

MEASURING AN INDIVIDUAL'S INVESTMENT IN THE FUTURE: SYMBOLIC IMMORTALITY, SENSATION SEEKING, AND PSYCHIC NUMBNESS

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ABSTRACT

Robert Jay Lifton has proposed that humans have a compelling urge to relate to the future beyond their own life span, which he calls the need for symbolic immortality. According to Lifton this need may be expressed in different modes across different individuals and societies. These are the biological, religious, nature, creative, and experiential modes. Based on his research with survivors of the Hiroshima bomb, Lifton suggests that the threat of nuclear holocaust can destroy an individual's faith in the future of man, resulting in psychic numbness. This article operationalizes Lifton's constructs and develops an instrument to measure an individual's needs for symbolic immortality in the five modes. Age effects and the relation between symbolic immortality needs and Zuckerman's sensation seeking scales are also explored. The results are discussed in terms of Lifton's prediction that psychic numbness will tend to push people toward the experiential mode and away from the other four modes.

Based on his interviews with survivors of the Hiroshima bomb and other research, Robert Jay Lifton has theorized that there is a basic need in the healthy psyche to relate to life beyond one's own lifespan [1,2]. He calls this need the need for symbolic immortality, which he defines as "a compelling universal urge to maintain an inner sense of continuous symbolic relationship over time and space with the various elements of life" [7, p. 31]. This need is expressed in the beliefs of all the major religions, past and present; it was probably the motivating force behind the building of the Egyptian pyramids, the engraving of Roman portrait coins, and the creation of Christian icons. This

uniquely human need may also explain why one can find so many examples over the ages of men willing to sacrifice their fortunes or even their lives for causes not directly related to their own survival. On a more commonplace level, the need for symbolic immortality is expressed in the desire to have children, to achieve success in one's profession, and in the desire to be revered and remembered by one's social groups [3]. This basic need may also underly charitable acts such as donating money to social causes, and it is probably related to the enormous camera and photography industry in contemporary society.

Ironically, however, it is precisely when this human need to identify with the future might be especially important—in today's world facing the imminent dangers of nuclear holocaust and other disasters—that peoples' needs for symbolic immortality might be crushed. If one believes mankind is likely to be destroyed by nuclear war, contributing to the future of man loses its significance. This loss of belief in a future, which Lifton observed in survivors of the Hiroshima bomb [1], results in a total loss of human feeling, called psychic numbness. In fact, the survivors of Hiroshima report that life itself no longer has any meaning, except to live as a monument to the destructive power of nuclear war. Lifton believes that psychic numbness is widespread today [2], as a result of the global nuclear threat to mankind [4]. If Lifton is correct, this loss of the desire to relate to the future could prevent people from pressing for answers to world crises at hand.

While Lifton believes the need for symbolic immortality is present in all people, its expression may take on different forms or "modes" in different cultures and in different individuals within a culture [5-6]. One common mode in which this need finds expression is called the biological mode. This mode encompasses the sense in which people feel they will "live on" through their children. However, Lifton does not restrict the biological mode to direct genetic lineage. In the same mode, Lifton includes attachments to one's friends, neighbors, profession, country, even to mankind in general.

A second mode, which Lifton calls the creative mode, emphasizes ones personal achievements and contributions which will benefit those who survive us. Included in this category would be things one would ordinarily classify as creative works, such as paintings, writings, discoveries, or industrial accomplishments. Also included in the same mode are less tangible contributions to people who will survive us: healing of a doctor's patients, helping friends, or facilitating the careers of younger colleagues.

A third mode concerns religious beliefs. Lifton tries to define this mode in its broadest sense to include beliefs encompassed by most religions. These beliefs include the general notion that death results in "release from profane life to existence on a higher plane" [2, p. 32]. Also, many religious beliefs include the notion that death brings peace or harmony with God or some higher principle of the universe.

The fourth mode emphasizes the relatedness of man with nature. Lifton says this mode is important in the Japanese culture and was important in the European Romantic Movement. The main distinguishing feature of this mode is that it emphasizes man's relatedness and connections to other living and non-living aspects of nature, conveying a sense of immortality through integration with nature.

The fifth, and final mode of symbolic immortality, is radically different and somewhat the antithesis of the other modes. Lifton characterizes this mode, which he calls the experiential transcendent mode (I will refer to it as simply the experiential mode), as being in a psychological state so intense that time and death disappear. This state occurs when people "lose themselves" in what they are doing. It can occur in song, dance, athletics, sex, or any intense activity in which one's sense of existing in time and space is diminished. Whereas the other modes concern the connections of the self to the past and future, this mode emphasizes dissolution of the self, and it is totally centered on the here and now. It is precisely because of this live-for-the-moment aspect of this mode that Lifton believes people turn toward this mode and away from the others when the future of mankind is in doubt (e.g., threatened by nuclear war).

