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# Full Length Research Paper

# Psychological profile of Malaysian female prisoners

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Females' pathways to criminality are significantly different from the male. The types of crimes committed by female, their level of violence, and their background are shown to be very different than those of male. Therefore, to make a significant impact on the female offender and her criminal lifestyle, this study aims to identify the psychological profile of female prisoners in a Malaysian prison. The objectives are to identify types of psychological problems among female prisoners, and to compare the differences between groups. A cross-sectional study was designed using a psychological instrument to collect the data. Two groups of participants were formed; the study group consists of female prisoners, and the control group consists of free-living females. Descriptive and statistical analyses were conducted. The findings demonstrated that female prisoners have higher occurrences of chemical abuse, antisocial tendency, thought disturbance, and self-depreciation compared to the free-living females. Chemical abuse and antisocial tendency were found to be significantly higher among Malaysian female prisoners, whereas thought disturbance and self-depreciation were significantly higher among non-Malaysian female prisoners. It can be concluded that the psychological profile of Malaysian female prisoners are consisted of four factors, which are chemical abuse, antisocial tendency, thought disturbance, and self depreciation.

**Keyword:** Female prisoners, psychological profile, chemical abuse, antisocial tendency, thought disturbance, self depreciation.

#### INTRODUCTION

Female prisoners have always been a minor subject in research and study. For a very long time, theory and research relating to crime had been focusing on the male counterpart (Covington, 2002; Gunter, 2004), contribute to the lack of information and knowledge regarding female prisoners. Consequently, correctional program that has been used for female is based on male

criminality and often failed to provide the appropriate option for the needs of female (Langan and Pelissier, 2001; Covington, 2002). An appropriate rehabilitation program should be created based on a deeper understanding of the prisoners themselves. To gain the knowledge related to the elements appropriate for the rehabilitation, psychological profile of prisoners is needed. This profile should consist of empirical knowledge such as chemical use and antisocial behavior that may provide some guide towards female's criminality. Thus, appropriate profiling may help in designing a better rehabilitation program for the female prisoners.

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The first objective of the current study is to identify types of psychological problems among Malaysian female prisoners. The second objective is to compare the mean difference of chemical abuse, antisocial tendency behavior, thought disturbance, and self-depreciation between groups.

#### **MATERIALS AND METHODS**

# **Participants**

The current study was designed based on cross-sectional study design. Two groups of participants were formed. The sample sizes were calculated based on two proportion formula, and the participants were selected based on purposive-selective sampling method. The first group is the study group which consists of female prisoners from one prison in Peninsular Malaysia. The study group was further divided into 2 subgroups; Malaysian and non-Malaysian inmates. In the Malaysian subgroup, 46 inmates participated in the study, whereas 88 participants represented the non-Malaysian subgroup. Overall, the number of participants in the study group was 142. The second group is the control group consists of free living females in Kota Bharu, Kelantan (one of the state in Peninsular Malaysia). The number of participants in the control group was 100.

#### Measure

Carlson Psychological Survey (CPS). The CPS is a psychometric instrument designed by Carlson (1982) specifically for individuals who offend or are convicted of a crime. The CPS consists of four scales which are chemical abuse, thought disturbance, antisocial tendencies, and self-depreciation. A validity scale was also included for the purpose of validating the respondent test-taking attitude. This instrument contains 50 items with a level four literacy level which is easily understood by respondents. Chemical abuse scale has 9 items, antisocial tendency scale has 16 items, thought disturbance scale has 14 items, and self depreciation scale has 8 items. Three additional items are for validity scale. Each item in the CPS has five responses. The respondent needs to choose one that is most related to themselves. From each response given, a raw score is calculated for each scale by summing up the number of responses. Higher scores would indicate higher tendency for the scale. The CPS provides internal consistency for each scale, which are; chemical abuse = .73, antisocial tendency = .82, thought disturbance = .80, and self depreciation = .67. The test-retest reliability are as followed; chemical abuse = .91, antisocial tendency = .89, thought disturbance = .92, and self depreciation =

.87. The reliability test has been validated among offenders' population (Carlson, 1982).

