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Linda Brockmeyer  
*University of Central Florida*

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CHANGES TOWARDS INTERNAL LOCUS OF CONTROL  
AS A FUNCTION OF  
IMPROVING TIME MANAGEMENT SKILLS

BY

LINDA BROCKMEYER  
B.S., University of Florida, 1980

THESIS

Submitted in partial fulfillment of the requirements  
for the Master of Arts degree in Psychology  
in the Graduate Studies Program  
of the College of Arts and Sciences  
University of Central Florida  
Orlando, Florida

Fall Term  
1987

## ABSTRACT

Locus of Control (LOC) refers to the generalized expectancy that one controls the events in his/her life (internal orientation) or that events are controlled by other forces, such as luck (external orientation). According to many reviews of the extensive LOC literature, it is beneficial to have an internal rather than an external orientation. For example, desirable characteristics such as personal adjustment, high self-esteem, good job performance and job satisfaction are associated with internal LOC. This study was undertaken to identify and test a model which could be of use in an organizational setting for promoting the belief in internal control. A time management training model was chosen on the assumption that people who learn to manage their time better would feel more in control of their lives. The 67 University of Central Florida students who accepted the free Daytimers (a widely used professional time management system) and completed the pretest and posttest questionnaires served as the sample. The questionnaires included Rotter's LOC scale and a time management skills scale, and were administered at the beginning and end of the Spring semester. The Daytimers were distributed immediately after the pretest. Students who made frequent use of the Daytimers improved

their time management skills and became more internal by the end of the semester. There were no corresponding significant changes in either time management skills or LOC for students who used the Daytimers infrequently. These results suggest that time management training can be used to promote the belief in internal control. Future research is recommended to verify the expectations that these changes in LOC will result in better personal adjustment, greater job performance and more job satisfaction.

#### ACKNOWLEDGEMENTS

I would like to express my appreciation to Wayne Burroughs, Ph.D., William Wooten, Ph.D., and Jack McGuire, Ph.D. for their encouragement and guidance as my committee members, and to David Abbott, Ph.D. who was also a significant ( $p < .0001$ ) source of valuable assistance. I am especially grateful to Harvey L. Schwartz, Ph.D., for introducing me to the benefits associated with Internal Locus of Control orientation. I thank my family for always being there to provide feedback ranging from editing tips to unmerciful teasing. Most of all, my gratitude goes to my husband, Doug. His patience with my paper jungles, my ups and downs, and my strange schedules has been a stabilizing force. His kindness, support and enthusiastic encouragement are appreciated beyond description.

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## INTRODUCTION

### Overview

Locus of Control is a personality variable that has been extensively studied and credited with having significant influences on a wide variety of important factors such as self esteem, personal adjustment and job satisfaction, to name just a few. According to a recent computer search, over 5,000 studies of Locus of Control, conducted in the areas of clinical psychology, personality, cognition, industrial/organizational psychology, education and management, are referenced in Psychological Abstracts. In addition to reviews of Locus of Control as a personality variable (i.e., Joe, 1971) and a book entitled Locus of Control, Current Trends in Theory and Research (Lefcourt, 1982), a recent review of the organizational literature has also been published (Spector 1982).

Locus of Control is defined as the generalized expectancy that reinforcements (rewards or outcomes) are contingent upon one's own actions or controlled by other forces. Or, in the words of Rotter (1966), who developed the concept and the Internal-External Locus of control scale:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action,



then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control.

Perceptions of internal control may develop because of the perception of behavior-outcome contingencies, the attribution of abilities to one's self and the perception of the environment as responsive or potentially so (Catania, 1984). In other words, if individuals are able to attain their goals by their own efforts, they are likely to believe in their ability to control what happens to them as opposed to believing mainly in luck as the source of their fate.

People's beliefs about their control over their own fate greatly affect how they cope with stress, respond to change and succeed in living satisfying lives. While there are many studies which disagree as to the extent of the relationship between Locus of Control and various measures of personal adjustment, there is overwhelming evidence that it is more desirable and beneficial to have an internal orientation (Joe, 1971). The published evidence indicates that Externals are likely to function ineffectively in American Society. All the research points to the same conclusion: people are handicapped by external Locus of Control orientations (Rothberg, 1980).

### Personal Adjustment and LOC

The relationships between Locus of Control and a plethora of personal adjustment variables have been studied. In a comprehensive review by Joe (1971), the following factors were reported to be correlated with internal and external control: Internals score higher on various measures of well being, achievement, intelligence, academic grades, insight, interpersonal trust, initiative, controlling impulses, and according to the adjective check list they describe themselves as achieving, effective, industrious, powerful, assertive and independent. They perform better in events requiring skill; whereas chance events cause an increase in anxiety.

Externals, on the other hand, score higher in the areas of debilitating anxiety, neurotic symptoms, death anxiety, hostility, authoritarianism, dogmatism, suspiciousness, and aggression. They are lacking in self-confidence, insight and need for social approval. Skill events tend to increase anxiety and, therefore, performance is better on chance events (Joe, 1971). Some of the reported correlation coefficients for these findings, all significant at the  $p < .05$  level, are:

<u>Independent Variable</u>	<u>Correlation with Locus of Control</u>
debilitating anxiety	r=.38, r=.61
neurotic symptoms	r=.46
dogmatism	r=.24
hostility-rejection	r=.27
authoritarianism	r=.24
machiavellianism	r=.16
death anxiety	r=.31
hostility	r=.27
insight	r=-.30
interpersonal trust	r=-.28
facilitating anxiety	r=-.82

Since a high score on the I-E scale represents an external orientation, a correlation (with Locus of Control) in the negative direction indicates that internals score higher than externals on the dimension being considered.

Warehime (1971) also cited significant relationships between Internal Locus of Control and measures of adjustment, such as: efforts to better one's life circumstances, less neuroticism, less suicide and accident proneness, constructive responses to frustration, insight, and positive self reports. He then hypothesized a low linear relationship between locus of control and self-actualization, one conception of ideal personal adjustment.

