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Procrastination : a comparison of two strategies for strategic intervention.

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PROCRASTINATION: A COMPARISON OF TWO STRATEGIES
FOR STRATEGIC INTERVENTION

A Dissertation Presented

By

SUZANNE I. LERNER

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May

1986

Psychology

Suzanne I. Lerner
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FOR THERAPEUTIC INTERVENTION


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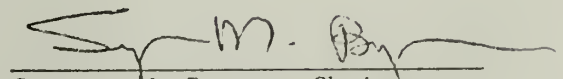
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This work is dedicated to
Anabelle Burnett

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give a most hearty thanks.

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Love, Suzanne

Note: Due to the limits of our language at present, there is no generally accepted way of expressing a single human being without an indication of gender. Our language greatly instructs how we see the world. Therefore I felt it incumbent upon me to highlight this problem by using the female singular in place of the male singular when talking about a generalized individual (i.e. When a person procrastinates, she is expressing . . .). This is not, by any means, meant to reflect an exclusion of the consideration of men. Rather, it is one small step in highlighting a problem that needs solution so that women are included as human beings when we talk about human beings in general.

ABSTRACT

Procrastination: A Comparison of Two Strategies
for Strategic Intervention

May 1986

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This study was developed to investigate two different approaches to working with procrastinators. The first approach was paradoxical, where the subject was asked to continue the problematic behavior. The second approach was behavioral, where a subject was told to track her behavior and then work toward changing her behavior. A third group filled out the questionnaires but did not participate in the interviews in order to act as a control group.

It was hypothesized that both treatment groups would fare better than the control group, but that the behavioral group's improvement would be only temporary, while the strategic group's improvement would continue to develop over time. This was based on the notion that a person doesn't contain one goal but a multitude of goals. A behavioral approach deals logically with the most vocal part at the moment, the part of the person that has as a goal symptom removal. It was hypothesized that a strategic approach by giving less weight to the goal of the most

vocal part of a person, allows other goals to surface so that the individual can come to a compromise that will meet many of her goals.

Contrary to predictions, the strategic group did not change on any of the major dependent variables. The behavioral group did change, relative to the control group, in terms of expectation to change and in terms of their sense of controllability of the problem. However, they did not change in terms of their reported procrastination behavior or their satisfaction with their behavior. None of the three groups showed changes on the inventory used to measure anxiety at the beginning and end of the study.

Many provocative questions have been raised by this research. Questions in terms of how to define procrastinators, how to empirically measure the actual behavior of a subject rather than rely solely upon self-reported measures, and questions about the actual goals of therapy. As with most research, this study has provided more questions than answers, but these questions can lead to further research to help us understand how we can all perform more creatively and efficiently.

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CHAPTER 1

INTRODUCTION AND REVIEW OF THE LITERATURE

Scope and Purpose

Procrastination is a problem that all individuals have to deal with from time to time. However, for some, procrastinating can become a disabling behavior, causing intense anxiety, depression, and self-loathing. It can cause difficulties at work or at school. With some people, it creates great tensions in their interpersonal relationships, as others come to see the procrastinator as irresponsible or uncaring.

One can procrastinate upon any number of tasks. In initially researching this project, various acquaintances were polled as to how they defined procrastination and also whether they had a problem in this area. It was amazing how many volunteered to be subjects for the study, or barring that, if they could send one of their friends to the study. These people saw themselves as suffering from procrastination in a number of areas, including tardiness (putting off leaving for appointments), not responding to letters, putting off paying bills, not studying until final's time, turning tax forms in late, putting off laundry and other housekeeping chores, writer's block, and other difficulties in completing creative tasks.

It became clear that procrastination affected many different areas of functioning. For the purpose of this study, I decided to narrow the focus to the area of academic procrastination and to examine what sort of interventions could help individuals lessen their procrastination.

The author has a great interest in understanding how people can be encouraged to change. Various theories of therapy prescribe very different approaches in attempting to help a person change. Of particular interest, for the purposes of this study, is the whole concept of resistance and the idea, coming from strategic therapy, that the more one tries to change the more one stays the same (Watzlawick, Beavin, & Jackson, 1967; Watzlawick, Weakland and Fisch, 1974).

Strategic therapy is similar to behavioral therapy in that they are both directive therapies. They contrast with the non-directive therapy recommended by Carl Rogers (1957). Rogers believes in a client-centered therapy, in which the therapist's main job is to reflect back what is being said by the client. By showing unconditional positive regard for the client one presumably allows the client to accept herself fully and, therefore, she will be able to sort things out for herself.

Behavioral therapy (Adams, 1972; Rimm & Masters, 1974) evolved out of learning theory and is based upon the

supposition that a person needs to be taught new ways of behaving and then be reinforced for those behaviors. The behavioral therapist is quite directive in a session, encouraging the client to try new behaviors and stop the old ones. Behavioral therapy usually begins by tracking the problematic behavior by some means, such as having the client keep a log and then assigning tasks to modify the problematic behavior. In some cases it is assumed that if the client can be taught new behaviors, she will find these more reinforcing than the old behaviors, and so continue them. In other situations, it is the reinforcers themselves that are manipulated, in order to encourage new behaviors.

While behavioral therapy seems to make logical sense when applied to humans, it often does not lead to the expected progress in symptom control. To some applied learning theorists, having a person change seems to be merely a matter of telling the person with a problem how to change and then giving the person the proper reinforcers. Unfortunately, what appeared to be a clear cut approach to therapy, has become quite complicated. This is because it is very much easier to figure out what an appropriate reinforcer would be for a rat in a laboratory experiment than it is to figure out an applicable reinforcer for that curious social animal, woman.

Some theorists have hypothesized that one of the

reasons that a person has problems changing in a straight-forward way is because a person is actually made up of different parts. An action or substance that may reinforce one part of a person may not reinforce another part. For example, if a woman who has had a heart attack is put on a restricted diet by her physician, a part of her will be reinforced by staying on the diet. This is the part of the woman that is concerned with her health. However, there will be another part of her, let us call it his "pleasure-seeking" part, that will feel punished by this same stimulus. This may explain, in part, why physicians and therapists have such problems in encouraging patients' compliance to their directives. There are parts of the person that want to change but there are also parts of the person that don't want to change.

The main emphasis of Klein (1975), who belongs to the British Object Relations School, is upon the early interactions of the infant with its mother (note: the author acknowledges the great impact of the father as well as the mother upon the infant's experience. At the time Klein was writing, attention was being given almost solely to the mother's involvement with the child). While Freud saw the resolution of the Oedipal conflicts as crucial to an individual's development, this school felt a need to look at pre-Oedipal issues. One of the major issues of the pre-Oedipal period concerns how the infant makes

attachments to others, or what this school refers to as "objects."

Klein (1975) theorized that initially the infant felt totally cared for and loved by the world, the embodiment of which was the mother's breast. Because the concept of discrete entities does not yet exist for the infant, the infant loves a part-object, the breast, rather than having a relationship with the mother as a complete and separate person. This view of the world as totally nurturing and supportive is disturbed when the infant experiences frustration. Perhaps it feels hungry and is not immediately fed. Perhaps it has wet its diaper and cries out to be changed. When its needs are not immediately intuited by its mother, the infant feels engulfed by rage. Because its feelings are not yet modulated it feels terrified and overwhelmed by its anger. Not only does it not have a clear sense of self and other, so that rage toward its mother seems to come ricocheting back upon itself, but also it is experiencing murderous rage toward its sole provider.

The solution that the infant comes up with is to believe that there is a good breast and a bad breast. The good breast is nurturing and omnisciently taking care of its needs, while the bad breast is withholding and punitive.

This split into good and bad of the primary object is related to an earlier split within the infant.

The danger of being destroyed by the death instinct directed against the self contributes to the splitting of impulses into good and bad; owing to the projection of these impulses on to the primal object, it too is split into good and bad (p. 300).

This initial split provides some amount of security for the infant, who otherwise would be terrified by its death instinct. (It is important to note that by splitting it is meant that the central ego is only identifying with one aspect of itself, rather than accepting all the aspects of the self as part of its identity. Because we are all made up of both good and bad impulses, effort to maintain a distortion of reality must exist if we are to think of ourselves as only good. That this distortion takes a great toll upon us as individuals is one of the premises of this dissertation.)

According to Klein the infant develops its identity by introjecting (taking in and identifying with) parts of its mother that are caring and nurturing. Following after Freud's concept, it is maintained that there is a death instinct as well as a life instinct with which the infant is born. Afraid of being overwhelmed by the death instinct, the infant projects the bad feelings back onto the mother and attempts to hold onto the feelings of being cared for and nurtured. Thus, the two earliest defenses

are splitting and projection.

From the beginning there is also a drive toward integration, which counteracts the splitting tendency into good and bad. The initial splitting is a defense against feelings of being overwhelmed by the death instinct. However, the infant's ego begins to grow stronger due to its ability to introject or identify with the good object, or good aspects of the mother.

Splitting as a defense against the death instinct is never totally successful, so that the infant must develop some sense of security from a satisfactory early relationship with its mother. If this early relationship has been adequate, then the infant comes to have confidence that it can no longer be overwhelmed by negative impulses. "For integration, if it could be achieved, would have the effect of mitigating hate by love and in this way rendering destructive impulses less powerful" (p. 301).

As the ego becomes more confident through having identified with the good aspects of the mother (internalizing the good object) it comes to believe that the world is a good and safe place that will provide for the infant's needs. Klein for the most part is talking about the relationship between the infant and the mother, the attitudes developed toward the mother become, with some modifications, the infant's attitude towards the world. For, at this point in life, the mother is the world.

Thus assured, the infant has less of a need to split it's good and bad impulses and also less of a need to project the bad impulses out upon the world. This becomes a reciprocal loop. The less the infant needs to project its bad impulses out into the world, the more there will be a good object to introject that will strengthen the ego which will allow less of a splitting to occur, and so on. Klein notes that when there is a harsh repression of the destructive impulses, the process of integration becomes all the more difficult and painful.

During this process of integration the ego is in conflict "between seeking integration as a safeguard against destructive impulses and fearing integration lest the destructive impulses endanger the good object and the good parts of the self " (p. 302). One sees this sort of attitude take shape in adults as perfectionism. The perfectionist will report that she can't let her standards down even one degree else she will be inundated by laziness and sloth (see section on Burns below). It is during the process of integration that issues of omnipotence and idealization start to be resolved. Klein (1975) explains that integration means:

...facing one's destructive impulses and hated parts of the self, which at times appear uncontrollable and which therefore endanger the good object (note: the good object is that part of the self that has positive virtues and feels secure) . With integration and a growing sense of reality, omnipotence is bound to be lessened, and this again contributes to the pain of

integration, for it means a diminished capacity for hope...Integration also means losing some of the idealization...In my experience, the need for idealization is never fully given up, even though in normal development the facing of internal and external reality tends to diminish it. (p.304-5)

It is important to note that integration is never complete, so that the individual is never totally confident, but harbors some paranoid fears of being incapable and unable to control her negative impulses. Klein points out that: "Since full integration is never achieved, complete understanding and acceptance of one's own emotions, phantasies, and anxieties is not possible..." (p. 302).

Procrastinators tend to be perfectionists who are unable to show any flexibility in their standards. Kleinian Theory can help to explain how this perfectionism develops. All-or-nothing thinking is a splitting defence, where there has not developed in the ego a sense of confidence and competence so that the ego is constantly striving to be perfect and deny its negative tendencies rather than have the confidence that it can have good and bad feelings and still succeed.

Jung (1959) also addressed these concepts in his ideas about the persona and the shadow. Jung noted that each person develops a limited concept of who she is and then clings to that identity as if it were her complete self. June Singer (1973), a Jungian analyst, explains it in this manner:

In becoming civilized, we compromise between our natural inclinations and the patterns of society. We assume a certain character or stance through which we can relate. Jung calls this stance a mask or a persona, the name given to the masks worn by the actors of antiquity to signify the roles they played. (p. 209)

Trying to fit into a certain environment, the person takes on a sort of role that is not really herself. Singer quotes Jung:

Fundamentally the persona is nothing real: it is a compromise between the individual and society as to what a man should appear to be. He takes a name, earns a title, represents an office, he is this or that. In a certain sense this is real, yet in relationship to the essential individuality of the person concerned it is only a secondary reality, a product of compromise, in making which others often have a greater share than he. The persona is a semblance, a two-dimensional reality (p. 210).

