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Reflective Processes and Anxiety

By STEPHAN P. SPITZER

Summary. Three hypotheses are abstracted from Laing's writings on the interrelationships between self-consciousness, anxiety, and self-evaluation. Indicators of self-consciousness are obtained from an open-ended instrument which requires the respondent to provide twenty answers to the question (asked of himself): 'Who am I?' Statements indicative of self-consciousness are those on which the respondent inserts a self-reference into the statement made about himself and are distinguished from statements in which no explicit self-reference is found. The data indicate that the mark of the self-conscious person is anxiety and that anxiety is largely restricted to those statements devoid of self-consciousness. The structure of a system likely to produce this configuration is considered by drawing upon Kierkegaard's conjectures on the joint emergence of consciousness and anxiety. Equating self-consciousness with 'reflection', it is suggested that while reflection brings about anxiety in a system as a whole, the act of reflection deters the emergence of anxiety at the particular points within the system upon which it is deployed. Thus the function of reflection is two-fold, creating anxiety at the same time (but not at the same place) as anxiety is reduced.

Introduction

Anxiety is a central construct in theories of motivation (Cofer and Appley, 1964), personality (Hall and Lindzey, 1957), and psychopathology (May, 1950; Hoch and Zubin, 1950; Masserman and Moreno, 1957; Holzman, 1970). It is also a central construct in R. D. Laing's ontological model. The difference between Laing and other anxiety theorists does not lie in anxiety as a motivational principle. Avoidance of anxiety, or, conversely, motivation for security is held in common by Laing and others such as Sigmund Freud (1936), Anna Freud (1946), Sullivan (1947), and Horney (1945). The difference lies in the manner in which defences against anxiety are said to work.

Unlike psychoanalytically-oriented theories, in which mechanisms of defence operate by the denial, falsification and distortion of reality, the mechanism of defence against anxiety posited by Laing operates by the mirroring of reality. To the extent that the person includes himself as a watcher of that reality he is self-aware, and the mechanism of defence is said to operate. Since it is largely taken for granted that anxiety is an inevitable consequence of self-awareness (Portnoy, 1959; May, 1967), a question arises: How is it possible that self-awareness may reduce anxiety when self-awareness is a precondition for its emergence?

As stated the question is strictly theoretical, and thus speculation is unavoidable in posing a resolution. But the degree of credibility of any suggested resolution would increase in proportion to the degree to which it could be established that anxiety is associated with *both* the presence and absence of self-awareness. The apparent paradox disappears when it is remembered that what is true of a whole is not necessarily true of the parts. Thought of in this way, it is possible to restate the major question so that it becomes amenable to empirical test, and the ontological model becomes a convenient vehicle for its demonstration.

While reference to self-awareness and anxiety often appear in Laing's writings (1961, 1967), the focus for this paper is a chapter in *The*

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Divided Self entitled 'Self-consciousness' (1965, pp 106–9). Three hypotheses have been identified and abstracted from this work.* For the most part, Laing's original terminology and phraseology have been retained in developing and stating the hypotheses, although it becomes increasingly convenient to substitute the terms 'reflective' and 'reflection'. These terms are regarded as equivalent to 'conscious(ness)', 'self-conscious(ness)', and 'self-aware(ness)'.

Laing's model of ontological insecurity and hypotheses

As the term is ordinarily used, self-consciousness implies heightened or intensified awareness of one's own being. According to Laing, the most fundamental characteristic of the self-conscious person is his state of anxiety. In accord with existentialist writings, the source of anxiety is said to be fear of non-existence. 'Not to be conscious of oneself . . . may be equated with non-entity. The . . . individual is assuring himself that he exists by always being aware of himself' (p 119). The existentialist position of a self-conscious person is one of ontological insecurity, and this is allegedly a consequence of the failure to achieve a secure sense of identity. Accordingly the first hypothesis states:

H-1: Self-conscious persons are more likely to display indicators of anxiety than non-self-conscious persons.

If a secure sense of identity has not been established the self-conscious person has available to him some recourse. The major security-enhancing strategy he can employ is to watch himself. It is by taking himself as his own object that the self-conscious individual maintains surveillance on himself, and so convinces himself of his own existence. It follows, then, that there should be a greater sense of permanence of state at those points within a cognitive system where existence is recognized than at those points which are not, so to speak, 'covered' by the surveillance mechanism. Accordingly, the second hypothesis states:

H-2: Persons are less likely to be anxious about those aspects of self on which self-consciousness is shown than about those aspects on which there is no indication of self-consciousness.

