Abstract

The purpose of this research is to identify the relationship between irrational belief system and stress among students from Fully Residential Schools (FRS) in Johor. A total of 94 Form One students, 2010/2011 session were selected as samples of the research through random stratified sampling method. Data collection was based on Student Beliefs Questionnaire (SBQ) and Student Stress Questionnaire (SSQ) which were answered by the respondents. The data of the research was analyzed using descriptives and inferentials statistic. Descriptives analyses used frequency, percentage, and mean score. Besides these, Pearson correlation 'r' was used in the inferential statistic to test the research hypotheses. The finding showed that most of male (78.8%) and female (72.1%) respondents had acquired moderate level of stress. Majority of male (81.8%) and female (83.6%) respondents also had moderate level of irrational beliefs. Subscales of demandingness was identified as the most dominant irrational beliefs held by among respondents based on gender. Likewise, there was a positive significant relationship between irrational beliefs and stress among respondents. All the subscales of irrational beliefs such as demandingness, awfulizing, low frustration tolerance and global evaluation also showed positive significant relationship with stress among respondents in which low frustration tolerance subscale had the highest significant relationship with stress. In conclusion, these findings prove that the Rational Emotive Behavioral Therapy (REBT) is one of the useful cognitive behavioral therapy to understand the sources of stress among students which are often associated with irrational belief system.

Keyword: REBT; irrational beliefs; stress

Abstrak

Kajian ini bertujuan mengenalpasti hubungan antara sistem kepercayaan tidak rasional dan tekanan dalam kalangan pelajar Sekolah Berasrama Penuh (SBP), negeri Johor. Seramai 94 orang pelajar Tingkatan Satu, sesi 2010/2011 telah terpilih sebagai sampel kajian melalui kaedah persampelan rawak berlapis. Pengumpulan data adalah berdasarkan Soal Selidik Kepercayaan Pelajar (SSKP) dan Soal Selidik Tekanan Pelajar (SSTP) yang telah dijawab oleh responden. Data kajian telah dianalisis menggunakan kaedah statistik deskriptif dan statistik inferensi. Kaedah analisis deskriptif menggunakan kekerapan, peratusan dan min skor. Manakala, kolerasi Pearson 'r' telah digunakan dalam analisis inferensi bagi menguji hipotesis kajian. Dapatan kajian telah menunjukkan bahawa kebanyakan responden lelaki (78.8%) dan perempuan (72.1%) memperoleh tahap tekanan yang sederhana. Kebanyakan responden lelaki (81.8%) dan perempuan (83.6%) juga memperoleh tahap kepercayaan tidak rasional yang sederhana. Subskala pendesakan telah dikenalpasti sebagai kepercayaan tidak rasional paling dominan dimiliki oleh kalangan responden berdasarkan jantina. Selain itu, terdapatnya hubungan positif signifikan antara kepercayaan tidak rasional dan tekanan responden. Kesemua subskala iaitu pendesakan, keterukan, toleransi kekecewaan rendah dan penilaian menyeluruh juga menunjukkan hubungan positif signifikan dengan tekanan responden di mana subskala toleransi kekecewaan rendah mempunyai hubungan signifikan paling tinggi dengan tekanan. Secara keseluruhannya, dapatan kajian telah membuktikan bahawa Terapi Rasional Emotif Tingkah laku (REBT) merupakan salah satu terapi kognitif tingkah laku yang berguna bagi memahami punca tekanan dalam kalangan pelajar yang seringkali dikaitkan dengan sistem kepercayaan tidak rasional.

Kata kunci: REBT; kepercayaan tidak rasional; tekanan

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1.0 INTRODUCTION

In facing current issues and challenges, a student's life cannot be separated from stress (Banks, 2006; Silvergrade, Tosi, Wise & D'Costa, 2001). According to Lazarus & Folkman (1985), each individual experiences different kinds of stress. Stress experienced in a positive manner might motivate or influence an individual to acquire his or her maximum potential (Ellis & Wildle, 2002). Nonetheless, if the stress level exceeds a certain threshold and can no longer be controlled, it may create psychological, physical, mental or physiological problems to the individual (Romas & Sharma, 2004).

Furthermore, stress which is regarded as negative or extreme may have negative effects on a student's academic performance (Misra, McKean, West & Russo, 2000). Likewise, students may also be exposed to the *burnout* effect as a result of stress experienced in school (Knaus, 1985). This phenomenon can become worrisome if the students also experience mental disturbance due to unresolved prolonged stress. According to Vernon (2004a), although most adolescents have successfully overcome their personal development problem with minimum guidance from adults, there are exceptions.

