

The Impact of Stress and Action Control
on the Occurrence of Depression on
a College Station Population

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Abstract

The impact of stress and Kuhl's personality moderator, action control, on the occurrence of depression on a college student population was studied. Three subscales of action orientation were examined, the failure, decision, and performance subscales. Persons who were action oriented on the failure and decision subscales were less depressed than their counterparts ("state oriented" persons). Two measures of stress, major life events and microstressors, both related to depression. Those persons with more stress were more depressed, with the microstressors being the better predictor of depression. Action oriented persons experienced fewer numbers of microstressors.

The Impact of Stress and Action Control on the Occurrence
of Depression on a College Student Population

This paper examined the relationship of stress and the personality moderator, action control, to depression. We will first discuss depression and then explain Kuhl's theory of action orientation and its relationship to depression. Finally, two kinds of stress will be defined, and the relationship stress has with both depression and action orientation will be examined.

Depression exhibits emotional, motivational, cognitive and somatic symptoms. The emotional symptoms are sadness, unhappiness, and despair. The depressed person's motivation level is low, and the person seems passive and without goals. In addition he or she will often experience a sense of hopelessness. Cognitive symptoms include a feeling of self worthlessness, and in extreme cases thoughts of suicide might prevail. Somatic symptoms include disruptions of sleeping and eating patterns. The subjects will fill out the Beck Depression Inventory (BDI) which measures all four of these symptoms by listing statements concerning the individual's thoughts and behaviors (Beck, Ward, Mendleson, Mock, & Erbaugh, 1961). Depression exists on a continuum. No exact dividing point exists between a depressed and nondepressed person. Moreover, depression does not remain on a static level over time. A person can vary in his or her level of depression.

Beck and Rush described depression in terms of the activation of three major cognitive patterns (Beck & Rush, 1980). First, the

depressives have a negative view of themselves. They view themselves as worthless and attribute adverse experiences to internal defects of character. Second, depressed persons have a distorted view of their current and past experiences and view the world to be overdemanding and interfering in their pursuits of goals. Finally, the depressives view the future in negative ways by thinking that their current difficulties and unhappiness will continue indefinitely.

Studies have shown biological facts to be a determinant in depression. However, many other factors can affect depression. Persons under higher levels of stress might experience greater depression. Also, the occurrence of stress moderated by various dysfunctional personality factors might increase the number of depressive symptoms a person experiences. Many differences in personality moderators exist among individuals. These factors can cause differences in the way an individual copes with stress. For instance, Type A and Type B individuals have different reactions to stress (Baron, 1986). In general Type A people are less able to cope effectively with stress, and consequently their stress might lead to depression. Thus, Type A persons might show a greater amount of depressive symptoms. The way persons perceive their causes of stress might influence their levels of depression. Johnson and Sarason found that persons with an internal locus of control are more likely to be healthy under high levels of stress than those persons with an external locus of control (Johnson and Sarason, 1978, cited in Billings & Moos, 1982). In addition, depressed persons might have less effective social skills (Youngren & Lewinson, 1980 cited in

Billings & Moos; 1982). Improving communication skills and social competence can reduce stress levels and consequently reduce their depression.

Kuhl proposed another personality moderator in his theory of action orientation (Kuhl, 1981, 1983, 1984, 1985). Action orientation (AO) also exists as a continuum. Although it is a fairly stable trait, a person can fluctuate on the degree of action orientation he exhibits. Various situations can cause a person to be more or less action oriented. Kuhl's theory is concerned with the psychological processes that intervene between intentions and actions (Kuhl, 1981, 1983, 1984 cited in Herrmann and Wartman, 1985). Intentions to behave and actual behavior correspond more among high action oriented persons as opposed to low action oriented persons, also called state oriented (SO) persons (Kuhl, 1985). State oriented persons fall back on routine or habitual activities rather than following through with their intended activity. Kuhl divided action orientation into three subscales: failure, decision, and performance (Kuhl, 1985). Persons high on the failure subscale focus on problem solving alternatives when encountering failure rather than dwelling on the causes or consequences of the failure. They do not become as emotionally disturbed when they do not succeed, and they are able to relinquish impossible goals. When persons scoring high on the failure scale realize their goals are unreachable they will set more realistic goals and move towards them. The second subscale is the decision scale. Persons scoring high on this scale are able to make decisions easily. They look at their alternatives, make a decision and move forward.

They do not vacillate among alternatives. Finally, the action orientation theory includes a performance subscale. Persons scoring high on this subscale focus on the actions needed to reach their goals rather than the goals themselves and the consequences of their performance. They are intrinsically interested in the activities in which they engage. They are not motivated solely by the need to achieve goals extrinsic to the activity, such as the goal of being esteemed by others.

