#### **CHAPTER 5**

### CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter presents the summary of the research process in term of findings of the research. Discussions are initiated based on the analysis of the data collected during this study regarding how these findings affected the sea training program in term of training outcomes and its effectiveness toward the trainees. The findings are organized according to the research hypotheses. Then, recommendation to improve the sea training program will be discussed. Finally, the chapter concludes with the limitation of the study and suggestion for future researches.

### 5.2 Summary of Research Findings

This study is guided by four research hypotheses, Bivariate correlations, multiple regression, t-test and descriptive statistic were used to test the proposed relationships and the magnitude of each variable. The research hypotheses and related results are as follows:

## 5.2.1 H1: There is a positive relationship between design of training program and training outcomes.

By using bivariate correlation, this study found significantly positive relationship between design of training program and training outcomes, suggesting that design of the training program is positively associated with course satisfaction. Further analysis on items variables, by using descriptive statistic technique, revealed that the trainees feel the contents of the sea

training program meet their needs and will enhance the trainees desire to perform onboard ship. The average mean for variable design of the training program is 3.56.

# 5.2.2 H2: There is a positive relationship between supervisor's support and training outcomes.

By using bivariate correlation, this study had found significantly positive relationship between supervisor support and course satisfaction, suggesting that supervisor support was positively associated with course satisfaction. Further analysis on items variables, by using descriptive statistic technique, described that the trainees agreed that with the support from supervisor, they perceived that they can transfer their newly acquired knowledge and skills to the work onboard ship. The average mean for variable design of the training program is 3.64.

# 5.2.3 H3: There is a positive relationship between trainee's motivation to learn and training outcomes.

Bivariate correlation was used to determine the relationship hypothesized by H3. This study found significant positive relationship between motivation to learn and course satisfaction. The results also showed that trainees' perception to motivation to learn at the highest positively correlation (r=0.619). Further analysis using descriptive analysis technique revealed that the mean for motivation to learn describes trainees are agreeing with the extent they are motivated to utilize learning in their work. The average mean for variable design of the training program is 3.74. However, training establishment and accommodation (training room, ship accommodations and facilities, etc)

scored low, suggesting that trainees assessed the support from establishment and training facilities as insufficient.

A test using standard multiple regression had discovered that H2 was partially supported, this study supported hypotheses H1 and H3. This study also found the design of the training program, instructor support and motivation to learn affected the attitudes of trainees and subsequently in turn impacted training outcomes. Trainee's motivation to learn (t=5.363) is the most contribution factor that leads to trainees' performance onboard ship.

5.2.4 H4: Sea training program will increase the training effectiveness in term of reaction based on trainees' course satisfaction; learning based on the results of the examination: and behavior based on positive increments of basic job skills and personal attributes.

In order to prove the effectiveness of the sea training, the evaluation of trainings effectiveness was operationalized using three levels of test based on Kirkpatrick's model. First, descriptive statistic technique was used to analyze the items in the variables course satisfaction for Level 1 (Reaction). Results from the means for course satisfaction describes the trainees agreed that they are satisfied with the conduct of sea training program. The trainees' also perceived that they can transfer their newly acquired knowledge and skills to the work onboard ship. The average mean for variable design of the training program is 4.04.

For Level 2 (Learning), a test was conducted to evaluate and validate whether the training has transformed knowledge. An examination was conducted after the trainees completed onboard training. Overall, the trainees had achieved a moderate level in the examination. These results had illustrated that the trainees have moderately transferred their knowledge to the examination. For Level 3 (Behavior), a test using t test had discovered that there was a significant difference of variables in basic job skill and personal attributes before and after sea training program. The results revealed that the sea training program significantly improved the trainees' basic job skill and personal attributes with increased of t-value and average mean after sea training program. Further analyses of the variable's items using descriptive statistic technique showed that means of trainees' basic job skills and personal attributes at the completion of the sea training program improved from moderate level to high level. Therefore, it concludes that the sea training program had a strong positive impact on the trainees' behavior at the completion of the training.

5.2.5 Summary of the Analysis – This study has shows that design of training program, supervisor support and motivation to learn positively impact trainees' performances in sea training program. The trainees' had showed tremendous improvement in knowledge, skill and attitudes at the completion of the sea training program. Findings of this study revealed that motivation played a more determinant role than other factors in regard to training performance especially in the military environment. However, finding of the study also showed that the trainees' perceived support from the organization and training facility are insufficient. Therefore, the stakeholder should look into these matters seriously to ensure the success of BJOC. Overall, sea training program had improved the trainees' knowledge, skills and attitude. Sea

training is an excellent tool to train and educate young officer on the important of having sufficient knowledge, skills and attitudes to survive onboard ship. This study also revealed 2<sup>nd</sup> year cohorts score better results than 3<sup>rd</sup> year cohorts. However, this finding was not further explored due to beyond the scope of this research.

#### 5.3 Recommendation

Based on the research, some of the following recommendation and improvement should be considered to enhance the relevancy of sea training program.

5.3.1 Facilitate Effective Training Outcomes - It is critical that training professionals understand the link between training and performance and measure both the effectiveness of training and the efficiency of the organization in delivering improved performance outcomes. To improve the trainees' knowledge, skills and attitudes in the sea training program, an effective performance management process can be quite helpful. A continuous performance management system could help the trainees plan for future performance, since it sets clear targets and goals, and explains why those targets and goals may not have been achieved in the past. In addition the performance management process can also provide clear mechanism by which employees can be given developmental opportunities in their current job that will prepare them for promotion or advancement when such opportunities arise.

