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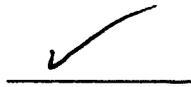
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“ADOPT A PAL”

AN APPLICATION OF THE TRANSTHEORETICAL MODEL

By

Chad Spangler

B.S. Montana State University-Northern, 1995

Presented in partial fulfillment of the requirements

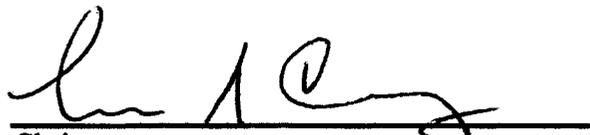
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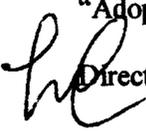
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“Adopt a PAL,” An Application of The Transtheoretical Model

 Director: Dr. Lewis Curry, Ph.D.

According to the Centers for Disease Control, more than 60 percent of adults do not achieve the recommended amount of regular physical activity. Healthy People 2010 cites physical activity first as a leading health indicator, suggesting that perhaps two of the most important objectives of Healthy People 2010 are: 1.) Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion and 2.) Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day (U.S. Department of Health and Human Services 2000).

Currently, efforts to promote physical activity are action-oriented (Prochaska and Marcus, 1996) and therefore, mostly ineffective. In response to the problems of low levels of physical activity and the corresponding low levels of stage-matched interventions, “Adopt a PAL (Physically Active Lifestyle),” a workbook program designed to promote physical activity among adults, has been created.

Adopt A PAL is primarily based on Prochaska and DiClemente’s Transtheoretical Model of change (1983) and consequently driven by the theories of Self-Efficacy (Bandura, 1977, 1982) and Decisional Balance (Janis and Mann, 1977). The Adopt A PAL workbook is divided into 6 parts: introduction, assessment, precontemplation, contemplation, preparation, and action/maintenance. Each section has a unique and specific purpose concurrent with stage-matched goals identified in the Transtheoretical Model of behavior change. It is hoped that this workbook will succeed by targeting the majority of the adult population – that which is not psychologically ready for action – oriented interventions regarding physical activity behavior.

TABLE OF CONTENTS

Abstract	ii
Introduction	1
Review of Related Literature	6
Methodology	17
Workbook	21
Conclusions	50
References	51

I. Introduction

I have been interested in the behavior associated with physical activity and exercise since the fall of 1995. As a recent college graduate, my first job was as a wellness coordinator at a hospital. I soon became certified as a personal trainer and started to work beyond the set job requirements. Within a couple years I had taken enough courses and credentialing exams to allow me to work as an exercise specialist in the cardiac rehabilitation program at the same hospital. I had found my passion. I truly loved learning about individuals and teaching them how to make exercise or physical activity enjoyable and meaningful. Outside my clinically based days, I also trained healthy adults in the contexts of fitness and sport. Whether I was teaching an adult education program or conditioning the local college football team, I was genuinely committed to making physical activity an individually relevant experience. I found myself fulfilled with others' enjoyment of any kind of physical activity. Even now, as a broke and busy graduate student, I still seek opportunities to encourage and enjoy the physical activity of others. That being said, it's with tremendous enthusiasm that I present Adopt a P.A.L.

According to the Centers for Disease Control, more than 60 percent of adults do not achieve the recommended amount of regular physical activity. In fact, 25 percent of all adults are not active at all. It's not surprising that over 60 million people (a third of the population) are overweight and 14 million suffer from depression (Centers for Disease Control, 1996a), to which lack of exercise may contribute. In addition, our current population suffers increasingly from heart disease, diabetes, high cholesterol, and cancer. But perhaps more staggering than the statistics is the fact that the majority of such

conditions are preventable. Regular physical activity performed on most days of the week has been consistently shown to reduce the risk of developing heart disease, diabetes, and colon cancer; regular physical activity also alleviates high blood pressure and feelings of depression and anxiety, and helps maintain a strong, healthy body (Centers for Disease Control, 1996a). Despite this common knowledge, there is still an inverse relationship between current levels of physical activity and incidence of disease. People are getting less physical activity and they have more risk factors for disease.

At this point, I'd like to present the relationship between lack of exercise and health risk factors as the main problem addressed in this paper. Additionally, I will present a subproblem: Most of the current efforts to promote physical activity are action-oriented (Prochaska and Marcus, 1996). This means that most efforts to increase levels of physical activity are only reaching those people who are already active. According to Rossi's (1992) research based on Prochaska and DeClemente's Transtheoretical Model (1983), nearly 100 percent of the sedentary population are in pre-action stages of change (cited in Prochaska, Johnson, & Lee, 1998). This population is simply not ready for the traditional action-oriented interventions that rely on reactive recruitment strategies (advertise or announce your program, and let potential participants react). According to Prochaska and Marcus (1996), "If we try to help sedentary populations with action-oriented interventions, we risk serving many of them badly" (p. 166). In an effort to address the problems of low levels of physical activity and the corresponding low levels of stage-matched interventions, I would like to present a theoretically based intervention. It is titled Adopt A PAL.

Adopt a PAL is a workbook program designed to promote physical activity among adults. It is primarily based on Prochaska and DiClemente's Transtheoretical Model of change (1983) and consequently driven by the theories of Self-Efficacy (Bandura, 1977, 1982) and Decisional Balance (Janis and Mann, 1977). PAL is a catchy and friendly acronym for physically active lifestyle, subtly suggesting that a physically active lifestyle is a friend. Those that read Adopt a PAL will learn where they are and where they will go in route to becoming physically active. The workbook will consist of stage matched information and exercises designed to facilitate behavior change through specific stages.

As a workbook, Adopt a PAL is delimited to participants' reading level, interpretation, and interest. Such delimitation suggests careful consideration regarding attractiveness and readability of the workbook. Professional editing and evaluation would be necessary if Adopt a PAL was to be published, which leads to another consideration. Because the sole purpose of this project is to produce an effective intervention, the obvious limitation is the lack of possible evaluation. The effectiveness of Adopt a PAL will therefore demand theoretical evaluation, at least initially. However, it is only with the hopes of future use and subsequent evaluation that I design and produce Adopt a PAL.

In order for the Adopt a PAL workbook to hold any relevance I assume the possibility that an effective method of promoting physical activity can exist and make a significant impact on our current population. Such an intervention must be, by definition, both efficacious and popular. $\text{Population impact equals participation rate times the rate of efficacy or action}$ (Prochaska et al., 1998). With this possibility assumed and the goal

of a significant population impact in mind, the Adopt a PAL workbook must not only be effective, but popular.

