Doctoral Dissertation

Post-Training Interventions for Transfer of Training

NU NU MAI

Graduate School for International Development and Cooperation
Hiroshima University

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D171303

NU NU MAI

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We hereby recommend that the dissertation by Ms. NU NU MAI in entitled “Post-Training Interventions for Transfer of Training” be accepted in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY.

Committee on Final Examination:

Yoshi TAKAHASHI, Associate Professor
Chairperson

Shinji KANEKO, Professor

Daisaku GOTO, Associate Professor

Makoto KAKINAKA, Professor

Nobuyuki CHIKUDATE, Professor,
Management Science Program,
Graduate School of Humanities and Social Sciences, Hiroshima University

Date: _____

Approved:

_____ Date: _____

ICHIHASHI Masaru, Professor
Dean

Graduate School for International Development and Cooperation
Hiroshima University

Summary

Title Post-Training Interventions for Transfer of Training

Student ID No. D171303

Name NU NU MAI

The transfer of training is an invisible hand for improvements of individual performances as well as of organizations due to its subtlety and complexity in measures and indicators, concurrently, costly, and time-consuming nature in implementing transfer measures. How to maximize transfer impact, in other words, how to visualize or explicit transfer value, has been an important question in the field of transfer studies (Baldwin, Ford & Blume, 2017). Scholars in this field have established some significant techniques to enhance transfer of training. Conducting post-training interventions after the main training has been recognized as a one of the promising techniques for enhancing transfer of training (Baldwin, Ford & Blume, 2017). Concerning transfer problems, this dissertation focuses on post-training interventions as a technique to facilitate transfer of training which helps improve individual and organizational performances.

This dissertation has three main purposes. The first purpose was to validate inconclusive findings on the effectiveness of two relatively more utilized post-training interventions; full relapse prevention (RP) and proximal plus distal goal setting (GS) (Chapter 2). A Solomon four group experimental design was used. Subjects were management study undergraduate students from one college who participated in a three-hour time management workshop. Before the workshop, students were randomly divided into two groups: pretested and unpretested groups. They were randomly subdivided into three additional groups: full RP, proximal plus distal GS, and the control group after the workshop. Transfer of time management behaviors were measured by both self-reported and observer reports at before and three months after the training.

Contrary to prediction, results from both intervention groups were not significantly different from those of the control group. A significant difference, however, was found between full RP and proximal plus distal GS in terms of self-reported time-management behavioral change. It is difficult to conclude whether post-training interventions enhance the transfer of training. Further ideas for improving research designs were explored, such as

increasing the time intervals between training and interventions so that trainees have opportunities to attempt transfers before the intervention.

The second purpose was to test the effect of another post-training intervention; implementation intentions (II) on transfer of training (Chapter 3). Subjects were trainees of three digital marketing trainings. They were randomly divided into two groups: with or without II after the training. Their general and specific transfer of digital marketing knowledges and skills were measured 12 weeks after the training. A significant positive effect of II was found on the specific measures of transfer of training while the effect was insignificant on the general measures of transfer of training. The possible explanation for the inconclusive results is the self-evaluation on the general measures, which was more troublesome as the respondents perceived them relatively vaguer. Only a few studies have tested the effectiveness of II as a post-training intervention in transfer studies. The findings of this study validated previous findings on the effect of II after a longer interval, 12 weeks rather than up to six weeks after training. The findings suggest that II can be a convincing answer for how to maximize transfer.

The third purpose of the dissertation was to examine the reactions of managers towards the implementation of post-training interventions. More specifically, when the managers face a post-training transfer intervention (implementation intention or proximal plus distal goal setting) and an information condition (research information or research information with utility analysis). Subjects were executive managers (n = 229) who were attending the Executive Master of Business Administration Program (EMBA) of a University of Economics. A randomized, 2 × 2 (post-training intervention × information type) factorial design was used. MANOVA was conducted on both variables: understandability and acceptability. The results show that managers are more likely to understand the consultant's proposal on II intervention than on proximal plus distal goal setting. These interventions did not have a significant difference in the acceptance to the consultant's proposal. However, managers are more likely to accept the consultant's proposal on II intervention when research information with utility analysis information is provided with. The study adds to the literature by investigating two interventions, not previously examined, with two specific information conditions.

In conclusion, the above analysis results will be synthesized, from the perspective of how to enhance and exploit the post-training interventions to improve transfer of training. The present study contributed to the transfer of training literature, from the perspective of

post-training interventions. To accomplish this goal, three empirical studies were conducted with experimental research designs, through the primary data. Two of them are on the effectiveness of post-training interventions on transfer of training (Chapter 2 and Chapter 3) while the other is on the determinants of a manager's decision on introducing post-training interventions (Chapter 4).

The specific contributions of each empirical study were already articulated in the relevant chapter. Moreover, overall contributions can be elaborated as the empirical studies on post-training interventions for transfer of training. One important point is the comprehensive scope of the study as a whole. Major three types of interventions, RP, GS and II were analyzed, though not in a single study. Furthermore, not only the intervention's effectiveness but the determinants of introducing the interventions are within the research scope. By doing so, a more comprehensive pictu re of the issue could be shown. The other point is the detailed investigation in the empirical analyses including different measures of transfer (self- and others-reported transfer, chapter 2), different specifications of transfer (general and specific transfer, chapter 3) and moderating variables (private or public sector, chapter 4) in the empirical analyses. The literature set more focus on the simple direct effect of interventions, particularly because whether the effect exists has been a main agenda among the researchers. The present study explored this direction, at least to some extent.

This study has several limitations. Among them, the most critical matter is that the theoretical foundations could not be identified clearly for the different results for the effectiveness of three types of interventions. This point has been one weakness of the literature, mainly because the researchers have focused too more on the confirmation of the effectiveness. The boundary conditions and underlying conditions have not been analyzed well in the literature. Therefore, such sort of analyses is demanded. Simultaneously, further theoretical discussions are also required. By advancing the research in this direction, the researchers would obtain more convincing evidence and the practitioners would be more certain to introduce the post-training interventions for transfer of training.

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I would also like to admit that any errors, shortcomings, and limitations in this dissertation are entirely my own responsibility.

Table of Contents

List of Tables

List of Abbreviations

ANCOVA	Analysis of covariance
ANOVA	Analysis of variance
CEO	Chief executive officer
EMBA	Executive Master of Business Administration
GDP	Gross domestic product
GS	Goal setting
HRM	Human resource management
II	Implementation intentions
KPI	Key performance indicator
KSAs	Knowledge, skills, and abilities
MANOVA	Multivariate analysis of variance
MBA	Master of business administration
MBRP	Mindfulness-based relapse prevention
MMK	Myanmar Kyat
NGO	Non-governmental organization
NMDC	National Management Degree College
RP	Relapse prevention
ROI	Return on investment
SEO	Search engine optimization
TPB	Theory of Planned Behavior

Chapter 1: Introduction

1.1 Background of the study

Individual and organizational level performances greatly relied on how much the knowledge, skills and abilities gained from training have been transferred to the workplaces. The effectiveness of training would be meaningless if the transfer of training has been ignored or not been occurred. It would be wasting the money and time invested in the trainings. Among several ways to make sure transfer of training happen, implementing post-training interventions after the main training is one of the promising ways.

Transfer of training, the application of newly retained Knowledge, Skills and Abilities (KSAs) from training in workplaces (Baldwin & Ford, 1988), serves as an indicator of the effectiveness of investment in training and development programs in organizations (Kirkpatrick, 2007). It is a steppingstone from thinking, learning, and developing to increase personal and organizational performance. Transfer of training is a vital factor in improving individual or organizational performances (Gold & Smith, 2003), however, less than about 35 percent of employees transfer their KSAs back to work one year after training (Saks & Belcourt, 2006).

The transfer of training is like an invisible hand for improvements of performances due to its subtlety and complexity in measures and indicators, concurrently, costly and time-consuming nature in implementing transfer measures. How to maximize transfer impact, in other words, how to visualize or explicit transfer value, has been an important question in the field of transfer studies (Baldwin, Ford & Blume, 2017).

Baldwin and Ford (1988) published the first comprehensive model concentrating on the transfer of training issues. According to their model, there are three factors that affect the transfer of training: training design, trainee characteristics, and work environment. Since the development of their model, empirical studies have been accumulated (see, Burke & Baldwin, 1999; Facteau et al., 1995; Holladay & Quinones, 2003; Lysø et al., 2011; Roullier & Goldstein, 1993; Saks & Belcourt, 2006; Saks & Burke, 2012). Some review articles including meta-analyses been published (see Baldwin & Ford, 1988; Baldwin et al., 2009; Blume et al., 2010; Burke & Hutching, 2007).

In terms of the evaluation on the effectiveness of training, Kirkpatrick (1959) was a pioneering work. According to his model, training effects can be observed in the four levels,

that is, reaction, learning, behavior meaning "transfer of training" and result in terms of performance.

Based on this idea, some other models have been proposed, basically as the modifications of the Kirkpatrick model. One direction is the extension with introducing additional variables into the original model. For instance, Phillips (1996) added return on investment (ROI) as the fifth level, to reflect the perspective of efficiency into the evaluation. Another major example is Holton (1996). He included characteristics of the trainees and organizations in his comprehensive framework. Those factors are new because they are the ones beyond events directly related to the learning process.

But one of the main problems in these studies is the infeasibility of empirical studies. For the former, how to measure the return is an immense challenge, because many tasks and jobs are not as the simple output of the individuals who participated in training and learning opportunities. Insufficient methodological rigor is also a critical problem with the related prior studies, as most of them are through observational data. For the latter, due to many factors and relatively complicated relations among those factors proposed, applications to empirical studies are not likely to be possible, although there may be potential for researchers to pick up some part of it for empirical investigation.

In addition to such antecedents, a more straightforward intervention was raised to enhance the transfer of training. Equipping trainees with cognitive and behavioral strategies after training can help increase generalization and maintaining of their learned KSAs (Hutchins, 2004).

1.2 Rationale of the study

Concerning the transfer problem, this dissertation focuses on post-training interventions as a technique to facilitate transfer of training. There are four main reasons this dissertation focuses on post-training interventions. First, conducting post-training interventions after the main training has been recognized as a one of the promising techniques for enhancing transfer of training (Baldwin, Ford & Blume, 2017). Equipping trainees with cognitive and behavioral strategies after training can help increase generalization and maintaining of their learned KSAs (Hutchins, 2004). Second, in studies of different interventions (pre, during, and post), the post-training interventions have been found to have the strongest influence on transfer (Werner et al., 1994). Third, it is a cost-effective tool as it can be simply added after the main training. Finally, it could be a turnkey, as an efficient method to enhance the transfer

of training and performance of less capable and qualified human resources in the case of developing countries like in Myanmar.

Among several interventions, relapse prevention (RP) and proximal plus distal goal setting (GS) and implementation intention (II) were selected to study for the following reasons. Firstly, among the post-training interventions, relapse prevention (RP) and goal setting (GS) interventions have been the most tested in recent decades (Baldwin & Blume, 2009). The results of these studies, however, have been mixed (Rahyuda, Soltani & Syed, 2018; Rahyuda, Syed & Soltani, 201) as some studies having supported the interventions' effectiveness while others have not.

Secondly, it is a response to the calling of scholars in the training transfer field that is to expand the existing post-training intervention strategies (Ford et al., 2018). The effects of an alternative, newly, post-training intervention, implementation intention (II), has been found preferable in transfer of training but still need to validate regarding types of training (Friedman & Ronen, 2015) and length of effect (how long it will last), both were not investigated yet.

Some studies have shown strong support for the effectiveness of post-training interventions, but it is still difficult to know their practicality in organizations and manager acceptance (Huint and Saks, 2003; Salas and Cannon-Bowers, 2001). There is still a need to know what types of information and how it is presented is an important issue when it comes to selling managers the value of human resources practices (Carson, Becker and Henderson, 1998; Huint & Saks, 2003; Latham and Whyte, 1994; Whyte and Latham, 1997). Being weak in convincing of their effectiveness and cost (time-consuming) in implementation, executing post-training interventions are not warmly welcome among practitioners and managers and so their reaction to transfer interventions are not encouraging (Huint & Saks, 2003). Finally, for the above reasons, the reaction of managers to post-training intervention is examined in this study.

1.3 Post-Training Interventions with Background Theories

In this session, post-training interventions with their background theories will be described. The relapse prevention is theoretically based on social cognitive theory. The proximal plus distal goal setting is grounded on goal setting theory and implementation intentions is based on the theory of planned behavior.

1.3.1 Relapse Prevention (RP) and Social Cognitive Theory

Relapse prevention is a self-control strategy that helps trainees recognize and overcome potential hindrances to their transfer of newly acquired knowledge and skills (Marx, 1982). RP was employed as a behavioral therapy to help addicted individuals predict and cope with relapse problems (Marlatt & George, 1984). Relapse prevention is based on social cognitive theory (Marlatt & Gordon, 1985) which bridge between behavioral and cognitive theories of learning. According to social cognitive theory, human behavior is explained by a continuous reciprocal interaction between cognitive (personal factors), the behavior itself, and the environment (reinforcement) (Bandura, 1976).

The RP model posits the detailed classification of factors that can cause relapsing episodes. Two categories of relapse factors are: immediate determinants (e.g., high-risk situations, coping skills) and covert antecedents (e.g. lifestyle imbalances and urges and cravings). RP treatment begins with the assessment of the environmental and emotional characteristics of situations that are potentially associated with relapse (Larimer, Palmer & Marlatt, 1999). RP has two specific aims: 1. to prevent an initial lapse and maintain abstinence or harm reduction, and 2. to provide lapse management if a lapse occurs, or to prevent further relapse. The final goal of RP is to provide the skills to prevent a complete relapse, regardless of situation or impending risk factors.

Marx brought the concept of clinical RP as a transfer enhancement intervention into the corporate training arena in 1982. According to him, RP helps trainees become aware of the possibility of relapse in high-risk situations (e.g., those involving time pressure or intense interpersonal emotions) and to reduce the potential for slips, which are failures to transfer trained skills in the corporate training field. Marx developed a cognitive behavioral model of the relapse process based on self-management strategies adapted from Marlatt and Gordon (Marx, 1986). The four steps of behavioral self-management that Marx's 14 RP strategies are 1. (S) stimulus situation, 2. (O) thoughts and feelings of individual (Organism), (B) behavior, and (C) consequences of behavior, (Marx, 1986, p.55).

1.3.2 Proximal plus distal Goal Setting and Goal Setting Theory

Proximal plus distal goal is a combination of two kinds of goals: short-term goals (proximal goals) with the long-term goal (distal goal) (Brown & Warren, 2014). The proximal plus distal goal setting is based on the goal setting theory of Locke and Latham, which was used to explain motivation and effort in the workplace. It states that a person who sets a specific,

challenging goal can achieve a higher result than one who sets a vague, easily attainable goal. Simultaneously, the person must have the ability, resources, commitment, and feedback on progress to achieve the goal (Latham, Seijts & Slocum, 2016).

Setting short-term goals benefit trainees in three ways. 1. It can boost motivation through instant gratification; a person is more motivated when he knows that rewards are just around the corner. 2. It enables ongoing feedback to be received more frequently. Once a person has achieved a short-term goal, he / she can immediately change his / her performance and habits, enabling him / her to immediately increase productivity and efficiency. 3. It makes long-term goals easier to achieve by dividing them into smaller steps. A person can overcome each nearer obstacle individually, instead of trying to solve all obstacles at once. Their increased motivation makes them more likely to achieve long-term goals that are harder to achieve. In summary, achievement of proximal goals can be improved by direct incentives (Sun & Frese, 2013) to increase motivation and trial-and-error feedback (Locke & Latham, 2002) to correct actions.

Setting distal goals can help trainees to build self-confidence, become more resilient and identify areas for improvement, because they have overcome their long journey with several mistakes and obstacles. Combining areas that need to be improved). Pair proximal goals with distal goals, trainees benefit from achieving the best results. It helps trainees analyze each component of their long-term goal and then divide it into steps that are easier to accomplish. It also helps the trainees to stress the importance of recognizing each milestone and treating it as a small victory. It also creates a timeline for achieving goals, as timelines help to stay on track and focus, which leads to better results.

1.3.3 Implementation Intention (II) and Theory of Planned Behavior

Implementation intention (II) is a self-regulatory tool, introduced by Peter Gollwitzer, an American Psychologist, in 1993 (Gollwitzer, 1993). According to him, by forming II individuals can specify their intended behaviors when, where and how to implement those behaviors (Gollwitzer, 1999). Implementation intention is grounded in the theory of planned behavior (TPB). TPB is the extension of the theory of reasoned action which claims that behavior is predicted by volition and intention. According to the TPB, in addition to subjective and attitude norms, the behavior is also predicted by a person's perception of the ease or difficulty of performing the suggested behavior (Ajzen, 1987) (i.e. the perceived behavioral control). Behavioral intention is formed from a combination of attitude toward the behavior (what does the person think about the suggested behavior- positively or negatively?), subjective

norm (what will other's think of performing that behavior - favorably or unfavorably?), perceived behavioral control (do the person have the skills/means to perform it?). In short, the more favorable a person's attitude is toward behavior and subjective norms, and the greater the perceived behavioral control, the stronger that person's intention will be performing the behavior in question.

