

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter discusses the results obtained in the experimental study which is divided into three sections. The first section deals with the results of the hypotheses that examined the effects of PGT on addicts' motivation change based on three variables, namely, the stages of change (SOC), self-efficacy level (SE) and decisional balance level (DB). The effects of PGT on these variables are discussed based on research groups, comparisons between the research groups, and comparisons between research groups and time-delayed effects. The discussions in the first section also encompass the discussion of descriptive analysis results and further analysis which were done to further support the basis of results obtained in inference tests. The second section discusses the research implications as a whole, as a result of this study. Lastly, the third section discusses research recommendations and future studies based on the results of this study.

5.2 Discussion of findings

The discussions on findings involve the effects of PGT treatment on the enhancement of motivation among naïve and experienced addicts and focuses on the study's three main variables, namely, the stages of change (SOC), self-efficacy (SE), and decisional balance (DB).

5.2.1 Treatment effect on the addicts' stages of change

In short, the results obtained show that PGT has an effects on motivation enhancement which is characterized by promotion of at least one stage of change among treatment-experienced addicts (hypotheses 4a and 4b), but it is not effective to the treatment-naive addicts (hypothesis 1a and 1b) as compared to the control group which did not receive PGT treatment. In terms of comparisons between the two experiment groups, the effects of treatment received are similar (hypothesis 7). After a three-month period, the results indicated that there was a promotion in stage of change among the treatment-naive addicts (hypothesis 10), while the stage of change among treatment-experienced addicts remained the same (hypothesis 13). Both experiment groups were at the same stage of change for time-delayed effects (hypothesis 16). The next section discusses in detail the results obtained and mentioned above.

5.2.1.1 Treatment-naive addicts

The results of the study found that the two hypotheses, 1a and 1b, that tested the effects of psychoeducational group therapy treatment on the factor of addicts' stage of change show that there is no significant effect of treatment on naïve addicts' stage of change. This study revealed that psychoeducational group therapy is not effective for enhancing the naïve addicts' stage of change and this finding is supported by the descriptive analysis which showed that only four respondents (40.0%) experienced at least one stage of change after they had gone through the treatment, compared to 60.0% who were still at the same stage of change. A higher total percentage of change which 40.0% only seen from the categorical aspect. Further analysis carried out on ten respondents among the naïve addicts who participated in the treatment sessions found that four respondents (40.0%) experienced a drop in the

readiness to change score (RTC), while the remaining five respondents (50.0%) experienced an increase in RTC and one respondent maintained the same level. This shows that only half or 50.0% of the respondents experienced the effects of treatment and the other 50% were not affected by the treatment given. The range of RTC scores obtained from all respondents was from 7.86 to 13.00.

No specific previous study was conducted to test the effectiveness of psychoeducational group therapy treatment to promote the stages of change in naïve addicts for the purpose of comparisons and discussions of the findings. One research that came quite close to the above objective was carried out by Guajardo (2008) who tested the effects of psychoeducational intervention on a client's expectations and fears about psychotherapy, working alliance, and therapeutic outcomes during pre-treatment or for first-time clients. The findings of this research support the results of Guajardo's (2008) study which discovered that psychoeducational intervention was not effective in enhancing therapeutic outcomes among new clients or first-time clients because they did not have any experience in the treatment method and had high expectations of their participation.

The descriptive analysis and further analysis conducted revealed that the majority of the respondents, or the naïve addicts who participated in the research and remained at the same stage of change after the treatment, were addicts who were at the contemplation stage of change. This finding supported the main TTM assumption about the contemplators, as stressed by Velasquez et al. (2001), that the contemplators might still be far from making any commitment to act to change. They added that the contemplators received the benefits from the programs conducted but would only accept and absorb all information related to their predicaments without being able to do anything. Contemplators are usually not ready to make any commitment.

DiClemente (2006) and CSAT (2005) explained that this was caused by the ambivalence that they experienced. Ambivalent contemplators will continue to struggle with uncertainties and doubts about leaving an old behavior (addiction) and accepting new behavior (rehabilitation) which will eventually put them in an unstable situation (DiClemente, 2006). Prochaska, Johnson and Lee (2008) categorized this group as contemplators who possessed a balanced set of pros for changing and cons for changing that forced them to be at this stage for a long time. They were usually serious in contemplating the decision to stop addictive behavior in the next six months (DiClemente, 2006).

This finding is supported by the results from the descriptive analysis of the activities of change that were carried out. Based on the individual characteristics at a certain stage of change as highlighted by DiClemente (2006), Connors, Donovan & DiClemente (2001) and Velasquez et al. (2001), the results obtained showed that all the addicts (3 out of 3) who were at the pre-contemplation stage of change stated that they had participated in the rehabilitation program because of pressure from others, especially from families. Other characteristics which describe the addicts at this stage are: the feeling that taking drugs is still acceptable and it does not trouble other people (2 out of 3); addiction is not an issue (2 out of 3); still do not think of taking part in any treatment or drug rehabilitation (2 out of 3); and feel happy with their situation now (2 out of 3). As for the naive addicts who were at the contemplation stage of change, all the clients stated that they: had started to think of change and to overcome their problems (7 out of 7); wanted to control and be in charge of their behavior (7 out of 7); and tried to view and evaluate the advantages and disadvantages of their addictive behavior and the change that they wanted (7 out of 7). Other characteristics that matched them are: they had not taken any effort or planned anything to overcome

problems (6 out of 7); they sought answers and tried to understand addiction problems (6 out of 7); and they had tried to make some changes before (6 out of 7).

As for time-delayed effects, the results obtained showed that there was a significant difference in the stage of change between the posttest level and the follow-up level. This means that during the three months after the treatment was given, there was a promotion in status of change among the treatment-naïve addicts. Further descriptive analysis revealed that at the follow-up test level, the results obtained showed that after three months of treatment, there was a significant effect on the promotion of stage of change among the treatment-naïve addicts. PGT treatment can be considered not effective in promoting the stages of change for treatment-naive addicts, based on the posttest measurement results, and there was also no significant difference shown by the control group. Nevertheless, the promotion of stages of change after the treatment (time-delayed effect) could occur due to the PGT treatment.