Action orientation may be related to depression, especially under high levels of stress. A state oriented person encountering failure might experience a feeling of hopelessness, which is a motivational symptom of depression. An action oriented person in the same situation would focus on problem solving actions thus avoiding a hopeless feeling. State oriented persons vacillating between alternatives when making a decision might become frustrated with themselves and consequently become depressed. Action oriented persons can avoid this frustration by weighing their alternatives and quickly making a decision. Certain stressful conditions could magnify this feeling in a state oriented person and lead to a higher level of depression. Finally, action oriented persons might be better at solving the kinds of stressful life problems that left unsolved can lead to depression.

Many kinds of stressful events occur in a person's life. Stress can be divided into two broad categories, major life events, and microstressors. Major life events are dramatic events and severely taxing situations (Kanner, Coyne, Schaefer, & Lazarus, 1981). These

events might include death of a family member, serious illness or the break up of a long-standing relationship (Cochrane & Robertson, 1973). A large percentage of all previous research on stress has examined major life events. However, major life events may not be the best predictor of depressive symptoms. The average relationship between cumulated life events and health outcomes is only .12 (Rabkin & Streuning cited in Kanner, Coyne, Schaefer & Lazarus, 1981). An alternative to the major life events are microstressors which make up the Hassle Scales produced by Lazarus and his colleagues. Microstressors are defined as "the irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" (Kanner, Coyne, Schaefer & Lazarus, 1981, p. 3). It is the cumulative effect of these microstressors that should have a profound effect on depression. McLean said:

Perhaps because the unit of stress is relatively small and the stressors so familiar, these kinds of stressors have been taken for granted and considered to be less important than more dramatic stressors. Clinical and research data indicate that these microstressors act cumulatively, and in the relative absence of compensatory positive experience, can be potent sources of stress (McLean, 1976, p. 298, cited in Kanner, Coyne, Schaefer & Lazarus, 1981).

Kanner, Coyne, Schaefer & Lazarus (1981) did a study in which they compared the prediction of psychological symptoms of emotional distress from the Hassles Scale to that of Berlman's Life Events Scale. They found that the Hassles Scale was a better predictor of present psychological symptoms than the life events.

Several hypothesis were tested in the present study. Regarding the failure and decision subscales of Kuhl's action orientation theory, those persons with low AO scores were expected to be less

depressed. When encountering failure, high AO persons should engage in problem solving alternatives rather than dwelling on the failure itself, and thus should lead to a lower depression level. A person exhibiting SO in the decision subscale may continually worry about whether or not they made the right decision. This reaction could lead to a higher level of depression. Moreover, it could interfere with a personal ability to plan a course of action that could deal with stressful life problems. In the performance subscale the focus is on how individuals deal with an accomplishment, a positive event. This makes it quite different from the other two scales and thus, no difference in depression level is anticipated for high versus low scores on this scale.

Higher stress in terms of both major life events and microstressors is predicted to be positively related to depression. In addition, it is hypothesized that the microstressors will correlate with depression more strongly than the major life events will. Kanner, Coyne, Schaefer & Lazarus (1981) found the Hassles Scale to be a better predictor of psychological symptoms. They discussed how hassles might function as critical event mediators of the life events and serve as a direct indication of how a person's routine is being affected by life changes and thus be a better predictor of health status. An additional hypothesis regarding stress is that under conditions of high stress the difference in depression is expected to be greater between action and state oriented persons than under low levels of stress. This effect is anticipated because high stress should serve as a magnifying effect for the difference of action and

state oriented persons. Furthermore, it is also hypothesized that the effect of AO is greater for microstressors than stressful life events for depression. In cases of severe life events, action oriented persons may regress to state orientation. State orientation can also show positive effects such as: (1) development of a full understanding of the crisis; (2) formulation of subsequent plans to resolve crisis; (3) coming to terms with problems that have no solutions; and (4) making transitions to the next plan with a new identity and goals. Action orientation could actually impede coping if the resulting action does not alleviate the problem it was meant to solve (Kuhl, 1981, 1984 cited in Herrmann & Wortman, 1985). Also, in serious life events an action oriented person might show more state oriented characteristics thus diminishing the distinction between the two states.

Finally, we will measure both the frequency and intensity of the microstressors. Our hypothesis is that, while the frequency of the hassles should be the same for both action and state oriented persons, the severity level will be less for action oriented people. Since action oriented people focus on resolving crisis and taking action, they will perceive their hassles to be less severe (Herrmann & Wortman, 1985). An alternative hypothesis is that action oriented persons have learned skills to help them avoid hassles thus encountering a smaller number of microstressors.

Method

Subjects

Two hundred and seventy seven students (128 males and 149 females) from an Introductory Psychology class participated in the study. Data was collected in the fall semester of 1986 at Texas A&M University.