In the real life, however, the behavior intention does not always predict the suggested behavior. That is why there is a necessary role of implementation intention. It is a situational cue prompts action which does not need to be thought about the what, when, where and how to perform the goal behavior. It is a specific, individualized plan created by the individual. By creating II, it helps in forming mental images of situations in advances which in turn help the person to avoid any indecisiveness to perform the preferred behavior. The indecisiveness leads to fail performing the desired behavior (Gollwitzer, 1993). Behavior intentions that are equipped with implementation intentions are more likely to be enacted because opportunities for enactment are less likely to be missed (Gollwitzer, 1993). Forming implementation intention, therefore, increases the likelihood of attaining one's suggested behavior compared to the formation of a behavior intention on its own (Gollwitzer, 1999).

1.3.4 Comparing Post-training interventions

Relapse prevention more likely to act as passive role because RP's coping strategies based on high-risk situations which largely based on the past experiences. In the longer-term, it helps maintain the desired behavior. While comparing to relapse prevention, proximal plus distal goal setting is acting as an active role because it focuses on striving for achieving the future events or goals.

II acts as a starter of a particular behavior. It mainly focused to initiate a desired behavior, then once it started and got momentum, the behavior itself react or respond automatically to the cues.

1.4 Statement of the Problem

Training transfers have played a critical role in improving employee and organizational performance, but few percent of KSAs have been reported to be returned to work. The trainees and employers want transfer to occur, but there is a clear understanding that training alone does not ensure that trainees will necessarily use what they have learned during training (Broad and Newstrom, 1992). Transfer problem is an issue of organizational sustainability and personal

survival (Noe & Colquitt, 2002). A way to solving transfer of problem is implementing post-training interventions after the main trainings (Baldwin, Ford & Blume, 2017).

1.5 Purposes of the dissertation

This dissertation has three main purposes -

1. to validate inconclusive findings on the effectiveness of two relatively more utilized post-training interventions; full relapse prevention (RP) and proximal plus distal goal setting (GS).
2. to examine the effect of another post-training interventions; implementation intentions (II) on transfer of training in different context
3. to examine the reactions of managers towards the implementation of post-training interventions.

1.6 Contribution of the study

This study contributes to the extent of training transfer literature in at least three ways. First, it contributes literature by answering why RP is insignificant. Originally according to reviews and studies in the RP, it was assumed that inconsistent results may be from using different RP models full versus modified version. It may be not only on that different version utilizations, rather it largely relies on when post-training intervention is implemented and how trainees perceived their behavior: desire to change or not; how they mindful; and how they monitor their behavior. Another contribution is the study validates the results by filtering out pre-test sensitization effect; detecting history and maturing influences those are previous studies could not provide while comparing post-training interventions. Additional contribution is that checking the effectiveness of II on a different training - digital marketing training- which has not been analyzed in the transfer studies yet. The study confirms the usefulness of II in the unexplored training type. The effect of II is measured after 12 weeks of training which is much longer than previous studies (four weeks for the nonstudent group study). The longer-term effect of II can persuade managers, trainers or practitioners to introduce II as a post-training transfer intervention in their training and development programs.

1.7 Organization of Dissertation

Based on the discussion above on transfer of training and more specifically focusing on post-training interventions and its potential contributions to transfer of training, the dissertation consists of three main analysis chapters after this introduction chapter.

Chapter 2 focuses on two relatively more utilized post-training interventions; full relapse prevention (RP) and proximal plus distal goal setting (GS) and empirically analyzes their effects on transfer of training. The purpose of this chapter was to validate inconclusive findings on the effectiveness of the two interventions. Management study undergraduate students were randomly divided into two groups: pretested and unpretested groups. After a time, management workshop, the students were randomly subdivided into three additional groups based on the following conditions: full RP, proximal plus distal GS and the control group. Although results from both intervention groups were not significantly different from those of the control group, a significant difference was found between full RP and proximal plus distal GS in terms of self-reported time-management behavioral change. It is difficult to conclude whether post-training interventions enhance the transfer of training. Further ideas for improving research designs were explored, such as increasing the time intervals between training and interventions so that trainees have opportunities to attempt transfers before the interventions.

Chapter 3 focuses on the other post-training interventions; implementation intentions (II) and in the same way as Chapter 2, empirically analyzes their effects on transfer of training. Participants for a digital marketing course were randomly divided into two groups: with or without II after the training. A significant positive effect of II was found on the specific measures of transfer of training while the effect was insignificant on the general measures of transfer of training. The possible explanation for the inconclusive results is that the self-evaluation of the general measures was more difficult as the respondents perceived them relatively vaguer. Only few studies have tested the effectiveness of II as a post-training intervention in transfer studies. The findings of this study validated previous findings on the effect of II after a long interval, 12 weeks rather than up to six weeks after training. The findings suggest that II can be a convincing answer for how to maximize transfer.

Chapter 4 has a different research scope from those of the previous two empirical studies. The focus is on how it could be possible to sell the post-training interventions to managers in Myanmar organizations by different conditions of information provision. More specifically, the respondents face a post-training transfer intervention (implementation intention or proximal plus distal goal setting) and an information condition (research information or research information with utility analysis). The results show that managers are more likely to understand the consultant's proposal on II intervention than on proximal plus distal goal setting. These interventions did not have a significant difference in the acceptance of the consultant's proposal. Managers are more likely to accept the consultant's proposal on II intervention when research information with utility analysis information are provided with. The study adds to the

literature by investigating two interventions not previously examined, with two specific information conditions.

In conclusion, the above analysis results will be synthesized, from the perspective of how to enhance and exploit the post-training interventions to improve transfer of training.

Chapter 2: The Effectiveness of Two Post Training Interventions on the Transfer of Time Management Knowledges and Skills

The aim of this chapter is to examine the effectiveness of two post-training interventions, namely full relapse prevention (RP) and proximal plus distal goal setting (GS), on the transfer of time management training. First, it describes the theoretical background and hypothesis development, followed by the methodology of the study including samples, procedures and measures. Finally, the results and findings with discussion and conclusion are described.

2.1. Theoretical Foundation and Hypothesis Development

The transfer of training is the utilization of knowledge and skills acquired through training in new settings. It is a steppingstone from thinking, learning, and developing to increasing personal and organizational performance. Thus, training transfer is critical for maximizing transfer outcomes. At the same time, however, the transfer problem—the question of how to enhance this transfer—requires further clarification (Baldwin, Ford & Blume, 2017). In studies of different interventions (pre, during, and post), the post-training interventions have been found to have the strongest influence on transfer (Werner, Leary-Kelly, Baldwin & Wexley, 1994). Consequently, investigations of post-training interventions have been increasing in transfer studies (Baldwin & Blume, 2009). Among the post-training interventions, relapse prevention (RP) and goal setting (GS) interventions have been the most tested in recent decades. The results of these studies, however, have been mixed (Rahyuda, Soltani & Syed, 2018; Rahyuda, Syed & Solatani, 2014), with some studies having supported the interventions' effectiveness while others have not.

Moreover, in terms of research design, Solomon four-group design was used in this study, which allows us to rule out several internal validity threats (history and maturation) as well as external validity threats (interactions between pretesting and treatments and between selection bias and treatments) (Campbell & Stanley, 1966). By so doing, the results in the intervention effects is more likely to be convincing.

Based on the discussion above, in the present study, I investigate the effectiveness of the post-training interventions RP and GS. Subjects were undergraduate students who participated in time management training as the main focus of learning. Testing interventions in this manner can help trainers, educators, practitioners, and managers in their considerations of whether to

add post-training interventions to boost the future transfer of training. Based on the result, it is difficult to conclude whether post-training interventions enhance the transfer of training, because results from both intervention groups were not significantly different from those of the control group, whereas a significant difference was found between the two intervention groups, full RP and proximal plus distal GS.

2.1.1 Relapse prevention

RP is a self-control strategy that helps trainees recognize and overcome potential hindrances to their transfer of newly acquired knowledge and skills (Marx, 1982). RP is based on the principles of social learning theory. Originally, it was employed as a behavioral therapy to help addicted individuals predict and cope with relapse problems (Marlett & George, 1984) . Generally, "relapse refers to a breakdown or failure in a person's attempt to change or modify any target behavior" (Marlet & George, 1984, p. 261).

In 1982, Marx described a cognitive behavioral model of the relapse process and elaborated RP strategies as transfer enhancement interventions for corporate trainings (Marx, 1982). In the corporate training field, RP helps trainees to become aware of the possibility for relapse in high-risk situations (e.g., those involving time pressure or intense interpersonal emotions) and to reduce the potential for slips, which are failures to transfer trained skills. The original, full version of Marx's RP includes seven steps for trainees: (a) selecting skill(s) to retain, (b) setting retention goal(s) by specifying frequencies for skill usage and identifying slips and relapses, (c) creating commitments to skill maintenance by determining the pros and cons of using and not using the skill(s), (d) learning and applying the 14 RP strategies, including identifying high-risk situations, (e) imagining conditions surrounding a first slip, (f) practicing coping strategies, and (g) monitoring the target skill transfer process (Marx, 1986) .

Several empirical studies have suggested that RP groups exhibited improved training transfer compared to control groups (Milne, Westerman & Hanner, 2002; Burke & Bakdwin, 1999). Other studies, however, have not supported the effectiveness of RP (Gaudine & Saks, 2004; Hutchins, 2004). Two literature reviews have shed light on the inconsistent results for RP, which may stem from alternating between using full versus modified RP models (Rahyuda et al., 2014; Hutchins, 2006). Modified RP is a scaled-down version of full RP, usually including just two to five steps from the full version, and it has not been standardized across studies except that step (d) has consistently been included (Hutchins, 2006, p. 14). However, we should not simply assume that the mixed RP results have arisen from the use of these

different versions. Even for full RP, one study fully supported it (Rahyuda, Syed & Soltani, 2018), while another only partially supported it (Burke & Baldwin, 1999; Burke, 1997) . Likewise, for modified RP, some studies have supported it (Tziner, Haccoun & Kadish, 1991; Noe, Sears & Fullenkamp, 1990), while other studies have not (Gaudine & Saks, 2004; Richman-Hirsch, 2001). It should also be noted that full and modified RP are not markedly different and results for both approaches have been diverse.

As mentioned above, only three studies since 1986 have examined the use of the full version of RP. A recent study of time management training for Indonesian employees indicated that full RP influenced transfer (Rahyuda et al., 2018). Moreover, a study on employee coaching skills in 78 research scientists showed that full RP modestly influenced transfer when the work environment was unsupportive (Burke & Baldwin, 1999). An empirical study of 90 undergraduate students in an assertive communication training showed that full RP significantly increased their ability and desire to transfer skills (i.e., a direct consequence of the RP intervention before transfer). It did not, however, increase the undergraduates' use of transfer strategies (i.e., the transfer of RP, which was expected to precede transfer of the main training) nor their use of skills acquired in the main training (i.e., the transfer of the main training, which was the outcome variable of the present study) (Burke, 1997) . Since these studies found at least partial support for the effect of RP, I hypothesize that full RP trainees will demonstrate greater transfer than the control group trainees.

Hypothesis 1. The full RP intervention trainees demonstrate greater transfer of training than the control group trainees.

2.1.2 Proximal plus distal goal setting

Locke and Latham's goal setting theory of motivation explains why some people perform better than others on work-related tasks Locke & Latham (2013). It maintains that a person setting a specific, challenging goal can achieve a higher outcome than one setting a vague, easily attainable goal as long as the person has the following things with the respect to the goal: 1. the ability 2. the situational resources, 3. the commitment, and 4. feedback on progress Latham, Seijts & Slocum (2016).

Moreover, another perspective on goals should be considered in the present study. Several types of goals have been discussed in the literature, including outcome, performance, process, learning, and behavioral goals. There has been no strong evidence to suggest, however, that intervention effects differ according to the type of goal. Since our target is to enhance

behavioral change, the goal set in our intervention is a behavioral one, such that the performance of specific behaviors leads to a given outcome or goal: for example, writing a paragraph every day to finish a paper Latham, Seijts & Slocum (2016).

Another perspective relevant to our study is distinguishing between distal and proximal goals. A distal goal is a long-term goal, whereas a proximal goal is a shorter-term, benchmark goal. Short-term goals that cascade from a longer-term distal goal are called proximal plus distal goals (Brown & Warren, 2014). The achievement of proximal goals can be enhanced by immediate incentives (Sun & Frese, 2013) to boost motivation and by trial-and-error feedback (Locke & Latham, 2002) to correct actions. These processes can also promote progress toward distal goals, toward which a person may be less motivated to act. Hence, combining these two kinds of goals is considered an effective approach in management development programs, where people are learning new and complex tasks (Brown & McCraken, 2010, pp. 38–39). In particular, these ideas apply to the subject of the current study, which is learning time management as a new skill.

Previous empirical studies have supported that compared to distal and do-your-best goals, proximal plus distal GS as a post-training intervention more significantly enhances transfer outcomes (Brown, 2005; Brown & Warren, 2009). Six weeks after 72 Canadian public service employees completed a self-awareness training, the participants in the proximal plus distal goals group demonstrated greater transfer (in terms of generalization and maintenance) than did those in the distal and do-your-best goals groups (Brown, 2005). In another study of 89 government employees who completed self-awareness training, the results confirmed that proximal plus distal goals enhanced transfer (maintenance) six months after training. The current study hypothesizes that the proximal plus distal goal intervention trainees exhibit greater transfer than control group trainees.

Hypothesis 2. Proximal plus distal goal intervention trainees demonstrate greater transfer of training than control group trainees.

2.1.3 Comparison of RP and GS

Several scholars have compared the contributions of RP and GS to transfer maximization (Rahyuda et al., 2018; Richman-Hirsch, 2001; Wexley & Baldwin, 1986), although most did not conduct their comparisons in exactly the same manner as the present study, which compares full RP and proximal and distal GS. In a comparative study on customer service skills training, trainees in the outcome goal GS group utilized learned behaviors to a greater extent than did

those in the modified RP and control groups (Tziner et al., 1991). In a case study of Master of Business Administration (MBA) student salary negotiation simulations, the results of the regression analysis showed that modified RP attenuated trainees' negotiating performance, while self-set GS accentuated it (Gist, Stevens & Bavetta, 1991). In the earliest comparative study of GS with modified RP intervention in the context of a time management workshop (Wexley & Baldwin, 1986), students in GS interventions were superior to those in modified RP and the control group in terms of maintaining behavior change over a two-month period. The only study with the same comparison as ours was a recent study of RP and GS in 160 Indonesian employees. This study showed that proximal plus distal GS boosted transfer more than full RP did twelve weeks after time management training (Rahyuda et al., 2018). All the above studies concluded that RP was less effective than GS, with the exception of one conflicting result in a study of 68 MBA students involved in a dyadic negotiation skills training program. In this study, the modified RP group exhibited higher skill transfer than the self-set GS group (Gist, Bavetta & Stevens, 1990). This may be because the simulation was too novel and complex for the students, and consequently, the RP transfer strategies were more effective than the GS ones.

Based on the above discussion, GS has had more solid results than RP in most studies, and this trend can be explained by examining the underlying concepts. GS is based on motivation theory, and especially in proximal plus distal GS, proximal goals serve as "small wins" (Brown, 2005) on the journey to distal goals. At the same time, proximal goal outcomes function as feedback (Brown, 2005) during the goal-striving process. Thus, it seems that the motivation to look forward to achieving goals is more activated in GS than in RP. In GS, obstacles might fade away or at least be less active in a motivated person's cognition. RP, though, is based on coping with obstacles (Marx, 1982), which may cause people to focus more on the obstacles in the interest of overcoming them, which engages a passive response.

Based on the above discussion, it is hypothesized that trainees in the proximal plus distal GS group will exhibit greater transfer than those in the RP group.

Hypothesis 3. Trainees in the proximal plus distal goal intervention group demonstrate greater transfer of training than those in the full RP intervention.

2.2. Materials and Methods

2.2.1. Ethical Statement

This research was approved by the ethics committee of the Graduate School for International Development and Cooperation, Hiroshima University, Japan. A written informed consent was obtained from each participant, after communicating to them that participation was voluntary.

2.2.2 Research design

The present study is designed to eliminate threats to internal validity (history and maturation effects) and threats to external validity (the interaction effect of treatment) by pretesting and conducting a systematic exploration of the effects of RP and proximal plus distal GS. Solomon four-group experimental field research design was used (Solomon, 1949). In this design, both the treatment and control groups have two subgroups: a pretested group and an unpretested group (see Table 2.1).

Table 2.1: The Solomon four-group design

	Pretest	Treatment	Posttest
Group 1	O1	X	O2
Group 2	O3		O4
Group 3		X	O5
Group 4			O6

Note. X: treatment, O: outcomes.

In this study, a total of three Solomon four-group designs were implemented (illustrated in Table 2.2) involving nine groups and comparing the RP group with the control group, the GS group with the control group, and the RP group with the GS group.

