

## HOW GOOD IS THE WILSON-PATTERSON CONSERVATISM SCALE?

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A review of findings with the Wilson and Patterson C-scale shows that, contrary to its authors' claims, it is not uniformly of high reliability, nor is it especially immune to acquiescent response set. The correlation between its nominally positive and negative halves has even been found on some occasions to be positive—thus throwing the *validity* of the scale into question. It is pointed out that the short item format used in the C-scale is not original to Wilson and Patterson, and that a revised version of the scale is in existence which appears to overcome some of the defects mentioned above. It is concluded that the field of work opened up by the C-scale is of great intrinsic interest whether or not the C-scale has the psychometric advantages that were originally expected.

Since its publication in 1968, the Wilson and Patterson conservatism (C) scale appears already to have given rise to considerable interest and use. See for example Bagley (1970), Boshier (1969, 1972) and the references listed in Wilson and Nias (1972). It seems timely therefore to attempt a review of work done with this scale to see if it has in fact lived up to its great initial promise. The recent article by Wilson and Nias (1972) does attempt such a review but fails to report certain data leading to criticism of the scale.

The C-scale was presented as an innovation in the form of attitude measurement. Instead of full sentences it presented single words and phrases for the subject to respond to. From this format several advantages were expected: (1) It should be less susceptible to acquiescent set; (2) It should be more valid (by eliminating idiosyncratic "contextual" factors); (3) It should be less susceptible to social desirability contamination. It was also shown as a matter of empirical fact to be exceptionally reliable in the initial study.

Perhaps the first thing to note in evaluating these claims is that this format is not in fact original to Wilson and Patterson. Alpert and Sargent (1941) used something very similar for the measurement of conservatism, and for the measurement of other variables; the use of "adjective check-lists" is a well-known technique. See for example Mitchell (1961)—where an adjective check list was shown to be exceptionally valid in the management of achievement motivation. The contribution of Wilson and Patterson, then, must be seen in the particular scale they present rather than in the format of that scale.

In their 1972 review, Wilson and Nias give by far the most space to acquiescence as the area where the C-scale is said to be superior. They say that their format attracts less acquiescence than the "old" format.

They point to the great difficulties which the F and D scales have with acquiescent response set contamination and quote Cloud and Vaughan (1969) in support of their claims that the C-scale provides a better alternative for this reason. Cloud and Vaughan do in fact go to great lengths to demonstrate that the C-scale is little affected by acquiescence. However, as I have suggested elsewhere (Ray, 1972a), there is some failure here to distinguish between acquiescence as an artifactual and as an empirical correlate of the scale score. In truth any balanced scale, no matter how poor, must control perfectly for artifactual contamination of the scale score with acquiescence. Where there are an equal number of positive and negative items which are summed to provide a total score, acquiescence should cause an increase in the scores on the positive items and a decrease in the scores on the reversed items. Since acquiescent response set is conceptualized as content-irrelevant, the effects should be equal for both sorts of items and the increases and decreases would hence cancel one another out. Thus not only the C-scale but also the balanced D and F scales by Haiman (1964), Ray (1970), Lee and Warr (1969) and Ray (1972b), provide perfectly satisfactory alternatives to the original F and D scales as far as eliminating the acquiescence problem is concerned. A somewhat different issue is the empirical correlation of some variable such as dogmatism truly measured, and acquiescence truly measured. In this respect there is some evidence that dogmatism is empirically related to acquiescence or "yea-saying" (Ray, 1970) but authoritarianism is not (Ray, 1971b). The only effect a correlation of this sort might reasonably be expected to have would be to cause us to calculate a yeasaying score as well as a content score for the balanced scale we are using and partial out the effect due to acquiescence.

Why then the fuss (exemplified by Wilson and Nias (1972) but not original to them) about the correlation between the positive and negative halves of balanced scales? As we have seen, the control against acquiescence provided by a balanced scale is in no way dependent on the magnitude of this statistic. The answer is that this correlation may reflect on the *validity* of our items if it is low. If one set of items is deliberately worded (as in balanced F scales) to mean the opposite of the other set, a failure to find a negative correlation reflects a failure of one or both of those item-sets to measure what it was intended to measure. It has twice been shown, however, that when normal psychometric precautions are observed, correlations of as high as  $-.71$  can be obtained between item sets such as this (Ray, 1970, 1972b). The C-scale has thus no monopoly on high negative correlation between its two halves. Such results are also obtainable with conventional format balanced F and D scales.

What we must remember however is that the correlation between the two halves of a scale is an empirical matter that may truly reflect something about the world as well as about the operation of acquiescent set. Liberalism and Conservatism could (as Kerlinger (1967) be-

lieves) in fact be orthogonal. Measured orthogonality may reflect the nature of things as they are, not the presence of a measurement artifact due to acquiescence. How we assess what part of the correlation between the two halves of a balanced scale is due to acquiescence and what part is due to real opposition between the underlying attitudes is a rather difficult matter and one that is treated more fully elsewhere (Ray, 1973). For our present purposes however, it should be sufficient to look at the actual performance of the C-scale and some of its alternatives to enable us to assess the relative merits of the different scales as far as the correlation between the two halves is concerned. Even a relatively simplistic approach does serve where, as in the present case, the differences between the various scales are extreme.