The parts of the person that are less acceptable to the environment come to make up the shadow. The shadow is "what is inferior in our personality, that part of us which we will not allow ourselves to express" (p. 215). The more a person clings to her persona, the less she is willing to examine her shadow, which may contain such feelings as envy, pride, deceit, and hate. As these feelings are repressed, they come to form a "splinter-personality", the shadow. Because these feelings can not be expressed directly, they are expressed indirectly, by being projected out onto the environment. The feelings that are projected out are "all those uncivilized desires and emotions that

are incompatible with social standards and with the persona; it is all that we are ashamed of" (p.215).

Singer points out that Jung saw the shadow as also having a positive value. She quotes Jung's perspective that:

The shadow is a moral problem that challenges the whole ego personality, for no one can become conscious of the shadow without considerable moral effort. To become conscious of it involves recognizing the dark aspect of the personality as present and real. This is the essential condition of self-knowledge... (p. 215).

Therefore, Jung like, Klein, sees a need to accept the bad aspects of oneself along with the good. We cannot simply rid ourselves of certain negative aspects. But by acknowledging them, they become tendencies that can be predicted and dealt with in an appropriate manner, instead of their being expressed in unconscious behavior. Jung (1959) describes the need for this self-acceptance:

The shadow is a living part of the personality and therefore wants to live with it in some form. It cannot be argued out of existence or rationalized into harmlessness. This problem is exceedingly difficult, because it not only challenges the whole man, but reminds him at the same time of his helplessness and ineffectuality. Strong natures--or should one rather call them weak?--do not like to be reminded of this, but prefer to think of themselves as heroes who are beyond good and evil, and to cut the Gordian knot instead of untying it...In the end one has to admit that there are problems which one simply cannot solve on one's own resources. Such an admission has the advantage of being honest, truthful, and in accord with reality... (p. 304)

At this point, Klein and Jung differ in terms of the results of this integration of the good and bad objects or

the acceptance of the shadow. For Klein, this leads to a better dealing with reality, but also a concomitant loss of the idealized object, since you cannot ever regain the unity that you had, that emotional symbiosis, that existed between you and your mother. Klein states that:

However gratifying it is in later life to express thoughts and feelings to a congenial person, there remains an unsatisfied longing for an understanding without words--ultimately for the earliest relation with the mother (p. 301).

For Jung however, there is the collective unconscious, a universal resource that can provide insights or inspiration via dreams or thoughts that were not allowed to voice themselves before. By letting go of one's own control, a larger force can come to one's aid.

Jung believed that the unconscious is not made up just of the biological instincts, but that it also contains the collective unconscious, where the artificial separation of the self and the world breaks down. In connecting with the unconscious, Jung noted that there can be the fear of being overwhelmed, just as Klein spoke of the infant's fear of the good object being overwhelmed by the bad object.

The issue of control, or more specifically loss of control, is brought up in this regard. Jung describes how:

...primatives are afraid of uncontrolled emotions, because consciousness breaks down under them and gives way to possession. All man's strivings have therefore been directed toward the consolidation of

consciousness. This was the purpose of rite and dogma; they were dams and walls to keep back the dangers of the unconscious, the "perils of the soul." Primitive rites consist accordingly in the exorcising of spirits, the lifting of spells, the averting of the evil omen, appropriation, purification, and the production by sympathetic magic of helpful occurrences. (p. 306)

Jung goes on to explain that there are treasures in these waters (i.e. the unconscious) so that we need to be able to plumb these depths without getting swamped by them. He calls up the imagery of the fisherman. Individuals "must never forget who they are, they must on no account imperil their consciousness. They will keep their standpoint firmly anchored on the earth...become fishers who catch with hook and net what swims in the water" (p. 308). This imagery is similar to Klein's in that "their standpoint firmly anchored on the earth" is like the internalized good object, which is able to maintain confidence and not become overwhelmed with anxiety by the powerful feelings of the internalized bad object.

To summarize, both Klein and Jung emphasize the importance, for full maturation of the individual, that the person know herself. This means being able to accept both the good and the bad aspects of the self. Part of this comes to pass when the individual comes to have a sense of confidence so that even when she cannot accomplish something behaviorally, this does not undermine her basic sense of identity. When a person has not developed this

sense of personal security, she will rigidly hold on to a splitting of good and bad impulses and identify only with the good impulses. She will feel a loss of control whenever the "bad" impulses arise, and will attempt to repress or project these impulses. These defenses can never be totally successful, so that there will be disturbances in her life, as these impulses find a covert way of expressing themselves. It is suggested that if feelings of insecurity such as fear of success or fear of failure, or desires to be perfect, are not directly addressed, symptoms will arise. Procrastination may be seen from this perspective as a symbolic behavior for a person who will not allow her imperfection, her shadow, to be expressed.

Some examples of how these impulses get expressed covertly can be seen in Susie Orbach's (1978) studies of women with eating disorders. Women would enter therapy saying they wanted to lose weight and yet they had tried to reduce unsuccessfully. What Orbach began to wonder was why they had never tried to reduce successfully. She speculated that there must be some reasons that women, given the choice, often choose to diet unsuccessfully. In exploring these women's phantasies, Orbach discovered that these women had many covert fears about losing weight. These fears included becoming- emotionally cold and ungiving; angular, too defined, and self-involved, admired too much,

especially sexually; unable to deal with their own sexual desires; too powerful; unable to define their boundaries and limits; too competitive, superwomen who were not allowed to have problems or make mistakes. One can see from this list that, in Jung's terms, society's demands for the persona of a woman meant that many of these individual's feelings had to be suppressed. In a world where women are supposed to be all-giving, nurturing earth goddesses, to have any needs of one's own is seen as being selfish. Ashamed of what are actually natural needs, women suppress their own needs and attempt to be totally responsive to men's needs.

As Klein and Jung both declared, this repressing of unwanted feelings leads to conflicts. The unconscious then finds a covert way of nurturing its needs, by over-eating. Because the feeling has been repressed, it becomes more extreme than if it were to be expressed directly.

Therefore, eating does not provide soothing nurturance, but instead becomes a compulsive behavior. Women in our society are not supposed to be powerful and competitive and so, here too, women resort to eating as a defense against the anxiety of having these feelings and being told, "If you're a woman, you don't have such feelings." From the feminist perspective, we can see how some of the feelings split off and identified with the bad object, are normal feelings that society has disavowed. (In the same way, men

have been taught that vulnerable and caring feelings are "bad" or sissy-like rather than as a normal part of themselves. When these feelings are repressed, they can lead to workaholic behavior as overcompensation to prove their competence and thus manliness. Other men turn to alcohol to fulfill these repressed feelings. One sees the maudlin drunk crying and it is permissible because he is drunk. In a drunken state he is allowed to hug his buddies and tell them they are his pals.)

Orbach's unique approach to compulsive eaters is to tell them not to diet, but instead to get in touch with the negative consequences of becoming thin. (This is what the therapists at MRI would call a strategic approach.) It is only when these issues are being taken care of by direct means (for example learning assertiveness training and communications skills) that eating can become based upon hunger. Otherwise, eating is acting as a symbolic communication of what's not being dealt with directly. In a sense, Orbach is encouraging these women to have enough confidence in their ability to cope (a firmly identified good object) that they can learn to cope with their negative feelings without feeling overwhelmed. They can integrate their persona and their shadow so that they become balanced individuals.

General semantics theory (Weinberg, 1959) offers us a way to clarify some of this material about how individuals

deal with good and bad feelings. The actual feelings "I feel envious of her" or "I feel sexually attracted to him" are at the first order of meaning. They are the direct emotions that a person might have. Then, in reaction to those feelings, there are other feelings such as "It's bad to feel envious" or "I may lose control and get hurt if allow myself to feel sexually attracted". These feelings about feelings are second order feelings that are commenting upon and reacting to the original feeling expressed. It is at the second order of meaning that is important in terms of maturation and healthy development.

Burns (1980) in studying perfectionism, understands catastrophizing in the same way. An event might occur (loss of job, personal rejection) and that would be "_____" (awful, unbearable, humiliating, etc.). While we can't control all events around us, we can control our reactions and conclusions to the events.

It is suggested that it is the all-or-nothing, rigidly perfectionistic second-order thinking that gets people in trouble. The greater the flexibility and creativity we have in our second-order thinking, the more degrees of freedom we have in our lives. All-or-nothing thinking is related to perfectionism in that a perfectionist wants all good feelings and no bad feelings for themselves and for the world. Because reality is not set up this way, they are in for a sisyphian task.

The perspective upon procrastinators here then, is that it is not the problem itself of occasionally putting off a task which is the problem. Rather, it is the panic at being imperfect, of being overwhelmed by the bad object in Klein's terms, that causes problems for the person.

The MRI (1974) approach to therapy is based on this same concept. (Although having derived the concept from very different sources, namely general systems theory). The therapists who use paradoxical interventions are attempting to get the client to let go of her panicked rigidly repeated solution so that other options may present themselves. It is this author's speculation that the individual is rigidly misapplying a useless solution because of an inability to see that the symptom is reflecting something that the client cannot accept within her. For the procrastinator, this would be the fact that she is not perfect, that she will neither totally fail nor totally succeed.

Some theorists (Alexander, 1932; Bandler and Grindler, 1981, 1982; Erickson, 1965) have explored the possibility that while one part may be wanting to change, a fearful part of the person may be trying to protect the individual from some real or imagined harm. Because this fear is accompanied by panic, logic alone is not going to be effective in helping the person to change. For this

reason, Richard Schwartz (personal communication) has named this symptomatic part the protective part. In his approach, symptoms are seen as mistaken solutions to a problem.

If a person is in a situation which she perceives to be dangerous, she will develop a solution to protect herself. However, if this situation is not actually dangerous, she may not discover this, since her protective part will try to keep her out of situations that seem even remotely similar. By analogy, if an animal is confronted by a predator, it is a useful solution to run. However, if it responds to every rustle of the bushes by running away, it will soon become an exhausted and overwrought animal.

This protective response is useful and necessary to survive in the world. For optimal functioning, however, this protective response must be counterbalanced by experimentation to find out when this protective behavior is necessary and when it is not. A major part of this experimentation involves being able to accurately read the feedback after the protective response is brought forth. By reading the feedback, the individual can decide whether the protective action accomplished what it was supposed to do, i.e. to protect the individual from a real harm.

Theorists at the Mental Research Institute (MRI) have helped to develop strategic therapy in order to develop ways of helping clients to change problematic behaviors.

One of their major assumptions is that a symptom occurs because a wrong solution is applied again and again in a rigid and unchanging way. In terms of the above discussion, a perceived danger has occurred, the person panics, attempts a solution and, due to the constrictive effects of panic upon thorough and thoughtful perception, is unable to read the feedback that the solution has not been successful. Instead of showing flexibility and trying a different solution, this person attempts "more of the same" i.e. applies the original solution all the more intensely. Soon the original problem is overshadowed by the problem of the rigidly entrenched solution.

Two of the major interventions that the MRI therapists use are "reframing" and "restraint from change." Reframing involves suggesting a new perspective that positively connotes the symptom. For example, a woman who has problem with obesity, instead of being told she is overweight and being given a diet, might be told that it is useful for her to remain overweight because she is protecting her husband who would be constantly fearful of losing her if she were slender and alluring.

The second intervention, restraint from change, is telling the individual not to change, to continue her symptom. This is a rather unexpected intervention when a client is coming to therapy looking to change. However, in the broader perspective, if one accepts the idea of

conflicting parts, then one can see this intervention as recognizing and acknowledging the protective part.

Schwartz has suggested that unless the protective part is acknowledged it will undermine any long term progress in therapy. He suggests that by the time a person has reached the therapist's office, this person's emotional parts are pretty embattled. The part that wants to change can't believe how stubborn the protective part is, while the protective part can't believe how reckless the changing part wants to be.