Procedures

Subjects were tested in groups of about 50 persons. The subjects had two hours to fill out the questionnaires. The order in which the measures were filled out was randomly determined for each subject. The subjects responded to the following measures: the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock & Erbaugh, 1961), Kuhl's "action control" scale also called the "state vs. action orientation" scale (Kuhl, 1985), Cochrane and Robertson's life events inventory (LEI; Cochrane & Robertson, 1973), and the Hassles Scale of microstressors (Kanner, Coyne, Schaefer & Lazarus, 1981).

The BDI is composed of 21 items. For each item the subjects chose the response that best described their feelings or behavior. One item has responses that includes: "(a) I do not feel sad, (b) I feel blue or sad, (c) I am blue or sad all the time, (d) I am so sad or unhappy that it is quite painful and (e) I am so sad or unhappy that I can't stand it." The BDI measures the level of depression in each subject. A high score on the BDI indicates a high level of depression (Beck, Ward, Mendelson, Mock & Erbaugh, 1961).

Kuhl's instrument is divided into three subscales: failure, decision and performance (Kuhl, 1985). Each subscale is composed of twenty questions and high scores indicate action orientation (AO) while low scores indicate state orientation (SO). Action orientation and its subscales were explained in the introduction. The failure subscale measures the subjects response to failure and a sample question is, "When I've made several futile attempts to start an assignment (a) I start something relatively soon or (b) I don't feel like doing anything at all". (a) is an AO answer while (b) is a SO answer. The decision subscale evaluates a subject's decision making process. A sample question is, "When I'm sitting at home and feel like doing something (a) I decide on one thing relatively fast and don't think much about other possibilities or b) I like to consider several possibilities before I decide on something", where (a) indicates AO and (b) indicates SO. Finally, the performance subscale shows what subjects focuses on when accomplishing their goals. A question on this subscale is, "When I've won an interesting game often (a) I like a change and do something else or (b) I could play on and on", where (b) is the AO response and (a) is the SO response.

The life events scale is a measure of stress that measures both positive and negative major life events that occur in a person's life. The subjects responded to 39 events by indicating if they had experienced this event in the past year. Events include such things such as unemployment, moving house, jail sentence, miscarriage, death of a close friend and break up of family (Cochrane & Robertson, 1973).

A high score indicates high stress. In this study we examined only the negatives events since past research has shown that positive changes do not lead to depression.

The Hassles Scale is concerned with microstressors which are minor annoyances that can occur every day in a subject's life. Examples of hassles are misplacing or losing things, inconsiderate smokers, planning meals, care for pet, gossip, and wasting time (Kanner, Coyne, Schaefer & Lazarus, 1981). Three summary scores were generated on the Hassles Scale. The frequency score is an account of how many hassles each subject encountered. The cumulated severity which is the sum of the scores of how severe each hassle is perceived to be was computed. Finally, the intensity, the cumulated severity divided by the frequency, was calculated. The intensity is an index of how strongly or intensely the average hassle was perceived. The Hassle Scale consists of 117 hassles and the subjects specified severity on a range from 0 to 3 for any hassle they had encountered in the past month.

The data from these questionnaires were recoded into workable form with a SPSSX program. A BMDP program was used to find the averages and to compute correlations and analyses of variance.

Results

Analyses of Variance

The first analyses were three separate analysis of variance (ANOVA) that examined the relationships of the failure, decision and performance subscales with depression. In addition to these factors,

each analysis also included two other factors, high vs. low life event stress and high vs. low levels of microstressors. The means associated with this and subsequent ANOVAs are shown in Table 1, page 19. The first ANOVA showed a main effect of failure on depression, $F(1,221) = 7.74, p < .05$. This effect means the persons action oriented on the failure scale are less depressed than their counterparts. The Hassles Scale also showed a main effect, $F(1,877) = 30.66, p < .05$. The LEI Inventory was another main effect, $F(1,137) = 4.78, p < .05$. These results indicate that higher stress leads to higher depression. An interaction exists between the Hassles and LEI for depression, $F(1, 126) = 4.41, p < .05$. The second ANOVA showed a main effect of decision on depression, $F(1,238) = 8.55, p < .05$. Persons highly action oriented on the decision scale showed less depressive symptoms. There was an interaction between the decision scale and the LEI for depression, $E(1,213) = 7.66, p < .05$. This result indicates that there is a greater difference between action and state orientation in high stress than in low stress. The third ANOVA showed no main effect of the performance subscale.

Correlational Analyses

As shown in the ANOVA, both the Hassles and LEI have a main effect on depression. To determine the relative strength of the relationship, correlation coefficients were computed and a t test was done to determine if the microstressors effect was stronger than the LEI. The Hassles ($r = .48$) did have a significantly stronger effect on depression, $t = 3.35, p < .05$, than the LEI ($r = .29$), thus

indicating that the Hassles Scale is a better predictor of depression than the LEI.

