Symptomatology and the Use of Affect Constructs to Influence Value and Behavior Constructs

Timothy Anderson
Vanderbilt University

Larry M. Leitner
Miami University

This study examined participants' tendency to use affective constructs to influence nonaffective constructs (behavioral and valuative), as well as their ability to generate affective constructs. Using a modified repertory grid procedure, 131 participants compared each combination of affective, valuative, and behavioral constructs so as to make decisions about the relative influence of these constructs. Low-symptom participants did not differ from high-symptom participants in the frequency of affective constructs generated. However, when participants were asked to make decisions about personal change, low-symptom participants' affective constructs influenced their nonaffective constructs more frequently than did those of high-symptom participants. It is suggested that high-symptom participants do not necessarily have difficulty in identifying affective experiences but have difficulty in using affect to alter their constructions.

In the empirical study of affect, it has traditionally been assumed that the quantity of experienced affect differs between clinical and nonclinical populations. For example, researchers using the Experiencing Scale (Klein, Mathieu-Coughlan, & Kiesler, 1986) have found preliminary support for the notion that the degree of experienced affect is unidimensional and relates to outcome in psychotherapy and the resolution of specific problematic experiences (Greenberg, Elliott, & Lietaer, 1994). Research using objective self-ratings has also focused on how symptomatic groups differ in the quantity of endorsed affect but has focused little attention on how affect is processed or integrated (e.g., Lorr, Datson, & Smith, 1967; Watson & Clark, 1984).

An alternative conceptualization is that symptomatology may be related not to the amount or type of affect but to the ability to process and integrate emotional experiences within a larger domain of schemes and constructs. For example, Greenberg, Rice, and Elliott (1993), elaborating on Rogerian experiential theory, proposed a complex model of internal affective processing. Rather than a single, independent, unidimensional construct, Greenberg et al. proposed that meaningful schemes are elaborated through a dialectical engagement of affective experiences with cognitions, values, and behavioral interactions with the environment. Furthermore, self-coherence and awareness are established through "a continual process of reorganizing at higher and higher levels of complexity in order to maintain and enhance the self and to attain maximum creative flexibility" (Greenberg et al., 1993, p. 71). From a personal construct perspective, Landfield (1980) and Leitner (1982) similarly proposed that affective experiences are integrated with values and behaviors to form constructs, which also serve to maintain self-coherence and elaborate self-awareness. Thus, symptomatology may be associated with the ways in which a person integrates these affective, behavioral, and valutational components of constructs. Stiles (Stiles et al., 1990; Stiles, Meshot, Anderson, & Sloan, 1992) also proposed that patients' problematic experiences are inherently interactive with cognitive schemes and must be assimilated (and not simply expressed).

These alternative, multifaceted explanations of affective experiencing are relatively recent and therefore have not received much empirical examination. Nonetheless, results from mood-manipulation experiments might be interpreted as supporting these more complex conceptualizations. For example, self-focus has been found to provide valuable feedback that contributes to an individual's regulation of mood (Reisenzein & Gattinger, 1982; Schwarz & Clore, 1983). People who are able to self-focus and, hence, have increased self-coherence and awareness are able to counteract experimentally induced affective stimuli through self-regulation.

Thus, personal problems may not be related solely to a decreased awareness of affective experiences; they may also be the result of a disruption in the complex balance of affect and various cognitions that, in turn, contributes to an inability to create meaning and maintain a stable construction of self. If this balance is disrupted, affective experiences are not well integrated into an overall sense of self. Without this integration, affective experiences may be less meaningful for the symptomatic person. Thus, symptomatic people may not rely on affective experiences, and, as a result, their

Correspondence concerning this article should be addressed to Timothy Anderson, Department of Psychology, Vanderbilt University, 211-B Wilson Hall, Nashville, Tennessee 37240. Electronic mail may be sent via Internet to anderstm@ctrvax.vanderbilt.edu.
feelings do not inform their appraisals of external events (e.g., cognitions); rather, their appraisals influence their affective experiences. In other words, symptomatic people's feelings lose their original adaptive function as direct sensory antennae of immediate changes in the environment, and cognitively based appraisals become overvalued and communicate how these individuals should feel. Leitner (1982) referred to this phenomenon as "lateralism," because experiences cannot be integrated within a fixed and literal cognitive system.