Based on stress scenario among adolescents in Malaysia, particularly Form One students in Fully Residential School (FRS), stress begin to be felt when they start a new life and adjustment in FRS. The students have to strive to preserve their academic achievement according to the needs and philosophies of FRS. One of the objectives of FRS establishment is to produce students who do not only excel in academics, but have towering personality, moral, competitive, vision and open-minded (Fully Residential School Management Division and Cluster School, Ministry of Education, 2008, p.9)

Nevertheless, in fulfilling the philosophy and mission of FRS, Form One students have to go through transition period which may trigger stress. Based on the report of the FRS Management Division and Cluster School, Ministry of Education (2008), factors such as students' adaptation, problems of health, discipline, family and so forth had affected a few Form One students to quit FRS. These prove that there are students who have suffered from stress in FRS. Furthermore, a study conducted by Shaharizan Shamsuddin (2009) in one of the FRS's in Selangor has also indicated that the level of stress among students is high (55.7%).

Similarly, a study by Ak and Sayil (2006) also reported that students who were separated from family to continue studies in boarding schools have inadequate social support and negative thinking toward the boarding school. Not only that they have to live without parents and siblings and have to face with a crowd of new people in residential schools (Schaverein, 2004). According to Schaverein (2004), coping with homesickness in boarding school can affect students' personality.

Hence, stress may bring many negative implications if not dealt with effectively. In line with this, many previous researchers often associate stress with a number of personality variables when discussing the problems of personality and individual stressors. However, there is still a lack of studies which correlate stress with the role of personality variables or the differences between individuals as a source of stress, especially from the cognitive aspect. A study conducted by Flett *et al.* (2008) has shown that there was a relationship between irrational beliefs and psychological stress among group of adolescents. DiLorenzo, David and Montgomery (2007) also claim that one of the differences between individuals is the irrational belief systems which may contribute to students' stress. Bernard (2004) also highlights that the best way to understand human behaviour and emotion is through the analysis of the cognitive structure

elements, that is, belief systems and cognitive processes which involving perception and reasoning ability. Hence, a theoretical approach that is often associated with irrational belief systems of individual is the Rational Emotive Behavioural Therapy (REBT), introduced by Albert Ellis in the mid 1950s.

1.1 ABC Model Based On REBT Approach

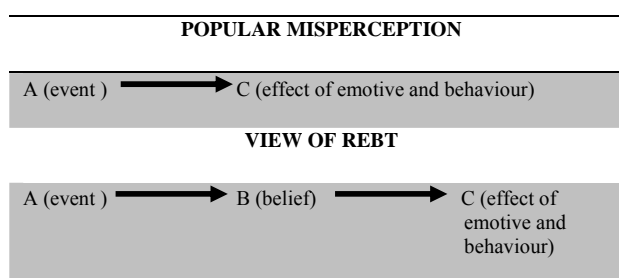
The ABC Model introduced in the REBT approach greatly helps an individual in understanding the causes of stress (Ellis, 1994). The ABC Model explains in a clear and detailed manner about how an individual who has irrational beliefs could be assisted so that he/she could attain rational beliefs by applying certain techniques, especially challenging techniques (Ellis, 2002; Dryden, 1995). The REBT approach holds that, individual stress originates from the individual's irrational beliefs that include ideas or thought processes which are rigid and illogical, not from events experienced by them (Ellis & Bernard, 2006).

Waters (1982) for instance, has listed the examples of common irrational beliefs of adolescents:

1. It would be awful if my peers did not like me. It would be awful to be a social loser.
2. I should not make mistakes, especially social mistakes.
3. It's my parents' fault I am so miserable.
4. I can't help it. That is just the way I am, and guess I'll always be this way.
5. The world should be fair and just.
6. It's awful when things don't go my way.
7. It's better to avoid challenges rather than risk failure.
8. I must conform to my peers.
9. I can't stand to be criticized.
10. Others should always be responsible.

Hence, Ellis (2002) emphasizes that the best way to control the irrational belief is through changing the thinking system and the belief of the individual. REBT therefore, is one of cognitive and behavioural therapy approach which is useful in these modern days to understand the causes of individual stress, specifically among students who are often associated with irrational beliefs. Figure 1 illustrates the interaction components of the ABC Model based on the REBT approach.