Warehime tested his hypothesis using Rotter's I-E Locus of Control scale and the Personal Orientation Inventory (POI). The results supported the relationship better for females than for males as can be seen by the following correlations between the I-E control scale and the (POI)

subscales (all correlations are significant at the  $p < .05$  level):

POI subscale	Males	Females	Both
Time competence	-.39	-.30	-.32
Internal support	NS	-.34	-.18
Self-Actualizing value	NS	-.37	-.18
Spontaneity	NS	-.26	NS
Self Regard	-.28	-.43	-.33
Existentiality	NS	-.27	NS

It was suggested that the POI measures a type of personal adjustment valued less by males than by females (Warehime, 1971).

In another study, the variables of self-esteem, choice of adaptive responses, depression score, choice of helpless, self-blaming and externalized blaming responses all correlated significantly ( $p < .01$ ) with Locus of Control in children. These findings support the theory that an important element of depression is a feeling of helplessness to change the situation (external control) and that a concept of depression, similar to the adult type, can be investigated in children (Moyal, 1977).

Externals have been shown to be more anxious and to have lower expectations of achieving certain of their valued goals (Strassberg, 1973). Since many of the scales used to assess stress and anxiety are self-report instruments, it may be important to emphasize that internals "report themselves" to be less anxious, and more constructive in overcoming frustration than externals. But there is also physiological evidence for reduced stress (measured by skin

conductance) due to internal vs. external control orientation. Perception of effective control, even if not veridical, can affect autonomic responding. For example, subjects who believed they could control shock duration by increasing their response rate showed significantly fewer and smaller spontaneous skin conductance responses to shock onset than subjects who did not feel they had control (Geer, 1970).

If externals are truly more anxious, the question of whether the belief in external control produces anxiety or whether anxiety produces the belief in external control is raised. Longitudinal studies of this problem would help to determine the direction of the major effect but it seems likely that each scenario reinforces the other.

A linear relationship between locus of control and personal adjustment, with internals tending to be better adjusted, has been suggested. Individuals at the extreme ends of the continuum, however, may be more maladjusted than individuals in the middle range. While further research will most likely provide a better definition of the relationships along the continuum, the weight of the evidence overwhelmingly suggests that it is more beneficial to be of an internal orientation (Joe, 1971).

#### Employment Success and LOC

The generalized beliefs that individuals hold about their ability to control their environment would seem to

apply to job performance and satisfaction. The expectancy theory of work motivation is closely related to the concept of Internal Locus of Control. The expectancy that effort leads to success is the crucial element in motivating an individual to work. Therefore, it is reasonable to assume that an internal orientation is beneficial for employment success as well as personal adjustment and well being. The research bears this out. Significant correlations between internal locus of control and job related variables have been reported in many studies. For example, better and higher status occupations, higher earnings, more job satisfaction, more pronounced advancement (Andrisani, 1976), better education, more job involvement, less alienation (Knoop, 1981), more internal work motivation and more motivational potential (Frost & Wilson, 1983) have been linked to internality.

Belief in the ability to influence the environment is probably related to attempts to influence it. Internals, when confronted with strain-evoking situations, may be more likely to initiate attempts at improving the situation. Successful attempts could result in reduced strain and reinforcement of their internal beliefs. On the other hand, externals, believing that they cannot influence their environment, may make fewer attempts at control and set up a self-fulfilling prophecy. This would keep them in a perpetual state of tension and prevent them from learning how to

effectively handle strain-evoking situations, such as job demands.

Managers who express a greater belief in their abilities to control their environment report significantly ( $p < .01$ ) lower levels of job strain and a greater degree of job satisfaction than do managers who express a more external orientation (Gemmill, 1972). The correlations ( $p < .01$ ) between some of the job strain items and internal-external control orientation reported by Gemmill (1972) are summarized below:

ITEM	CORRELATION COEFFICIENT
Feeling:	
1. unable to influence superior actions and decisions related to them.	.370
2. progress on the job is not what it could or should be	.370
3. one cannot get the information needed to complete the job.	.334

The positive direction of the correlations indicates that externals score higher on the strain items since the Rotter Locus of Control Scale is scored in the external direction.

#### Changes in Locus of Control

There is much controversy over whether to consider Locus of Control a stable personality "trait" that is not subject to change, or a predominant attitude that can be restructured.

Many of the earlier organizational studies (i.e., Lefcourt, 1976; Rothberg, 1980; Andrisani, 1976) strongly suggest that internal-external orientation is a stable trait. Additionally, Kasperson (1982) still promotes Lefcourt's 1976 interpretation that "there is no conclusive evidence that changes in an individual's locus of control can be effected by the organization." While this statement could have been very true, and may still be true, Kasperson's conclusion seems a bit extreme:

"Therefore, it is concluded that locus of control is a personality construct that mediates job satisfaction and is directly related to the extent of projection. There appear to be people who are, very simply, less satisfied than others in the organization with the same job and environment. For management to strive for a particular level of job satisfaction for an organization (a mean value) is reasonable, but to strive to have universally satisfied workers is probably folly, unless the organization is willing to terminate highly external employees on the basis of this fact alone, which is also probably folly."

There are many others who share this view, although not quite as adamantly. In his study of elite career military officers, Rothberg (1980) acknowledged that "implicit in this retrospective test is the assumption that I-E is a stable personality trait as opposed to a dispositional state." He considers the question of whether locus of control is a stable trait to be important, unresolved and an issue of considerable complexity. However, he continues to base his research on the assumption that I-E orientation is a stable trait.



Andrisani (1976) also claims that Locus of Control is typically considered to be a stable personality variable. He says there is considerable evidence that the development of internal-external beliefs is due to direct cultural teachings but there is apparently no data on the stability of I-E expectancies beyond the early developmental stages. He also acknowledges that there is some suggestion from psychotherapy (referencing Lefcourt, 1972) that as persons successfully cope with immediate difficulties, they seem to experience an increase in personal control.

The goal of most therapeutic efforts is to encourage the belief in personal or internal control. Bruch (1974) put it this way, "The task of therapy in general terms is to assist a patient in the development of a center of gravity so that he experiences himself as self directed...free to assert himself and pursue satisfaction in terms of his own goals of living." While there is controversy over which type of intervention to use with internal vs. external clients and which clients make the most gain in internal orientation, there is convincing data from clinical psychology that support the idea that clients can become more internal as a result of various interventions. Gillis (1970), for example, demonstrated a significant change towards internal control in the nine patients (out of 13 who received therapy) who "improved" according to their therapist. The posttest mean of 8.1 on the Rotter scale was

significantly different ( $p < .05$ ) from the pre-test mean of 10.3 for this group. The post test mean was also significantly different from the control group (no therapy) post-test mean, whereas the pretest means of the experimental and control groups did not differ significantly.

