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Community Development as a Therapeutic Force: A Case Study with Measurements

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ABSTRACT

A cross-disciplinary study was undertaken to learn what the social sciences had to offer psychiatry in understanding mental illness. The authors hypothesized that human settlements deficient in satisfying basic physical, psychological, and social needs will evidence higher rates of psychiatric disorders than localities where such needs are met more adequately. A case study is presented showing how community development interventions that provided for greater self-esteem and other need satisfaction resulted in a lower rate of mental illness. Methods for measuring mental illness useful for further research are suggested. This piece originally appeared in Sociological Perspectives on Community Health *(1974).*

Recent generations of sociologists have become increasingly reluctant to participate in community development programs; psychiatrists have never participated. Each discipline studies communities or individuals to learn more about human behavior and to derive theories, yet neither has been very willing to put knowledge thus gathered to a practical test in the hurly-burly of the "real" world. There is little interest or feeling of responsibility in either discipline for combining respective areas of expertise in a way that would be useful for planning social change or for the amerlioration of change that is clearly upsetting to the groups most involved. These are seen as jobs for "planners" or the government. Sociologists claim ignorance in detecting clinical evidence of human damage concomitant with intolerable social conditions. It is likewise

common for psychiatrists to be sadly lacking in adequate acquaintance with principles of social organization. While there is now in evidence a slight tendency for some cross-disciplinary activity, the approach by both sides is still very tentative.

The senior author of this paper had the good fortune to interrupt a psychiatric residency for a year spent (with Alexander Leighton) trying to find out what the anthropological way of investigating humanity had to offer psychiatry. Living with Navajos for a winter, we frequently drove past the town dump and noted a small group of Navajo families encamped there. Conversations with other Navajos indicated that this group of tribesmen were regarded as useless, lazy, corrupt, and altogether despicable. Intimate association with non-dump Navajos and comparison of them with the dump group highlighted the fact that poverty was not the differentiating factor; almost all Navajos were extremely poor by white standards. My subsequent encounters with Eskimos, Japanese in a World War II relocation center, Zuni and Hopi Indians, plus previous intimate knowledge of various subgroups within Western culture, started cerebrations and resonances. These eventually developed into an effort to try to pin down what aspects of the social experience affect, for better or worse, human adaptation as reflected in the presence or absence of psychiatric symptoms. This in turn led to conceptualizing and operationalizing the Stirling County Study which, with the help of many others, was tentatively begun in 1948 and which, in a limited way, still continues (2,3).

The Frame of Reference

This paper describes the research and the philosophy of the Stirling County Study of psychiatric disorder and sociocultural environment, in which both authors participated. The study grew out of Adolf Meyer's psychobiology (29), with additions from physiology, psychology, anthropology, sociology, statistics, history, and so on. The frame of reference for the study, as set forth by A. H. Leighton (11), can be outlined very briefly:

Man exists in a state of continual striving to satisfy basic physical, psychological, and social needs. The needs, expressed abstractly, can be listed as:

I. Biological
   a. Physical security (food, shelter, health)
   b. Sexual satisfaction
II. Psychological
   a. Opportunity to express hostility (without reprisal)
   b. Opportunity to expresss love
   c. Opportunity to secure love
   d. Opportunity to secure recognition
   e. Opportunity to express spontaneity, creativity, volition, etc.

III. Social
    a. Orientation in terms of one's own place and the terms of others in society
    b. Securing and maintaining membership in a definite human group
    c. Sense of belonging to a moral order (a system of values and of being right in what one does)

Interference with achievement of these needs, either from within or from outside the person, may produce a number of results, one of which is the possibility of developing symptoms that reflect the person's frustration, dissatisfaction, or actual suffering. The particular result of a given interference to need achievement is strongly influenced by the person's sentiment system, derived from his culture and quite similar to what other writers speak of as a "value system."

The Stirling County Study

On the basis of this frame of reference, the Stirling County study was designed as an investigation of the epidemiology of psychiatric disorder in a general population. Its basic hypothesis was that in a social setting where achievement of need satisfaction is most faulty, one will find the most psychiatric symptoms. An elaboration and specification of this hypothesis was that there would be many people with symptoms of psychiatric disorder living in local settlements characterized by "social disintegration" (11,8). Such localities are deficient in social and cultural patterns that provide for the achievement of significant needs. It was expected, conversely, that there would be fewer persons with such symptoms in communities which could be characterized as relatively well integrated by these same indicators.