According to DiClemente (2006), contemplators (most of the respondents were at this stage at the posttest level) would receive a lot of information and contemplation to change. They would later continue to gather and analyse information for a long period of time which would eventually enable them to overcome their ambivalence problems and tip the balance, resulting in them making a firm decision to change. Three months after the treatment, the results showed that nine respondents (90.0%) were successful in going through this process and had made the decision to change (advance towards stage of change known as preparation/action). The PGT treatment is effective because, compared to the control group (which showed no significant difference with the experiment group at the post measurement level), the follow-up measurement level recorded only three respondents (27.3%) who advanced towards the preparation/action stage of change or made a firm decision to change.

5.2.1.2 Treatment-experienced addicts

The research findings showed that there was a significant change in the motivation level of the respondents based on the increase in stage of change among treatment-experienced addicts, as resultant effects from the PGT treatment. This study brings forward the fact that psychoeducational group therapy is effective in enhancing the stage of change of experienced addicts. Further analysis which was done descriptively supported this finding about the individual change among respondents. Fifty percent of the respondents experienced a promotion in the stage of change, which means at least one stage, while the other 50% remained in the same stage of change. In terms of the RTC score value change, all or 100% of the respondents reported an increase in score. This indicates that PGT treatment is effective in promoting the stage of change among addicts who have a treatment history.

Further descriptive analysis carried out revealed that treatment-experienced addicts who had moved at least one stage ahead were four people from the pre-contemplation stage (moving from pre-contemplation to contemplation or preparation/action) and two respondents from the contemplation stage (moving from contemplation to preparation/action). There were two cases of change movement which involved more than one stage of change, that is, from pre-contemplation to preparation/action; two cases which reported movement from the pre-contemplation stage to the contemplation stage; and two cases from the contemplation stage to the preparation/action. These happened due to the psychoeducational treatment which was able to change the 'addiction' attitude to a 'disapproval of drug use' attitude, as proven by Martin et al. (1996) in their studies. The treatment also enhanced the

motivation to participate in treatment even when the addicts had previously reported that they were against or ambivalent towards it (Lovejoy et al., 1995).

This finding also supports the basic TTM theory. Change process activities which were applied in PGT and made as intervention inputs were able to move contemplators to reflect and admit their addiction problem, to be aware of the problems that they faced and the potential changes that they could explore (DiClemente, 2006). The use of group method in executing change process activities, according to DiClemente (2006) and Velasquez et al. (2001), would benefit the addicts as they would receive support from other addicts through the same stage and process of change, and made the helping relationship within the group became effective. They would receive a reassurance to function as usual without drugs, and be able to manage urges or needs to relapse. Contemplators on the other hand, would receive benefits from PGT which uses the change processes in group activities in the form of information contemplation to assist them to make the decision to change (DiClemente, 2006), and the anticipation of the gains and losses which would be theirs if changes were made (Miller & Rollnick, 2002).

In terms of rehabilitation characteristics shown in the therapy activities, the changes were detected by all the experienced addicts (5 out of 5) who were at the contemplation stage of change at pretest after participating in the rehabilitation activities; they stated that the use of drugs was not 'okay' and burdened other people. They wished to change their addictive behavior (4 out of 5); felt that addiction was a problem (4 out of 5); were not happy with their current condition (4 out of 5); and thought of getting treatment and participating in rehabilitation at the moment (4 out of 5), although all admitted that they had attended the rehabilitation program at the center because of pressure from others. As for those who were at the contemplation

stage of change, all the clients (7 out of 7) fulfilled the characteristics of change that are better, such as seeking for answers and trying to understand addiction problems as well as starting to think about changing and wanting to overcome addiction, and controlling and being in charge of addictive behavior. They also tried to evaluate the advantages and disadvantages of addictive behavior and the changes they desired. Only four out of seven clients admitted that they had previously tried to change but had not yet taken any action or planned anything to overcome their addiction problem.

For time-delayed effects, the results showed that the stages of change of the treatment-experienced addicts remained stable three months after the treatment ended. This result supported the basis of TTM theory which is the foundation of this study. Further analysis showed that at the posttest level, the majority of the respondents were at the contemplation stage of change and remained at the same stage after three months (time-delayed effect), and this was a stage of change that caused an addict not to be able to make any decision to change and to actively weigh the pros and cons of the changes that would be made (DiClemente, 2006). They would continue to be in this stage for a long period of time if the pros and cons for change were balanced and caused them to be ambivalent (Prochaska, Johnson & Lee, 2008). At the level of follow-up measurement, there was a small promotion or movement of stage of change where only one respondent (8.3%), advanced towards the preparation/action stage of change.

5.2.1.3 Groups comparison

Research findings showed that the addicts' treatment history influenced the respondents' stage of change movement after the treatment was given. Results revealed that treatment-naïve addicts did not receive any effect of treatment provided

as compared to treatment-experienced addicts. Among the treatment-experienced addicts, PGT treatment was effective in moving the addicts at least from one stage of change. As for treatment-naïve addicts, PGT treatment was not effective in moving their stage of change.

These findings support studies by Hser, Grella, Hsieh, Anglin and Brown (1999) who found that addicts who had prior treatment experience demonstrated more recognition of the drug problem that they were facing, required more help, and showed more readiness to get treatment compared to treatment-naïve addicts. According to the abovementioned studies, treatment-naïve addicts do not really admit their drug abuse issues, lack the need to participate in treatment, and also lack the motivation to change.

These findings are in line with the stage of change that was measured among respondents before and after the treatment. Further descriptive analysis conducted revealed that the majority of respondents among the treatment-experienced addicts who moved to new stages of change were those who were in the pre-contemplation stage of change before the treatment. This means that PGT treatment was able to assist respondents in recognizing their addiction problems and the respondents were ready to make changes even though they had not yet taken any action. Other than that, this circumstance occurred because treatment-experienced addicts had begun to learn to reach out for help, to have more realistic expectations of treatment received and the outcome, and understood that rehabilitation is a long-term process (Merrick, Reif, Hiatt, Hodgkin, Hogan & Ritter, 2012).

Analysis of time-delayed effects revealed that the two groups did not show any significant difference in terms of stages of change. This means that both research groups shared the same stage of change in the course of three months after the

treatment. In other words, the PGT treatment effects remained in treatment-experienced addicts group, and the same effects increased the stage of change among treatment-naive addicts after three months. The results of this study supported studies conducted by Kelley (2010), Khodayarifard (2010), Battjes et al. (2004) and Bartholomew et al. (2000). Their studies revealed several factors: that a psychoeducational treatment approach was effective for drug addicts in terms of change differences in addiction relapse and emotional regulations (Kelley, 2010); it was effective in curing addicts from their dependency on drugs and the addicts did not experience any problems regarding drugs (Battjes et al., 2004); and the approach improved their level of knowledge about communication skills and relationships, increased their psychological functioning and provided them with many benefits from the program conducted (Bartholomew et al., 2000) during the period after the treatment and time-delayed effects.

