DOCUMENT RESUME

ED 192 198 CG 014 650

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TITLE Clinical and Experimental Research Utilizing the DACL.
PUB DATE 80
NOTE 27p.: Paper presented at the Annual Meeting of the Western Psychological Association (60th, Honolulu, HI, May 5-9, 1980).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Affective Measures; *Behavior Rating Scales; *Check Lists; Clinical Psychology; Correlation; *Depression (Psychology); *Evaluation Methods; *Measures (Individuals); Research; State of the Art Reviews; Test Reliability; Test Validity; Therapy
IDENTIFIERS *Depression Adjective Checklists

ABSTRACT

Since the development of the Lubin Depression Adjective Check Lists (DACL) in 1965, researchers have used this instrument in many empirical and clinical studies. Scores on the DACL have correlated with other measures of depression and have also been related to personal characteristics of depressed individuals. The DACL has been used in studies to assess depression across time in relation to physical and psychological conditions such as insomnia, and in studies of premenstrual mood change and mood change during pregnancy and following childbirth. Studies on the effects of drugs or medical treatments have used the DACL to investigate cyclic hormonal levels, response to electroconvulsive shock, alcohol withdrawal, drug intake, pain perception, and exertion. Evaluation studies of therapy or behavioral interventions for the treatment of depression often use the DACL. Theoretical investigations of anger and learned helplessness have also used the DACL. Ease of administration and the benefits of matched repeated lists have provided investigators with a simple method for assessing depression across time and in relation to a number of concomitant events. (NRB)

Clinical and Experimental Research Utilizing the DACL

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Paper presented as part of a Symposium, Chair B. Lubin
"Recent Research with the Depression Adjective Checklist"
Western Psychological Association, 1980

Clinical and Experimental Research

Utilizing the DACL

The Depression Adjective Check Lists (DACL, see bibliography 1-136) developed by Lubin in the mid nineteen sixties (71, 73) quickly became a psychological instrument of wide spread use meeting an obvious need among researchers interested in depression and mood. Since the time when the DACL first became easily available to investigators, about a hundred and forty studies have been published which cite or use the DACL - many more have been completed and are not yet published. The popularity of the DACL arises for several reasons. The Check Lists were well crafted and extensive reliability and validity data are available making this a dependable instrument for experimenters. The DACL assesses self-report of depressive affect - an area of interest for clinical, personality, social, human physiology and health research and one that has become increasingly popular over the last few years. Depression represents a mental health problem which accounts for the second highest patient admission to our psychiatric facilities and is among the few emotional disorders which may lead to a fatal outcome - suicide. Chronic depression -- not serious enough to warrant hospitalization extracts an enormous toll in regard both to the use of out-patient facilities and the psychological well-being of large numbers of supposedly "normally functioning" persons who do not seek treatment. Symptoms of depression accompany almost all of our major and minor physical health problems ranging from heart attack to the flu. And, depression appears to be a concomitant of the everyday stress and difficulties of living which most of us feel. Not only does depression account for substantial lost work time and productivity but in many cases interferes with on-going activities so that individuals are not as well-functioning or as happy as they might be

otherwise. Depression is a disorder or complex of disorders which may have multiple etiologies and demand a myriad of intervention techniques. Aside from clinical depression, or the evidence of depressive symptoms among "normally functioning" individuals, the area of mood or affective states has also attracted the interest of a large number of psychologists and students. Although mood states has been a relatively neglected area of investigation in psychological research, recent advances in physiological psychology and an abiding concern with the role of feelings and experience in relation to individual, and even group behavior, has led to a resurgence of experimentations with relation to affect. Researchers and clinicians in these broad areas of mood and depression looked for assessment instruments which would help describe the phenomenon of negative affect mood states labeled depression and so eagerly embraced the DACL when it became available. Of further importance is the fact that the DACL, to my knowledge, is the only instrument which is specifically designed to assess depressive mood across time. Many affective states appear to be temporary or changeable and investigators often wish to consider naturally occurring moods *or* the effects of treatment manipulations across time. Thus, the availability of short, easily-administered, matched Check Lists which tap an important experience provide an appropriate and exceptional methodology for psychological research in the areas of depression and mood.