Stirling County, located in a Canadian Maritime Province, was selected in 1950 as the study site. One of the first steps taken was to designate five rural focus areas in the county for intensive studies of both sociocultural patterns and the prevalence of psychiatric disorder. Two of these were relatively affluent, well-integrated communities, and three were examples of the most economically depressed, socially disintegrated settlements to be found in the county. In addition to detailed studies of the focus areas, a survey of remaining sections of the county was also conducted to provide estimates of the overall prevalence of psychiatric symptoms and of selected sociocultural patterns.

A great effort was made to keep the study of the social setting separate from the determination of which people had psychiatric symptoms. Although in the end a single structured interview, supplemented in various ways (17), provided material for both sides of the investigation, the major attempt to avoid contamination and prevent circularity took the form of carefully abstracting and editing the parts of the schedule to be evaluated by psychiatrists. Consequently, psychiatric evaluations were blind insofar as any identification of person or sociocultural

setting was concerned, including clues to socioeconomic status, ethnicity, religiosity, etc.

The definition of "psychiatric" symptoms was taken from the first version of the *Diagnostic and Statistical Manual, Mental Disorders* (American Psychiatric Association, 1952). Since most people assume psychiatric symptoms to mean "mental illness" or at least "something serious," the quotation marks indicate that in many of the individuals studied these were mild and only slightly, if at all, impairing. The researchers' interest lay in identifying even slight reflections of inadequate need achievement so as to study as delicately as possible those associations between conditions of living and personal reactions. It seemed desirable to count all such symptoms in each subject rather than to limit the estimate to some clinical level of "illness" or "seriousness" or to a single descriptive "diagnosis." We hoped to relate particular kinds of symptoms to particular kinds of sociocultural situations (such as peptic ulcers in London bus drivers), and it was decided that the chance for this should be preserved.

As has been reported in considerable detail (17), the basic hypothesis was confirmed. Communities at opposite ends of the integration-disintegration continuum stood in strong contrast with regard to the amount and intensity of psychiatric disorder which could be identified in individual residents.

The Focus

In this paper we confine ourselves to discussing certain aspects of the unorganized and socioeconomically depressed communities in which we could find very few people who could be considered free of any signs of psychiatric disorder. It is worth noting that there was no evidence of a high number of psychotics in these communities. Rather, there were increased numbers of symptoms of other psychiatric categories, and these were commonly associated with a significant degree of impairment of functioning. This point is made because of the widely held opinion that poor people have psychoses (especially schizophrenia), while rich people have neuroses, a conclusion derived from the studies of *treated* populations where such a relationship has been clearly demonstrated. In the depressed communities studied in Stirling County, individuals had numbers of psychophysiological and psychoneurotic symptoms, sociopathic behavior, personality disorders, and the usual small percentages of brain syndrome, mental retardation, and psychoses. It seemed to be a circular relationship where unfavorable, unsatisfactory living circumstances led to symptom development, which in turn increased the difficulty of doing anything to improve the living circumstances.

Once it was demonstrated that there was a strong relationship between unfavorable social and economic conditions and a relatively high prevalence of psychiatric symptoms, it was a natural intellectual progression to wonder if the symptoms could be diminished by intentionally improving the living conditions.

The latter, of course, has been the avowed aim of many community development programs, but rarely have such programs held specific expectations of mental health consequences. Improvement of living conditions has usually been seen as a sufficient good in itself. However, with the study's commitment to the interrelationship of life circumstances and psychiatric symptoms, it seemed imperative to further test the hypothesis by seeing if changes in the mental health level might be achieved by stimulating social, educational, and economic changes of a sort that could be expected to enhance individuals' skills, interpersonal competence, and possibilities for choices.

Recent history has seen the rise of community organization and action programs in many parts of the United States and other countries, where much effort has been invested in helping the local people to identify their problems, set their priorities, and then learn how to go about improving their living circumstances. Some of these have been quite successful in ways comparable to the events to be described below which took place in the Stirling County community. To the best of our knowledge, however, no attempt has been made to estimate the mental health level of the people involved in other community-change programs, either before or after the effort. This is not surprising in view of the compelling socio-economic needs of the people and the slow development of an understanding of the implications of sociocultural change for mental health. This has been further hindered by the impression that the estimation of mental health level can only be done by psychiatrists, who are in short supply and not trained for this kind of research. Alternative means of such measurement are discussed later in this paper.