Correlations between the failure, decision, and performance subscales with the number of hassles and the average intensity of each hassle were computed. The total failure scale had a significant effect on both the number and intensity of hassles, $t = -5.53$, $p < .05$, $t = -2.99$, $p < .05$. The decision scale also had an effect on the number of hassles, $t = -3.57$, $p < .05$. These results indicate that persons high in action orientation on those scales experience less hassles, and those persons scoring high in action orientation or the failure subscale should perceive their hassles to be less severe. The opposite effect occurred with the performance subscale and the number of hassles, $t = 2.89$, $p < .05$, indicating that action orientated persons on this scale have more hassles. A trend for those high in AO in the performance scale to perceive their hassles as more severe was also seen, $t = 1.90$, $p > .05$.

Discussion

The results of this study showed higher action orientation to be related to lower depression for both the decision and the failure subscale. No relationship was anticipated for the performance subscale and depression, and no relationship was found. When state oriented persons encounter failure they dwell on the failure itself, a negative thought, and thus would be expected to be more depressed. The action oriented persons in the same situation focus on problem solving alternatives to remove themselves from this negative

situation. When state oriented persons encounter a decision making situation their inability to make a decision could lead to frustration. This frustration and subsequent worrying about whether the correct decision was made leads to depression. Action oriented persons make quick and effective decisions thus avoiding frustration and anxiety. Given these psychological differences between action and state oriented persons, the greater vulnerability of state oriented persons to depression is not surprising. With the decision scale greater differences were seen between action and state oriented persons in high levels of stress (LEI) than in low levels of stress. A trend of this effect also was seen with Hassles Scale and the failure subscale. Stress affects state oriented persons more than action oriented persons thus magnifying the difference in depression between them under higher levels of stress. Although this magnification effect was predicted to be stronger with the Hassles Scale than the LEI, the results did not support this hypothesis.

Both the Hassles and LEI significantly related to depression. Persons under higher levels of stress were more depressed. The Hassles, however, were a significantly better predictor of stress than the life events. Since most previous research has been done on life events, these results have serious research implications. When studying stress the Hassles Scale needs to be a dominant factor in describing stressful events.

In both the failure and decision subscales, action oriented persons experienced a significantly fewer number of hassles as well as perceiving them to be less severe. Most previous research on stress

has been concerned with how individuals cope with stress. However, these results indicate that action oriented persons have learned to avoid hassles. Future research can test what methods action oriented persons use to avoid hassles. The performance subscale did show an opposite effect which should be verified with future research.

In summary, the present study has shown that both stress and personality are related to depression. Kuhl's personality moderator, action control, affected stress and depression in two ways. First, state oriented persons seemed to be more affected by stress and consequently became more depressed than their counterparts. Second, action oriented persons seemed to have developed a lifestyle that allows them to avoid stress. These findings suggest that action control has an important bearing on vulnerability to depression and deserves further study.

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Appendix A

Beck Depression Inventory

Read the entire group of statements in each category. Then pick out the one statement in the group which best describes the way you feel today, that is, right now. Circle the number beside the statement you have chosen. If several statements in the group seem to apply equally well, circle each one.

Be sure to read all the statements in the group before making your choice.

1.
 - a. I do not feel sad
 - b. I feel blue or sad
 - c. I am blue or sad all the time
 - d. I am so sad or unhappy that it is quite painful
 - e. I am so sad or unhappy that I can't stand it

2.
 - a. I am not particularly pessimistic or discouraged about the future
 - b. I feel discouraged about the future
 - c. I feel I have nothing to look forward to
 - d. I feel that I won't ever get over my troubles
 - e. I feel that the future is hopeless and that things cannot improve

3.
 - a. I do not feel like a failure
 - b. I feel I have failed more than the average person
 - c. I feel I have accomplished very little that is worthwhile or that means anything
 - d. As I look back on my life all I can see is a lot of failure
 - e. I feel I am a complete failure as a person (parent, spouse)

4.
 - a. I am not particularly dissatisfied
 - b. I feel bored most of the time
 - c. I don't enjoy things the way I used to
 - d. I don't get satisfaction out of anything any more
 - e. I am dissatisfied with everything

5.
 - a. I don't feel particularly guilty
 - b. I feel bad or unworthy a good part of the time
 - c. I feel quite guilty
 - d. I feel bad or unworthy practically all the time now
 - e. I feel as though I am very bad or worthless

6.
 - a. I don't feel I am being punished
 - b. I have a feeling that something bad may happen to me
 - c. I feel I am being punished or will be punished
 - d. I feel I deserve to be punished
 - e. I want to be punished

7.
 - a. I don't feel disappointed in myself
 - b. I am disappointed in myself
 - c. I don't like myself
 - d. I am disgusted with myself
 - e. I hate myself