Figure 1 Model ABC based on REBT



(Source: Ellis & Bernard, 1983, p.433)

2.0 STATEMENT OF THE PROBLEM

The success of Form One students in enrolling and beginning their term at a Fully Residential School (FRS) does not necessarily ensure they effectively manage their stress. FRS students do not only have to be separated temporarily from their families, but they also need to learn independently and adapt themselves to the new FRS environment, such as academic competition and social interaction. For example, there was an increase statistically

in the presence of students in counseling session during Form One in 2007 (33.9 percent), while in 2008 indicated 35.8 percent and 36.2 percent in 2009 (Counseling Unit of Johor Fully Residential School, 2009). Likewise, academic adjustment was the main dominant problem experienced by many Form One students in one of the FRS school in Johor.

Moreover, failure to manage stress has resulted in the increased cases of Form One students quitting residential school. In Johor FRS itself, there were 42 students (8.45%) who quitting residential school in 2008 compared to 30 students (21.6%) in 2007 (Counseling Unit of Johor FRS, 2009). In addition, a study conducted by Mehat Man (1997) reported that Form One students who had just started schooling at FRS experienced overall adjustment problems involving academic, social, finance, food and boarding, as well as school facilities. In addition, FRS students were found to face more problems and experienced higher stress level compared to ordinary school students (Shaharizan Shamsuddin, 2009).

Academic adjustment problems related to “anxiety towards examination achievement” and “fear of failure in examination” were chosen by Form One students in FRS as the most disturbing problem (Noran Fauziah Yaakub & Mizan Adiliah Ahmad Ibrahim, 1994). Based on Knaus (2000), the issue of stress has to be given emphasis by school administrators as the negative impact may not only affect the students’ academic performance, but also their process of psychological development.

Based on the REBT approach, the feelings of anxiety and fear are among the types of negative emotional disturbance which are often associated with irrational belief system (Ellis, 1991). Consequently, there is a tendency among Form One students in FRS to think irrationally when experiencing stress. Though some Western studies (Montgomery *et al.*, 2007; Szentagotai & Freeman, 2007; DiLorenzo *et al.*, 2007) have shown that there is a relationship between irrational beliefs and students’ stress, questions on the extent of the applicability of this study in the context of the students in Malaysia, remain unanswered. Based on this need, this study was carried out to identify the extent of the relationship between irrational beliefs and stress, as well as to ascertain the level of irrational beliefs and stress based on gender and the dominant subscales of irrational belief possessed by the students.

■3.0 OBJECTIVES OF THE STUDY

This study aims to achieve the following objectives:

- (1) To identify the level of stress and irrational beliefs of Form One students in Johor FRS based on gender.
- (2) To identify the most dominant subscales of irrational beliefs among Form One students in Johor FRS based on gender.
- (3) To identify whether there is a relationship between irrational beliefs and stress among Form One students in Johor FRS.
- (4) To identify whether there is a relationship between subscales of irrational beliefs and stress among Form One students in Johor FRS.

■4.0 HYPOTHESES OF THE STUDY

Directional hypothesis is used when a researcher is able to predict a specific direction on the results based on past literatures (Fraenkel & Wallen, 2006; Wiersma, 2000). Thus, the hypotheses of this study are as follows:

- H₁: There is a positive significant relationship between irrational belief and stress among Form One students in Johor FRS.
- H₂: There is a positive significant relationship between subscale of demandingness and stress among Form One students in Johor FRS.
- H₃: There is a positive significant relationship between subscale of awfulizing and stress among Form One students in Johor FRS.
- H₄: There is a positive significant relationship between subscale of low frustration tolerance and stress among Form One students in Johor FRS.
- H₅: There is a positive significant relationship between subscale of global evaluation and stress among Form One students in Johor FRS.

■5.0 METHODOLOGY OF THE STUDY

This section discusses the methodology used in the study involving research design, study location, sample, instruments, validity and reliability as well as data analysis.

5.1 Framework of the Study

According to Gay and Airasian (2003), correlational studies determine the degree of strength of relationship that exists between two or more variables. Nonetheless, the correlational studies are not able to explain *causal-effect* relationship between variables and no manipulation of variables occur in the study (Fraenkel & Wallen, 2006). Based on these rationale, correlational studies are the most suitable to be implemented in this study to identify the extent of the relationship between irrational beliefs and their subscales with students’ stress.

Survey method was also employed in this study. The survey method is frequently used in studies to explain attitude, beliefs, opinions and other information (McMillan & Schumacher, 2006; Ranjit Kumar, 2005). Hence, the survey method in this study was meant to identify the level of irrational beliefs and stress as well as the most dominant irrational subscales of the students based on gender.