Because the protective part developed its behavior during a time of danger and panic, telling it to stop its protective symptom or defense is not going to work. Teaching it how to act differently is not going to work because it already knows how to act differently, but it can't without leaving the person too vulnerable. By recognizing the protective part's intention, by going along and even encouraging it to continue, the protective part can become less panicked and therefore more open to experimenting to find more appropriate ways of protecting the individual from harm.

A brief case example may be useful. The author was working with a male anorexic who was extremely perfectionistic. Having grown up in a rather chaotic environment, his protective part developed an extreme need for control. This was manifested by a rigid control over

his eating, and his remaining in the "cocoon" of his apartment rather than going out and having to deal with an imperfect world. Several previous therapists had used different approaches, including attempting to draw him out of his shell, teaching him new behavioral and social skills, and analyzing his past in order to help him change, all to no avail.

The approach of the author (under the supervision of Richard Schwartz) was to encourage the client to review all the negative consequences of change and to be very cautious about changing. By these means, the protective part could hear that its concerns were being respected, so that it might become less panicked and more open to experimenting with new options. In this way, the control that he was working so hard to maintain could be applied to parts of his life where it was useful and necessary to have control. (When referring to a part reading feedback or a part saying something, the author is not suggesting that these parts are homunculi running around in people's brains. Rather, the parts theory is a heuristic device to help map out how different parts of the mind are interacting.)

Thus, it is suggested that an encouraging approach that tells a person to change may initially be successful, as the therapist aligns with the changing part and attempts to suppress the protective part, but the protective part will undermine any change. If instead, the protective part is

included in the "therapeutic pact" then any changes will be more long-lasting.

It is also predicted that while an encouraging approach may initially cause some improvement, this will heighten the conflict between the parts, leading to increased anxiety. A restraint from change approach, while taking a bit longer to show change, will be followed by a decrease in anxiety as the parts conflict is lessened.

A seemingly ideal group to investigate these two different approaches, encouraging versus discouraging change, are those individuals who have problems with procrastinating. Because a person who procrastinates is resisting a deadline or an expectation while at the same time claiming to want to meet the deadline or expectation, she is by definition in conflict, with a part of her wanting to change and a part refusing or unable to change at the moment.

This study is designed to compare the two different approaches, encouraging versus discouraging change, in a student population with the self-identified problem of procrastination. Before reviewing the design of this study in detail, it is important that a review be made of the current literature on procrastination so that a more complete understanding of the problem can be developed.

Literature Review

Although many people seem plagued by problems with procrastination, there is a paucity of solid research in this area. Many of the articles have been oriented toward developing a better understanding of the causes of procrastination. These theories will be reviewed below, followed by a summary of the quantitative research that has been produced so far.

Albert Ellis and William Knaus (1977) have examined the causes of procrastination in their work with several hundred clients who procrastinate. Their work with these client's was based on the use of rational-emotive therapy (RET) which is a cognitive approach to therapy. This approach is based on the assumption that individuals have problems in coping efficiently because they have faulty cognitive rules and assumptions upon which they base their actions. Therapy, then, consists of helping the client to become aware of these rules and then to modify them to more realistic and effective ways of thinking. Thus, it is called cognitive therapy because one is examining and changing one's cognitions.

Ellis and Knaus hypothesized several categories for why an individual procrastinates. Some of the underlying causes of procrastination according to the authors are: self-downing, low frustration tolerance, and hostility.

Other emotional problems such as perfectionism, dire need for love, anxiety, guilt or depression can also lead to procrastinating. Then there are times when a procrastinator seems to be suffering from a kind of cognitive set or habit. It seems useful to look at each of these causes individually and then examine how the authors suggest working with these problems.

Self-downing is seen as occurring because a person has extremely high expectations. Instead of having a desire to do well, with some acceptance that everyone has her successes and failures, this person turns her desire into a need. According to Ellis and Knaus, most people desire:

1) to perform important tasks adequately; (2) to experience the approval or love of others whom they consider significant. It is when these desires become absolutist, dogmatic, dire necessities that problems occur. (p.15)

Because this person needs these things, if she doesn't procure them, she can end up feeling inadequate. Rather than risk facing the sadness and frustration that occurs from failing, the person procrastinates and thus has an external reason for her or his failure. At this point, the person has created an absolutist demand rather than a relativistic desire to do well at most things. These impossibly high standards can then make the person want to avoid the task either temporarily or permanently.

The next cause of procrastination that they identify is

low frustration tolerance (LFT). This occurs when a person is unable to endure any discomfort or anxiety when faced with a task. The person says to herself, "Every time I go to study I get nervous about the exam, it's just not worth it!" According to Ellis and Knaus, this person has not been able to embrace the concept of "no pain, no gain." Any sort of goal has its trials and tribulations. What happens to the procrastinator is that she forgets the even greater difficulties that she will face later on if she does procrastinate. If this individual would accept the difficulties of the task and get on with it, she would find her anxiety diminishing. However, she doesn't get that far, because she has convinced herself that she can't possibly produce the effort required to reach the goals that she desires.

Yet another underlying cause of procrastination can be hostility. Along with the "faulty" assumptions that an individual must perform perfectly to gain others' approval, and that the individual's circumstances must work out perfectly, there can be a third faulty assumption. "Other people must treat me fairly, kindly, and considerately and do what I want" (p. 22). Obviously, this kind of assumption won't always be met, but the procrastinator is surprised and experiences anger and resentment. The individual may then "act out" her anger by showing up late, or not getting work accomplished.

Another way that anger can interact with procrastination is in terms of rationalizations. A person avoids writing a paper for some reason and then, rather than facing her own motives for the delay, blames a friend for distracting her, or the professor for giving too difficult an assignment.

While these three causes, self-downing, low frustration tolerance, and hostility are seen by Ellis and Knaus as the major reasons to procrastinate, they also note that the procrastinator may have problems with perfectionism, the dire need for love, anxiety, guilt, shame, and depression. While these all can really be grouped under self-downing, they are seen so frequently in procrastinators that it would be useful to look at each separately.

Perfectionism can become a problem when it is demanded of oneself or of others. Because all individuals are fallible, if a person expects perfection, then she is bound to be dissappointed and angry at herself and/or others. Because unrealistically high standards are set, great anxiety sets in at the commencement of any task. Through procrastination, the person finds a way to escape the task, and thus the anxiety, at least temporarily. However, as time passes, and the deadline looms, the individual, in her frustration, feels that she is behaving in a worthless manner and needs to set even more stringent standards for herself. Thus, a vicious cycle is created.

The dire need for love can lead to procrastinating in two ways. If one is dependent on the approval of others, then she doesn't want to risk losing that love by not performing in a consistantly excellent way. Therefore, she puts off tasks rather than dare to allow her loved ones to see a less than perfect performance. In another way, fearing loss of love can cause a person to make decisions against her best interest. For example, a woman may have a project due, and her boyfriend may want to go see a movie. Even though she wants to get her work done, she may give in, fearing that otherwise her boyfriend will find someone less "serious." This person needs to create her own standards rather than depending on another's evaluation that she cannot control.

Anxiety usually results from "anticipating future pains, believing you can't cope with them, and awfulizing about them" (p. 79). By "awfulizing" Ellis and Knaus are referring to the tendency to take realistic disappointments and frustrations and catastrophize about them. "...you take truly unfortunate conditions, such as learning that you have cancer or that a dear friend has died, and escalate them over and above sadness and grief to the point of your virtual immobility" (p.79). Often the anxiety is based on some catastrophe that has little realistic chance of occurring, such as, "If I fail this exam, everyone will hate me." Once, this fear occurs, it is treated as a fact

instead of a possibility. As the anxiety feeds on itself, it seems less and less likely that any effort can avoid this self made disaster.

Guilt or shame can be related to procrastination also. A person may feel embarrassed that they haven't put enough time into a project, and then hesitate writing up the final report. Also, individuals often feel shame about the procrastinating behavior itself. The person knows she has a habit of putting things off, feels badly about herself, so that when she goes to work on the project, beyond the anxiety of failure is the anxiety, "I'm going to put things off until the last minute again, I'm never going to be able to change." This anxiety and the sense of defeat are obviously not going to aid in getting the task done. Instead the task becomes all the more onerous, something to be avoided, not thought about until one absolutely has to. Depression can occur when this behavior becomes so ingrained that the individual starts making judgements about her basic self-worth. "Anyone but a jerk would have finished this paper by now!" or "It's hopeless, I'll never be on time, I'm irresponsible and awful!" This depression then leads to inactivity, or to be more precise, the activity of obsessing about how awful you are is substituted for the activity that needs to be done.

Ronnie Janoff- Bulman (1979) in another context, has described this behavior as making characterological rather

than behavioral self-blame. She found in a study of rape victims that those who blamed a specific behavior for the rape had a better recovery than victims who blamed a basic part of their character. In the same way, Ellis and Knaus point out that if the procrastinator globalizes her failure to meet a deadline into a general comment upon her character, then depression is likely to ensue.

Finally, Ellis and Knause point out that a person can develop a psychological set in which she responds in a particular and predictable manner. Thus she may see doing her taxes as a painful experience before she's even started to work on them. Yet the habit of seeing the work this way can be causing half the problem. Some procrastinators come to see their procrastinating behavior as a joke, or they may set up a kind of contest, in which they see how long they can put off their work and still make it to the deadline.

Burka and Yuen (1982) more recently have been working with a combined behavioral and cognitive approach to working with procrastinators. For the past three years they have been working with and observing procrastinators in both group and individual sessions. While procrastinators tend to see themselves in moralistic terms, as bad or lazy, Burka and Yuen suggest that rather than a bad habit, procrastinating is a way of expressing internal conflict and protecting self-esteem. Although behavioral

and time-management techniques are of partial help, Burka and Yuen believe that successfully overcoming of procrastination involves more. An individual must understand how she is using procrastination in an ineffective attempt to deal with personal issues.

The major underlying issues that Burka and Yuen have identified are fear of failure, fear of success, and rebellion against authorities. A person who has fear of failure is afraid to have her competency put on the line. Fearing that she is a fraud whose promising future is a sham, she avoids putting her ability to the test. By procrastinating, she can have a ready-made excuse if people do not approve of her performance. Instead of taking pride in her work, the procrastinator finds comfort in how close she was able to make it to the deadline. This demonstration of how well a person can pull things together under pressure has been termed "brinkmanship" by Burka and Yuen.

Richard Beery (as quoted by Burka and Yuen 1982) has suggested that there is a three part equation being utilized by those with low self-esteem. This equation is that Self-worth equals Ability equals Performance. Thus, rather than a person feeling good about herself for who she is, this person feels that she is only loved for her abilities. Added to this is the feeling that each performance is a complete assessment of the individual's abilities. And so we have the equation Self-worth equals

Abilities equals Performance. (If a person feels that her self-worth is based on her abilities, one can begin to understand the striving for perfectionism, as the person's whole self-worth is on the line with any given performance.)

According to Burka and Yuen, procrastination breaks this equation. "No longer does performance reflect true ability. Instead, it reflects how well you are able to pull things together at the last minute" (p. 37). For the procrastinator, Self-worth equals Ability but does not equal Performance.

Alice Miller (1981) in her book, Prisoners of Childhood, has spoken movingly about the terrible consequences of bringing up a child who is reinforced only for her performance and not for her self-worth. She describes a vicious cycle, where the parent's own low self-esteem leads her to use her child's performance as a crutch to support her feelings of self-worth. The child is not loved for who she is but instead is loved only as a reflection of the parent's accomplishments. These children feel they have to be perfect to be loved. Miller suggests that these children grow into adults who are always striving to accomplish, to be perfect, because they never learned that they could be loved just for being themselves.

Fear of success is also a problem for procrastinators. Women are afraid of leaving sex-role stereotyping behind

when they act competently in a high-paying job. Men and women dislike being put in a situation where doing well is seen with envy by fellow workers and success may be followed by increased competition and loss of valued emotional support.