Table 2.2: Solomon four-group comparisons

First Solomon four-group (S1): Comparing RP with Control (Hypothesis 1)						
Conditions				Pre-Test	Treatment	Post-test
R	Group 1	RP_1	RP pretest group	B1	X	B2
R	Group 2	C_1	Control pretest group	B3		B4
R	Group 3	RP_2	RP unpretested group		X	B5
R	Group 4	C_2	Control unpretested group			B6
Second Solomon four-group (S2): Comparing GS with Control (Hypothesis 2)						
Conditions				Pre-Test	Treatment	Post-test
R	Group 5	GS_1	GS pretest group	B7	X	B8
R	Group 2[a]	C_1	Control pretest group	B3		B4
R	Group 6	GS_2	GS unpretested group		X	B9
R	Group 4[a]	C_2	Control unpretested group			B6
Third Solomon four-group (S3): Comparing RP with GS (Hypothesis 3)						
Conditions				Pre-Test	Treatment	Post-test
R	Group 1[a]	RP_1	RP pretest group	B1	X	B2
R	Group 5[a]	GS_1	GS pretest group	B7	X	B8
R	Group 3[a]	RP_2	RP unpretested group		X	B5
R	Group 6[a]	GS_2	GS unpretested group		X	B9

Notes: R = randomization, B = behavior outcome measure, X = treatment. [a] Group reused in repeating conditions, $_1$ pretest group, $_2$ unpretested group

2.2.3 Participants

Data were collected from 210 management study students at the National Management Degree College (NMDC) in Yangon, Myanmar. Participants were final-year students who had enrolled in the four-year bachelor's degree program during the 2018–2019 academic year. Participants enrolled in a three-hour time management workshop arranged by the college and the researchers. This particular sample was selected as students were nearing graduation and about to enter the job market. Therefore, it was thought that time management skills would be

helpful for these students to complete their academic work, prepare them to enter the job market, and at their future workplaces. Moreover, training transfer seemed more feasible for this course compared with other courses available to the students. For example, for these particular students, measurements of training transfer from a financial management course would be problematic as the students were not employed at that moment. Furthermore, two studies in the transfer literature also used time management training as the core training. For the sake of consistency and comparability with other literature, a similar training was used to examine the effect of transfer interventions.

2.2.4 Procedures

2.2.4.1 Before the training

Two months prior to the training, the permission from the principal of NMDC was asked to conduct the training. The head of the Department of Tourism & Hospitality and the head of the Department of Business Management were also informed. They granted us permission to conduct the trainings and surveys. Two weeks before training, an email was sent to a student representative who was introduced to us by the principal. That email introduced the purpose of the training and the research, explained the expected outcomes of the training, and requested voluntary participation. A week before the workshop, a meeting with two student representatives was held at Yangon and discussed effective incentive tools for students. The representatives requested a certificate of workshop completion in exchange for students' participation, and their request was accepted. Invitation letters were sent to all final-year students via the representative through a private Facebook group chat. In the letter, the training objectives, procedures, schedule, the voluntary participation, and rewards were explained. Consent forms were collected before training, and the two student representatives were removed from the data analysis to avoid bias.

2.2.4.2 Implementation of training

Three-hour time management workshops were held six times to accommodate all 330 final-year students. Generally, about 50 students participated in each session, and a total of 310 students participated due to the absence of 20 students. Before the workshop, participants were randomly assigned into either the pretested or unpretested groups based on their roll numbers. Then, the time management knowledge and behavioral questionnaires were distributed only to

the pretested groups. Even though our main outcome was time management behavior, data on time management knowledge was collected, as it is considered an important intermediate outcome and useful for understanding the underlying mechanism of the behavior. All participants were asked to identify whether they had participated in a time management training before starting the training; no one reported having participated in the past. The training had seven learning objectives: (1) setting goals, (2) prioritizing, (3) making lists, (4) scheduling and planning, (5) organizing desks and papers, (6) dealing with procrastination, and (7) dealing with interruptions. Training methods consisted of lectures, discussions, films, and activities such as making lists, setting goals, and role playing.

2.2.4.3 Intervention sessions and manipulation check

At the end of each training session, participants of both pretested and unpretested groups were randomly assigned to three groups: RP, GS, and control groups, respectively. Post-training intervention sessions were implemented on days other than training days, as students were not available for additional time on the training days due to their need to attend other classes. Four sessions for each intervention (a total of eight sessions) were held over three days within 10 days of the workshop. During the intervention sessions, participants were introduced to the respective intervention briefly, and they worked individually as well as in groups. Example cases were also provided for the transfer of learning. Lectures, power point presentations, and group discussions were used in the sessions, and at the end of each intervention session, a manipulation check was performed.

Consistent with Marx (1982), the one-and-a-half hour sessions for the full version of the RP intervention were conducted after the core time management training. Before starting each session, participants were asked whether they had participated in RP interventions or learned RP skills before, and they reported that they did not have any related experiences. After introducing RP and explaining why it is important in training transfer, RP group trainees chose a specific newly trained skill that they wanted to use in their daily lives. Next, each participant set a specific, measurable skill-maintenance goal and quantified the parameters of slips and relapses under the supervision of the instructor. Then, using a decision matrix, each participant committed to retain the skill by identifying the positive and negative consequences of using and not using the new skill. RP case examples were also provided to the participants (Richman-Hirsch, 2001). Next, the participants learned the 14 RP strategies, which are designed to increase awareness of potential trouble spots and enhance a person's likelihood of coping with

the situation. In the next step, trainees predicted the circumstances of their first slip and practiced strategies to deal with such situations. Lastly, trainees were provided with a simple chart with which to track their progress on skill maintenance goals (Burke & Baldwin, 1999; Noe et al., 1990).

As in RP, after the time management training, the one-hour GS intervention sessions were conducted for participants. Trainees were asked whether they had previous exposure to proximal plus distal GS skills, and no one reported having related experiences. The participants were then trained to set proximal plus distal goals. Adapting the approach from previous studies (Richman-Hirsch, 2001; Gist et al., 1991; Gist et al., 1990), the training included two main parts: (1) discussion and demonstration of GS and (2) development of GS by the trainees. The first part of the training consisted of introducing the idea of a proximal plus distal goal and explaining why GS is important. A description of the proximal plus distal GS process was provided along with a discussion and examples showing how proximal plus distal GS can be effective in one's daily and future life. How to set specific, challenging proximal plus distal goals was demonstrated, and then, the second part of the intervention session involved each trainee developing a proximal plus distal GS plan. The participants were asked to individually set specific, challenging distal goals (e.g., goals for the entire eight weeks' time) and then break these eight-week goals into shorter one-, two-, and three-week goals after learning how to complete the worksheets.

To ensure that the appropriate content was covered in the interventions, immediately after the post-training session, all participants (except those in the control group) were asked what was taught in the post-training interventions using checklists for full RP and GS (Richman-Hirsch, 2001).

2.2.5 Measures

Students' knowledge, and time management behavior were measured. Their initial knowledge and time management behavior was checked before the workshop for the pretested group (time 1). Ten-weeks after the workshop, their knowledge or retention of learning and post-time management behavior were measured for the both pretested and unprotested groups (time 2). Knowledge was examined by 14 questionnaire items reviewing the basic concepts covered in the study's time management course; these were developed from Wexley and Baldwin's 16 short-answer questions (Wexley & Baldwin, 1986). The excluded items were related to GS to avoid the problem that the GS group members would have an advantage from

their additional learning from the intervention. The behavior measure was from two sources: self and observer reports, both of which were borrowed from Wexley and Baldwin (1986). The self-reported behavior measures consisted of 30 items (e.g., "I make up a daily planner or to-do list"). For observer-reported behavior measures, all participants were asked to identify one friend, family member, or current teacher from NMDC or elsewhere who was familiar with the participants' time management behavior. The observer-reported measure consisted of 10 items (e.g., "The student seemed very conscious of planning and prioritizing their day"). For both behavior measures, all items used a 5-point response scale ranging from 1 (always) to 5 (never). The authors confirm that the data supporting the study findings are available in Supplementary Materials.

2.2.6 Data analysis

Due to data limitations, it was forced to adopt different analytical methods for the three outcome variables—self-reported behavior, observer-reported behavior, and knowledge in terms of time management—after checks for randomization and pretest sensitization. A one-way analysis of variance (ANOVA) was used for the three pretest groups' pretest scores (O1, O3) and a 2 × 2 between-groups ANOVA for the four post-test scores (O2, O4, O5, O6).

The most rigorous analysis was possible for self-reported behavior. The external factors, the potential confound between treatment effects, and the history effects could be checked by comparing the post-test outcomes of the unpretested control group (O6) with the pretest outcomes of the pretested treatment group (O1) and the pretest outcomes of pretested control group (O3). Analyses were conducted using simple independent-samples t tests. After these preliminary analyses, the main effect of each treatment was examined by performing an analysis of covariance (ANCOVA) on the post-test scores, covarying the pretest scores (Braver & Braver, 1988).

In contrast to the approach for analyzing self-reported behavior, A one-way mixed ANOVA was performed on matched observer-reported behavior, as this measure was excluded from the Solomon four-group design. Moreover, effects on knowledge were tested, particularly because the retention of knowledge after eight weeks is a potentially important mediator between the intervention and the transfer. Multivariate analysis could not be utilized as the sample size had dropped. A one-way repeated measures ANOVA was conducted for comparing knowledge changes in the RP, GS, and control groups.

2.3. Results

2.3.1 Descriptive statistics and randomization checks for outcome variables

Descriptive statistics, scale reliabilities, and intercorrelations of dependent variables are presented in Table 2.3. A one-way ANOVA performed on each dependent variable of the pretested groups taken at time 1 tested whether the random assignment of subjects was ideal. Results indicated insignificant differences across conditions with regard to knowledge $F(2, 115) = 1.52$, $p = .22$; self-reported time management behavior, $F(2, 117) = .78$, $p = .46$; and observer-rated behavior $F(2, 146) = .55$, $p = .58$, indicating that the groups were not statistically different (see Appendix 4.).

Table 2.3: Descriptive statistics, scale reliabilities, and intercorrelations of study variables

Variables [a]	n	M	SD	α	1	2	3	4	5
Knowledge, time 1	116	1.99	1.46	__	__				
Self-reported behavior, time 1	118	3.16	0.35	.72	.24**				
Observer-reported behavior, time 1	149	3.27	0.47	.57	.19*	.20*			
Knowledge, time 2	111	3.92	2.35	__	.25*	.20	.01		
Self-reported behavior, time 2	133	3.08	0.38	.79	.17	.39**	.21*	.22*	
Observer-reported behavior, time 2	112	3.21	0.47	.63	.26*	-.04	.22*	.24*	.21*

a Time 1= Before the time management workshop; time 2 = eight weeks after the workshop
*p < .05. **p = < .01.
Note: only knowledge and self-reported behavior measures used Solomon four-group design.

2.3.2 Pretest sensitization checks for external validity for self-reported time management behavior

In terms of self-reported time management behavior, the results of a 2 × 2 between-groups ANOVA on the four post-test scores (O2, O4, O5, O6) in each Solomon four-group indicated no interaction effects (pretesting by treatment effects) as shown in Table 2.4.

Table 2.4: ANOVA results for the pretest sensitization checks (by the interaction of pretesting and treatment) for self-reported time management behavior

Solomon Four-Group (S)	Type III Sum of Squares	df	Error	Mean Square	F	p
S1 (RP vs Control)	.508	1	13.347	.508	3.461	.066
S2 (GS vs Control)	.031	1	10.892	.031	0.240	.626
S3 (RP vs GS)	.236	1	12.384	.236	1.522	.211

Note: RP = relapse prevention, GS = proximal plus distal goal setting.

2.3.3 History effect checks for self-reported time management behavior

For the history effect checks, analyses were simple independent-samples t tests, first comparing O1 with O6 and then O3 with O6. One significant history effect was found in a pair of GS pretested and control unpretested groups.

Table 2.5: Sample t test results for history effect checks for self-reported time management behavior

Comparison paired groups	Mean Dif.	Std. Error of Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
B1 = B6 (RP_{1a} vs C_{2b})	.13	.096	-.06	.32	1.35	55	.18
B7 = B6 (GS_{1a} vs C_{2b})	.21	.099	.01	.40	2.08	53	.04
B3 = B6 (C_{1a} vs C_{2b})	-.11	.089	-.29	.07	-1.24	70	.22

Note: RP_{1a} = RP, pretested group, pre score; GS_{1a} = GS, pretest group, pre score; C_{1a} = Control, pretested group, pre score; C_{2b} = Control, unpretested group, post score.

2.3.4 Results of the experiment for outcome variables

It is proceeded to examine the main effect of each treatment on self-reported behavior after showing the descriptive statistics of the behavior for all nine groups (from B1 to B9, see Table 2.6). The main effects were not significant. ANCOVA was performed on the post-test scores, covarying the pretest scores (see Table 2.7). As a result, none of the treatments were statistically different from the control group, and Hypotheses 1 and 2 were rejected. The

comparison between the two treatments, RP and GS, was statistically different (p = 0.046). Therefore, Hypothesis 3 that the GS group would transfer more than the RP group was accepted.

Table 2.6: Descriptive statistics of self-reported time management behavior

Conditions	*RP*			*GS*			*Control*			
Pretest	Yes		No	Yes		No	Yes		No	Total
	T_1	T_2	T_2	T_1	T_2	T_2	T_1	T_2	T_2	
Sample	24	24	27	27	22	22	24	24	15	207
Mean	3.11	2.93	3.12	3.11	3.13	3.02	3.15	3.17	3.15	
SD	0.38	0.43	0.31	0.36	0.39	0.35	0.35	0.37	0.37	

Note: RP = relapse prevention, GS = proximal plus distal goal setting.

Table 2.7: ANCOVA results for treatment effects on time management behavior in three Solomon four-group designs

Solomon Four-Group (S)	Mean Difference	Std. Error	*P*	95% Confidence Interval for Difference	
				Lower Bound	Upper Bound
S1 (RP vs Control)	-.18	0.11	.09	-.39	.03
S2 (GS vs Control)	.04	0.10	.65	-.15	.24
S3 (RP vs GS)	-.22*	0.12	.05	-.44	-.01

Note: RP = relapse prevention, GS = proximal plus distal goal setting.

The effects on the other measure of behavior (observer-reported) were analyzed as well. Specifically, a one-way mixed ANOVA on matched observer-reported behavior was performed as this measure was excluded from the Solomon four-group design. I tested only for matching between pre and post observer. The main effect of the within-subjects factor pre and post observer-rated was not significant: F (1, 64) = .30, p = .57, nor was the main effect of the between-subject factor conditions, F (2, 64) = .21, p = .81. Therefore, H1, H2, and H3 were not supported, partly differing from the main effect results for self-reported behavior.

Additionally, the effect on time management knowledge was analyzed. No pretest sensitization effect or interaction effect of pretest and treatment was found for the knowledge measures F (5, 105) = .23, p = .95. To analyze the main effects and compare knowledge changes in the RP, GS, and control groups, a one-way repeated measures ANOVA was conducted. No

significant main effect was found F (2, 107) = .44, p = .65 among the three groups. This result was not consistent with that for self-reported behavior.

Table 2.8: Descriptive statistics of time management knowledge

Conditions	*RP*			*GS*			*Control*			
Pretest	Yes		No	Yes		No	Yes		No	Total
	T_1	T_2	T_2	T_1	T_2	T_2	T_1	T_2	T_2	
Sample	19	19	15	20	20	15	26	26	16	176
Mean	1.95	4.11	4.40	1.60	3.70	4.00	2.27	3.77	3.69	
SD	1.75	2.35	2.41	1.43	2.13	2.59	2.50	2.50	2.33	

Note: RP = relapse prevention, GS = proximal plus distal goal setting.

2.4. Discussion

The purpose of this study was to validate the effectiveness of the post-training interventions in the training literature by using Solomon four-group design. Regarding the three hypotheses for the main effects, the interventions were not statistically different from the control group for all the three outcome variables, in contrast to Hypotheses 1 and 2. Only Hypothesis 3, that participants in the proximal plus distal GS group would demonstrate greater transfer than those in the RP group, was partially supported, as self-reported behaviors were different between the RP and GS groups, whereas the hypothesis was not supported for observer-rated behavior and knowledge. Discussion on the results are as follows.

The unexpected insignificance may have resulted from the implementation and evaluation of the interventions and on how trainees perceived their behavior. First, when looking back on previous studies and especially on the three studies of full RP, it is seen that two studies implemented transfer interventions immediately after the training (Burke & Baldwin, 1999; Burke, 1997), whereas the other study implemented interventions six weeks later Rayuda et al., 2018). Burke (1997) measured transfer three weeks after training, and Burke and Baldwin (1999) measured transfer six weeks after training, while Rahyuda et al. (2018) measured transfer six weeks after training and again six weeks after intervention. Rahyuda et al.'s (2018) results supported that full RP enhanced transfer, whereas the first two studies did not show direct significant results for full RP interventions, though they were partially supportive, as full RP enhanced the ability and the desire to transfer. Moreover, full RP

modestly influenced transfer based on the transfer climate, but the researchers did not find a direct significant effect for full RP. Based on these findings, it seems that participants who had opportunities to attempt transfer were able to review and evaluate their first transfer attempts before the intervention. After the six-week trial period, participants seemed ready for the transfer intervention, and perhaps, they more fully appreciated how to enhance transfer after learning strategies in the intervention. In our study, transfer interventions were implemented in the days immediately after training, as in the previous two studies. Post-training interventions may have been more effective if the trainees had been provided with adequate time for trial and error with transfer attempts. Then, after a period of time to allow for this kind of experimentation, it may have been more effective to implement the transfer interventions.