5.2 Location of the Study

The researcher had chosen FRS in Johor as the location of the study to achieve the objectives of the study. Thus, four FRSS in Johor were selected namely, Sekolah Tun Fatimah (STF), Sekolah Menengah Sains Johor (SMSJ), Kluang, Sekolah Menengah Sains Kota Tinggi (SAKTI) and Sekolah Menengah Sains Sultan Iskandar (SMSSI), Mersing.

5.3 Sample of the Study

Based on Cochran’s (1977) formula in calculating the sample size, a total of 94 respondents were required from the population of 459 students of Form One, first intake session 2010/11 in Johor FRS. Bartlett, Kotrlik and Higgins (2001) state that the basic formula for calculating sample size determination based on Cochran (1977) takes into consideration several main things namely, main variables used in measurement, error estimation and variance estimation.

The researcher thus, opted to choose stratified random sampling using *proportional representation*. The stratified random sampling ensures each sample size that is, school and gender of the students are represented and able to reduce sampling error (Wiersma, 2000). In this study, the researcher required the

number of respondents based on calculation of percentage by gender so that the number of sample studied was proportionate to the total number of population for each FRS in which STF (27 students), SAKTI (23 students), SMSJ (23 students) and SMSSI (21 students).

5.4 Instrument and Reliability

There were three main sections in the questionnaire; Section A consisted of the students' biodata while Section B focused on Students' Beliefs Questionnaire (SBQ) containing 60 items to measure students' irrational beliefs based on five point Likert scale. Reliability analysis using *Cronbach alpha* showed a high reliability coefficient at .92. Each subscale of irrational beliefs (demandingness, awfulizing, low frustration tolerance and global evaluation) obtained the reliability coefficients ranging from .72 to .81.

Section C of the questionnaire emphasized on Students' Stress Questionnaire (SSQ) comprising 45 items to identify the extent of students' stress level based on stress events frequently experienced by students living in FRS. The reliability coefficients value of SSQ was also high at .90. Overall, both SBQ and SSQ have an acceptable reliability value in research. This is in accordance with Fraenkel and Wallen (2006) that the coefficient of reliability of measurement tools which can be considered reliable is at least .70 for research purposes.

5.5 Data Analysis of the Study

Data were analyzed using descriptive statistics in which the findings were tabulated in the forms of tables showing frequency, percentage and mean score for the level of irrational beliefs and stress, as well as the most dominant irrational beliefs subscales based on gender. Moreover, Pearson correlation test was employed to examine the relationship between irrational beliefs / subscales of irrational beliefs with stress of the respondents. Data obtained were analyzed using computer software, namely *Statistical Packages for the Social Sciences* (SPSS/PC+Windows).

6.0 FINDINGS OF THE STUDY

This section describes the findings of descriptive and inferential statistical analysis with reference to the objectives of the study.

6.1 Respondents' Demographic Information

Table 1 shows the demographic information of the respondents based on gender according to each FRS. Through stratified random sampling, a total of 94 respondents of Form One students in Johor FRS were involved in the study, comprising 33 male students (35.1%) and 61 females (64.9%). All respondents were Malays

Table 1 Respondents' demography based on gender in Johor FRS

FRS	Male		Female		Total	
	n	%	n	%	n	%
STF	-		27	(44.3)	27	(28.7)
SAKTI	11	(33.3)	12	(19.7)	23	(24.5)
SMSJ	12	(36.4)	11	(18.0)	23	(24.5)
SMSSI	10	(30.3)	11	(18.0)	21	(22.3)
Total	33	(35.1)	61	(64.9)	94	(100.0)

6.2 Levels of Irrational Beliefs of the Respondents Based on Gender

Table 2 shows the analysis of irrational beliefs of the respondents based on gender. For males respondents, 27 of them (81.8%) had moderate irrational beliefs and only six (18.2 %) possessed high level. Similarly, 51 female respondents (83.6%) had a moderate level of irrational beliefs, while 10 (16.4%) of them had a high level. In conclusion, the majority of the respondents (78 students or 83.0%) belonged to the moderate level of irrational beliefs and only 16 students (17.0%) belonged to the high level.