In the present study, we examined in a symptomatic group and a nonsymptomatic group, three hypotheses concerning (a) the relative influence that various construct components (i.e., affective, valuative, and behavioral) have on each other and (b) these constructs' susceptibility to change. First, we predicted that a high-symptom group, in comparison with a low-symptom group, would have constructs in which the affective components had significantly less influence over valuative and behavioral components. Second, we predicted that high-symptom and low-symptom groups would differ in the quantity of affect words used in forming these constructs. Finally, because of findings suggesting that a stable and consistent sense of self is needed to counteract problematic affective experiences (Schwarz & Clore, 1983), we predicted that symptomatic individuals would be more inconsistent than nonsymptomatic individuals when rating themselves on a series of implicitly similar affective constructs.

Repertory grid methods developed in G. A. Kelly's (1955) personal construct theory were used to empirically examine these notions for several reasons. First, the assumed focus of grid methods is the self. Because self-focus has emerged as a significant phenomenon in the affect literature, it may be useful to directly assess self-constructs of affect. The personal construct approach is arguably less artificial than analogue situations because the participant, rather than the experimenter, identifies those experiences that are most personally relevant. Second, grid methods may be used to measure the extent to which affective experiences influence (and are susceptible to influences from) other types of experiences. Third, grid measures allow for some separation of the affective components of a construct from other components (i.e., values and behaviors).

Method

Participants

Participants were 131 undergraduates (61 men and 70 women) from two Midwestern universities who received extra credit for taking part in the study. The mean age of the students was 20.60 years (SD = 4.63), and the vast majority were White.

Procedure

An interactive computer program was written for this study to facilitate the collection of some of the data. Because of the difficulty of some of the procedures, only 1 or 2 students participated at a time so that each student could receive individualized instruction. Students spent approximately 2 to 3 hr completing the procedures.

Students completed a 15 (Elements) X 15 (Constructs) repertory grid test (Kelly, 1955). Basic repertory grid procedures were followed (see Fransella & Bannister, 1977, for details). As a means of optimizing each student's opportunity to make distinctions, the elements and constructs were rated on a 13-point Likert-type scale (Landfield, 1971) instead of the forced-choice format originally used by Kelly.

Using Leitner's (1981) procedure for eliciting affect, value, and behavior constructs, we asked students to provide a "feeling," "value," or "behavior" construct from each construct on the repertory grid. Specifically, affective, valuative, and behavioral constructs were elicited by means of a linking procedure in which each new construct was tied to a previously elicited construct. Eliciting hierarchically in this manner was useful in defining the inconsistency of self score (described later). For example, if a student used the construct successful versus unsuccessful on the repertory grid (and rated herself or himself as "successful"), then the "successful" pole was used to elicit the first construct component. If an affect component was being elicited (the ordering varied), the student was asked, "How might a successful person feel?" The student's answer served as the first pole of a new (affect) construct, and this component was further used to create two additional implications constructs (in this example, behavioral and valuative). Examples of constructs elicited with the linking procedure are given along the diagonal of Table 1. For example, if the student said that a successful person felt "confident," she or he might then have been asked, "What does a confident person value?" (e.g., "honesty") and "What does a confident person do?" (e.g., "work hard"). These value and behavior constructs created the third and fourth constructs, which were implicitly related. The opposite poles for these constructs were also elicited, and each student rated herself or himself on the constructs.

Having elicited these new constructs, students then completed an implication rating procedure (Hinkle, 1965) in which they were asked to imagine having changed from an affect, value, or behavior construct to the opposite pole of that construct. Given this imagined change, students were then asked to consider the extent to which they would change on each of the two remaining value, behavior, or feeling constructs. These implied change ratings were made for each of the six possible pairings of affect, value, and behavior constructs (i.e., because each of the new constructs was paired with each other construct). These ratings were made on a 13-point scale ranging from changed (1) to unchanged (13). Table 1 provides an example of the implicitly linked constructs and implication ratings derived from a construct on the repertory grid (e.g., successful vs. unsuccessful). This example shows that a person might change somewhat (a rating of 4 on the 13-point scale) in being confident when contemplating changing from being honest to being dishonest. However, this person would be unchanged (a rating of 13) in his or her honesty when contemplating changing from being confident to being unsure.

Thus, 15 affect, 15 value, and 15 behavior constructs were...
Table 1

Example of Implications Method Used

<table>
<thead>
<tr>
<th>Consequent</th>
<th>Repertory grid Affect</th>
<th>Value</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful vs. unsuccessful (3)</td>
<td>Confident vs. unsure (2)</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Affect</td>
<td>Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Honest vs. dishonest (1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>10</td>
<td>3</td>
<td>Work hard vs. lazy (4)</td>
</tr>
</tbody>
</table>

Note. Bipolar constructs are listed along the diagonal, with self-ratings in parentheses. Self-ratings range from 1 (first pole) to 13 (opposite pole). Implication ratings are in the remaining cells and range from 1 (changed) to 13 (unchanged). The repertory grid was used for construct elicitation, and hence, there were no implication ratings on these constructs. The antecedent implication refers to the construct in the phrase “If you were to change on — —,” and the consequent refers to the construct in the phrase “To what extent would you change — —?”