5.2.2 Treatment effect on the addicts' self-efficacy

The findings of this research indicate that PGT was effective in enhancing motivation which was characterized by an increase in self-efficacy stage among treatment-experienced addicts (hypotheses 5a and 5b), but was not effective for treatment-naive addicts (hypothesis 2a and 2b) compared to the control group which did not receive PGT treatment. In terms of comparisons between the two experiment groups, the effects of treatment received were significant where self-efficacy stages of treatment-experienced addicts were better compared to treatment-naive addicts (hypothesis 8). After the three-month period, the results showed that the self-efficacy stage remained the same for both groups (hypothesis 11 and 14). Both experiment

groups did not show any significant difference in the time-delayed effects for the self-efficacy stage (hypothesis 16). The next section deals with these results in detail.

5.2.2.1 Treatment-naïve addicts

The findings of this research show that a psychoeducational group therapy program does not have any effect on enhancing the self-efficacy stage of treatment-naïve addicts compared to the control group. This study revealed that psychoeducational group therapy is not effective in increasing the self-efficacy stage of naïve addicts. Further descriptive analysis conducted discovered that at the post measurement level, the treatment-naïve addicts' self-efficacy stage remained as it was before the addicts participated in the treatment which involved seven people or (70.0%), while 20.0% experienced a drop and the remaining 10.0% reported an increase. In terms of the self-efficacy mean score, the total of treatment-naïve addicts showed a decline and increase of the same mean score that is at 50.0%.

These findings are in line with the results obtained by Burlison and Kaminer (2005) in their study which examined the effectiveness of group therapy with CBT approach and psychoeducation in influencing the rate of drug usage and self-efficacy. They found that an addict's self-efficacy is an important indicator of the reduction in drug usage but it does not apply to the outcome of the treatment. In that study, the effects given by two treatment methods were the same or there was no significant difference in terms of the increase in self-efficacy. Although the conclusion was that both methods of treatment were able to increase the self-efficacy stage, which could contribute to a positive treatment outcome, the group therapy method which applied the psychoeducational approach did not provide a different impact compared to the CBT approach.

In another three studies by Molaie et al. (2010), Dolan, Martin and Rohsenow (2008), and Ilgen, McKellar and Moos (2007), although the respondents' treatment histories were not mentioned, the results of their researches differed from one another. Molaie et al. (2010) found that movie therapy activities, followed by group discussion sessions (psychoeducation intervention) and CBT each, was effective in increasing the general and situational self-efficacy compared to the control group. Dolan, Martin and Rohsenow (2008) reported that self-efficacy is an important indicator of the treatment outcome. High self-efficacy was able to keep the addicts in their study in the state of abstinence or showed less drug outcomes in the course of three to six months after the treatment. As for Ilgen, McKellar and Moos (2007), they discovered that psychoeducational intervention such as the implementation of skill-building activities during treatment is able to increase the self-efficacy stage and it is related to the treatment outcome.

These findings are in line with the basic theory of TTM, which is the basis of this research. According to this model, self-efficacy is an important marker in driving the change process of an addict, and addicts who at the early stages of change (pre-contemplation and contemplation) usually have low self-efficacy beliefs (DiClemente, 2006; Prochaska, DiClemente & Norcross, 1992). Further descriptive analysis revealed that the majority of the respondents who were measured at the pretest and posttest phases remained in the early stages of change. In one "Anda Boleh" ("Yes, you can!") therapy session that focused on self-efficacy, an overview of the naïve addicts' self-efficacy after they had attended the session supported this finding. Based on their responses on the rehabilitation activities given, the majority of the clients (eight respondents or 80%) placed their level of confidence at 10% to 50% when faced with eight high-risk situations such as negative emotions, physical problems, positive

emotions, accessible drugs, urge or desire to take drugs, interpersonal conflicts, social pressure and pleasurable situations.

In terms of time-delayed effects, the treatment-naïve addicts' self-efficacy stage remained at the same level during the follow-up measurement and there was no significant difference compared to the post measurement level. This indicates that treatment-naïve addicts did not go through any significant change in the three-month period after the treatment. Crosstabular descriptive analysis reported that at the follow-up level, there was an increase in self-efficacy stage among the naïve addicts, represented by six respondents (60%) compared to two people (20%) at posttest level. Nevertheless, the control group showed an almost similar increase where six respondents (54.5%) were compared to three respondents (27.3%) at posttest level. These results verified the fact that PGT treatment is not effective in enhancing the self-efficacy stage of naïve addicts.

5.2.2.2 Treatment-experienced addicts

The results obtained in this study showed that psychoeducational group therapy has an effect on the self-efficacy stage of treatment-experienced addicts. This indicates that PGT therapy is effective in enhancing the self-efficacy stage of treatment-experienced addicts compared to the control group. Further descriptive analysis conducted revealed that at the posttest measurement level, PGT therapy increased the self-efficacy stage among seven respondents (58.3%), while another five respondents (41.7%) remained at the same stage of self-efficacy. In terms of the self-efficacy mean score, all the respondents (100.0%) showed an increase in score compared to the control group. Crosstabular analysis validated this finding by showing that at the posttest measurement, ten respondents (83.3%) from the

experiment group were at a high self-efficacy stage in contrast to only five people (41.7%) who were also at the high self-efficacy stage in the control group.

A review on the clients conducted during “Anda Boleh” (Yes, you can!) session regarding their level of confidence when faced with high-risk situations in change activities showed that these activities supported their self-efficacy stage to change. The majority of the respondents had high confidence in facing three situations or high-risk situations that were identified as positive emotions (9 respondents or 75.0%), easy access to drugs (8 respondents or 66.7%) and pleasant moments (9 respondents or 75.0%). Another three situations in which the respondents felt that they were at the moderate to high level of confidence were physical problems (7 respondents or 58.3%), urge or desire for drugs (7 respondents or 58.3%) and interpersonal conflicts (8 respondents or 66.7%). There were only two high-risk situations, negative emotions (7 respondents or 58.3%) and social pressure (7 respondents or 58.3%), in which the majority of respondents felt uncertain to face.