Encounter group experiences have also been reported to significantly increase the internal locus of control of participants. Diamond and Shapiro (1973) did studies showing a significant ( $p < .05$ ) change toward greater internal control for the three experimental groups (an 11-week, professionally lead encounter experience), with no such change for the control group (no encounter experience). They concluded that:

"particular environmental manipulations (e.g., encounter groups, psychotherapy, educational programs, etc.) can be employed to modify generalized expectancies and thus allow individuals to perceive themselves as having greater control over their lives. This perception of increased control is positively related to a wide variety of competence and adjustment behaviors. Furthermore, enhanced feelings of self-control may serve to counteract those feelings of alienation and powerlessness so common in complex, modern societies" (Diamond and Shapiro, 1973).

Work experience may have an important influence on internal-external beliefs. Individuals may modify their outlook according to changing economic conditions as well as the conditions specific to their jobs. Andrisani (1976) provided a longitudinal study to examine both the influence of internal-external control on a number of work experience

factors, and the influence of work experience on change in locus of control. He used almost 3,000 respondents from the National Longitudinal Survey's sample of middle-aged males and found a systematic influence of locus of control on success in the world of work, independent of individual differences in skills, abilities, and demographic distribution. Additionally, the data also support the idea that success at work enhances the expectancy of internal control. Significant correlations were reported between increasing internal control and advancement in occupational status, advancement in annual earnings and reentry into the labor force.

Confidence in these findings is strengthened by the fact that there were many factors which operated to suppress any real relationships between work experience and change in locus of control. For example, since middle-aged men have considerable work experience on which to base their expectations, a weaker relationship between work experience and change in internal-external control may exist than might be found in younger workers or women with less work experience. Also, the statistical artifact "regression toward the mean" works against demonstrating a significant change in locus of control.

These findings, in conjunction with those examining the role of locus of control as a contributor to work experience, suggest that internal-external expectancies both

affect one's behavior toward the environment and are affected by one's environment. In other words, internal expectancies influence success in worklife, and success at work enhances the expectation of internal control. Both success, and opportunities for success, are effective means for raising initiative to succeed. The somewhat more external outlooks of those at the lower end of the socioeconomic spectrum may reflect unfulfilled expectations of success, rather than, or as well as, a lack of initiative (Andrisani, 1976).

#### Time Management and Locus of Control

While there is apparently no literature linking time management practices and locus of control, there is a possibility that improving time management skills could result in a greater belief in internal control. For example, if the managers in Gemmill's (1972) study (previously mentioned) developed better time management practices and accomplished more at work, they may not have been as inclined to feel that "progress on the job is not what it should be." Perceiving the relationship between personal effort and increased productivity could result in their feeling more in control of what happens on the job. Without intervention the same managers would probably blame external factors/people for the situation and never attempt to personally change things for the better. It seems that if individuals develop better time management practices they may feel more

in control of their lives, thereby accomplishing more and reinforcing the more internal beliefs. The present study was undertaken to address this issue.

Feather and Bond (1983) showed that structured and purposeful use of time was positively associated with self-esteem and negatively associated with depressive symptoms. These same variables (self-esteem and depression) have repeatedly been linked to Locus of Control, which could possibly be acting as a moderator in their experiment. They used a 17-item "use of time scale," the Beck Depression Inventory and the Backman Revision of the Rosenberg self-esteem scale. The following correlations were obtained:

Variables	Employed	Unemployed
Use of time vs. self-esteem	.46 ***	.48 **
Use of time vs. depression	-.41 ***	-.46 **
Depression vs. self esteem	-.54 ***	-.69 ***

\*\*  $p < .01$

\*\*\* $p < .001$

Those who used their time in a structured way, regardless of whether they were employed or unemployed, were more likely to report higher self esteem and less depressive symptoms. The ability to organize one's time has been found to be a good predictor of mental health in other studies as well (Feather & Bond, 1983).

Even in the absence of employment, time management skills seem to be related to the same personal adjustment variables often associated with internal locus of control.

But in a work setting there would probably be even more opportunities to benefit from maximizing the use of one's time. For example, praise from the boss for a good job done in a timely manner could serve to reinforce an employee's belief in his/her ability to handle (control) the demands of the environment.

Since an internal orientation is reported to be associated with more satisfied and productive employees, it is desirable to attempt to reorient employees in that direction. Time management seems like a reasonable choice of intervention in an industrial/organizational setting since it has high face validity toward probable increases in productivity which should should serve to encourage the belief in internal control.

#### Statement of the Problem

The purpose of the present study was to examine the relationship between locus of control and time management practices. The primary goal was not the implementation of the perfect time management system, but rather, to examine the predicted relationship between improved time management skills and internal changes in Locus of Control orientation.

A pretest-posttest design was used to measure students' time management skills and LOC orientation at the beginning and end of the semester. To help them improve their time management skills, participants were given a 4-month supply

of Daytimers (see time management instrument, method section) to use in the interim. Consideration was given to the fact that students would need to exert an effort to improve their time management skills in order for them to do so. In other words, they would need to view improvement as a valued goal so a "value of improving" scale and an "effort" scale were devised to measure these dimensions.

Externals have been reported to make fewer attempts at controlling their environment. Therefore, the students who would actively participate in efforts to improve their time management skills were expected to be those of a more internal orientation.

The specific hypotheses tested in this study were:

1. People with better time management skills will score more internally on the Rotter Locus of Control Scale.
2. People who exert the most effort to improve their time management practices will be of a more internal orientation than those who do not try to improve.
3. Individuals, whether internal or external, will have to value developing time management skills (as measured by the "value" subscale) in order to exert an effort to do so.
4. Individuals who use the Daytimers the most will improve their time management skills and will change towards a more internal Locus of Control orientation.

## METHOD

### Subjects

Volunteers were recruited from a variety of undergraduate and graduate classes at the University of Central Florida in the hopes of obtaining a random mixture of orientations along the internal/external continuum. No form of extra credit was offered. Since the relationships between effort (to improve time management skills) and both LOC and value (of improving) were being investigated, participation for the sake of extra credit would have possibly had a contaminating effect.