5.3.2 Factors Influence Training Effectiveness - As the research has confirmed, transfer of training is complex and involves many factors, which is why it is critical that practitioners evaluate the work environment and what is needed for the trainees to transfer the new knowledge, skills and attitudes back to the job for their particular work environment. This study has proved that design of training program, supervisor support and motivation to learn influenced the success of sea training program. The trainee's motivation to learn contributes most to the effectiveness of training and therefore, a mentoring program could help the newly trained trainees apply what was taught in class and also what was not taught in class (tricks of the trade) and provide immediate and constructive feedback on how well the trainee is performing. This study also agreed trainees should be in communication with his/her supervisor to understand expectations of job performance both before and after training. There should be accountability and a partnership formed between the trainees and supervisor. It may be more motivating if the trainees knew how he/she were going to use the training to help him/her perform better.

**5.3.3 Concentrate On Weaker Performer** – Based on the examination results, there are number of trainees whom are getting grade C and C+, therefore, the organization should focus extra attention for weaker performers in order to ensure the effectiveness of training program. One or more individual's trainees should be designated as the internal leader or champion for measurement and evaluation. As in most change efforts, someone must take the responsibility for ensuring that the process is implemented

successfully. The leader is usually the one who understands the process best and sees the potential contribution of the process. More importantly, this leader is willing to teach others.

**5.3.4 Set Target for Evaluation Level** – To ensure that there is a comprehensive system of evaluation, specific targets should be set for each level of evaluation based on Kirkpatrick's model. This process requires that a certain number of programs be evaluated at each level (example; by end of 2010, the following evaluation targets will be established 100% at Level 1, 50% at Level 2, 30% at Level 3 and 20% at Level 4). These targets provide guidance for the training department to focus on a complete evaluation system. For each of evaluation level, chain of impact has occurred that indicates that trainees learned the material, applied it on the job, and obtained the desired results.

5.3.5 Upgrade Library and Computer Facilities – As the officer learning institution in the RMN, KDSI 1 should have the best equipped library amongst Navy units and stocked with the latest books, reference and publications for the convenience of trainees who wish to use the facilities to update their knowledge. To enhance the importance of information technology, KDSI 1 should have its own web page that is link to all the advance countries Armed Forces higher learning institutions where there can be an exchange of knowledge and latest information.

### 5.4 Limitations of the Study

Whilst undertaking this research, the researcher faced some constraints which have an impact on the study. Firstly, due to time constraint an in-depth study could not be conducted. Only basic relationships using correlation and multiple regression techniques were evaluated. Since this study only focused and tested the proposed relationships in the model, other potential relationships were not evaluated. For example, others influence such as trainees self characteristics, organization influences, intrinsic and extrinsic motivation which may have a direct correlation with individual performance were not studied. In addition, using a structural equation model for analyzing the data could reveal more information because all of the possible relationships between the variables in the proposed model could be tested.

Secondly, the respondents were limited to only 2<sup>nd</sup> year and 3<sup>rd</sup> year BJOC trainees. This sample size of 109 respondents was not adequate to perform exploratory or confirmatory factor analysis. Factor analysis is a large-sample procedure, so it is important to use guidelines to choose the sample size which will be minimally adequate for an analysis. To conduct exploratory factor analysis, the guideline is the larger of 100 subjects or 5 times the number of variables being analyzed. To conduct confirmatory factor analysis, the guideline is the larger of 150 subjects or 5 times the number of variables being analyzed (Hair et al, 1998)

Finally, this study reviewed the influence of the three work environment variables (design of training program, supervisor support and motivation to learn) on training effectiveness. Work environments are not static, but are constantly changing due to organizational needs, management practices, jobs and roles, access to resources and changes in the industry. This is especially true of the work environment of BJOC trainees as different training grounds may be allocated each year. For this reason, it may have been helpful to this study to gather and measure background information on both the organization and the trainees' work environment at the completion of sea training. This would provide a more accurate measure of the context in which the work environment influences transfer and the trainees' perceived importance of the work environment variables.

### 5.5 Future Research

The research involving training effectiveness in RMN was rare and the success of sea training program showed the effectiveness of knowledge retention by trainees'. Based on the above limitation, many aspects of training environment can be investigated for future research. Firstly, the research can be further improved by expanding the time frame to give the researcher more time to do research on more respondents in order to gain more factors which could predict training effectiveness. Secondly, several performance factors should be included in the questionnaire in order to evaluate the effectiveness of sea training program such as locus control, personal outcomes negative, importance of supervisor sanctions, and importance of resistance/openness to change. Thirdly, future research should

look into how to improve the performance management of the graduates once they are performing their job after graduating from BJOC program. This should be done in order to enhance the knowledge that the trainees have gathered during the BJOC program. By improving their performance management, the organization will benefit more from the trainees' knowledge, skill and attitude. Fourth, the role of peer or co-worker and organization for learning transfer enhancement should be studied in the future. Lastly, the significant differences between trainees showed that 2<sup>nd</sup> year cohorts performed better than 3<sup>rd</sup> year cohorts. Due to time constraints, this finding was not analysis. Future researcher should explore these phenomena and look into possibilities differences of length of training onboard between cohorts, the number of trainers versus trainees and quality of trainee i.e qualification and maturity may be the reasons why the 2<sup>nd</sup> year cohorts performed better than 3<sup>rd</sup> year cohorts.