The other major cause of procrastination, according to Burka and Yuen, is a difficulty in dealing with authorities. In this case, procrastination is being used as a way of avoiding feeling controlled or dominated. One "wins" the power struggle when it's you who decides when you're turning in the final report, not your boss. Here too, one sees evidence of shaky self-esteem. Ultimately, no authority can have total control over you. It has been suggested that those who survived concentration camps and somehow were able to maintain their sanity seemed to find a way to maintain a sense of self-control, even in this most debilitating of circumstances (Frankl, 1959). For someone with very low self-esteem,

Any expectation, schedule or rule represents a battle to be won or lost. Adhering to someone else's time schedule means losing. Procrastination becomes a means of retaining a sense of power and control, even though the only power she has is to say 'No!' (Burka and Yuen, p. 34)

Burka and Yuen have observed all-or-nothing thinking with almost every procrastinator. They work to help procrastinators see how they set high standards and then expect to attain them very easily. (This is similar to the

low frustration tolerance observed by Ellis and Knaus) When procrastinators run into the first difficulty, they have a tendency to see this as a failure or defeat rather than as a temporary setback. Somehow, the very fact of having to work hard can make them feel inadequate or dumb. The present author worked with a client who described this dilemma by means of the film "Amadeus", a film about Mozart's life. The client saw Mozart as just "whipping off" compositions, while a second-rate composer in the film was seen struggling and struggling. Thus, for this client, if he was a genius, he should just be "inspired" and working at his writing was somehow equated with his being second-rate.

David Burns (1980) has talked about the all-or-nothing thinking that occurs with perfectionists. Burns describes this thinking as the:

...tendency to evaluate your personal qualities in extreme, black-or-white categories...If you try to force your experiences into absolute categories, you will be constantly depressed because your perceptions will not conform to reality. You will set yourself up for discrediting yourself endlessly because whatever you do will never measure up to your exaggerated expectations. (p.31-2)

Burka and Yuen have also identified two sorts of family situations that seem to be associated with individuals who develop problems with procrastination. The first type of family is the type described by Miller, where there is very

strong pressure to succeed. These children are expected never to fail. On a report card of almost all A's, the child only receives comment on the one B. "If performance was the basis for love, then (the child) risked losing that love if she couldn't measure up" (Burka & Yuen p. 37).

The second family pattern was where the child was discouraged from setting any high goals. This might happen where a child had an early (although corrected) learning problem, or where a bright child was discouraged from furthering her education. These are children who have not developed confidence in their intelligence and abilities.

As Burka and Yuen explored the problem of procrastination with their clients, they found there were often negative consequences that could occur if the individual stopped procrastinating. One client talked about how success meant "taking a stand, making himself visible to the world, and exposing himself to insatiable demands for continued top-notch performance" (p.37). Another client spoke of losing her special, even though sometimes unpleasant, relationship that she usually developed with authority figures. "I might find out I'm just mediocre, and no one will be interested in me" (p.37). The negative consequences of change is an often overlooked variable in the therapeutic relationship. The therapist can collude with the client in recognizing only the magical wish to be rid of the given problem, without acknowledging

the trade-offs that are inherent in any given change.

In summary, Burka and Yuen see some of the same main causes of procrastination as Ellis and Knaus. These include perfectionism, low self-esteem, and low frustration tolerance. Beyond the possible personal causes of procrastination, Burka and Yuen have also noted the possible effects of a person's context upon a person's procrastination. One way this can happen is from extreme family expectations. Another way this can occur is when there are possible negative consequences in the client's personal interactions if she acted competently.

Very little scientific information has been gathered on procrastination. Most of what has been written is based on clinical experience, loosely built hypotheses, and generalizations garnered from the popular press. In response to this dearth of research, Solomon and Rothblum (1984) designed a study of the cognitive and behavioral correlates of academic procrastination. Their goals were:

(a) to determine the frequency of academic procrastination among college students and to assess the degree to which students feel it is a problem and would like to change their behavior; (b) to systematically assess the reasons for procrastination in order to better understand the cognitions that contribute to the behavior pattern; and (c) to compare the self-report of procrastination to behavioral measures of procrastination and to standardized self-report scales of potentially related content areas (e.g., anxiety, study habits, depression, self-esteem, irrational cognitions, and assertion). (p.504)

A procrastination assessment scale (PASS) was developed

to measure procrastination in various aspects of academic functioning. Areas included on this scale included procrastinating in writing a term paper, studying for an exam, keeping up with weekly reading assignments, performing administrative tasks, attending meetings, and performing academic tasks in general. An introductory psychology class of 342 psychology students were given the PASS along with a questionnaire battery that consisted of The Rosenberg Self-Esteem Scale, The State-Trait Anxiety Inventory (Trait version), the punctuality and organized study habits subscale of the Survey of Study Habits and Attitudes, The College Self-Expression Scale, The Beck Depression Inventory, and The Ellis Scale of Irrational Cognition. Students in a self-paced section of this introductory psychology course were used to provide two behavioral correlates of the questionnaire battery. Their self-paced exams after completion of each chapter were monitored. They were also invited to participate in an experiment (consisting of another administration of the PASS). This second administration of the PASS was available at either the early, middle or late part of the semester.

Solomon and Rothblum found that 46% of subjects reported that they nearly always or always procrastinated on writing a term paper, 27.6% procrastinate on studying for exams, and 30.1% procrastinate on weekly reading

assignments. The other activities they had inquired about, administrative tasks, attendance tasks and school activities in general were found to be less of a problem (10.6%, 23.0%, and 10.2% respectively). While the data were analysed for any possible sex differences, no significant differences were found for any area of academic procrastination nor for total self-reported procrastination.

In regards to the behavioral measures, these researchers found results that suggest the situational specificity of procrastination. The number of self-paced quizzes taken during the last third of the semester correlated with self-reported procrastination on writing a term paper ($r=.24$, $p<.001$), studying for exams ($r=.19$, $p<.01$), and doing weekly readings ($r=.28$, $p<.0005$). On the other hand, attendance to the experimental session either during the early, middle, or late part of the semester was correlated only with self-reported tendency to procrastinate on administrative tasks, ($F=3.41$, $p<.05$). The procrastination scale was found to correlate with several self-report measures, depression ($r=.30$, $p<.0005$), an affective measure; irrational cognitions ($r=.30$, $p<.0005$) and self-esteem ($r=-.23$, $p<.0005$), two cognitive measures; and punctuality and organized study ($r=-.24$, $p<.0005$), a measure of behavior. Procrastination was found to correlate with anxiety to a lesser extent ($r=.13$,

$p < .05$), and was not found to correlate with assertion. The authors point out that if procrastination were primarily a study skills or time management deficit, as previous studies suggest (Miller et. al. 1974, Ziesat et al., 1978), they would expect procrastination to correlate with study habits to the exclusion of most of the other self-report measures of cognition and affect. Finally, those subjects who reported high procrastination and who perceived procrastination to be a problem also reported depressed affect, low self-esteem, and irrational cognitions.

In a factor analysis of subjects' reasons for procrastinating, the first factor, accounting for 49.4% of the variance, seemed to reflect what the authors termed "fear of failure". This factor was made up of the components of evaluation anxiety, perfectionism and lack of self confidence. A second factor, which accounted for 18% of the variance, related to the aversiveness of the task and laziness. These two factors were seen as the two primary independent reasons for procrastinating. The last five factors were not included in further analyses because they explained such a small percent of the variance. These factors were dependency, risk taking, lack of assertion, rebellion against control, and difficulty making decisions, in that order.

A frequency of endorsement of reasons for procrastinating was also run. From these results and the

factor analysis, the authors hypothesized that there were two groups of procrastinators, one a small but relatively heterogeneous group who report fear of failure as their reason for procrastinating. While this factor explained almost 50% of the variance, subjects' endorsement of items in this factor ranged from 6.3% to 14.1%. The authors found that not many subjects endorsed the items in this factor, but that when they did, it was a major explanation for why they procrastinated. The second group of procrastinators who reported procrastinating due to the aversiveness of the task or laziness rarely felt this was the only reason they procrastinated. Therefore, while this factor explained only 18% of the variance, at least one of the items of this factor was endorsed by 19% to 47% of the subjects as highly representative of why they procrastinate.

The fear of failure factor correlated with the self-report measures of depression ($r=.41$, $p<.0005$), irrational cognitions ($r=.30$, $p<.0005$), punctuality and organized study habits ($r= -.48$, $p<.0005$), self-esteem ($r= -.26$, $p<.005$) and also anxiety ($r=.23$, $p<.0005$). There was also a lower but significant negative correlation with this factor and assertion ($r= -.12$, $p<.05$).

The aversiveness of the task factor was correlated with the self-report measures of depression ($r= .23$, $p<.0005$), irrational beliefs ($r= .23$, $p<.0005$), and punctuality and organized study habits ($r= -.53$, $p<.0005$). Unlike the

students who reported procrastinating due to fear of failure, those students associating their procrastination with aversiveness of task did not report high anxiety or low self-esteem.

The authors conclude from this study that there not only behavioral, but also affective and cognitive aspects of procrastination. They caution that attempting to alter procrastination by improving time management and study skills, while a valuable component, is not likely to be sufficient in itself. They also suggest that there may be two significantly different groups of procrastinators, one group having major problems with fear of failure, the second group procrastinating because of the aversiveness of the task.

Many of the studies published on procrastination have investigated the procrastination that occurs in conjunction with the personalized system of instruction (PSI) developed by Keller (1968). For example, Morris, Surber, and Bijou (1978) compared students in a self-paced course with those who were being taught by an instructor. They found that while the self-paced students procrastinated more than those with an instructor, there was no difference for the two groups in either grades or course satisfaction. Reiser (1984) examined the effects of having a pacing schedule and then punishing or rewarding students in relation to how they kept to the schedule. The results were that students

who were punished progressed more rapidly through the course than controls. However, there were no significant differences in either student withdrawal rate, final exam performance, or attitude. The conclusion of the authors was that a pacing schedule combined with punishment could reduce procrastination without having a deleterious affect upon the student's attitude or final grade.

A major problem with the PSI studies on procrastination is that the students who are participating in these studies are not identifying themselves as procrastinators. Rather, the procrastination is, in a sense, iatrogenic, that is caused by the organization of the course. Thus, what helps a student to do better in a PSI class may not necessarily reflect the kinds of interventions that are needed for a student who is a chronic procrastinator. In this way, the PSI studies on procrastination tell more about how to develop better PSI courses than they do about how to help procrastinators.

There have been some studies that have looked directly at the effects of paradoxical interventions on procrastination.

Young (1982) examined the relative effects of paradoxical, behavioral, and reflection-support treatments for college students who procrastinate. Each student met with a therapist for an hour session for eight weeks. All the subjects kept records of their studying. Contrary to

expectations, the behavioral and paradoxical interventions were no more effective than the simple reflection-support intervention and in none of the treatments did subjects show improvement over the course of treatment. Improvement had been defined subjectively as less intense symptomatology and behaviorally as increased hours of study time, along with sticking to goals of planned study time and percentage increase in overall studying.

Wright and Strong (1982) investigated the hypotheses that telling a client what to do would create defiance while allowing them to make a choice would encourage compliance in procrastinators. The students came to two interviews. The first group was told to continue procrastinating as they had been. The second group was told to choose some of their procrastination behaviors to continue. Both groups decreased procrastination greatly, while a control group did not. There were differences between the two intervention groups in terms of attribution of controllability. The first group (continue) felt the change was due to spontaneous, non-volitional causes, while the second group (chose) felt their decrease in procrastination was due to their own actions and choice.

Lopez (1980) looked at the effects of direct and paradoxical instructions in a brief counseling session with procrastinators. The subjects attended a total of four sessions, including a pre-testing and a post-test. The

first two groups had interviews during sessions two and three while the control group merely filled out questionnaires during the middle sessions.

In the direct intervention, subjects were encouraged to decrease their procrastination by increasing their self-control. Subjects receiving the paradoxical intervention were told to schedule 1/2 hour periods each day during which they would actively procrastinate and delay studying. The interventions were scripted beforehand and memorized in an attempt to control for variability in the intervention.

Lopez found that both interview groups showed greater improvement over time than the control group. However, the two interview groups differed both in their sense of controllability over the problem (as measured by Rotter's I-E Locus of Control questionnaire) and in their rate of improvement. The group receiving direct instruction had steady but moderate decreases in procrastination and reported significant increases in terms of their controllability of the problem. Those subjects in the paradoxical intervention showed delayed but much sharper decreases in terms of their procrastination. Their perception of controllability did not change significantly.