It is possible that minimal transfer or behavior change can arise from trainees' thoughts and feelings when confronting their first lapse. "Dichotomous thinking" or all-or-nothing thinking (Burns, 2012) may plague them when they fail to cope in a high-risk situation. For example, they may think, "Let it be, I don't want to try it again" or "As I already failed in the first attempt, now I don't want to do it anymore." If this is the case, trainees may be discouraged from returning to prolapse (their ideal behavior) (Witkeiwitz & Marltt, 2007, p. 3) after their first lapse or slip back into the old behavior. Moreover, because of the kinds of strategies they learn in the RP group, some of trainees may be more sensitized to or aware of their relapse compared to those in the other two groups. In turn, they may be less motivated to switch back to the intended behavior, or perhaps they change their behavior such that it becomes even more negative than before the workshop. As a possible solution for this problem, mindfulness-based RP (MBRP) should be explored as a transfer strategy in the training and development arena, as the effectiveness of RP might depend on the mindfulness of trainees when they encounter high-risk situations. MBRP encourages individuals to increase their awareness of the thoughts, emotions, and sensations that characterize high-risk situations, thereby allowing them to notice and resist urges to revert back to old behavior (Ostafin, Robinson & Meier, 2015). According to the tenets of MBRP therapy, mindfulness reduces negative effects, halts and reduces relapse, and mitigates the relationship between negative effects and actual behaviors (Ostafin, Robinson & Meier, 2015).

Reflecting on the origins of RP, it is "a self-control program designed to teach individuals who are trying to change their behavior …" (Marlett & George, 1984, p. 261). RP is explicitly designed to help addicted individuals who acknowledge their problem behaviors and wish to change them. What if, in our case, students chose to ignore their current behavior or did not have any desire to change it? Simply teaching the students RP, then, may not have

been as effective as anticipated. For example, it is possible that time management was not a pressing issue for the students to address at that point in time. Likewise, for the GS group, the students were not monitored to see whether they were actually following up on their goals, even though the manipulation checks after each of the intervention sessions ensured that learning had taken place. Perhaps merely teaching the self-help strategies to the trainees was not enough, and it should have been determined whether they were really following through the interventions.

In this study, time management behaviors were measured only two times, which may not have been adequate for monitoring behavior change. The data was collected through survey questions on paper and via online forms, which may have failed to capture participants' actual behaviors over time. By striving for high data reliability and monitoring behavior daily or weekly, future studies may follow up on these discussions about how to measure human relapses (Kranzler & Tennen, 2005). It could be beneficial to utilize interactive voice response, an automated telephony system, for daily or weekly monitoring as previously discussed. Another approach would be to try implementing the timeline follow back method, which has been used to retrospectively estimate alcoholic drinking on a day-to-day basis through the identification of major events (Kranzler & Tennen, 2005). Students could also be encouraged to keep a logbook, and feedback could be provided based on their records; this approach might assure more a positive behavior change.

2.5. Conclusions

The present study investigated the effects of two post-training interventions, RP and GS; the results were not supportive, excluding the difference in training transfer between RP and GS in terms of self-reported behavior. These unexpected results were justified mainly based on the specific characteristics of our subjects, who were undergraduate students. This study contributes to the literature by clarifying why results from RP have not been significant. Based on reviews and studies of RP, it was originally assumed that the inconsistent results may have arisen from researchers using different RP models: the full versus the modified versions. However, it appears that inconsistencies stem from not only the utilization of different versions but also on trainees' perceptions of their own behavior: their desire to change, their mindfulness, and their self-monitoring methods. This study also sheds light on how interventions affect transfers—how trainees think about, interpret, learn, and apply interventions for enhancing transfer.

Chapter 3: The Effect of Implementation Intentions on the Transfer of Digital Marketing Training

The purpose of this chapter is to test the effect of an alternative post-training intervention, specifically implementation intentions (II), on the transfer of digital marketing training. First, it describes the theoretical background and research question development, then the method of the study including participants, procedures, measures and data analysis. Lastly, the results and findings, discussion with limitation and conclusion are explained.

3.1 Theoretical Foundation and Research Question Development

Transfer of training, the application of newly retained knowledge and skills from training to workplaces (Baldwin & Ford, 1988), serves as an indicator of the effectiveness of investment in training and development programs in organizations (Kirkpatrick, 2007). Transfer of training is a vital factor in improving individual or organizational performances (Gold & Smith, 2003), however, less than about 35 percent of employees transfer their learning back to work one year after training (Saks & Belcourt, 2006). The amount of transfer is lower than that manager anticipates.

The transfer of training is like an invisible hand for improvements of individual performances as well as of organizations due to the nature of its subtlety and complexity in measures and indicators, at the same time, costly and time-consuming nature in implementing transfer measures. How to maximize transfer impact, in other words, how to visualize or explicit transfer value, has been an important question in the field of transfer studies (Baldwin, Ford & Blume, 2017). So as to answering this question, since the early 1980s, scholars introduced some type of post-training interventions as transfer enhancement strategies, namely relapse prevention (Marx, 1982) and goal settings (Latham & Locke, 1979). Up to present, several researchers (such as Feldman, 1981; Rahyuda, Soltani & Syed, 2018; Wexley & Baldwin, 1986) empirically tested the effectiveness of those interventions, but could not provide the consolidated results for these interventions (Hutchins & Burke, 2006; see also Rahyuda et al., 2014, 2018). Being weak in convincing of their effectiveness and costly (time-consuming) in implementation, executing post-training interventions are not warmly welcome among practitioners and managers and so their reaction to transfer interventions are not encouraging (Huint & Saks, 2003). Is there any transfer intervention that can be implemented simply and efficiently? As a possible candidate to that question, this paper tests the effect of

implementation intention (II) as a post-training intervention on the transfer of digital marketing knowledge and skills.

Digital marketing knowledge and skills are becoming basic requirements or elements in business successes in this 21st century. Because of its advantages in finding new customers, maintaining current customers, and providing speed information and services to consumers, digital marketing is widely necessary and popular around the globe, so as in Myanmar. Not only large companies but also small businesses and entrepreneurs are highly interested in it and eager to learn and use it in their businesses. Transfer of digital marketing knowledge and skills are worth to test in this manner.

Implementation intention (II) is a self-regulatory tool, introduced by Peter Gollwitzer. An American psychologist, in 1993 (Gollwitzer, 1993). According to him, by forming II individuals can specify their intended behaviors when, where and how to implement those behaviors (Gollwitzer, 1999).

II is a pre-step to goal attainment and helps individuals for attaining all their own goals by pinpointing when, where and how to respond. It has a pattern of 'when situation x arises, I will perform y!' (Gollwitzer, 1999, p. 494). Gollwitzer (1999) persuaded his idea by explaining that generating II helps an individual to bind him or herself to respond to a certain situation in a specific manner that leads to goal attainment. In that way II promotes goal attainment that is specified in the goal intention. Several researches in health studies confirmed that II is a powerful tool when a person is difficult to get started on his or her own's goals (Gollwitzer & Brandstatter, 1997) and to pursue unpleasant behaviors (Orbell, Hodkins, & Sheeran, 1997).

Then in the case of transfer studies, how II can enhance transfer? Forming mental imagery of situations in advance can help trainees to avoid indecisiveness whether to apply or not, simultaneously, when and how. This indecisiveness may lead to postpone transfer or even to leave at no transfer stage (Gollwitzer, 1993). However, using II as a post-training intervention is still quite new in the field of transfer studies and so far, only a few studies have conducted yet.

Friedman and Ronen (2015) empirically tested the effect of II on the training transfer of active listening skills (used 37 undergraduate student samples) and sales training (used 63 sales supervisor sample) as two experiments in one study. They measured the transfer of training six weeks and four weeks after the training respectively. Their results were positively significant in both cases, and they advised to check whether II can be useful to any types of training. Their finding implied that II worked well in shorter time as they measured transfer four or six weeks after training. Can II effect last for a longer time, in other words, what if at

least 12 weeks after training, can the effect of II be found? The present study tests the effect of II 12 weeks after the digital marketing training which focuses on both closed and open skills, in order to test the effectiveness of II in various training programs as well as for a longer time period.

II is chosen to test as the post-training intervention in this study due to four main reasons. First, when it comes to starting to execute marketing related activities, a person may feel uneasy to get started because of requirements of extra efforts (such as from realizing customer needs to sales promotions). By utilizing the concept of II, trainees can be expected to increase the likelihood of executing marketing activities through forming II equipped trainees with (already set) mental preparation and reminder for what to do when situations arise.

Second, it is a response to the calling of scholars in the training transfer filed to expand the existing post-training intervention strategies (Ford et al., 2018). Third, testing II is a validation on whether II can be beneficial to all types of training or not (Friedman & Ronen, 2015). Fourth, usually post-training interventions are costly and time-consuming to operationalize. II may be a possible candidate to enhance transfer because it is simple and cost-effective to implement. In other words, II has the operational advantages over previous post-training interventions, for example, conducting relapse prevention intervention generally takes 60 minutes and goal-setting interventions take 30 minutes while II takes only 15-20 minutes. Conducting II as a post-training intervention can save both time and cost of the training.

By conducting this research, this paper can contribute to the extent of training transfer literature in at least three ways. First, digital marketing knowledges and skills are complex skills (require computer or mobile skills, including both open and skills), which has not been analyzed yet. Therefore, the present study may confirm the usefulness of II in the unexplored training type. Second, the sample used to assess the effectiveness of II was composed of various backgrounds who are working at private companies, non-governmental organizations (NGOs) and government agencies. They are not university students like in a laboratory setting, or they are not employees from only one organization but composed of different background in the current sample, to reflect the real workplace situations and training places. Third, the effect of II is measured at 12 weeks after training that is much longer than previous studies (four weeks for the nonstudent group study). The longer-term effect of II can persuade managers, trainers or practitioners to introduce II as a post-training transfer intervention in their training and development programs. By taking the above discussion, this study aims to answer the research question _ Can II as a post-training intervention enhance transfer of digital marketing training even after 12 weeks?

3.2 Method

3.2.1. Ethical Statement

This research was approved by the ethics committee of the Graduate School for International Development and Cooperation, Hiroshima University, Japan. They were informed their participation was voluntary and submitting their responses constituted their consent to participate.

3.2.2 Participants

Participants were trainees of three digital marketing trainings. Totally 21 responses could be received for the final survey. Two responses were removed as their identity (name, email address or telephone number) did not match in any of their recorded databases of three trainings. After checking and matching identity, totally, 3 out of 16 from training one, 6 out of 29 from training two, and 10 out of 26 from training three, responded post survey. The first training was used for a pilot survey for developing post training questionnaires and did not introduce the intervention to them, so they were excluded in the main analysis. From training two, one trainee was removed as the respondent did not participate in neither of the control nor the treatment group. Finally, only fifteen were left for the data analysis, representing the 27.8% respondent rate. Totally 10 males and 5 females fully participated both in training and in the surveys.

Among respondents, 67% were under 30 but above 19 years old and 33 % were in their 30s. 80% were bachelor's degree holders while 13% were master's degree holders. 46.7 % of them were running their own businesses and 26.7% were working at companies. 33.3 % were owners, another 33.3 % were supervisors and 20% were employees. Many of them (46. 7%) had above 1 to 3 years working experience and 93% of them did not have any experience of using digital marketing in the past. All of them did not learn or attend digital marketing in the past. The reasons for attending training were because of interest in digital marketing (27%), desire to support their businesses (some even advertised their products and services to other trainees), desire to apply knowledge and skills from training (33%) and combining all of these three reasons together (20%).

The demographic information of nonrespondents who did not respond post surveys was checked. Out of 39 nonrespondents, 41 % were male and 59% were female; 67% were under 30 years old but above 19 years old and 31 % in their 30s. 85 % of nonrespondents were

bachelor's degree holders. 41% of them were working at the company and 33 % were operating their own businesses, 28% were owners, another 28 % were employees and 15 % were managers. 23% had above 1 up to 3 years working experience and 18% had above 9 years working experience. 72% had no prior experiences of using digital marketing, 28% had prior usage of it. 90% did not learn or attend it, while 10% of them had prior knowledge of it.

The nonresponse bias was checked. The results of *T*-tests showed no significant differences between respondents and nonrespondents in terms of age, gender, education, current job, current job position and objectives of attending training. There were significant results for prior usage and knowledge of digital marketing as some of the nonrespondent groups had prior usage and knowledge. It seems that trainees who had prior knowledge and usage before training might have less motivation to respond post surveys as they had already applied the knowledge and skills.

The nonresponse bias in the dropout lists was also checked. No statistical differences were found in terms of gender, age and working experiences (see Appendix 8).

3.2.3 Procedure

A two-day digital marketing training was conducted for three times at two different places. The first two trainings were conducted at Myanmar Information and Communication Technology Park, Yangon, while the third training was conducted at community center, Myitkyina, Kachin State by the same trainer who is a professional trainer from Myanmar Computer Professionals Association with the same training contents. Before training, pre-survey forms which asked demographics information, objectives of attending training, intention to transfer, self-efficacy to transfer were distributed. Knowledge and skills lectured in each digital marketing training are what is marketing, marketing process including market research to key performance indicators (KPI), what is digital marketing, overview of digital marketing, persona marketing, triple media strategy, online vs offline digital marketing, influencer marketing, content marketing, inbound marketing, using digital tools for marketing including auto response, video marketing, email marketing, and search engine optimization (SEO) and so on.

At the end of each training, participants were randomly assigned into two groups: control group and treatment group. The II form was distributed to the treatment group which needed to take 10-15 minutes to fill up. The form was distributed to control group, asking which knowledge and skills they are most likely to transfer at their work after the training,

which need to take 3-5 minutes to fill up. The idea behind asking the control group to fill the form is that whether they also have an intention to transfer, that is to draw an equation from the fact that both groups have the same intention to transfer. Both groups were asked to read the provided information carefully and informed different time durations to complete each form. They were prohibited to discuss or talk during the post sessions, but not after the post sessions as they were not from the same organizations and were very less possible to discuss what they had filled in the form. Three months after the training, the final survey was conducted by sending a survey link to their email addresses and Facebook messenger.

3.2.4 Implementation intention form

The form starts with the following introduction paragraph adapted from Milne, Orbell & Sheeran (2002) and Gollwitzer (1993).

"Many people find that they intend to use digital marketing for their businesses, but then in practice they forget or 'never get around to it'. It has been found that if a person forms a definite plan of exactly when, where and how he or she will apply from what he or she had learned, that person is more likely to actually do so and less likely to forget. It would be also useful for you to plan when, where and what digital marketing knowledge, skills and activities you will do in the next month".

After the above paragraph, the activities steps and example statements are followed.

- First of all, please imagine in which situations that you will be able to use digital marketing and skills.
- Then, please write at least five statements based on your visualizing situation. When you write down, please describe which skills, when and where (situations) that you will apply those knowledge and skills.

Example statements are such as

- "When I get to introduce new products in the market, I will create a video clip of it on Monday and Wednesday evenings at home"
- "If my boss asked me to reduce the advertising costs, then I will try email marketing and video marketing"

Following the above paragraph, they are asked to write their own statements based on learning contents and their own notes. In each statement, they were asked to describe explicitly what learned knowledge and skills to apply in which situations.

3.2.5 Measures

Data were collected from two: before the training (Time 1) and three months after the training (Time 2). The independent variable was the post-training intervention on II enhancement. The main dependent variable was transfer of training in terms of perceived general transfer of training and specific behavioral measures of application knowledge and skills from digital marketing training. Demographics information was collected at time 1 and transfer of training at time 2.

3.2.6 Manipulation checks

Participants in the treatment group wrote at least two to five statements of II. Four participants (50%) of them wrote down three statements of the II and only two participants wrote five II statements. Participants in the control group wrote at least two to five statements regarding what learned knowledge and skills are most likely to transfer by them. There were five participants (71%) who wrote five statements.

Perceived general transfer of training, the extent to which trainees effectively apply what they learned from training to their jobs, is measured three months after the training, by using three items from Tesluk et al. 1995 (e.g. I have been using the knowledge and skills presented in the digital marketing training to help improve my performance). Twenty-seven behavioral measures were developed based on training objectives and contents for *specific transfer of training* by using 5-point Likert scales (e.g. After the training, I created a profile that represents my ideal customer (persona marketing)). All details were described in the Appendix.

3.2.7 Data analysis

The independent sample t-test was used for examining the influence of experimental conditions on measured variables.

3.3 Results

Table 3.1 shows descriptive statistics of dependent variables, general and specific transfer. Both have high Cronbach's alpha, which certify the sufficient internal consistency of both constructs. Moreover, for both, the treatment group had higher means than the control group. The *t*-test results showed that there was no difference between the control and II treatment groups in terms of general transfer. However, in terms of specific transfer, a

significant difference between the control and treatment groups was found. Trainees in the treatment group exhibited greater transfer than those in the control group.