Of the 205 total participants only the 74 who completed both the pretest and posttest were used. Seven of the 74 were dropped because some of their responses indicated that they were answering randomly. For example if they reported their gender to be female at the beginning of the experiment and male at the end, there was a strong possibility that their answers were not very reliable. Most were dropped for giving ratings of 3 to 5 on the scales with a maximum value of 2. The 67 remaining students were used as the sample population. The average age was approximately 24 (2.6 on a five point age group scale) and ranged from "under 18" to "over 33." There were 36 male subjects and 31 females.



### Questionnaires

The pretest and posttest questionnaires consisted of Rotter's Internal-External Locus of Control Scale, a Time Management Skills scale and Gough's Adjective Checklist. In addition there were items to assess: age and gender; attitudes towards the value of time management; and in the post test, items to assess the amount of effort exerted and benefit obtained from the time management efforts.

### Scales

Rotter's I-E LOC Scale (1966) which has 29 forced-choice items, including 6 fillers, was used to measure Locus of Control. The test-retest reliabilities have ranged from .49 to .83, and internal consistency estimates range from .65 to .79 (Rotter, 1966). Low scores indicate an internal locus of control (Appendix A).

The Time Management Skills scale (Appendix B) was developed by the author. It is based on the time management tips for college students offered by Alan Lakein, the nation's leading time management expert (according to page 8 of Semester Magazine, published in the University of Central Florida's Spring 1987 Class Directory). Alan Lakein is a time management consultant to major corporations and wrote the best-selling How to Get Control of Your Time and Your Life (Peter H. Wyden, Inc., 1973). Considering his credentials, questions used to reflect the degree to which stu-

dents utilize his time management tips should be a valid indicator of what is referred to in this thesis as "Time Management Skills."

In addition to the items based on Lakein's work, three previously validated "use of time" questions were also incorporated into the present Time Management Skills scale (Appendix B). Items 5, 10, and 15 reflect the "structure" subscale of Feather's (1983) Use of Time Scale. The original scale used by Feather consists of 17 questions scored from 1 (yes, always) to 7 (no, never), with unlabeled intermediate scale points. The inter-item reliability coefficient was reported as .87, using Cronbach's alpha and the four subscales were derived by factor analysis using .50 as the factor loading criterion (Feather & Bond, 1983). Although the present scale does not score these questions in an identical manner, it is desirable to include items which have been previously validated.

Each of the 20 items of the present Time Management Skills scale were scored from 1 to 5 with the points labeled as never, rarely, sometimes, usually and always. High scores were considered to reflect greater time management skills, so questions 5, 10, 15 and 20 were reverse scored, accordingly.

After the data were collected an item analysis was performed. Items 18 and 19 were dropped since they did not correlate significantly with the total score. The adjusted

total score then correlated significantly ( $p < .010$ ) with all the items constituting the adjusted scale. The final time-management skills score used in the analyses, therefore, was the summation of items one through 20 minus 18 and 19, after reverse scoring the appropriate items as mentioned above.

The Value scale (Appendix C) consists of two subscales; one which indicates the degree to which an individual values time management and a second which measures the degree to which an individual values improving his/her time management skills. Both subscales have a true/false format. The Value of Time Management subscale consists of items 1, 3 and 6, with higher scores (more "true" responses) representing more value. Items 2, 3, 4 and 7 constitute the Value of Improving Time Management Skills subscale. It too is scored in the positive direction. The perceived value of Daytimers as a time management tool can be addressed in isolation, even though it is included within this subscale. Item 5 was not used. Each item making up the subscales correlated significantly with the total subscale scores at the  $p < .001$  level.

The Effort scale (Appendix D) and the Benefit scale (Appendix E) are six- and eight-item true/false scales, respectively. They are both scored in the positive direction and both were used only in the posttest. They are designed to assess the amount of effort exerted to improve time management skills, and the amount of benefit obtained.

The effort score used was the product of items five and six which reflect the frequency of use of the Daytimers. Both items correlated significantly ( $p < .001$ ) with the effort score, as would be expected by the high face validity and the small number of items. The remaining items provided some secondary information related to improvement efforts.

Gough's Adjective Check List, or ACL (Appendix F) is a personality measure which has 23 scales, including personal-adjustment and self-confidence. Since these two factors (and others measured by the ACL) have frequently been reported to correlate significantly with LOC, it would be interesting to see if a change in LOC orientation is accompanied by a change in the ACL scores. Although this question is beyond the scope of the present study the data were collected for possible use at a later time.

#### Time Management Instrument

The "senior size pocket daytimers" were provided free of charge to those students who chose to use them for the semester. Daytimers are a series of bimonthly booklets which fit in a special "wallet" (provided) along with an address booklet, a six year planner, and a work organizer. The interchangeable bimonthly booklets provide space to record appointments, daily records, things to do today, auto-mileage, expenses and notes for the month. They were obtained from Daytimers, Allentown, PA 18001. Catalog #A18010.

### Procedure

Students were solicited from 10 different classes close to the end of their class period. They were asked to stay and complete the questionnaires even if they chose not to attempt to improve their time management skills by accepting the free Daytimers. They were informed that the purpose of the experiment was to measure students' attitudes towards time management and that another questionnaire would be distributed at the end of the semester. All issues covered in the pretest and posttest consent forms (appendices I and J) were explained orally. The Locus of Control construct was not discussed. A list of the scales included in each questionnaire can be seen in appendix G (pretest) and appendix H (posttest). It was hoped that those who did not wish to use the daytimers would be able to provide the information regarding willingness to participate as it relates to LOC. However, very few students completed the pretest and posttest who did not want the free Daytimers. Therefore the control group was redefined as those who used their Daytimers infrequently.

Participants were encouraged to read the information which came with the Daytimers and the time management article by Alan Lakein, which were provided along with the pretest. A brief demonstration of the components of Daytimers was given before they were distributed.

Top-third/Bottom-third splits were used to group subjects according to their scores on the different dimensions. These cutoff scores can be found in Table 2.

## RESULTS

Descriptive statistics for the 67 subjects who completed both the pretest and the posttest can be found in Table 1. The scores used to define the top-third vs. bottom-third splits of the various dimensions, as well as the number of subjects falling into each group, are listed in Table 2.