#### **Data Collection**

The data collection took place at the selected prison situated in the Peninsular Malaysia. Prior to the data collection, a brief explanation regarding the purpose of the study was given to the participants. Informed consent forms were distributed to be signed and the participants were assured that they might withdraw from the study at any time during the data collection. Upon their agreement to participate, the CPS was given to each participant and they were asked to complete the instrument within a given time. The participants in the study group answered the instrument in group of five to ten. The data collection for the study group was semi-structured and the researcher had a chance of interacting with the participants but not directly interviewing the participants. The average time taken to answer all the guestions was 15 minutes. The completed instrument was returned to the researcher. For the control group, the data collection was done at places preferable by the participants. The participants who volunteered to participate were given the instrument, and asked to return it as soon as they completed the questionnaire. The information was then extracted from the instruments and electronically compiled into systematic data for further analysis.

### **Analysis**

Following the data collection, all the data were analyzed using Statistical Package for Social Sciences (SPSS) version 19.0. Descriptive statistics was computed for the demographic information and the four scales (chemical abuse, antisocial tendency, thought disturbance, and self depreciation), including the mean and standard deviation. The scores for all scales were divided into three ranges: low, moderate, and high, and the percentage of occurrence were calculated for each range. Subsequently, the analysis proceeded with statistical comparative analysis between the independent variables. The analyses included comparison between the study group and the control group, comparisons between subgroups within the study group, and comparison between convictions in the study group. For the comparative analysis, multivariate analysis of variance (MANOVA) was conducted.

Multivariate analysis of variance (MANOVA) is the extension of univariate analysis of variance to the involvement of multiple dependent variables (Coakes and Steed, 1999). Since the analysis of the current study involved multiple numerical dependent variables (chemical abuse, thought disturbance, antisocial tendency, and self-depreciation), MANOVA was the most

Table 1. Summary of demographic information for the participants in the study and control groups

Demographic Information		Study group	Control group
	Malay	27 (19%)	76 (76)
	Chinese	10 (7%)	11 (11)
Ethnicity	Indian	8 (5.6%)	13 (13)
-	Indonesian	97 (68.3%)	=
	20 to 29	57 (40.14)	64
	30 to 39	46 (32.4)	16
Age	40 to 49	34 (23.94)	16
	50 and above	5 (3.52)	4
	Less than 6 months	45 (31%)	-
Length of	6 months to 12 months	65 (46.5%)	-
incarceration	More than 12 months	32 (22.5%)	=
	Working	-	45
Working status	Not working	-	7
•	Student	-	48

Table 2. The summary of scores for each variable in the study and the control groups

Variables		Study group	Control group
	Scores:		
Chemical abuse	9 – 17	102 (71.8%)	98 (98%)
	18 – 25	19 (13.4%)	1 (1%)
	≥ 26	21 (14.8%)	1 (1%)
	16 – 29	88 (62%)	84 (84%)
Antisocial tendency	30 – 35	30 (21.1%)	9 (9%)
-	≥ 36	24 (16.9%)	7 (7%)
	14 – 30	73 (51.4%)	93 (93%)
Thought disturbance	31 - 40	62 (43.7%)	7 (7%)
•	≥ 41	7 (4.9%)	-
	8 – 17	41 (28.9%)	58 (58%)
Self-depreciation	18 – 25	95 (66.9%)	38 (38%)
-	≥ 26	6 (4.2%)	4 (4%)

appropriate statistical tests to process the data. The main objective in using MANOVA is to determine the affect of the independent variable on the multiple dependent variables. The independent variable was the groups, which are the Malaysian, non-Malaysian, and the control groups.