Lopez concludes that attitude change is not necessary in order for behavior to change since the subjects in the paradoxical intervention group changed their procrastina-

-tion behavior without viewing their problem as significantly more controllable. He suggests that the paradoxical approach is especially useful with clients who present themselves as "resistant" because the clients can maintain their oppositional stance and still change.

The present study has been modeled after Lopez's study. However, there have been several modifications made. First, the experimenter was the counselor for all the interviews. Because this was an exploratory study, the experimenter wanted to gather as much information personally as possible. A modified Barrett-Lennard Relationship inventory was administered to the two interview groups to see if there were any perceived differences of the counselor's interactions in the two groups. With something as complicated as a paradoxical directive, a counselor must pick up all sorts of verbal and non-verbal feedback in order to how to insure that a directive has been effective. For these same reasons, it was felt that a scripted intervention would drastically limit the effectiveness of a paradoxical intervention. While these two changes added complications to the interpretation of the data, it was felt to be necessary in order that the results achieved would be relevant to the actual practice of therapy (Reference to these added variables will be further discussed in the results section). The final change in design was that a one month

follow-up was added to find out if the changes occurring would be maintained over time.

CHAPTER 2

METHOD

Subjects

Subjects were undergraduate psychology students who identified themselves as having a "procrastination problem". They attended a screening session for a "procrastination study" during which they completed several self-report forms. Subjects were selected for the final sample if they had indicated (on one of the screening measures) that they had a serious and recurrent problem with procrastination and had also indicated a desire to continue with the experiment. The final sample was then randomly assigned to the three experimental conditions. Students received experimental credit for participating in the experiment.

Instruments

Relationship Inventory

The 36-item Relationship Inventory was developed by Strong, Wambauch, Lopez, and Cooper (1979) from an adaption of the Barrett-Lennard Relationship Inventory (Barrett-Lennard, 1964). It was used to measure the subjects' ratings of the interviewer in the two interview

groups. The five subscales and their corresponding Cronbach alpha internal consistency reliability coefficients as reported by Lopez and Wambach (1982) are as follows: Empathetic Understanding (.70), Unconditional Regard (.54), Level of Regard (.85), Congruence (.81), and Resistance (.66).

Procrastination Log

The Procrastination Log is an 11-item self-report form, which was developed by Lopez and Wambach (1982) from an earlier version by Strong et al. (1979), measured subjects' weekly procrastination behavior and their level of satisfaction with this behavior. Subjects respond to each item statement (e.g., "I was late turning in assignments") by first indicating how true the item was for them during the week on a 7-point scale ranging from true to false. Secondly, subjects indicate how satisfied they were with this performance on a separate 7-point scale ranging from very dissatisfied to very satisfied. The sum of the true-false ratings constitutes the Procrastination Behavior (PB) scale, and the Satisfaction scale was composed of the satisfaction ratings on the same 11 items. Lopez and Wambach (1982) found the Cronbach alpha coefficients for the two scales to be .67 and .76 respectively.

Procrastination Inventory

This inventory consists of a 36-item questionnaire revised by Lopez and Wambach (1982) from an earlier version developed by Strong et al. (1979). The original four scales, Controllability, Expectation to Change, Motivation to Change, and Justification, were reduced to only the first two scales, which were slightly lengthened. All items are rated by the subject on a 7-point scale ranging from true to false. The Controllability Scale (20 items) measures the subject's beliefs about how easily she could control her procrastination. The items themselves reflect a bipolar contrast between procrastination as something that could be controlled by additional effort (e.g., "Procrastination can be controlled by increasing self-discipline") versus something that can not be directly changed because of its impulsive nature (e.g., "I can't resist the impulse to procrastinate"). Lopez and Wambach (1982) found the Cronbach alpha coefficient for this scale to be .76. The Expectation to Change scale (16 items) assesses the subject's beliefs that her procrastination behavior will improve. The items themselves represent a bipolar contrast between positive behavior change that was likely to occur (e.g., "I am confident that I will be able to start tasks sooner than I used to"), and as something whose future occurrence was an unlikely event (e.g., "I suspect that I will always put off unpleasant tasks until

the last possible moment"). Lopez and Wambach obtained a Cronbach alpha coefficient on this scale of .89.

The Spielberger State-Trait Anxiety Inventory

This 20-item inventory was developed by Spielberger, Gorsuch, and Lushene (1966) to measure long term characterological anxiety (trait) and also situational anxiety (state). Only the trait inventory was used in this study. Subjects read a series of statements which "people have used to describe themselves". The subjects then rated the statements on a 4-point scale in terms of how they felt in general. The scale goes from "not at all" (1) to "very much so" (4).

Behavioral Measure

In addition to these instruments, a behavioral measure was devised. In the class from which the students had originally been recruited, a paper was assigned. Each student had the option of turning in the paper either on time, a week early and receive bonus points, or a week late with a penalty of points. This behavioral measure was then to be compared to the written measures of procrastination, to see if they were correlated. Unfortunately, this original class did not provide enough students for the study. Students were subsequently recruited from several

other classes where this behavioral measure could not be administered. Therefore, this study was unable to use the planned behavioral measure to correlate with the self-report measures.

However, one confirmation that the subjects recruited were actually procrastinators was evidenced in the screening process. Times were made available over a two week period for the initial screenings. An analysis was made by dividing the subjects up by their screening score and then comparing how many subjects scoring high on the procrastination scale attended the second rather than the first week of screenings. This was then compared with the same statistics for subjects that had a low score on the procrastination scale. The t-test showed that significantly ($p < .05$) more procrastinators showed up for the second week of screenings than the first, when compared with the subjects that scored low as procrastinators.

Treatments

This study had two treatment (interview) conditions and a no-treatment (control) condition. The two treatment conditions involved directives being delivered during two half-hour interviews spaced a week apart. Subjects in the control condition did not receive any interviews, but did fill out the pre-intervention and post-intervention

measurements. The following is a description of the three conditions.

Change Directive Condition

In the first interview, the interviewer spent the first half of the session inquiring 1) why the subject saw herself as a procrastinator; 2) what activities would the subject do if she could get her work done on time; 3) what did the subject usually do when procrastinating 4) what were the negative consequences of procrastinating and 5) what were the negative consequences of stopping procrastination. The second half of the session was then spent encouraging the person to change and organize their working habits better, emphasizing the negative aspects of procrastinating. A schedule was then given out to track the subjects work habits and times of procrastination.

In the second session, the schedule was reviewed. The Premack Principle (Premack, 1959) was explained for structuring a daily work routine. This principle states simply that if Behavior B tends to occur more frequently than Behavior A then the frequency of A can be increased by making it contingent upon it. Most students grasped intuitively the common sense underlying this principle. Subjects were encouraged to use this principle of using a higher reinforcer as a reward for completing a task that was a lower reinforcer. The subject was congratulated for

any improvements. Directives were again issued that it was important and useful that the subject change because of the negative consequences of procrastinating.

No Change Directive Condition

The same questions were explored as with the previous group. However, in the second half of the first session, the subject was encouraged not to change, using the responses they had given to question five (what were the negative consequences of stopping procrastinating) as a rationale and expressing the usefulness and importance of continuing to procrastinate. Although some subjects expressed some discomfort about this intervention, they were all able to accept it after a brief discussion. The subjects were then instructed to choose two separate hours during the week when they were to purposefully procrastinate.

In the second session, responses to the week before were gathered, and any changes in procrastination were noted. Any improvements were to be responded to with mild concern. The subject was then instructed to choose some upcoming deadline and was asked when she would normally begin to study if she was procrastinating on that task. The subject was then asked if she would be willing, as an experiment, to choose to procrastinate on that task. In other words, she would not let herself study until late in the evening, at the time when she would finally get to her

studying if she was procrastinating. Finally, it was reiterated that it was important and useful for the individual to continue her procrastination.

Procedure

Students were recruited from introductory psychology classes to participate in a study to evaluation of counseling methods for students who consider themselves to have a procrastination problem. Those interested were invited to a pre-test session in which the general purpose of the study and its time requirements were described. Also at that time, the informed consent form, the Procrastination Log, the Procrastination Inventory, the Spielberger State-Trait Inventory (STAI), and a personal data sheet were completed. Those subjects that indicate a willingness to continue participation, and who had reported (a) engaging in last minute "cramming" either "all of the time" or "most of the time," (b) being "mostly unsuccessful" or "almost always unsuccessful" in previous attempts to control procrastination, and (c) perceiving their procrastination as either a "serious" or "very serious" problem were then randomly assigned to the three conditions. The subjects were then called and scheduled for two interview sessions and a post-test for the experimental conditions or three weekly "evaluation

sessions" for the control condition. The subjects in the experimental conditions also filled out the Relationship Inventory after the second interview.

There was a one month follow-up of all subjects at which time the Anxiety Inventory, the Procrastination Log and the Procrastination Inventory were again administered. Afterwards, a debriefing session was held at which time the the purpose of the study, the techniques, and the dependent measures used were described. As part of the debriefing, the experimenter individually met with the subjects to informally question them about their experience and to answer all questions about the study. Subjects were also informed that both directives had previously been used by counselors and were considered effective in the treatment of recurring behavior problems. Those in the control group were offered a three session treatment if it was desired. Information on referral sources for all participants interested in additional help with their procrastination problem was given at this time.

Of the 107 students originally screened, 36 qualified for the highest level of procrastinators. Five of the students dropped out of the study before completing the four sessions. One student had dropped the class for which the experimental credits were valid, one student dropped out of school, another student had a family crisis, and the final two students dropped out because of time pressures.

This left a pool of 31 subjects upon which the analysis of the data was based.

Research Hypotheses

The present study hypothesized that subjects who suffered from problems with procrastination would respond differently to two intervention strategies. The first strategy was to encourage the subject to continue her procrastination. The second strategy was to encourage the subject to change her procrastination by means of some behavioral interventions. It was assumed that allowing the procrastinator to continue procrastinating would be more useful in the long term than any short term gains made by the behavioral methods. The following hypotheses were proposed:

1. Interviewed and non-interviewed subjects would differ significantly ($p < .05$) over time in their scores of the major dependent variables (controlability, expectation to change, procrastination behavior, satisfaction, anxiety). Only interviewed subjects would demonstrate improvement on these measures over time.
2. Subjects in the behavioral group would initially show a significant ($p < .05$) improvement on the major dependent variables, but that this improvement would not be maintained by the time of the one month follow-up.
3. Subjects in the paradoxical group would not initially improve, but would show a significant ($p < .05$) improvement on the major dependent variables at the

time of the one month follow-up.

4. Subjects in the behavioral group would evidence a significant ($p < .05$) increase on the Anxiety Inventory. In contrast, the paradoxical group would show a significant ($p < .05$) decrease in anxiety while the non-interview group would show no change on this measure.

5. There would be no significant ($p < .05$) differences of the ratings of the interviewer by the two interview groups in terms of empathetic understanding (EU), unconditionality of regard (UR), level of regard (LR), or congruence (CO).

C H A P T E R 3

RESULTS

Subjects were selected by means of an initial screening. They answered three questions that evaluated their frequency of last minute cramming, their success in controlling their procrastination, and the degree to which they considered their procrastination to be a serious problem. The subjects were then invited to their first session, at which time they filled out the Procrastination Inventory, the Procrastination Log, and the Spielberger State-Trait Anxiety Inventory (Trait version). A one-way analysis of variance was run on the data from this first administration of the questionnaires to insure that there were no significant ($p < .05$) differences between the three groups.

The analysis showed that there were no significant differences between the three groups on any of the dependent measures before treatment had commenced. Therefore, it seemed appropriate to continue the analysis of the data to determine if there were any treatment effects. A summary of this initial ANOVA can be found in Table One.