Currently there is a need for more intervention studies in order to determine whether matching treatment to stage makes intervention more effective (Prochaska, & Marcus, 1994). The creation of Adopt a PAL is therefore significant in that it is an initial step towards the possibility of a future intervention study. Perhaps equally important as the need for more research is the need for effective means of promoting physical activity. Healthy People 2000, the U.S. national health promotion and disease prevention objectives for the year 2000, identified physical activity as a priority area for health promotion; stating goals to decrease sedentary lifestyles to 15 percent or lower and to increase work site fitness programs 50 percent or greater (U.S. Department of Health and Human Services, Public Health Service, 1991). Producing an effective means of promoting physical activity is therefore pertinent to the goals of the Surgeon General.

Before presenting more relevant literature it's important to define the terms that will be common throughout the upcoming literature review.

Lifestyle physical activity is defined as the daily accumulation of at least 30 minutes of self-selected activities, which includes all leisure, occupational, or household activities that are at least moderate to vigorous in their intensity and could be planned or unplanned activities that are part of everyday life (Dunn, Anderson, and Jakicic, 1998). This definition is operationally consistent with comparable programs such as the PACE program (1994) and project ACTIVE (1998) which will be discussed later.

Exercise; in contrast is considered a subset of lifestyle physical activity or one of many different ways to be physically active. Much of the research cited uses both terms:

physical activity and exercise. Within the literature review these two terms are considered the same. However, within the context of Adopt a PAL, both terms take on the aforementioned definitions.

Transtheoretical Model and Stages-of Change are used interchangeably. Both terms represent the same concept and merely represent the differences in cited authors. Within the same subject, the term stage of readiness is used frequently. Stage of readiness is considered one of the five stages within the Transtheoretical Model.

An action-oriented intervention is one that assumes its target population is motivated and ready to engage in a particular behavior. Most current physical activity promotions are action-oriented.

II. Review of Literature and Model Support

Lack of Physical Activity

It's not a coincidence that physical activity is the first of 22 priority areas addressed in Healthy People 2000 (1991). Lack of physical activity is a well-recognized problem today that, according to the midcourse review of Healthy People 2000, isn't getting any better. According to the review, there has been no reduction in the percentage of adults who engage in no leisure time physical activity since 1990. The Behavioral Risk Factor Surveillance System (BRFSS), a random-digit-dialed telephone survey used by the CDC to determine the percentage of adults participating in regular physical activity, lends additional support with its 1996 data reporting that over 73 percent of adults are insufficiently active in half of the American states (Center for Disease Control, 1996b).

Such a high level of inactivity has a significant impact on society. As many as 250,000 deaths a year have been attributed to a lack of regular physical activity (U.S. Department of Health and Human Services, 1995). And a recent report from the Surgeon General (1996a) lists the following burdens that could be reduced through physical activity:

- 13.5 million people have coronary heart disease.
- 1.5 million people suffer from a heart attack in a given year
- 8 million people have adult-onset (non-insulin-dependent) diabetes.
- 95,000 people are newly diagnosed with colon cancer each year.
- 250,000 people suffer from hip fractures each year.
- 50 million people have high blood pressure.

- Over 60 million people (a third of the population) are overweight.

The most recently published Healthy People 2010 continues on with the same information regarding physical activity. Healthy People 2010 cites physical activity first as a leading health indicator, suggesting that perhaps two of the most important objectives of Health People 2010 are: 1.) Increase the proportion of adolescents who engage in vigorous activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion and 2.) Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day (U.S. Department of Health and Human Services, 2000).

A long list of longitudinal research (cited in Blair, Wells, Weathers, & Paffenbarger Jr., 1994) supporting such claims of an inverse relationship between physical activity and specific health risks has been growing over the past 20 years linking physical activity to reductions in all-cause mortality (Verbrugge & Wingard, 1987; Salonen, Puska, & Tuomilehto, 1982; Paffenbarger, Hyde, Wing, & Hsieh, 1986), hypertension (Blair, Goodyear, Gibbons, & Cooper, 1984), coronary artery disease (Morris, Clayton, Everitt, Semmence, & Burgess, 1990; Leon, Connett, Jacobs, & Rauramaa, 1987; Salonen et al., 1982), non-insulin-dependent diabetes (Helmrich, Ragland, Leung, & Paffenbarger, 1991), and colon cancer (Garabrant, Peters, Mack, & Bernstein, 1984; Gerhardsson, Norell, Kiviranta, Pederson, & Ahlbom, 1986; Vena, Graham, Zielezny, Brasure, & Swanson, 1987).

Lifestyle Physical Activity vs. Exercise

Lifestyle physical activity is the daily accumulation of at least 30 minutes of self-selected activities, which includes all leisure, occupational, or household activities that are at least moderate to vigorous in their intensity and could be planned or unplanned activities that are part of everyday life (Dunn et al., 1998). Exercise is a subset of physical activity and defined as planned, structured, and repetitive bodily movement done to improve or maintain one or more components of physical fitness (Pratt, 1999). According to these two recent definitions exercise can simply be thought of as an option for those currently living or planning to live a physically active lifestyle. The concept of optional, structured exercise as first introduced by Blair, Kohl, & Gordon (1992) seems to be an important message to spread to the sedentary populations.

Research on determinants and barriers to exercise has indicated that many people feel that they do not have time to exercise, dislike vigorous exercise, and dislike gymnasium-based exercise (King et al., 1992; Sallis et al., 1986). From such evidence, many public health researchers have deduced that many people are not active because of their misperception that vigorous exercise is their only alternative (Pate et al., 1995). Fortunately, vigorous exercise is merely one of many ways to be physically active. And there is a great deal of evidence to support lifestyle physical activity as a means to all the same health benefits once reserved only for vigorous exercisers (for review, see Dunn, et al., 1998). Anderson et al. (1999) found similar and significant changes in weight loss and lipid levels in 40 women randomly assigned to a lifestyle physical activity group or a structured aerobic exercise group. The study lasted 68 weeks, and both groups participated in the same diet regimen. The results of the study confirmed that in combination with a healthy diet, lifestyle activity is a very effective way for women to

maintain or lose weight and enhance cardiovascular health. An equally important and similar study (Dunn et al., 1999) arrived at the same conclusion. In a study of 116 sedentary men and 119 sedentary women, Dunn and colleagues found significant and comparable improvements in physical activity and cardiorespiratory fitness in both lifestyle and structured exercise groups over a 2-year period. Lifestyle physical activity approaches have also shown increased adherence rates over structured exercise programs (Jakicic & Wing, 1997). Godin, in a review of social-cognitive models, wrote:

“Promoting the habit of physical activity rather than fitness has the potential to yield to participants not only health but also rewards such as new experiences and social contacts. Moreover, such factors are significant motivators for some people. A moderate exercise or activity program is also likely to be perceived as enjoyable by those individuals who are sedentary but who manifest interest in becoming more active” (in Dishman, 1994, p. 131)

Transtheoretical Model (Stages of Change)

Adopt a PAL is a promotion of physical activity based on the Transtheoretical Model. Therefore, at this point it is important to present the Transtheoretical Model. The following presentation will be organized into three parts: a thorough definition, empirical evidence, and application to physical activity promotion. The following explanation of the Transtheoretical Model is based on information presented in Prochaska, Johnson, and Lee’s chapter – “The Transtheoretical Model of Behavior Change,” in the handbook of Health Behavior Change (1998) and Prochaska and Marcus’s chapter – “The

Transtheoretical Model: Applications to Exercise,” in *Advances in Exercise Adherence* (1994).

Explanation/Definition: The Transtheoretical model is an integrative framework for understanding how individuals progress toward adopting and maintaining health behavior change. Prochaska and DiClemente developed it in 1982 following a study of self-changing smokers. Prochaska and DiClemente revealed 5 stages of change, 10 processes of change, the pros and cons of changing, and self-efficacy as the core constructs.

The five stages of change are Precontemplation (subject has no plans of changing), Contemplation (subject plans to change within six months), Preparation (subject is planning a change within the next month), Action (subject has engaged in the new behavior), and Maintenance (subject has adopted new behavior for at least 6 months). The Transtheoretical Model also includes a final stage known as termination, which represents a point at which a person is no longer tempted to engage in the previous behavior. During the precontemplation stage an individual is usually uninformed or underinformed about the consequences of their current behavior. They may have been demoralized by their past attempts at change and they subsequently avoid reading, talking, or thinking about their behavior. In the contemplation stage one is equally aware of both the pros and the cons of their current behavior, however, they are not ready for an action-oriented intervention. Once a person reaches the preparation stage, they are ready to be recruited for an active intervention. The cons of their current behavior are now outweighing the pros. Additionally, those in the preparation stage have a well-thought out plan. The action stage simply refers to the period in which one has made a specific

change that has lasted approximately 6 months. Finally, the maintenance stage is the time (6 months – 5 years) in which one practices the new behavior and works to prevent relapse.

In between each of these stages is a process, an overt or covert activity, used to progress to the next stage. A person moving from the initial precontemplation stage to the contemplation stage may use one, two, or three of the ten total processes. Specifically, consciousness raising (becoming aware of the negative consequences of current behavior through education, confrontation, or interpretation), dramatic relief (an emotionally moving experience that causes one to reevaluate their current behavior), or environmental reevaluation (examining the effect a specific behavior has on family, work, or social life). Moving from contemplation to preparation one may employ the fourth process of change – self-reevaluation, which is the use of one's self-image with and without a particular unhealthy habit. Such visualizations eventually lead to value clarification. Getting through the preparation stage requires self-liberation (the belief that one can change and the commitment to act on that belief – will power) and social liberation (the awareness of social opportunities or alternatives). The final four processes apply to the action and maintenance stages: contingency management (rewards for engaging in new behavior), counterconditioning (learning healthier, alternative behaviors), stimulus control (removing cues for unhealthy behavior and adding cues for new behavior), and helping relationships (support for others – buddy systems). This integration suggests that in the early stages people apply cognitive, affective, and evaluative processes to progress through the stages. In later stages, people rely more on

commitments, conditioning, contingencies, environmental controls, and support for progressing toward termination.

Decisional balance is integrated into the Transtheoretical model and based on a theoretical model originally conceived by Janis and Mann (1977). It involves a comparison of the perceived benefits and costs of exercise participation (for a review, see Marcus et al., 1996). According to Prochaska, however, it may be simply thought of as pros versus cons within his model. Decisional balance (pros and cons) is particularly relevant in the first three stages of the Transtheoretical Model. During the precontemplation stage the pros of the current unhealthy behavior outweigh the cons. However, following the consciousness raising, dramatic relief, and/or environmental reevaluation processes, decisional balance evens out so the pros equal the cons in the contemplation stage. Finally, during the preparation stage the cons of a current behavior overshadow the pros.

The construct of self-efficacy was integrated from Bandura's (1977, 1982) self-efficacy theory. According to the theory, all behavioral changes are mediated by a common cognitive mechanism termed self-efficacy, namely, a belief that one can successfully perform the desired behavior (Godin, 1994). Self-efficacy is learned through past experiences and by witnessing the actions of others and can determine whether an individual will attempt a given task and to what degree that individual will persist. Within the Transtheoretical model, it is the situation-specific confidence that people have when they can cope with high-risk situations without relapsing to their original habit.

Empirical support: The Transtheoretical Model (Prochaska, & DiClemente, 1983) has been successfully applied to smoking cessation programs in the past (Prochaska, DiClemente, Velicer, & Rossi, 1993). This should really come as no surprise as it was originally developed through the observation of self-quitting smokers and intended for the treatment of addictive behaviors. However, findings from Hunt, Barnett, & Branch (1971) that showed similar patterns of relapse in both studies of exercise and addictions, suggested that the Transtheoretical Model maybe applied to the acquisition of positive behaviors such as physical activity. Sonstroem & Amaral (1986) first applied the Transtheoretical Model to exercise using 220 adult males at the University of Rhode Island (cited in Prochaska & Marcus, 1994). They found a strong, positive correlation ($r = .68$) between the subjects' outcome expectations (self-efficacy) and stage of exercise. Marcus, Selby, Niaura, & Rossi (1992) found added support for the relationship between stages of change and self-efficacy in a study of two work site samples of 1,063 and 429. The results indicated that those in precontemplation and contemplation stages, in contrast with those who were already active, had much less confidence in their ability to be active. In another study, Marcus, Rakowski, & Rossi (1992) found that decisional balance (pros and cons) was significantly associated with the stages of change. Following that study, Prochaska et al. (1994) found that across 12 different behaviors, the cons of changing outweigh the pros during the stages of contemplation and precontemplation. And, from contemplation to action, the cons of changing are outweighed by the pros. Additionally, they found a mathematical relationship between the pros and cons that suggests the pros of changing must increase twice as much as the cons decrease in order to reach the action stage of change. In another work site investigation of the Transtheoretical Model's

application to physical activity, Marcus, Eaton, Rossi, & Harlow (1994) found that levels of physical activity could be predicted by stage of readiness, perception of pros and cons, and self-efficacy. More specifically, high pros, low cons, and high self-efficacy are related to higher levels of physical activity, but only indirectly through the mediation of the stages of change.

