

## **Female Adolescent Prostitutes' Cognitive Distortion, Self-Esteem and Depression**

**Nasir, R.<sup>1\*</sup>, Zamani, Z. A.<sup>1</sup>, Khairudin, R.<sup>1</sup>, Ismail, R.<sup>2</sup>, Yusoooff, F.<sup>1</sup> and Zawawi, Z. M.<sup>1</sup>**

*<sup>1</sup>School of Psychology and Human Development,*

*<sup>2</sup>School of Social Development and Environmental Studies,*

*Faculty of Social Sciences and Humanities,*

*Universiti Kebangsaan Malaysia,*

*43600 Bangi, Selangor, Malaysia*

*\*E-mail: rohanyn@gmail.com*

### **ABSTRACT**

This study investigated the relationship between cognitive distortion, self-esteem and depression among female adolescents who were involved in prostitution in Malaysia. Subjects for this study were 42 adolescents aged between 15 and 20 years old. Four research instruments were used in this study; a set of questions for the demographic background of the subjects, Briere's Cognitive Distortion Scale (CDS), Rosenberg Self-Esteem Scale (RSES) and Reynolds Adolescent Depression Scale (RADS) for measuring cognitive distortion, self-esteem and depression, respectively. Data for this study were analyzed by using Pearson Correlation. Results of this study revealed that there was a significant negative correlation between cognitive distortion and self-esteem ( $r = .530, p < 0.001$ ), a negative significant correlation between depression and self-esteem ( $r = .522, p < 0.001$ ), and a significant positive correlation between cognitive distortion and depression ( $r = .712, p < 0.001$ ). Implications for counselling are also discussed.

**Key words: Adolescents, cognitive distortion, depression, prostitution, self-esteem**

### **INTRODUCTION**

Police raids on massage parlours and karaoke lounges are getting more frequently these days because these places are known to have disguised activities related to prostitution in the forms of health massages and karaoke. According to Lin (1998), more women involved in prostitution are being detained by the police. Even though most of the women who were caught by the authorities are foreigners, the number of local women involved in prostitution has also increased. The statistics has also shown that female adolescents' involvement in prostitution is on the rise (Lin, 1998; CATW-AP). This trend is worrying and of public concern.

Malaysia, being a Muslim country, is very concern about this particular problem because it gives a very negative effect on the image of the country. The involvement of adolescents in prostitution is a bad reflection on the kind of adult population and human capital that the country is going to have in the future. The major concerns of the public are the moral, religious and legal aspects. Of late, the physical and psychological health of the prostitutes has become an increasing concern for the public and the government, especially when it involves adolescents. The community as a whole is beginning to wonder whether there is any psychological explanation to this problem.

---

\*Corresponding Author

At the local level, there is nothing much that we know about the psychological aspects of the adolescents who are involved in prostitution. Internationally, there are many studies on adolescents but not many have focused on the psychology of adolescents who are involved in prostitution. In some Malaysian studies such as the one by Lin (1998) focused on the social, legal and historical aspects of prostitution. Very few have attempted to look at the phenomenon from the psychological perspective. It has been widely accepted that the economic reason may be one of the few important factors that contribute to women being involved in prostitution (Lin, 1998). The other factors may be psychological and social (cf. Marton *et al.*, 1993; Sheeber *et al.*, 2001). As such, the primary focus of this study was to look at the relationships between cognitive distortion, self-esteem and depression among the female adolescents who are involved in prostitution in Malaysia. This study also attempted to relate the findings with these adolescents' family background.

Depression is very common among adolescents, whereby it is reported to affect 5 to 8 percent of them (Son 2000). Depression is a common mental disorder that comes in the forms of depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration (World Health Organisation, 1992). Depressive illness often interferes with normal functioning. Often, a combination of genetic, psychological and environmental factors is involved in the onset of depression. Those people who have low-self esteem can be more prone to depression as well (National Institute of Mental Health Depression, 2004).