### Relationship between LOC and Time Management Skills Scores

The LOC scores of subjects in the "good time management skills" group (top-third) were compared to the LOC scores of students in the "poor time management skills" group (bottom third) by analysis of variance. This was done using the pretest scores and again using posttest scores. Table 3 shows that at the time of the pretest, the mean LOC score for subjects who managed their time well was 8.37, which was not significantly different ( $p=.289$ ) from the 9.04 mean LOC score for subjects with poor time management practices. On the other hand, on the posttest, subjects who scored high on the time management scale (top-third) scored significantly ( $p = .018$ ) more internal, with a LOC mean of 7.2, than the group who managed time poorly. The LOC score for the latter averaged 9.96. Therefore, hypothesis one was supported by the posttest scores but not by the pretest scores.

TABLE 1  
DESCRIPTIVE STATISTICS

<u>VARIABLE</u>	<u>MEAN</u>	<u>SD</u>	<u>MIN</u>	<u>MAX</u>
LOC-pre	9.33	4.10	0	19
LOC-post	8.54	4.66	0	18
TM-pre	50.94	9.91	26	71
TM-post	53.37	8.93	32	79
LOC-change	-.79	3.11	-7	8
TM-change	2.43	7.37	-12	23
Value impr	3.63	.81	0	4
Effort	6.30	6.59	1	25
Age Group	2.70	1.13	1	5

n =67

TABLE 2  
GROUP ASSIGNMENT STATISTICS

SCORES USED TO DEFINE TOP-THIRD AND BOTTOM-THIRD GROUPINGS

<u>VARIABLE</u>	<u>Bottom-Third Groups</u>				<u>Top-Third Groups</u>			
	<u>score</u> <u>&lt;or =</u>	<u>n</u>	<u>mean</u>	<u>sd</u>	<u>score</u> <u>&gt;or =</u>	<u>n</u>	<u>mean</u>	<u>sd</u>
LOC-pre	7	23	4.78	1.99	12	23	13.69	1.91
LOC-post	6	27	3.74	1.74	12	23	14.00	1.44
TM-pre	46	23	39.91	5.16	56	24	61.42	4.24
TM-post	50	24	44.37	5.79	57	25	61.96	5.28
LOC-change	-2	24	-3.95	1.33	0	29	2.07	2.17
TM-change	-1	23	-5.52	3.54	6	26	9.65	4.29
Effort	1	26	1.00	0.00	7	23	14.50	4.93



### Relationship between LOC and Effort

The pretest LOC scores for people who exerted the most effort to improve their Time Management skills (scored in the top-third on the Effort scale) were compared to those obtained by students exerting the least effort (bottom-third). There was no significant difference ( $p = .823$ ) between the means. The mean LOC score for the infrequent users of Daytimers (least effort) was 9.08 and a comparable 9.36 for those who exerted the most effort to improve. These results, which are listed in Table 4, do not support hypothesis 2 in which it was predicted that the students who put forth the most effort to improve would be of a more internal orientation than those who exerted the least amount of effort.

### Relationship between Effort and Value of Improving

To emphasize the point that a goal must be valued in order for a person to exert an effort to attain that goal, the "value of improving" scores were compared between the groups who exerted the least and the most effort. These values are also in Table 4. As predicted by hypothesis 3, those who used Daytimers the most (top-third effort) valued improving their time management skills significantly more ( $p = .027$ ) than those who exerted the least effort. The "value of improving" score was 3.87 for those who exerted the most effort and 3.32 for those who exerted themselves the least. The maximum score obtainable on this scale was 4.0.

TABLE 3

MEAN LOC SCORES FOR STUDENTS WITH GOOD VS. POOR  
TIME MANAGEMENT SKILLS

	<u>POOR TM</u>	<u>GOOD TM</u>	<u>t</u>	<u>df</u>	<u>p</u>
PRETEST	9.04	8.37	.56	45	.289
POSTTEST	9.96	7.20	2.16	47	.018*

TABLE 4

PRETEST LOC AND VALUE OF IMPROVEMENT SCORES FOR STUDENTS  
EXERTING LOW VS. HIGH EFFORT

	<u>LOW EFFORT</u>	<u>HIGH EFFORT</u>	<u>t</u>	<u>df</u>	<u>p</u>
LOC-PRE	9.08	9.36	-.23	46	.823
VALUE IMPRV	3.32	3.87	-1.78	46	.027 *

\*significant at  $p < .05$

Relationship Between Improving TM Skills and Changing  
Towards Internal LOC

Some convincing support for hypothesis 4 was obtained by comparing the students who used Daytimers the most (top third effort) and those who used them the least (bottom-third effort). Table 5 shows that the group which exerted the most effort (used Daytimers the most) did improve their time management practices and they did score more internally at the end of the experiment. More specifically, their mean LOC score was 9.36 on the pretest and significantly changed in the internal direction to an 8.0 on the posttest. The one tail probability from the paired t-test analysis was  $p = .024$ . Similarly, their TM skills score improved from 53.95 to 56.78 from pretest to posttest ( $p = .043$ ).

There were no corresponding significant changes in the scores of the group who used Daytimers the least (the control group). The mean pretest LOC score for this group was 9.08 and the mean posttest LOC score was 8.50 (two tailed  $p = .415$ ). At the beginning of the semester this "low effort" group scored 48.15 on Time Management skills which did not differ significantly from their average score at the end of the semester, 49.42 ( $p = .395$ ).

Although the group that significantly improved their time management skills also changed significantly towards internal control, comparing change scores directly did not indicate a relationship between the greatest improvement in

TM skills and the greatest shift towards internal control. In other words, comparing the "change in LOC" scores for the groups with the highest vs. the lowest "change in TM" scores revealed no significant differences. The group making the most improvement in time management averaged  $-.538$  change in locus of control and the group which improved least in time management had a mean change in locus of control score of  $-1.17$  ( $p=.495$ ).

#### Additional Analyses

Overall, externals did not significantly improve their time management skills, whereas there was a marginally significant improvement for internals. Externals started with a mean TM score of 51.61 and ended with 52.69 ( $p=.525$ ). Internals improved slightly from 52.65 to 55.04 with a one-tail probability of  $p=.08$ .