Table 3.1: Descriptive statistics

Dependent Variables	Number of items	Alpha	Control (without II intervention)		Treatment (with II intervention)	
			M	SD	M	SD
General transfer	3	.87	3.19	.77	3.79	.59
Specific transfer	27	.93	2.85	.53	3.50	.53
			n = 7		n = 8	

Table 3.2: Independent Samples Test

								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
General transfer	.36	.56	-1.72	13	.11	-.60	.35	-1.36	.16
Specific transfer	.04	.86	-2.37	13	.03	-.65	.27	-1.24	-.06

3.4 Discussion and Conclusion

3.4.1 Discussion

According to the results, the II enhanced training transfer even 12 weeks after training in the case of specific measures of transfer, as expected. Trainees who have a ready plan what to do or apply when situations arise can enhance transfer of what they have learned in training. However, in the case of general transfer measures, the result was insignificant. It may come from the measure itself as it is too general to get to know their transfer, overall everybody assumes they transfer what they had learned, that might cause indifference enough when comparing control and treatment groups, in the case of measuring general transfer. The creation

of II is much easier, and less time-consuming than other post-training interventions and therefore this intervention seems propitious for using it in the future training and development.

3.4.2 Limitations

Even though significant results were obtained, cautious interpretations were recommended due to the small sample size. Endorsing II as a useful post-training intervention is required to replicate the research in larger sample size in different trainings and different contexts. Even though there is no significant difference between respondents and nonrespondents, 72 percent (39 out of 54 trainees) were dropped out of study, indicating there is a necessary of serious consideration on how to make sure to increase response rate while using online data collection methods. Participating in surveys is uncommon for Myanmar people, especially collecting data through online is very new to them, especially for the general public. They may assume or expect their problem will get solved after responding to surveys, and if it is failed to fulfill their hope quickly, and then they may frustrate to participate in surveys. Or if the surveys seem not related to their current priority problem, they do not have an interest in it and do not want to participate in it. One possible way to solve this problem (even if it may take time) is that academic institutions may put efforts on giving awareness to the general public that participation in surveys is no harm at all and it is a valuable contribution toward building a better society.

3.4.5 Conclusions

Only a few studies have tested the effectiveness of II as a post-training intervention in transfer studies. The findings of this study validated previous findings on the effect of II even 12 weeks after training. The findings suggest that II can be a convincing answer for how to maximize transfer. This suggests that II can be introduced after training to enhance the transfer of training and consequently it can explicate the value of transfer of training to the practitioners.

Chapter 4: A Study of Managers' Reactions to Post-Training Interventions

The main objective of this chapter is to observe the reactions of managers toward the implementation of post-training intervention (either implementation intention or proximal plus distal goal setting), when they have two different information conditions (research information or research information with utility analysis). At first, it portrays the theoretical background and research question development, then the method of the study including participants, procedures, measures and data analysis are explained. Lastly, the results and findings, with discussion and conclusion are elucidated.

4.1 Theoretical Foundation and Research Question Development

Transfer of training is a subtle mechanism which drives the performances of the employees and organization. Transfer problems are still a fresh challenge in developing and maintaining the quality and performances of human resources of today business industries. Scholars in this field have established some significant techniques to enhance transfer of training. Conducting post-training interventions after the main training has been recognized as a one of the promising techniques for enhancing transfer of training.

One of the most frequently studied post-training intervention is the proximal plus distal goal setting. It is setting a combination of a long-term goal with shorter-term goal(s) (Brown & Warren, 2014). Proximal plus distal goal setting works as motivation element on the process to thriving a goal. The achievement of a proximal goal can be enhanced by immediate incentives (Sun & Frese, 2013) and that in turn boost motivation, moreover, that achievement can be increased by trial-and-error feedback (Locke & Latham, 2002) to correct actions. These processes promote progress toward distal goals, toward which a person may be less motivated to act. Hence, combining these two kinds of goals is considered an effective approach in management development programs (Brown & McCraken, 2010). Several empirical studies also have supported that proximal plus distal GS as a post-training intervention significantly enhances transfer outcomes (Brown, 2005; Brown & Warren, 2009).

Recently, a new alternative tool to improve transfer of training _implementation intention (II) was introduced to the transfer of training studies. Implementation intention (II) is a self-regulatory tool that helps an individual to bind him or herself to respond to a certain

situation in a specific manner that leads to goal attainments. According to II, goals can be achieved by simply specifying his or her intended behaviors when, where and how to implement those behaviors (Gollwitzer, 1999). Several researches in health studies already confirmed II is a persuasive tool when a person is difficult to get started on his or her own's goals (Gollwitzer & Brandstatter, 1997) and to pursue unpleasant behaviors (Orbell, Hodkins, & Sheeran, 1997).

In the case of transfer studies, there are not so many studies of II yet, but a study has supported that II can enhance transfer of training (Friedman and Ronen, 2015). II can facilitate trainees in transfer of training by forming mental imagery of situations in advance to avoid their indecisiveness whether to transfer or not, simultaneously, what, when and how. This indecisiveness may lead to postpone transfer or even to leave at no transfer stage (Gollwitzer, 1993).

Several studies have exhibited some significant support for the effectiveness of post-training interventions, however, there is still challenging knowing about their practicality in organizations and acceptability by managers (Huint and Saks, 2003; Salas and Cannon-Bowers, 2001). What kinds of information and how those are presented is an important matter in selling the value of human resource practices to managers (Carson, Becker, and Henderson, 1998; Huint & Saks, 2003; Latham and Whyte, 1994; Whyte and Latham, 1997).

The very first empirical study on understanding the demand side of the training programs was conducted by Huint and Saks in 2003. The information on post-training intervention was presented by focusing on utility analysis evidence versus research evidence (Huint & Saks, 2003). The utility analysis is a method of forecasting the net financial benefits that come from HR practices or interventions (Whyte & Latham, 1997). The research evidence is a gather of research finding based on the published research in the particular field. They investigated manager's reaction and preference to two post-training interventions (precisely relapse prevention and supervisor support) with two information conditions (research information and utility information). However, the finding of their research was discouraged that managers did not indicate a high acceptance of post-training interventions. In other words, there was no significant demand for conducting post training interventions by managers.

The current study explores on what if introducing another alternative post-training transfer intervention (implementation intention and proximal plus distal goal setting) and what

if the information conditions would be presented in research information with utility analysis, could it be possible to sell the post-training interventions to managers? The purpose of this study was to understand the probability of conducting post-training interventions by managers in Myanmar organizations.

4.2 Method

4.2.1. Ethical Statement

This research was approved by the ethics committee of the Graduate School for International Development and Cooperation, Hiroshima University, Japan. They were informed their participation was voluntary and submitting their responses constituted their consents to participate.

4.2.2 Participants

Participants were executive managers (n = 105) who were attending the Executive Master of Business Administration Program (EMBA) of the Yangon University of Economics at the 17th and 18th batch during 2019-2020 academic year. This sample was chosen for two reasons: 1. They could be well represented Myanmar business industry as they were working in different business industries and 2. They were working at management level and had working experiences at least 8 years even before joining EMBA program that could match and well represent for the CEO position presented in the scenarios. Moreover, this sample and its demographic characteristics in terms of gender, age and work experience are similar to previous studies that have also used Executive M.B.A students (Carson, Becker, and Henderson, 1998; Latham and Whyte, 1994; Whyte and Latham, 1997; Huint & Saks, 2003).

Out of 229 potential participants, 105 (46 %) responded. The mean age of participants was 39 years, and the mean number of years of total work experience was 15 years. There were 52 (49.5 %) women participants and 53 (50.5 %) men participants. Their reported work experience was as follows: operation management, 32 (31%); sales and marketing, 24 (23%); finance or accounting, 10 (10%). Seventy-seven (73 %) participants reported working in the private sector, 23 (22 %) reported working in the public sector and 5 (5%) reported working in non-government organization or non-profit organization. Their reported working industry was as follows: service industry, 70 (67 %); constructions, 11 (11 %); manufacturing, 11 (11%). 34 (34%) of them were working at top management level, 63 (60%) at middle management level and 4 (4%) at lower management level.

4.2.3 Study Design

A randomized, 2 × 2 (post-training interventions × information type) factorial design was used. The factors were post-training intervention (implementation intention versus proximal plus distal goal setting) and information type (research with validity information versus validity information with utility analysis). Four scenarios were developed from the stimulus material used by Huint and Saks (2003) and Carson, Becker, and Henderson (1998) and are described below.

4.2.4 Procedure

Prior to online survey, the permission from the head of department of management studies, Yangon University of Economics was obtained. Totally 229 students from two executive M.B.A. classes in Yangon (90 in each class) and one class in Naypyidaw (49 participants) were randomly assigned into four scenarios. Then, an invitation letter with the survey links of the four scenarios with attached questionnaires were emailed to each of the students' email by blind carbon copy.

The letter includes three main parts: 1. General introduction to researcher and research purpose along with brief general introduction on transfer of training, the importance of post-training interventions and the scenario-based survey design, 2. The invitation for voluntary participation with brief notes on survey procedures such as scenario in Myanmar will be presented first then survey questions will be followed and when the survey links will be closed, 3. Some requests on dos and don'ts including refrain from sharing survey links to other students as it could violate random assignment of scenarios, and finally the survey links. They were told they were randomly assigned into different scenarios and were asked not to share the survey links to their classmates and not to discuss the scenarios with colleagues until they had completed the questionnaires. They were assured their responses would be anonymous and kept strictly confidential. No additional credits were given to the participants, but they are offered with sharing the finding of the results and the professors of the executive M.B.A. and classes were not involved in the research.

4.2.5 Materials and Manipulations

The four scenarios in the post training interventions context were developed from the transfer intervention scenarios of Huint and Saks (2003) and the revised validity-only condition

scenario of Carson, Becker, and Henderson (1998). Each participant was randomly assigned to one of these four scenarios.

All scenarios began with the same short introduction, describing that the manager was to assume the role of CEO of a large Myanmar corporation. The introduction also contained information about the company and the job of the employees, information regard to declining performance of employees currently holding this job and the qualifications of the consultant presenting the intervention programs (following Huint and Saks, 2003).

To make simple and short to the managers' information perception habits, we presented the cost of implementing intervention information in a table, as which are commonly used to present information to managers, especially in the HRM context (Wempen, 2007). Both intervention scenarios let to the same estimate of monetary return of investment.

Participants read a proposal from a consultant for a post-training transfer intervention, which was to be added to a training program that was designed to increase the productivity of clerical-administrative personnel. Participants were asked to imagine that they were the CEO in a large Myanmar corporation who asked a well-known corporation consultant regarding the concern the declining performance of employees. The consultant researched the problem and proposed the implementation of a post-training intervention that was to follow the main trainings. The proximal plus distal goal setting intervention read as follows:

> One of the most significant obstacles to the transfer of training is trainees' lack of goals for what knowledges and skills to transfer back to workplace. Trainees' goals on what to transfer during shorter term and longer term is one of the most significant keys to resolving the problem of transfer of training. Setting specific, clear, and challenging knowledges and skills transfer goals can greatly strengthen the likelihood that trainees will apply the training material on the job. The Proximal Plus Distal Goal Setting intervention will teach trainees how to set short term goals (proximal goals) to support long-term goals (distal goals). This will include factors such as discussion and demonstration on goal-setting activities and how to set long-term goals with short term goals.

Participants in the implementation intention received an identical scenario except that the consultant proposed an intervention program called "Implementation intention." The implementation intervention read as follows:

> One of the most significant obstacles to the transfer of training is trainees' lack of preparation for what to transfer back to workplace. Trainees' preparation to anticipate what to transfer when specific situations arise in work environment is one of the most significant keys to resolving the problem of transfer of training. Preparing trainees for what to and when to transfer can greatly strengthen the likelihood that they will apply the training material on the job. The Implementation Intention training will teach trainees to get ready with a clear implementation plan to transfer of learning to workplaces. This will include factors such as imagine situations in workplace and planning what knowledge and skills to be able to transfer for dealing with transfer problem. For example, trainees will be trained on the developing a clear plan in a pattern of "I will do X when situation Y arise", how to prepare for transfer barriers after the training.

Each of the scenarios ended with a paragraph about the cost of implementing post training intervention that was identical for all scenarios. This was followed by the research or utility analysis information manipulation.

The research information condition indicated that research published regarding transfer of training interventions had been found to improve transfer, and a statement about either proximal plus distal goal setting or implementation intention was made. The text of the research information intervention read as follows:

> Research published on the transfer of training has found that transfer of training interventions can improve the transfer of training. Proximal plus distal goal setting interventions (or implementation intention) have been shown to have a significant effect on the transfer of training and the effectiveness of training programs. Therefore, Proximal plus distal goal setting interventions (or implementation intention) post-training intervention is expected to improve the transfer of training and productivity of the clerical/administrative personnel.

The utility analysis information condition was developed from the revised validity-utility condition used in the Carson, Becker, and Henderson (1998) study. This scenario was identical to the research information condition except that the paragraph regarding research

was replaced by two paragraphs about utility. The first stated that costs should be evaluated, and that utility analysis was a process used to estimate the overall gain in productivity. The second paragraph indicated a return on the investment based on the utility analysis. The text of the utility analysis condition read as follows:

> These costs should be evaluated in the context of the return the company can expect to receive. If the Proximal plus distal goal setting interventions (or implementation intention) intervention which we are proposing does in fact result in an increase in the level of productivity, as compared to previous results from training, more overall productivity will be the measurable result. More productive employees are obviously beneficial since they produce more for the company for the same labor costs as their less productive counterparts. Utility analysis is the process that can be used for estimating the benefit to the company of training employees when training is transferred resulting in a measurable gain in overall productivity.

Since you expect to train 400 employees for this year, and we expect that the total cost for implementing the Implementation Intention (Proximal Plus Distal Goal Setting) intervention will cost MMK 2,282,000 ($1690) for this year. The details calculation is shown at the following table.

Description	MMK (Per head)	MMK (400 employees)
Opportunity cost (i.e. labor cost per hour) The Implementation Intention (Proximal Plus Distal Goal Setting) intervention duration = 60 minutes (salary MMK 300,000 per month / 22 days =13,636 per day/ 8 hours=1,705 per head)	1,705	682,000
Cost of the Implementation Intention (Proximal Plus Distal Goal Setting) instructor (1hour × 100,000 MMK× 16 sessions)÷ 400 employees	4,000	1,600,000
Total Costs	5,705	2,282,000

These costs should be evaluated in the context of the return the company can expect to receive. A utility analysis was conducted based on the information gained from your supervisors in your company about the value of more productive clerical/administrative employees, the expected increase in productivity, numbers of employees trained, and the cost estimates for the Proximal Plus Distal Goal Setting intervention program. This analysis indicates that the average clerical/administrative employee, due to productivity, will be "worth" 58,079 MMK more to the organization that the average employee having participated in the intervention session. This will be due to the increased transfer of training resulting in employees performing their jobs more effectively and continuing to improve as new policies and technology are put in place. Since the company expects to train 400 clerical/administrative employees over the course of the year, this saving equals 23,231,600 MMK per year to the company.

In sum, the utility analysis shows that improved transfer of training and productivity that results from the Implementation Intention (Proximal Plus Distal Goal Setting) intervention has an impressive economic benefit to the company.

The sum of 58,079 MMK ($43) per employee was calculated based on the relative GDP ratio between Canada and Myanmar (World bank, 2018) on $3000 which was used by Huints & Saks (2003). For a more realistic amount of gain for a transfer of training scenario in Myanmar context, this study used only half value of $86 (the relative ratio of $3000).

4.2.6 Measures

Two dependent variables used in this study were acceptability and understandability.

Acceptability. It is managers' probability of accepting the proposed intervention after reading the scenarios. It was measured by nine-item decision preference scale which adapted from Whyte and Latham's (1997), those used in previous studies on managers' preferences to consultant's recommendations (Carson et al., 1997; Huint & Saks, 2003; Wankler, Konig & Kleinmann, 2010). Some of the scale items were modified to refer to "intervention" rather than "training" (Huint & Saks, 2003) or "selection" (Whyte and Latham, 1997). The items were such as "How likely are you to implement the consultant's recommendations?" "How confident are you that the consultant has the ability to improve the intervention training given to the clerical/administrative personnel?" and "How confident are you that investing in new

intervention training procedures as recommended by the consultant is a good use of company resources?" All the items are measured on a five-point Likert-type scale specific to each item, with 1 a very unlikely to implement and 5 a very likely to implement.

Understandability. It is the extent to which managers understood the consultant's proposal. It was measured by two items scale which were used in previous studies on reactions to utility analysis (Carson et al., 1997; Wankler, Konig & Kleinmann, 2010; Whyte & Latham, 1997). The items were "How well did you understand this consultant's proposal?" and "To what extent was the proposal clearly presented?"

A principal components factor analysis was conducted for each of the dependent variables that resulted in one component being extracted respectively. For understandability variable, all two items had loading above .85 and the internal consistency reliability coefficient (Cronbach's alpha) of the scale is .74. For acceptability variable, all nine items had loadings above .65 and four of the items had loadings above .80. These results confirmed the unitary structure of the scale. The internal consistency reliability coefficient (Cronbach's alpha) of the scale is .91, which is identical to that obtained by Whyte and Latham (1997).