We first describe the series of events which took place in one of the three depressed communities studied which transformed the settlement from a depressed to an ordinary community in the space of only a few years. Whereas in 1952, at the time of the first survey, this community had all the unfavorable characteristics of a slum, ten years later most of its characteristics, including its mental health rating, had become indistinguishable from those of average communities in the county. There follows, then, an account of "The Road," one of the depressed focus communities, where certain intentional inputs were supplemented by spontaneous and chance events to produce significant social and economic change and a concomitant rise in the level of community mental health.

A Case Study

At the beginning of the 1950s, The Road incorporated a population of 118 persons occupying 29 households scattered along a two-mile dirt road that extended from the coast to the sparsely populated interior of the country. It stood out clearly among neighboring settlements as a rural slum: a string of ramshackle, crudely patched, tarpapered and unkempt homes situated on scrubby and rocky land which was largely untended and overgrown with undersized trees among a general cover

of weeds and bushes. The Road had first been settled in the 1850s, but never in its history had it constituted a highly developed, exclusive, and self-sufficient community. From the beginning, its social life was very much a product of the character of its relations with surrounding populations.

The first settlers were families of French background who had migrated to a predominantly English area of the country, attracted by employment in shipyards at the coast and the opportunity for hauling timber from woodlots further inland. Not being concerned with farming, these early migrants settled on poor, cheap land strategically located for both employment on the shore and the profitable timber trade.

In time, ties between the inhabitants of The Road and their natal French communities weakened. Intermarriage with surrounding English populations began to take place, the French language began to drop out of use, and significant economic bonds to the English Protestants of the area increased. Efforts by local Protestants to establish a Baptist mission on The Road proved generally ill-fated, but some converts were won and some weakening of commitment to the Catholic faith occurred. The failure of missionization, however, coupled with the incomplete assimilation of English cultural characteristics, served to perpetuate cool feelings on the part of the English in the local area toward the French. Prior to the turn of the century, The Road nevertheless remained economically viable, enjoying the fruits of a booming shipbuilding industry at the coast and an active lumber trade between the coast and the interior.

At the beginning of the present century, the shipbuilding industry collapsed, and with it the trade in lumber. This resulted in the precipitous loss of the economic resources upon which people on The Road had depended. Although the change in the economic situation also wrought hardship on surrounding English populations, their greater education, fluency in English, social connections, and capital resources facilitated their adaptation to the economic crisis. The Road, on the other hand, had few resources to fall back on: its inhabitants formed a small population, situated on poor land, with little capital or education, isolated from their French homeland, and socially peripheral to the neighboring English. In difficult circumstances themselves, the neighboring English were ill disposed toward supporting the people of The Road economically or otherwise, and the social boundaries between the two groups became firmer.

In the years that followed, as surrounding communities managed to recover their economic position in some measure, the people of The Road were forced to resort to arduous, low-paying forms of labor which did not afford the margin of surplus that might have permitted them to break out of their economic straits. The settlement thus gradually acquired the appearance of a rural slum, with a distinctive economic position and life style which set it clearly apart from its milieu and rendered its inhabitants easy targets for disparagement as an inferior breed. With no traditional image of themselves as constituents of a cohesive and prideworthy community, the people of The Road appear to have promptly acquired the social

and psychological characteristics which typified the settlement in 1950 when studies of it were begun.

Intergroup Relations

Known pejoratively throughout the country as "monkeys," Road inhabitants were found in 1950 to share a widespread reputation for laziness, drunkenness, fighting, thievery, illicit sexual indulgence, and a variety of other traits deemed indicative of amorality and mental inferiority. These characteristics were attributed, in the popular stereotype, to excessive inbreeding. Repeatedly, "Monkeytown" was singled out by informants elsewhere in Stirling as "the worst place in the county."

For their part, people on The Road did not hold a benign opinion of outsiders. While it was widely recognized that respect should be shown to the faces of people from neighboring communities, particularly those in positions of authority, it was felt that outsiders were not to be trusted, and they were conventionally regarded as hypocritical, hostile, and exploitative in their dealings with people from the settlement. Social contact with outsiders was thus avoided when possible, crude but subtle jokes at their expense were a source of much amusement, and accusations and stories concerning the outsiders' immoral activities were common conversational topics among Road residents.