On the average, females made a significant improvement in their time management skills and became significantly more internal, whereas neither of these changes was significant for males. More specifically, females improved their TM scores from 52.71 to 56.22 ( $p = .018$ ) and their LOC scores changed from 9.77 to 8.51 ( $p = .023$ ) by the end of the semester. These results are based on a two-tailed t-test since no hypothesis was proposed addressing differential responses attributable to gender. The pretest vs. posttest scores for males were 49.42 vs. 50.91 for TM

( $p = .203$ ) and 8.94 vs 8.55 for LOC ( $p = .477$ ). Females also reported that they valued improving their time management skills to a greater degree than males did ( $p = .006$ ).

TABLE 5

PRETEST VS. POSTTEST LOC SCORES AND TM SCORES FOR  
STUDENTS WHO EXERTED LOW VS. HIGH EFFORT.

## LOW EFFORT

<u>Loc-Pre</u>	<u>Loc-Post</u>	<u>t</u>	<u>df</u>	<u>p</u>
9.077	8.50	.83	25	.415
<u>TM-Pre</u>	<u>TM-Post</u>	<u>t</u>	<u>df</u>	<u>p</u>
48.15	49.42	-.87	25	.395

## HIGH EFFORT

<u>Loc-pre</u>	<u>Loc-post</u>	<u>t</u>	<u>df</u>	<u>p</u>
9.36	8.00	2.10	21	.024
<u>TM-pre</u>	<u>TM-post</u>	<u>t</u>	<u>df</u>	<u>p</u>
53.95	56.78	-1.80	21	.043

## DISCUSSION

The relationships between LOC and time management skills were examined in this study in the hopes of presenting an organizationally acceptable model for promoting the belief in internal control. Reported correlations between internal LOC and a myriad of beneficial personal adjustment variables, including job satisfaction and job performance, are plentiful in the literature. Furthermore, it is apparently unanimous that an internal orientation is more advantageous than a belief in external control.

For these reasons, it is desirable to have employees with an internal LOC orientation. Some clinical treatments have been used successfully to alter an individual's external beliefs. However, in an industrial setting it would probably be neither acceptable nor cost effective to deliver large scale psychotherapeutic treatment to people for the purpose of changing them into more productive and satisfied "internal" employees.

Time management training, on the other hand, could be a very effective and acceptable intervention program. Assuming that as people accomplish more they will attribute their achievements to their own efforts, improving time management skills should result in a stronger belief in internal con-

trol. The outcome of the present study supports the relationship between improved time management skills and a change towards internal orientation.

#### Relationship between LOC and Time Management Skills

The hypothesized relationship between good time management practices and internal LOC orientation was supported at the time of the posttest but was not supported by the pretest scores. This may indicate that good time management skills do not necessarily relate to LOC orientation in the absence of time pressures. At the beginning of the semester (during the pretest) there were probably fewer time demands placed on the students. Therefore students without good time management skills may not have felt less in control (i.e., more external) than their good time managing counterparts. As the semester drew to a close and final projects and final exams were impending, those students with better time management skills were likely to feel more in control of the situation than those inclined to procrastination and other poor time management practices.

In addition, if the students who improved their time management skills during the semester were the same ones who changed towards a more internal orientation, then there would tend to be a greater relationship at the time of the posttest. The present experiment probably reflects a combination of these two explanations since it would not be reasonable to expect a change in one variable as the result



of changing another, unrelated variable. In other words, if there was not a relationship between time management and LOC then the students who improved their time management skills would not be expected to become more internal as a result of the improvement. In the world of business where there are far more frequent and urgent deadlines, the relationship between time management and LOC is expected to be pronounced. Since internal LOC orientation has been related to many desirable job performance characteristics, it could be very useful to consider the proposed relationship between good time management practices and internal LOC. For example, in dealing with minimally productive employees it might be helpful to ascertain their proficiency in time management skills rather than writing them off as unmotivated. This is important because of the published relationships between external LOC and both job dissatisfaction and low productivity. Poor time management is expected to have the same effect as external LOC.

#### Relationship between LOC and Effort

Hypothesis Two, which proposed that students exerting the most effort to improve their time management skills would be the students who scored most internally on Rotter's LOC scale, was not supported by this study. This seems to be in contrast with the findings that greater job involvement (Knoop, 1981) and work motivation (Frost and Wilson,

1983) are related to internal LOC. If a student's "job" is his/her school work and improving time management skills is considered "job involvement" then it seems that more effort would be exerted by students who were more internal. Although there were no significant differences in the LOC scores of students putting forth the most vs. the least effort, the mean score was slightly more external for those who exerted the most effort. While this is in contrast to the hypothesis it is interesting to note that externals may have been more motivated to improve their time management skills, possibly as a way of feeling more in control.

It would be encouraging to believe that internals and externals would be equally as likely to participate in self improvement efforts, but this result must be viewed with caution. It is possible that all of the participants in this experiment tended to be internal, even those who did not use the Daytimers frequently. If all students in the selected classes could have been "forced" to answer the pretest and posttest questionnaires, the relationship between effort and internality may have been supported. In other words, the students who refused to fill out the questionnaire may have been significantly more external than those who participated but did not use Daytimers frequently. Some support for this suggestion comes from a recent study done by Puchkoff and Lewin (1987) in which the mean LOC score for 275 college students was 12.63 which is more external

than the 9.33 average score for participants in the present study.

#### Relationship Between Effort and Value of Improving

As predicted by Hypothesis Three, the students who exerted the most effort were those who placed the most value on improving their time management skills. By itself this is a rather simplistic hypothesis but it is important to emphasize that in order for an individual to strive for any goal, it must be a valued goal. In the business world employees must value improving their performance if they are to be expected to exert an effort to do so.

This can be especially pertinent if the ultimate goal of a program is to promote a more internal orientation. If externals are reluctant to participate a "catch 22" situation can arise. Externals need to become more internal in order to increase their likelihood of participation and participation is required in order to encourage them to become more internal. Alternatively, externals could be expected to exert more effort if they were encouraged to attribute more value to the goal (participation, in this case).