The next hypothesis deals with the induction of anxiety. The fundamental source of anxiety is fear of loss of identity, and once ontological insecurity has been constituted a secondary process may be activated. The connection between reflection and anxiety depends upon a 'feedback' mechanism which involves the reflective subject's evaluation of what he has perceived about himself. He is said to be '. . . persecuted by his own insight and lucidity' (p 119). The result is a perpetuation of, if not an actual increase in, anxiety. Accordingly, the third hypothesis states:

H-3: Self-conscious persons are more likely to show indications of self-dissatisfaction than non-self-conscious persons.

Methods and Procedures

Subjects

The subjects were 68 students in a social psychology course offered in the Department of Sociology of the University of Minnesota. Because the course satisfied requirements in departments in addition to sociology the population showed a wide variety of specialties. The average age was 22·9 years, with a standard deviation of 3·5 years. Thirty-three per cent were males. Forty-five per cent were fourth (final) year undergraduates, 28 per cent third year undergraduates, and the remainder either second year undergraduates (9 per cent) or graduate students (18 per cent). Eighty-five per cent were Caucasian and the remainder either American Indian (7 per cent), Black (4 per cent), or of Oriental extraction (3 per cent). All but two subjects were American born.

Self-concept instrument

The 'Who am I?' technique, or the Twenty Statements Test (TST), originated as an attempt to provide an operational technique to assess self-attitudes in the theoretical tradition of early symbolic interactionists such as Mead

* The ontological model contains at least two additional testable propositions. These deal with modes of reflection, such as whether persons view themselves through their own eyes *or* imagine to themselves how they appear to others. The former is claimed to be the preferred mode as well as the more effective of the two for anxiety reduction. A test of these propositions, however, is not within the scope of this investigation.

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(1934) and Cooley (1909). Both theorists regarded self-consciousness as structurally possible only when a person's own responses entered the field of his selectivity, thereby creating a condition wherein the person became an object to himself. The TST makes use of the subject's personal construct system by employing an open rather than a fixed response format, and consists of a lined sheet of paper and the instructions:

> In the twenty blank spaces provided below, please make twenty different statements in response to the simple question—addressed to yourself—'Who am I?' Answer as if you were giving the answers to yourself—not to somebody else.

Upon completing the TST the subjects were instructed: In the blanks to the left of each statement that you have given, indicate the degree to which you are satisfied with being what you say you are. If *Very satisfied* with a statement, put a '4' in front of it; if *Satisfied*, rate it '3'; if *Dissatisfied*, rate it '2'; and if you are *Very dissatisfied*, rate it '1'.

Scoring for self-consciousness

Rather than focusing on the *content* of a statement, the method of 'logical reflective analysis' (Spitzer, 1976a, 1976b) focuses on the *form* of a statement. The reflective form is distinguished by the presence of a feature which remains invariant under changes in the outward appearance of a statement. An invariant feature is found in self-descriptive statements when the respondent re-enters his own self-descriptive space, i.e. he inserts a self-reference into the statement he uses to describe himself.*

Consequently statements such as: I am . . .

all that *I* know
quick to change *my* mind
conscious (self-conscious)
overly concerned about *myself*
(don't) know what *I* am doing here
worried about how other people regard *me*
more stable than others credit *me* with being
(find) it hard to discipline *myself* the way *I* want to
coming to understand that people don't always see *me* the same way *I* see *myself*

are indicative of the reflective form. But statements which assert: I am . . .

a woman
Jane Doe
24 years old
a part of the universe
shy in front of strangers*
assertive most of the time
involved with people and society
the mother of a boy and two girls,

are non-reflective because the respondent has not re-entered his own self-descriptive space. In short, the latter set of statements lack the invariant feature which is the denotative criterion for the definition of self-consciousness.