The above research findings support the outcome of the studies by Molaie et al. (2010), Dolan, Martin and Rohsenow (2008), Ilgen, McKellar and Moos’ (2007). Although all three studies did not state the status of the respondents’ treatment history, they could still be used as the basis for discussions. Molaie et al. (2010) found that movie therapy activities followed by group discussions (psychoeducational intervention) and CBT are all effective in enhancing general and situational self-efficacy compared to the control group. Dolan, Martin and Rohsenow (2008) reported that self-efficacy is an important indicator in treatment. In that study, a high level of self-efficacy was able to keep an addict in a situation where he was abstinent or reduced his drug intake in the course of three to six months after the treatment was over. As for Ilgen, McKellar and Moos (2007), their findings showed that

psychoeducational intervention such as the implementation of skill-building activities during treatment is able to enhance the self-efficacy stage and it is related to outcome of the treatment.

By referring to the basis of TTM theory, which is the foundation of this research, these findings provided new variations to the explanation of self-efficacy dimensions as markers of change in the change process. The main assumption of this theory is that any addict who is at the early stages of change has low self-efficacy (DiClemente, 2006). Further descriptive analysis revealed that the majority of the respondents at the posttest measurement level, or eight individuals (66.7%), were at the early stage of change compared to four respondents (33.3%) who were at the preparation/action stage of change. According to DiClemente (2006), the existence of individuals who had high self-efficacy when they were at the early stages of change was due to the fact that they used experiential and behavioral change processes compared to using cognitive change processes which were dominant at the early stages of change.

In terms of time-delayed effects, the effects of PGT treatment on the treatment-experienced addicts' enhanced self-efficacy remained at the follow-up level compared to the posttest measurement level. This indicates that PGT provided more effects to the respondents' self-efficacy three months after the treatment had ended. Crosstabular analysis conducted indicated that at the follow-up test measurement, there was a reduction to eight respondents (66.7%) who had high self-efficacy, compared to 10 individuals (83.3%) at posttest measurement. As for the control group, there was a slight increase as one respondent moved to a higher self-efficacy stage and that move contributed to a total of six respondents (60.0%) compared to 41.7% at

posttest measurement. Nevertheless, this did not significantly influence the effects of treatment on both groups.

5.2.2.3 Groups comparison

The research findings show that the addicts' treatment experience influenced the increase in the respondents' self-efficacy stage after the treatment was given. The results indicated that, compared to the treatment-experienced addicts, the treatment-naive addicts did not receive the effects of the treatment given. PGT treatment was effective in improving the self-efficacy stage among treatment-experienced addicts. However, for treatment-naive addicts, PGT treatment failed to have any effect in enhancing their self-efficacy stage.

No previous study was found which put the focus on psychoeducational intervention effects on the self-efficacy variable among the naïve addicts with experience in treatment. The findings of this research offers new contributions in understanding the addicts' self-effiacy stage in different treatment settings. Previous studies had provided a different overview about these two groups of addicts, as emphasized in the literature review by Neale, Robertson and Bloor (2007), in contrast to the findings of this research. According to them, addicts who had experienced treatment are more prone to treatment failure than those who are treatment-naive. Experienced addicts are categorized as those who have worse addiction careers, more severe drug use patterns, greater problems in other life areas, seem to do less well in drug treatment, and show poorer treatment outcomes. Their research findings verified the findings of previous studies except for the treatment outcomes. They did not find that those with a treatment history had worse treatment outcomes, as measured by recent illicit drug use, than those getting treatment for the first time. The findings of

this current research will add to the existing literature on studies concerning experienced and naïve addicts.

5.2.3 Treatment effect on the addicts' decisional balance

From the results of the study, it was found that PGT had an effect on the increase in motivation which was characterized by an escalation of the decisional balance stage among treatment-naïve addicts (hypotheses 3a and 3b) and treatment-naïve addicts (hypothesis 6a) compared to the control group which did not receive PGT treatment except for the treatment-experienced addicts (hypothesis 6b) control group. In terms of the difference between these two experiment groups, the effect of treatment received was significant where the decisional balance stage for treatment-naïve addicts was better than the treatment-experienced addicts (hypothesis 9). After three months, the results showed that the decisional balance stage remained the same for both groups (hypothesis 12 and 15). Both experiment groups were not significantly different in terms of time-delayed effects for the decisional balance stage (hypothesis 18). The next section discusses in detail the results which were obtained.

5.2.3.1 Treatment-naïve addicts

The research results showed that the psychoeducational group therapy program had affected the change in the decisional balance stage of naïve addicts. Further descriptive analysis conducted revealed that at the posttest measurement level, the decisional balance stage of the majority of the treatment-naïve addicts (five individuals or 50%) changed to the cons of drug use compared to the stage before they underwent treatment (pros of drug use); 40% remained at the same stage; and 10.0 %

changed from cons of drug use, compared to the control group which had 36.4% changed to cons of drug use and 63.6% remained the same.

In short, PGT treatment succeeded in changing the decisional balance stage of five respondents who changed from the pros to the cons of drug use, compared to only one respondent who changed from the cons to the pros of drug use. The PGT treatment also caused seven respondents (or 70.0%) to be at the decisional balance stage of cons of drug abuse compared to only three people (30%) before treatment. In terms of the decisional balance mean score, all the respondents (100%) among the treatment-naïve addicts reported an increase in mean score compared to only 54.5% of the respondents in the control group.

These research findings support the results obtained in the studies by Battjes et al. (2004), Bartholomew et al. (2000) and Lovejoy et al. (1995). Treatment using the psychoeducational approach (which focuses on education on drug and its effects) and addiction treatment (which is suitable with the client's level of addiction) would influence the clients' contemplation to change. Battjes et al. (2004) in their research used a manual-guided module which focused on introduction to treatment session, drug education and skills training. As a result, this method was effective in reducing drug use among the respondents after they had undergone the treatment, six months after the treatment, and this situation remained for 12 months.

In addition, a study by Bartholomew et al. (2000) found that educational materials on communication, communication skills and discussions regarding assignments in groups were effective in improving the respondents' knowledge in communication and relationships. The respondents also reported that they received a lot of benefits from the materials distributed and there was also a marked increase in terms of psychosocial functioning. On the other hand, Lovejoy et al. (1995) found that

educational materials used in sessions such as video-viewing and notes were very effective in enhancing the respondents' awareness of the effects and outcomes of drug usage, and the skills taught were also useful in reducing the use of drugs.