#### Relationship between Improving Time Management Skills and Changing Toward Internal LOC

Since students who frequently used the Daytimers improved their time management skills and developed a more

internal outlook, and no corresponding significant changes occurred with the control group (infrequent users of Daytimers), Hypothesis Four was supported. It appears, however, that it is necessary to attribute the improvement in time management skills to one's own effort in order for the resulting change towards internality to occur. This is evidenced by the fact that students who made the greatest improvements in time management were not necessarily the students who made the greatest improvement towards internal control. In other words, there was not a significant correlation between the "change in time management" scores and the "change in LOC" scores. But, when students were compared on the basis of the effort they exerted, as mentioned above, significant changes towards better time management and more internal control were demonstrated only for the group that reported putting forth the most effort (using daytimers frequently).

#### Conclusions

This study lends support to both the view of LOC as a stable trait and the view of LOC as amenable to change. The test-retest reliability of .76 ( $p < .001$ ), even when a deliberate attempt to change the posttest LOC score was made, is a good indication of stability. On the other hand, the students who used daytimers frequently were significantly more internal at the end of the semester, although the magnitude of the change was small.

It is encouraging that there were significant changes even with minimal intervention. In other words, the time management "treatment" was almost completely self motivated once the free daytimers were distributed. Greater changes are likely to be attainable with a more structured, organizationally supported time management training program.

Further research in an organizational setting could determine the extent of the benefits associated with improved time management and increased internal orientation. Increased productivity, job satisfaction and self-esteem are just a few of the expected benefits. Follow up studies would be needed to determine the persistence of the changes and benefits. The proposed stability of LOC orientation may indicate that it requires a systematic and determined effort to change an employee's LOC. However, once this is accomplished it is desirable that a person would not be expected to easily revert to the more external orientation.

APPENDIX A

ROTTER'S I-E LOCUS OF CONTROL SCALE

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered A or B. Please select the one (and only one) statement of each pair which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice. In some instances you may discover that you believe both statements or neither. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

Please circle the letter of the statement you select, and record your answer on the scantron card.

1.    a     Children get into trouble because their parents punish them too much.  
      b     The trouble with most children nowadays is that their parents are too easy with them.
2.    a     Many of the unhappy things in people's lives are partly due to bad luck.  
      b     People's misfortunes result from the mistakes they make.
3.    a     One of the major reasons why we have wars is because people don't take enough interest in politics.  
      b     There will always be wars, no matter how hard people try to prevent them.
4.    a     In the long run people get the respect they deserve in this world.  
      b     Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5.    a     The idea that teachers are unfair to students is nonsense.  
      b     Most students don't realize the extent to which their grades are influenced by accidental happenings.
6.    a     Without the right breaks one cannot be an effec-

- tive leader.
- b Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a No matter how hard you try some people just don't like you.  
b People who can't get others to like them don't understand how to get along with others.
8. a Heredity plays the major role in determining one's personality.  
b It is one's experiences in life which determine what they're like.
9. a I have often found that what is going to happen will happen.  
b Trusting fate has never turned out as well for me as making a decision to take a definite course of action.
10. a In the case of the well prepared student, there is rarely if ever such a thing as an unfair test.  
b Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a Becoming a success is a matter of hard work, luck has little or nothing to do with it.  
b Getting a good job depends mainly on being in the right place at the right time.
12. a The average citizen can have an influence in government decisions.  
b This world is run by the few people in power, and there is not much the little guy can do about it.
13. a When I make plans, I am almost certain that I can make them work.  
b It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. a There are certain people who are just no good.  
b There is some good in everybody.
15. a In my case, getting what I want has little or nothing to do with luck.  
b Many times we might just as well decide what to do by flipping a coin.



16. a Who gets to be the boss often depends on who was lucky enough to be in the right place first.  
b Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. a As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.  
b By taking an active part in political and social affairs the people can control world events.
18. a Most people don't realize the extent to which their lives are controlled by accidental happenings.  
b There really is no such thing as "luck."
19. a One should always be willing to admit mistakes.  
b It is usually best to cover up one's mistakes.
20. a It is hard to know whether or not a person really likes you.  
b How many friends you have depends upon how nice a person you are.
21. a In the long run the bad things that happen to us are balanced by the good ones.  
b Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. a With enough effort we can wipe out political corruption.  
b It is difficult for people to have much control over the things politicians do in office.
23. a Sometimes I can't understand how teachers arrive at the grades they give.  
b There is a direct connection between how hard I study and the grades I get.
24. a A good leader expects people to decide for themselves what they should do.  
b A good leader makes it clear to everybody what their jobs are.
25. a Many times I feel that I have little influence over the things that happen to me.  
b It is impossible for me to believe that chance or luck plays an important role in my life.
26. a People are lonely because they don't try to be friendly.

- b There's not much use in trying too hard to please people, if they like you, they like you.
27. a There is too much emphasis on athletics in high school.  
b Team sports are an excellent way to build character.
28. a What happens to me is my own doing.  
b Sometimes I feel that I don't have enough control over the direction my life is taking.
29. a Most of the time I can't understand why politicians behave the way they do.  
b In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX B

Time Management Skills scale

Please indicate the degree to which the following statements apply to you according to the following scale:

- | (A)<br>Never | (B)<br>Rarely | (C)<br>Sometimes                                                                             | (D)<br>Usually | (E)<br>Always |
|--------------|---------------|----------------------------------------------------------------------------------------------|----------------|---------------|
| A B C D E    | 1.            | I currently use a time management system.                                                    |                |               |
| A B C D E    | 2.            | I make a daily "to do" list.                                                                 |                |               |
| A B C D E    | 3.            | I do the most important things first.                                                        |                |               |
| A B C D E    | 4.            | I break large projects down into smaller pieces and get started by doing a little at a time. |                |               |
| A B C D E    | 5.            | I have trouble organizing the things I have to do.                                           |                |               |
| A B C D E    | 6.            | I set aside 5 minutes per day for time planning.                                             |                |               |
| A B C D E    | 7.            | I set aside a certain regular time to study for each class.                                  |                |               |
| A B C D E    | 8.            | I do my toughest assignments at my prime time.                                               |                |               |
| A B C D E    | 9.            | I put some sort of "do not disturb sign up when I need to concentrate.                       |                |               |
| A B C D E    | 10.           | I find that time just seems to slip away.                                                    |                |               |
| A B C D E    | 11.           | I avoid distractions by having only what I'm working on in front of me.                      |                |               |
| A B C D E    | 12.           | I use movies or other outings as a reward for accomplishing my goals.                        |                |               |
| A B C D E    | 13.           | I begin my study sessions with a review.                                                     |                |               |
| A B C D E    | 14.           | I save trivial tasks for when I need a break.                                                |                |               |
| A B C D E    | 15.           | I tend to leave things til the last minute.                                                  |                |               |
| A B C D E    | 16.           | I write frequent postcards instead of long letters.                                          |                |               |

- A B C D E 17. I use "waiting time" by updating my "to do" list, making shopping lists, jotting down ideas or reviewing my schedule.
- A B C D E 18. I skim the newspaper and only read the articles I'm really interested in.
- A B C D E 19. I plan time to have fun (i.e., take one day off each weekend).
- A B C D E 20. I think I should do more with my time.