However, this did not generate ingroup solidarity. Even more striking than the negative stereotype of The Road held by outsiders was the frequency and intensity with which its inhabitants themselves expressed negative conceptions of one another. Field workers' first contacts within the settlement often stimulated remarks about The Road which matched the most extreme disparagement voiced by outsiders. Chronic animosities supported by disparaging stereotypes divided the residents along kin group lines, and even normally friendly or benign relations between close kinsmen and others were often breached by public accusations. Hostilities of this temporary sort tended to erupt with only minor provocation, coming to public view in a fight or, more commonly, in the form of character assassination on one side and response in kind. These conflicts were coupled with accusations of "putting on airs." Taken altogether, these patterns left few individuals safe from being targets of publicly expressed hostile feelings and public avowals of their untrustworthiness.

These sentiments found concrete expression in the limited and transient character of the voluntary, leisure time, social contacts among inhabitants of the settlements (1.) Such contacts were limited to occasional visits between close kin for the women and to gatherings of men at a nearby dance hall, filling station, or the home of one of the local bachelors where there would be drinking, swapping stories, and often, fighting. Aside from these activities and from contacts with one another in the course of work, a pattern of guarded mutual social isolation

was the normal state of interpersonal relations. The pattern here stood in sharp contrast to the relations sustained through a variety of regularly organized community activities among members of most other communities in the county.

Residents of the settlement thus shared an identification by outsiders as being fundamentally amoral and untrustworthy, which they reciprocated with sentiments in kind. These stereotypes appeared to guide behavior in interactions between The Road and surrounding communities. Within the settlement, even if individuals denied that such stereotypes applied to themselves, there was little support for their viewing one another as more trustworthy or deserving of social commitments than the stereotype would justify. The frequent and pervasive allegations to the contrary and the readiness to disparage one another served to continually reinforce a conception of their relations as normally mistrustful and hostile and to further the adoption of this concept as the basis of all their social dealings.

The economic position of the people of The Road in the early 1950s afforded a material standard of living far below the norm for the county as a whole. Occupationally, 74 percent of the household heads either relied on work of the lowest category on the scale of occupational advantage-disadvantage constructed for the county or were drawing only unearned incomes. No household derived income from farms or woodlots of its own nor from fishing on its own account, both of which were typical occupations in most other rural parts of the county.

The bulk of The Road's wage earners made their living by contracting for farm labor in neighboring settlements, by temporarily hiring-on to cut timber with woodlot owners in the vicinity, or by digging clams. In any given year, a man typically engaged in some combination of these activities, since none by itself could provide a steady income. Most men supplemented these earnings by occasional day labor at various odd jobs in surrounding communities.

Farming served as a source of day labor only during the summer months. Lumbering, on the other hand, while less seasonal, was nevertheless an irregular form of employment, being only occasional and for relatively short periods. The men who worked in the woods did so as employees of local lumbermen or farmers who needed extra hands for cutting work on their own lots. The nearest clam flats, located some 25 miles from The Road, were the scene of the mos widely practiced single form of subsistence activity. Diggers were paid by the barrel by companies located in Bristol, the county seat, and clamming offered a year-round opportunity for income. Given the distance to the clamming grounds, however, daily travel back and forth to the flats was impossible. Accordingly, men from The Road established camp on the flats in crud brush or tarpaulin shelters for a week or two at a time, returning home to seek other types of work between trips. These extended sojourns and the high level of activity in clamming were characteristic of the summer months only. In the winter the freezing rain, ice, and snow precluded camping for any extended period, and clamming was generally undertaken only as a last resort.

All these occupations represented the bottom of the county hierarchy of oc-
cupational status, and the resulting negative evaluation of their occupational roles
was fully recognized by people on The Road. To outsiders, their position simply
indicated their inferiority and genetic incompetence; on The Road, the low oc-
cupational position was ascribed to the exploitation and hostility of outsiders.

Social Organization

It is clear, however, that the economic history of The Road as outlined
above was primarily responsible for the plight of its inhabitants. The settlement
had never had the resources-the woodlots, farmland, or other capital-to produce
anything of economic value locally. The one commodity it had ever offered on
the local market was labor, and in this respect alone it differed from most other
settlements in the country. Secondly, from the time of the decline in shipbuild-
ing and the lumber trade, The Road had no marketable skills and no monopoly
on the type of marketable labor it was able to supply. The educational and skill
level of its workers could be matched or surpassed almost anywhere in the
county. The labor force was clearly unsuited to either professional roles or to
other economically rewarding and respectable forms of employment. Among the
opportunities for unskilled work available, the types which could absorb the
greatest numbers were those which brought the least compensation, both in
status and in the amount and steadiness of income.