During the last twenty years, studies have reported high rates of depressive symptoms in adolescents (see for instance, Angold, 1988; Fleming & Offord, 1990; Kovacs *et al.*, 1984; Petersen *et al.*, 1993; Wichstrom, 1999). High rates of depression and post traumatic stress disorder (PTSD) were also reported among sex workers (Farley & Barken, 1998). Depression has been closely associated with delinquent behaviour among adolescents

(Weisner & Windle, 2006; Brendgen *et al.*, 2000). Adolescents who are depressed engage in violent and non-violent crimes, as well as promiscuous sexual behaviour (Naylor, 2008).

Theories proposing cognitive and learned-helplessness models of depression have stressed that maladaptive cognitive patterns are significant features in the development and maintenance of depressive symptoms (Tems *et al.*, 1993). Cognitive distortion is a symptom that is commonly observed among depressed adults; however, adolescents who are depressed have significantly greater cognitive distortion than non-depressed adolescents (Marton *et al.*, 1993). Cognitive distortion is an assumptions made on oneself, others, the environment, and the future. When these assumptions or attributions are inaccurate, unnecessarily negative, and interfere with optimal functioning, they will result in dysfunctional thinking patterns. Cognitive distortions are commonly associated with low self-esteem that is the tendency to blame oneself for negative events beyond one's control, a general sense of helplessness regarding unwanted events in one's life (Briere, 2000). Research on varieties of population has indicated a relationship between cognitive distortion and depression (Marton *et al.*, 1993; Schroeder, 1994; Maxwell *et al.*, 1997; Tirch, 2001; Roxburgh *et al.*, 2008) and the prevalent of other mental health problems (Alegria *et al.*, 1994; Gilchrist *et al.*, 2005).

Koydemir and Demir (2008) found a negative correlation between cognitive distortion and self-esteem. Self-esteem is also a predictor of depressive symptoms when negative thinking (cognitive distortion) is a strong factor (Naylor, 2008). Harter and Whitesell (1996) also found that negative attribution style and low self-esteem are associated with depressive symptoms and clinical depression across age, gender and sample type. Meanwhile, the results from a study by Krotenberg (2003) revealed that the three variables, self-esteem, cognitive distortion and depression were correlated. On the contrary, self-esteem was observed to be negatively correlated with cognitive distortion and depression, while depression and cognitive

distortion were positively correlated. The study also found that there was a difference in cognitive distortion based on the respondents' ethnic background. Similarly, depressed children showed more cognitive errors, endorsed more negative attributions, and had lower self-esteem than those of the control groups when first hospitalized (Tems *et al.*, 1993).

## METHODOLOGY

### *Sample*

The subjects for this study consisted of 42 Malaysian adolescents involved in prostitution. They were chosen to participate in this study through convenient sampling due to the nature of the participants (difficulty of obtaining prostitutes as respondents). They were from all over Malaysia; the police lockups, prison, rehabilitation centres, massage parlours and other places/streets where they had worked.

For the subjects who were in rehabilitation centres, prison and police lock-ups, data collection could only begin after obtaining the necessary official permits from the social welfare office, the prison departments, and the police headquarters, where they were detained or rehabilitated. The subjects from the massage parlours were contacted through the owners of the parlours, while the street prostitutes were obtained from the informants. The subjects were guaranteed full anonymity. It is crucial to note that consents from the subjects were obtained before data collection was carried out. All the respondents, including the pimps and other informants, were paid to participate in this research. For convenience and to avoid unnecessary problems, the questionnaires were distributed to the subjects in groups, based on where they lived or worked. As for those from the massage parlours and other places of work, the research instruments were distributed individually. The subjects with no reading ability were assisted by the research assistants to help them read and fill up the questionnaires.

Due to the sampling method, some inequalities were found in the demographic characteristics of the subjects. Ethnic and

religious distributions were unbalanced, with the majority of them were Malays and Muslims (almost all Malays in Malaysia are Muslims). As for age, most of the subjects were in the 15 and 20 years age group. Most of the subjects just managed to complete high school education.

In this study, fathers' and mothers' incomes were used as indicators of the respondents' socio-economic status (SES). SES was referred to the Statistic Department of the Economic Planning Unit 2010. More than 65% of the subjects were at the lowest socio-economic status, as indicated by their fathers' and mothers' monthly incomes of less than RM1000 per month. In terms of the size of the family of origins, 45.3% came from large families with more than 5 siblings.