8.
 - a. I don't feel I am worse than anybody else
 - b. I am critical of myself for my weaknesses or mistakes
 - c. I blame myself for my faults
 - d. I blame myself for everything that happens

9.
 - a. I don't have any thoughts of harming myself
 - b. I have thoughts of harming myself but I would not carry them out
 - c. I feel I would be better off dead
 - d. I feel my family would be better off if I were dead
 - e. I have definite plans about committing suicide

10.
 - a. I don't cry any more than usual
 - b. I cry more than I used to
 - c. I cry all the time now. I can't stop
 - d. I used to be able to cry but now I can't cry at all even though I want to

11.
 - a. I am no more irritated now than I ever am
 - b. I get annoyed or irritated more easily than I used to
 - c. I feel irritated all the time
 - d. I don't get irritated at all at things that used to irritate me

12.
 - a. I have not not interest in other people
 - b. I am less interested in other people now than I used to be
 - c. I have lost most of my interest in other people and have little feeling for them
 - d. I have lost all my interest in other people and don't care about them at all

13.
 - a. I make decisions about as well as ever
 - b. I try to put off making decisions
 - c. I have great difficulty in making decisions
 - d. I can't make any decisions at all anymore

14.
 - a. I don't feel I look any worse than I used to
 - b. I am worried that I am looking old or unattractive
 - c. I feel that there are permanent changes in my appearance and they make me look unattractive
 - d. I feel that I am ugly or repulsive looking

15.
 - a. I can work as well as before
 - b. It takes extra effort to get started doing something
 - c. I don't work as well as I used to
 - d. I have to push myself very hard to do anything
 - e. I can't do any work at all

16.
 - a. I can sleep as well as usual
 - b. I wake up more tired in the morning than I used to
 - c. I wake up 2-3 hours earlier than usual and find it hard to get back to sleep
 - d. I wake up early every day and can't get more than 5 hours sleep

17. a. I don't get any more tired than usual
b. I get tired more easily than I used to
c. I get tired from doing nothing
d. I get too tired to do anything
18. a. My appetite is not worse than usual
b. My appetite is not as good as it used to be
c. My appetite is much worse now
d. I have no appetite at all
19. a. I haven't lost much weight, if any, lately
b. I have lost more than 5 pounds
c. I have lost more than 10 pounds
d. I have lost more than 15 pounds
20. a. I am no more concerned about my health than usual
b. I am concerned about aches and pains or upset stomach or constipation
c. I am so concerned with how I feel or what I feel that it's hard to think of much else.
d. I am completely absorbed in what I feel
21. a. I have not noticed any recent change in my interest in sex
b. I am less interested in sex than I used to be
c. I am much less interested in sex now
d. I have lost interest in sex completely

Appendix B

Kuhl's Action Control Scale

INSTRUCTIONS:

Please answer the following questions by coding the appropriate oval on the red answer sheet that seems to best describe your reaction. It may occur that neither answer choice, or sometimes both, will seem to apply to you. In such cases, code the answer that more nearly describes your reaction.

There are no right or wrong answers to the questions. We are interested in your spontaneous reaction to them. Therefore please answer quickly; don't take a long time to think, but decide on the best choice spontaneously. What we are interested in is your first reaction to the question.

Please answer all questions, not omitting any. We can only evaluate the questionnaire if you have answered all questions. Please mark the one alternative for each question that best describes your reaction.

1. When I've had good ideas while playing a difficult game
 - a. I soon look for something else to do
 - b. I could play on for hours
2. When I've done extremely well in an important contest
 - a. I'd like best to continue
 - b. I then like to do completely different things
3. When I receive an award for excellent achievement
 - a. I like to continue practicing in the same area immediately
 - b. I like to do things that have nothing to do with this area
4. When I've finished an excellent piece of work
 - a. I like to do something else for a while
 - b. it makes me want to do something more in the same area
5. When I've won an interesting game often
 - a. I like a change and do something else
 - b. I could play on and on
6. When I've made a decisive win in a game
 - a. I have a longing to stop the game after a while
 - b. I'd just as soon keep right on playing

7. When the food really tastes good and I've already had enough
 - a. I continue eating because the food looks so good
 - b. I stop eating
8. When I'm reading something interesting
 - a. I busy myself with other things sometimes for a change
 - b. I often stick with it for a long time
9. When the TV schedule seems interesting to me
 - a. I watch one program after the other
 - b. I soon need a change anyway
10. When I do something interesting with friends
 - a. I soon get interested in something else anyway
 - b. I'd rather not stop with what we're doing
11. When I've constructed something complicated that didn't take me very long
 - a. I soon turn my attention to something else
 - b. I congratulate again and again about how well it turned out
12. If I get lucky in a situation where my chances were poor
 - a. I play it back in my mind over and over again
 - b. It's not long before I think about other things
13. When I've accomplished something really important
 - a. I think about other things relatively soon
 - b. I can't think about anything else at first
14. When my effort is graded unexpectedly well
 - a. I don't think about it long
 - b. I think about how well I did
15. When I try something new and I'm successful with it
 - a. I keep thinking of it for a while
 - b. I think about something else after a little while
16. If I were to win a lot of money (e.g., in a lottery)
 - a. I would immediately think about how to spend the money
 - b. I would keep thinking about how I could have been so lucky