According to TTM, the decisional balance stage is an important marker in the transition of stages of change among addicts who are in the early stages of change where at the pre-contemplation stage, the addicts are more inclined toward the pros of drug use than the cons of drug use (decisional balance is in favor of status quo). On the other hand, at the contemplation stage, addicts have a decisional balance that is more in favor of pros for change (cons of drug use) and possess balance in terms of positive or negative leanings toward change. If they continue to move to the next stage of change, the pros of change or cons of drug use will increase (DiClemente, 2006). These research findings support the basis of this theory. As discussed earlier in the section on PGT's effects on the movement of stages of change, at the level of posttest measurement upon the completion of the PGT treatment, a majority of the respondents were at the contemplation stage (seven respondents or 70.0%) and at the preparation/action stage, there were two respondents (or more than 20.0%). Based on the new stages of change after the posttest measurement, overall, most of the respondents would have a decisional balance stage that was more pros to change or cons of drug use. This is proven by the fact that 70.0% of the respondents who had a decisional balance stage of cons of drug use as a result of this study after PGT treatment was given to the research groups.

The change was proven in the change activity "*Untung dan rugi saya terhadap dadah*" ("Gains and losses in my use of drugs"?) which was conducted where all the respondents were able to make their own lists of pros and cons (the best and the worst things about addiction) after they had undergone the treatment. With the

psychoeducation segment that provided more emphasis on the effects of addiction, the change activities which were carried out resulted in the majority of the respondents or seven individuals (70.0%) listing more sets of cons of drug use compared to sets of pros of drug use; two individuals (20.0%) who possessed balanced pros and cons sets; and an individual (10.0%) who had more pros of drug use sets than the cons of drug use sets.

This study does not support the research findings by Cacciola, Dugosh and Camilleri (2009) who found that new addicts who received residential treatment had the lowest treatment acceptance, compared to high acceptance among experienced addicts (those who had participated twice or more in previous treatments), and intermediate acceptance for addicts who had one prior treatment. As for time-delayed effects, the decisional balance stage of treatment-naïve addicts remained unchanged. This showed that the effects of PGT treatment lingered until three months after the treatment was given. These findings also supported the findings in studies conducted by Battjes et al. (2004), which were that the effects of psychoeducation treatment remained between six to 12 months after treatment is given.

In follow-up measurements, results showed that the time-delayed effects were not significant, which meant that the decisional balance stage remained the same as after the treatment (posttest). This indicated that the PGT effects remained three months after the treatment ended. Crosstabular descriptive analysis showed that at the follow-up test, the majority of respondents or nine individuals (90.0%) were at the preparation/action stage of change, and another 10.0% remained in the contemplation stage of change. Theoretically, these results showed that the majority of the respondents had succeeded in overcoming their decision making problems, since they had moved to a higher stage (preparation/action). As emphasized by DiClemente

(2006), to move the contemplator to a higher stage of change is to assist him to make a decision to change. When an individual has successfully entered the preparation stage of change, it means that he or she has managed to make a firm decision to change. It was not in line with the decisional balance level among the respondents. The results of the follow-up tests showed that only 60.0% of respondents had reached the decisional balance stage of cons to drug use (able to “tip the balance” or have weighed the pros to change) compared to 90.0% of respondents who were at the preparation stage of change.

5.2.3.2 Treatment-experienced addicts

Research findings reported that the psychoeducational group therapy program had an effect on the change in decisional balance stage of treatment-experienced addicts, but that there was no significant difference for the control group. This study revealed that psychoeducational group therapy was effective in enhancing the decisional balance stage of experienced addicts. Further descriptive analysis conducted indicated that at the posttest level, the decisional balance level of most of the treatment-experienced addicts, numbering seven individuals or 58.3%, remained (cons of drug use) as before they underwent the treatment, while 41.7% changed to cons of drug use compared to their previous stance of pros of drug use. (Is this what you mean?) In total, all of the respondents or 100.0% were at the decisional balance stage (cons of drug use) at the posttest. As for the control group, 83.3% maintained at the same decisional balance stage (70.0% cons of drug use and 30.0% pros of drug use) as prior to the treatment, and 8.3% changed to the pros of drug use and cons of drug use. This resulted in eight respondents (66.7%) who had decisional balance of cons of drug abuse. In terms of decisional balance mean score, ten respondents made

up of treatment-experienced addicts experienced an increase in mean score, which was 83.3% compared to 66.7% respondents in the control group.

This study supported the findings by Cacciola, Dugosh and Camilleri (2009) who found that experienced addicts (participated twice or more in prior treatments) who were treated residentially had higher treatment acceptance, compared to new addicts without prior treatment who had less acceptance, and intermediate acceptance for addicts who had only one prior treatment. A high rate of acceptance of treatment showed that they were ready to receive more intensive treatment, enhanced multidimensional services, and continuing care. Bartholomew et al. (2000) and Lovejoy et al. (1995) had similar findings, as discussed in the naïve addict section.

This study's findings revealed that the change in decisional balance stage for the experiment group was the same when compared with the control group. The decisional balance stage between both experiment and control groups for treatment-experienced addicts was not statistically significantly different at the posttest level. Further descriptive analysis showed that there was an increase in the DB score for both groups at the posttest level, but that the value of respondents' DB score among the control group was higher compared to the experiment group at the pretest level. After posttest, the range of scores for both groups was almost the same at the 2.80 to 3.65 range (experiment group) and the 2.85 to 3.65 (control group). Further descriptive analysis also revealed that the majority of respondents in the control group was at a positive decisional balance stage (cons of drug use) and remained at the same stage for posttest level (66.7%, including one respondent who had changed), even though they did not undergo treatment. As for the experimental group, the majority of the respondents were also in decisional balance of cons of drug use (58.3%), but the treatment given was successful in changing the decisional balance to 100% cons of

drug use. In terms of descriptive analysis, there was a change in the decisional balance stage among the experiment group but it was not statistically significant. This could possibly be attributed to the value of the mean score, which was in the same range. In addition, the majority of the respondents who were in the control group possessed a higher stage of decisional balance as compared to the experiment group in pretest level.

In the follow-up tests, results showed that there was a time-delayed effect for the experiment group. Research results found that PGT treatment's effects remained the same and did not show any significant difference at the follow-up and posttest levels. This was indicative of PGT treatment's success in enabling the respondents to maintain at the same stage three months after the treatment was given. These findings supported the results from a study by Cacciola, Dugosh and Camilleri (2009). They found that experienced addicts (participated twice or more in prior treatments) would stay longer in residential treatment when compared to respondents who had little or no experience. The increase indicated a probability that the method of treatment given was suitable and that it fulfilled the requirements of the clients' rehabilitation. The extent of their improvement was generally comparable or greater than that of clients with fewer prior treatments (Cacciola, Dugosh & Camilleri, 2009).

