In order to illustrate the cross-culture applicability of Reeder's Theory of Beliefs, Disbeliefs, and Social Action and its usefulness in predicting and explaining social actions, studies conducted in communities in India, Sudan, Lebanon, northeastern United States, and western United States are examined. Using this theory, beliefs and disbeliefs and reference category characteristics (age, sex, education, income, etc.) are examined in each study. The theory holds that "as social actors act upon or interact with referents (things), the action takes 1 of 4 forms: (1) beliefs and opinions, (2) feelings and sentiments, (3) hypothetical responses, or (4) gross behavioral responses." Social action is influenced by beliefs and disbeliefs, reference category characteristics, and past actions and experiences, which are consolidated into one—beliefs and disbeliefs. The studies examined deal with (1) the relationship of beliefs and disbeliefs to social participation in various types of organizations in the United States; (2) the exploration of the meanings of reference category characteristics; (3) the adjustment of Sudanese farm families to a new location; (4) the participation of farmers in a Lebanese village cooperative; (5) the examination of factors related to the consumption of frozen meat in suburbs of Beirut, Lebanon; and (6) community leadership and leadership structure in 2 villages in Punjab, India. Results show beliefs and disbeliefs to be dependable, independent variables in all 5 cultures and reference category characteristics to be less dependable and more capricious for both prediction and explanation. (NQ)
A COMPARISON OF BELIEFS AND DISBELIEFS AND REFERENCE CATEGORY CHARACTERISTICS AS DIRECTIVE FACTORS OF SOCIAL ACTION IN FIVE CULTURES

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Ivan Fahs
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A COMPARISON OF BELIEFS AND DISBELIEFS AND REFERENCE CATEGORY CHARACTERISTICS AS DIRECTIVE FACTORS OF SOCIAL ACTION IN FIVE CULTURES

This paper reports on studies in communities in five cultures: India, Sudan, Lebanon, northeastern U.S.A., and western U.S.A. (Mormon). In each study, beliefs and disbeliefs and reference category variables were examined using the same general theoretical frame of reference. That theoretical framework is Reeder's Theory of Beliefs, Disbeliefs and Social Action. The purpose of this paper is to demonstrate the cross-culture applicability of the theory and its usefulness in predicting and explaining social actions.

The Theory

The theory holds that as social actors act upon or interact with referents ("things"), the action takes one of four forms: 1) beliefs and opinions, 2) feelings and sentiments, 3) hypothetical responses, or 4) gross behavioral responses. Social action, regardless of its form, is influenced by some or several of ten types of beliefs and disbeliefs: goals, belief orientations, value standards, habit and custom, expectations, self-commitment, force, opportunity, ability, and support. Social action is also influenced by reference category characteristics and past actions and experience, both of which are translated into beliefs and disbeliefs (meanings) by social actors. Thus, the three main types of influences (beliefs and disbeliefs, reference category characteristics, and past actions and experiences) are consolidated into one -- beliefs and disbeliefs.
In a social action situation, some or several of the ten types of beliefs and disbeliefs regarding a particular referent are operational. Those that are operational are those the social actor perceives as relevant to the particular situation. The combined cumulative influence of this relevant cluster of beliefs and disbeliefs will direct his action regarding the referent. But the cluster is directive only within the framework of the array of attitudinal-behavioral response patterns provided by the community-society. A social actor finds a number of alternative attitudinal-behavioral response patterns regarding each referent from which he can select. No single normative response is provided. No matter what response pattern he chooses, an actor will find support from substantial numbers of social actors in the community.

A social actor's choice of response will exhibit consistency with his beliefs and disbeliefs and actions regarding a particular referent. His beliefs about a referent will be consistent with one another; his sentiments will be consistent with one another; his hypothetical responses will be consistent with one another; and his gross behavioral responses will be consistent with one another. And further, all of these social actions toward a particular referent will be consistent with one another.

The theory also maintains that beliefs and disbeliefs not only influence and direct social action, but that social action also influences beliefs and disbeliefs.

The Studies

In 1963 the senior author of this paper and Heckert designed a study to make possible a comparison of reference category characteristics
and beliefs and disbeliefs as independent variables in relation to social participation in three types of organizations, namely: civic, fraternal, and religious. (These are among the most frequently represented types of voluntary organizations in upstate New York, where the study was conducted.) The study was also designed to explore the meanings of reference category characteristics. This part of the analysis was undertaken by Yacoub as a Ph.D. dissertation.

The relationship of beliefs and disbeliefs to social participation was studied using a hypothetical action scale and a gross behavioral response scale for each of the three organization types and fourteen specific beliefs and disbeliefs with identical questions being asked for each of the three types (Table 1). Thus, there were 84 possible belief and disbelief relationships. Of the eighty-four, eighty-three or 99 percent were significant at the .05 level or above. As to the magnitude of their correlations, about one-fourth fell in the 20's, two-fifths in the 30's, one-fourth in the 40's, and 12 percent in the 50's or 60's.