4.2.7 Data Analysis

A two-way between groups multivariate analysis of variance (MANOVA) was performed to investigate different intervention in different information conditions. When dependent variables are more than one and those variables are moderately correlated, it is better to use MANOVA rather than ANOVA to control for the Type 1 error across multiple tests. Two dependent variables used in this study were understandability and acceptability. The independent variable were post-training interventions and information conditions. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multiple outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations noted.

There was no statistically significant difference between interventions on the combined dependent variables, F (2, 102) = .53, p = .57; Wilks' Lambda = .99; partial eta squared = .01. Furthermore, there was no statistically significant difference between information conditions on the combined dependent variables, score F (2, 102) = 1.04, p = .36; Wilks' Lambda = .89; partial eta squared = .02.

4.3 Results

Mean, standard deviations and internal consistency for dependent variables were shown in Table 4.1. Regarding post-training intervention conditions (implementation intention vs proximal plus distal goal setting), there was no significant main effect differences between the two interventions in terms of understandability F (1, 97) = .87, n.s and acceptability F (1, 97) = .14, n.s.

Table 4.1: Mean, Standard Deviations and Internal Consistency for Dependent Variables

		II intervention		GS intervention	
	α	Research	Research + Utility	Research	Research + Utility
1. Understandability	.74	7.64 (1.62)	7.83 (1.37)	7.21 (1.22)	7.72 (1.62)
2. Acceptability	.91	32.75 (6.54)	33.67 (5.27)	31.58 (5.12)	34.00 (4.79)
n		28	24	24	25

Note: Standard deviations were shown in brackets beside mean.

Similarly, for the main effect for information conditions (research information vs research information with utility analysis information) was not significant, in terms of understandability F (1, 97) = 1.43, n.s and acceptability F (1, 97) = 2.3, n.s. Moreover, no interaction effect (intervention vs information) was found for both dependent variables F (1, 97) = .30, n.s; F (1, 97) = .47, n.s.

Then, a further data analysis in terms of sector, 2 × 3 (intervention conditions vs sectors) MANOVA was conducted on both dependent variables. Regarding understandability of the scenarios, the mean for the implementation intention condition (M = 8.49) was higher than proximal plus distal goal setting condition (M = 7.01) and the main effect of post-training intervention was statistically significant F (1, 95) = 8.38, $p < .01$. As well as the interaction effects with sector was also statistically significant F (1, 95) = 4.53, $p < .05$. However, regarding acceptability of the proposal, while the mean for the implementation intention (M = 34.05) was higher than GS condition (M = 31.41), there was not a significant main effect for the post training interventions F (1, 95) = 1.88, $p = .17$ and neither interaction effect was F (1, 95) = 1.26, $p = .29$.

For the information condition, 2 × 3 (information conditions vs sectors) MANOVA was conducted on both dependent variables. Regarding understandability, there was no statistically differences between research information and research information with utility analysis information F (1, 92) = 1.16, $p = .29$. However, regarding acceptability of

information conditions, it showed that research information with utility analysis information was statistically more accepted than just research information by the participants $F\ (1, 92) = 3.97$, $p < .05$.

In summary, the results show that implementation intention intervention is more understandable than proximal plus distal goal setting. However, the acceptability upon conducting post-training interventions was not significant. The results also indicate that managers who are working in public sector and NGO sector have higher acceptability on the utility analysis information than the research information only.

4.4 Discussion and Conclusion

This study explored the probability of implementing post-training interventions in Myanmar in terms of implementation intention versus proximal plus distal goal setting which are not previously examined as manager's decision preference to post-training supplements. Moreover, this study investigated manager's preference to research information conditions versus research information with utility analysis information, the latter one is not previously examined.

The results of the study show that managers are more likely to understand the consultant's proposal on II intervention than on proximal plus distal goal setting. These interventions did not have a significant difference in the acceptance to the consultant's proposal. However, managers are more likely to accept the consultant's proposal on II intervention when research information with utility analysis information are provided with.

The results of this study suggest taking consideration of different sector with different information conditions while trying to sell the value of HRM interventions to managers. When selling to managers in public sector including NGOs, it is better to provide detailed information, i.e. research information with utility analysis information. Even though they were required to imagine they were the CEO of a private firm, they might not be able to leave from their role in the real world and play the assigned role. The audience in this sector are responsible and accountable to explain or relay the information to others (in other words they are not allowed to make decision by themselves just right away because of their job nature), they prefer to see full picture or consequences of something new proposed to them.

However, when selling new ideas to managers in private sector, it is better not to use utility analysis as a tool to promote new ideas. Researchers already agreed and confirm on it (Carson, Becker & Henderson, 1998; Huint & Saks, 2003; Latham & Whyte, 1994). Managers

in private sector feel difficult to believe information on monetary value. Whatever the amount of monetary value (Macan, Lemming and Foster, 2013), they are unlikely to accept it. Rather, it is better to use causal chain utility information which exhibit the chain of benefits not in monetary value. For example, conducting a post-training intervention can enhance 14% of transfer of training, which in turn increase 4% of employee performance. Winkler, Konig and Kleinmann (2010) confirmed that causal chain analysis yielded higher results than utility analysis did.

In conclusion, this study adds to the literature by investigating two interventions not previously examined as post-training intervention scenarios, implementation intention and proximal plus distal goal setting, with two information condition, research and research information with utility analysis.

Chapter 5: Conclusion

The present study aimed to contribute to the literature on transfer of training, from the perspective of post-training interventions. To accomplish this goal, three empirical studies were conducted with experimental research designs, based on the primary data. Two of them are on the effectiveness of post-training interventions on transfer of training (Chapter 2 and Chapter 3) while the other is on the determinants of manager's decision on introducing post-training interventions (Chapter 4).

5.1 Summary of Main Findings

Chapter 2 focuses on two relatively more utilized post-training interventions; full RP and proximal plus distal GS and empirically analyzes their effects on transfer of training on time management. Differently from the expectation, results from both intervention groups were not significantly different from those of the control group. Therefore, it was difficult to conclude whether post-training interventions enhance the transfer of training. On the other, a significant difference was found between full RP and proximal plus distal GS in terms of self-reported time-management behavioral change. More specifically, the GS treatment group made more transfer of training than the RP treatment group. These contrasting results showed different effectiveness by the two post-training interventions, at least for this sample, undergraduate students in Myanmar.

Chapter 3 focuses on the other post-training interventions; II and empirically analyzes their effects on transfer of training on digital marketing courses. A significant positive effect of II was found on the specific measures of transfer of training while the effect was not significant on the general measures of transfer of training. The possible explanation for the inconclusive results is that the self-evaluation on the general measures was more difficult as the respondents perceived them relatively vaguer. Only few studies have tested the effectiveness of II as a post-training intervention in transfer studies. The findings of this study validated previous findings on the effect of II after a longer interval, 12 weeks rather than up to six weeks after training. The findings suggested that II can be a convincing answer for how to maximize transfer for this case.

Chapter 4 explored how it could be possible to sell the post-training interventions to managers in Myanmar organizations by different conditions of information provision. More specifically, the respondents face a post-training transfer intervention (implementation

intention or proximal plus distal goal setting) and an information condition (research information or research information with utility analysis). The results show that managers are more likely to understand the consultant's proposal on II intervention than on proximal plus distal goal setting. These interventions did not have a significant difference in the acceptance to the consultant's proposal. However, managers are more likely to accept the consultant's proposal on II intervention when research information with utility analysis information are provided with.

5.2 Contributions

The abovementioned empirical results can be discussed in the context of transfer of training studies, or training effectiveness/evaluation studies in a broader sense. As argued in Chapter 1, the ineffectiveness of training has been a major concern among many organizations. Although several frameworks were developed to evaluate training effectiveness, performance and ROI based indicators have not been used extensively due to the difficulty to identify the effect in an efficient way. Therefore, more intermediate effectiveness measure, transfer of training to workplace has been more utilized as the stage linking KSA improvement and performance. In order to enhance this transfer of training, efficient and effective interventions are demanded. In this regard, the researchers in the field advocated post-training interventions such as RP, GS and II and accumulated the evidence on their effectiveness. Moreover, among the practitioners, potential effectiveness of post-training interventions is not well understood. Hence, how to promote these interventions to managers is also an important agenda among the researchers.

The specific contributions of each empirical study were already articulated in the relevant chapter. Moreover, overall contributions can be elaborated as the empirical studies on post-training interventions for transfer of training. One important point is the comprehensive scope of the studies as a whole. Major three types of interventions, all of RP, GS and II were analyzed, though not in a single study. Furthermore, not only the intervention's effectiveness but the determinants of introducing the interventions were within the research scope. By doing so, a more comprehensive picture of the issue could be shown. The other thing is the detailed investigation in the empirical analyses such as different measures of transfer (self- and others-reported transfer, chapter 2), different specifications of transfer (general and specific transfer, chapter 3) and moderating variables (private or public sector, chapter 4) in the empirical analyses. The literature set more focus on the simple direct effect of interventions, particularly

because whether the effect exist has been a main agenda among the researchers. The present study explored this direction, at least to some extent.

Some important issues should be addressed for the advancement of the related study. Among them, the most critical matter is that the theoretical foundations could not be identified clearly for the different results for the effectiveness of three types of interventions. This point has been one weakness of the literature, mainly because the researchers has focused too more on the confirmation of the effectiveness. The boundary conditions and underlying conditions have not been analyzed well in the literature. Therefore, such kind of analyses are demanded. At the same time, further theoretical discussions are also required. By advancing the research in this direction, the researchers would obtain more convincing evidence and the practitioners would be more certain to introduce the post-training interventions for transfer of training.

5.3 Limitations and Suggestions for Future research

This study has several limitations which should be discussed.

First, this study measured the transfer of training in terms of behavior only for two times, specifically in Chapter 2 and 3, which may not have been adequate for monitoring behavior change. The data was collected through survey questions on paper and through online forms, which may have failed to capture participants' actual behaviors change over time. Future studies may utilize interactive voice response, an automated telephony system, for daily or weekly monitoring, consider implementing the timeline follow back method (Kranzler & Tennen, 2005). Participants could also be encouraged to keep a logbook, and feedback could be provided based on their records; this approach might encourage self-monitoring on behavior change.

Second, this study relied on self-assessment measures, although observer-rating was included in Chapter 2, but not in Chapter 3 and 4. Future studies may consider collecting data from multiple sources, including from direct managers, trainers or concealed observers.

Third, due to its small simple size especially in Chapter 3, endorsing II as a suitable post-training intervention is required to replicate the research in larger sample size in different trainings and different contexts. Moreover, 72 % were dropped out in Study 2, it is an immense challenge on how to make sure increasing response rate while collecting data online. Although the participants were presented with cash rewards (worth about $3), which was perhaps not exciting for them. Future studies may consider providing effective incentive like providing a free online course or a free consultation service after the training.

Fourth, regarding the gender representation of the sample, the small number of male participants may limit the generalizability of the findings for both genders in the first study, Chapter 2.

Finally, this study could not include how post-training interventions enhance transfer. Future studies might pursue explanations on how interventions enhance transfer and take consideration of mediating variables such as proactive personality and willingness to use transfer intervention strategies.

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Appendix

Appendix 1. Invitation letter

Subject: Invitation to Participate in Time Management Workshop

Dear all,

I am Nu Nu Mai, a PhD student of Hiroshima University, an assistant lecturer at Yangon University of Economics. I plan to conduct a Time Management Workshop at NMDC in the second week of December 2018 as one of my contributions to knowledge empowerment of students in Myanmar and for my research paper. I am working on facilitating the transfer of learning and assessing the effectiveness of trainings and workshops. I would like to invite you all to participate in this workshop.

Outcomes of the workshop

1. By participating in this workshop, you will get to know how to overcome procrastination behavior and be able to set out the planners and goals.
2. By participating in the follow-up sessions (one hour), you will know how to utilize the learned skills even in an unsupportive or unfavorable study/work environment.

Time Management Workshop

Facilitator:	Daw Mon Mon Oo, Assistant Lecturer, National Management Degree College
Duration:	3 hours
Place:	NMDC campus
Target audience:	The final year management studies students (Business Management and Tourism and Hospitality Management)
No. of participants:	50 per session

Workshop Schedule:

1. 9:00-12:00, December 11, Tuesday, 2018 (BTHM students only)

2. 12:30-3:30, December 11, Tuesday, 2018 (BBM students only)
3. 9:00-12:00, December 12, Wednesday, 2018 (BBM students only)
4. 9:00-12:00, December 13, Thursday, 2018 (BBM students only)
5. 13:00-16:00, December 13, Thursday, 2018 (BTHM students only)
6. 13:00-16:00, December 14, Friday, 2018 (BTHM students only)

***The allocation of session will be based on your registration number.

***You need to participate in only one session.

Follow-up Sessions:

1. 9:00-10:00, December 16, Sunday, 2018
2. 10:30-11:30, December 16, Sunday, 2018
3. 12:30-14:00, December 16, Sunday, 2018
4. 14:30- 16:00, December 16, Sunday, 2018

***Some participants will be assigned to participate in the follow-up session.

What participants need to do;

Some participants need to

1. Answer the time management behavior before the workshop
2. Answer the learning questionnaire before the workshop
3. Join a follow-up session

All participants need to

1. Answer time management behavior questionnaire 8 weeks after the workshop
2. Answer retention of learning 8 week after the workshop
3. Answer the personality tests before the workshop (online)
4. Answer the self-efficacy questionnaire
5. Identify and select one person as an observer of his/her time management behavior, whom they felt could observe their management of time before and during the eight-week study period. The observer needs to answer the questionnaire.

⇒ Please note that answering survey questionnaires are not mandatory but your voluntarily participation are highly appreciated.

⇒ The information you provide will be used only for academic purposes and will be keep securely.

⇒ Certificate of completion will be provided to all participants who participated fully in the workshop, the follow-up session and survey.

⇒ Extra curriculum credit rewards (as counted for the Business Finance & Advance Management) will be also provided to all participants who participated fully in the workshop, the follow-up session and survey.

If you are interested to participate in the workshop, please register at the following link by 21:00, December 9, Sunday, 2018.
Registration Link: https://goo.gl/forms/gvAIqaZ5jeUKSkTE2

Thank you in advance for your cooperation and participation.

Looking forward to seeing you at the workshop.

Warm regards,

Nu Nu Mai
PhD Student
Division of Development Science
Department of Development Policy
Graduate School for International Development and Cooperation, Hiroshima University
1-5-1 Kagamiyama, Higashihiroshima, Hiroshima 739-8529 JAPAN
Tel: +95 96 8332 0009
+81 70 4314 0101
Email: nunumai@gmail.com, d171303@hiroshima-u.ac.jp

Appendix 2. Sample of Consent form

CONSENT FORM

Full Title of Project: Time Management Workshop, Follow-up Sessions and Survey

Researcher: Nu Nu Mai, PhD Student,
Graduate School for International Development and Cooperation,
Hiroshima University
1-5-1 Kagamiyama, Higashihiroshima, Hiroshima 739-8529 JAPAN
Tel: +95 96 8332 0009 +81 70 4314 0101
nunumai@gmail.com, d171303@hiroshima-u.ac.jp

	Please check box
1. I confirm that I have read and understand the information provided in the invitation letter for the project and have had the opportunity to ask questions.	☐
2. I understand that my participation is voluntary.	☐
3. I understand that my answers to questionnaires will be used for the research purpose.	☐
4. I agree to take part in the above study.	☐

Name of Participant	Date	Signature
Nu Nu Mai	December 2018	
Name of Researcher	Date	Signature

Appendix 3. Questionnaires

Time Management Knowledge Test

* This questionnaire includes 14 items which assessing your current time management knowledge.
* Please check the box according to your answer. If your answer is yes, please write the correct answer.

Student ID_____ Student Name_____

No.	Items	Yes	No	If yes, Answer
1.	Do you know how often, and during what part of the day, you should make up your to-do list or planner?			
2.	Do you know that how many sheets of paper you should list your activities on?			
3.	Do you know that when should C's be attempted in the ABC priority method?			
4.	Assuming you have prioritized your day, do you know what you should do in the spare ten minutes before lunch?			
5.	Do you know that what is the "swiss cheese method"?			
6.	Do you know any idea that will help you avoid procrastination?			
7.	Do you know any idea that will help you deal more effectively with interruptions?			
8.	Do you know what a C-Drawer is?			
9.	Do you know what the 80/20 rule in time management is?			
10.	Do you know what the difference between internal and external prime time is?			
11.	Do you know when the best time is to block out for important projects?			
12.	Do you know what is meant by a "productive" break period?			
13.	Do you know what question you might ask yourself to determine if something is a time waster or something better left undone?			
14.	Do you know what Lakein's rule is?			

Time Management Behavior

* The respondent must be the final year BBM or BTHM students from NMDC. Otherwise, please not.
* This questionnaire includes 30 items which asking about your current time management behavior. Please answer it honestly and carefully.
* Please circle for your response.