Lifton's experiential mode implies the seeking of intense, pleasurable activities. In this respect it resembles Zuckerman's sensation seeking trait [7,8]. Zuckerman defines sensation seeking as, "the need for varied, novel, and complex sensations and experiences and the willingness to take risks for the sake of experiences" [8, p. 37]. The general trait of sensation seeking is divided into four subscales: thrill and adventure seeking, experience seeking (seeking arousal through the mind and the senses), disinhibition (seeking release from inhibitions through drinking, partying, gambling, and sex), and boredom susceptibility (becoming bored easily). The first two subscales of sensation seeking, thrill and adventure seeking and experience seeking, would seem most related to the experiential mode because they emphasize the seeking of intense stimuli (e.g., sky diving, experimenting with drugs) on which one's sense of self might be diminished. Whereas Lifton emphasizes turning to the experiential mode out of desperation (e.g., belief that mankind is doomed), Zuckerman's sensation seeking trait is thought to be biologically based [8].

The present study begins the task of operationalizing Lifton's constructs and developing an instrument to measure a person's needs for symbolic immortality. Age effects on the needs for symbolic immortality and the relation between sensation seeking and symbolic immortality are also examined in this study.

METHOD

Instruments

The symbolic immortality instrument developed for this study consisted of 40 belief statements generated to reflect Lifton's five modes of symbolic

immortality. Eight statements were generated to correspond with each of the five modes. Several procedures were followed to insure adequate sampling of the content of Lifton's modes in the questionnaire items. Initially, the experimenters and a group of students familiar with Lifton's theory generated as many items as they could to represent each mode. Then a smaller set of these questions was selected to be used in a preliminary study. In the preliminary study 400 adults in the Baton Rouge community rated their agreement with each item on a five point scale. A factor analysis of these data indicated only three modes were adequately measured (religious, creative, and biological modes). Therefore a second item generation session was conducted. The forty items in this questionnaire were selected from this final item pool, being careful to select items representing all facets of Lifton's definitions of each mode. For example, items were included for the biological mode reflecting ties to other people (friends, associates, etc.) in addition to one's own children.

Instructions on the instrument asked respondents to rate the extent of their agreement/disagreement with each statement using a 5-point scale (0 = strongly disagree, 1 = disagree, 2 = unsure, 3 = agree, 4 = strongly agree). The forty belief statements will be presented in the results section along with data concerning the mode each statement was written to represent and the factor in which the statement clustered.

Form V of Zuckerman's sensation seeking scale was also included in the questionnaire [7].

Sample data

All respondents were adult volunteers solicited by the experimenters and research assistants at random in the Baton Rouge area. The final data set included 401 respondents, 185 females and 216 males, between the ages of eighteen and eighty. The median age of respondents in our sample was 40.54 years. The youngest quartile of our sample was between the ages of eighteen to thirty, the second quartile were between the ages of thirty-one and thirty-nine, the third quartile were between the ages of thirty-nine and fifty-nine, and the oldest quartile of our respondents was between the ages of sixty and eighty-two.

The marital status of our respondents were: 116 were single and never married, 230 were married, and fifty-five were previously married. Their religious affiliations were: 158 Catholics, 192 Protestants, seven Jews, thirty-eight declared no religion, and six of other religions. The educational experience of our respondents may be summarized as follows: 17.7 percent of our sample had a high school education or less, 41.1 percent had from one to four years of college, and 41.2 percent had more than four years of college.

RESULTS

A VARCLUS procedure was performed on the forty questionnaire items. The VARCLUS procedure attempts to divide a set of variables into non-overlapping clusters in such a way that each cluster can be interpreted as essentially unidimensional. From analysis of the correlation matrix, the clusters were chosen to maximize the variation accounted for by the first principal component. Thus, all items were treated as equally important. The MINC = 5 and MAXC = 5 options were used to force the items into five clusters. The resulting analysis provides three types of evidence concerning symbolic immortality theory: Do the items cluster into the modes for which the items were generated? Do the items show a high R^2 with other members of the same cluster, providing evidence of a true underlying factor? And, do the items show low correlations with other clusters, indicating that the items can differentiate between the five modes? For this last test, a ratio was calculated with the R^2 of an item with its own cluster in the denominator and the highest R^2 of the item with any other cluster in the numerator. Thus, low R^2 ratios indicate good items for differentiating between modes.