### *Location of the Study*

The study was conducted throughout Malaysia. This covered various states including Wilayah Persekutuan, Kelantan, Selangor, Negeri Sembilan, Sabah, Sarawak, Perak and Johor.

### *Instrumentation*

Four instruments were used in this research, namely, a set of questionnaires for the demographic characteristics, Rosenberg's Self-Esteem Scale (RSES) for measuring self-esteem (reliability = 0.92), Cognitive Distortion Scale (CDS) for the assessment of cognitive distortion (reliability = 0.96) and Reynolds' Adolescents Depression Scale (RADS) for measuring symptoms of depression (reliability = 0.90). The RSES, which was developed by Rosenberg (1965), contains 10 items; the CDS developed by Briere (2000) contains 40 items, while RADS developed by Reynolds (1986) contains 30 items. The RSES is a widely used measure of global self-esteem designed to assess the extent to which individuals consider themselves worthy and hold a positive attitude towards themselves. Each item of the RSES was rated on a four-point Likert scale, with higher scores indicating higher self-esteem. The total score is between 10 and 40. Meanwhile, the CDS covered five dimensions of cognitive distortion: self-criticism, self-blame, helplessness, hopelessness

and preoccupation with danger. Each item was rated on a five-point Likert scale, with higher scores indicating greater cognitive distortion. Each dimension contains eight items. The total score for the CDS is between 40 and 200, and for each dimension, the total score is between 8 and 40. As for the RADS, each item was rated on a four-point Likert scale, with higher scores indicating more symptoms of depression. The total score for RADS is between 30 and 120.

*Data Analysis*

Descriptive statistics were used for the demographic characteristics of the subjects. Meanwhile, Pearson correlation was used to determine the relationship between the three variables, namely, self-esteem, cognitive distortion and depression.

**RESULTS**

*Descriptive Analysis*

Table 1 presents the number of subjects by age, educational level, ethnicity and religious background, while Table 2 depicts the subjects' family background which includes fathers' income, mothers' income and the number of siblings.

TABLE 1  
Subjects by Age, Educational Level,  
Ethnicity and Religious Background

Demography	Frequency	%
Age in years		
15	4	9.5
16	3	7.1
17	6	14.3
18	9	21.4
19	8	19.0
20	12	28.6
Educational Level		
Never Been to School	2	4.8
Primary School	4	9.5
Secondary School	31	73.8
Certificate/Diploma	4	9.5
No Information	1	2.4

Table 1 (continued)

Ethnic group		
Malay	16	38.1
Chinese	8	19.0
Indian	1	7.1
Kadazan	10	23.8
Iban	5	11.9
Religion		
Muslim	19	45.2
Christian	13	31.0
Buddhist	8	19.0
Hindu	2	4.8
Total	42	100.0

TABLE 2  
Respondents' Family Background

Family Background	Frequency	%
Father's Income		
Below RM500	11	27.5
RM501-RM1000	16	38.1
RM1001-RM1500	1	2.4
RM1501-RM2000	1	2.4
RM2001-RM2500	1	2.4
No Information	12	28.6
Mother's Income		
Below RM500	8	19.0
RM501-RM1000	8	19.0
No Information	26	61.9
No. of Siblings		
Only Child	2	4.8
2-4 persons	21	50.0
5-7 persons	16	38.1
8-10 persons	2	4.8
11 and above	1	2.4
Total	42	100.0

The respondents were asked how they perceived the relationship between their mothers and fathers. It was found that 19% had said that the relationships between their parents were not happy, even though the parents were still married and living together. 9.5% said that their parents were divorced, while 16.7% said their fathers had died (see Table 3). In terms of family relationship, as shown in Table 4, only 35.7% said that their families encouraged problem sharing, 14.3% said that their parents were overly controlling, 35.7% said their parents gave them too much freedom, while the rest (14.3%) said that the families were inconsistent in terms of their treatment towards them. Several

indicators shown in Tables 3 and 4 lead one to believe that the family relationship was not strong and that 35.7% of the parents did not exercise any control (i.e. giving them too much of freedom), too controlling or inconsistent in their parenting styles.