(Table 1 about here)

In exploring the relationship of reference category characteristics to the three types of social participation, eight reference category characteristics and seventeen religious, civic and fraternal scales were included for a total of 136 possible relationships (Table 2). The reference category characteristics showed quite different relationships to the three referents. Of the possible relationships, 37 percent were found to be significant at the .05 level or above. Of those that were significant, one-half had correlations under 30; the remainder, with four exceptions, fell in the 30's.
Table 1. Relationship of Specific Beliefs and Disbeliefs to Hypothetical Action (H.A.) and Gross Behavioral Response (G.B.R.), Community B, Upstate New York*

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Benefit to occupation (G)</td>
<td>.32</td>
<td>.33</td>
<td>.37</td>
<td>.32</td>
<td>.43</td>
<td>.38</td>
</tr>
<tr>
<td>2. Power and influence over you and your way of life (G)</td>
<td>.40</td>
<td>.28</td>
<td>.39</td>
<td>.38</td>
<td>.31</td>
<td>.46</td>
</tr>
<tr>
<td>3. Good or bad (G)</td>
<td>.33</td>
<td>.36</td>
<td>.37</td>
<td>.32</td>
<td>.37</td>
<td>.40</td>
</tr>
<tr>
<td>4. Confidence and trust (G)</td>
<td>.36</td>
<td>.25</td>
<td>.36</td>
<td>.32</td>
<td>.43</td>
<td>.44</td>
</tr>
<tr>
<td>5. Active and productive or passive and unproductive (B)</td>
<td>.32</td>
<td>.32</td>
<td>.27</td>
<td>.23</td>
<td>.26</td>
<td>.25</td>
</tr>
<tr>
<td>6. Strong or weak (B)</td>
<td>.32</td>
<td>NS</td>
<td>.25</td>
<td>.23</td>
<td>.29</td>
<td>.21</td>
</tr>
<tr>
<td>7. Importance (V)</td>
<td>.42</td>
<td>.38</td>
<td>.40</td>
<td>.45</td>
<td>.38</td>
<td>.47</td>
</tr>
<tr>
<td>8. Expectation of spouse and family (E)</td>
<td>.55</td>
<td>.35</td>
<td>.63</td>
<td>.28</td>
<td>.60</td>
<td>.29</td>
</tr>
<tr>
<td>9. Expectation of officers and members (E)</td>
<td>.53</td>
<td>.46</td>
<td>.64</td>
<td>.34</td>
<td>.57</td>
<td>.37</td>
</tr>
<tr>
<td>10. Personal commitment (C)</td>
<td>.55</td>
<td>.49</td>
<td>.60</td>
<td>.48</td>
<td>.53</td>
<td>.54</td>
</tr>
<tr>
<td>11. Support of spouse and family (S)</td>
<td>.35</td>
<td>.35</td>
<td>.41</td>
<td>.26</td>
<td>.44</td>
<td>.34</td>
</tr>
<tr>
<td>12. Support of close friends (S)</td>
<td>.37</td>
<td>.33</td>
<td>.39</td>
<td>.28</td>
<td>.42</td>
<td>.41</td>
</tr>
<tr>
<td>13. Effectiveness in chairing a meeting (A)</td>
<td>.41</td>
<td>.22</td>
<td>.45</td>
<td>.28</td>
<td>.41</td>
<td>.20</td>
</tr>
<tr>
<td>14. Difficult to join (O)</td>
<td>.26</td>
<td>.33</td>
<td>.41</td>
<td>.26</td>
<td>.29</td>
<td>.35</td>
</tr>
</tbody>
</table>

Coefficients of correlation are all adjusted coefficients of contingency (C). All are significant at the .05 level or above, unless otherwise specified.

*The data for the study were gathered in upstate New York in 1963.

G = Goal  S = Support
B = Belief Orientation  A = Ability
V = Value Standard  O = Opportunity
E = Expectations  F = Force
C = Self-Commitment  H = Habit & Custom
Occupation, income and education were related to the civic sector and not to the fraternal or the religious sectors, with only two or three exceptions. In contrast, religious denomination was related to both the religious and fraternal sectors but not to the civic sector. Age was the only factor that was consistently related to all three sectors while, with a couple of exceptions, sex and military experience were not related to any of the three sectors.

In conclusion, beliefs and disbeliefs were more dependable and also exhibited higher relationships as independent variables when related to participation than reference category characteristics.

Yacoub added another important dimension to this relationship. His analysis indicated that reference category variables are primarily masks that hide a small cluster of socially-shared meanings. He further found that the meanings are different for each referent and are different for the same referent in different situations. He concluded that reference category variables are in fact transposed into beliefs and disbeliefs and can be measured in that form. Although his data were for only one culture, it can be hypothesized that most reference category characteristics will also have different meanings in other cultures.

In 1968 Abdelrahman, using Reeder's frame of reference, conducted a study of the adjustment of a population of Sudanese farm families to a new location, a new climate, and a new type of agriculture. These date-growing farm families had been displaced from their village in Sudan by the construction of the Aswan High Dam and were relocated in Sudan's Khashm el-Girba project in a hot humid climate where cotton is the main crop.
Table 2. Relationship of Reference Category Characteristics and Attitudinal-Behavioral Response Patterns Toward Religious, Civic and Fraternal Organizations, Community B, Upstate New York

<table>
<thead>
<tr>
<th>Attitudinal-Behavioral Response Scales</th>
<th>Sex</th>
<th>Age</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Head</th>
<th>Family</th>
<th>Denomination</th>
<th>Religion</th>
<th>Military Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Religious Social Action Scales</strong></td>
<td></td>
<td></td>
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<tr>
<td>1. Religious Opinion Scale</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>a. Belief in God</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.26</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Life after death and morality</td>
<td>NS</td>
<td>.24</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.42</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Religious Sentiment</td>
<td>.24</td>
<td>.22</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.36</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Religious Hypothetical Action Scale</td>
<td>.25</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.34</td>
<td>NS</td>
<td></td>
<td></td>
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<tr>
<td>5. Religious Composit Scale</td>
<td>NS</td>
<td>NS</td>
<td>.26</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.31</td>
<td>NS</td>
<td></td>
<td></td>
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<tr>
<td><strong>Civic Social Action Scales</strong></td>
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<tr>
<td>1. Civic Opinion Scale</td>
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<tr>
<td>2. Civic Sentiment Scale</td>
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<tr>
<td>3. Civic Hypothetical Action Scale</td>
<td>.19</td>
<td>.23</td>
<td>.30</td>
<td>.25</td>
<td>.30</td>
<td>.25</td>
<td>NS</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Civic Gross Behavioral Response Scale</td>
<td>NS</td>
<td>.20</td>
<td>.32</td>
<td>.21</td>
<td>.46</td>
<td>.44</td>
<td>NS</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Civic Composit Scale</td>
<td>NS</td>
<td>.25</td>
<td>.33</td>
<td>.33</td>
<td>.33</td>
<td>.27</td>
<td>NS</td>
<td>NS</td>
<td></td>
<td></td>
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<tr>
<td><strong>Fraternal Social Action Scales</strong></td>
<td></td>
<td></td>
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<tr>
<td>1. Fraternal Opinion Scale</td>
<td></td>
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<td></td>
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<tr>
<td>2. Fraternal Sentiment Scale</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Fraternal Hypothetical Action Scale</td>
<td>.19</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.32</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Fraternal Gross Behavioral Response Scale</td>
<td>NS</td>
<td>.34</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.31</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fraternal Composit Scale</td>
<td>NS</td>
<td>.32</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>.37</td>
<td>.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at the .05 level or more