Wilson and Nias (1972) rely heavily for their treatment of this issue on data from one of my own unpublished papers—a paper partly based on my M.A. work at the University of Sydney (not as they state, Macquarie University) entitled “Are Liberalism and Conservatism orthogonal?” This paper was in fact the first version of a report later extensively recast and published as: “Are conservatism scales irreversible?” (Ray, 1972a). Sadly, Wilson and Nias seriously misunderstand and misrepresent the conclusions of the original paper. They report, quite correctly, my findings that a set of conventional items derived from the F, R, E and D scales, when divided up into positive and negative items, form two moderately reliable scales which correlate only .099. They also report that I found two scales in the new format measuring respectively “Liberalism” and “Conservatism” to correlate by contrast  $-.639$ . This also is true—as far as it goes. What they fail to mention is that these two latter scales were not composed entirely of items worded in the one direction but were in fact both themselves balanced scales. The distinction between “Liberalism” and “Conservatism” scales was a conceptual one influenced by Kerlinger’s (1967) proposals, not a distinction in terms of direction of wording. Putting it another way, the Conservatism scale was composed of pro-conservative and anti-conservative items and the Liberalism scale of pro-liberalism and anti-liberalism items. It was not assumed that an anti-conservative item was pro-liberal or vice versa. This in fact was the fault of the paper, that made it unpublishable in its original form. The decision as to whether an item was pro-conservative or anti-liberal (for instance) was on some occasions a necessarily subjective one. Wilson and Nias can then claim no support from my paper for their contention that the C-scale shows characteristically higher correlations between positive and negative halves than do other scales in conventional format. In fact quite the opposite is the case. The published version of this paper (Ray, 1972a) shows that the C-scale has a *positive* correlation (of .288) between its two halves. My own revised version of the C-scale on the same sample showed a moderate negative correlation between the two halves. Wilson and Nias do not mention this finding at all.

How do we reconcile the above findings concerning the C-scale with those reported by Cloud and Vaughan (1969), who found a correlation between the two halves of  $-.68$ ? At least part of the explanation may lie in variations in the gross amount of acquiescence (Yeasaying). Unlike Wilson or Cloud and Vaughan, I have found (see Ray, 1971a) that short format scales do elicit a large preponderance of "Yes" over "No" responses. Where the meaning-opposition between the supposedly negative and positive items is in fact slight, this acquiescence (which by definition has the effect of causing items to be responded to as if they were similar) may more than cancel out any tendency to respond to the items as if they were opposed. That the *revised* C-scale (Ray, 1972a) does not share the same problem of poor meaning-opposition between its two halves is attested to by the correlations between these two halves of  $-.373$  and  $-.181$  for the conscript and the student samples respectively (Ray, 1972b). It will be evident then that acquiescence can have a great effect on the validity of the C-scale published by Wilson and Patterson (1968).

We must conclude then that Wilson's first three claims for his scale are far from universally supported. In three studies reported in two articles (Ray, 1971a, and 1972a) it has been found that the C-scale is of deficient reliability (Ray, 1971a) when applied to general population samples and it is strongly affected by acquiescent response set to the point of making the scale seriously invalid (Ray, 1972a). His more recently made claim that the scale is little affected by social desirability set has been challenged by Schneider (1973). The above criticism of the C-scale's reliability must be qualified somewhat, however. Bagley, Wilson and Boshier (1970) used a community sample and found a reliability of  $.89$ , which is substantial. Regrettably, however, door-to-door samples are not necessarily representative either. The "volunteer artifact" can be extremely large and one cannot assume that the attitudes of co-operative people are organized in the same way as the attitudes of the non co-operative. Conscript samples are not biased in this way (filling out questionnaires is a welcome alternative to the parade ground) and may hence be far more representative (within the limits of age and sex) than almost any other sample. Indeed, if we assume that filling out questionnaires is a task more intelligible and congenial to more educated people, the "Volunteer" bias of a door-to-door sample could also be an educational bias. The Bagley, Wilson and Boshier (1970) results might then not be seriously in conflict with the generalization made earlier that C-scale reliabilities are satisfactory only when the scale is applied to educated samples.

Another issue which has arisen recently is Boshier's (1972) demonstration that the C-scale items can factorially be segregated into no less than four orthogonal sub-scales and that these sub-scales are identifiable in terms of reasonably traditional content areas. This finding however, will be deterring only to tyros who fancy that factor analysis tells one what the structure of an item set is. Although factor analysis

can be useful in suggesting hypotheses, it has long been abandoned as a means of testing hypotheses about structure (witness the British-American dispute about the structure of intelligence). Obviously, the unifactor structure found in the items by Wilson (1970) is equally as "correct" as the structure found by Boshier (1972). With different factor analytical methods many structures are possible. Only usefulness determines which one we prefer.

In conclusion, then, it is not true that the correlation between positive and negative halves is greatly superior or even at all superior in the C-scale as compared to conventional balanced scales in the same content area. It is also not true that the C-scale is exceptionally reliable or that it is uniformly resistant to acquiescent set. The interest of the C-scale then must remain intrinsic. It is interesting because of its inherent directness. Although this directness may not lead to the psychometric advantages claimed by Wilson and Nias (1972) it does open up a field worth investigating in its own right. The hypotheses of Kerlinger (1967) are one instance where the C-scale makes possible a more exact test of something asserted about social attitudes (see Kerlinger, 1972; Ray, 1972a).

Another final observation that might have some usefulness is that those who wish to use the new item format might find the *revised* C-scale (Ray, 1972a) superior to the original. The revised scale does at least initially appear to overcome three of the problems with the original: low general population reliability; occasional positive correlations between the supposedly negative and positive halves; and the regular alternation between negative and positive items which makes it possible that some respondents will "guess the pattern" and thus give spuriously consistent answers.

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