Within the area of depression, or the depressions, a number of diverse issues and problems are under investigation. These range from basic physiological concomitants of depression through an examination of temporary mood states to descriptions of large group characteristics. Moreover, the range

of subject populations is quite broad and among others includes hospitalized psychiatric patients, alcoholics, housewives, college students, and subjects who have agreed to respond to or reflect on certain naturalistic or experimental manipulations. The Lubin DACL has been translated into several languages and Tony Marsella will be speaking on cross-cultural work with this instrument. I would like to comment briefly on several different areas of current research with the DACL, especially noting those in which the most of the research using this instrument has been accomplished.

Obviously, any psychometric instrument which purports to tap phenomena such as depression and mood should be subject to a consideration of construct validity in relation to other paper-and-pencil assessment and diagnostic instruments. Considerable work of this nature has been accomplished with the DACL and scores on this measure have been related to numerous other personality trait and state measures. People who score high on depression on the DACL also score high on the other traditional measures of depression such as the Zung, the Beck, the Hamilton, and others. In our own research, we will often collect pre-experimental data from subjects using a wide range of depression measures including the DACL. Often we will pre-select for depression but we still want to reassess mood state when the subject appears for the experiment -- especially if some time has passed between pre-screening and the actual experiment. We will then repeat the DACL and occasionally the Multiple Affect Adjective Check List (MAACL) at the beginning of the experiment proper. Because these instruments can be answered quickly, this saves time for us but more importantly the availability of matched lists allows us to collect additional data on the expression of depressive affect without some of the

difficulties inherent in using the same measure over again. We are able to avoid such problems as prior commitment to scale items, the subject attempting to recall what s/he has marked before, and so on. We do, of course, compare scores across instruments and across time and we find appropriate reliability and validity with the Lubin DACL.

Aside from correlations with other measures of depression, the DACL has also been related to personal characteristics which would be expected to be correlated with depression. These include neuroticism, poor personal adjustment, low self-confidence and self-control (82), anxiety (26, 88), low self-esteem, unhappiness (88), and negative cognitions about oneself (129). High need approval (Napp) and depression, as measured by the DACL, appear to be related for individuals of different socio-economic groups (56) although some investigators find the Napp-DACL results equivocal (11, 88). Black, Puerto Rican, and white psychiatric patients who express a need for help also score high on the DACL (24). Sheslow and Erickson (118) asked college students to report their activity levels across time and found that depressed students, as measured by the DACL, were likely to reduce their engagement in a large number of activities in a relatively small way rather than reporting depression as a function of large, or more catastrophic events. Students may also report themselves to be helpless in relation to life events seeing little relationship between their own behaviors and subsequent rewards or punishments. In our laboratories, W. Daniel Hale and I (Note 3) considered relationships between scores on the DACL for both male and female college students who also answered questionnaires about internal versus external expectancies about control of reinforcement and chronic depression as assessed

by the Zung scale. Because social desirability responding can be a problem especially when individuals are asked to report negative things about themselves, such as symptoms of depression, we controlled for social desirability bias through the use of the Marlowe-Crowne Social Desirability Scale (M-C SD). We found that individuals who attribute reinforcement to forces beyond their personal control and understanding are more likely to report depressive feelings and symptomotology -- especially for chronic depression. These relationships were modified according to sex of subjects and occurred even when social desirability responding was controlled. Through the use of the DACL, we also found that for the most effective prediction it is necessary to differentiate between chronic and temporary depression. Different aspects of internal/external beliefs must also be elucidated as well. We found relationships between internal/external expectancies about control of reinforcement and depression are attenuated although still significant (dependent on sex) when one considers DACL scores — which we assumed to reflect current mood state than in relation to chronic depression as assessed by the Zung.