Table 2 Levels of irrational beliefs based on gender

	Levels of Irrational Beliefs						Total	
	Low		Moderate		High		f	%
	f	%	f	%	f	%		
Male	-		27	(81.8)	6	(18.2)	33	(100.0)
Female	-		51	(83.6)	10	(16.4)	61	(100.0)
Total	-		78	(83.0)	16	(17.0)	94	(100.0)

6.3 Stress Level Based on Gender

Table 3 highlights the analysis results of stress level based on gender. From the findings, 26 male respondents had moderate stress level (78.8%), six of them were highly stressed (18.2%) and only one of them had low level of stress (3.0%). Meanwhile, 44 female respondents (72.1%) belonged to the moderate level, followed by two respondents (3.3%) of the low level. Fifteen of the females (24.6%) had a high level of stress. Overall, most of the respondents (70 students or 74.5%) had a moderate level of stress, followed by 21 students (22.3%) having a high level of stress and only three students (3.2%) were not stressful.

Table 3 Levels of stress based on gender

	Levels of Stress						Total	
	Low		Moderate		High		f	%
	f	%	f	%	f	%		
Male	1	(3.0)	26	(78.8)	6	(18.2)	33	(100.0)
Female	2	(3.3)	44	(72.1)	15	(24.6)	61	(100.0)
Total	3	(3.2)	70	(74.5)	21	(22.3)	94	(100.0)

6.4 The Most Dominant Subscales of Irrational Beliefs of the Respondents Based on Gender

Table 4 illustrates the detailed analysis of mean score of subscales of irrational beliefs of the respondents based on gender. As shown in the table, the male respondents (M=53.0) and females (M=53.4) obtained the highest mean score for subscale of demandingness compared to other subscales of irrational beliefs.

Table 4 Mean score of subscale of irrational beliefs based on gender

Subscales	Male	Female
	Mean (SD)	Mean (SD)
Demandingness	53.0 (5.99)	53.4 (6.93)
Awfulizing	51.3 (6.66)	51.9 (6.80)
Low frustration tolerance	47.6 (7.14)	47.4 (5.75)
Global evaluation	48.0 (6.70)	46.2 (6.77)

6.5 Relationship between Irrational Beliefs and Stress of the Respondents

Table 5 shows the relationship between irrational beliefs and stress of the respondents. Pearson Correlation analysis showed that Pearson correlation 'r' for both variables was .63. This indicates that there was a positive moderate relationship between both variables in which if the irrational beliefs were high, the stress would be high or vice versa. Meanwhile, significant level, $p = .000$ obtained was lower than the significant level determined, at .05 as shown in table 5. Thus, the hypothesis (H_1) which stated that there was a positive significant relationship between irrational beliefs and stress among the respondents was acceptable at α level of .05.

Table 5 Relationship between irrational beliefs and stress

Variable Relationship	r	p
Irrational beliefs and stress	.63	.000*

Significant at level $p \leq .05$

6.6 Relationship between Subscales of Irrational Beliefs and Stress of the Respondents

Table 6 illustrates the analysis of the relationship between subscales of irrational beliefs and stress of the respondents. The findings of the study revealed that there was a significant relationship between all the subscales of irrational beliefs and stress. Pearson correlation analysis showed that demandingness ($r = .34$) and global evaluation ($r = .38$) obtained low correlation coefficient. As shown in table 6, awfulizing ($r = .62$) and low frustration tolerance ($r = .64$) obtained moderate correlation coefficient. Likewise, significant level, $p = .000$ obtained for all the subscales was smaller than the determined significant level, that was .05. Thus, the hypotheses (H_2 to H_5) which stated that there was a positive significant relationship between each subscale of irrational beliefs (demandingness, low frustration tolerance, awfulizing and global evaluation) and stress among the respondents was accepted at α level of .05.

Table 6 Relationship between subscales of irrational beliefs and stress

	Stress	
	r	p
Demandingness	.34	.000*
Awfulizing	.62	.000*
Low frustration tolerance	.64	.000*
Global evaluation	.38	.000*

Significant at level $p \leq .05$

7.0 DISCUSSION, IMPLICATION AND SUGGESTIONS

The discussion involves the findings based on inferential and descriptive statistics implemented in the study.

7.1 Levels of Irrational Beliefs Based on Gender

The finding which revealed that the moderate level of irrational beliefs existed among the respondents was in line with the finding of the previous study conducted by Namir Hassan Mohammad (2002) which obtained the moderate level of irrational beliefs among the students studied. However, this finding was contradictory to the finding of Marcotte (1996) which obtained high irrational beliefs among adolescents who experienced high level of depression. Data analysis based on gender portrayed majority of the male and female respondents had a moderate level of irrational beliefs.