APPENDIX C  
VALUE OF IMPROVING

Please indicate whether you agree or disagree with the following statements by circling T for true or F for false. Also, record your answer on the scantron card.

- T F 1. I think time management is important.
- T F 2. I am interested in improving my time management skills.
- T F 3. I am willing to spend 10 minutes/day on time management.
- T F 4. I think that using Daytimers could help me manage my time better.
- T F 5. I feel that I manage my time well enough.
- T F 6. I currently have a good time management system.
- T F 7. I plan to accept and use the free Daytimers.

APPENDIX D  
EFFORT SCALE



Please indicate whether you agree or disagree with the following statements by circling T for true or F for false. Also, record your answer on the scantron card.

T F 1. I accepted the free Daytimers at the beginning of this semester.

T F 2. I read the Time Management article in the University of Central Florida's Winter Course Schedule magazine.

T F 3. I read the information which came with the Daytimers.

T F 4. I ordered another free Daytimer sample kit.

5. ON THE AVERAGE.....

- A. I used the Daytimers 1 day/week or not at all.
- B. I used the Daytimers 2 days/week.
- C. I used the Daytimers 3 days/week.
- D. I used the Daytimers 4 days/week.
- E. I used the Daytimers 5 days/week or more.

6. ON THE AVERAGE.....

- A. I recorded 0 or 1 item/day (appointments or things to do).
- B. I recorded 2 items/day.
- C. I recorded 3 items/day.
- D. I recorded 4 items/day.
- E. I recorded 5 items/day.

APPENDIX E  
BENEFIT SCALE

Please indicate how much you agree with the following statements by circling A, B, C, or D and filling in the scantron.

A	B	C	D
Strongly Disagree	Disagree	Agree	Strongly Agree

Compared to how I felt at the beginning of the semester:

- |         |                                                       |
|---------|-------------------------------------------------------|
| A B C D | 1. I now feel more organized.                         |
| A B C D | 2. I now feel like I do more with my time.            |
| A B C D | 3. I procrastinate less now.                          |
| A B C D | 4. I am doing better in my classes now.               |
| A B C D | 5. I feel less anxious about tests now.               |
| A B C D | 6. I now feel more productive.                        |
| A B C D | 7. I now feel more satisfied with myself.             |
| A B C D | 8. I now feel more in control of things.              |
| A B C D | 9. Writing things down helps me get them done sooner. |

APPENDIX F

GOUGH'S ADJECTIVE CHECK LIST

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## APPENDIX G

## PRETEST

The pretest consisted of the following:

- \* Consent Form 1 (Appendix I)
- \* Adjective Checklist (Appendix F)
- \* Rotter's I-E Locus of Control scale (Appendix A)
- \* Time Management Skills scale (Appendix B)
- \* Value scale (Appendix C)

## APPENDIX H

## POSTTEST

The posttest consisted of the following:

- \* Consent Form 2 (Appendix J)
- \* ACL (Appendix F)
- \* Rotter's I-E Locus of Control scale (Appendix A)
- \* Time Management Skills scale (Appendix B)
- \* Effort scale (Appendix D)
- \* Benefit scale (Appendix E)

APPENDIX I

CONSENT FORM 1 (PRETEST)

## CONSENT FORM

Linda Brockmeyer, a graduate student in the Industrial/Organizational Psychology Department at UCF, is conducting a study on time management as part of a thesis report. This study is being carried out under the supervision of Dr. Wayne Burroughs.

Participation is completely voluntary and you may choose to discontinue at any time.

If you wish to participate in this study, you will be asked to fill in the attached questionnaires. The information you provide will be seen only by the experimenter and the 3 members of the thesis committee. Your name will be separate from all other data to insure confidentiality.

You will be given the opportunity to receive a free "Daytimer" to help you develop your time management skills. I will need to provide Daytimer corporation with your name and address so that they can send you a free catalog but there is no other obligation of any kind.

If you would like to participate in this study and get a free Daytimer, please sign the right side of this page and provide your address. If you would like to participate, but don't want a Daytimer, please sign the left side of the page.

If you are interested in the results (i.e., how many students are able to improve their time management skills within the semester and the benefits associated with improved skills), please give a self-addressed (not stamped) envelope to your instructor and I will be glad to send you a summary of the findings, once the study is completed. Thank you.

I would like to  
participate

I would like to participate  
and receive a FREE DAYTIMER

\_\_\_\_\_  
Social Security Number

\_\_\_\_\_  
Social Security Number

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Zip



APPENDIX J  
CONSENT FORM 2 (POSTTEST)

## CONSENT FORM

Linda Brockmeyer, a graduate student in the Industrial/Organizational Psychology Department at UCF, is conducting a study on time-management as part of a thesis report. This study is being carried out under the supervision of Dr. Wayne Burroughs.

Participation in this study is completely voluntary and you may choose to discontinue at any time. If you wish to participate, you will be asked to fill in the attached questionnaires. The information you provide will be seen only by the experimenter and the 3 members of the thesis committee. Your name will be separate from all other data to insure confidentiality.

If you would like to be informed of the results of this study, please include your phone number or give your instructor a self-addressed (stamp isn't necessary) envelope and I will contact you after the results are analyzed.

I would like to participate  
in this study.

\_\_\_\_\_  
Course Name and Time

\_\_\_\_\_  
Social Security Number

\_\_\_\_\_  
Did you participate  
at the beginning  
of the semester?

\_\_\_\_\_  
Name

\_\_\_\_\_  
Street

\_\_\_\_\_  
Did you accept  
the Daytimers?

\_\_\_\_\_  
City      State      Zip

\_\_\_\_\_  
(area code)      Phone Number(s)

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