| 4 | 13 | 5 | 6 | 5 | 4 | 12 | 2 |
Abdelrahman developed 14 Guttman-type five- and six-item scales for aspects of the situation hypothesized as being relevant to adjustment. Twelve of the scales had R coefficients of .90 or above, and seven of the scales met both the Guttman and the Menzel criteria for scalability.

When the 14 scales were related to adjustment, 12, or 86 percent, were found to be significant at the .05 level or above (Table 3). In marked contrast, for 18 reference category characteristics studied, only 5, or 28 percent, were found to be significant at the .05 level or above by any one of three criteria, Chi Square, Gamma, and Pearsonian (Table 4). Once again, in another culture, beliefs and disbeliefs were found to be the more dependable independent variables and they were found to yield relationships of greater magnitude than reference category characteristics.

(Tables 3 and 4 about here)

In 1968 using the same theoretical frame of reference, Yacoub and Haddad made a study of the participation of farmers in a Lebanese village cooperative. They included five of the belief and disbelief factors and an opinion and a sentiment factor in their design. They also included seven reference category characteristics.

The five general belief and disbelief scores, which included belief orientation, ability, expectations, goals, and support, were all significant at the .01 level or above when related to participation in the cooperative (Table 5). The opinion and attitude measure used by Yacoub and Haddad was significant at the .05 level and their satisfaction measure was significant at the .001 level. In sharp contrast, even to the studies mentioned above,
Table 3. Summary of Measures of Association Between General Adjustment and the Tenants' Attitudes* toward Significant References in Their Environment, Khashm el-Girba, Sudan

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$X^2$</th>
<th>$\gamma$</th>
<th>Pearson $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitude toward cotton</td>
<td>13.34</td>
<td>0.131*</td>
<td>0.125*</td>
</tr>
<tr>
<td>2. Attitude toward irrigation</td>
<td>25.22*</td>
<td>0.268**</td>
<td>0.234*</td>
</tr>
<tr>
<td>3. Attitude toward climate</td>
<td>57.917**</td>
<td>0.518**</td>
<td>0.431**</td>
</tr>
<tr>
<td>4. Attitude toward inspectors</td>
<td>16.69</td>
<td>0.152*</td>
<td>0.118*</td>
</tr>
<tr>
<td>5. Attitude toward strangers</td>
<td>18.20</td>
<td>0.177**</td>
<td>0.162*</td>
</tr>
<tr>
<td>6. Attitude toward the Nile</td>
<td>-56.59**</td>
<td>-0.430**</td>
<td>-0.391*</td>
</tr>
<tr>
<td>7. Attitude toward social services</td>
<td>28.26**</td>
<td>0.193**</td>
<td>0.190*</td>
</tr>
<tr>
<td>8. Attitude toward manual work</td>
<td>5.656</td>
<td>0.163</td>
<td>0.060</td>
</tr>
<tr>
<td>9. Attitude toward housing</td>
<td>56.988**</td>
<td>0.416**</td>
<td>0.383**</td>
</tr>
<tr>
<td>10. Attitude toward tenancy agreement</td>
<td>20.099+</td>
<td>0.252**</td>
<td>0.159*</td>
</tr>
<tr>
<td>11. Attitude toward size of tenancy</td>
<td>14.795+</td>
<td>0.223*</td>
<td>0.146*</td>
</tr>
<tr>
<td>12. Attitude toward distance to tenancy</td>
<td>14.223</td>
<td>0.292**</td>
<td>0.159*</td>
</tr>
<tr>
<td>13. Attitude toward extension staff</td>
<td>15.608</td>
<td>0.145</td>
<td>0.093</td>
</tr>
<tr>
<td>14. Attitude toward tenancy system</td>
<td>28.800**</td>
<td>0.366**</td>
<td>0.260**</td>
</tr>
</tbody>
</table>

*The term attitude is used as it was better known both by the thesis chairman and by the Sudanese audiences. However, these scales deal with specific aspects of the situation and would be more accurately described in terms of theory as beliefs and disbeliefs.