Scores

Construct direction. From the implication grid ratings, the influence and susceptibility of affective, valutative, and behavioral constructs were calculated to test the hypothesis that a group of high-symptom students would have less influential affect constructs. Construct influence (CI) was defined as the extent to which a construct influenced other constructs to change. For example, affect CI was the amount that students rated value and behavior constructs as changing because of a change on the affective construct. Construct susceptibility (CS) was defined as the extent to which a construct was influenced by other constructs to change. Affect CS was the amount that students rated affect constructs as changing because of a change in the value and behavior constructs. Both CI and CS were measured for affect, value, and behavior constructs. In the set of linked implication constructs in Table 1, the person would have CI and CS ratings of, respectively, 23 and 13 on affect constructs, 7 and 14 on value constructs, and 10 and 13 on behavior constructs. Inconsistency of self scores were calculated by summing the deviations in self-ratings across all constructs that had been linked. For example, if value and behavior constructs, respectively, were elicited from an affect construct, the inconsistency of self score would be defined as $I_{S,s} = \sum \{(Rep_{S,A} - Imp_{S,A}) + (Imp_{S,B} - Imp_{S,B})\}$, where $S$ is the repertory grid (Rep) or implication grid (Imp) self-rating, $i$ is the number of constructs, and $A$, $V$, and $B$ are the affect, value, and behavior construct prompt types, respectively. In the example from Table 1, the inconsistency of self score would be $[(3 - 2) + (3 - 1) + (3 - 4)] = 4$. This score was used to test the hypothesis that high-symptom students would differ from low-symptom students in their ability to use affective constructs to influence valutative and behavioral constructs. The inconsistency of self score was calculated for affective, valutative, and behavioral constructs.

Content analysis of affect. As a means of evaluating the hypothesis concerning the quantity of affect constructs produced between the high-symptom and low-symptom groups, all constructs from the repertory and implication grids were coded for the number of words that matched affect words from Clore, Ortony, and Foss's (1987) experimentally derived affect lexicon. This lexicon categorizes affect into four “conditions”: affective, cognitive, external, and physical and bodily states. A computer was used to search for affect words among all constructs. Affective conditions, described by Clore et al. (1987) as prototypical emotional states, included words such as happy, depressed, and sympathetic. Cognitive conditions, which are less clearly emotional and involve less of a focus on affect states, included words such as confident, curious, and uncertain. External conditions are less emotional and depend on situational influences to produce emotional states; this category included words such as alone, lucky, and wonderful. Finally, physical and bodily states, the least emotional of the four categories, included words such as dizzy, thirsty, and hungry.

Symptom Check List 90-Revised. This scale (Derogatis, 1983) is a multidimensional self-report inventory designed to assess psychological symptom patterns. The 90 symptoms (rated on a 5-point scale) were scored for the nine subscales as well as the Global Severity Index, which is the mean of the 90 symptom ratings. Nonpatient norms were used. High-symptom and low-symptom groups were derived by means of Derogatis’s (1983) decision rule (a Global Severity Index T score or two subscale T scores > 63) for creating symptom categories. Use of this decision rule resulted in 41 (31%) students being classified in the high-symptom group, a number slightly higher than might be expected in a student sample.