In 1952, nearly 80 percent of the adults on The Road continued to identify
themselves as Catholic in the French tradition, with the remainder indicating
Baptist affiliation. These religious affiliations were almost entirely nominal,
however. There was no local church, and the people who attended services at all
did so in neighboring communities. Residents attended church two or three
times at most in the course of a year. Participation in church sponsored activities
of a more secular nature was equally rare and peripheral. This contrasted
markedly with church-related activity os a Catholic community in the French
section of the county also studied as a focus area in 1952. In the latter com-
munity, 90 percent of the population reported attending all or most services of
the church in the course of a year (8). On a scale of public religious participa-
tion constructed for the county as a whole, The Road registered very low com-
pared to county norms. Still, this low level was not reflected in private religious
alienation. On the contrary, a scale of private religious participation (including
such items as the personal importance of religion, prayers, and grace at meals)
showed The Road to be substantially closer to county norms than the public
sphere. Thus, a striking discrepancy between the levels of religious involvement
was registered by the settlement on these two measures.

The typical rationale expressed for the minimal participation in public
religious activities was, first, that the clergy took little interest in them and

generally harbored unfriendly attitudes toward them. Secondly, Road residents felt self-conscious and uncomfortable associating with outsiders who looked down on them. Although persons from The Road were permitted to join in the activities of churches outside the settlement, they felt that they were accorded inferior status, and that their presence was tolerated only with obvious distaste and condescension. No alternative was afforded through indigenously organized religious activities, with the result that they completely lacked one of the institutions which served as a major focus for social activities in other communities in the county.

A small one-room school at the inland end of The Road served most families in the settlement and a few other scattered homes. Up to eight grades of formal schooling were offered. In order to go beyond this level, a youngster would be required to board in Bristol, a financial impossibility for virtually every family.

For years, The Road school had been poorly staffed. In all but one of the ten years prior to the study, it had no fully qualified teacher, with the post consequently occupied by a succession of individuals who had been granted temporary "permissive" teaching licenses. Understandably, there was a widespread opinion that there was little use in sending children to the school. In particular, some were encouraged to drop out and work for the family by finding odd jobs or going clamming because the teachers "didn't know anything anyway." Resentment was also expressed toward paying tax money to support teachers who were "no damn good."

There was no formal parents' organization associated with The Road school, while such organizations flourished in other districts in the immediate area. Furthermore, no one from The Road held a position on the locally elected Board of Trustees responsible for the management of school affairs. Little attention was paid to Board elections in the settlement, and the long-standing incumbencies of the outside Board members were never challenged. Similarly, Road adults virtually never made contact with the teacher or trustees concerning such matters as the progress of children in school, the maintenance of school facilities, or the quality and selection of teachers. The local school represented the one formal institution which The Road might have claimed as its own and which afforded a potential focus for community activity. In spite of this, collective involvement related to school matters remained negligible.

Seeds of Change

An immediate outgrowth of the first study of The Road was a program for improvement drawn up by the researcher who had conducted the initial field work there, Allister M. Macmillan. Macmillan succeeded in interesting school author-

ities to give special attention to the settlement, with the result that a man responsible for adult education in the area was encouraged to attempt an experimental program. This educator defined his objective as that of improving the skills of The Road people so as to make them more employable, and he planned to accomplish this long-range goal by establishing regular adult education classes at the settlement's school. His initial tactic, however, was to attract adults to regular evening gatherings at the school by showing free movies. With the collaboration of the schoolteacher, he began by showing movies during school hours to the children, then sending them home with the news that there would be movies again in the evening for anyone who wished to attend. Attendance at the first showings was reasonably good, and the first attempt toward community organization was the suggestion by the educator that The Road people elect a committee to select subsequent programs from the list of available films. He also gradually encouraged the showing of films with educational content, and began suggesting the possibility of adult classes in the school.

Since there was no electricity in the school, the first showings required that the educator bring along a portable generator. He pointed out at a suitable time that the school ought to be electrified if the evening programs were to be carried on properly and, furthermore, that the Department of Education was prepared to meet half the cost if the rest were raised in the neighborhood. This suggestion was made partly because of the immediate practicalities, but was also influenced by his recognition that local organization and involvement in support of the project was a necessary preliminary to success in any more ambitious program. The risk was, of course, that the wiring project might fail from lack of interest. Fortunately, it proved a success: enough money was raised to finance half the wiring and to pay the electrical bill for the succeeding year—the first voluntary contribution of Road residents to any public cause.

At this juncture, however, the project came to an abrupt halt because the adult educator was transferred to a different district. Such a collapse was thoroughly in keeping with The Road's attitudes of suspicion, apathy, and disparagement, and completely matched the predictions of the project's opponents on The Road. Recovery seemed unlikely and the prospects for any further activities of this kind looked bleak.