+Significant at the .1 level
*Significant at the .05 level
**Significant at the .01 level
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>$\chi^2$ (Chi square)</th>
<th>$\gamma$ (Gamma)</th>
<th>Pearson $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1.711</td>
<td>-0.019</td>
<td>-0.014</td>
</tr>
<tr>
<td>2. Education</td>
<td>2.348</td>
<td>0.079</td>
<td>0.064</td>
</tr>
<tr>
<td>3. Marital Status</td>
<td>1.505</td>
<td>0.094</td>
<td>0.040</td>
</tr>
<tr>
<td>4. Dependents sharing same house</td>
<td>3.176</td>
<td>-0.082</td>
<td>-0.066</td>
</tr>
<tr>
<td>5. Area farmed at Wadi Halfa (former home)</td>
<td>7.083</td>
<td>-0.013</td>
<td>-0.080</td>
</tr>
<tr>
<td>6. Free-hold land</td>
<td>13.22*</td>
<td>-0.239*</td>
<td>-0.173*</td>
</tr>
<tr>
<td>7. Number of rooms</td>
<td>4.66</td>
<td>-0.035</td>
<td>-0.065</td>
</tr>
<tr>
<td>8. Visits by extension staff</td>
<td>14.13*</td>
<td>0.038</td>
<td>0.057</td>
</tr>
<tr>
<td>9. Girba cooperative (membership in)</td>
<td>0.536</td>
<td>0.011</td>
<td>0.008</td>
</tr>
<tr>
<td>10. Halfa cooperative</td>
<td>4.967*</td>
<td>-0.282*</td>
<td>-0.107*</td>
</tr>
<tr>
<td>11. Breach of tenancy regulations</td>
<td>7.656</td>
<td>0.201</td>
<td>0.049</td>
</tr>
<tr>
<td>12. Visits to extension staff</td>
<td>7.202</td>
<td>-0.305</td>
<td>-0.062</td>
</tr>
<tr>
<td>13. Prayer in mosque</td>
<td>2.265</td>
<td>0.099</td>
<td>0.079</td>
</tr>
<tr>
<td>14. Distance to tenancy</td>
<td>3.38</td>
<td>-0.075</td>
<td>-0.046</td>
</tr>
<tr>
<td>15. Place of residence before the move</td>
<td>1.30</td>
<td>0.172</td>
<td>0.051</td>
</tr>
<tr>
<td>16. Travel outside Wadi Halfa</td>
<td>1.88</td>
<td>-0.273</td>
<td>-0.083</td>
</tr>
<tr>
<td>17. Amount of family illness</td>
<td>51.94**</td>
<td>-0.763**</td>
<td>0.409**</td>
</tr>
<tr>
<td>18. Occupation</td>
<td>7.15</td>
<td>0.160*</td>
<td>0.124*</td>
</tr>
</tbody>
</table>

+ Significant at the .1 level  
* Significant at the .05 level  
** Significant at the .01 level
Table 5. Relationship of Cognitive Factors to Farmers' Participation in a Village Cooperative, Abadiyeh, Lebanon

<table>
<thead>
<tr>
<th>Factor</th>
<th>$\chi^2$</th>
<th>d.f.</th>
<th>$\bar{c}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>The belief factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belief in cooperation</td>
<td>23.53***</td>
<td>2</td>
<td>0.56</td>
</tr>
<tr>
<td>Belief in cooperatives</td>
<td>1.53</td>
<td>2</td>
<td>0.15</td>
</tr>
<tr>
<td>Belief in individualism</td>
<td>8.13*</td>
<td>2</td>
<td>0.44</td>
</tr>
<tr>
<td>Belief in Cooperation</td>
<td>4.34</td>
<td>4</td>
<td>0.24</td>
</tr>
<tr>
<td>The ability factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to market outside the cooperative</td>
<td>12.87**</td>
<td>2</td>
<td>0.43</td>
</tr>
<tr>
<td>Knowledge about the cooperative</td>
<td>12.70*</td>
<td>4</td>
<td>0.39</td>
</tr>
<tr>
<td>Power and influence in the cooperative</td>
<td>5.99*</td>
<td>2</td>
<td>0.30</td>
</tr>
<tr>
<td>The expectation factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self expectations</td>
<td>13.64**</td>
<td>4</td>
<td>0.41</td>
</tr>
<tr>
<td>Neighbors' expectations</td>
<td>14.04**</td>
<td>4</td>
<td>0.41</td>
</tr>
<tr>
<td>Family expectations</td>
<td>9.40</td>
<td>6</td>
<td>0.32</td>
</tr>
<tr>
<td>The goals and motives factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>including the economic goal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The support factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family support</td>
<td>17.66***</td>
<td>2</td>
<td>0.49</td>
</tr>
<tr>
<td>Close friends' support</td>
<td>21.32***</td>
<td>2</td>
<td>0.53</td>
</tr>
<tr>
<td>Neighbors' support</td>
<td>6.33*</td>
<td>2</td>
<td>0.30</td>
</tr>
<tr>
<td>Cooperative officials' support</td>
<td>1.64</td>
<td>2</td>
<td>0.16</td>
</tr>
<tr>
<td>Opinions and attitudes toward the cooperative</td>
<td>7.66*</td>
<td>2</td>
<td>0.33</td>
</tr>
<tr>
<td>The satisfaction factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with the cooperative efficiency in marketing</td>
<td>22.75***</td>
<td>4</td>
<td>0.51</td>
</tr>
<tr>
<td>Satisfaction with the administration efficiency</td>
<td>24.48***</td>
<td>4</td>
<td>0.52</td>
</tr>
<tr>
<td>Satisfaction with the cooperative in general</td>
<td>7.69</td>
<td>44</td>
<td>0.31</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level  
**Significant at 0.01 level  
***Significant at 0.001 level
none of the seven reference category characteristics, which included age, occupation, land tenure, land ownership, education, income derived from farming, and religion, was significant at the .05 level (Table 6).

Another study conducted by Yacoub and Ghanima in 1972 in the suburbs of the city of Beirut, Lebanon examined factors related to the consumption of frozen meat. The independent variables included eight reference category characteristics, seven belief and disbelief factors with twenty-four possible relationships, and three attitude indices. Included also were six indices dealing with exposure to mass media. Of the latter only television viewing was significant.