Scoring for anxiety

A procedure developed specifically for the TST was employed (Salisbury, 1963). Protocols were inspected for indicators of disturbances of affect and somatic symptoms generally indicative of anxiety. A statement was scored as anxious when the respondent defined himself as:

1. Experiencing unpleasant affects such as being anxious, nervous, fearful, afraid, worried, upset, apprehensive, disturbed, prone to embarrassment, overly sensitive, depressed, etc.
2. Suffering the effects of such affect upon his behaviour, such as being restless, tense, unable to concentrate, jittery, having nightmares, unable to sleep, etc.
3. Experiencing the somatic symptoms reputedly associated with anxiety, such as

* On the basis of a constant so defined, it is possible to state two principles for the identification of reflective assertions. The principle of re-entry is used in the text. According to the principle of autodescriptivity we admit as reflective those words and phrases by which a reflective system describes itself, i.e. conscious, cognizant, reflective, self-aware, etc. Both principles are subsumed by a more general denotative definition expressed in set theory as: a system is reflective if the image of the thinker of a set of thoughts is an element of the set of thoughts thought by a thinker.

* Inspection of various TST data sets indicates that if an assertion such as this appears on a protocol, the chances are better than even that at least one assertion meeting the denotative criteria for reflection will also appear on that protocol. A weak type of logical entailment may account for this; another possibility is that statements of this genre are reflective, but that a principle to justify their inclusion is lacking.

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trembling, weakness in limbs, rapid heartbeat, 'cold' sweats, blushing, frequent nausea, persistent fatigue, frequent headaches, stomach aches, etc.

Technical specifications

Several judges independently scored the protocols for reflection and anxiety. Inter-rater agreement for each of the scoring procedures is about 97 per cent. Discrepancies in coding were resolved by mutual discussion. A more detailed description of 'logical reflective analysis' is found in Spitzer (1976a, 1976b). A more detailed description of the anxiety scoring procedure is found in Salisbury (1963) and Spitzer *et al* (1970).

Results

The subjects were divided into two groups according to whether evidence of self-consciousness was or was not found on a protocol. Although the subjects varied according to the amount of self-consciousness and anxiety shown, Table I is based simply upon whether an indicator of self-consciousness (one or more reflective statements) was or was not found and whether protocols divided in this way showed one or more indicators of anxiety or no anxiety at all. It can be seen that 79 per cent of self-conscious subjects showed at least one indicator of anxiety as compared to only 52 per cent of non-self-conscious subjects. The difference between proportions is significant at the ·01 level.*

The second hypothesis predicts that anxiety and self-consciousness are unlikely to be contained in the same statement, for when reflection is present the anxiety-reducing mechanism is supposedly operative. The subjects were classified into those whose anxious statements were *more* frequently reflective than non-reflective (or whose anxious statements were equally divided in number between reflective and non-reflective) and those whose anxious statements were *less* frequently reflective than non-reflective. Table II shows that the proportion of subjects whose anxious statements are more frequently non-reflective than reflective significantly exceeds the proportion of subjects showing the converse pattern, thus providing confirmation for the second hypothesis.

* In addition, level of anxiety is significantly higher ($P < ·05$) among anxious self-conscious subjects (2·09) than among anxious non-self-conscious subjects (1·14) as shown by the mean number of anxiety statements ($t = 2·09$; 28 df).

Table I

*Summary of difference for the proportion of subjects in the self-conscious and non-self-conscious groups showing one or more indicators of anxiety**

Group	Proportion	Diff	Z	P**
Self-conscious (N = 43)	·79	·27	2·33	< ·01
Non-self-conscious (N = 25)	·52			

* Two sample test of proportions; Ho : $P_1 = P_2$.
** One-tailed test.

Table II

*Subjects showing one or more indicators of anxiety divided according to the distribution of reflection within their anxiety statements**

Type of subject	Proportion	Diff	Z	P**
Anxious statements mostly reflective (N = 15)***	·32	·26	2·48	< ·01
Anxious statements mostly non-reflective (N = 32)	·68			

* Single-sample test of proportions; Ho : P = ·5.
** One-tailed test.
*** Includes 6 subjects whose anxious statements are equally divided between reflective and non-reflective.

The third hypothesis predicts a lower level of self-satisfaction among self-conscious than among non-self-conscious persons, but the self-satisfaction ratings do not bear out the contention. The ratings are almost identical (mean = 3·03 versus mean = 3·13) and the difference is not significant ($t = ·96$, 66 df). A further examination of the data discloses that there is essentially no relationship between the number of reflective statements made by a sub-

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ject and his rating of self-satisfaction (Pearson $r = -\cdot 15$; ns).*

Discussion and Conclusions

Partial confirmation was found for the ontological model. While reflective subjects are more anxious than non-reflective ones, anxiety is likely to be absent from those dimensions of self on which reflection is found. The third of Laing's propositions, that one source of anxiety is self-dissatisfaction, was not confirmed. This, of course, does not deny that dissatisfaction with what is perceived about oneself is a source of anxiety. Rather, it indicates that self-dissatisfaction is no more of a source of anxiety to reflective than to non-reflective subjects, thus reducing the probability that this factor is responsible for the higher level of anxiety among the reflective subjects.