In the meantime, however, county school officials had managed to secure the services of a fully qualified and interested teacher, and she continued as a catalyst for activity and involvement where the adult-educator had left off. She maintained frequent contacts with the women and encouraged them to seek improved education conditions. (Although the teacher's work with women was doubtless partly motivated by her feeling at home with them, it has usually been found in depressed, disintegrated communities that women can be motivated to move sooner and more easily than men.) Evening bingo games were organized at the school as a means of raising money to purchase new desks,

with prizes provided by the women. However, one of the teacher's most important moves was to stir up (at the suggestion of school authorities) the question of having the local school admitted to the consolidated school district of the region. Such admission meant daily bus transportation to Bristol for the children above the sixth grade. There, educational opportunities were considerably richer and the way would be clear for going on through high school. It also meant increased taxes for the school district of which The Road was a part.

In spite of opposition on and near The Road stemming from the necessity for increased taxes, the women who were in favor of the move (urged on by the teacher), campaigned on its behalf through the whole school district with success. Supporters in sufficient numbers were brought out to a meeting of the district rate-payers to vote the measure through. Among those in opposition were the school trustees, who resigned as a result of the vote. For the first time in history they were replaced by three men elected from The Road. Thus, a partial end to social isolation, along with a need for citizen participation, was achieved.

Another development of major importance, beginning around 1950, was the establishment of a work circuit that linked the settlement to a major city in Ontario. Before this time, many individuals had left The Road to seek their fortune in large cities. Their lack of interpersonal skills and of previous close contact with people different from themselves, however, induced an overwhelming loneliness which soon drove them home, empty handed. Thus, the work circuit's survival might be taken as evidence of some sort of renaissance. It is impossible to trace contributory forces to ascertain whether the early steps in community organization had played any part. Possibly the original investigation by Macmillan had begun a subtle change in self-perception—if that college man would spend time to come and talk to Road inhabitants again and again, perhaps they weren't really so no-account as they had thought. It seems quite clear that the women would never have had the courage to tackle the larger community on the school issue without the practice afforded by the movie program and the bingo games.

The work circuit's initiation had taken place when a family originally from The Road, who had settled in Ontario, wrote home inviting some of their relatives to join them for a time to take advantage of the comparatively lucrative employment opportunities in the city. By 1952, four people had responded and were living close to one another in the city, engaged in the same type of unskilled industrial work. With this start, a pattern developed whereby people form The Road would go to work in Ontario for six months or a year and then return home. The arrangement was such that before leaving The Road they had assurance from those in the city that jobs would be available and that they would be moving in among people they knew. They apparently made a good impression as workers, for when they left the city their employers were glad to accept a friend or a relative as a replacement. The returnees to The Road expended

their accumulated savings on paint, furniture, house construction, cars, and investment in a variety of new economic enterprises.

It has often been a cause for astonishment to those unfamiliar with the Maritime Provinces that successful emigrants from such a community would have any wish to return. An extremely common pattern, however, is for young adults of all stations in this society to go away to the States or to upper Canada to accumulate enough money so that they can afford to "retire" to the old homestead. This may take many years during which taxes are scrupulously paid and occasional visits made to mend the roof or to ready the home for later occupancy. No doubt the Road people were familiar with this pattern even though it had not worked well for them previously. The pattern is probably more widespread than the Maritimes—common, very likely, in many rural areas. In the States, the pressure is great to move permanently to the city, but it seems there could be many emotional gains in maintaining a foothold somewhere while undertaking new, perhaps dangerous, ventures.

In 1957 the movement reached a peak with 21 people from The Road (about 18 percent of the total population) at the Ontario location. By 1962 some individuals had made the circuit four or five times. Both men and women—married couples as well as single people—made the trip. Some newly married couples chose this adventure as a means of acquiring a sum of money to start a new home. It is clear that the circuit served as an economic pump, not only temporarily raising the income level of migrants, but resulting in significant improvement in material living conditions and capital on The Road itself. Factors important in its success seem to have been the receiving friends at the Ontario end, the arranged job, and a prepared place to live. Anxieties about being stranded among strangers in a strange place were thus reduced, while confidence in finding an acceptable job and getting fair treatment from employers was established. Far from home, the migrants had escaped the curse of their local reputation as unreliable workers.