Table 1 presents the items arranged by clusters, with predicted cluster, R^2 with its own cluster, and the R^2 ratio shown for each item.

In general, the results strongly support Lifton's theory of symbolic immortality. The five clusters which emerged clearly reflect the five modes described by Lifton. Also, most items correlate very strongly with their own cluster and have a low R^2 ratio, suggesting unidimensional clusters. Any items which did not show an R^2 of .30 with their own cluster were dropped from the instrument. Examination of these "bad" items (see Table 1) is revealing in terms of refining the definitions of the five modes; the implications of these findings for the definitions of Lifton's modes will be discussed below. Further evidence for the reliability and construct validity of the obtained clusters is provided by the generally high Coefficient Alphas associated with the clusters. These were .94, .83, .83, .83, and .70 for the five clusters, respectively.

All of the items originally written for the religious mode clustered into Factor 1. One extraneous item written for the experiential mode also occurred in this cluster, but with a very small R^2 (.12); therefore, this item was dropped. Six of the items intended for the biological mode occurred in Factor 2. There were no extraneous items in this factor. All of the intended nature mode items occurred in Factor 3, along with one extraneous item written for the experiential mode which had a low R^2 (.18) and was therefore dropped. All of the items written for the creative mode along with one item intended for the biological mode occurred in Factor 4. Since the biological item had a reasonably high R^2 (.42) and it could easily be interpreted as implying that one's creative contributions cause one to be remembered, this item was retained as a creative mode item. One creative mode item had an R^2 below .30 and was

Table 1. Questionnaire Items by Factor with R^2 , R^2 Ratio, and Predicted Cluster (P) for Each Item

| R^2 | R^2 Ratio | P | Questionnaire Item |
|----------------------------|----------------|---|---|
| Factor 1 – Religious Mode | | | |
| .78 | .07 | R | It is important to lead my life according to my religious beliefs. |
| .74 | .07 | R | The meaning of life is determined by my religious beliefs. |
| .75 | .10 | R | It is important to follow your religious beliefs in order to assure spiritual attainment after death. |
| .71 | .07 | R | Death is a graduation to a higher existence. |
| .70 | .11 | R | Practicing my religion assures me of eternal peace. |
| .69 | .15 | R | I would do almost anything to ensure that I live my life according to my religious beliefs. |
| .68 | .07 | R | After I die, I will be with God or in harmony with some higher principle of the universe. |
| .54 | .08 | R | Some part of me (e.g., soul, spirit) will continue to exist after my death. |
| dropped | | E | When I throw myself into a cause or a project, nothing, not even death matters. |
| Factor 2 – Biological Mode | | | |
| .69 | .19 | B | After my death, my life will still have meaning through the lives of my children. |
| .63 | .19 | B | It is important to know that many of my beliefs, values, and attitudes will continue in my children. |
| .59 | .28 | B | It is important to me to have children to carry on my family line. |
| .55 | .20 | B | I would do almost anything to ensure the future of my children. |
| .48 | .22 | B | It is important for me to tell my children about past generations to keep memories of relatives alive. |
| .30 | .70 | B | It is important to know that my friends and the people I have been close to will remember me after I am dead. |
| Factor 3 – Nature Mode | | | |
| .63 | .16 | N | The fundamental relation between man and nature gives my life meaning. |

Table 1. (Cont'd.)

| <i>R²</i> | <i>R² Ratio</i> | <i>P</i> | <i>Questionnaire Item</i> |
|--------------------------|--------------------------------|----------|---|
| .60 | .10 | N | Being part of nature is an important aid in my spiritual fulfillment. |
| .51 | .11 | N | I am in nature and nature is in me. |
| .46 | .05 | N | Being with nature gives me a sense of peace and tranquility about my life. |
| .44 | .05 | N | It is important to me to understand one's place in nature and man's relationship with all living things. |
| .44 | .13 | N | I feel most alive when I am alone with nature. |
| .37 | .09 | N | I feel harmoniously related to nature in such a way that my own death seems unimportant. |
| .32 | .20 | N | My relationship with God and nature are one and the same. |
| dropped | | E | When doing certain things I experience feelings of great joy or ecstasy. |
| Factor 4 — Creative Mode | | | |
| .53 | .24 | C | It is important to write, create, or build something that will exist after my death. |
| .52 | .39 | C | It is important to know that people will continue to value or use my ideas or things that I have made after my death. |
| .52 | .27 | C | After my death, my life will still have meaning through the things I have made or created. |
| .48 | .10 | C | Some of the goals I have achieved in my life will continue to benefit people after my death. |
| .43 | .42 | C | It is important for me to know that I will have a positive effect on the lives of people who live on after my death. |
| .43 | .35 | B | Long after my death people will remember that I was here. |
| .37 | .30 | C | I would do almost anything to ensure that my life made a valuable contribution to my fellow man. |
| .37 | .09 | C | What I have accomplished in my work will continue to benefit people after my death. |
| dropped | | C | The meaning of my life is determined by the people I have helped or influenced during my lifetime. |