17. When somebody surprises me with a gift that really pleases me
 - a. I think about the nice surprise for a long time
 - b. I soon busy myself with other things after the initial surprise is over
18. When the doctor tells me that I don't have any internal injuries after I've taken a bad fall
 - a. it's a closed case for me
 - b. my relief lasts a long time
19. When I really like a vacation
 - a. I busy myself with other things soon after I return
 - b. after my return, I think a lot about the vacation
20. If someone has irritated me and I really told him off
 - a. then the matter is finished for me
 - b. the feeling of satisfaction stays with me for quite a while
21. When I've made several futile attempts to start an assignment
 - a. I start something else relatively soon
 - b. I don't feel like doing anything at all
22. When my work is labeled "unsatisfactory"
 - a. then I really dig in
 - b. at first I am stunned
23. When I notice that I'm not getting anywhere with something important
 - a. it kind of cripples me
 - b. I lay it aside for a while and do something else
24. When something breaks down unexpectedly
 - a. it takes a while before I can get myself to do something about it
 - b. I undertake the necessary steps immediately
25. When I can't memorize something even though I've tried and tried
 - a. I find it hard to start anything else
 - b. I do something else for awhile
26. When grades do not match the effort I put into a task
 - a. it takes a while before I get over the disappointment
 - b. I then work extra hard

27. When something important to me just keeps going wrong
- a. I gradually get discouraged
 - b. I forget about it for a while and do something else
28. When something makes me sad
- a. I lose all desire to do anything
 - b. I try to divert my attention to other things
29. When several things go wrong for me on the same day
- a. I really don't know what to do with myself
 - b. I can still do things as though nothing had happened
30. When my whole ambition is to finish something successfully and it doesn't work out
- a. I would like to start the whole thing over again from the beginning
 - b. it's hard for me to do anything at all
31. If I lost something of value and all effort to find it proved futile
- a. I would have a hard time getting over it
 - b. I wouldn't think about it very long
32. If I've worked on a project for four weeks and everything turns out wrong
- a. It's a long time before I get over it
 - b. I don't let it bother me for very long
33. When I'm lagging far behind in a contest of some sort
- a. I think about how I can make the best of the situation
 - b. I think about whether or not I might make a fool of myself
34. When a new appliance falls on the floor by accident
- a. I concentrate fully on what should be done
 - b. I can't stop thinking about how this could happen
35. If somebody is unfriendly to me
- a. it can put me in a bad mood for quite a while
 - b. it doesn't bother me for long
36. When I'm in pain
- a. I am able to concentrate on other things
 - b. I can hardly think about anything else

37. When I'm taking an important test and I notice that I'm not doing too well
- a. it gets harder and harder for me to concentrate on the questions
 - b. I don't think much about it until the test is over
38. When I have to write a letter and can't think of anything else to say
- a. I think about whether or not there's something else I can do
 - b. I can't think about anything else
39. When I notice I've been used
- a. I can't stop thinking about it for a long time
 - b. I soon forget about it
40. When a friend suddenly behaves in a way that shows the friend has withdrawn from me
- a. I immediately consider how I should behave towards her/him
 - b. I try hard to figure out what's the matter
41. If I had to work at home
- a. I would often have problems getting started
 - b. I would usually start immediately
42. When I want to see someone again
- a. I try to set a date for the visit right away
 - b. I plan to do it some day
43. When I have a lot of important things to take care of
- a. I often don't know where to start
 - b. It is easy for me to make a plan and then stick to it
44. When I have two things that I would like to do and can do only one
- a. I decide between them pretty quickly
 - b. I wouldn't know right away which was most important to me
45. When I have to do something important that's unpleasant
- a. I'd rather do it right away
 - b. I avoid doing it until it's absolutely necessary

55. When I have to solve a difficult problem
- I think about a lot of different things before I really start on the problem
 - I think about which way would be best to try first
56. When I'm trying to solve a difficult problem and there are two solutions that seem equally good to me
- I make a spontaneous decision for one of the two without thinking much about it
 - I try to figure out whether or not one of the solutions is really better than the other
57. When I have to study for a test
- I think a lot about where I should start
 - I don't think about it too much; I just start with what I think is most important
58. When I've made a plan to learn how to master something difficult
- I first try it out before I think about other possibilities
 - before I start, I first consider whether or not there's a better plan
59. When I'm faced with the problem of what to do with an hour of free time
- sometimes I think about it for a long time
 - I come up with something appropriate relatively soon
60. When I've planned to buy just one piece of clothing but then see several things that I like
- I think a lot about which piece I should buy
 - I usually don't think about it very long and decide relatively soon