People on The Road (and others in the vicinity who know the neighborhood well) claimed that the old habits of speech, dress, and deportment that had characterized those who made the circuit had dropped away by the time they returned. The migrants arrived. back home with confidence in their ability to do more respected forms of work and a marked unwillingness to take part in the traditional, low-status occupations of the neighborhood. They also displayed confidence in their ability to deal with outsiders on an equal footing and a desire for living down the neighborhood's unsavory reputation. It is worth noting that the same kind of change took place in the children who began to attend the consolidated school.

Coincident with these developments, a public works project in the county, employing between 300 and 400 men over a three year period, had afforded a new, albeit temporary, source of employment for unskilled laborers at wages substantially higher than they could otherwise secure. The Road, of course, provided a ready supply of labor recruits for the project, and those employed mostly conformed to the pattern which had been established with the work circuit to Ontario:

new earnings were invested in various home improvements and applied to the development of new economic enterprises of their own.

The Consequences of Social Change

By 1962, when a re-study of the focus areas of the county was undertaken, changes on The Road were evident to even the most casual observer. The population of the settlement had remained largely stable: only 11 percent of the 1962 adult population had arrived as immigrants since 1952, virtually all of these in-marrying women. The most striking change was in the appearance of the area. Freshly painted and newly constructed or refurbished homes, surrounded by cultivated shrubbery and well tended lawns largely indistinguishable from those in neighboring, more affluent communities, had replaced the tarpaper shacks and dilapidated larger dwellings of a decade before.

Economic measures of the material standard of living of Road families also showed a marked improvement, a change not even remotely approached by the other depressed settlements in the county in the same period. Furthermore, the new economic roles and resources now evident were very similar to what could be found elsewhere in the county. For example, clamming was no longer practiced. Only one man still worked as a farm laborer, but he did so year-round on an annual salary rather than in the earlier pattern of occasional day labor. For those relatively few men who continued to rely on wage work in lumbering, the work had become steady during the season, was for major contractors, and was sufficient to enable workers to draw unemployment compensation during the slack months. Only 36 percent of the families on The Road in 1962 gained their subsistence from traditionally low-status occupations or were dependent on unearned income, as compared to the figure of 74 percent a decade earlier.

Capital accumulated during the decade had led to several new economic ventures and cooperative patterns. Several men, for example, had jointly invested in the operation of a fish weir; another had acquired a lobster boat; a dairy farm and mink ranch had been established and were being operated by a group of closely related families; two men had acquired tractors and other equipment and had gone into business with their sons, hauling lumber in the winter and hiring out their services to local farmers during planting season; woodlots had been purchased and were being cut by men from several families in the settlement. Other new forms of employment included full time jobs at fish-processing firms in the county and a variety of occupations ranging from electrical repair and maintenance work at a local resort to clerking in the department stores in Bristol.

Aside from these changes, participation in the activities of churches increased during the decade, particularly among the women. Church services were now regularly attended by almost half the women on The Road. Sisters from the nearby Catholic church were making frequent visits in a generally successful

effort to encourage Sunday school attendance on the part of the children. They were also holding regular catechism classes at a home in the settlement. Church suppers and church-sponsored bingo games had become a regular activity for many Road couples.

Consolidation of the primary schools in the area had taken place in 1961, when The Road was combined with six small neighboring districts to form a single larger district. The consolidation, however, had not lessened interest and involvement of Road people in local school affairs. Women in the settlement had played an important role in the formation of the new Home and School Association which served all the communities included in the new district, and they represented The Road at its meetings.

Queried about The Road in 1962, people elsewhere in the county were likely to immediately remark on the changes they had noticed, especially their undisguised surprise at its "new look" (27). The familiar stereotypes attributing genetic inferiority and amorality to the inhabitants were no longer voiced. On a workaday level, the change in the self and public image of The Road was clearly evidenced by the greatly improved acceptance of its people by outsiders in various institutional contexts. The decade had also marked a changed outlook on The Road toward residents of neighboring communities, who were no longer warily viewed as hypocritical, hostile, and exploitative. Gone, too, were the allegations and public displays of antipathy that had previously divided both kin groups and individuals. The current image of the settlement and of those within it now accentuated the positive character of intracommunity relations.

These changes were reflected in new forms of leisure-time associations. Many couples gathered regularly for card games, usually on a weekly basis, with nearly half the households in the settlement represented in such activity. The several groups meeting together for entertainment consistently included a cross section of the settlement's major kin groups. On a larger scale, although less often, "rappie pie" parties were being hosted on a rotating basis by a number of families, and attendance at these affairs also drew a substantial proportion of the population.