In particular, the findings of the study have given insights that most male and female respondents have a tendency to think flexibly, not extreme, in logical manner, based on reality as well as can help them to achieve their goals as stated by Dryden and Neenan (2004). In other words, the respondents are still able to think rationally when facing a negative situation in their lives, especially at FRS. The respondents categorized as normal students are still able to function effectively in their daily lives even when facing problems.

Furthermore, the findings of the study pointed out that there were still male and female respondents who had a high level of irrational beliefs. Instead, they engage in a thinking process which is illogical and inconsistent with the reality when they face any negative situation at FRS. Based on the REBT approach, irrational beliefs were formed at the initial stage of learning through illogical learning either exposure from parents or cultural influence (Adomeh, 2006).

According to Walen, DiGiuseppe and Dryden (1992), since irrational beliefs cannot be proven empirically, these beliefs may produce false conclusions based on inaccurate assessment of the situation experienced by individual. Hence, if the respondents were continuously having irrational beliefs, this would result in maladaptive behaviour, school failure, and relationship problems (Lupu & Iftene, 2009). Moreover, the effects of having irrational beliefs might hinder someone from achieving the goal and well-being in his/her life (Ellis *et al.*, 1997). In short, the findings of this study have clearly shown that most of the male and female students of Form One at Johor FRS have the same level of irrational beliefs, that is, moderate followed by high level.

7.2 Level of Stress Based on Gender

Most respondents (74.5%) obtained a moderate level of stress as opposed to 22.3% respondents who belonged to the high level and only 3.2% was at the low level. The different levels of stress obtained in this study supports the claim by Bernard (1990) that children or adolescents of the same age would experience different emotional and behavioural levels. The findings of this study support the statements by Banks (2006) and Silvergrade *et al.* (2001) that students are prone to be exposed to stress.

Nevertheless, the findings are contradictory to Namir Hassan Mohammad (2002), which found that students had low stress level, whereas Pennebaker (1997) states that students normally experience stress at the beginning of the semester. This was probably due to the time factor that during data collection period, the presence of the researcher at the FRS contributed to the adaptation of the respondents, mentally and emotionally.

Furthermore, analysis of stress based on gender showed that the majority of the male and female respondents belonged to the

moderate level of stress. This finding was contrary to the Boelen *et al.* (2004) and Marcotte (1996) in which female students had a higher level of stress compared to males. Indirectly, the finding of this study has indicated that a large number of the respondents are still able to control their stress and have the ability to deal with various issues and challenges while at FRS. Ellis *et al.* (1997) claim that positive stress seen in a positive manner is able to motivate an individual in order to achieve maximum personal potential. Obviously, most respondents who obtained the moderate level had the tendency to face stress positively while residing at FRS.

Nonetheless, the findings showed that there were still male and female respondents who obtained high stress level. This indicates that there are still respondents who are unable to control their stress when facing a negative situation at FRS. According to Noran Fauziah Yaakub and Mizan Adiliah Ahmad Ibrahim (1994), being separated from their families and having to manage themselves on their own while at FRS have probably created adverse psychological effects on the students. These, if not managed effectively could lead to severe negative emotion and affect their thinking process and academic performance or social interaction with their teachers and peers (Zionts, 1996; Bernard, 1990; Vernon, 1989). To sum up, in this study, the moderate level of stress dominated a large number of respondents of both genders, followed by the high level and finally, the low level.

7.3 The Most Dominant Subscales of Irrational Beliefs of Respondents Based on Gender

The findings demonstrated both groups of respondents, comprising males and females had the highest mean score for that subscale of demandingness as opposed to other irrational beliefs subscales. This is in line with the findings of Marcotte (1996) which pointed out that there was an increase in demandingness subscale on oneself when reaching adolescent age. However, there was no significant differences of mean score between male respondents ($M=53.0$) and females ($M=53.4$) for the subscale.

Dryden and Neenan (2004) claim that, demandingness is a belief or a rigid idea in which a person ultimately will put emphasis an event or situation which must or must not occur in their lives. Usually, demandingness will be expressed verbally either on oneself, other people and other living situations through the use of words such as, “should” and “must” occur or vice versa which leads to an individual having distress (DiLorenzo *et al.*, 2007; Ellis, 1991). For instance, among the examples of the most dominant items of demandingness subscale possessed by most respondents were “*Teacher must show good teaching techniques which are able to attract students all the times*”, and followed by “*I must always show academic excellence*”.