Applications of the Transtheoretical Model: Most of the research supporting the Transtheoretical Model's application to promoting physical activity has offered some useful information regarding the stage distribution of its samples. Past studies such as Marcus & Owen (1992) showing 41 percent of subjects in precontemplation or contemplation stages; or Marcus & Simkin (1993), categorizing 51 percent of their subjects as precontemplators or contemplators are typical. Rossi's (1992) stage distribution study (cited in Prochaska et al. 1998) supports the notion that the majority of our current population is not ready for action. Rossi (1992) used an HMO sample of 20,000 and assessed stages of readiness for 15 different health behaviors. Although there were some variations among different distributions, on average 40 percent of the sample were precontemplators, 40 percent were contemplators, and 20 percent were in preparation. According to such a finding, the majority of current, action-oriented physical activity promotions will be effective for only a small percentage of the population. Such information calls for a proactive stage matched approach to promoting physical activity.

Recent developments include the PACE program (1994), and project ACTIVE (1998). Both interventions are based on the Transtheoretical Model and provide support for the conception of Adopt a PAL. Project ACTIVE is currently at the end of its trial

period; therefore no results are available at this time. It is worth mentioning, however, as it is a well – researched design for a lifestyle physical activity intervention. Project ACTIVE is based on the practical issues of making physical activity participation less complicated, more convenient, less intimidating, and inexpensive. It allows each person to make choices about how they will achieve the ACSM/CDC recommendations for moderate physical activity (an accumulation of 30 minutes a day of moderate physical activity). The program is stage-matched and employs stage specific curricula. Topics include issues of barriers, self-monitoring, stimulus control, social support, self-efficacy, relapse prevention, consequences, rewards, and time management, among others. Project ACTIVE is facilitated by experienced counselors and supervised by a licensed clinical psychologist (for project review, see Kohl, Dunn, Marcus, & Blair, 1998). Results of the project's two-year trial will be compared to a similar group undergoing a two-year trial of a structured exercise program and published soon.

The PACE (Physician-based Assessment and Counseling for Exercise) program was developed in collaboration with the CDC in response to the objectives of Healthy People 2000. While the PACE program doesn't yet have a lot of empirical support, initial reports are positive. In one multisite field test 27 primary care providers reported that over 50 percent of their patients had become more active following a PACE intervention (Long, Calfas, & Wooten, 1996). Another study by Calfas, Sallis, & Oldenburg (1997) found that individuals who participated in the intervention both self-reported and objectively demonstrated an increased physical activity level. Finally, effectiveness of the PACE program was supported by a study that demonstrated that sedentary patients in an intervention group reported increased physical activity over those

patients in a control group who were at the same stage of readiness (Calfas, Long, & Sallis 1996). Individuals receiving the P.A.C.E. intervention are initially categorized into one of 3 stages of readiness (precontemplation, contemplation, or action) and subsequently counseled under the appropriate protocol. Based on the research findings that knowledge and general attitudes about physical activity are not major determinants of behavior change (Patrick et al., 1994), the PACE program focuses on perceptions of barriers, support from family and friends, beliefs about the personal benefits, and the confidence in one's ability to perform throughout the intervention. Each of the three protocols is consistent with Transtheoretical Model's (1983) integration of decisional balance. For example, patients receiving the protocol for a precontemplators will begin to list the pros of becoming active while receiving information about the benefits of physical activity (for a program review, see Houde & Melillo, 2000). Both interventions: project ACTIVE and PACE, are useful and comparable to the development of Adopt A PAL.

III. Methodology

The goal of this project is to produce a practical application of the Transtheoretical Model in an effort to promote physical activity. The means of this application is a workbook titled "Adopt a PAL." As stated earlier, P.A.L. is an acronym for physically active lifestyle. The title was chosen with two things in mind. It's catchy and non-threatening in a marketing sense; And it's expandable. To elaborate, it affords the author a future possibility to expand on themes of relationship and meaning in physical activity. It's hoped that readers will use the acronym P.A.L. to anthropomorphize physical activity as a friend. At this point, however, the friendship theme will not be a tool within the Adopt A PAL workbook. Such a theme requires more development. The effectiveness of the workbook will rely mostly on the application of the Transtheoretical Model and the behavioral processes associated with it.

The Adopt A PAL workbook is divided into 7 parts: introduction, assessment, precontemplation, contemplation, preparation, action/maintenance, and conclusion. Each section has a unique and specific purpose.

The first section of the workbook is the introduction. The introduction is brief and easy to read. The purpose of the introduction is to invite the reader to continue on. This is accomplished by addressing every individual regardless of their position on the physical activity spectrum. The first paragraph of the introduction defines physical activity as a term relevant to anyone. It is hoped that the many people who avoid discussions of physical activity due to their dislike of structured exercise will be drawn in at this point. Following the first paragraph, the workbook is briefly described, allowing the reader to feel confident in his/her ability to successfully complete the workbook.

The second section of the workbook is an assessment. The purpose of the assessment is to guide the reader to the appropriate starting section. The assessment (Adapted from Cardinal's Stage-of-exercise readiness, 1999) is very simple and quick. It does rely on the reader to answer honestly, but is currently and successfully used in Project PACE. After readers self-assess their stage of readiness, they are instructed to turn to a specific section (1,2,3,or 4) and begin the first exercise. The sections are actually stages of change defined by the Transtheoretical Model (precontemplation, contemplation, preparation, and action/maintenance).

Section one is for those who assessed themselves as precontemplative. The specific purpose of this section is to manipulate the reader's decisional balance so that they have just as many reasons to become physically active as they do to stay sedentary. It has been shown that participants in the precontemplative stage have more reasons to not be active than they have to be active. At the beginning of section one the reader is asked to list all their pros and cons. This serves as a baseline and also illustrates for the reader where they are and where they need to go in order to move to the next stage. There are four exercises to be completed in section one. The exercises are designed in accordance with the cognitive processes involved at the precontemplation stage of change: consciousness raising, dramatic relief, and environmental reevaluation. Upon completion of section one, the reader is instructed to move on to section two.