TABLE 3  
Respondents' Perception of Parents' Relationship

State of Relationship	Frequency	%
Married – Happy	23	54.8
Married– Not Happy	8	19.0
Divorced	4	9.5
Father Died	7	16.7
Total	42	100.0

Most of the subjects came from the group with the lowest socio-economic status, as indicated by their fathers' and mothers' incomes. The number of siblings in their families of origin was also big (Statistic Department for the Economic Planning Unit, 2010). Meanwhile, their educational level is generally low, whereby most of them just managed to complete secondary/high school. The data on the families showed that the family relationship was rather weak and most parents did not exercise any control (i.e. giving them too much of freedom), too controlling, or inconsistent in their parenting styles.

TABLE 4  
Family Relationship

Family Relationship	Frequency	%
Encouraged Problem Sharing	15	35.7
Overly Controlled	6	14.3
Too Much Freedom	15	35.7
Inconsistent	6	14.3
Total	42	100.0

*Inferential Analysis*

Following are the results of the inferential analysis.

TABLE 5  
Relationship between Cognitive Distortion and Depression

Construct	r
Cognitive Distortion	.712**
Depression	

\*\**p* < 0.001

Table 5 presents the relationship between cognitive distortion and depression. The table shows that there is a significant positive correlation between cognitive distortion and depression among the adolescent prostitutes ( $r = .712, p < 0.001$ ), indicating that when cognitive distortion is high, depression is also high.

TABLE 6  
Relationship between Cognitive Distortion and Self-esteem

Construct	r
Cognitive Distortion	-.530**
Self-esteem	

\*\**p* < 0.001

Table 6 presents the relationship between cognitive distortion and self-esteem. It was found that there is a significant negative correlation between cognitive distortion and self-esteem among the adolescent prostitutes ( $r = - .530, p < 0.001$ ), suggesting that when cognitive distortion is high, self-esteem is low, and vice versa.

TABLE 7  
Relationship between Depression and Self-esteem

Construct	r
Depression	-.522**
Self-esteem	

\*\**p* < 0.001

Table 7 shows that there is a negative significant relationship between depression and self-esteem among the adolescent prostitutes

( $r = -.522, p < 0.001$ ), revealing that when depression is high, self-esteem is low, and vice versa.

## DISCUSSION AND IMPLICATIONS

The results showed that there was negative correlation between cognitive distortion and self-esteem, suggesting that the more distorted their thinking was, the lower their self-esteem. This study also showed that there was a negative correlation between depression and self-esteem, and this indicated that the more depressed they were, the lower their self-esteem. The findings of this study also showed that cognitive distortion and depression were positively correlated. In other words, the more distorted their thinking, the more depressed they would become, and vice versa. Bromberg's (1997) radical feminist theory suggests that the degradation of women can be viewed in three ways: one, an activity is degraded so that it affirms and sustains the male power dynamic; two, the actor is degraded as a labourer in Marxist terms; three, the degradation itself is associated with men's perception of a whore. Our findings fit the theory that the prostitutes feel degraded in various ways. The feeling of degradation would explain the reason why the women had low self-esteem and high cognitive distortion.

It was also found that cognitive distortion and depression were positively correlated. This suggested that the more distorted the participants were in their thinking, the more depressed they would become. This finding can be explained by the learned-helplessness theory of depression. Learned helplessness theory is the view that clinical depression and related mental illnesses result from a perceived absence of control over the outcome of a situation (Seligman, 1975). Clearly, when the prostitutes perceived that they were no longer in control of a situation (helplessness or cognitive distortion), they went into major depression. Furthermore, Seligman (1992) argues that there are similarities between the symptoms of depression and helplessness. For example, symptoms of depression, such as a lack of interest in, and pleasure from, almost

all activities, correspond to symptoms of learned helplessness, such as cognitive representation of uncontrollability (Seligman, 1992). Shnek *et al.* (1997) also found similar findings. They discovered that cognitive distortions have no independent effect. Based on this finding, they concluded that cognitive distortions might have caused the feelings of helplessness and low self-efficacy and in this way, they had indirect effects on depression (Shnek *et al.*, 1997). In addition, Farley and Barkan's (1998) study supports our findings that prostitutes experience higher depression than the general population.

