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Urban and Rural Families: A Comparative Study of the Impact of Stress on Family Interaction[1]

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This longitudinal study investigated the differential impact of stress, as caused by accumulated life change events, on 101 rural and urban families. It was concluded that the "piling-up" of stressor events inversely influenced the intrafamilial relations for rural, but not urban, families—and most specifically for young rural families. Such conclusions may be interpretated as being supportive of both the traditional distinctions between urban and folk families, and the concept of agrarianism. Implications for the mental health and educational sectors of rural communities are discussed.

The "turnaround phenomena" of the past decade has changed the rural scene—no longer synonymous are the concepts rural and farm [17]. During the 1970's, a significant number of families selectively migrated from urban to rural residences in an attempt to better actualize what perhaps can be described best as the "agrarian ideology" [7; 9]. While agrarianism is not confined to rural areas, there is evidence to suggest that urban and rural communities, and the families who live in them, differ in ways consistent with this "ideology" [3]

Miller and Crader, [13] using Wirth's [18] model of urbanization, reasoned that urban and rural communities, and thus families, differed on the basis of value structures. Certain life values, given the environmental-residential context, were comparatively more fully rewarded and, consequently, attained a higher relative priority in the value structure of families. The findings of their study supported the conclusion that familial value structures for urban and rural families indeed did differ [13]. For urban families, the economic and cultural aspects of community life were perceived as most important, whereas rural families emphasized non-economic values, particularly family and community interaction. It was not implied that interpersonal relationships were not important to urban families, rather that urban families tended not to value interpersonal interaction as highly as did rural families.

The works of Buttel and Flinn [3] and Miller and Crader [13] highlight the importance of family interaction for rural families. It is clear that advocates of agrarianism feel that the rural environment facilitates quality family life which, in turn, promotes a quality community and society. What is not so clear is the impact that recent changes have had on the "new" rural scene. Coward and Smith [4] suggest that there exists an urgent need to understand better the dynamics of rural family life in a changing society.

Change, whether positive or negative, generates stress. Thus, the concern of Coward and Smith [4] can be restated to ask, how does stress affect rural families? What do we know about the capacities of rural families to cope with and adapt to life changes? And, do rural families differ from other families, particularly urban families, in their comparative abilities to deal effectively with stress?

In general, the study of stress has been confined to non-representative urban samples [12]. Conspicuously absent are investigations of how, or even if, stress affects the functioning of normative rural families.

Several factors have contributed to this omission. First, the study of stress historically has been conducted in two areas of inquiry, the medical-psychiatric field and disaster-crisis investigations [8]. The former emphasizes the physiological, somatopsychic aspects of stress, while the latter efforts tend to consider the impact of single, trauma-type stressors. Only recently has work been done which incorporates some of both, with an added dimension [5]. This most recent approach to the study of stressors views change in a longitudinal, cumulative perspective. It is the rate of change experienced that is the critical factor, not simply the nature of any single stressor event per se.

Second, for many researchers, the interpretation of various trends acted to diminish the importance of the rural/urban distinction as a substantive research variable. During the 1950's and 1960's, the combination of rural to urban migration, information diffusion, and enhanced educational opportunities seemingly predicted the ultimate convergence of values for rural and urban families [1]. Concurrently, the rising divorce rate and increasing incidences of alternative family forms combined to sustain the shift of family research interests to historically and classically less traditional areas (i.e., single parent, reconstituted, dual career and wage earning families). The significance of the above for the present study lies in the notion that accumulated life changes may affect rural and urban families in different ways. What if families migrating to rural areas, and seeking to

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enhance the quality of their family interaction, are affected by stress in ways that negatively affect the very life perceptions they most hope to influence positively?

Support for this query is found in the secondary findings of a study investigating the comparative rank-orderings of selected stressor events experienced by both urban and rural families. Using factor analysis, Miller et al. [12] concluded that certain stressor events apparently influence the interpersonal climate of rural families, while the same stressors influence urban families' relationships with the community.

These findings suggest that there is reason to believe that stress, as caused by accumulated life changes, will, because of environmental influences, be perceived differentially by urban and rural families. Specifically, it is speculated that stress may influence the interpersonal relationships of rural families to a greater degree than those of urban families.

The purpose of the present study was to investigate comparatively the differential influence of stress on the interpersonal relationships of representative rural and urban families.

Methodology

The research objectives of this study required a normative sample suitable for the comparative study of urban and rural families over time. Therefore, the sampling procedure was designed to be representative, while maximizing urban/rural differences. Probability samples were drawn in 1974 from urban households within the Lansing, Michigan, SMSA, and rural households from surrounding townships containing no incorporated city or village (open countryside). Urban households were selected from blocks located within randomly drawn census tracts. Rural households were chosen randomly from sections within townships. In each case, the probability of selection was proportional to the population [20].

