

RELIABLE SCHEMATICS

Expositor

ABSTRACT: *Questions concerning the replicability of results in Q method are shown not to inhere primarily in statistical facts, but in the schematical nature of Q factors, which depends upon interpretation. An example is presented in reference to two studies about abortion in which identical factor structures emerge from separate Q samples and P sets, and in which the factors give rise to virtually identical interpretations.*

Concerns about reliability in Q method have taken many forms, some of which have involved the reproducibility of results based on the application of the same or only slightly altered sample of statements to different groups (e.g., Fairweather, 1981) or individuals (Shontz, 1981), or on the choice of strategies for rotating the factors (D'Agostino, 1984). In response to issues of this kind, however, Stephenson (1984) has vouchsafed Q's position by consigning such technical matters to the category of "statements of fact," leaving Q's main contribution to the illumination of "statements of problems," which also advance knowledge by exploring the range of meanings to which facts apply. The researcher's goal is not necessarily to establish normative facts (for which

reliability and validity are crucial), but to reach understandings.

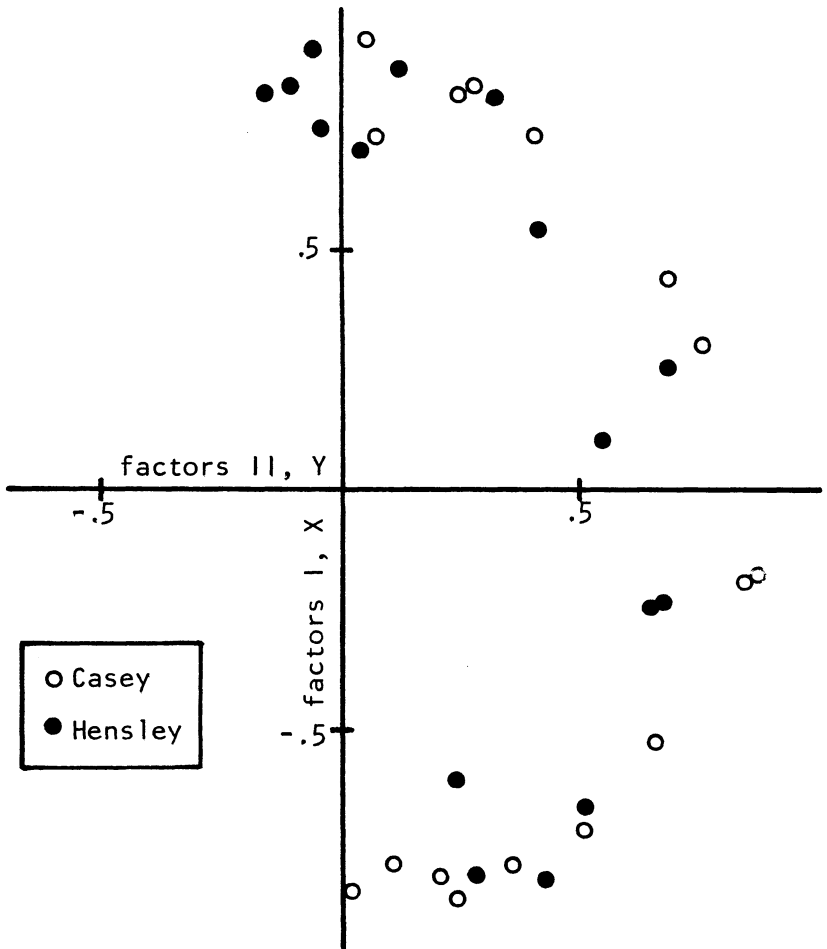


Figure 1. Factor structure of Casey and Hensley et al. studies.

The litmus test of the acceptability of a factor is the extent to which it is *schematical*--i.e., the extent to which the structure of its statements is coherent--and this criterion can be applied to studies in

which different statements and different Q-sample structures are employed. An illustration is available in terms of two recent studies on abortion (Casey, 1984; Hensley, Baugh & Brown, 1986), the factor structures for which, as shown in Figure 1, are remarkably similar. Unrotated factors were deemed acceptable in both studies, and the apparent factorial similarity could not but give heart to those valuing factual invariance. The purist would of course prefer that a standard set of statements be utilized in both studies so that direct comparisons could be made--e.g., by correlating the factor scores for Casey's factors I and II with Hensley et al.'s X and Y--but Casey was concerned with public opinion, and so his statements were drawn from talk shows, newspaper editorials, pamphlets, and interviews; whereas Hensley et al., with their interest in legal matters, drew their statements from past Supreme Court decisions plus legal briefs and lower court decisions related to the 1986 Supreme Court decision. Moreover, Casey's P set was structured in terms of categories drawn from public opinion studies (e.g., elite vs. mass), whereas Hensley et al. employed categories salient in studies of judicial impact (e.g., interpreters, implementors, consumers). Finally, the two studies were conducted more than a decade apart and in somewhat different regions of the country.