To use MANOVA, there are few assumptions that need to be fulfilled (Coakes and Steed, 1999). The assumptions are sufficient sample sizes, normality, linearity, multicollinearity, and homogeneity of variance. Sufficient sample is determined by the cell sizes, which should exceed 30 for each cell. In the current study, the numbers of cell sizes for all groups were more than 30. To test the normality, the variables were analyzed by using descriptive statistics. Skewness of the variables and any outliers were observed. All variables were found to be normal. For the third assumption, the relationship among all pairs of dependent variables must be assumed as linear (Coakes and Steed, 1999). To test the linearity, scatterplot graphs were plotted to test all dependent variables. The result showed that all dependent variables are linear. Subsequently, the multicollinearity between dependent the variables was checked. No multicollinearity was observed among the variables. Lastly, the homogeneity of variance was checked during the interpretation of the output. The homogeneity of variance was assessed with the Box's M Test of Equality of Covariance Matrices. All the assumptions were fulfilled, thus the analysis proceeded with the MANOVA test.

## **RESULTS**

## **Demographic information**

In the study group, Indonesian represented the whole non-Malaysia subgroup, whereas Malay ethnic made up the highest percentage of the Malaysian subgroup. The summary of the demographic information for the participants is tabulated in Table 1. Based on the age, majority of the participants in the study group were within the age range of 20 to 29 (40.14%). For the length of incarceration, most were sentenced within six months to 12 months length (46.5%).

Majority of the participants within the control group were Malays (76%), followed by Chinese (11%) and

**Table 3.** The mean and standard deviation for all variables in the study and control groups.

Variables	Malaysian subgroup	Non-Malaysian subgroup	Control group
	Mean (SD)	Mean (SD)	Mean (SD)
CA	23.96 (.66)	9.90 (.45)	9.54 (1.41)
AT	32.98 (.75)	26.96 (.52)	25.55 (4.88)
TD	33.83 (.86)	34.47 (.60)	25.72 (5.52)
SD	19.85 (.54)	20.55 (.37)	17.01 (4.26)

Notes. CA – chemical abuse, AT – antisocial tendency, TD – thought disturbance, SD – self-depreciation.

Table 4. The results of Tests of Between-Subjects Effects.

Independent	Dependent	Tests of Between-Subjects Effects			
variables	variables	df	Mean Square	F	p - value
Groups	CA	2	3781.65	191.66	< .001
	AT	2	894.42	34.88	< .001
	TD	2	2146.43	63.00	< .001
	SD	2	329.92	24.70	< .001

Notes. CA – chemical abuse, AT – antisocial tendency, TD – thought disturbance, SD – self-depreciation.

Indian (13%). As shown in Table 1, the highest numbers of the participants in the control group were within 20 to 29 years old (64%). For working status, most of the respondents were students (48%), followed by working in various occupations (45%).

# Descriptive and statistical analysis

The majority of the participants in the study group scored within low range for all scales, except for self depreciation. For self depreciation, most participants scored within moderate range. The results are shown in Table 2. In the control group, nearly every participant scored within low range for all the scales, except for self depreciation. In self depreciation, a fair number of participants scored within moderate range. comparison, more participants in the study group scored within moderate and high compared to the control group.

Comparison between means showed that the study group had higher means of all scales compared to the control group. The means and standard deviations for all variables in both groups are tabulated in Table 3. Preliminary, these results demonstrated that the Malaysian subgroup had higher means of chemical abuse and antisocial tendency, whereas the non-Malaysian subgroup had higher means of thought disturbance and self-depreciation compared with the control group. The results were confirmed with the MANOVA test.

The final assumption for MANOVA, the homogeneity of variance was assessed using the output in the Box's M Test of Equality of Covariance Matrices. The test was found not significant (p > .05), thus the assumption was fulfilled. Homogeneity of variance was assumed. Mean comparison between the groups demonstrated significant result (p < .05), as shown in the output of the Multivariate tests. Thus, there is significant difference between groups on the multiple dependent variables, F (df, error df) =

55.04 (8, 474), p < .001, Pillai's Trace = .96.

Consequently, Tests of Between-Subjects Effects was assessed to consider each dependent variable separately. The results were tabulated in Table 4. To reduce a Type I error, Bonferroni correction was applied. The alpha level was set higher according to the Bonferroni correction (.05/4 = .0125). The results showed that all the dependent variables differ significantly across the groups (p < .001), indicated that the occurrences of each dependent variables are higher in a group compared to others. The Estimated Marginal Means output was then assessed, confirmed that chemical abuse and antisocial tendency are more likely to occur in Malaysian subgroup, whereas thought disturbance and self-depreciation are more likely to occur in non-Malaysian subgroup.