Results

Strength of Affect Constructs

The means and standard deviations for the affective, valutative, and behavioral implication grid measures are presented in Table 2. The CS and CI scores were used to test the hypothesis that high-symptom students would differ from low-symptom students in their ability to use affective constructs to influence valutative and behavioral constructs. Constructs that did not contain affect words from the Clore et al. (1987) affect lexicon were excluded from the analysis because students occasionally provided constructs that were
Means and Standard Deviations for Construct Influence, Susceptibility, and Inconsistency of Self-Scores by Symptom Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>High-symptom group (n = 41) M</th>
<th>SD</th>
<th>Low-symptom group (n = 90) M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct direction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affect influence</td>
<td>9.30</td>
<td>3.21</td>
<td>10.43</td>
<td>2.47</td>
</tr>
<tr>
<td>Affect susceptibility</td>
<td>9.75</td>
<td>3.17</td>
<td>10.23</td>
<td>2.45</td>
</tr>
<tr>
<td>Value influence</td>
<td>8.70</td>
<td>4.86</td>
<td>8.45</td>
<td>3.46</td>
</tr>
<tr>
<td>Value susceptibility</td>
<td>8.41</td>
<td>4.88</td>
<td>8.71</td>
<td>3.75</td>
</tr>
<tr>
<td>Behavior influence</td>
<td>7.30</td>
<td>4.16</td>
<td>7.87</td>
<td>4.36</td>
</tr>
<tr>
<td>Behavior susceptibility</td>
<td>7.37</td>
<td>4.47</td>
<td>8.12</td>
<td>4.35</td>
</tr>
<tr>
<td>Inconsistency of self</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affect</td>
<td>43.41</td>
<td>12.64</td>
<td>42.49</td>
<td>13.87</td>
</tr>
<tr>
<td>Value</td>
<td>51.22</td>
<td>10.64</td>
<td>43.07</td>
<td>11.84</td>
</tr>
<tr>
<td>Behavior</td>
<td>47.24</td>
<td>13.95</td>
<td>43.52</td>
<td>11.52</td>
</tr>
</tbody>
</table>

Note. Construct direction scores are the mean implication rating and have a possible range of 1 to 13. Inconsistency of self scores has a possible range of 0 to 180.

Affect Words in Constructs

As can be seen in Table 4, there were no overall differences in the total number of affect words used in constructs between the high-symptom and low-symptom groups. However, the cognitive-focal affect words were used significantly more by the low-symptom group than by the high-symptom group. This finding is of interest because cognitive-focal affect words are moderate in their emotional tone (i.e., less emotional than affective-focal words but more emotional than external-focal and physical and bodily state affect words (Clore et al., 1987). Thus, although there were no differences in the total number of affect words used in constructs, the type of affect was more moderate for low-affect students. The differences in the frequencies of the four affect type categories in Table 4 were roughly proportional to the number of affect words in each of the affect lexicon categories (see Clore et al., 1987).

Symptomatic individuals may not differ in the quantity of affect words they provide; however, they may differ in the extent to which they identify themselves with, and hence experience, the affective states they report. Self-ratings were used to examine the possibility that high-symptom and low-symptom students differed in identifying themselves with affective experiences. We examined whether the two groups may have differed in the tendency to rate more toward the affect pole of a construct. Thus, self-ratings of constructs identified with an affect word on any single pole were examined (constructs with affect words on both construct poles were excluded). The high-symptom and low-symptom groups did not differ in the extent to which self-ratings were made toward the affect pole on the three construct prompt types, $F(2, 128) = 0.41, ns$. This suggests that high-symptom and low-symptom students identified

Table 3

Analysis of Variance for Implication Ratings

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Affect</th>
<th>Value</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between subjects</td>
<td></td>
<td>2.57</td>
<td>0.01</td>
<td>0.65</td>
</tr>
<tr>
<td>Symptom (S)</td>
<td>129</td>
<td>(13.96)</td>
<td>(31.56)</td>
<td>(17.14)</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct direction</td>
<td>1</td>
<td>1.26</td>
<td>0.01</td>
<td>2.10</td>
</tr>
<tr>
<td>$S \times C$</td>
<td>1</td>
<td>8.35**</td>
<td>3.01</td>
<td>0.67</td>
</tr>
<tr>
<td>Error</td>
<td>129</td>
<td>(0.70)</td>
<td>(1.31)</td>
<td>(0.64)</td>
</tr>
</tbody>
</table>

Note. Values enclosed in parentheses represent mean square errors. ** $p < .01$. 

Figure 1. Construct influence and construct susceptibility for the high-symptom and low-symptom groups on affect constructs.
with affect constructs equally, just as they produced the same total number of affect words.

**Inconsistency of Self-Ratings**

A 3 × 2 (Construct Type × Symptom) ANOVA was performed on the inconsistency of self-ratings (with affect, value, and behavioral construct types as repeated measures) to test the hypothesis that symptomatic students would be more inconsistent in self-ratings than nonsymptomatic students. As can be seen in Table 5, there was a significant interaction but in the opposite direction of that predicted. High-symptom students had greater self-inconsistency scores than low-symptom students for value and behavior constructs, whereas there was little difference for affect constructs (see Figure 2). A follow-up comparison of the affect constructs with the combined value and behavior constructs supported this conclusion, \( F(1, 129) = 4.05, p < .05 \). Thus, although high-symptom students were more inconsistent than low-symptom students overall, this inconsistency was the result of value and behavior constructs (high-symptom students did not differ from low-symptom students on affect construct self-inconsistency).