Table 1. (Cont'd.)

| R^2 | R^2 Ratio | P | Questionnaire Item |
|------------------------------|----------------|---|---|
| Factor 5 — Experiential Mode | | | |
| .70 | .14 | E | Since life is so short, it is important to me to enjoy as many pleasurable and exciting things as possible. |
| .50 | .08 | E | I would do almost anything that would be pleasurable or exciting to me. |
| .48 | .10 | E | It is important to me to live my life to the fullest by experiencing as much of it as I can. |
| .43 | .26 | E | What makes life meaningful is some of the great experiences that I have had. |
| dropped | | E | Sometimes I do things so intensely that I forget about everything else. |
| dropped | | E | What I accomplish in my life is not as important as the experiences I have had. |
| dropped | | B | The meaning of life is determined by relationships I have had with people I have known or worked with. |

Note: The R^2 is with items in the same cluster, the R^2 ratio divides the R^2 for an item by the next highest R^2 of that item with items in another cluster, and P indicates the first letter of the predicted mode for that item.

dropped. Factor 5 contained only four experiential items with an R^2 above .30. Also dropped were two experiential items and one item intended for the biological mode with low R^2 s.

Using only the retained items to produce cluster scores, Table 2 presents the inter-correlation matrix of cluster scores. Notice that there are modest positive correlations between several modes, the strongest being between the biological and creatives mode (.51). There was one negative correlation between the religious mode and the experiential mode.

A regression analysis of age effects on the cluster scores showed that age was positively related to the religious mode, $F(1,399) = 6.54, p < .01$, and negatively related to the experiential mode, $F(1,399) = 13.03, p < .01$. Age was not significantly related to the biological, creative, and nature modes.

Table 3 presents correlations of the cluster scores with the general sensation seeking trait and with the sensation seeking subscales. The general sensation seeking trait showed significant negative correlations with the religious ($-.37$) and biological ($-.17$) modes and significant positive correlations with the nature (.13) and experiential (.28) modes. Correlations with the subscales (see Table 3) showed substantial negative correlations of the religious mode with the disinhibition (DIS), boredom susceptibility (BS), and experience seeking (ES) scales. The negative correlation between the biological mode and sensation seeking was most evident on the experience seeking subscale. The strongest positive correlation between the nature mode and sensation seeking was on the experience seeking subscale. Finally, the strongest correlations between sensation seeking and the experiential mode were on the disinhibition and boredom susceptibility scales, not the thrill and adventure seeking (TAS) and experience seeking scales as predicted.

The high level of agreement between the obtained clusters and Lifton's five modes of symbolic immortality supports Lifton's theory.

Table 2. Inter-Cluster Correlations

| Factor | <i>Symbolic Immortality Factor</i> | | | | |
|--------------|------------------------------------|-------------|-------------|---------------|---------------|
| | <i>Rel.</i> | <i>Bio.</i> | <i>Nat.</i> | <i>Creat.</i> | <i>Exper.</i> |
| Religious | 1.00 | .27 | .12 | .27 | -.13 |
| Biological | .27 | 1.00 | .07 | .51 | .30 |
| Nature | .12 | .07 | 1.00 | .20 | .32 |
| Creative | .27 | .51 | .20 | 1.00 | .37 |
| Experiential | -.13 | .30 | .32 | .37 | 1.00 |

Furthermore, the relatively high R^2 of retained items along with the generally low R^2 ratio which reflects relations to other clusters indicates reasonably good measurement of an individual's needs for the five modes of symbolic immortality can be obtained with this instrument.