Section two is reserved for readers that have either assessed themselves as comtemplative or completed section one. The goal of section two is similar to that of section one as it involves decisional balance. At this point, however, the goal is to move the reader to decrease the number of reasons for not being more physically active. Such a

movement will result in a shift of decisional balance in which the pros suddenly outweigh the cons allowing movement to the stage of preparation. Exercises in section two are designed to begin increasing the readers' self-efficacy by helping them see how capable they are in regard to becoming more physically active. In addition to increasing self-efficacy, exercises in section two will cue the reader to reevaluate themselves and their environment. This is a necessary process involved when moving from contemplation to preparation.

Section three of the Adopt a PAL workbook focuses on the preparation phase of individual behavior change. According to the literature previously reviewed on the Transtheoretical Model, people at this stage are ready to be invited to engage in a new behavior. At this time individuals struggle with a process known as self-liberation: The belief that one can change and the commitment to act on that belief.

The purpose of section three is to help foster the necessary self-efficacy the reader needs to successfully engage in physical activity. The exercises within section three are therefore designed to show readers what they can do, how they can do it, and why they want to do it. By first selecting an activity, then setting a goal, and finally establishing a plan readers will feel more confident in their ability to successfully engage in a selected physical activity.

It is also pointed out in this section that the exercises can and should be used anytime in the future for subsequent goals or new activities.

Section 4 is the final chapter of the workbook and deals with the action and maintenance stages of behavior change. The two stages are combined into one section of the workbook for reasons of practicality. Within the context of Adopt a PAL, there are

no practical differences between the action and maintenance stages of change. In fact, the only thing that does change between the two stages is time. The behavior processes are the same.

Those processes are: contingency management, counterconditioning, stimulus control, and helping relationships. Each process is presented in section 4 as a tip, or a tool to be experimented with. The reader is given this set of tools as a resource for their active lifestyle and directed to use the ones that work for them. At this point the reader is encouraged to take what they've learned and apply it to a healthier, happier life. The conclusion of the workbook also reminds the reader to revisit any sections of the workbook as needed.

IV. The Workbook

The following pages are a manuscript of the workbook Adopt a PAL:

Introduction

Regular physical activity is defined as the daily accumulation of 30 minutes or more of self-selected activities. These activities include leisure activities such as tennis, walking/jogging, golf, or aerobic exercise; occupational activities such as climbing stairs or construction labor; and household activities such as cleaning windows, scrubbing the floor, or mowing the lawn. Such activities can be as vigorous as a basketball game or as moderate as a round of golf (without a powered cart). In other words, being physically active can be a completely different experience to everyone. Some people may have to get their activity in three, 10 minute bouts of household and occupational activities, while others may be able to spend an hour playing tennis or taking a walk. The point is, there is something for every type of person and every type of day.

Not only is a physically active lifestyle very possible for everyone, its benefits are enormous. Accumulating 30 minutes or more of physical activity a day decreases the risk of heart disease, diabetes, osteoporosis, depression, and certain types of cancer. In addition, regular physical activity helps maintain strength and a healthy weight. Health benefits such as these used to be reserved for those people who participated in structured, vigorous exercise like jogging or aerobics. However, research over the past 20 years has shown that regular physical activity is just as effective as structured exercise. Exercise is now just one of many ways to be active.

“Easier said than done” is probably the first thing that comes to mind for many

of the people reading this. Some may be thinking to themselves, “sounds good, I should really get more active.” Still others are thinking, “yeah, I already know all this stuff and I am already regularly active.” Regardless of what you may be thinking to yourself, Adopt a PAL applies to you.

Adopt a PAL is an effort to promote physical activity to the working adult. It is designed under the assumption that everyone is unique and adopts new behaviors at different speeds through a series of similar stages. Using the theme of friendship to help people better understand how and why to adopt a physically active lifestyle (PAL). The main message is that by adopting a physically active lifestyle you are, in a sense, making a new friend. Choosing the correct activities will reflect who we are, just as a friend does; and a physically active lifestyle is important to our health just as friendship is.

Finally, Adopt a PAL is a “Stage-Matched” program. This means that it is designed for the individual. Adopt a PAL recognizes that everyone is at a different level, or stage, of interest toward physical activity. Some people are very interested and excited about becoming or staying active while others are a little skeptical or not interested at all. The goal of Adopt a PAL is to help the individual determine where they are (how interested), where they need to go, and how to get there. This is a step by step process that can vary in time across individuals. Adopt a PAL is also fun and easy. Give it a try, you’ll be surprised how simple it really is.

Step One: Where are you?

Lets get started: The first step toward making physical activity a meaningful part of your life is to find out where you are. Take a moment and determine which one of these statements best describes you. Remember that being physically active means an accumulation of at least 30 minutes of vigorous or moderate activity each day.

<p>I am not physically active and I do not plan to be for the next six months.</p> <p style="text-align: center;"><u>Section 1</u></p>
<p>I am not physically active but I've been thinking about starting some form of physical activity soon.</p> <p style="text-align: center;"><u>Section 2</u></p>
<p>I get some physical activity but not regularly.</p> <p style="text-align: center;"><u>Section 3</u></p>
<p>I am getting regular physical activity.</p> <p style="text-align: center;"><u>Section 4</u></p>

At this point you may turn to the section that best matches your current level of physical activity. Keep in mind that Adopt a PAL is designed for the individual. Go at your own pace – there is no timeline involved. In fact you may find yourself starting the same section over from time to time. Don't be discouraged by that. It's perfectly normal considering the very dynamic lives we lead today.

Section 1

Buying A New Car

Before we begin please take a moment and complete the following exercise:

Pros vs Cons

List the reasons for adopting a more active lifestyle (pros) and then list the reasons for not adopting a more active lifestyle (cons). Be spontaneous and list reasons as they come to you. Don't worry about balancing the lists, it's normal for one list to be longer than the other.

Pros

Cons

Some activities relieve stress

exercise is boring

Total Pros _____

Total Cons _____

Keep these numbers in mind as we begin section 1

Welcome. Believe it or not this is the most popular section of this workbook. You along with millions of others categorize yourself as inactive. In other words, you don't get the recommended 30 minutes of daily moderate physical activity. Let me be the first to assure you that it's nothing to be embarrassed about. This is a very common problem for the majority of adults today.