**Discussion**

This study found that no overall differences in the ability to generate constructs with affect or in the tendency to make self-ratings in the direction of affect. However, low-symptom students provided significantly more cognitive–focal affect words than high-symptom students. Thus, more affect is not necessarily healthier, but the type of affect experienced may relate to mental health. It is possible that low-symptom students provided more cognitive–focal affect words because these words represent a more controlled, mediated use of affect. This result is consistent with the finding that people who are successful in assertiveness training use a higher ratio of cognitive to affective verbs than those who are unsuccessful and passive in training (Gervasio, 1988). Future study using the Clore et al. (1987) affect lexicon appears to be promising because of the potential to measure affect through people's everyday use of language.

The major finding from this study was that the affect constructs of high-symptom students did not influence other constructs as readily as the affect constructs of low-symptom students. Thus, high-symptom students reported as many affect constructs, but it was the type and influence these constructs had over other constructs (valuative and behavioral) that related to symptomatology. This finding may help explain why patients are less able than nonpatients to distort negative events with positive affect (e.g., Pyszczynski & Greenberg, 1985; affect constructs are not allowed to have enough influence within patients' entire construct system. Thus, "weaker" affect constructs may account for a patient's inability to provide the type of self-feedback that is necessary to alter experimentally induced affect or other dystonic feelings (i.e., Schwarz & Clore, 1983). The method described here may be a useful addition to studies using affect-inducing procedures because it would allow for a more complete understanding of the internal processes involved when people react to affective stimuli.

We were initially puzzled by the finding that students with high symptoms differed from those with low symptoms in the inconsistency of value and behavior self-ratings but did not differ in the inconsistency of affect self-ratings.
Although we did not predict the direction of this finding, it is nonetheless consistent with Greenberg et al.'s (1993) proposal that symptomatic individuals have an imbalance between affective-based and cognitive-based functioning. Nonetheless, it is interesting that symptomatic students appeared to have more difficulty in making broad, reflective appraisals (i.e., inconsistency of self-ratings, which are arguably more at the schema level) and more affective difficulty in making more specific, immediate decisions about construct changes.

Inconsistencies in self-ratings of implicitly similar constructs are also likely to be a reflection of the amount of conflict or poor assimilation in these areas. These results might suggest that symptomatic individuals are most conflicted about the nonaffective areas of life. It may be especially difficult for some symptomatic individuals to therapeutically explore affective construing because (a) affective experiences are difficult to address as a result of their carrying little weight in the patient's construing (i.e., low construct influence for affect constructs) and (b) the majority of relevant conflicts are experienced as being in other areas (i.e., value and behavior constructs). As affective constructs gain strength with therapy, patients may experience conflicts about allowing their feelings to alter their other constructions. This might result in patients, temporarily at least, becoming more prone to construe themselves in more affectively inconsistent ways.

One shortcoming of this study is that it emphasized theoretical interactions of internal processes at the expense of more traditional attempts to elaborate the psychometric properties of the measures. Although measures derived from repertory grid procedures are not as amenable to traditional strategies for establishing reliability and validity (Beail, 1985; Fransella & Bannister, 1977; Kelly, 1955; Yorke, 1985), future research should address the construct validity and generalizability of these measures. For example, the affect measures from this study were retrospective verbal reports of somewhat abstract personal constructs. It is therefore unclear to what extent these measures were cognitively mediated and whether the present findings would be replicated with procedures designed to measure more immediate experiences (e.g., through affect-inducement procedures). It is also unclear whether this analogue procedure would be generalizable within a therapeutic context and with specific clinical populations. For example, patients with panic disorder might have affective constructs that have greater influence on other constructs.

A clinical implication of these findings is that the therapeutic encouragement of affect production may not be as useful in psychotherapy as interventions that might strengthen patients' confidence in using existing affective constructions. Although the present study does not provide direct evidence for the effectiveness of specific interventions or strategies, we believe that there is general support for a more complex theoretical and clinical conceptualization of patient affective experiences than previously accepted. In particular, these results are consistent with recent theoretical proposals (Greenberg et al., 1993; Landfield, 1980; Leitner, 1982; Stiles et al., 1990) that view affective experiences as dialectically interacting with cognitive constructs in a larger attempt to elaborate personally meaningful schemes. When there is an imbalance in this process, simple encouragement by the therapist to "feel more" of any experience may not be as effective as attempts to facilitate the patient's trust and confidence in affects that are already intact. An overemphasis on interventions that are designed to induce affective "uncovering" would probably neglect people's human struggle to cognitively integrate their newfound feelings.

References


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