There were significant relationships for all but one of the seven types of beliefs and disbeliefs, the goal factor being the exception. Of the possible twenty-four relationships, fifteen or 62 percent were significant at the .05 level or above. All three attitudinal indices were significant at the .001 level. In contrast, only one, or 12 percent, of the eight reference category characteristics was significant at the .05 level or above, that being the educational level of the household level. In these two studies, then, in this third culture, beliefs and disbeliefs were again shown to be more dependable as independent variables and produced more powerful relationships than reference category characteristics.

(Table 6 and 7 about here)

In 1969-70 Jassal made a study of community leadership and leadership structure in two villages in Punjab, India. Some parts of the study incorporated Reeder's theoretical frame of reference. In a comparison of leaders and non-leaders, Jassal covered eight of the ten types of beliefs.
Table 6. Relationship of Reference Category Characteristics of Farm Head to Participation in a Village Cooperative, Abadiyeh, Lebanon

<table>
<thead>
<tr>
<th>Reference Category Characteristics</th>
<th>$\chi^2$</th>
<th>$\bar{c}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Occupation</td>
<td>N.S.</td>
<td>.18</td>
</tr>
<tr>
<td>2. Land tenure</td>
<td>N.S.</td>
<td>.30</td>
</tr>
<tr>
<td>3. Total land ownership</td>
<td>N.S.</td>
<td>.33</td>
</tr>
<tr>
<td>4. Education</td>
<td>N.S.</td>
<td>.26</td>
</tr>
<tr>
<td>5. Age</td>
<td>N.S.</td>
<td>.31</td>
</tr>
<tr>
<td>6. Proportion of income derived from farming</td>
<td>N.S.</td>
<td>.22</td>
</tr>
<tr>
<td>7. Religion</td>
<td>N.S.</td>
<td>.14</td>
</tr>
</tbody>
</table>
Table 7. Relationship of Reference Category Characteristics and Cognitive Factors to Consumption of Frozen Meat in Two Residential Areas of Beirut, Lebanon

<table>
<thead>
<tr>
<th>Factor</th>
<th>$\chi^2$</th>
<th>d.f.</th>
<th>$\bar{c}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reference Category Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious affiliation of respondent</td>
<td>5.49</td>
<td>2</td>
<td>0.25</td>
</tr>
<tr>
<td>Occupation of household head</td>
<td>7.87</td>
<td>6</td>
<td>0.26</td>
</tr>
<tr>
<td>Income of family</td>
<td>3.92</td>
<td>4</td>
<td>0.22</td>
</tr>
<tr>
<td>Age of respondent</td>
<td>6.46</td>
<td>4</td>
<td>0.27</td>
</tr>
<tr>
<td>Age of household head</td>
<td>7.93</td>
<td>4</td>
<td>0.30</td>
</tr>
<tr>
<td>Educational level of household head</td>
<td>8.66*</td>
<td>2</td>
<td>0.32</td>
</tr>
<tr>
<td>Educational level of respondent</td>
<td>1.66</td>
<td>4</td>
<td>0.14</td>
</tr>
<tr>
<td>Size of family</td>
<td>0.98</td>
<td>4</td>
<td>0.11</td>
</tr>
<tr>
<td><strong>Exposure to Mass Media</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching television (all respondents)</td>
<td>16.78**</td>
<td>6</td>
<td>0.40</td>
</tr>
<tr>
<td>Household head watching television</td>
<td>2.96</td>
<td>6</td>
<td>0.12</td>
</tr>
<tr>
<td>Listening to radio program (all respondents)</td>
<td>6.02</td>
<td>6</td>
<td>0.25</td>
</tr>
<tr>
<td>Household head listening to radio program</td>
<td>7.44</td>
<td>6</td>
<td>0.25</td>
</tr>
<tr>
<td>Reading newspaper (all respondents)</td>
<td>7.92</td>
<td>6</td>
<td>0.29</td>
</tr>
<tr>
<td>Household head reading newspaper</td>
<td>5.36</td>
<td>6</td>
<td>0.21</td>
</tr>
<tr>
<td><strong>Belief and Disbelief Factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expectation Factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-expectation</td>
<td>64.99***</td>
<td>2</td>
<td>0.79</td>
</tr>
<tr>
<td>Expectation of family</td>
<td>39.39***</td>
<td>4</td>
<td>0.62</td>
</tr>
<tr>
<td>Expectation of others</td>
<td>17.05***</td>
<td>4</td>
<td>0.47</td>
</tr>
<tr>
<td>Expectation score</td>
<td>64.73***</td>
<td>4</td>
<td>0.74</td>
</tr>
<tr>
<td>Knowledge About Frozen Meat as a Product</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity Factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondent's awareness of shops that sell frozen meat</td>
<td>17.41***</td>
<td>2</td>
<td>0.45</td>
</tr>
<tr>
<td>Respondent's perception of their being informed about frozen meat</td>
<td>7.65*</td>
<td>2</td>
<td>0.29</td>
</tr>
<tr>
<td>Respondent's knowledge of countries from which frozen meat was imported to Lebanon</td>
<td>13.98***</td>
<td>2</td>
<td>0.43</td>
</tr>
<tr>
<td>Ability Factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to cook frozen meat</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having time needed to cook frozen meat</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents' knowledge about proper ways of cooking frozen meat</td>
<td>83.99***</td>
<td>4</td>
<td>0.80</td>
</tr>
</tbody>
</table>
Table 7 (Cont.)