Table 1

Pre-Test Means, Standard Deviations, F's and p's for
Subjects in the Paradoxical, Behavioral, and No-Interview
Control Conditions on the Major Dependent Variables

Variable	Condition						F*
	Paradoxical (N=10)		Behavioral (N=11)		Control (N=10)		
	M	sd	M	sd	M	sd	
Control-ability	71.0	14.3	67.4	10.5	72.5	7.9	.57
Expectation	74.4	8.8	63.1	18.5	67.7	10.7	1.83
Procrast-ination	43.9	17.7	48.0	11.9	48.5	10.3	.35
Satisfaction	33.7	13.7	38.6	8.8	34.1	8.7	.71
Anxiety	42.8	8.3	43.4	13.7	44.8	4.3	.11

* none of the F values were significant at the $p < .05$ level

Treatment Effects

Dependent Measures

Procrastination Inventory. The Procrastination Inventory measures two aspects of procrastination. The first scale is controllability which measures the extent to which the subject believes that procrastination is a behavior that can be controlled. The strategic group's means did not change significantly over the course of the study (Mpre=71.0, Mpost=71.2, M1mth=73.9). The behavioral group's means increased (Mpre=67.5, Mpost=81.4, M1mth=86.3). This was found to be significant ($p < .005$). The control group's means did not change significantly (Mpre=72.5, Mpost=73.9, M1mth=70.7). The second scale of the Procrastination Inventory measures the subject's expectation that she will be able to change her procrastination behavior. The strategic group's means became lower over the course of treatment (Mpre=74.4, Mpost=68.6, M1mth=63.7). This was not found to be significant. The behavioral group's means became higher over the course of treatment (Mpre=63.1, Mpost=76.9, M1mth=79.1). This was found to be significant ($p < .05$). The control group's means did not change significantly during this time period (Mpre=67.7, Mpost=70.1, M1mth=65.3).

Procrastination Log. The Procrastination Log is also broken down into two scales. The first scale is a measure of actual procrastination during the past week. The strategic group's means increased over this time period (Mpre=43.9, Mpost=47.8, M1mth=48.6). This change was not found to be significant. The behavioral group's means decreased on this same measure (Mpre=48.0, Mpost=43.9, M1mth=37.9). This also was not found to be significant. The control group's means initially decreased and then returned to approximately the same level (Mpre=48.5, Mpost=43.8, M1mth=47.8). These changes were not found to be significant.

The second scale of the Procrastination Log measures the subject's satisfaction with her procrastination behavior. All three groups increased on the measure of satisfaction at the post-test and then returned to close to the original values in the one month follow-up. (Strategic, Mpre=33.7, Mpost=41.4, M1mth=35.5; Behavioral, Mpre=38.6, Mpost=43.6, M1mth=41.1; Control, Mpre=34.1, Mpost=40.3, M1mth=34.4). These changes were found to be significant in terms of session ($F=4.81, p<.01$) but there was no significant group/session interaction.

Spielberger State-Trait Anxiety Scale. The final dependent measure, the Spielberger State-Trait Anxiety Scale (Trait version), was administered twice, at the pre-test and at

the one month follow-up. The means did not change significantly on this measure of anxiety for any of the three groups (Strategic, Mpre=42.8, M1mth=43.3; Behavioral, Mpre=43.5, M1mth=41.4; Control, Mpre=44.8, M1mth=46.4). However, the subjects were higher than the norms for undergraduates (Spielberger, 1968 mean equal to 37.8 for males and 38.2 for females) but lower than those patients hospitalized for anxiety reaction (Mean = 48.1).

The means and standard deviations of the three groups at pre-test post-test and one month follow-up are summarized in Table Two. The relevant analysis of variance tables are reported in the appendix.

The next table (Table Three) shows the F's and p's for the repeated test Anovas. This analysis compared the means of the three groups at the pre-test, the post-test, and the one month follow-up.

After these initial tests were run, some other tests were needed in order to determine specifically where the significant differences existed amongst the three groups. Therefore, Anova's were run comparing the pre-session with the one month follow-up results for specific groups where there had been significant differences for the three groups. Significant group by session interactions were found in the following situations. There was a significant ($p < .02$) group by session interaction in comparing the results of the behavioral and the control groups on the

measure of Expectation to Change. These two groups also showed a significant ($p < .0008$) group by session interaction on the measure of Controlability. This data is summarized in Table Four.

Table 2

Means and Standard Deviations on Controllability, Expectation to Change, Procrastination Behavior, Satisfaction, and Anxiety Scales for the Paradoxical, Behavioral, and No-Interview Control Conditions Over Time

Variable	Time	Condition					
		Paradoxical (N=10)		Behavioral (N=11)		Control (N=10)	
		M	sd	M	sd	M	sd
Control	Pre-	71.0	14.3	67.5	10.5	72.5	7.9
	Post-	71.2	11.8	81.4	15.7	73.9	10.8
	1 mth	73.9	14.7	86.3	17.7	70.7	13.7
Expecta- tion	Pre-	74.4	8.8	63.1	19.5	67.7	10.7
	Post-	68.6	10.0	76.9	19.5	70.1	12.5
	1 mth	63.7	12.9	79.2	24.2	65.3	12.2
Procras. Behavior	Pre-	43.9	17.7	48.0	11.9	48.5	10.3
	Post-	47.8	10.2	43.9	13.1	43.8	5.7
	1 mth	48.6	11.5	37.9	10.1	47.8	10.3
Satis- faction	Pre-	33.7	13.7	38.6	8.8	34.1	8.7
	Post-	41.4	10.9	43.6	17.8	40.3	6.5
	1 mth	35.5	10.1	41.9	9.4	34.4	6.6
Anxiety	Pre-	42.8	8.3	43.5	13.7	44.8	4.3
	1 mth	43.3	13.4	41.4	17.4	46.4	4.8

Table 3

F's and p's for Subjects in the Paradoxical, Behavioral,
and No-Interview Control Conditions on the Major Dependent
Variables

Variable		df	F	p
Controlability	GP	2	.97	.39
	SES	28	6.39	.003
	S X G		5.76	.0006
Expectation	GP	2	.52	.60
	SES	28	.86	.44
	S X G		4.65	.003
Procrastination	GP	2	.50	.61
	SES	28	.48	.62
	S X G		2.48	.055
Satisfaction	GP	2	1.14	.34
	SES	28	4.81	.01
	S X G		.26	.90
Anxiety	GP	2	.27	.76
	SES	28	.00	.99
	S X G		.36	.70

Table 4

F's and p's for the ANOVA's of the pre-session and one month follow-up session comparing intervention groups with the control group means.

Variable	Groups compared		F	p	
Expectation	II & III	GP	.48	.50	
		SES	3.30	.08	
		S X G	6.03	.02	*
Expectation	I & III	GP	.36	.56	
		SES	5.85	.03	*
		S X G	2.35	.14	
Controlability	II & III	GP	1.07	.31	
		SES	10.72	.004	**
		S X G	15.73	.0008	***
Procrastination	II & III	GP	1.72	.20	
		SES	4.46	.05	*
		S X G	3.37	.08	

* = p<.05		** = p<.01		*** = p<.001	

Interviewer Effects

Because the experimenter was the counselor for both intervention groups, it was determined useful to have some rating by the subjects of the counselor to determine if there were any significant differences experienced by the subjects in the two treatment groups. The Barrett-Lennard Relationship Inventory was administered to the subjects in groups one and two at the post-test. This inventory is divided into five subscales measuring empathic understanding, unconditional regard, level of regard, congruence, and resistance. The ratings of the counselor did not differ significantly on any of the subscales when a paired t-test was run. The results of this analysis are summarized in Table Five.

Table 5

Means, Standard Deviations, F's, and p's for Subjects in Paradoxical and Behavioral Instruction Conditions on the Subscales of the Barrett-Lennard Relationship Inventory

Subscale	Condition				F	p
	Paradoxical M	sd	Behavioral M	sd		
Empathic Understanding	38.4	21.2	45.0	16.0	1.78	.38
Unconditional Regard	34.8	19.4	37.9	14.0	1.92	.32
Level of Regard	39.9	21.4	42.9	15.5	1.91	.33
Congruence	39.8	21.6	46.3	16.2	1.78	.38
Resistance	6.5	4.3	6.2	2.9	2.24	.22

C H A P T E R 4

DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

Hypotheses Concerning the Effects of the Two Interventions

It would seem useful to review the hypotheses in light of the results of the analysis of the data. Each hypothesis will be listed followed by a discussion of what can be gleaned from the results.

Hypothesis One:

Interviewed and non-interviewed subjects would differ significantly ($p < .05$) over time in their scores of the major dependent variables (controlability, expectation to change, procrastination behavior, satisfaction, anxiety). Only interviewed subjects would demonstrate improvement on these measures over time.

Contrary to the expectation of the experimenter, both groups of interviewed subjects did not differ significantly from the non-interviewed subjects on the major dependent variables. Only the behavioral group showed significant changes over time as compared to the control group. This change was found to be significant in terms of an increasing expectation to change and an increased sense of control over the procrastination but without a significant decrease in the report of actual procrastination behavior.

Hypothesis Two

Subjects in the behavioral group would initially show a significant ($p < .05$) improvement on the major dependent variables, but that this improvement would not be maintained by the time of the one month follow-up.

This hypothesis was based on the expectation that subjects had ambivalence about changing, so that if they were encouraged to change, they would initially comply but later rebel. Contrary to predictions, the improvement demonstrated by the behavioral group on two of the dependent variables at post-test was maintained and even exceeded at the time of the one month follow-up.

Hypothesis Three

Subjects in the paradoxical group would not initially improve, but would show a significant ($p < .05$) improvement on the major dependent variables at the time of the one month follow-up.

The paradoxical group did not demonstrate improvement over time. In fact, they showed a slight though statistically insignificant decline in the area of expectation to change, and an increase though not statistically significant in reported procrastination behavior.

Hypothesis Four

Subjects in the behavioral group would evidence a significant ($p < .05$) increase on the Anxiety Inventory. In contrast, the paradoxical group would show a significant ($p < .05$) decrease in anxiety while the non-interview group would show no change on this measure.

Contrary to expectations, none of the groups showed

significant changes in their scores on the Anxiety Inventory. This is particularly surprising since the second administration of this Inventory was given during the last week of classes, when a subjective impression of the participants of this study was that they seemed anxious, harried and in general under a great deal of stress. This might be expected given that they were procrastinators and were entering the time period when they had to face the negative consequences of their procrastination. This may mean that it would have been more accurate to administer the state version of the Inventory. It seems that these students' norms were higher than the norms of anxiety level for undergraduates (Spielberger 1968) but that without a change in procrastination behavior we cannot know whether the subjects in the two interventions might have had a different sort of decrease in anxiety when they procrastinated less.

Hypothesis Five

There would be no significant ($p < .05$) differences of the ratings of the interviewer by the two interview groups in terms of empathetic understanding (EU), unconditionality of regard (UR), level of regard (LR), or congruence (CO).

This hypothesis was supported. The results showed that there were no significant differences experienced by the subjects in the two intervention groups in terms of any of the subtests of the Barrett-Lennard Relationship

Inventory. It is important to note that this questionnaire is only one indicator of experimenter influence. There still exists the possibility that the experimenter might have influenced the subjects without the subjects' awareness. Thus, extreme caution must be exercised whenever an experimenter is testing out her own hypotheses.

Evaluation of Subject Selection and Interview Procedures

Subjects were recruited by means of announcements in introductory psychology classes. Because the study offered quite a number of experimental credits, it is possible that some students might have filled in the questionnaires indicating procrastinating behavior in order to participate in the experiment. However, because this study involved participating in several interviews it is doubtful that someone would falsely maintain that she was a procrastinator for a period of several weeks. A more serious concern is that, due to the self-identifying nature of the questionnaires, there may be procrastinators who are ashamed to admit that they are procrastinators. Also, there may be students who are not aware that they are procrastinators. Obviously, those procrastinators who did not identify themselves as such were not included in the study.

In terms of the interviewing procedures, the interviews

varied somewhat in terms of the exact language used in an attempt to help the situation better approximate a real counseling session. While this allowed for the intervention to better fit a given subject's needs, it did create more variety in the actual intervention received by each subject.

Students were randomly assigned to the three groups. However, it is important to note that students at a university have all sorts of interactions and relationships. Within the final pool of selected subjects, two were sisters and another two were roommates. At first the experimenter was tempted to make sure that these related pairs were assigned to the same group so that they would not share their different assignments. However, on further thought, the experimenter realized that there might be other relationships of which the experimenter had no knowledge, so that it would not be correct to interfere with the random assignment due to some limited outside knowledge. As it turned out, all four of these subjects ended up being assigned to the same group randomly. It is hard to know how to control for such variables, but obviously relationships between subjects who are assigned to the same or different groups are bound to have some influence upon the outcome of a study.