5.2.3.3 Groups comparison

Results obtained in this study showed that both experiment groups, treatment-naive and treatment-experienced addicts, received positive and significant effects from the PGT treatment as compared to the two control groups. Nevertheless, comparative tests of treatment effects between the two (hypothesis 9) found that decisional balance of both research groups after the treatment was significantly

different, where the level of decisional balance stage of treatment-naive addicts was better than that of the treatment-experienced addicts group. This result indicated that PGT treatment was more effective in increasing decisional balance stage among treatment-naive addicts than among treatment-experienced addicts.

These findings did not support the outcome of studies by Cacciola, Dugosh and Camilleri (2009) who found that addicts who are experienced in treatment would show a better acceptance rate towards treatment than new addicts would. Similarly, the treatment completion rates obtained by these addicts showed no significant differences in terms of treatment experience. The same findings by Guajardo (2008) indicated that the psychoeducation treatment program had little effect on reducing anxiety towards therapy. There was no increase in therapeutic alliance and outcomes (engagement in psychotherapy) because clients who are new to treatment (or have less treatment experience) had higher expectations of their participation, but experienced clients (who have more prior treatment experience) expected a higher level of therapeutic environment.

In the follow-up tests, the time-delayed effect for both experiment groups showed that PGT effects experienced by the respondents remained after three months, and that there was no significant difference between the two research groups. Crosstabular analysis verified this finding. Results showed that there was a drop in the decisional balance stage among respondents in both research groups. At the follow-up test stage, each respondent from the experiment group had reported a change in decisional balance stage from cons of drug use to pros of drug use. A small change as this did not significantly influence the effects of PGT treatment given for the time-delayed period. This was because the same change occurred in the control group if a comparison were to be made.

As a summary of all the findings of this research, psychoeducational group therapy has succeeded in motivating change among treatment-experienced addicts at least one step up in respect of the stage of change; an increase in the self-efficacy stage; and a change in the decisional balance stage to cons of drug use. On the other hand, PGT is only successful in influencing a change in the decisional balance stage among treatment-naive addicts. Further inference analysis was conducted to get an accurate overview of PGT's influence on the experiment and control groups by controlling the treatment experience variable, by conducting tests such as MANOVA and MANCOVA. Through these tests, two experiment groups were , and two control groups were also merged as one. The number of respondents increased to 22 people for the experiment group and 23 for the control group. The total number of respondents in these groups complied with the basic condition of normal distributions, which states that respondent sizes in each sub-group in the variable must not be lesser than 15 individuals (Chua, 2009).

Results from the MANOVA inference test found that there were significant differences between pre and posttest data, which indicated that PGT treatment was generally effective in enhancing motivation. A prepost univariate analysis test verified these findings, which showed that PGT was effective in promoting stage of change, self-efficacy and decisional balance among respondents who were undergoing treatment. Comparing experiment and control groups, the MANCOVA test which was conducted showed that PGT was effective in enhancing respondents' motivation in only two variables, namely, stage of change and decisional balance, but was not effective in the change in self-efficacy. This indicated that there was a significant difference in the stage of change and decisional balance in the experiment group compared to the control group.

The results of this study did not support the findings from research conducted by Dolan, Martin and Rohsenow (2008); Ilgen, McKeller and Moos (2007); and the literature review of Kadden and Litt (2001) which found that psychoeducational intervention could enhance addicts' self-efficacy stage, particularly in terms of their ability to remain in an abstinent state or lessened drug intake (Dolan, Martin & Rohsenow, 2008). In addition, the respondents' participation in skill-building activities was related to higher self-efficacy and contributed to the positive outcome of treatment (Ilgen, McKeller & Moos, 2007).

5.3 Implications of the research

This section discusses the implications of the research based on the findings which were obtained from the study's contribution to the theory, which is the basis of this research. The implications refer to treatment policy and the nation's drug rehabilitation programs, the development of rehabilitation modules, the role of the main authorities in implementing treatment programs, and the drug rehabilitation counseling practice.

5.3.1 Contribution of the research to theory

This study indicated that there are several researches, which could contribute to the theoretical basis, TTM, as the core of this study. These contributions may be viewed from four aspects: the effectiveness of psychoeducation approach, stages transitions, research designs, and treatment history.

The results of the study showed that a psychoeducational approach, particularly when it was executed in group therapy, was effective in promoting or enhancing the clients' motivation which was measured based on the transition of

stages of change, increase in the self-efficacy stage, and changes toward a positive decisional balance stage (cons of drug use). Nevertheless, different results would be obtained if the treatment experience factor were taken into consideration. These findings contributed to the verification of TTM recommendations which indicated that a psychoeducational approach is most suitable to be used in interventions for addicts who are at the early stages of change, that is, at the pre-contemplation and contemplation stages. TTM stresses that at the pre-contemplation stage, an addict does not plan to change have no intention to change or stop his addictive behavior, and the treatment goal, which must be focused on, is to increase his awareness of changing this behavior. Addicts who are at the contemplation stage will start to weigh their need to change. The change that would take place depends on the addicts' awareness of the balance between the pros and cons of changes that they would like to make (Prochaska & DiClemente, 1984; DiClemente & Hughes, 1990; DiClemente, 2006).

Velasquez et al. (2001) suggested that these addicts must be educated about the negative effects of addiction, and explore the concerns and conflicts that arise between drug use and personal values while being given the information related to their addiction and the potential problems that would arise because of their addictive behavior. The psychoeducational approach using the group therapy method which was applied on these addicts took into consideration all suggestions given and listed in TTM theory, including the use of change activities based on the change processes which were experienced by the addicts. Results obtained showed that the approach was indeed effective. Transition of at least one stage of change which was proven in this research verified the TTM theoretical assumption which states that in order to assist the rehabilitation of an addict, the intervention treatment to be conducted must

be in line with the concept known as “doing the right thing at the right time” (Velasquez et al., 2001).