<table>
<thead>
<tr>
<th>Factor</th>
<th>( x^2 )</th>
<th>d.f.</th>
<th>( \bar{C} )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals Factor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saving</td>
<td>0.98</td>
<td>1</td>
<td>0.21</td>
</tr>
<tr>
<td>Buying cleaner meat</td>
<td>0.16</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Buying tastier and tender meat</td>
<td>0.16</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Improving family diet and health</td>
<td>0.41</td>
<td>1</td>
<td>0.13</td>
</tr>
<tr>
<td>Buying more meat</td>
<td>0.17</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Gaining recognition</td>
<td>2.26</td>
<td>1</td>
<td>0.32</td>
</tr>
<tr>
<td>Satisfying curiosity</td>
<td>2.26</td>
<td>1</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>Support Factor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support of family</td>
<td>36.07***</td>
<td>4</td>
<td>0.60</td>
</tr>
<tr>
<td>Support of neighbors and friends</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support of relatives</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support score</td>
<td>19.55***</td>
<td>2</td>
<td>0.48</td>
</tr>
<tr>
<td><strong>Habits and Customs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lebanese habit and custom of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consuming frozen meat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbors' habit and custom of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consuming frozen meat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family's habit and custom of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consuming frozen meat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relatives' habit and custom of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consuming frozen meat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Beliefs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beliefs score</td>
<td>19.89***</td>
<td>4</td>
<td>0.46</td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opinions and attitudes score</td>
<td>44.50***</td>
<td>4</td>
<td>0.65</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents' satisfaction with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frozen meat in general</td>
<td>11.57***</td>
<td>1</td>
<td>0.65</td>
</tr>
<tr>
<td>Satisfaction of family with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>frozen meat</td>
<td>12.99***</td>
<td>1</td>
<td>0.68</td>
</tr>
<tr>
<td>Satisfaction with cuts of frozen</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meat</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level
**Significant at 0.01 level
***Significant at 0.001 level
and disbelief indices, namely: belief orientations, goals, value standards, expectations, self-commitments, opportunity, ability, and support. He included all four of the forms of social expression -- opinions, sentiments, hypothetical actions, and gross behavioral response -- and seven reference category characteristics.

Of the eight belief and disbelief indices, all were significant for both villages except one, self-commitment, which was significant for one village but not the other. The average for the coefficients was .45 (Table 8). All four forms of attitude and behavioral indices were significant for both villages, and the average of the coefficients was .55 (Table 9). Six of the seven reference category variables were significant at the .05 level or above. Only age was not significant for either village. The average coefficient for those that were significant was .49 (Table 10).

(Tables 8, 9 and 10 about here)

These data then indicate that in relation to community leadership in the Punjab, all three types of variables are highly dependable. The magnitude of their correlations is all strong, but that of reference category variables is slightly stronger than beliefs and disbeliefs with social action variables stronger than either of the others. Combinations of any of the three types increases their predictive and explanatory power.

The five studies presented above were all designed so that the belief, disbelief and reference category variables could be compared as independent variables. Two earlier studies gave rise to this later investigation. While not as neat for comparison purposes as those later
Table 8. Relationship of Belief and Disbelief Indices to Leader and Non-leader Categories for Single Factors, Two Factors Combined and Three Factors, Punjab, India

<table>
<thead>
<tr>
<th>Factors</th>
<th>Village Rupalon Adjusted Coefficient of Contingency (C)</th>
<th>Village Bholapur Adjusted Coefficient of Contingency (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief orientations</td>
<td>.39</td>
<td>.44</td>
</tr>
<tr>
<td>Goals</td>
<td>.44</td>
<td>.43</td>
</tr>
<tr>
<td>Value standards</td>
<td>.36</td>
<td>.44</td>
</tr>
<tr>
<td>Expectations</td>
<td>.54</td>
<td>.62</td>
</tr>
<tr>
<td>Self-commitments</td>
<td>.42</td>
<td>N.S.*</td>
</tr>
<tr>
<td>Opportunity</td>
<td>.44</td>
<td>.55</td>
</tr>
<tr>
<td>Ability</td>
<td>.42</td>
<td>.54</td>
</tr>
<tr>
<td>Support</td>
<td>.43</td>
<td>.45</td>
</tr>
<tr>
<td>Belief orientations and goals combined</td>
<td>.47</td>
<td>.53</td>
</tr>
<tr>
<td>Goals and value standards combined</td>
<td>.48</td>
<td>.50</td>
</tr>
<tr>
<td>Opportunity and ability combined</td>
<td>.58</td>
<td>.70</td>
</tr>
<tr>
<td>Opportunity and support combined</td>
<td>.61</td>
<td>.63</td>
</tr>
<tr>
<td>Goals, expectations and opportunity combined</td>
<td>.73</td>
<td>.84</td>
</tr>
</tbody>
</table>

*Not significant
Table 9. Relationship of Attitude and Behavior Indices to Leader and Non-leader Categories for Single Factors, Two Factors Combined, and Three Factors Combined, Punjab, India

<table>
<thead>
<tr>
<th>Factors</th>
<th>Village Rupalon Adjusted Coefficient of Contingency (C)</th>
<th>Village Bholapur Adjusted Coefficient of Contingency (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinions</td>
<td>.49</td>
<td>.47</td>
</tr>
<tr>
<td>Sentiments</td>
<td>.54</td>
<td>.59</td>
</tr>
<tr>
<td>Hypothetical actions</td>
<td>.36</td>
<td>.51</td>
</tr>
<tr>
<td>Attendance</td>
<td>.49</td>
<td>.45</td>
</tr>
<tr>
<td>Offices held (present)</td>
<td>.62</td>
<td>.92</td>
</tr>
<tr>
<td>Offices held (past)</td>
<td>.53</td>
<td>.52</td>
</tr>
<tr>
<td>Opinions and sentiments combined</td>
<td>.69</td>
<td>.68</td>
</tr>
<tr>
<td>Hypothetical actions and attendance combined</td>
<td>.41</td>
<td>.66</td>
</tr>
<tr>
<td>Opinions, sentiments and hypothetical actions combined</td>
<td>.74</td>
<td>.78</td>
</tr>
</tbody>
</table>
Table 10. Relationship of Reference Category Indices to Leader and Non-leader Categories for Single Factors, Two Factors Combined and Three Factors Combined, Punjab, India