Examination of the dropped items is useful for refining the definitions of the five modes. The mode showing the greatest difference between Lifton's definition and the obtained cluster is the experiential mode (Factor 5). The items which were retained in this cluster all express a need for varied and pleasurable experiences. The items written for this mode which did not reach the criterion for retaining them in the cluster ($R^2 > .30$) or which clustered in a different factor, were the items emphasizing intensity of experience (e.g., when doing certain things I experience feelings of great joy or ecstasy) or losing oneself in experience (e.g., when I throw myself into a cause or a project, nothing, not even death matters). Thus the experiential factor which emerged from this instrument seems to reflect a general seeking of pleasurable experiences rather than seeking intense experiences in which the self disappears.

This less intense nature of the experiential factor helps explain some of the other findings in this study. We did not find negative correlations between the experiential mode and the other modes (except the religious mode, $r = -.13$), as suggested by Lifton's notion that fear of nuclear destruction of mankind would push people toward the experiential mode and away from the other modes. Perhaps the experiential factor in this study is a more moderate pleasure seeking trait, not indicative of the desire for self dissolution characteristic of severe psychic numbness. The more moderate nature of the experiential mode which emerged in this study also explains the modest correlation with sensation seeking ($r = .28$), and the greater correlation of the experiential factor with the more moderate disinhibition and boredom susceptibility subscales of sensation seeking rather than the more extreme thrill and adventure seeking and experience seeking scales. See Table 3.

The biological factor (Factor 2) emerging from this study also appears a bit different from Lifton's definition. Lifton incorporates ties to other people (friends, colleagues, etc.) in addition to one's children in the biological mode. However, one item written for this mode with the general referent "people" (long after I am gone people will remember I was here) clustered in the creative factor (Factor 4). One additional item emphasizing relationships "with people I have known" clustered into Factor 5 (experiential). All but one of the biological mode items which were retained in Factor 2 mentioned children. The one item which was retained and did not mention children (It is important to know that my friends and the people I have been close to will remember me after I am dead) just made the required cut off of $R^2 = .30$. Thus, in some disagreement with Lifton, but much in line with the thinking of sociobiologists [9], the biological mode may be closely tied to direct genetic lineages.

Table 3. Correlations of Factor Scores with
Sensation Seeking Scales

| <i>Sensation Seeking</i> | <i>Symbolic Immortality Factor</i> | | | | |
|--------------------------|------------------------------------|-------------|-------------|---------------|---------------|
| | <i>Rel.</i> | <i>Bio.</i> | <i>Nat.</i> | <i>Creat.</i> | <i>Exper.</i> |
| General | -.37** | -.17** | .13** | .03 | .28** |
| DIS | -.39 | -.04 | .08 | .08 | .36 |
| BS | -.26 | -.09 | .10 | .02 | .23 |
| TAS | -.14 | -.13 | .07 | .02 | .10 |
| ES | -.34 | -.25 | .15 | -.04 | .14 |

**Significant at the $p < .01$ level.

Finally, the mean rating per item in each factor was computed. These means were 2.7, 2.6, 2.2, 2.5, and 2.6 for the five factors, respectively. The proximity of these means to the midpoint of the five point scale (2 = unsure, 3 = agree) speaks well of the instrument psychometrically as a device for detecting individual differences. However, the closeness of the means to the "unsure" category may not speak well of the psychological strength of contemporary western society. Additional crosscultural data would be valuable in interpreting this result. However, the low general level of the need for symbolic immortality could indicate that psychic numbness is prevalent in our society as Lifton suggests [2]. In addition to the threat of nuclear war, there are other cultural factors in our society which might decrease the potency of symbolic immortality. The soaring divorce rates and the mobility of our society has dissolved the permanence of family ties and diminished the chance of being remembered by one's kin [10]. Our social institutions and industry also offer little opportunity for achieving symbolic immortality. For example, retirement usually entails cleaning out your desk and removing every trace that you ever belonged to an organization. It is especially ironic that a society founded on the notion that the individual life has value, does virtually nothing to preserve memories of its dead [11,12]. Even our cemeteries usually contain no more about a person than dates of birth and death. We live in an impersonal, disposable age, and perhaps we are paying a costly psychological price.

It is hoped that this operationalization of Lifton's theory will stimulate further research on this topic, which will give us a clearer understanding of the need for symbolic immortality and its effects on behavior. In addition to

improving our understanding of the human psyche, this research may have several important applications: Finding ways to stimulate individual's desire for symbolic immortality could increase social cohesion and the general willingness to take action on long term social problems which impact on the future (e.g., pollution or wasting of energy resources). Increased opportunities to achieve symbolic immortality within societies could also be an important factor in the individuation process which Beer recommends for increasing the chance of world peace [13]. Finally, an increased understanding of an individual's symbolic immortality needs and how they may be fulfilled may make the task of facing personal death a little easier [14-16].

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