Student ID_____ Student Name_____

Items		Never	Seldom	Sometimes	Often	Always
1.	I review or revise my long-term goals.	1	2	3	4	5
2.	I link my daily activities to my goals and not just to urgency or time pressure.	1	2	3	4	5
3.	I spend most of my time on high priorities.	1	2	3	4	5
4.	I make up a daily planner or to-do list.	1	2	3	4	5
5.	I set deadlines to help avoid procrastination.	1	2	3	4	5
6.	I try to make my deadlines "public" by telling my roommate or others about them.	1	2	3	4	5
7.	I put low priority activities in a special drawer or place.	1	2	3	4	5
8.	I let interruptions break up my work time.	1	2	3	4	5
9.	I take breaks that are "productive" and get me away from work tasks.	1	2	3	4	5
10.	I spend excess time trying to decide what to do next.	1	2	3	4	5
11.	I brainstorm about whether my goals are really what I want from life.	1	2	3	4	5
12.	My activities are controlled by others' expectations and demands.	1	2	3	4	5
13.	My days are basically just handling each activity or crisis as it comes to my attention.	1	2	3	4	5
14.	I tried to get started earlier on my major projects by working on small parts of them.	1	2	3	4	5
15.	I blocked out internal prime time for important tasks on projects.	1	2	3	4	5

16.	I concentrated on "doing it now".	1	2	3	4	5
17.	I actively tried to recognize my time wasters by asking "what would happen if I just didn't do this".	1	2	3	4	5
18.	I practiced tactful assertiveness.	1	2	3	4	5
19.	I have days where I felt I get absolutely nothing accomplished.	1	2	3	4	5
20.	I rewarded myself for not procrastinating.	1	2	3	4	5
21.	I thought about what was my internal prime time and tried to distinguish it from external prime time.	1	2	3	4	5
22.	I planned something enjoyable each day.	1	2	3	4	5
23.	I was able to spend time doing things I really wanted to do.	1	2	3	4	5
24.	I found myself over-scheduling.	1	2	3	4	5
25.	I asked this question daily: "what is the best use of my time right now".	1	2	3	4	5
26.	I kept my to-do list on one sheet and made it up at a designated time each day.	1	2	3	4	5
27.	I tried to very moderately change my behavior to help me get more done.	1	2	3	4	5
28.	I really try to prioritize my to-do list.	1	2	3	4	5
29.	I complete my to-do list.	1	2	3	4	5
30.	When I found myself not working on high priority tasks I either changed my behavior or modified my priorities on the to do list.	1	2	3	4	5

Observer

* This questionnaire includes 10 items which asking how you will evaluate the current time management behavior of your friend/student/son/daughter.
* Please circle for your response.

Your Name (Evaluator) _____

For Whom (Name of the student) _____

Items		Never	Seldom	Sometimes	Often	Always
1.	This student seemed very goal oriented.	1	2	3	4	5
2.	This student seemed very conscious of planning and prioritizing their day.	1	2	3	4	5
3.	This student seemed to successfully avoid major procrastination.	1	2	3	4	5
4.	This student blocked out time for studying.	1	2	3	4	5
5.	This student seemed to successfully avoid major procrastination.	1	2	3	4	5
6.	This student seemed to waste little time in indecision.	1	2	3	4	5
7.	This student was rushed or behind.	1	2	3	4	5
8.	This student was substantially overloaded and had to work long hours or pull “all nighters” to catch up.	1	2	3	4	5
9.	This student uses a term calendar and/or daily time planner.	1	2	3	4	5
10.	This student overscheduled.	1	2	3	4	5

Appendix 4: The Results for randomization checks and pretest sensitization check

Table A1. ANOVA results for randomization checks and the pretest sensitization check

Time management knowledge

Descriptives

Conditions	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Min	Max
RP	34	2.03	1.507	.258	1.50	2.56	0	7
GS	33	1.64	1.342	.234	1.16	2.11	0	5
Control	49	2.20	1.486	.212	1.78	2.63	0	5
Total	116	1.99	1.460	.136	1.72	2.26	0	7

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.425	2	3.213	1.522	.223
Within Groups	238.566	113	2.111		
Total	244.991	115			

Self-reported time management behavior

Descriptives

Conditions	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Min	Max
RP	35	3.15	0.351	.059	3.03	3.27	2.43	4.23
GS	33	3.22	0.363	.063	3.10	3.35	2.33	3.93
Control	50	3.13	0.342	.048	3.03	3.23	2.23	3.77
Total	118	3.16	0.350	.032	3.10	3.22	2.23	4.23

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.193	2	0.096	0.783	.459
Within Groups	14.149	115	0.123		
Total	14.341	117			

Observer-reported time management behavior

Descriptives

Conditions	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Min	Max
RP	44	3.21	0.499	0.075	3.06	3.36	2.10	4.00
GS	45	3.32	0.464	0.069	3.18	3.46	2.30	4.40
Control	60	3.28	0.447	0.058	3.16	3.39	2.10	4.70
Total	149	3.27	0.467	0.038	3.19	3.35	2.10	4.70

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.243	2	0.121	0.554	.576
Within Groups	31.975	146	0.219		
Total	32.218	148			

Appendix 5: Questionnaire

Digital Marketing Training

Pre-Training Questionnaire

This survey is to study your transfer of knowledges and skills learned from the digital marketing training. Your provided information will be used only for academic research purposes and will be kept confidential. Thank you very much for your kind participation.

Nu Nu Mai, Hiroshima University, Japan, nunumai@gmail.com, Tel: +81 70-4314-0101

Name: _____

Email address/Tel: _____

1. Male Female
2. Age
   a) 19 and Under 19 years old
   b) 20-29 years old
   c) 30-39 years old
   (d) 40-49 years old
   (e) 50-59 years old
   (f) 60 and above 60 years old
3. The highest degree or level of school you have achieved
   a) High school degree or equivalent
   b) Bachelor's degree
   c) Master's degree
   d) Doctor's degree
   e) Others (Please specify): ----------
4. Current employment status
   a) Own business
   b) Company
   c) Government agencies
   d) NGO/NPO
   e) Freelancer
   f) currently unemployed
   g) Housemaker (housewife)
   h) Student
   i) Retired
   j) Others (Please specify):----------
5. Current job position
   a) Upper management
   b) Middle management
   c) Junior Management
   d) Administrative staff
   e) Support staff
   f) Student
   g) Trained professional
   h) Freelancer
   i) Self-employed/Partner
   j) Other (Please specify):----------

6. Current work experience

a) No experience yet
b) Under 1 and 1 year
c) Above 1 year until 3 years
d) Above 3 years until 5 years
e) Above 5 years until 7 years
f) Above 7 years until 9years
g) Above 9 years

7. Have you ever learned about digital marketing?

a) No b) Yes

If yes, please specify when and where.

a) When---------- b) Where ----------

8. How many times have you used the digital marketing last year?

a) None
b) 1 to 4 times
c) 5 to 8 times
d) 9 to 13 times
e) 14 and more

9. How many times have you attended management courses in the past?

a) None
b) 1 to 4 times
c) 5 to 8 times
d) 9 to 13 times
e) 14 and more

10. Among the following, which one is the most reflecting your main purpose of attending this training?

1. Interested in what is digital marketing?
2. To support current works.
3. To apply the digital marketing knowledge and skills
4. Others (Please specify) …….

11. Within coming 1 month, how likely are you going to use the digital marketing knowledge and skills in your work or private life?

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely

12. Most people my age uses digital marketing.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely

13. Most firms like mine business perform digital marketing.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely

14. I feel capable of performing digital marketing.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely

15. I intend to carry out digital marketing in my work or daily life within a month.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely

16. I am discouraged from performing digital marketing because I feel I do not know how to.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Undecided	Somewhat likely	Likely	Very likely

Appendix 6: Questionnaire

Right After the Digital Marketing Training

(For Treatment Group)

Name ……

Many people find that they intend to use digital marketing for their businesses but then in practice they forget or 'never get around to it'. It has been found that if a person forms a definite plan of exactly when, where and how he or she will apply from what he or she had learned, that person is more likely to actually do so and less likely to forget. It would be also useful for you to plan when, where and what digital marketing knowledge, skills and activities you will do in the next month.

- First of all, please imagine in which situations that you will be able to use digital marketing and skills.
- Then, please write at least five statements based on your visualizing situation. When you write down, please describe which skills, when and where (situations) that you will apply those knowledge and skills.
- You can also see the example sentences given below.

Example sentences:

- "When I get to introduce new products in the market, I will create a video clip of it on Monday and Wednesday evenings at home"
- "If my boss asked me to reduce the advertising costs, then I will try email marketing and video marketing"

Please write your own statements based on learning contents and your own notes. Please describe explicitly what learned knowledge and skills to apply in which situations.

During-------weeks or months, I will use digital marketing skills----------(do)------ (day or days) -------at------ (time of day) at or in (place) ----------.

Right After the Digital Marketing Training

For Control Group

Name ……

1. Do you remember your objective of attending the training. Please write down at least one objective.

a) ……

b) ……

c) ……

2. Please list down the (5) most important topics for you that you had learned from the training. As a reference, you can use a list of training contents or your own notes.

a) ……

b) ……

c) ……

d) …….

e) ……..

Appendix 7: Questionnaire

Digital Marketing Training Post Survey

First of all, thank you very much for participating in the first surveys of Digital Marketing Training. The purpose of this final survey is to examine the applicability of knowledge and skills learned from the "Digital Marketing Training" to your real-life situation or workplaces. All your answers will be recorded safely and used only for academic research purposes. Your participation in this survey is voluntary. Submission of this assessment constitutes your consent to participate.

The study should take you around 5 minutes to complete. For your complete participation in this survey, you will get a 3,000 Kyat worth PREPAID MOBILE TOP-UP. We will send the pin number to your email address or Facebook messenger. If you are interested, we can also share the findings of this research with you.

The survey will be closed on Saturday, January 11, 2020. Please also note that all your personal information will be protected appropriately. If you have any questions about the survey, please email us: nunumai@gmail.com.
We really appreciate your input!

Declaration: This survey is only intended to distribute to the trainees of Digital Marketing Training at Myitkyina which held on September 21-22, 2019.

Nu Nu Mai, PhD Student, Hiroshima University, Japan.
(Lecturer, Department of Management Studies, Yangon University of Economics, Myanmar)
Supervisor: Associate Professor. Yoshi Takahashi, Hiroshima University, Japan.

1.	Please rate your familiarity with digital marketing.	Not at all familiar	Slightly familiar	Somewhat familiar	Moderately familiar	Very familiar
	Before the training	1	2	3	4	5
	After the training	1	2	3	4	5
2.	Please rate your competency in digital marketing.	Not at all competent	Slightly competent	Somewhat competent	Moderately competent	Very competent
	Before the training	1	2	3	4	5
	After the training	1	2	3	4	5
3.	Do you have any supports from others for utilizing digital knowledge & skills? i. Yes ii. No iii. Not applicable					

Please rate how much do you agree with the following statements using strongly disagree to strongly agree.						
General Transfer of Digital Marketing Training						
	Items	Strongly disagree	disagree	Neutral	Agree	Strongly Agree
1.	I have been using the knowledge & skills presented in the training to help improve my performance.	1	2	3	4	5
2.	I have been incorporating learned knowledge & skills from the training into daily work activities.	1	2	3	4	5
3.	The training helped to improve job performance.	1	2	3	4	5

Specific Transfer of Digital Marketing Training						
In this session, only (5) questions will be asked to know your situations regarding the application of digital marketing skills/knowledge after the training. Please read carefully each sentence and select the number that best describes your situation.						
After Digital Marketing Training, I…						
1.	Created a Facebook page.	1	2	3	4	5
2.	Created a Website or a blog.	1	2	3	4	5
3.	Signed up for a new personal account (such as Facebook, Gmail, LinkedIn or Instagram etc.)	1	2	3	4	5
After the training,						
4.	I conducted market analysis or research.	1	2	3	4	5
5.	I created a profile that represents my ideal customer (persona marketing).	1	2	3	4	5
6.	I researched the needs of my customers.	1	2	3	4	5
7.	I performed SWOT analysis for my business or myself.	1	2	3	4	5
8.	I realized who are my main competitors.	1	2	3	4	5
9.	I discovered who are the end-users of my product/service.	1	2	3	4	5
After the training, I have been using the following online digital marketing.						
10.	Social media marketing.	1	2	3	4	5
11.	Video marketing	1	2	3	4	5
12.	Email marketing	1	2	3	4	5
13.	Pay per click advertising (PPC)	1	2	3	4	5
14.	Content marketing	1	2	3	4	5
15.	Search Engine Optimization (SEO)	1	2	3	4	5

16.	Influencer Marketing	1	2	3	4	5
17.	Google tools (such as Gmail, Calendar, Translate, Search, Maps, YouTube etc.)	1	2	3	4	5
After the training, I have used the following offline digital marketing channel.						
18.	TV Marketing	1	2	3	4	5
19.	Radio Marketing	1	2	3	4	5
20.	SMS Marketing	1	2	3	4	5
21.	Billboard Marketing	1	2	3	4	5
After the training, I have been conducting the following tasks.						
22.	Designed (and/or) managed a website or a page.	1	2	3	4	5
23.	Used online for searching information.	1	2	3	4	5
24.	Communicated with my customers/followers by using media such as Facebook messenger, Viber and so on.	1	2	3	4	5
25.	Posted information that my followers/customers may interest	1	2	3	4	5
26.	Tried Chatfuel or Chatbot for automatically replying to/receiving feedback from my customers/followers.	1	2	3	4	5
27.	Sold goods or services over the internet.	1	2	3	4	5
What is your name? _____						

Appendix 8. Nonresponse Bias Check in Drop out List

Group Statistics

	Conditions	N	Mean	Std. Deviation	Std. Error Mean
Gender	Control	19	1.53	.51	.12
	Treatment	20	1.65	.49	.11
Age	Control	19	2.37	.60	.14
	Treatment	20	2.35	.49	.11
Education	Control	19	1.89	.32	.07
	Treatment	20	1.90	.45	.10
Work experience	Control	19	2.95	2.04	.47
	Treatment	20	3.70	2.25	.50
User experience	Control	19	1.32	.95	.22
	Treatment	20	1.70	1.22	.27

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-t)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower	Upper
Gender	1.62	.21	-.77	37	.45	-.12	.16	-.45	.20
Age	.44	.51	.12	37	.92	.02	.17	-.34	.37
Education	.70	.41	-.04	37	.97	-.01	.13	-.26	.25
Work experience	.60	.45	-1.09	37	.28	-.75	.69	-2.15	.64
User experience	1.38	.25	-1.10	37	.28	-.38	.35	-1.10	.33

Appendix 9. Questionnaire

Invitation Letter

Subject: Invitation to participate in online survey: The Probability of Implementing Post Training Interventions in Myanmar Business Industry

Dear Sir/Madam,

Greeting from Hiroshima.

I am Nu Nu Mai, a Ph.D. candidate at Hiroshima University, and a lecturer at the Department of Management Studies, Yangon University of Economics.

I would like to invite you to participate in my online survey which is a scenario-based survey design. The purpose of this study is to be able to understand the probability of implementing an additional learning session after the main training to enhance the transfer of training.

Please note the following facts before you start.

1. You will be presented the scenario in Myanmar. It may take 3 to 5 minutes to read and, after that, you will be asked 11 questions (linear scale) based on the scenario.
2. The survey will be closed on Friday, May 15, 2020, and you can edit your responses until that date.
3. Your responses will be kept completely confidential and your participation in this research is voluntary.
4. This survey is intended to distribute to current students of the EMBA programs (including both the 17th and 18th batch) of the Yangon University of Economics only.

Now to start the survey, please click the links below.

Unicode: https://forms.gle/GueUq8mRkRx1cPXq7

Zawgyi: https://forms.gle/NFQEs2b4gNSWfMRV9

If you have any questions regarding this survey, please feel free to contact me anytime. If you are interested in this research, I can share the findings of this research with you.

I am looking forward to your participation and cooperation.

Thank you very much.

Best regards,

Nu Nu Mai (Ms.)

Ph.D. Candidate

Division of Development Science, Department of Development Policy

Graduate School for International Development and Cooperation (IDEC)

Hiroshima University, 1-5-1 Kagamiyama, Higashi-hiroshima 739-8529, Japan

Mobile: +8170 4314 0101, E-mail:nunumai@gmail.com, d171303@hiroshima-u.ac.jp

Appendix 10. Questionnaires

This scenario focused on transfer of training which is the application of learned knowledge and skills from trainings to workplaces. Transfer of training is necessary and important for improving performances of employees and organizations. As one promising way to enhance transfer of training, we can simply add some extra sessions after main trainings. We developed this scenario in order to understand whether a responsible person is willing to implement an additional session after a training in order to enhance transfer of training.

Scenario (A1) Validity information only for Implementation Intention

Imagine that you are a Chief Executive Officer (CEO) of a large Myanmar corporation. This corporation employs over 1,700 people last year. The corporation has a reputation for high quality products and services. Recently concerns have been raised about the quality of clerical/administrative personnel. The corporation has its own in-house training centers to train employees. However, recently there is a concern that trained employees may not behave or apply well what they had learned from trainings to their workplaces.

So, you, as a CEO, asked a corporate consultant (who has a high reputation in this arena) to make a proposal regarding enhancing performance of your employees. After discussing the issue, your consultant researches the issue of transfers and propose to implement a post training intervention specifically "Implementation Intention" after main training in order to solve transfer issues and increase the productivity of clerical/administrative personnel.