Appendix C

LEI

The following are a series of life events which you may be experiencing or have experienced during the past year, such as beginning a new job or taking a vacation. For each event listed, please indicate if you have experienced it in the past six months by filling in (a) for yes and (b) for no

(a) yes

(b) no

- | | | |
|------------------------------------------------------------------|---|---|
| 1. Unemployment | a | b |
| 2. Trouble with superior at work | a | b |
| 3. New job in same line of work | a | b |
| 4. New job in new line of work | a | b |
| 5. Change of hours or condition in present job | a | b |
| 6. Promotion or change of responsibilities at work | a | b |
| 7. Retirement | a | b |
| 8. Moving house | a | b |
| 9. Purchasing own house (taking out mortgage) | a | b |
| 10. New neighbors | a | b |
| 11. Quarrel with neighbors | a | b |
| 12. Income increased substantially (25%) | a | b |
| 13. Income decreased substantially (25%) | a | b |
| 14. Getting into debt beyond means of repayment | a | b |
| 15. Going on holiday | a | b |
| 16. Conviction for minor violation (eg. speeding or drunkenness) | a | b |
| 17. Jail sentence | a | b |
| 18. Involvement in a fight | a | b |
| 19. Immediate family member starts drinking heavily | a | b |
| 20. Immediate family member attempts suicide | a | b |
| 21. Immediate family member is sent to prison | a | b |
| 22. Death of an immediate family member | a | b |
| 23. Death of close friend | a | b |
| 24. Immediate family member serious ill | a | b |
| 25. Gain of new family member (immediate) | a | b |
| 26. Problem related to alcohol or drugs | a | b |
| 27. Serious restriction of social life | a | b |

28.	Period of homelessness	a	b
29.	Prolonged illness or injury requiring hospital treatment	a	b
30.	Prolonged ill health requiring treatment by own doctor	a	b
31.	Sudden and serious impairment of vision or hearing	a	b
32.	Unwanted pregnancy	a	b
33.	Miscarriage	a	b
34.	Abortion	a	b
35.	Sex difficulties	a	b
36.	Break up with steady boy or girlfriend	a	b
37.	Problems related to sexual relationship	a	b
38.	Increase in number of family arguments (eg. with parents)	a	b
39.	Break up of family	a	b

Appendix D

The Hassles Sacle

Directions: Hassles are irritants that can range from minor annoyances to fairly major pressures, problems, or difficulties. They can occur few or many times.

The following list is composed of a number of ways in which a person can feel hassled. Using the key indicate how severe each hassle has been for you in the past month.

-
- (a) Has not occurred
 (b) Occurred somewhat severe
 (c) Was moderately severe
 (d) Was extremely severe
-

- | | | | | | |
|-----|----------------------------------------------------------------|---|---|---|---|
| 1. | Misplacing or losing things | a | b | c | d |
| 2. | Troublesome neighbors | a | b | c | d |
| 3. | Social obligations | a | b | c | d |
| 4. | Inconsiderate smokers | a | b | c | d |
| 5. | Troubling thoughts about your future | a | b | c | d |
| 6. | Thoughts about death | a | b | c | d |
| 7. | Health of a family member | a | b | c | d |
| 8. | Not enough money for clothing | a | b | c | d |
| 9. | Not enough money for housing | a | b | c | d |
| 10. | Concerns about owing money | a | b | c | d |
| 11. | Concerns about getting credit | a | b | c | d |
| 12. | Concerns about money for emergencies | a | b | c | d |
| 13. | Someone owes you money | a | b | c | d |
| 14. | Financial responsibility for someone who doesn't live with you | a | b | c | d |
| 15. | Cutting down on electricity, water, etc. | a | b | c | d |
| 16. | Smoking too much | a | b | c | d |
| 17. | Use of alcohol | a | b | c | d |
| 18. | Personal use of drugs | a | b | c | d |
| 19. | Too many responsibilities | a | b | c | d |
| 20. | Decisions about having children | a | b | c | d |
| 21. | Non-family members living in your house | a | b | c | d |
| 22. | Care for pet | a | b | c | d |
| 23. | Planning meals | a | b | c | d |

- (a) Has not occurred
- (b) Occurred somewhat severe
- (c) Was moderately severe
- (d) Was extremely severe