Another difficulty in the random assignment of subjects to the three groups is that some people have personality

styles that would seem to work best with one sort of therapeutic modality, while others seem definitely suited for a different therapeutic approach. With more and more therapists being trained in various therapeutic modalities, it would make an interesting study to have experienced therapists work with a series of clients according to the therapy approach that they guess would be most appropriate and compare this outcome with clients that are randomly assigned to these differing therapeutic approaches.

Another factor in running a clinical study is that subjects are dissimilar in terms of motivation to change. Some students entered the study as part of a commitment to really do something about their procrastination. Others in the study were there out of curiosity or for the experimental credits rather than participating because of any real determination to change. As any therapist knows, it is quite difficult to get even a highly motivated client to change, let alone a client who is disinterested in changing. The subjects in this study varied quite a bit in terms of their level of motivation.

It is important to note that even though the subjects selected scored similarly on the various procrastination scales, the interviews revealed major differences in terms of what they were identifying as procrastination behavior. Some subjects were "straight A" students who had never turned in anything late, others were on the probation list

and had hardly ever turned a project in on time. Some subjects felt they were procrastinators because they crammed for exams while others felt they were procrastinators because they couldn't get themselves to even begin studying.

Another area in which the subjects differed was in terms of what they did when they were procrastinating. For some, procrastinating involved socializing, others compulsive eating, watching television, or studying other subjects.

Yet another area in which subjects differed was in how much of their outside time was committed to other things besides academic work. One subject had a handicapped spouse and two young children. Another was training competitively in a martial art and assisting in running a karate school while maintaining a full academic schedule. Several students had quite heavy work schedules to provide financial support for their schooling. Thus, difficulty in completing tasks was often related to outside stressors rather than internal or psychological problems.

An important consideration in evaluating the results is that the experimenter, with preconceived notions of which intervention might be more useful, acted as the counselor for both the strategic and the behavioral subjects. It is interesting to note that the results directly contradicted the expectations of the experimenter. This brings into

question whether a researcher is necessarily influencing subjects in the direction of her expectations as has been suggested previously.

Finally, two basic parts of the design must be called into question. First, with such a long term habit as procrastination, one must wonder if a counselor can get dramatic changes in only three sessions. It must be noted that Lopez (1980) did find changes in reported procrastination behavior with such a brief intervention. Second, a question arises as to whether a strategic intervention could be effective when the students knew that the experimenter had designed the study in order to figure out how to get procrastinators to change. Therefore, when the experimenter told them to continue to procrastinate, the effect of this intervention may have been diluted due to the larger context.

Implications for Therapy

The results of this study are quite intriguing because they call into question the whole purpose of therapy. One of the treatment interventions, the strategic approach, had no effect upon the subjects. The other intervention, using a behavioral approach, led to a change in terms of the subjects' improved expectations of change in their procrastination behavior and a greater sense of control

over their procrastination behavior, but did not cause a change in the actual reported procrastination behavior.

From these findings a question arises: when a client enters a therapist's office and reports a behavioral symptom that she wants to change, what is the goal of the therapist? Is the therapist trying to change the behavior, to change the underlying attitudes of which the maladaptive behavior is merely a reflection, or to change the person's belief that they need to change in order to feel a moderate level of self-regard?

The subjects in the behavioral group reported a greater sense of control over their procrastination and a greater expectation to change. According to Seligman (1975) a sense of helplessness leads to depression and apathy. His theory suggests that a person will have the greatest psychological harmony if she attributes internal causes for good events (such as perseverance or intelligence) and external causes for bad events (such as bad luck or the other person's problem).

If a person's attitudes change about a behavior and this leads to improved behavior this is a wonderful result. However, if a person's attitudes change and the behavior does not change, the person may feel even more defeated and hopeless than when they first started therapy, because she has invested time and effort (and in most cases money) to try and change her behavior.

An example of this situation is the reducing diets given to overweight individuals. For years, doctors have been prescribing and patients have faithfully and not so faithfully attempted to adhere to these diets. A recent study (Chernin, 1981) found that of people who go on diets, 95% regain the weight they lost and 90% actually gain back more weight than they had lost! Therefore, their mistaken attempts to lose weight were much more a guaranteed way to gain weight.

The author is not here suggesting that no attempts be made to help people change. She is suggesting that therapists may have become a little bit overzealous in trying to help change everyone's bad habits without acknowledging the potential negative consequences. Having individuals enter therapy, and then not succeed may leave the clients worse off than if they had never started therapy.

This idea might be empirically researched by investigating the short-term and long-term effects upon having counseling for procrastination. Through personal interviews both before and after treatment and comparisons with individuals with the same behavioral problem on a waiting list, one might investigate the potential detrimental effects of therapy. Such research would be very helpful to therapists who might then develop approaches to help alleviate some of the distress when a

hoped for behavioral change does not occur in therapy.

Implications for Further Research

It seems the more one studies a subject the more one realizes how much there needs to be studied. This investigation into procrastination has helped the author realize what a complex and varied phenomenon she has attempted to study. It would seem important that future studies provide a more in depth definition of procrastination so that different subtypes could be identified. Another important step would be to find away to have outside confirmation of the self-report measures, perhaps by having some significant other, such as a roommate participate in the study.

There are several complications inherent in working with procrastinators. The first is that it is necessary to find a way to help them comply with the assignments, which in a sense would mean discovering a solution to the procrastination problem itself. Second, the attendance rate varied tremendously between subjects. Although there were five sessions to attend, subjects took from five to twelve sessions to complete the study due to numerous cancellations and rescheduling. Obviously then, the interventions that were supposed to occur at weekly intervals could only approximate that schedule due to

missed sessions.

An important issue that was raised during the initial talks with the subjects was the role that the subjects' larger context played in terms of reinforcing the procrastination behavior. Several subjects spoke of parents who had problems with procrastinating. Others mentioned their interactions with teachers and how they felt that teachers who had let them "get away" with turning in late papers had helped to cause their problems. These two areas of the interaction with the larger context would also be interesting areas to investigate further.

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APPENDIX

Appendix A

CONSENT FORM

The study you are invited to participate in is designed to evaluate different methods used to help students to understand and control procrastination. If you decide to participate and if you are selected for the final sample, you will be assigned to one of the following groups:

1. Interview conditions: In this group you will be asked to attend:
 - a) two weekly 30-minute interviews with an experienced counselor and to fill out some brief questionnaires at the conclusion of each interview.
 - b) a short session one week after the second interview to complete some questionnaires.
 - c) a brief one month follow-up session where the questionnaires will again be completed. At this time a written description of the study will be provided and all questions will be answered.
2. Non-interview condition: In this group you will not receive any interviews but instead will be asked to attend:
 - a) three weekly evaluation sessions and to complete research questionnaires.
 - b) a brief session with the investigator one month after the evaluation sessions. (same as in 1 c).

Each of the weekly sessions in both groups will run for no more than 45 minutes, making the total time commitment for this study less than three hours. This figure includes today's session.

If you are interested in participating, you will be asked to complete some questionnaires during today's session and you will be given a brief take-home questionnaire which assesses your reasons for participating in this study and your current experiences with procrastination. If you are selected for the final sample, you will be given a second take-home questionnaire toward the end of the study. This questionnaire will assess your experience as a final participant.

Decisions regarding final selection will be made by the investigator during this week. Shortly after you will be contacted and informed of her decision. If you are selected, you will be scheduled for either an interview or for an evaluation session. If you complete the requirements of the condition, you will be awarded 3 experimental credits, which can be used to help your grade in your psychology course. If you are not selected, you will nonetheless receive 1 experimental credit for your participation in today's screening session.

Persons in the final sample will be assigned to either interview or non-interview groups on a random basis. All interviews will be audiotaped. All research information, including tapes, questionnaires, and interviews will be used solely for research purposes and will not be used for any teaching or training purposes. All information will remain strictly confidential. You will not be identified by name on the tapes or in the reporting of the research results.

You are making a decision whether or not to participate. Your signature below indicates that you have read the information provided above and have decided to participate.

You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

Signature

Date

S. Lerner M.S. Investigator

Appendix B

QUESTIONNAIRE

Name _____

Phone _____

Address _____

City _____ Zip _____

Best time to be
reached:
 ___ morning
 ___ afternoon
 ___ evening

Number of semesters registered at U. Mass _____.

Please answer the following brief items by checking (X) the alternative that best describes your experience with procrastination.

1. I find myself doing last-minute "cramming" . . .
 - _____ all of the time
 - _____ most of the time
 - _____ some of the time
 - _____ none of the time
2. In the past, when I have tried to control my procrastination, I have been . . .
 - _____ almost always successful
 - _____ mostly successful
 - _____ mostly unsuccessful
 - _____ almost always unsuccessful
3. I consider my procrastination to be . . .
 - _____ a very serious problem
 - _____ a serious problem
 - _____ a possible problem
 - _____ not a problem at all

If you would be interested in participating in a study on ways to stop procrastinating, please indicate this below. This study would allow you to earn three experimental credits and would require three meetings of approximately 45 minutes. Thank-you for your cooperation.

_____ I am interested in participating in a study on procrastination.

_____ I am not interested in participating in a study on procrastination.

Appendix C

relationship inventory*

Name _____

Date _____

The Relationship Inventory asks you to describe your reactions to your counselor. Please rate how much you agree or disagree with each item. For example, the first item is "The counselor respected me as a person." If this is very much how you feel about the counselor, you would circle 7, mostly agree. If you feel quite the opposite was true, you would circle 1, mostly DISagree.

SAMPLE

The counselor respected
me as a person.

Mostly DISagree (1)	1
Moderately DISagree (2)	2
Slightly DISagree (3)	3
Neither agree nor disagree (4)	4
Slightly agree (5)	5
Moderately agree (6)	6
Mostly agree (7)	7

Some statements may be difficult to evaluate on the basis of your interview, but please try to use your experiences in the interview to make some assessment of the counselor. Don't spend too much time on each item. Your immediate and honest reaction to each item is most desirable.

*Adapted from the Relationship Inventory - Form OFM-64
by G. T. Barrett-Lennard, Ph.D.

For each item, please
circle the number which
best describes how much
you agree or disagree with
the item.

1. The counselor wanted to understand how I saw things.
2. The counselor's interest in me depended on the things I said or did.
3. The counselor seemed to like me.
4. The counselor may have understood my words, but s/he did not see the way I felt.
5. The counselor seemed opinionated.
6. I felt that the counselor was real and genuine with me.
7. I felt appreciated by the counselor.
8. The counselor was indifferent to me.
9. The counselor wanted me to be a particular kind of person.
10. The counselor wanted me to think that s/he liked me or understood me more than s/he really did.
11. The counselor cared for me.
12. Sometimes the counselor thought that I felt a certain way, because that's the way s/he felt.
13. The counselor helped me get a more accurate picture of myself.
14. The counselor liked certain things about me, and there were other things s/he did not like.