At this point, rather than dwelling on what you don't do, I want you to think about everything you already do. Chances are, you're more active than you think. Most likely, the world of the 'regularly active' isn't far away. To give you an idea of activities you may be taking for granted I've compiled this brief list of moderate activities that do make a difference:

- *Gardening, weeding*
- *Sawing with a chainsaw*
- *Shoveling snow*
- *Mowing the lawn*
- *Dancing*
- *Walking up stairs*
- *Golfing*
- *Walking*
- *Fishing*

Perhaps you work in a building that has several floors, you might accumulate 10 minutes of walking up stairs in a day and not even realize it. Now, if you start parking your car a ten minute walk away, you've added 20 minutes of walking totaling 30 minutes of moderate physical activity. It really is that simple. And the benefits are enormous. Current research has shown that by accumulating 30 minutes of moderate physical activity daily, the chances of you developing any of the following complications is considerably lower.

- *Coronary artery disease*
- *Adult-onset diabetes*
- *Cancer*
- *Osteoporosis*
- *High Blood Pressure*
- *Obesity*

So why are so many of us reading this section? If you recall the Pros vs Cons exercise you completed at the beginning of this section you will probably find that you were able to list more reasons against a physically active lifestyle than for it. The fact the you have a longer Cons list is exactly why we're here. The objective of this section is to help you lengthen your Pros list so that it matches that of your Cons.

Any time we make a decision we weigh the consequences on both sides. For example, you may be thinking of buying a new car. On one side of your mind you're thinking about better reliability, gas mileage, performance, and even image. While on the other side, you're thinking about higher car payments, insurance rates, and registration fees. It's no different than the Pros vs Cons list you've just completed. You make these lists in your head all the time.

In the case of deciding to create a more active life, you may be unaware of all the "pros" we could put on our list. When someone is trying to sell you a car they make sure you know as many "pros" as possible, hoping that things like power windows, great gas mileage, or leather seats will make up a larger list and weigh heavier than the cons of higher monthly payments. Deciding to become more active is much the same. If you have the information to create a large "pros" list, you'll soon find that whether or not to take a walk after dinner is an easy decision. At this point I'd like to offer you some information to think about. Perhaps you didn't think of this information when you completed that initial pros vs cons list.

By accumulating 30 minutes of moderate or vigorous activity a day you can improve your health in the following ways:

- *Reduce the risk of dying prematurely.*
- *Reduce the risk of dying prematurely from heart disease.*
- *Reduce the risk of developing diabetes.*
- *Reduce the risk of developing high blood pressure.*
- *Help reduce blood pressure in people who already have high blood pressure*
- *Reduce the risk of developing colon cancer.*
- *Reduce feelings of depression and anxiety.*
- *Help control weight*
- *Help build and maintain healthy bones, muscles, and joints*
- *Help older adults become stronger and better able to move around without falling.*
- *Promote psychological well-being.*

Reasons such as these are all good reasons to adopt a physically active lifestyle but they are very general. Chances are you've probably already seen or heard similar information. Information such as this can be considered a foundation, or a place to begin. Throughout this section of the workbook you will build on this foundation with more reasons or "pros" that are relevant to you. For example, you may read through the list and say to yourself, "I've never had any weight control problems, I've never suffered from depression or anxiety, and I don't know anyone who's ever had colon cancer, but my father developed heart disease when he was fifty." Suddenly, 'Decreasing your risk of heart disease' may be a very relevant reason to you.

Try this first exercise. It's designed to bring things to a personal level.

Exercise 1-2:

Read through these reasons to become more active

By accumulating 30 minutes of moderate or vigorous activity a day you can improve your health in the following ways:

- *Reduce the risk of dying prematurely.*
- *Reduce the risk of dying prematurely for heart disease.*
- *Reduce the risk of developing diabetes.*
- *Reduce the risk of developing high blood pressure.*
- *Help reduce blood pressure in people who already have high blood pressure*
- *Reduce the risk of developing colon cancer.*
- *Reduce feelings of depression and anxiety.*
- *Help control weight*
- *Help build and maintain healthy bones, muscles, and joints*
- *Help older adults become stronger and better able to move around without falling.*
- *Promote psychological well-being.*

Now choose one, and write briefly about why that reason has personal meaning to you.

Reason: _____

This reason has personal meaning to me because: _____

Exercise 1-3:

Making your own list: You've already identified one personally important reason to become more active. You also understand why that reason is meaningful only to you. Now it's time to broaden your horizons.

Over the next couple days or weeks (remember there is no time line; don't just do it – do it right!) identify 10 more meaningful reasons to become more active. Try to find reasons that you haven't already seen in the magazines or on television. If you find yourself short for ideas, ask a friend or family member they may have ideas you hadn't thought about. This should be a challenging exercise, so take your time and write them down as they come to you.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Exercise 1-4:

Pros vs Cons revisited: Just as you did at the beginning of this first section complete the pros vs cons list:

ProsCons*Some activities relieve stress**exercise is boring*

Total Pros _____

Total Cons _____

Is there a difference between this list and the original? Hopefully you've found more "pros," and now the pros and cons are more closely balanced. If that's the case, you're ready to move to section two. If your cons still outweigh your pros, you need to spend more time here. Try exercises 1-2 and 1-3 again. Remember, this make take a while. Be patient with yourself.

The objective of this section was to make you more aware of all reasons there are to become a more active person. Just like the car salesman, I recognize that there are many different reasons you and millions of others decide not to take the stairs instead of the elevator. But hopefully this first

section has shown you the leather seats and power windows of a physically active life. You may not be ready to buy this car yet, but at this point, you should be interested in hearing more.

You are now ready to take the second step and begin section two. Section two will focus more on the other half of the pros vs cons list. Now that you have several good reasons to adopt a physically active lifestyle, it's time to get rid of the reasons not to.

Remember to take your time. Section two is no different than section one regarding time lines. The exercises in this workbook should take a considerable amount of time. That time should be different for everyone. So please, don't rush. Use a few minutes everyday and do it right.

Section 2

Breaking Down The Barriers

Welcome to section 2 – Breaking Down The Barriers. At this point you are well aware of all the positive reasons for being physically active. Unfortunately for you and millions of others in the same boat there seems to be too many things standing between you and a physically active lifestyle. For some it's the lack of time that goes along with a family and a career. For others it seems to be lack of motivation or a bad exercise experience in the past. The purpose of this chapter is to identify your barriers. If you've recently completed section one you probably remember the pros vs cons lists you completed. The barriers you're about to identify may be the same as the "cons" you've already listed.