The negative correlation between cognitive distortion and self-esteem can be explained in terms of the role cognitive distortion plays in this context. Prostitutes' cognitive distortions could play the roles of psychological defence mechanisms to having low self-esteem. Prostitutes who had low cognitive distortion and low depression were most likely to have high self-esteem. In other words, eliminating distortions and negative thought may actually improve self-esteem and lower depression, and hence, explain the negative correlation between cognitive distortion and depression with self esteem.

Cognitive distortions are inaccurate ways of attending to or conferring meaning on experiences (Barriga *et al.*, 2000). An individual with cognitive distortion perceives things, people and experiences in a distorted manner and differently from other individuals with no cognitive distortion. As such, a person with cognitive distortion may rationalize her immoral behaviour as acceptable and rational. Since cognitive distortion, depression and self-esteem are related, these three problems need to be addressed.

Counselling with spiritual content may be effective in decreasing cognitive distortion, as indicated in the study by Nave (2004). In his study on participants with high scores on all the five dimensions of CDS, Nave found that with spiritual prayer counselling, the participants demonstrated a significant decrease in their cognitive distortion.

Group and individual counselling and workshops for the prostitutes can be conducted in rehabilitation centres and prisons to give them the opportunities to reflect, return to normal life, and reconstruct self-esteem. Workshops with an objective to raise self-esteem were effective, as found by Vianna *et al.* (2006). Counselling using person-centred approach may enable them to pour out their feelings, while cognitive behaviour therapy will be effective in working with their troubled cognitions. McCarthy *et al.* (2008) observed that depressed students who had participated in their study felt that talking to someone was helpful in dealing with depression.

There are ways to reduce prostitution or related activities and among them are prevention through education in schools and public campaigns. School counsellors can play their roles through prevention education and campaigns. Evans *et al.* (2002) suggested school-based prevention activities for the prevention and treatment of depression. Many studies on adolescents have shown that parental support is very important in promoting positive self-esteem and prevention of depression. As such, counsellors should get the cooperation of parents while at the same time parents should be urged to play more active parts in helping their adolescents cope with life pressures and to be sure that they are not lured into immoral activities.

Economic history suggests that vices indulged by consenting adults are not likely to be eradicated by law (Chudakov *et al.*, 2006). Law alone will not be effective in dealing with the phenomenon. As such, an ideal rehabilitation for adolescents who had been involved in prostitution should be holistic, i.e. one that combines counselling, skill training and religious as well as moral education.

Some caveats are in order. The sample of this study was quite small, and thus, caution should be used when the results are to be generalized. In more specific, the study does not truly reflect the characteristics of a substantial majority of the prostitutes as the numbers are relatively small although the data the support the findings on the prostitutes are experiencing

depression, cognitively distorted and have low self-esteem. Despite these limitations, the current study makes an important step towards increasing our understanding on the mental health of the prostitutes in Malaysia. The results have provided evidence on these aspects of mental health as serious issues that warrant public concerns.

## CONCLUSION

The results of this study indicated that there were negative significant correlations between cognitive distortion and self-esteem and depression with self-esteem. It was also found that there was a positive correlation between depression and cognitive distortion.

By distorting their thoughts, the female adolescents involved in prostitution may have justified and rationalized their behaviour but failed to improve their self esteem and reduce their depression due to shame and continuous public rejection. In order to reduce prostitution and to ensure more well-adjusted individuals, a holistic approach to rehabilitation which combines counselling, skill training and religious as well as moral education should be given to these adolescents. In addition, preventive measures may also be taken through education and public campaigns, as well as parents' involvement and support.