From the aspect of stages transitions, this study has proven that the transition from one stage to another stage that is higher in changes can happen when the intervention given is suitable or is conducted according to the preconditions of the stage’s transition (DiClemente, 2006). In fact, the results also indicated that there was a situation where the transition not happened in linear or in stages, when the individual involved achieved his goal that need him/her to change. In this research, it was revealed that two respondents in the experienced addicts group who had undergone the PGT treatment had moved to the preparation/action stage of change after the treatment had ended, compared to when they were at the pre-contemplation stage before they participated in the treatment. This finding supports DiClemente’s (2006) view, which emphasizes that change processes application in therapy can become an engine that creates and sustains the transitions through the stages and facilitates successful completion of the stage task.

The findings also contribute to the enrichment of TTM theory in terms of research design. According to Sutton (2001, 2005), one of the deficits in the literature on stage-matched interventions based on TTM was that no empirical research (experimental) has been published as a reference for the effectiveness of matched and mismatched intervention, including the examination on stage sequences (transitions) and longitudinal studies. The findings of this research will add to the research literature in terms of the experiment on the effectiveness of stage-matched intervention, which was founded by TTM to enhance the drug addiction treatment, especially in promoting motivation in treatment.

Finally, this study provided empirical evidence that addiction experiences influence the motivation of change among addicts who are at the early stages of change. Treatment-experienced addicts were found to be more motivated to be cured (characterized by the increase in stage of change, self-efficacy stage and decisional balance of cons of drug use) when they participated in stage-matched intervention using the psychoeducational approach as group therapy. The characteristics of addicts who are experienced in treatment are related to an indicator of the individual with greater problem severity and more severe psychosocial functioning (Cacciola, Dugosh & Camilleri, 2009) and who would benefit from this treatment. Such addicts were found to exhibit more changes in terms of the stage of change transition, more able to continue to change (high self-efficacy), and tipped the balance in cons of drug use compared to naïve addicts.

5.3.2 National policies on drug treatment and rehabilitation

The change profile of addicts who are undergoing treatment and rehabilitation in Malaysia, specifically the ones handled by AADK, have been proven in many studies (e.g., Abdul Halim & Mohd Rafidi, 2012; Abdul Halim, 2010; Najwa, Sabitha & Mahmood, 2008; Abdul Halim, Mohd Rafidi & Jailani, 2006) to be on average, at the early stage of change, forcing the government (particularly AADK) to conduct specific transformation to address the addicts' rehabilitation requirements more comprehensively.

According to DiClemente (2006), Connors, Donovan and DiClemente (2001), and Velasquez et al. (2001), this stage of change profile must be attended by more specific intervention that is suitable to their rehabilitation demands based on the stage's characteristics and tasks, the change processes, and the markers of change

which are identified. If all these elements are applied in the policy and treatment and rehabilitation treatment, they could deliver the desired effectiveness. This research proves that all the elements applied in experiments through manual-guided intervention were effective in promoting changes in the addicts.

Implications that are relevant to the transformation of the policy on drug treatment and rehabilitation, which can be suggested by the research findings, are, firstly, to provide a plan and implement the treatment and rehabilitation concept based on stage-matched intervention. This concept emphasizes that intervention strategies that are conducted must match with the addicts' stages of change since each of them has different demands and needs. For addicts who are ordered to undergo treatment and rehabilitation the residential rehabilitation way, stage-matched intervention is required to adhere to activities/processes of change and approaches, as recommended by DiClemente (2004), Velasquez et al. (2001) and Connors, Donovan and DiClemente (2001). This is particularly relevant in TTM, which involves two target groups, namely, the early stages of change (pre-contemplation, contemplation and preparation,) and the later stages of change (action and maintenance).

These two groups of addicts must be separated during the implementation of the programs because their treatment and rehabilitation goals are different, at least for the period of time proposed, that is, six months (DiClemente, 2006). The program contents and rehabilitation activities must be based on the rehabilitation goals of each stage of change. The goals for addicts' rehabilitation for each stage of change are featured in Table 5.1.

Table 5.1

Treatment goals according to addicts' stages of change

Group	Stages	Treatment goals
1. Early stage of change	Pre-contemplation	Problem recognition, and being objective and honest with self through educating and providing information
	Contemplation	Firm decision to change through gathering decisional considerations, evaluation and comparative process
	Preparation	Strong commitment and have an acceptable, accessible and effective plan for change
2. Later stages of change	Action	Establish a new pattern of behavior through implementing and revising the plan, maintaining commitment and managing relapse process
	Maintenance	Permanent change through sustaining change (time and situations), avoiding relapse process and creating a new satisfying life

(Source: Adapted from DiClemente (2006), *Addiction and change*, pp. 113 – 189)

The stage-matched intervention concept also suggests several strategies or intervention techniques which are suitable for facilitating or motivating addicts' change according to the stages of change. The essence of the strategy and technique in facilitating addicts' change is to use the change processes as an engine to promote change (Prochaska & DiClemente, 1984; Connors, Donovan & DiClemente, 2001; Velasquez et al., 2001). Certain change processes, and they are specific for each stage of change, can be applied in different methods, either to individuals or in groups, to become change activities in each session, as implemented in this research.

The second implication of this research is that it provides suggestions for addicts' placement in a suitable rehabilitation setting, based on the goal of the addicts' recovery. Based on Table 5.1 entitled "Treatment goals according to addicts' stage of change", each stage of change requires a different recovery setting to ease the stage's

tasks and achieve the goal mentioned. Based on TTM, addicts must be put in a rehabilitation setting which can facilitate their change processes based on the identified goals and stage task (DiClemente, 2006; Connors, Donovan & DiClemente, 2001). For instance, for addicts who are in the early stages of change (e.g. pre-contemplation), treatment approach differs since their recovery goal is to recognise that drugs are a problem to them, and the suitable treatment strategy is to educate and provide information to arouse awareness.

The same goes for addicts who are at the contemplation and preparation stages of change. This study has proven that the psychoeducation method, which is didactic in nature, and the sourcing of information could assist them to achieve their rehabilitation goal, and move towards a higher stage of change. Thus, the best setting for them is the rehabilitation institutions. As for addicts who are in the later stages of change, the intervention strategy used is in the form of practicals and drills in rehabilitation skills in order to enable them to establish a new behavior (e.g action) and face the time as well as the real situation that they have to encounter. Thus, it is more reasonable for them to have their rehabilitation setting in the community.