Let's get started with the first exercise.

Exercise 2-1:

Identifying the barriers

Imagine yourself as physically active. You're strong and energetic, alert and happy, and confident in your healthy future. What do you see yourself doing? Are you hiking on single track trail through tall pine trees, landscaping your entire yard, or playing a game of racquetball? What's preventing this image from becoming a reality?

Think about that last question over the next few days and create your list of barriers as they come to you. Some common barriers are: no time, hate exercise, and can't afford it.

My Barriers:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Great! Now you know exactly what's standing between you and your PAL. The next step is figuring out how to get over, under, around, or straight through these barriers.

Exercise 2-2:

Solutions

Take a look at the barriers you've listed. Many of them are probably permanent fixtures. In other words, you can't simply get rid of them. The object of this exercise is to create possible solutions to the barriers you've listed. You may find that some of your barriers to a physically active lifestyle could actually help you become and remain more active. For example, you may currently see you taking care of your children as a barrier. After all it does take a lot of time and energy. But many parents have successfully turned child care into a very rewarding physical activity for both themselves and their children.

Spend the next couple weeks coming up with solutions to the barriers you've listed. Talk to friends or family about possible ideas. Write them down as they come to you.

Here's a couple examples:

1. I am usually too tired - I could try some activities earlier in the day when I'm not tired. Besides, increasing my activity level will eventually give me more energy anyway.

2. I don't like to exercise - I don't have to exercise because there are lots of different ways to become active. I could play in a volleyball league or put more work into my garden.

Now it's your turn, list the barriers you've identified along with possible solutions:

- _____

- _____

- _____

- _____

- _____

- _____

Well done! You're almost ready to start planning some activities. At this point you should feel more confident in your ability to lead a more active lifestyle. This next exercise should give you even more confidence.

Exercise 2-3:

Interview

Don't worry, it doesn't have to be formal or lengthy. It will probably be just a casual conversation in which you'll learn something new about a coworker, friend, or family member. You may even make a new friend. Here's the plan: Find someone that you know is physically active and casually talk to them about their lifestyle. It may take place over coffee, during a break at work, or even at the dinner table. Whoever you choose, they will probably be proud of their activities and more than happy to share.

Here are some possible questions to ask:

- What type of activities do you do?
- What do you enjoy about these activities?
- How do you find the time or energy?
- Was it difficult when you first started?
- Do you ever get sore from being so active?
- Have you ever tried other activities?
- Do you get any support from your family or friends?
- How do you get motivated?

Exercise 2-4:

Finding your comfort zone

Recall the image that you had earlier of your physically active self. Are you doing activities that you know you're capable of? Are there activities that you fear you'd do poorly? Maybe you're not confident jogging on a treadmill, or playing in a fast-break basketball game. Think about some activities that you are confident participating in and list them here. These activities may be things you've done well in the past or activities you've always thought you'd be good at. Refer to this list from time to time and imagine yourself successfully participating in some of these activities. This is the final exercise of this section and should prove to be useful in the next section.

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Conclusion:

Congratulations! You've come a long way. Now that you know what you're up against and how to work around your barriers, it's time to start preparing for your new PAL. Section 3 will focus on planning some specific activities based on your skills and interests.

Section 3

Planning For Success

At least 50% of people who decide to begin a more active lifestyle will go back to their old ways in less than two months. The reason that so many people fail to experience long term success is lack of planning. It seems they take the popular Nike slogan “Just Do It” a little too seriously.

By just doing it we may be setting ourselves up for a bad experience. We may find ourselves participating in activities we don't enjoy or don't really know much about. By taking the time to plan for a specific activity we can decrease the chances of a bad experience.

The goals of this section are to first give you some ideas of activities that you will enjoy doing and second, to give you a useful template from which you may continue to plan specific activities in the future.

I can't emphasize enough the importance of this section. As you work through these next exercises be honest with yourself and take your time.

Exercise 3-1:**Choosing the right activities for you**

The first step in planning your for your new PAL is figuring out what type of activities you will enjoy. You may enjoy activities with structure or competition. You may enjoy the social aspect of physical activities. Perhaps physical activity means time to yourself. The point is, regular physical activity comes in all different shapes and sizes. There really is something for everyone. This exercise is designed to give you an idea of the type of activities you will enjoy. Begin by listing some activities you have enjoyed in the past. Then list activities you would like to try. When you finish listing your activities, identify your enjoyment preferences and match them with your exercise activities.

A. List activities that you've enjoyed and done well at in the past:

B. List the activities that you'd like to try:

C. Mark an X next to any of the enjoyment preferences that apply to you:

I enjoy activities that are done:

_____ With a friend

_____ With family members

_____ Alone

_____ In teams

_____ In social groups

I enjoy activities that:

_____ Provide competition against one other person

_____ Provide competition against another team

_____ Provide competition against myself

_____ Are not competitive

_____ Are fast-paced

_____ Are casual, or laid-back

_____ Are challenging to learn

_____ Are easy to learn

I enjoy activities that can be done:

_____ Indoors

_____ Outdoors

_____ With music

_____ In the morning

_____ During the day

_____ In the evening

_____ At any time of the day

D. Now go back up to your lists in parts A and B. Identify the activities that fit with your preferences marked in part C.

These are some activities that “fit” me:

Exercise 3-2:

Goal setting

At some point in our lives we all set goals. In fact, we set goals everyday. When you wake up in the morning, you set a goal to make it to work by eight o' clock, and everything you do from the time you wake up until you clock in is done in such a way so that you'll reach your goal. Goals are a naturally occurring process and often times we don't even notice we're setting goals. If we didn't set goals, we wouldn't get much done

For this exercise you will set a goal for one of the physical activities you've identified in the previous exercise. Once you've established a goal you will make a plan for achieving it. When you're setting your goal keep these guidelines in mind:

- ◆ Be specific – include every detail in your goal statement
- ◆ Be realistic – set goals you are confident you can achieve. If they are too easy, you can always set another
- ◆ Make it visible – write down your goal somewhere that you'll see it often

My goal is:

Exercise 3-3:

Reaching your goal

Now that you know where you want to go you need a map to help find the way. The object of this exercise is to create your map. How are you going to get to the goal you've set? The first step is to identify any likely obstacles that may come up along the way. For example, if your goal is to walk two miles every Monday and Wednesday after work for the next two weeks you may need to consider the possibility that it may rain every afternoon for a week. And what about the days you have to work late? Will you be sore after the first day? Will there be days when you just aren't motivated?