So, based on the construct validity of the DACL, we have a picture of the depressed person -- whether clinically depressed or supposedly "normally functioning"--which fits the stereotype of depression. Persons who report themselves depressed on the DACL also report themselves depressed, to some degree, on other traditional measures of depression, including those designed for clinical populations. These persons appear to be somewhat neurotic, anxious, and low in self-confidence. They tend to engage in negative self-cognitions, may feel a need for attention and/or help from others, feel powerless to control life events and may see little relationship between their

own behaviors and subsequent rewards.

A second group of studies has to do with expression of depression across time in relation to certain physical and psychological conditions. For example, Coursey, Buchsbaum, and Frankel (17) investigated personality characteristics and evoked potentials among 18 chronic insomniacs. Because, they wished to repeat measures of state depression across the five nights that the insomniacs slept in their laboratory, they used the DACL for this purpose and correlated DACL scores to other measures. Overall, they found insomniacs, in contrast to matched normal sleepers, to be more depressed, to show more anxious worrying behaivor, and to be sensory reducers as evidenced by lower evoked potential responses to sound and low scores on the Sensation-seeking scale. Other studies (47, 122) having to do with sleep behavior during alcohol intake and withdrawal stages have also used the DACL to assess depression across time. Investigators found substantial sleep disturbances for chronic alcoholics across ten nights of alcohol withdrawl following two days of alcohol intake. They report sleep patterns similar to those of persons much older than their sample. Also there appears to be a diminished amount of slow-wave sleep for their patients which does not change dramatically across the ten days although patients do report less anxiety and depression.

Because depression and anxiety are symptoms which are often reported by women who are pregnant or have recently delivered a child, several investigators have used the DACL to consider change in mood during pregnancy and following child birth. Lubin et al.(81) found no significant changes in report of depression on the DACL across the trimesters of pregnancy for 93 predominantly white, middle-class pregnant women. They did find relationships between DACL scores age during the first and second trimester although this correspondence

diminished during the third trimester. Blumberg (Note 2) assessed psychological stress among 100 mothers, primarily from low-socioeconomic and minority groups, who had recently delivered infants representing a wide range of neonatal conditions. She found that higher levels of neonatal risk were related to higher levels of depression, as assessed by the DACL, and anxiety and to more negative perceptions of the newborn. Negative maternal attitudes toward pregnancy and childbirth were significantly related to postpartum anxiety but not to depression or perception of the newborn. The DACL has also been used as a measure of depression in relation to premenstrual mood changes (33, 34). Golub found significant increases in depression and anxiety premenstrually for 50 women between the ages of 30 and 45 relative to reports obtained at mid cycle. Self-report of mood changes from these normally functioning women were much lower than anxiety and depression mean scores for patients with psychiatric disorders.

Another obvious advantage of the availability of matched depression instruments is the use of these measures in studies investigating the effects of drugs, or certain other medical treatment strategies. The DACL has been used in studies investigating cyclic hormonal levels (120), response to electroconvulsive shock (121), alcohol withdrawal (29, 47, 122), intake of lithium (102) and other drugs (94), pain perception and exertion (98, 99).

Studies which are an evaluation of therapy or behavioral interventions for the treatment of depression often use the DACL. Lewisohn and his colleagues (61-68, 132) have been the investigator/clinicians who have done the most extensive work in this regard. Basically, Lewisohn espouses a social-learning interpretation of depression. He assumes that a reduced rate of positive reinforcement is a critical antecedent condition for the occurrence of depressed behaviors and social interactions provide contingencies which strengthen and maintain depressive behaviors. His treatment approach then

is an attempt to reduce the occurrence of depressed behaviors and to help the patient engage in behaviors which are likely to restore an adequate schedule of positive reinforcement for him or her. Lewinsohn has the patient identify current behavioral patterns and will then, with the patients, attempt to modify or change the social milieu or the pateint's interpersonal behavior so that an adequate schedule of positive reinforcement can be restored. These behavioral interventions are often evaluated by having the patient complete rating scales or coding instruments. When the presenting complaint is depression, Lewinsohn and his colleagues will often use the DACL to measure change in self report of depressive affect across time. Again, the use of matched measures offers the benefits of the use of repeated measures without the drawbacks of having to use an identical instrument which must be completed several times. These behavioral approaches to changing depressed behaviors are not limited to individual work but have also been used in groups (68, 93) where the availability of a short, easily administered set of matched, repeated measures has obvious advantages.