#### DISCUSSION

The current findings showed that four factors, chemical abuse, antisocial tendency, thought disturbance, and selfdepreciation are common among the female prisoner population. Descriptively, female prisoners demonstrated higher occurrence of all factors compared to the freeliving female. In statistical comparison, chemical abuse and antisocial tendency were exhibited significantly among female prisoners, particularly among Malaysian inmates. This finding suggested that chemical abuse and antisocial behavior are particularly high among prisoners, as found in previous studies (Raistrick et al., 1999; Fazel and Danesh, 2002; South, 2007). Thought disturbance and self-depreciation on the other hand showed significance occurrence amongst the non-Malaysian female prisoners. The findings of the current study demonstrated that the prison population has higher a risk of chemical abuse, antisocial tendency, thought disturbance, and self-depreciation compared to the freeliving population (Raistrick et al., 1999; Fazel and

Danesh, 2002; South, 2007). The high occurrence of chemical abuse and antisocial tendency amongst the Malaysian inmates suggested positive association between the two factors (Ferguson et al., 1994; Loeber and Keenan, 1994; Robins, 1998). Antisocial behavior has been defined as related to substance dependence and legal problems (Moffit, 2003). The finding of the current study showed that there is a relationship between antisocial behavior and chemical abuse. The high prevalence amongst prisoners showed that antisocial behavior is likely to be related to unlawful behavior as well. Antisocial behavior had been described to include violations of rules and social norms, various forms of aggression, serious patterns of disruptive and aggressive behavior, and lack of guilt (Baker et al., 2007; Lahey, 2007). People with antisocial behavior are more likely to involve in a more serious and violent crime. To illustrate, drug abuser is more likely to involve in property crime (Usman, 2005; South, 2007). There is possibility for a more violent crime such as murder to happen during the commission of said crime if the drug abuser also has antisocial attitude. Example is when there is obstruction during the occurrence of the crime.

The non-Malaysian inmates showed a high occurrence of thought disturbance and self-depreciation compared to the Malaysian inmates. This may indicate that as a group non-Malaysian incarcerated offender have some forms of mental problems. Thought disturbance has been defined as disturbance in the form of thought and may involve confusion, hallucination, and delusion (McGrath, 1991). The type of crime that might be committed by people with thought disturbance is less likely to be a violent crime or property crime. The high prevalence amongst the non-Malaysian subgroup may refer more to disturbance in thought due to pressure being away from home. Selfdepreciation by its nature does not seem to predispose an individual to antisocial related crimes. Selfdepreciation is defined as undervalue of oneself and it is more likely due to the feeling of inferiority and weakness. People with high self-depreciation are more likely to be a victim rather than a criminal.

The free-living females did not show any significant prevalence of all the factors. Comparison of means between the control group and the study group showed that the control group had much lower incidence of all factors, most notably in chemical abuse. This finding suggested that chemical abuse in the free-living females is very low. The means for another three factors; antisocial tendency, thought disturbance, and self-depreciation among the control group did not differ too much from the study group. These findings suggested that the factors might be present among free-living female but at much lower incidence and are not significant compared to the female inmates.

During the course of the current study, several limitations were identified. The first limitation is the CPS. The CPS is prepared based on studies done in America.

The baseline means and standard deviation are based on such studies. Some of the items in CPS may not be as relevant to the Malaysian environment and there is a possibility that some behavior unique to the Malaysian offending population were excluded. Nevertheless, the current study had successfully produced good results.

In conclusion, the psychological profiles of female prisoners have been successfully generated at the end of this study. The psychological profile is consisted of four factors, which are; chemical abuse, antisocial tendency, thought disturbance, and self depreciation. All factors have been proved to be high amongst the female prisoners, which are very likely to become the factors for a female to commit a crime. This profile shows that prisoners have specific needs for psychological aspects in the rehabilitation program, and should be taken into consideration during the course of the rehabilitation.

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