One of the most significant obstacles to the transfer of training is trainees' lack of preparation for what to transfer back to workplace. Trainees' preparation to anticipate what to transfer when specific situations arise in work environment is one of the most significant keys to resolving the problem of transfer of training. Preparing trainees for what to and when to transfer can greatly strengthen the likelihood that they will apply the training material on the job. The Implementation Intention training will teach trainees to get ready with a clear implementation plan to transfer of learning to workplaces. This will include factors such as imagining situations in workplace and planning what knowledge and skills to be able to transfer for dealing with transfer problems. For example, trainees will be trained on the developing a clear plan in a pattern of "I will do X when situation Y arise", how to prepare for transfer barriers and subsequent to the training.

Since you expect to train 400 employees for this year, and we expect that the total cost for conducting Implementation Intention intervention will cost MMK 2,282,000 for this year. The detailed calculation is shown at the following table.

Description	MMK (Per head)	MMK (400 employees)
Opportunity cost (i.e. labor cost per hour) Implementation Intention intervention duration = 60 minutes (salary MMK 300,000 per month / 22 days =13,636 per day/ 8 hours=1,705 per head)	1,705	682,000
Cost of Implementation Intention instructor (1hour × 100,000 MMK× 16 sessions)÷ 400 employees	4,000	1,600,000
Total Costs	5,705	2,282,000

This particular training is suggested based on the research information. Research published on the transfer of training has found that post training interventions can improve the transfer of training. Implementation Intention interventions have been shown to have a significant effect on the effectiveness of training programs including the transfer of training. Therefore, Implementation Intention interventions is expected to improve the transfer of training and productivity of the clerical/administrative personnel.

Scenario (A2) Validity information with utility analysis for implementation intention

Imagine that you are a Chief Executive Officer (CEO) of a large Myanmar corporation. This corporation employs over 1,700 people last year. The corporation has a reputation for high quality products and services. Recently concerns have been raised about the quality of clerical/administrative personnel. The corporation has its own in-house training centers to train employees. However, recently there is a concern that trained employees may not behave or apply well what they had learned from trainings to their workplaces.

So, you, as a CEO, asked a corporate consultant (who has a high reputation in this arena) to make a proposal regarding enhancing performance of your employees. After discussing the issue, your consultant researches the issue of transfers and propose to implement a post training intervention specifically “Implementation Intention” after main training in order to solve transfer issues and increase the productivity of clerical/administrative personnel.

One of the most significant obstacles to the transfer of training is trainees' lack of preparation for what to transfer back to workplace. Trainees' preparation to anticipate what to transfer when specific situations arise in work environment is one of the most significant keys to resolving the problem of transfer of training. Preparing trainees for what to and when to transfer can greatly strengthen the likelihood that they will apply the training material on the job. The Implementation Intention training will teach trainees to get ready with a clear implementation plan to transfer of learning to workplaces. This will include factors such as imagine situations in workplace and planning what knowledge and skills to be able to transfer for dealing with transfer problem. For example, trainees will be trained on the developing a clear plan in a pattern of "I will do X when situation Y arise", how to prepare for transfer subsequent to the training.

This particular extra training is suggested based on the research information and utility analysis. Research published on the transfer of training has found that post training interventions can improve the transfer of training. Implementation intention interventions have been shown to have a significant effect on the transfer of training and the effectiveness of training programs. Therefore, Implementation intention is expected to improve the transfer of training and productivity of the clerical/administrative personnel.

Since you expect to train 400 employees for this year, and we expect that the total cost for implementing Relapse prevention intervention will cost MMK 2,282,000 for this year. The details calculation is shown at the following table.

Description	MMK (Per head)	MMK (400 employees)
Opportunity cost (i.e. labor cost per hour) Relapse Prevention training duration = 60 minutes (salary MMK 300,000 per month / 22 days =13,636 per day/ 8 hours=1,705 per head)	1,705	682,000
Cost of Relapse prevention Trainer (1hour × 100,000 MMK× 16 sessions)÷ 400 employees	4,000	1,600,000
Total Costs	5705	2,282,000

These costs should be evaluated in the context of the return the company can expect to receive. A utility analysis was conducted based on the information gained from your supervisors in your company about the value of more productive clerical/administrative

employees, the expected increase in productivity, the number of employees trained, and the cost estimates for the implementation intention intervention program. This analysis indicates that the average clerical/administrative employee, due to productivity, will be "worth" 58,079 MMK more to the organization that the average employee having participated in the intervention session. This will be due to the increased transfer of training resulting in employees performing their jobs more effectively and continuing to improve as new policies and technology are put in place. Since the company expects to train 400 clerical/administrative employees over the course of the year, this saving equals 23,231,600 MMK per year to the company.

In sum, the utility analysis shows that improved transfer of training and productivity that results from the Implementation Intention intervention has an impressive economic benefit to the company. As an CEO of the company, it is up to you to decide whether to implement the consultant's recommendation.

Scenario (B1) Validity information only for proximal plus distal goal setting

Imagine that you are a Chief Executive Officer (CEO) of a large Myanmar corporation. This corporation employs over 1,700 people last year. The corporation has a reputation for high quality products and services. Recently concerns have been raised about the quality of clerical/administrative personnel. The corporation has its own in-house training centers to train employees. However, recently there is a concern that trained employees may not behave or apply well what they had learned from trainings to their workplaces.

So, you, as a CEO, asked a corporate consultant (who has a high reputation in this arena) to make a proposal regarding enhancing performance of your employees. After discussing the issue, your consultant researches the issue of transfers and propose to implement a post training intervention specifically "Proximal Plus Distal Goal Setting" after main training in order to solve transfer issues and increase the productivity of clerical/administrative personnel.

One of the most significant obstacles to the transfer of training is trainees' lack of goals for what knowledges and skills to transfer back to workplace. Trainees' goals on what to transfer during shorter term and longer term is one of the most significant keys to resolving the problem of transfer of training. Setting specific, clear, and challenging knowledges and skills transfer goals can greatly strengthen the likelihood that trainees will apply the training material on the job. The Proximal Plus Distal Goal Setting intervention will teach trainees how to set short term goals (proximal goals) to support long-term goals (distal goals). This will include

factors such as discussion and demonstration on goal-setting activities and how to set long-term goals with short term goals.

This particular training is suggested based on the research information. Research published on the transfer of training has found that post training interventions can improve the transfer of training. The Proximal Plus Distal Goal Setting interventions have been shown to have a significant effect on the effectiveness of training programs including the transfer of training. Therefore, The Proximal Plus Distal Goal Setting interventions is expected to improve the transfer of training and productivity of the clerical/administrative personnel.

Since you expect to train 400 employees for this year, and we expect that the total cost for conducting the Proximal Plus Distal Goal Setting intervention will cost MMK 2,282,000 for this year. The detailed calculation is shown at the following table.

Description	MMK (Per head)	MMK (400 employees)
Opportunity cost (i.e. labor cost per hour) The Proximal Plus Distal Goal Setting intervention duration = 60 minutes (salary MMK 300,000 per month / 22 days =13,636 per day/ 8 hours=1,705 per head)	1,705	682,000
Cost of The Proximal Plus Distal Goal Setting instructor (1hour × 100,000 MMK× 16 sessions)÷ 400 employees	4,000	1,600,000
Total Costs	5,705	2,282,000

Scenario (B2) Validity information with utility analysis proximal plus distal goal setting

Imagine that you are a Chief Executive Officer (CEO) of a large Myanmar corporation. This corporation employs over 1,700 people last year. The corporation has a reputation for high quality products and services. Recently concerns have been raised about the quality of clerical/administrative personnel. The corporation has its own in-house training centers to train employees. However, recently there is a concern that trained employees may not behave or apply well what they had learned from trainings to their workplaces.

So, you, as a CEO, asked a corporate consultant (who has a high reputation in this arena) to make a proposal regarding enhancing performance of your employees. After discussing the issue, your consultant researches the issue of transfers and propose to implement a post training

intervention specifically “The Proximal Plus Distal Goal Setting” after main training in order to solve transfer issues and increase the productivity of clerical/administrative personnel.

One of the most significant obstacles to the transfer of training is trainees’ lack of goals for what knowledges and skills to transfer back to workplace. Trainees’ goals on what to transfer during shorter term and longer term is one of the most significant keys to resolving the problem of transfer of training. Setting specific, clear, and challenging knowledges and skills transfer goals can greatly strengthen the likelihood that trainees will apply the training material on the job. The Proximal Plus Distal Goal Setting intervention will teach trainees how to set short term goals (proximal goals) to support long-term goals (distal goals). This will include factors such as discussion and demonstration on goal-setting activities and how to set long-term goals with short term goals.

This particular extra training is suggested based on the research information and utility analysis. Research published on the transfer of training has found that post training interventions can improve the transfer of training. The Proximal Plus Distal Goal Setting interventions have been shown to have a significant effect on the transfer of training and the effectiveness of training programs. Therefore, the Proximal Plus Distal Goal Setting is expected to improve the transfer of training and productivity of the clerical/administrative personnel.

Since you expect to train 400 employees for this year, and we expect that the total cost for implementing the Proximal Plus Distal Goal Setting intervention will cost MMK 2,282,000 for this year. The details calculation is shown at the following table.

Description	MMK (Per head)	MMK (400 employees)
Opportunity cost (i.e. labor cost per hour) The Proximal Plus Distal Goal Setting intervention duration = 60 minutes (salary MMK 300,000 per month / 22 days =13,636 per day/ 8 hours=1,705 per head)	1,705	682,000
Cost of The Proximal Plus Distal Goal Setting instructor (1hour × 100,000 MMK× 16 sessions)÷ 400 employees	4,000	1,600,000
Total Costs	5705	2,282,000

These costs should be evaluated in the context of the return the company can expect to receive. A utility analysis was conducted based on the information gained from your supervisors in your company about the value of more productive clerical/administrative employees, the expected increase in productivity, the number of employees trained, and the cost estimates for the Proximal Plus Distal Goal Setting intervention program. This analysis indicates that the average clerical/administrative employee, due to productivity, will be "worth" 58,079 MMK more to the organization that the average employee having participated in the intervention session. This will be due to the increased transfer of training resulting in employees performing their jobs more effectively and continuing to improve as new policies and technology are put in place. Since the company expects to train 400 clerical/administrative employees over the course of the year, this saving equals 23,231,600 MMK per year to the company.

In sum, the utility analysis shows that improved transfer of training and productivity that results from the Implementation Intention intervention has an impressive economic benefit to the company. As an CEO of the company, it is up to you to decide whether to implement the consultant's recommendation.

Based on the above scenario, please tell us how you (as CEO) will respond to the consultant's recommendation. Please read the following questions and select a number which reflects your answer or thoughts from the box which ranges 1 to 5.

1. How well did you understand this consultant's proposal?

Not at all understood	not understood	Neither	understood	very well understood
1	2	3	4	5

2. To what extent was the proposal clearly presented?

Very unclearly presented	unclearly presented	Neither	clearly presented	Very clearly presented
1	2	3	4	5

3. How likely are you to implement the consultant's recommendations?

Very unlikely to implement	Unlikely to implement	Neither	Likely to implement	Very likely to implement
1	2	3	4	5

4. How confident are you that the consultant's recommendations will significantly improve the productivity of the clerical/administrative personnel?

Not at all confident	Not confident	Neither	Confident	Very confident
1	2	3	4	5

5. How confident are you that the consultant has the ability to improve the training given to the clerical/administrative personnel?

Not at all confident	Not confident	Neither	Confident	Very confident
1	2	3	4	5

6. How confident are you that investing in new intervention training procedures as recommended by consultant is a good use of company resources?

Not at all confident	Not confident	Neither	Confident	Very confident
1	2	3	4	5

7. How committed are you to implementing the consultant's recommendation?

Not at all committed	Not committed	Neither	Committed	Very committed
1	2	3	4	5

8. In relation to the investment required, how large do you believe the financial return will be if the consultant's recommendations are implemented?

Not at all believe	Not believe	Neither	Believe	Totally believe
1	2	3	4	5

9. Will others in the firm approve or disapprove if you decide to implement the consultant's recommendations?

Strongly Disapprove	Disapprove	Neutral	Approve	Strongly Approve
1	2	3	4	5

10. How effectively could you justify to others in the firm a decision to implement the consultant's recommendations?

Not at all Effectively justify	Not effectively justify	Neutral	effectively justify	Very effectively justify
1	2	3	4	5

11. How would you rate the quality of the consultant's advice?

Very Bad	Poor	Neither	Good	Excellent
1	2	3	4	5

Email address: _____

Roll number: _____

Select your EMBA batch

1. 17th batch
2. 18th batch Yangon campus
3. 18th batch Naypyidaw campus

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1. Gender: a) Male b) Female
2. Age _____
3. Current workplace
   a) Public sector
   b) Private sector
   c) Non-Government organization or Non-profit organization
   d) Others
4. In which industry are you working now?
   e) Manufacturing
   f) Service
   g) Constructions
   h) Real estate
   i) Logistic
   j) Wholesaling and retails
   k) Transportation
   l) Others (please specify: ----------)
5. Currently you are working as
   a) Owner of business(es)
   b) Top manager
   c) Middle manager
   d) First line manager or supervisor
   e) Employee or staff
   f) Freelancer
   g) Student
   h) Unemployment
   i) Others (Please specify): ----------
6. Total working experiences _____ years
7. Your main work experiences are in
   a) Operation or production management
   b) Human resource management
   c) Finance or accounting
   d) Sales and Marketing
   e) Others (please specify ----------)

Appended form No. 1

Application for Review

/06/1/2020

To the Chair of the Ethics Committee of
Graduate School for International Development and Cooperation

Review Item	☐ Research plan	☑ Research report
Title	The Effectiveness of Two Post Training Interventions on the Transfer of Time Management Knowledge and Skills	
Name of the Applicant	Name: NU NU MAI	Extension number:
(Academic Advisor)	(Course, if the applicant is a student.) Department: Development Policy	(ID No., if the applicant is a student.) Position: D171303
(Academic Advisor)	Name: Yoshi Takahashi	Extension number:
Other (Publication, etc.)	The 17th International Asian Conference of the Academy of Human Resource Development, Bangkok, Thailand from 8th to 10th November 2018. Presented the current paper as a Work-in-progress paper in title of 'Examining the Effectiveness of Posttraining Interventions on Training Transfer' Published at Education Sciences journal on 26 March 2020, entitled 'Testing the Effectiveness of Transfer Interventions: Using Solomon Four-Group Designs'.	

Notes:
1. The applicant's signature or seal is required in the ""Name of the Applicant"" field.
2. Check ☐ "Research plan" if you are applying before you begin the research.
3. Check ☐ "Research result" if you are applying after or during the research.
4. Specify about publication means, conference name, journal name and etc.in the "Other (Publication, etc.)" field if you check "Research result"

·····(the Ethics Committee Only)·····

Determination	1. Approved	2. Changes Recommended	3. Not Approved	4. Not Applicable
Reason for Determination or Recommendation	Approved June 16, 2020			

Appended form No. 1

Application for Review

/06/01/2020

To the Chair of the Ethics Committee of
Graduate School for International Development and Cooperation

Review Item	☐ Research plan	☑ Research report
Title	The Effect of Implementation Intentions on the Transfer of Digital Marketing Training	
Name of the Applicant	Name: NU NU MAI	Extension number:
(Academic Advisor)	(Course, if the applicant is a student.) Department: Development Policy	(ID No., if the applicant is a student.) Position: D171303
(Academic Advisor)	Name: Yoshi Takahashi	Extension number:
Other (Publication, etc.)		

Notes:
1. The applicant's signature or seal is required in the ""Name of the Applicant"" field.
2. Check ☐ "Research plan" if you are applying before you begin the research.
3. Check ☐ "Research result" if you are applying after or during the research.
4. Specify about publication means, conference name, journal name and etc.in the "Other (Publication, etc.)" field if you check "Research result"

·····(the Ethics Committee Only)·····

Determination	1. Approved	2. Changes Recommended	3. Not Approved	4. Not Applicable
Reason for Determination or Recommendation	Approved June 16, 2020			

Appended form No. 1

Application for Review

/06/01/2020

To the Chair of the Ethics Committee of
Graduate School for International Development and Cooperation

Review Item	☐ Research plan	☑ Research report
Title	A Study of Managers' Reactions to Posttraining Interventions	
Name of the Applicant	Name: NU NU MAI	Extension number:
(Academic Advisor)	(Course, if the applicant is a student.) Department: Development Policy	(ID No., if the applicant is a student.) Position: D171303
(Academic Advisor)	Name: Yoshi Takahashi	Extension number:
Other (Publication, etc.)		

Notes:
1. The applicant's signature or seal is required in the ""Name of the Applicant"" field.
2. Check ☐ "Research plan" if you are applying before you begin the research.
3. Check ☐ "Research result" if you are applying after or during the research.
4. Specify about publication means, conference name, journal name and etc.in the "Other (Publication, etc.)" field if you check "Research result"

·····(the Ethics Committee Only)·····

Determination	1. Approved	2. Changes Recommended	3. Not Approved	4. Not Applicable
Reason for Determination or Recommendation	Approved June 16, 2020			