<table>
<thead>
<tr>
<th>Factors</th>
<th>Village Rupalon</th>
<th>Village Bholapur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adjusted Coefficient of Contingency (C)</td>
<td>Adjusted Coefficient of Contingency (C)</td>
</tr>
<tr>
<td>Caste</td>
<td>.25</td>
<td>.47</td>
</tr>
<tr>
<td>Age</td>
<td>N.S.*</td>
<td>N.S.*</td>
</tr>
<tr>
<td>Education</td>
<td>.38</td>
<td>.47</td>
</tr>
<tr>
<td>Land</td>
<td>.49</td>
<td>.55</td>
</tr>
<tr>
<td>Income</td>
<td>.52</td>
<td>.49</td>
</tr>
<tr>
<td>Social class</td>
<td>.59</td>
<td>.57</td>
</tr>
<tr>
<td>Level of living</td>
<td>.42</td>
<td>.45</td>
</tr>
<tr>
<td>Land and level of living</td>
<td>.55</td>
<td>.71</td>
</tr>
<tr>
<td>combined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social class and education</td>
<td>.58</td>
<td>.72</td>
</tr>
<tr>
<td>combined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land, social class and</td>
<td>.55</td>
<td>.67</td>
</tr>
<tr>
<td>level of living combined</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not significant
studies, the two early studies contain considerable comparative data and add yet another culture to those already discussed.

Reeder conducted a study in 1954-55 in which church leaders in the Church of Jesus Christ of Latter-day Saints were compared with active church members and inactive church members in a Mormon community in Utah. In this study the perception of others (selected judges) was found to be most highly correlated with the three leadership-nonleadership groupings (Table 11).

(The Table 11 about here)

The attitudinal-behavioral patterns of the respondents were next most related, while specific church beliefs and disbeliefs of the respondents were in third position. Three reference category characteristics, specifically related to the church, were of about the same magnitude as beliefs and disbeliefs (Table 12). In last position were the usual reference category characteristics. Four out of seven of them were not significantly related to the leadership categories. Only education, occupation and income were related at the .05 level, and all of their relationships were comparatively weaker than those of the other types of variables considered.

(The Table 12 about here)

Additional foundation for the later studies was provided in 1956 when Reeder conducted a study in Community A in upstate New York. Several theses were written on various aspects of this study, but that by Fahs comes closest to the topic dealt with in this paper.
Table 11. A Comparison of Church Leaders, Active Members and Inactive Members on Other Church Related Factors in a Mormon Community, Western U.S.A.*

<table>
<thead>
<tr>
<th>Perception of Others</th>
<th>Adjusted Coefficient of Contingency C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Judges' ratings on willingness to accept church offices and follow council</td>
<td>.88</td>
</tr>
<tr>
<td>2. Judges' ratings on present ability to perform in leadership roles</td>
<td>.87</td>
</tr>
<tr>
<td>3. Judges' ratings on growth in leadership abilities over the past ten years</td>
<td>.87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitudinal Behavioral Patterns</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Church meetings attended during the past year</td>
<td>.85</td>
</tr>
<tr>
<td>5. Behavioral conformity to church teachings (scale)</td>
<td>.73</td>
</tr>
<tr>
<td>6. Attitude toward accepting church offices and positions (scale)</td>
<td>.69</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Beliefs and Disbeliefs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Feeling of strength of expectation that he accept a church office if asked</td>
<td>.65</td>
</tr>
<tr>
<td>8. Self rating on testimony of the Gospel</td>
<td>.59</td>
</tr>
<tr>
<td>9. Confidence in his religious beliefs (score)</td>
<td>.44</td>
</tr>
<tr>
<td>10. Conformity of personal beliefs to church teachings (scale)</td>
<td>.38</td>
</tr>
<tr>
<td>11. Self confidence in performing leadership functions (scale)</td>
<td>.54</td>
</tr>
</tbody>
</table>

*The data for this study were gathered in 1954-55.
Table 12. A Comparison of Church Leaders, Active Members and Inactive Members on Selected Reference Category Characteristics for a Mormon Community, Western U.S.A.

<table>
<thead>
<tr>
<th></th>
<th>Adjusted Coefficient of Contingency C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>.38</td>
</tr>
<tr>
<td>Occupation</td>
<td>.35</td>
</tr>
<tr>
<td>Income</td>
<td>.21</td>
</tr>
<tr>
<td>Age (men 20-65)</td>
<td>N.S.</td>
</tr>
<tr>
<td>Length of residence in the community</td>
<td>N.S.</td>
</tr>
<tr>
<td>Property owned compared with others (self-rating)</td>
<td>N.S.</td>
</tr>
<tr>
<td>Home one lives in compared with others in community (self-rating)</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

**Church Related Reference Categories**

<table>
<thead>
<tr>
<th></th>
<th>Adjusted Coefficient C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priesthood office held</td>
<td>.61</td>
</tr>
<tr>
<td>Had served on a two-year mission</td>
<td>.44</td>
</tr>
<tr>
<td>Married or sealed in the Temple</td>
<td>.65</td>
</tr>
</tbody>
</table>
In Community A, six of seven reference category variables were found to be related to participation in religious organizations, and all seven were related to participation in secular organizations. All of the relationships were relatively weak, however, being in the 20 to 30 range (Table 13). Beliefs and disbeliefs, attitudes, and actions on the other hand, were strongly related to their particular referents and weakly or not significantly related to other referents.

(Table 13 about here)

Data comparing beliefs and disbeliefs with reference category characteristics as independent variables in relation to eight different referents as dependent variables have been presented. These data came from seven separate field studies covering eight communities in five different cultures.