Another grouping of studies using the DACL have to do with theoretical investigations. In addition to the large number of clinical studies which have been completed and the range of studies describing correlates of depression, a smaller set of investigations can be characterized as theoretical in nature. As I mentioned earlier, research on mood and affect states has been a relatively neglected area in psychology in spite of the fact that personal experiences of feelings and emotions appear to many of us, psychologists and laypeople alike, as the very well-springs of our every day existence. I will mention several studies which represent this approach, including one conducted in our own laboratories. These have to do with trying to come to a clearer understanding

and delineation of some fundamental behaviors or psychological phenomena assumed to be inherent in depression. For example, psychoanalytic theorists posit aggression and hostility as central to depression. Atkinson and Polivy (2) conducted an investigation of response to insult and subsequent retaliation. Male and female subjects were placed in an arbitrary waiting situation and then either attacked (verbally) or apologized to by the experimenter. Half the subjects in each group was given the opportunity to retaliate by negatively evaluating the experimenter on a written form. State hostility and depression (as measured by the DACL) were measured before the anger manipulation and again after the manipulation and retaliation. Both males and females became angry and depressed following the attack, and females tended to become more depressed than males (though not more angry). Although males reported more outward hostility than did females after attack, the females retaliated more. Retaliation did not reduce either anger or depression. Incidentally, although we did not use the DACL in this particular study, Bill Haley (Note 4) in our laboratories also completed an experimental induction of anger via the use of a double cross which did not involve verbal insult or manipulation of self esteem. All of the subjects (female) reported anger at the instigator and those who scored high on the Zung scale were significantly more likely to be self critical on a performance task following the anger induction than were low depressed subjects. Obviously, there are considerable possibilities for research which elucidates the complicated arousal situations and interpersonal interactions which accompany depression.

The last study which I wish to mention is one which Judy Nissenbaum (Note 5) completed under my direction having to do with the phenomena of learned helplessness and depression.

The learned helplessness model (Abramson, Seligman, and Teasdale, 1978, Note 1; Seligman, 1975, Note 6) proposes that when individuals have learned that there are no relationships between their responses and outcome, they exhibit motivational and cognitive symptoms of depression and sad affect. In the studies investigating learned helplessness, however, it has been difficult to separate the effects of contingencies of response - reinforcement as described by the model to decreased performance, and reports of affect, such as depression. Generally, contingent and noncontingent feedback has been confounded with positive and negative reinforcement conditions when subjects are involved in a learned helplessness manipulation. Nissenbaum was able to yoke subjects and control for contingency and reinforcement feedback in a concept formation task. She then considered performance, expectancy for success, and reported affect on an anagrams task. Because she was repeating the measure of depression, before and after the tasks, she used the DACL as the most appropriate instrument for this method. Basically, she was able to demonstrate that the learned helplessness phenomenon did appear in that subjects gave a diminished performance following a helpless manipulation, these effects were significantly influenced by negative and positive reinforcement conditions but not by contingency between performance and subsequent outcomes. Subjects were also significantly more likely to report depressive affect following failure than success, a finding which was also independent of response-reinforcement contingency. Again, the DACL gave us an appropriate repeated measure and Nissenbaum was able to investigate implications of the cognitive theory of learned helplessness in relation to expressed depression and the experimental manipulations.

Overall, the DACLs have proved themselves reliable, valid, and appropriate assessment instruments for depression across a wide range of clinical and theoretical investigations. As I've mentioned so often in this paper, the ease of administration and the benefits of matched repeated lists have provided investigators with a simple, although sophisticatedly developed, method for assessing depression across time and in relation to a number of concomitant events. There are some possible problems with the measures such as their correlation with other mood states such as anxiety and possibly social desirability responding. But, it is clear that research in the area of depression and affect has been advanced as a function of the availablility of these instruments and no doubt they will continue in use for a long time to come.

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