After initial contact to determine appropriateness and willingness of families for inclusion in the study, the total 1974 sample providing complete data consisted of 196 husband-wife, husband-wife-child(ren) non-student households. Two years later, as many of the original 196 families were contacted as was possible. Of the original families, 101 families providing complete data participated for a second time, and thus comprised the sample for the study described in this paper (N = 101).

Of the original 196 families, 145 were urban households, and 51 were rural. The 1976 sample of 101 families consisted of 64 urban and 37 rural households, a loss of 55.7 percent for urban families and 27.4 percent for rural families. Demographic data taken from the 1976 interviews indicated that the urban and rural families comprising the study sample were matched similarly. Occupationally, only 5 of the 37 rural households were classified as rural-farm, with the remaining 32 (86.5%) families classified as rural, non-farm.

Instruments

Family stress was conceptualized as the accumulation, or "piling-up," of life change events experienced by family members over time. Many stress researchers believe that it is the rate of life change events experienced that is related to changes in functioning, not only the uniqueness of any particular life change event per se [8]. A reduced version of the Social Readjustment Rating Scale was used to assess family stress [10]. Scale items assessed participants' perceptions regarding changes in marital status, spousal employment, health and living patterns, number of family members, and occurrence of family problems. A household member (usually the wife) was asked by the interviewer to identify from a list those events that her family had experienced withing the previous 12-month period. The family stress score was computed by summing the values assigned to each identified life change event.

Family interaction was measured using a modified version of the Family Effectiveness scale of the Family Concept Test [19]. This test is parallel conceptually with the notion of self concept and purports to describe a family member's perception of various aspects of his or her family. The Family Effectiveness (FE) scale assesses a family member's perception of how effectively his or her family functions in the area of intra-familial interpersonal relationships. Scale items focused on the areas of family management and cohesion.

The FE scale was distributed for self-administration in both 1974 and 1976 to each husband, wife, and oldest child over 12 in the sample household. In both years, a professional interviewer administered questions to only one of the adult household members concerning family socio-economic status, and household composition and structure. Questions regarding family stress were asked only in 1976.

The mean stress core for all families (101) was 88.88 (s.d. = 74.7) with urban families having mean scores of 86.5 (s.d. = 72.9) and rural families 93.0 (s.d. = 78.7). The mean FE scores in 1974 were 56.7 (s.d. = 8.65) for wives and 55.9 (s.d. = 7.18) for husbands. In 1976 the same scores were 56.6 (s.d. = 10.7) and 57.19 (s.d. = 8.09) respectively. FE scores for spouses based on an urban/rural distinction did not differ significantly when compared to those of all spouses in either 1974 or 1976. Change in spousal perception of Family Effectiveness was measured by using adjusted differences between 1974 and 1976 FE scores. Copies of scales, demographic data, and formula used to calculate change scores are available from author upon request.

Findings

Correlational analysis (Pearson product-moment) of the relationship between family stress scores and 1976 Family Effectiveness (FE) scores were found to be significant statistically for both rural husbands ($r = 0.5362$, $p < .001$) and wives ($r = 0.3902$, $p < .017$). Correlations for both rural spouses between stress and 1974 FE scores were non-significant. For urban spouses, correlations between stress scores and 1974 and 1976 FE scores were non-significant (significance at .05 level).

Family Effectiveness *change* scores as correlated with stress scores for rural spouses were significant for

husbands ($r=0.3385$), $p<.04$) but not wives, and also were non-significant for both urban spouses.

Subsequent correlations of family stress and effectiveness scores with demographic variables suggested that age might represent an additional variable of interest. Urban and rural families were divided using the husbands' mean age (younger = LT 43 years, older = GE 43 years) as a decision point. Correlations between stress and FE scores for urban spouses were non-significant for both age groups. However, for rural spouses, the younger (LT 43) vs. older (GE 43) comparison revealed significant correlations between stress and FE scores for younger, but not for older, rural spouses (-0.6414, $p<.003$ for husbands; -0.5535, $p<.014$ for wives).

Discussion

The findings of this study have direct implications for rural families and communities. Based on the data presented, it may be concluded that stress differentially affects the interpersonal relationship of rural and urban families. It was found that the rate of stress (accumulated life change events) was associated with variation in the self-perceived effectiveness of intrafamilial interaction within rural, but not urban, families. For rural families, high rates of stress were associated with low levels of interaction and, conversely, low rates of stress were associated with comparatively higher levels of interaction.