Mostly Disagree (1)
Moderately Disagree (2)
Slightly Disagree (3)
Neither agree nor disagree (4)
Slightly agree (5)
Moderately agree (6)
Mostly agree (7)

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	<div>Mostly DISagree (1)</div> <div>Moderately DISagree (2)</div> <div>Slightly DISagree (3)</div> <div>Neither agree nor disagree (4)</div> <div>Slightly agree (5)</div> <div>Moderately agree (6)</div> <div>Mostly agree (7)</div>						
15. The counselor did not avoid anything that was important for our interview.	1	2	3	4	5	6	7
16. The counselor realized what I meant even when I had difficulty in saying it.	1	2	3	4	5	6	7
17. The counselor expressed his/her true impressions and feelings with me.	1	2	3	4	5	6	7
18. The counselor was friendly and warm with me.	1	2	3	4	5	6	7
19. The counselor just took no notice of some things that I thought or felt.	1	2	3	4	5	6	7
20. At times I sensed that the counselor was not aware of what s/he was really feeling with me.	1	2	3	4	5	6	7
21. I feel that the counselor really valued me.	1	2	3	4	5	6	7
22. The counselor approved of some things I do, and plainly disapproved of others.	1	2	3	4	5	6	7
23. At times the counselor thought that I felt a lot more strongly about a particular thing than I really did.	1	2	3	4	5	6	7
24. Whether I was in good spirits or felt upset did not make the counselor feel any more or less appreciative of me.	1	2	3	4	5	6	7
25. The counselor did not really understand my problem.	1	2	3	4	5	6	7
26. The counselor was openly him/herself in the interview.	1	2	3	4	5	6	7

Go on to next page. ➡

- 27. I seemed to irritate and bother the counselor.
- 28. The counselor did not realize how sensitive I was about some of the things we discussed.
- 29. Whether the ideas and feelings I expressed were "good" or "bad" seemed to make no difference to the counselor's feeling toward me.
- 30. There were times when I felt that the counselor's outward response to me was quite different from the way s/he felt underneath.
- 31. At times the counselor felt contempt for me.
- 32. I do not feel that the counselor tried to hide anything from him/herself that s/he felt with me.
- 33. The counselor seemed to be trying to change my thinking.
- 34. I don't think that anything I said or did really changed the way the counselor felt toward me.
- 35. What other people think of me affected the way the counselor felt toward me (or would have, if s/he had known).
- 36. I believe that the counselor had feelings s/he did not tell me about that caused difficulty in our interview.

Mostly DISagree (1)
Moderately DISagree (2)
Slightly DISagree (3)
Neither agree nor disagree (4)
Slightly agree (5)
Moderately agree (6)
Mostly agree (7)

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Thank you.

Appendix D

Procrastination log

Name _____

Date _____

Consider this last week. For each item below, please circle first the number which best describes how true the item has been for you during the past week. Then circle the number which best describes how satisfied you are with your performance.

	True (1)	Mostly true (2)	More true than false (3)	Cannot say (4)	More false than true (5)	Mostly false (6)	False (7)	Very Dissatisfied (1)	Moderately Dissatisfied (2)	Slightly Dissatisfied (3)	Neutral (4)	Slightly satisfied (5)	Moderately satisfied (6)	Very satisfied (7)
1. I reviewed my reading and notes so I wouldn't have to cram for exams later.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
2. I worked on papers and assignments that are due later in the quarter.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
3. I went to classes prepared for the lectures.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4. I kept up with the reading required for my courses.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. I was late turning in assignments.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. I daydreamed a lot.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. I studied more than I usually do.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8. I got more accomplished than I thought I would.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
9. I spent time thinking about procrastination and what I could do about it.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
10. I arrived on time for classes.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
11. I did other things when I should have been studying.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

procrastination inventory

Name _____

Date _____

The Procrastination Inventory asks you to describe your attitudes and beliefs about procrastination. For each statement below, please circle the number which best indicates how true or false the statement is as a description of you. Please rate each statement to the best of your ability.

1. There is nothing complicated about procrastination.
2. I procrastinate because it is the easy thing to do.
3. I can't resist the impulse to procrastinate.
4. I'll never be as conscientious as other people.
5. Any decrease in my procrastination will only be temporary.
6. Cramming will become less of a necessity in the future.
7. It is unrealistic for me to expect any long-term improvement in my procrastination behavior.
8. I can choose not to procrastinate when I want to.
9. Procrastination is a compulsion that is very difficult to stop.
10. I often put things off without thinking about what I am doing.
11. The harder I try to study, the more I seem to procrastinate.
12. I expect that my procrastination will be reduced only with great difficulty.
13. I suspect that I will always put off unpleasant tasks until the last possible moment.
14. If I work on it, I can overcome procrastination.

True (1)
 Mostly true (2)
 More true than false (3)
 Cannot say (4)
 More false than true (5)
 Mostly false (6)
 False (7)

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Go on to the next page. 

	<i>True (1)</i> <i>Mostly true (2)</i> <i>More true than false (3)</i> <i>Cannot say (4)</i> <i>More false than true (5)</i> <i>Mostly false (6)</i> <i>False (7)</i>						
15. My procrastination will be less of a problem in the future.	1	2	3	4	5	6	7
16. Procrastination is a stable part of my personality.	1	2	3	4	5	6	7
17. I become anxious when I know I have to study.	1	2	3	4	5	6	7
18. I can deal directly with my procrastination problem.	1	2	3	4	5	6	7
19. I feel prepared to make some real changes in my approach to studying.	1	2	3	4	5	6	7
20. I suppose I will always have to cram in order to get my work done.	1	2	3	4	5	6	7
21. Nothing I do seems to have any real effect on controlling my procrastination.	1	2	3	4	5	6	7
22. Procrastination can be controlled by increasing self-discipline.	1	2	3	4	5	6	7
23. I am confident that I will be able to start new tasks sooner than I used to.	1	2	3	4	5	6	7
24. Procrastination is something that I will be able to change soon.	1	2	3	4	5	6	7
25. I have a "mental block" about studying.	1	2	3	4	5	6	7
26. Eliminating procrastination is within my control.	1	2	3	4	5	6	7
27. It will become easier for me to get things done on time.	1	2	3	4	5	6	7
28. I don't anticipate that my procrastination will diminish.	1	2	3	4	5	6	7

Go on to the next page. ➡

29. I'm not sure why I procrastinate.

30. My procrastination reflects a lack of clear goals.

31. There are no simple solutions for controlling procrastination.

32. I expect that my procrastination may soon become a thing of the past.

33. I am optimistic about overcoming procrastination.

34. I expect that I will always have to live with procrastination.

35. Procrastination is a simple habit that can be easily broken.

36. Getting organized is the solution to procrastination.

True (1)
Mostly true (2)
More true than false (3)
Cannot say (4)
More false than true (5)
Mostly false (6)
False (7)

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Thank you.

Appendix F

Self-Evaluation Questionnaire

NAME: _____ TELEPHONE #: _____

SEX: Male _____ Female _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you feel in general. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

- 1 = Not at all
 2 = Somewhat
 3 = Moderately so
 4 = Very much so

- | | | | | |
|---|---|---|---|---|
| 1. I feel calm. | 1 | 2 | 3 | 4 |
| 2. I feel secure. | 1 | 2 | 3 | 4 |
| 3. I am tense. | 1 | 2 | 3 | 4 |
| 4. I am regretful. | 1 | 2 | 3 | 4 |
| 5. I feel at ease. | 1 | 2 | 3 | 4 |
| 6. I feel upset. | 1 | 2 | 3 | 4 |
| 7. I am presently worrying over possible misfortunes. | 1 | 2 | 3 | 4 |
| 8. I feel rested. | 1 | 2 | 3 | 4 |
| 9. I feel anxious. | 1 | 2 | 3 | 4 |
| 10. I feel comfortable. | 1 | 2 | 3 | 4 |
| 11. I feel self-confident. | 1 | 2 | 3 | 4 |
| 12. I feel nervous. | 1 | 2 | 3 | 4 |
| 13. I am jittery. | 1 | 2 | 3 | 4 |
| 14. I feel "high strung". | 1 | 2 | 3 | 4 |
| 15. I am relaxed. | 1 | 2 | 3 | 4 |
| 16. I feel content. | 1 | 2 | 3 | 4 |
| 17. I am worried. | 1 | 2 | 3 | 4 |
| 18. I feel over-excited and "rattled". | 1 | 2 | 3 | 4 |
| 19. I feel joyful. | 1 | 2 | 3 | 4 |
| 20. I feel pleasant. | 1 | 2 | 3 | 4 |

Appendix G

WRITTEN FEEDBACK

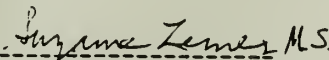
This study has been an investigation of how different interventions may be used in a counseling session to help an individual with procrastination. Students were divided into three treatment groups. The first group was asked to look at both the positive and the negative aspects of continuing to procrastinate. They were then encouraged to concentrate on changing the negative aspects, i.e. concentrating on stopping their procrastination. The second group was asked to look at the positive and negative aspects of procrastinating, but was then encouraged to look at the positive aspects of procrastinating. The third group kept records of their procrastinating habits but had no interviews.

All three interventions have been found to be of some help in helping procrastinators. This study was used to compare the advantages and disadvantages of each approach. Specifically, it was hypothesized that individuals have ambivalence about changing any habit, even a destructive one such as procrastination. Further, it was felt that individuals who had an opportunity to express the negative aspects of changing (group two) would fare better over time than those who are just encouraged to change (group one and three). Group three was also included to see what changes occurred just by monitoring procrastination behavior as opposed to monitoring plus encouragement or discouragement to change.

Any questions about this study will be gladly answered by the experimenter. She can be reached in Tobin Hall, room 602. If you are interested in continuing to work on issues of procrastination or any other issues that may have come up for you, some resources listed below:

1. Mental Health Service
University of Massachusetts
545-2337
2. Psychological Services Center
University of Massachusetts
545-0041

If you are interested in finding out the results of this study, please leave a note at Room 602 Tobin Hall. I would like to thank-you for your participation in this study. I hope that it may have helped you in some small way in dealing with your habit of procrastinating.



Suzanne Lerner, M.S.,
Investigator

Appendix H

ANALYSIS OF VARIANCE TABLES

Table Six

Pre-Test Inter-Scale Correlation Matrix of Dependent
Measures for All Conditions

	Controla- bility	Expecta- tion	Procrast- ination	Satis- faction
Expectation	.22			
Procrast- ination	-.14	-.41**		
Satisfaction	-.24	.29	.04	
Anxiety	-.04	-.25	.07	-.42**
*p< .05 **p< .01 ***p< .001				

Table Seven

Pre-Test Inter-Scale Correlation Matrix of Dependent Measures for Paradoxical Condition

	Controla- bility	Expecta- tion	Procrast- ination	Satis- faction
Expectation	.04			
Procrast- ination	-.31	-.03		
Satisfaction	-.66*	.17	.62*	
Anxiety	.34	-.17	-.01	-.57*
<p>*p< .05 **p< .01 ***p< .001</p>				

Table Eight

Pre-Test Inter-Scale Correlation Matrix of Dependent
Measures for Behavioral Condition

	Controla- bility	Expecta- tion	Procrast- ination	Satis- faction
Expectation	.51*			
Procrast- ination	-.19	-.61		
Satisfaction	.71**	.64*	-.68**	
Anxiety	-.31	-.36	.15	-.53*
<p>*p< .05 **p< .01 ***p< .001</p>				

Table Nine

Pre-Test Inter-Scale Correlation Matrix of Dependent Measures for Control Condition

	Controla- bility	Expecta- tion	Procrast- ination	Satis- faction
Expectation	-.32			
Procrast- ination	.48	-.66*		
Satisfaction	-.29	.39	-.66*	
Anxiety	-.23	.16	-.06	-.07
<p>*p< .05 **p< .01 ***p< .001</p>				

Table Ten

Analysis of Variance of Pre-Test Scores on the
Controlability, Expectation to Change, Procrastination,
Satisfaction, and Anxiety Scales for Subjects in the
Paradoxical, Behavioral and No-Interview Conditions

Scale	Source	df	MS	F	p
Controlability	Between	2	71.1	.57	.57
	Within	28	125.5		
Expectation	Between	2	337.0	1.83	.18
	Within	28	183.8		
Procrastination	Between	2	64.4	.35	.71
	Within	28	185.8		
Satisfaction	Between	2	80.0	.71	.50
	Within	28	112.3		
Anxiety	Between	2	10.4	.11	.90
	Within	28	95.1		

Table Eleven

Analysis of Variance of Pre-session and 1 Month Follow-up
of Scores for Controlability, Expectation, and
Procrastination for Subjects in the Behavioral and Control
Conditions

Scale	Source	df	MS	F	p
Controlability	Between	1	290.2	1.07	.31
	Within	19	271.0		
Expectation	Between	1	225.2	.48	.50
	Within	19	464.8		
Procrastination	Between	1	282.8	1.76	.20
	Within	19	160.8		

Table Twelve

Analysis of Variance of Pre-Session and 1 Month
Follow-up Scores of Expectation for Subjects in the
Paradoxical and Control Conditions

Scale	Source	df	MS	F	p
Expectation	Between	1	65.0	.36	.56
	Within	18	180.7		

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