The third implication, which involves treatment policy and drug rehabilitation, is the use of group therapy as one of the main methods to promote addicts' change, particularly for addicts who lack motivation or are not motivated at all, such as addicts who are in the early stages of change. Without denying the importance of individual counseling in assisting an addict's recovery, many researches have verified the effectiveness of the group therapy method in this issue (Sobell & Sobell, 2011), since it has several therapeutic advantages, which cannot be found in other therapy methods. These advantages include: peer group pressure and positive support, thus reducing the feeling of alienation; modeling the role model; sharing of emotions,

feelings and experiences through relevant sources (experience sharing); receiving feedback from others; experiencing a new brotherhood; a place for getting support, encouragement, guidance and reinforcement; provision of a situation for learning new social skills; and a source of support inside and outside the group (Sobell & Sobell, 2011; CSAT, 2005; Velasquez et al., 2001; Flores, 1997).

5.3.3 Implications for drug addiction counseling

This study provides a new dimension to drug addiction counseling practices, especially for rehabilitation professionals and in general, for implementation agencies. The implications of this study can be viewed in three situations, namely, module approach, multi-skilling counselor, and professional competencies.

The Malaysian approach to drug addiction treatment and rehabilitation, particularly by AADK, is driven by an action-oriented approach, which is characterized as a 'one size fits all' program of structured and scheduled activities that must be experienced by all addicts without taking into consideration their addiction history or previous treatment experiences. According to Abdul Halim (2010), they almost neglect the critical component of readiness to change amongst the inmates. Addicts must go through each program provided even when they do not need these programs, or have gone through these programs only because they have to fulfill the module's requirements and the targets set. Another interactive and conducive approach must be developed and implemented by AADK. This study has succeeded in developing a module that contains these characteristics, based on stage-matched intervention and fulfilling the requirement of an addict's recovery through the use of psychoeducational group therapy. It could also be used as the bench mark for the

development of a group therapy treatment module that fulfills the requirement of drug addicts' rehabilitation in the institution or community.

This study provide an empirical evidences that a drug treatment and rehabilitation approach, which applies psychoeducational group therapy, is effective in enhancing drug addicts' motivation to change. This research also provides implications for the importance of professional rehabilitation in the context of a counsellor's scope of responsibility and tasks, especially the fact that counselors have significant function must posses several skills. It is no longer adequate for counselors to only understand and master counseling skills. Brown (2011) and CSAT (2005) listed the following skills which rehabilitation professionals must master, especially counselors who are involved in preparing treatment and rehabilitation services that use psychoeducation and psychoeducational group therapy approaches:

- (a) Pedagogical skills, particularly basic teaching skills, because this approach emphasizes counselors' roles as teachers and educators;
- (b) Knowledge, understanding and skills in the field of drugs, including types and categories of drugs, pharmacokinetic and pharmacodinamic drugs, toxicology, effects of drugs, addiction-related disorders, and etiologies;
- (c) Group leadership skills such as attending, reflecting, summarizing, active listening and responding, clarifying and supporting, advanced leadership skills and facilitative communication skills;
- (d) Assessment and planning skills, especially in the management and interpretation of measurement tools, planning of rehabilitation programs based on evaluations done and developing the curriculum (program content);

- (e) Basic life skills such as problem-solving, crisis intervention, anger management, stress management and relaxation;
- (f) Basic group dynamics skills and an understanding of the dynamics of interpersonal relationships in groups; and
- (g) Case management skills such as assessment, planning, collaborating, implementing, monitoring and evaluating.

All these skills require the commitment of rehabilitation professionals. Their role is not limited to only preparing for counseling service and guidance, but also to take on the role of teacher, educator, resource provider, advocator, role model and case manager. Something could be considered is, the same approach and techniques applied in this study can be practiced in the field of preventive education, especially to the target groups at high risk to onset of drug use.

5.4 Recommendations for future research

Several recommendations presented below could be used as guidance and limitation by future researchers who are interested in making an in-depth study of this field.

The first recommendation is related to the target group. Since this research is the first to develop a stage-matched intervention module and to study its effectiveness on one segment of the target group, another similar study must be conducted to study the second segment of drug addicts who are undergoing drug treatment and rehabilitation. This is the group of addicts who are in the later stages of change, action and maintenance. The essence of future research must be aimed at preparing a treatment and rehabilitation module that fits well with the requirements of the addicts' rehabilitation based on their stages of change.

A quantitative method was applied in this research through the use of questionnaires as the main method of data collection. The second recommendation is that in future research, focus could be placed on a qualitative method as the main method of data collection. This is because the psychoeducational group therapy model must be evaluated thoroughly, especially how the interaction and helping relationships between counselors and group members contribute to the process of rehabilitation for drug addicts. A qualitative method may be able to verify the research findings, or to provide addicts who are undergoing psychoeducational group therapy with a better understanding of their processes of change.

The third recommendation that can provide guidance and ideas to future researchers, who are interested in this field, is related to the variables that have been studied. Specifically, this research focused on three main variables, which are the stages of change (limited to two stages of change: pre-contemplation and contemplation), and the markers of change, namely, the decisional balance and self-efficacy. This study has proven that the roles played by the three variables are influential to the addicts' process of change. Future research could focus on the interactions between the variables in different contexts of change, as stated by DiClemente (2006). Similarly, the focus could include the influence of "cognitive/experiential" and "behavior" in the change processes, particularly in the processes of change among drug addicts who are undergoing treatment and rehabilitation in institutions or the community.

The last suggestion which merits more attention in the future is the population of the research sample. The psychoeducational approach used in this study focused more on a small group of participants (of between 8 to 12 people) who were in a suitable circle for rehabilitation. This approach suggests that psychoeducational group

therapy can be carried out in large groups of up to 50 individuals per session (Brown, 2011). This large number of samples in one research and control group, for the purpose of research experiment, can today be implemented within the setting of rehabilitation institutions, due to their large capacity for inmates.

5.5 Conclusion

This study proves that by applying the group therapy method, the psychoeducational approach is able to increase the motivation level of drug addicts to change. This is based on the measurement index for stage of change, self-efficacy and decisional balance among addicts who are undergoing treatment, particularly experienced addicts (those who have had repetitive participation in treatment).

The findings of this research have important implications for drug rehabilitation counseling practitioners, especially ADK rehabilitation personnel. Drug treatment and rehabilitation can no longer be limited to individual counseling sessions, groups and families. Instead, it can be varied by applying more effective approaches, such as psychoeducational group therapy that is suited to the demands and requirements of the clients whom counselors are dealing with. It is clearly that the counselors' responsibilities and roles should be more focused on teaching the addicts, who need knowledge and understanding of their own behaviors.