Once you've identified the possible obstacles that you may face you can create possible solutions. This is step two, and this is where the real planning comes into play. You will soon find out that when you do face an obstacle that you've planned for it's no big deal. Often times, however, we run into obstacles that we haven't prepared for like bad weather or lack of motivation. When we are unprepared for such obstacles, the obstacles usually pull us off track and we never reach the goal that was set. You can think of this exercise like carrying a spare tire on a long road trip. You know that there is always a possibility of getting a flat tire so you prepare yourself by carrying a spare tire. If you get a flat and you don't have a spare you can't reach your destination.

These are the possible obstacles I may face:

These are some solutions should I face an obstacle:

Exercise 3-4:

Research

At this point you should have a pretty good idea of what type of physical activity fits you and your lifestyle. In the previous exercise you even specified one particular activity that you plan to participate in. The purpose of this exercise is to learn about the activity you plan to participate in. You may read about it, talk to someone who knows a lot about the activity, or even watch others who are already doing it. As you learn about your activity, consider the following questions:

- ◆ Does it require any special clothing or equipment?
- ◆ How can I ease into this activity without injuring myself?
- ◆ Should I expect to be sore at first?
- ◆ Where can I participate?
- ◆ When can I participate?
- ◆ Are there any clubs or groups in my area?
- ◆ Are there different skill levels?
- ◆ Which skill level is right for me?
- ◆ Are there ways to make this activity easier or more challenging?

Well done! You're now ready to get active. You're motivated and you've got a plan. The final section will help you begin and stick with the activities you choose. As you move into an active lifestyle keep in mind that there's nothing wrong with coming back to this section if you need to. Sometimes it doesn't matter how good our plan is, something can come up that we didn't foresee. There's also the possibility that you may decide to try a different activity. Either way, there's nothing wrong with taking one step back to take two forward.

Section 4

Being Active and Staying Active

Being active and staying active offers countless benefits. Being active keeps us strong and healthy, relieves our stresses, and is usually a fun experience. A PAL really is our best friend. But being active isn't always easy. There are days we just can't get motivated to do anything. Sometimes an activity we used to look forward to is no longer enjoyable

The purpose of this section is to give you some tools that you can use to stay active the rest of your life. After you've tried all the tips in this section you will probably find that some worked better than others. Keep the ones that do work for you and you and your PAL will be friends for life.

Tip 1:

One not two

We've all heard the phrase, "It's just on of those days." Chances are we've all been there a time or two. Usually there's nothing we can do about it. Hence the other common phrase, "stuff happens." The important thing here is to accept a bad day and plan on the next being better. In other words, it's okay to have a bad day, but never two in a row.

You're going to have days when you can't be active, and that's normal. But sometimes one day turns into two and two days turns into a week. To avoid that from happening accept missing a day, but never miss two days in a row.

Tip 2:

Reward yourself

I encourage you to seek someone out at work or at home who deserves to be rewarded for an accomplishment or hard work. Reward them with sincere praise or a gift and observe what happens. Perhaps you've already observed such instances. You may have even experienced it first hand. When

someone is rewarded for an effort of some kind, they tend to keep going. Imagine a woman at the verge of quitting her job. She feels over-worked and unappreciated. But out of the blue, her boss says, “Mary, I certainly appreciate all the hard work you’ve given this company. I am giving you a week’s vacation in Hawaii. All expenses paid. You deserve it.” Most likely, Mary will take her vacation and come back to work with a renewed sense of purpose. Her lots of quitting are gone.

Rewards do help keep us going and they work even when we reward ourselves. I know several people who reward themselves every couple months with some type of new active wear such as shoes or sweatshirts. Some people reward themselves by going out to a nice dinner at the end of every month they’ve stayed active.

Find a reward system that works for you. If you’re a walker or a jogger you may plan on buying a new pair of shoes every 50 miles. Perhaps you attend aerobics classes. You can reward yourself with a day off for every two weeks of perfect attendance. Be creative and find something that works for you.

Tip 3:

Cues

Cues are visible reminders. They are kind of like “post it” notes and they work very well. Like almost everything else you’ve learned in this workbook, they are different for everyone. Some people do actually use “post it” notes with their goals written on them. Others surround themselves with pictures and posters that remind them of their priorities or hobbies.

Use your imagination and try designing your daily environment so that you will be reminded of your goals, your reasons for being active, and the activities you enjoy doing. Try placing some cues on the steering wheel of your car or on your bathroom mirror. Find or take some action photos of you and your friends or family. Make sure you see those photos everyday. Jewelry makes for great cues too. I’ve known runners that always wear a shoe pendant around their neck to remind them of their passion. The possibilities are endless. Go for it.

Tip 4:

Helping relationships

It seems we've saved the best for last. Support from friends and family is perhaps the most effective way to get active and stay active. Helping relationships can mean a variety of things. It may suggest a friend that shares the same activities with you. Perhaps a helping relationship is a husband or wife that encourages a physically active lifestyle by taking on one of your daily chores so you have more time to do the activities you want to do.

Whatever the case, a helping relationship works for most people. The first step to developing a helping relationship is to figure out what type of support you need. Maybe you need an activity partner, or just someone to be interested in what you're doing. Do you need help finding more time? Do you need emotional support, or someone to talk to?

Once you know what type of support you need, you can assess your possible helpers. Who is available to help you and who is willing to help you? Perhaps there are groups or clubs that might provide helping relationships. And don't forget about your family. Parents and children both make great helpers.

Once you've found your support system or helping relationship, be willing to help others who may need some support. Sometimes helping someone else will help you discover new things about yourself.

Nurture your PAL!

As this workbook ends I would like to offer my congratulations on your achievement and wish you the best of luck in all you do. I would also like to invite you to use the exercises in this workbook as future resources. It's not uncommon for people to relapse back to old behavior, and it's certainly nothing to feel ashamed about. Go back through the workbook. It won't take long, you'll be right back where you left off. Good luck.

V. Conclusion

Adopt a PAL was originally conceived as a progressive idea that may eventually involve health professionals, printed materials, and formal programming. At this point however, my time and resources only allow the introductory workbook produced within this paper.

Future considerations for the progress of Adopt a PAL are: 1.) Expand on the friendship theme and the importance of personal meaning within desired behavior maintenance, 2.) Examine the impact that professional counseling may have on a future program such as Adopt a PAL, 3.) Develop a program plan to include a target population and professional evaluation, and 4.) Market a proven program in an effort to promote physical activity.

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