Still, from a schematical standpoint, the same viewpoints are in evidence as operant factors. The following statements, for example, were among those receiving the three highest positive scores in the respective "pro-choice" factors:

[Casey study]

Legal abortion coerces no one and establishes equal freedom of choice for all.

If new restrictions on abortion go into effect, we would return women to back-alley butchery.

It's all right for people opposed to abortion to oppose it for themselves, but what gives them the right to question the morals of people who can in good conscience accept abortion?

[Hensley et al. study]

The right of privacy, grounded in the concept of personal liberty guaranteed by the Constitution, encompasses a woman's right to decide whether to terminate her pregnancy. Every woman needing an abortion has a right to have it performed under circumstances to ensure her maximum safety.

Abortion is a matter for the conscience of the individual and her family.

The common concerns of choice, safety, and conscience emerge unmistakably from these diverse samples of persons, chosen in diverse ways and examined 10+ years apart. These two manifestations of the same attitude cannot be compared statistically, but they are coherent and obviously share the same subjective space; and since the two factors have bipolar opposites, the schematic nature of each can be further attested to as we examine the "pro-life" pole:

[Casey]

Making abortion legal doesn't make it morally right.

A baby is an individual! Never an extension of the mother's body! Never her property to dispose of as she sees fit, the Supreme Court notwithstanding.

Are helpless citizens who have not been born any less human than we who are actually in the world and able to fend for ourselves? Indeed, are they not more in need of protection than we who are strong and articulate?

[Hensley]

There is nothing in the Constitution to support a woman's right to an abortion.

I cannot accept the Court's exercise of its power in investing mothers and doctors with the constitutionally protected right to exterminate life.

I believe that the State's interest in protecting potential human life exists throughout the pregnancy, because potential life, by its

nature, exists before as well as after viability.

There is not the same 1-to-1 connection between statements in the two separate studies as was the case for the pro-choice poles, but the similarity in pro-life sentiments is still apparent--of the immorality (as opposed to legality) of abortion, of the individuality and even "citizenness" of the unborn and the need to protect it, and of antagonism toward the Supreme Court.

The unipolar factor (see Figure 1) in each of the two studies is interesting because it is unanticipated given the pro-life/choice dichotomy enhanced by the media and the adversarial judicial system. So as to give some idea of the range of sentiment involved in each factor, two of the most positive statements and one most negative (in italics) are displayed for each of the studies:

[Casey]

Making abortion legal doesn't make it morally right.

Contraceptives should be made more available so that abortion could be avoided insofar as possible.

Life begins at birth, so abortions don't kill anything or anybody.

[Hensley]

A new human life is present from the moment of conception.

The right to an abortion does not include a right to kill the fetus when there is a possibility that the fetus is capable of sustained survival outside the womb.

The woman's right is absolute: She is entitled to terminate the pregnancy at whatever time, in whatever way, and for whatever reason she alone chooses.

Common to both of these factors is a belief, shared with the pro-lifers, that life begins at conception; however, like the pro-choicers, they believe that abortion is a right and a matter of conscience, but that it is not an absolute right. In the Casey study,

this attitude advocated the availability of contraceptives so as to avoid the need for abortion, and such a recommendation would likely have received a warm reception by the same factor in the Hensley study.

Hence do the factors in the two studies converge, and to this extent do the attitudes which they represent reliably manifest themselves--even with different Q sorters and different Q samples designed to focus on different aspects of the problem. But as Stephenson (1984) has noted, our ship would not be sunk were the results otherwise since statements of problems are conceptually independent of fact, and refer to such matters as *beliefs* concerning the beginning of life, *understandings* about the consequences of choice and about responsibility in an open society, and of *strategies* for the mobilization of prudence. These are perennial problems that, like the facts associated with them, can be expected to appear again and again--not only in studies on the same topic (such as abortion), but in studies on different topics--and that can provide a focal point for many additional studies.

References

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