Eight types of beliefs and disbeliefs have been included in several of the seven field studies, namely: goals, belief orientations, value standards, expectations, commitments, opportunity, ability and support. All eight were found to be significantly related to the referent studied in almost every study in which they were included. Beliefs and disbeliefs were thus found to be very dependable as independent variables in all five cultures.

Reference category characteristics on the other hand were not dependable as independent variables. Most reference category variables were not significantly related to most referents. They were significantly related to some referents but not at all related to others. Where several indices regarding a referent were included, they were related to some of
Table 13. Selected Reference Category Characteristics and Selected Beliefs and Disbeliefs Related to Religious and Secular Participation for Community A, Upstate New York*

<table>
<thead>
<tr>
<th>Selected Reference Category Characteristics</th>
<th>Religious Organization Participation</th>
<th>Secular Organization Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.33</td>
<td>.23</td>
</tr>
<tr>
<td>Sex</td>
<td>.20</td>
<td>.26</td>
</tr>
<tr>
<td>Education</td>
<td>.32</td>
<td>.28</td>
</tr>
<tr>
<td>Income</td>
<td>.21</td>
<td>.31</td>
</tr>
<tr>
<td>Occupation</td>
<td>N.S.</td>
<td>.30</td>
</tr>
<tr>
<td>Socio-Economic Status</td>
<td>.29</td>
<td>.35</td>
</tr>
<tr>
<td>Religious Denomination</td>
<td>.37</td>
<td>.33</td>
</tr>
<tr>
<td>Beliefs, Disbeliefs and Social Action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Belief Conformity Scale</td>
<td>.40</td>
<td>N.S.</td>
</tr>
<tr>
<td>Confidence in Religious Beliefs</td>
<td>.47</td>
<td>N.S.</td>
</tr>
<tr>
<td>Citizen Participation Scale</td>
<td>.39</td>
<td>.61</td>
</tr>
<tr>
<td>Civic Prerogative Scale</td>
<td>.38</td>
<td>.52</td>
</tr>
<tr>
<td>Attitude Toward Accepting Public Office</td>
<td>N.S.</td>
<td>.33</td>
</tr>
<tr>
<td>Willingness to Accept Secular Leadership Positions</td>
<td>.25</td>
<td>.53</td>
</tr>
</tbody>
</table>

*The data for this study were gathered in 1956.
the indices but not to others. To interpret this seemingly contradictory picture, further comparative analysis will be helpful.

Since it was found that most reference category characteristics were not related to most referents, attention will be focused on factors that explain relationships that do exist.

In some instances in relation to social participation, a particular reference category characteristic is a criteria for eligibility in recruitment. Civic clubs in U.S.A., for example, recruit business and professional people who automatically rank high on education. Some fraternal organizations are sponsored by a particular religion and they recruit only church members. Other fraternities bar certain religious groups from membership. In the Mormon community, only persons holding certain priesthood offices are eligible for certain church offices.

Both community leadership and church leadership are more related to reference category characteristics than most other referents. Our studies show that persons holding leadership positions are perceived by others as able and willing to lead. Education is also perceived as evidence of leadership ability. Yacoub also found that occupation, education, and income mean expectation and encouragement to participate.

The data on the relationship of education, occupation, and income to religious participation in Community A and Community B indicate that while these three characteristics were related to church participation, they were not related to religious opinions, sentiments, or religious hypothetical action. It would appear that those with more education and income and in white-collar and professional occupations may participate more than others because they feel they are expected to and because they are strongly encouraged to do so by their families.
Sometimes a reference category characteristic is specific to a given referent and is significantly related to other indices regarding that reference but not to indices regarding other referents. Religious denomination, for example, is particularly related to religious and fraternal referents that are religion-linked but not related to civic referents. Similarly, having filled a church mission and having been married in the Temple in the Mormon community are related to church leadership. In our research program, attitudes and behavior have been found to be organized around referents and are consistent with each other in relation to a particular referent. It would seem that reference category characteristics that are specific to a referent share the same characteristic.

Sometimes a reference category variable is both of the same general class and in regard to the same referent as the dependent variable. In the Mormon community, for example, religious participation based on attendance, contributions, and office holding is a gross behavioral response toward the church. Filling a mission for the church and marrying in the Temple, though used as reference category variables, are likewise gross behavioral responses toward the church. They are all the same type of responses toward the same referent and can therefore be predicted to be significantly correlated with each other.

Thus, there are at least four possible bases for the correlation of a reference category characteristic and a dependent variable, any one of these or a combination of them may be responsible for the relationship that is found to exist. The operation of these four generate unpredictability.
Reference category characteristics are simply classification categories that are handy to use. When a reference category characteristic is taken into account as an important component in making a decision, it has a particular cluster of meanings for that situation. It could, for example, mean: eligibility, ability, expectation to participate, encouragement from the family to participate or any one of a number of other things. Its meaning in that situation will be understood and shared by others in the same society. If the situation or the referent or both change the cluster of meanings will change also. Hence, instead of something highly objective, the reference category characteristic has been transposed into beliefs and disbeliefs, which though measurable are highly subjective. The identification of the cluster of meanings that a reference category characteristic has in a particular situation will remove the mask and go far in clarifying what the reference category characteristic is really measuring in that situation.

From this comparison of two broad classes of social data, beliefs and disbeliefs and reference category characteristics in five cultures, beliefs and disbeliefs have been found to be dependable, independent variables in all five cultures and reference category characteristics have been found to be less dependable and more capricious for both prediction and explanation. The findings suggest that reference category variables can provide better predictive and explanatory power if they are unmasked and if the meanings they have in particular situations are identified.
BIBLIOGRAPHY


Yacoub, Salah M. and Antoine Haddad. Factors Influencing Farmers' Participation in a Lebanese Village Cooperative, Publication No. 48, Faculty of Agricultural Sciences, American University of Beirut, Beirut, Lebanon, December, 1970.