There are conditions where reflection is associated with both the presence and the absence of anxiety. But there is no evidence to suggest that the configuration of data is determined by the level of self-satisfaction. This has at least two implications, each with its own ramifications.

First, it suggests that a system made up of no more than an epistemological component (reflection) and an affective component (anxiety) can be sufficiently *self-regulating* to produce its effects solely by principles intrinsic to its own primitive organization. That is, effects are produced in the absence of concepts such as attitudes toward the self, recognition of the temporal finiteness of one's life, fear of particular objects, etc. And if effects can be produced without supplementary regulations, then effects can be produced before their development. This alludes to a qualitative difference in anxiety as it is experienced by adults as opposed to young children, since the latter are so undeveloped that such higher order concepts are beyond their comprehension.

Second, the finding that reflection is associated with both the presence and the absence of anxiety suggests that the function performed by reflective processes is *dualistic*. That is, two effects are simultaneously produced by the activation of reflective processes. This is the position of Kierkegaard (1844, 1849) who contended that anxiety emerges with the initial reflection, since consciousness defines a state with a greater value than the only alternative —which is a state in which the memory of self is not included. Thus, the ability of reflection to induce anxiety rests upon the recognition that a state of nothingness is a conceptual possibility and the ability of reflection to reduce anxiety rests upon the recognition that the state of nothingness is not a current reality. Any act of reflection necessarily activates both of these consequences with the result that anxiety is created at the same time that it is annulled.

Kierkegaard repeatedly stressed that the relation between anxiety induction and reduction is an asymmetrical one. 'With every increase in the degree of consciousness, and in proportion to that increase, the intensity of despair increases: the more conscious, the more intense the despair.' (1849, p 65). 'Despair is potentiated in proportion to consciousness of self.' (1849, p 129). Undeterred, the dual function of reflection has the potential for producing a progressive increment in anxiety, but with therapeutic intervention the balance can be tipped in the opposite direction. Sometimes the strategy is to deactivate reflective processes by the directing of attention away from the self (Frankl, 1967). But more frequently therapy techniques accomplish the goal of anxiety reduction by the activation of reflective processes. Since the patient is encouraged to reflect upon core (those which determine) rather than peripheral (those which are dependent) aspects of self, the result is that the anxiety-reducing function of reflection transmits its effects to those points of the self-system subordinate to the point of application.

* Subjects are more satisfied with non-reflective statements (median = 4) than with reflective statements (median = 3) as long as a statement does not contain an indicator of anxiety. If a statement contains anxiety, it makes no difference whether reflection is present or absent—the statement receives the lowest possible satisfaction rating (median = 1). An extension of the median test discloses that the differences are significant ($\chi^2 = 111 \cdot 9$; 3 df; $P < \cdot 001$). This shows that reflection and self-evaluation are related to one another when the unit of analysis is a self-descriptive statement. However, this finding does not provide substantiation for the third hypothesis which is about persons—not statements.

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We have arrived at two ways to answer the question of how it is possible that reflection serves to reduce anxiety while at the same time anxiety is an inevitable consequence of reflective processes. The answer is found on one level in the distribution of reflection and anxiety within the self. No paradox is entailed. Both self-awareness and anxiety may co-exist within a self-system without contradiction or inconsistency because the two tend to be located in different spaces of that system. Another level of explanation more directly addresses the dynamics of the system under consideration. The dualistic function of reflection in a self-regulating system imposes limits on the relationships between reflection and anxiety without fixing a single solution. This means that for any reflective act some anxiety is created as the emergence of anxiety is deterred.

Provision of these tentative answers should extend beyond those of establishing the credibility of Laingian and Kierkegaardian contentions. It is hoped that what has been found may be seen as relevant for the practice of clinical psychiatry, perhaps through the gaining of a more complete understanding of the mechanisms regulating the activation and deactivation of anxiety states.

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