This seems to indicate that there is a tendency among the male and female respondents to place importance on the rigid idea that an event either must occur or it must not occur in their daily living at FRS. Hence, the high demand of the respondents from the aspects of academic, social interaction, personal, living environment at FRS and many others might cause the respondents to have the tendency to think of rigid ideas and possess irrational beliefs. Thus, if the respondents still possess these irrational beliefs, they will always be exposed to any form of emotional disturbance though they might gain what they desired from the demandingness. In brief, the findings of this study have clearly shown that demandingness is the most dominant subscale of male and female respondents.

7.4 Relationship between Irrational Beliefs and Stress

The findings of the study showed that there was a significant positive relationship between the irrational beliefs and the stress of respondents. This indicates that when irrational beliefs of the respondents increase, the stress will also increase or vice versa. This finding supports the findings of Lupu and Ifene (2009), DiLorenzo *et al.* (2007), Montgomery *et al.* (2007), and Szentagotai and Freeman (2007) which also showed that there was a significant relationship between both variables. Also, the finding is also consistent with the finding of DiLorenzo *et al.* (2007) and Boelen (2004) which pointed out that all subscales of irrational beliefs had direct relationship with the stress of the respondents.

In terms of relationship between subscales of irrational belief and stress, the findings demonstrated that low frustration tolerance level had the highest level of significance on stress. According to Dryden and Neenan (2004), low frustration tolerance beliefs are extreme ideas stem from the demand that things must not be as frustrating or uncomfortable as they are. To illustrate, among the most dominant items of low tolerance frustration subscale belonging to most respondents was, “*I can't stand when people look down on my ability in anything*”. This shows that irrational beliefs with regard to difficulties in enduring oneself when facing negative situation is also correlated with experienced stress.

This was followed by the subscale of awfulizing which belonged to the second highest subscale in correlation with stress. Dryden and Neenan (2004) claim that, awfulizing beliefs are extreme ideas derive from the demand that thing must not be bad as they are. For instance, “*It's awful if I couldn't get satisfactory marks in the exam*”. This finding supports the findings of Noran Fauziah Yaakub and Mizan Adiliah Ibrahim (1994) who found that academic problems were one of the many which haunted Form One students in FRS.

In relation to the weakest relationship between demandingness and stress, the finding was in line with the results found by Koffler (2005) which states that there was still a lack of empirical evidence in support of the notion that demandingness was the main source of emotional disturbance among individuals. For example, studies done by O'Kelly, Joyce and Greaves (1998) reported that the relationship between demandingness and measurement of emotional disturbance was lower than awfulizing, low frustration tolerance level and overall assessment. However, this finding is in contrast with the study of DiLorenzo *et al.* (2007) which obtained the highest significance level of relationship between subscale of demandingness and respondents' stress.

On the whole, the findings of the study have given insights that students who possess high irrational beliefs are easily exposed to stress and are more likely to experience negative effects as opposed to students who have low irrational beliefs. This is in line with the claim made by Ellis (2002) that stress experienced by an individual has relationship with their belief system towards an event experienced. Further, Ellis (1991) emphasizes that significantly different stress situation has relationship with the perceptions and cognition of individuals towards the situation. The findings obtained support the claim of Bernard *et al.* (1983) that the best way to understand human behaviour and emotions is through analyzing cognitive structural characteristics, that is, the belief systems and cognitive processes involving perceptions and reasoning ability.

Thus, based on the findings obtained, it is clearly shown that stress among the respondents does not exist alone. According to Palmer and Dryden (1994), stress exists due to perceptions and responses of the people experiencing stress themselves. This means that the extent of the level of stress experienced by the

respondents towards an event occurring at FRS has relationship with their belief system or cognitive assessment towards an occurring event. As the stress experienced by an individual is due to the irrational beliefs, any reduction of irrational beliefs may help to reduce stress (Ellis, 1991). Hence, Corey (1986), suggests that if individuals succeed in changing their irrational beliefs to rational beliefs, the effects of new feelings will be formed as a replacement of the negative feelings experienced.

In conclusion, the findings of the study on the aspect of relationship of both variables have supported the REBT approach, in particular the ABC Model which demonstrated that emotional disturbance or stress experienced by an individual associated with the belief system of an event in one's life (Ellis & Bernard, 2006). The ABC Model has provided a basis for understanding the concept of irrational beliefs and emotional disturbance in REBT approach (Ellis, 1991).

8.0 IMPLICATIONS AND SUGGESTIONS

This section discusses the implications of the study based on the findings.

8.1 Implications

Specifically the findings of this study have theoretical implications. For instance, the findings have created significant awareness of the development of knowledge, in particular, the contribution to cognitive behavioural theory (REBT) on psychological stress endorsed by Ellis (1991). Stress experienced by the respondents of the study clearly has relationship with their belief system. Hence, the findings of this study supports the components of ABC Model which is the foundational explanation of irrational beliefs as well as individual emotional disturbance in the REBT approach (Ellis & Dryden, 1997).