## REFERENCES

- Alegria, M., Vera, M., Freeman, D. H., Robles, R., Santos, del C., & M. & Rivera, C. L. (1994). HIV infection, risk behaviours, and depressive symptoms among Puerto Rican sex-workers. *American Journal of Public Health, 84*, 2000–2002.
- Angold, A. (1988). Childhood and adolescent depression: Epidemiological and etiological aspects. *British Journal of Psychiatry, 152*, 601-617.
- Barriga, A. O., Landau, J. R., Stinson, B. L. II., Liau, A. K., & Gibbs, J. C. (2000). Cognitive distortion and problem behaviors in adolescents. *Criminal Justice Journal, 27*, 36-56.

- Brendgen, M., Vitaro, F., & Bukowski, M.W. (2000). Deviant Friends and Early Adolescents' Emotional and Behavioral Adjustment. *Journal of Research on Adolescence* 10(2), 173-189.
- Briere, J. (2000). *The cognitive distortions scale professional manual*. Odessa, FL: Psychological Assessment Resources.
- Bromberg, S. (1997). *Feminist issues in prostitution*. Paper presented at the International Conference on Prostitution at Cal State University, Northridge.
- Coalition Against Trafficking In Women – Asia Pacific (CATW-AP). *Facts and Statistics*. Retrieved from <http://www.catw-ap.org/programs/research-documentation-publications/facts-and-statistics>.
- Chudakov, B., Ilan, K., Belmaker, R. H., & Cwikel, J. (2006). The motivation and mental health of sex workers. *Journal of Sex and Marital Therapy*, 28, 305-315.
- Evans, J. R., Velsor, P. V., & Schumacher, J.E. (2002). Addressing adolescent depression: A role for school counselors. *Professional School Counseling*, 5,(3), 1-14. Academic Source Premier.
- Farley, M., & Barkan, H. (1998). Prostitution, violence and posttraumatic stress disorder. *Women and Health*, 27(3), 37-49.
- Fleming, J. E., & Offord, D. R. (1990). Epidemiology of childhood depressive disorders: A critical review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29, 571-580.
- Gilchrist, G., Gruer, L., & Atkinson, J. (2005). Comparison of drug use and psychiatric morbidity between prostitute and non-prostitute female drug users in Glasgow. Scotland, *Addictive Behaviors*, 30, 1019-1023.
- Harter, S., & Whitesell, N.R. (1996) Multiple pathways to self-reported depression and psychological adjustment among adolescents. *Developmental and Psychopathology*, 8, 761-777.
- Kovacs, M., Feinberg, T. L., Crouse-Novak, M. C., Paulauskas, S. L., Pollock, M., & Finkelstein, R. (1984). Depressive disorders in childhood. *Archives of General Psychiatry*, 41, 643-649.
- Koydemir, S., & Demir, A. (2008). Shyness and Cognitions: An Examination of Turkish University Students. *The Journal of Psychology*, 142(6), 633-644.
- Krotenberg, L. A. (2003). *Cognition and emotions in stereotype threat in African American and Hispanic college students*. (Unpublished Doctoral dissertation). St. John's University (New York). Available on ProQuest Database.
- Lin, L. L. (1998). *The Sex Sector: The economic and social bases of prostitution in Southeast Asia*. Geneva: International Labour Office.
- Luhtanen & Crocker (1992). A Collective Self-Esteem Scale: Self-Evaluation of One's Social Identity. *Personality and Social Psychology Bulletin*, 18(3), 302-318.
- Marshall, W. L., Marshall, L. E., Serran, G. A., & O'Brien, M. D. (2009). Self-esteem, Shame, cognitive distortions and empathy in sexual offenders: their integration and treatment implications. *Psychology, Crime and Law*, 15(2&3), 217-234.
- Marton, P., Churchard, M., & Kutcher, S. (1993). Cognitive distortion in depressed adolescence. *Journal of Psychiatric Neuroscience*, 18(3),103-107.
- Maxwell, T. D., Gatchel, R. J., & Mayer, T. G. (1997). The relationship between cognitive distortion and depression. *Journal of Behavioral Medicine*, 21(2),131-143.
- McCarthy, J., Downes, E., & Sherman, C. (2008). Looking back at adolescents' depression: A qualitative study. *Journal of Mental Health Counseling*, 30(1), 49-68.
- National Institute of Mental Health Depression. (2004). *Depression*. Retrieved on May 5, 2004 from [www.nimh.gov/publicat/depression.cfm](http://www.nimh.gov/publicat/depression.cfm).
- Nave, P. J. (2004). *Developing an effective spiritual model as a tool for facilitating emotional healing*. (Unpublished Doctoral dissertation). Ambridge University, Montgomery, Alabama.
- Naylor, L. P. (2008). Depression in adolescence: depression risk factors, depression effects, depression treatment. *Boston Counseling Therapy*. Retrieved June 10, 2010, from <http://www.thriveboston.com/counseling/depression-in-adolescence-depression-risk-factors>

