Beliefs About Consciousness and Reality: Highlights of Tucson II Consciousness Study

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Beliefs About Consciousness and Reality

Highlights of Tucson II Consciousness Survey

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The disparity of ideas concerning consciousness is well known. Our effort has been aimed at studying this disparity empirically. To that end, we have developed a questionnaire with good psychometric properties that can be used to measure beliefs about consciousness and reality along a material-transcendental dimension. More specifically, ideas about the nature of consciousness and how it is to be studied are correlated with the degree to which a person believes that there is more to the universe than material reality. This in turn appears to be correlated with purporting to have had experiences which cannot be explained in material terms. In order to make sense of the frequencies of responses given above, all of the items in the questionnaire are considered as a single scale with six subscales. Scores on the scale and subscales thus provide summary statistics with regard to beliefs about consciousness and reality.

One thousand copies of this questionnaire, along with a page of additional items, was distributed to participants at the conference, Toward a Science of Consciousness 1996 “Tucson II,” held April 8 – 13, 1996, at The University of Arizona, Tucson. We received 212 completed questionnaires. The mean age of respondents was 50 years. Twenty-nine percent were women. Fifty-six percent indicated that they had earned a doctorate. Thirty-two percent were presenters at the conference.

The following information was obtained by looking at specific items of the questionnaire. Twenty-four percent indicated that “there is no reality other than the physical universe” and 27 percent that “the accepted methods of science are the only proper way in which to investigate consciousness.” Ninety-three percent agreed that “introspection is a necessary element in the investigation of consciousness.” Sixty-seven percent indicated that “extrasensory perception is possible” and 27 percent agreed that “personal consciousness continues after physical death.” Sixty-six percent maintained that they “have had an experience which could best be described as a transcendent or mystical experience” and 31 percent “have had an experience which could best be described as an out-of-body experience.”
Consciousness Survey, we found responses concerning the nature of the universe. In a pilot study leading up to our 1986 measurements, we found that some participants tended to score in the materialist direction, but neglected variable in social science research. This could reflect differences in sampling in that those who actually do participate in a consciousness meeting are more inclined towards transcendent views than those chosen from the academic literature. This could be other reasons for this difference.

The most obvious differences between subgroups of participants at Tucson II, those related to religious affiliation. Religion has been found to be an influential, but neglected variable in social sciences research. As expected, those indicating their religious affiliation as "none," tended to score in the materialist direction. This would include agreement with statements about the exclusively scientific beliefs subscales. There was an item in our 1986 survey which we did not include on the Tucson questionnaire: "I think that others are conscious in the same way that I am conscious." Men were more likely to agree with this statement while women tended to disagree. Women's high scores on these two subscales indicate that their experiences, as a group, are not the same as men's. It is not only a logical fallacy, but empirically untrue, that the experiences of a particular consciousness researcher with regard to consciousness must be universally true.

In a pilot study leading up to our 1986 Consciousness Survey, we found respondents writing in "own beliefs" as their religious affiliation. When we added it as a category in the 1986 survey, 27 percent of respondents endorsed it. Of participants at Tucson II, 53 percent of respondents chose this category. It is correlated with scores in the transcendental direction, particularly for subscales measuring the purported presence of extraordinary experiences, such as out-of-body experiences; extraordinary beliefs, such as belief in the possibility of extrasensory perception; and the importance of knowledge gained through self-transformation, as indicated, for example, by agreement with the necessity for introspection.

In our 1986 survey we found strong sex differences. These were apparent again with participants at Tucson II. Women trend towards the transcendental end of the scale relative to men, particularly on the extraordinary experiences and extraordinary beliefs subscales. There was an item in our 1986 survey which we did not include on the Tucson questionnaire: "I think that others are conscious in the same way that I am conscious." Men were much more likely to agree with this statement while women tended to disagree. Women's high scores on these two subscales indicate that their experiences, as a group, are not the same as men's. It is not only a logical fallacy, but empirically untrue, that the experiences of a particular consciousness researcher with regard to consciousness must be universally true.

There were correlations of beliefs about consciousness and reality with areas of interest at the conference. Not surprisingly, those indicating an interest in phenomenology and culture scored very high in the transcendental direction on the main scale and all subscales, while those interested in neural correlates scored somewhat in the materialist direction. What came as a surprise to us was that those indicating an interest in physics and mathematics scored marginally in a transcendental direction on two of the subscales. There was no corresponding shift for those identified with the applied and natural sciences. If anything, there was a trend towards lower scores on extraordinary experiences and inner growth subscales for those allied with the applied sciences. There is not enough additional data to interpret this finding.

Of significance also are differences that were expected but not found. In our 1986 survey we found increases in materialist beliefs with increasing age. While there were some age effects at Tucson II, they were in the reverse direction. There were no effects of education and few effects of disciplinary affiliation. There was also no difference whether or not a respondent was a presenter at the conference. In other words, with regard to this particular sample of participants at Tucson II, one's beliefs about consciousness and reality were not correlated with whether or not one presented at the conference.

A paper describing the details of this study titled "Beliefs About Consciousness and Reality of Participants at Tucson II" is being submitted to the Journal of Consciousness Studies for consideration for publication.

### 1996 Questionnaire Items Results

It is possible for there to be consciousness in which there is awareness but no object of awareness.

Introspection is a necessary element in the investigation of consciousness.

The accepted methods of science are the only proper way to investigate consciousness.

Human consciousness would not exist without the brain.

There is no reality other than the physical universe.

The Tucson II sample scored considerably further in the transcendental direction than our 1986 standardization sample of 334 academics and professionals who could potentially write about consciousness in the academic literature. This could reflect differences in sampling in that those who actually do participate at a consciousness meeting are more inclined towards transcendent views than those chosen because of their potential interest in consciousness studies. There could be other reasons for this difference.

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