24.	Concerned about the meaning of life	a	b	c	d
25.	Trouble relaxing	a	b	c	d
26.	Trouble making decisions	a	b	c	d
27.	Problems getting along with fellow workers	a	b	c	d
28.	Customers or clients giving you a hard time	a	b	c	d
29.	Home maintenance (inside)	a	b	c	d
30.	Concerns about job security	a	b	c	d
31.	Concerns about retirement	a	b	c	d
32.	Laid off or out of work	a	b	c	d
33.	Don't like current work duties	a	b	c	d
34.	Don't like fellow workers	a	b	c	d
35.	Not enough money for basic necessities	a	b	c	d
36.	Not enough money for food	a	b	c	d
37.	Too many interruptions	a	b	c	d
38.	Unexpected company	a	b	c	d
39.	Too much time on hands	a	b	c	d
40.	Having to wait	a	b	c	d
41.	Concerns about accidents	a	b	c	d
42.	Being lonely	a	b	c	d
43.	Not enough money for health care	a	b	c	d
44.	Fear of confrontation	a	b	c	d
45.	Financial security	a	b	c	d
46.	Silly practical mistakes	a	b	c	d
47.	Inability to express oneself	a	b	c	d
48.	Physical illness	a	b	c	d
49.	Side effects of medication	a	b	c	d
50.	Concerns about medical treatment	a	b	c	d
51.	Physical appearance	a	b	c	d
52.	Fear of rejection	a	b	c	d
53.	Difficulties with getting pregnant	a	b	c	d
54.	Sexual problems that result from physical problems	a	b	c	d
55.	Sexual problems other than those resulting from physical problems	a	b	c	d

- (a) Has not occurred
- (b) Occurred somewhat severe
- (c) Was moderately severe
- (d) Was extremely severe

56.	Concerns about health in general	a	b	c	d
57.	Not seeing enough people	a	b	c	d
58.	Friends or relatives too far away	a	b	c	d
59.	Preparing meals	a	b	c	d
60.	Wasting time	a	b	c	d
61.	Auto maintenance	a	b	c	d
62.	Filling out forms	a	b	c	d
63.	Neighborhood deterioration	a	b	c	d
64.	Financing children's education	a	b	c	d
65.	Problem with employees	a	b	c	d
66.	Problems on job due to being a woman or man	a	b	c	d
67.	Declining physical abilities	a	b	c	d
68.	Being exploited	a	b	c	d
69.	Concern about bodily functions	a	b	c	d
70.	Rising prices of common goods	a	b	c	d
71.	Not getting enough rest	a	b	c	d
72.	Not getting enough sleep	a	b	c	d
73.	Problems with aging parents	a	b	c	d
74.	Problems with your children	a	b	c	d
75.	Problems with persons younger than yourself	a	b	c	d
76.	Problems with your lover	a	b	c	d
77.	Difficulties seeing or hearing	a	b	c	d
78.	Overloaded with family responsibilities	a	b	c	d
79.	Too many things to do	a	b	c	d
80.	Unchallenging work	a	b	c	d
81.	Concerns about meeting high standards	a	b	c	d
82.	Financial dealings with friends or acquaintances	a	b	c	d
83.	Job dissatisfaction	a	b	c	d
84.	Worries about decisions to change jobs	a	b	c	d
85.	Trouble with reading, writing, or spelling abilities	a	b	c	d
86.	Too many meetings	a	b	c	d
87.	Problems with divorce or separation	a	b	c	d

- (a) Has not occurred
- (b) Occurred somewhat severe
- (c) Was moderately severe
- (d) Was extremely severe

88.	Trouble with arithmetic skills	a	b	c	d
89.	Gossip	a	b	c	d
90.	Legal problems	a	b	c	d
91.	Concerns about weight	a	b	c	d
92.	Not enough time to do the things you need to do	a	b	c	d
93.	Television	a	b	c	d
94.	Not enough personal energy	a	b	c	d
95.	Concerns about inner conflict	a	b	c	d
96.	Feeling conflicted over what to do	a	b	c	d
97.	Regrets over past decisions	a	b	c	d
98.	Menstrual (period) problems	a	b	c	d
99.	The weather	a	b	c	d
100.	Nightmares	a	b	c	d
101.	Concerns about getting ahead	a	b	c	d
102.	Hassles from boss or supervisor	a	b	c	d
103.	Difficulties with friends	a	b	c	d
104.	Not enough time for family	a	b	c	d
105.	Transportation problems	a	b	c	d
106.	Not enough money for transportation	a	b	c	d
107.	Not enough money for entertainment or recreation	a	b	c	d
108.	Shopping	a	b	c	d
109.	Prejudice or discrimination from others	a	b	c	d
110.	Property investment or taxes	a	b	c	d
111.	Not enough time for entertainment and recreation	a	b	c	d
112.	Yardwork or outside home maintenance	a	b	c	d
113.	Concerns about news events	a	b	c	d
114.	Noise	a	b	c	d
115.	Crime	a	b	c	d
116.	Traffic	a	b	c	d
117.	Pollution	a	b	c	d
118.	Trouble with a professor	a	b	c	d
119.	Conflict with roommate	a	b	c	d