- Petersen, A. C., Compas, B. E., Brooks-Gunn, J., Stemmler, M., Ey, S., & Grant, K.E. (1993). Depression in adolescence. *American Psychologists*, 48, 155-168.
- Reynolds, W. M. (1986). *Reynolds Adolescent Depression Scale*. Odessa, F. L.: Psychological Assessment Resources.
- Rosenberg, M. (1965). *Society and the adolescents' self-image*. Princeton, N. J. Princeton: University Press.
- Roxburgh, A., Degenhardt, Copeland, J., & Larance, B. (2008). Drug dependence and associated risks among female street-based sex workers in the greater Sydney area, Australia. *Substance Use and Misuse*, 5, 1202-1217.
- Seligman, M. E. P. (1975). *Helplessness: On Depression, Development, and Death*. San Francisco: W. H. Freeman.
- Seligman, M. E. P. (1992). *Helplessness*. New York: Freeman.
- Sheeber, L., Hyman, H., & Davis, B. (2001). Family processes in adolescents' depression. *Clinical Child And Family Psychological Review*, 4, 19-35.
- Shnek, Z. M., Foley, F. W., LaRocca, N. G., Gordon, W. A., DeLuca, J., Schwartzman, H. G., Halper, J., Lennox, S., & Irvine, J. (1997). Helplessness, self-efficacy, cognitive distortions, and depression in multiple sclerosis and spinal cord injury. *Annals of Behavioral Medicine*, 19(3), 287-94.
- Shroeder, R. M. (1994). *The relationship between depression, cognitive distortion and life stress among African-American college students*. (Unpublished Doctoral dissertation). University of North Carolina, Chapel Hill.
- Son, S. E. (2000). Depression in children and adolescents. *American Family Physician*, 62(10), 2297-2310. Retrieved June, 9, 2010, from Academic Search Premier.
- Statistic Department for the Economic Planning Unit (2010). Retrieved from <http://www.epu.gov.my/malaysianeconomyfigures2010>
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & L.W. Austin (Eds.), *Psychology of Intergroup Relations*. Chigago: Nelson-Hall.
- Tems, C. L., Stewart, S. M., Skinner, J. R., Hughes, C. W., & Emslie, G. (1993). Cognitive distortions in depressed children and adolescents: are they state dependent or traitlike? *Journal of Clinical Child Psychology*, 22(3), 316-326.
- Tirch (2001). *An empirical exploration of predictions arising from a cognitive-behavioural model of depressions among persons with spinal cord injury*. (Unpublished doctoral dissertation). Fairleigh Dickinson University.
- Vianna, L. S. C., Bomfim, G. F. T., & Chicone, G. (2006). Self-esteem of raped women. *Rev Latino-am Enfermagem*, 14(5), 695-701.
- Weisner, M., & Windle, M. (2006). Young Adult Substance Use and Depression as a Consequence of Delinquency Trajectories During Middle Adolescence. *Journal of Research on Adolescence*. 16 (2), 239-264.
- Wichstrom, L. (1999). The emergence of gender difference in depressed mood during adolescence: The role of intensified gender socialization. *Developmental Psychology*, 35, 232-245.
- World Health Organisation (WHO) (1992). *Environmental Health Criteria 134 - Cadmium International Programme on Chemical Safety (IPCS)* [Monograph]. Retrieved from <http://www.bvsde.ops-oms.org/bvsacg/e/cd-cagua/guias/b.parametos/4.BasTox/IPCS/017.cadmioEHC/01.cadmio134EHC.pdf>