The data suggest that the relationship between stress and family interaction may, in fact, be causal. For rural husbands, the change in perceived family effectiveness (FE) from 1974 to 1976 is correlated significantly with the rate of accumulated life change events from 1975 to 1976 ($r=0.3385$, $p<.04$). In addition, the husbands' FE scores at T_1 were non-significant predictors of the rate of stress experienced prior to T_2 ($r=0.2897$, $p<.082$), while the rate of stress experienced prior to T_2 was correlated significantly with the FE scores at T_2 ($r=0.5362$, $p<.001$). The argument for a "cause and effect" relationship would have been strengthened had a stress measure been taken prior to T_1. In this way, it would have been possible to show that variation in the independent variable was related to, or influenced, variation in the dependent variable—a condition sufficient to support the existence of a "cause and effect" relationship [2].

It would be somewhat shortsighted to confine discussion of the implications of this study, given the findings of Buttel and Flinn [3], to rural, non-farm families only. Buttel and Flinn [3] found that belief in the agrarian ideology was not confined primarily to rural families. Data from their study suggest that there was more variation within the urban and rural groups than between them. Further, they found that, for urbans, farm origin was a significant predictor of agrarian values. This means that it is highly probable that the conclusions of the present study have implications for some urban families as well.

Like Buttel and Flinn [3], the present study revealed considerable variation in the stress scores of both urban and rural families. In future research, it would be interesting to investigate the relationship between stress and family interaction for urbans advocating agrarian values.

The serendipitous involvement of age as a variable of interest led to analysis of the interaction among stress, age, and familial interaction. Apparently age, as interpreted to represent life experiences, has a contingent influence upon the hypothesized relationship between stress and family interaction. Clearly the group within this sample most vulnerable to the impact of accumulated life change events is comprised of young, rural, non-farm families. Thus, we are led to the conclusion that the ravages of stress, at least in part, perhaps are modified by the experiences of time.

The definition of stress used in this study is limited in both conceptual scope and operationalization. Certainly there are other life change events that all families, and rural families in particular, experience that were not included in the scale used. Also, the definition of stress (accumulated life change events) represents only one possible perspective. Perhaps future stress research could incorporate other conceptual dimensions (i.e., role strain, physiological measures.

The measurment of family interaction reflects but one aspect of family functioning. The most powerful statement that could be made would address the impact of stress on family functioning—with both stress and family functioning being measures using multi-conceptual scales. In this way, a more complete understanding of the impact of stress on all families, both urban and rural, might be developed.

The longitudinal nature of this study, combined with realistic constraints that did not allow for tracking those families that had moved from the area, skewed the distribution of the sample. This resulted in the loss of those families probably experiencing higher rates of stress. If this belief is accurate, it is reasonable to conclude that the findings of this study represent conservative estimates of the actual statistical relationship between stress and family interaction scores.

The implications of this study focus on two sectors of rural communities—mental health services and education. First, it may be speculated that during stressful times the aggregate incidence of, or request for, assistance from rural families in the areas of interpersonal, marital, and parental relationships should increase. A recent report from a rural mental health center cites a 30 to 40 percent increase in demands for services, especially for marital and child-related problems [15]. This increase came during a period in which there normally would have been a ten percent decline. Because of the difficulty in traveling during the winter months, Ronaldson [15] believes such an increase reflects a major community need. The major stressor identified was a 16 percent unemployment rate. Secondly, given the increased vulnerability of young rural families to the influences of stressors, rural school administrators, counselors, and teachers would be well advised to be sensitive to the special needs of children from distressed families. Although any familial disruptions may negatively influence the child's academic progress [6] it is important for the school to recognize that differential causes require differential treatments. A sup-

portive, understanding, non-judgmental posture communicated by the school to such families is critical. Many of the rural, non-farm families of today are from urban areas. It has been suggested that this influx of families into rural America may have significant implications for rural education [16]. If a single reason for this extensive migration of families can be identified it would most likely be each family's desire to enchance their feelings of cohesion, and the integration of their children into family functioning [14]. Because of the central role which schools play in the rural community, and in the lives of many rural families, schools ought to be attuned to these motivating factors. And to integrate, where and when possible, such values, attitudes and motivations into curriculum, extracurricular and support programs and school-community-family relations [11].

In conclusion, it was found that the comparative influence of accumulated stressors on the functioning of rural and urban families, as described in this study, supports prior findings that rural and urban families differentially rank-order the importance of interpersonal relationships. Because stress apparently influences interaction more in rural than in urban families, it was speculated that family interaction is, comparatively, more highly valued in the rural family.

The findings of this study support both classical and contemporary distinctions between urban and rural families, and suggest implications for the mental health and educational sectors of rural communities.

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