Equally important, for practical applications, the findings which demonstrated the moderate level of irrational beliefs and stress of the respondents and the existence of the relationship between both variables of study, have given implications on FRS counselors in their efforts to plan and improve intervention strategies for students through the counseling services in school. Though the findings showed that most students are at the moderate level of stress and irrational beliefs in which they have a tendency to think rationally and also able to function effectively in their daily lives, the school authorities ought to be proactive and undertake all necessary precautions in handling students' stress based on cognitive approach in order to alleviate the problem. This is supported by Vernon (2002) that adolescents who will face many hurdles as a result of their inability to manage their feelings.

8.2 Recommendations

Based on the findings, discussion and implications of the study, the following are several recommendations put forward to certain parties as well as recommendations for future research.

- (1) Despite the fact that the findings displayed a moderate level of irrational beliefs and stress among respondents, together with significantly moderate relationship of both variables, the importance of the implications has to be given emphasis by the school authorities. The school authorities have to pay serious attention to students' stress issue in continuum. This is a vital as the findings found that there were Form One students who were having high level of irrational beliefs and stress. Additionally, the

subscale of demandingness identified as the most dominant among students is also the most important subscale of irrational beliefs linked to individual psychological disturbances based on the REBT approach. With other purposes, there is a tendency of respondents who are absolutely concerned on the rigid idea that an event either must occur or vice versa in their daily living in FRS. However, other subscales of irrational beliefs have to be controlled as they might also cause disturbances (David *et al.*, 2002).

- (2) The school, specifically the FRS counselors are recommended to use measurement tools of Students' Beliefs Questionnaire and Students' Stress Questionnaire in which their validity and reliability have been proven in order to identify students who require counseling intervention based on their levels of irrational beliefs and stress as well as the most dominant subscales obtained.
- (3) According to Tollerud and Nejedlo (2004), as there are not many students who meet the counselors for counseling session, hence, the implementation of a development program is a needed in school because it is able to have positive impact on students, in terms of personal development, academic, and career. Thus, the researcher suggests that Form One students of FRS be exposed to awareness and understanding of this matter at the early stage by the counselor in the school, using formal or informal methods, especially on the relationship between irrational beliefs and stress experienced.
- (4) Due to the findings which shows that there exists relationship between irrational beliefs and stress, it is suggested that future research could focus on module development in relation to rational thinking skills which might be implemented on students through preventive programs in order to reduce their irrational beliefs. Vernon (2004) claims that, there is a reduction in irrational beliefs and stress when the contents of the learning based on the REBT approach is applied on both children and adolescents. Likewise, preventive programmes based on REBT will help students to equip themselves with skills which enable them to minimize any future problems (Vernon, 2004a).
- (5) As this study was implemented on Form One students, FRS all over Johor, the findings of this study is not suitable to be generalized to population of other studies unless they have similar characteristics. Thus, it is recommended that future researchers are able to broaden their sample size, not only involving students of FRS from other states, but also on students of daily secondary schools, universities, teachers, parents, workers, or clinical groups. Comparison of educational background, socio-economic status, career, and many others, may shed new lights and arrive at more comprehensive conclusions.
- (6) Finally, advanced research may take into consideration other variables more widely by looking at relationships with irrational beliefs, especially using correlational studies. For instance, a researcher may identify the extent of relationship between irrational belief and self-concept, academic performance, career maturity, motivation, burnout, problem-solving strategy or other relevant variables in order to obtain comprehensive and variety of findings.

9.0 CONCLUSION

Rational belief system is clearly an important psychological construct in education, especially in helping students manage their stress level effectively. The ABC Model introduced in the REBT approach may assist the researcher in analyzing and identifying irrational beliefs of a student experiencing stress. Essentially, the findings of the study have shown that a large number of Form One students in Johor FRS were having a moderate level of irrational beliefs and stress as well as subscale of demandingness as the most dominant subscale of irrational beliefs based on gender. Equally important, significantly positive relationship between irrational beliefs and stress was found. In conclusion, the REBT approach is a cognitive orientation taking in the form of psychoeducational multimodal in which REBT is not only focusing on cognitive aspect, but also on emotive and behavioural aspects to help change an individual experiencing emotional disturbance or stress (Ellis et al., 2003; Ellis & Bernard, 1985)

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