Perhaps the most notable development was the inauguration of the first genuine community celebrations that the settlement had witnessed in many years. Any birth or wedding had become the occasion for a "shower" held at the home of a close friend or relative of one of the principals, to which every family in the settlement was extended a formal invitation. These gatherings were not only frequent and large, but were festive affairs with both men and women in attendance. Everyone taking part donned their best attire for the event which, in addition to the usual presentation of gifts to the guests of honor, provided the occasion for a night of community singing, dancing, and card games.

Taking into account all the changes evident in 1962, developments during the decade of the 1950s had clearly served to foster increased access to

conventionally recognized relationships of trust and solidarity for Road inhabitants. The same factors had promoted participation in social activities where individuals were accorded a status which provided some measure of self and public respect. This signaled not only a significant transformation of social relationships among inhabitants of the settlement themselves, but an equally striking alteration of the previous state of their relations with other residents of the county.

Better Mental Health

As was noted earlier, the mental health rating of The Road population in 1952 was substantially poorer than that of the county as a whole, the latter figure being based on a survey of a sample of residents throughout the county-at-large in addition to data from the five focus communities. The other two depressed focus areas were also worse than the county norm, but The Road had received the poorest mental health rating of all five focus areas (17).

In the 1962 re-survey (carried out according to previous Stirling County study techniques) (17), psychiatric as well as sociocultural data were again collected for all five focus areas to determine what changes, if any, had occurred in their mental health level during the decade. Analysis of the psychiatric data from The Road revealed a significant change in a positive direction so that its mental health rating had shifted to a position virtually equivalent to the mean for the county as a whole (14).

The re-survey also indicated that no social changes comparable to those which had taken place on The Road had occurred in the remaining two depressed settlements. Some less dramatic improvements in one of these could be noted in the way of lessened inter- and intracommunity social isolation and hostility (27), and better material style of life. In neither of these settlements was there such a positive change in mental health as was found on The Road, although some improvement was registered in the one that had also experienced some social improvement.

Finally, one of the two well-integrated communities that had registered a high level of mental health in 1952 showed decline in its mental health rating in 1962, even sharper than the rise on The Road. The decline in its mental health paralleled evident social change in a direction opposite to that observed on The Road, namely a marked decrease in the level of intracommunity solidarity and organization (14).

These findings clearly suggest the potential significance of community development programs for improving mental health in psychiatrically impaired, economically and socially depressed local groups. Individuals depend on the support of others for carrying out the activities and winning the recognition necessary to satisfy the needs, values, and goals on which their psychological

well-being and mental health depend. Their capacity to secure such support can suffer significant impairment where prevailing social patterns deny some persons access to interpersonal bonds of solidarity and trust or when access is denied to collectively organized and performed activities which would provide roles accorded social values and respect. Insofar as programs for community development include successful efforts to alter such social consequences of membership in a socioeconomically depressed local group, benefits in the form of improved mental health for the population are likely to result.

Further Research

Beginning in 1964 and presently nearing completion, a program and a series of studies in a second of Stirling's three depressed settlements has been under way, designed both as an experiment to evaluate means for intentionally stimulating change of the types which took place on The Road, and as a further test of the effects of such change on mental health (10). One of the major aims of this research has been to experiment with techniques for achieving change that can be implemented by local people willing to organize and devote time and effort to such an undertaking.

Kern (10) says, "The specific goals of the action program were to foster cooperation, to build a positive self and community image, to promote community power, and to increase ability to plan on a long term basis." To this end, three main activities were undertaken. The first was to make several movies of successful events in the community with much citizen participation. These were shown not only to residents, but also to outside opinion leaders, especially in Bristol, which sets the standard for the area. A second effort was to solicit the participation of two men to join the investigator in a cooperative garden. In spite of doubts and bad weather, a good crop was realized, and the venture stimulated a request by several men for some adult agricultural education. The third undertaking was the organization of a baseball league for men and boys that included a number of teams from other communities. This provided some of the same opportuniites for dispelling stereotypes and promoting communication as have been noted in some school desegregation experiences. The report does not quote figures measuring outcome, but if the major hypothesis of the Stirling county study is supported by measurements, this experiment can provide a model of useful guidelines for similar programs elsewhere which involve members of a local citizenry as the principal agents of change.

The currently widespread efforts to encourage community development noted earlier, both in this country and elsewhere, could obviously provide opportunities for further evaluation and refinement of such a sociotherapeutic approach to the improvement of mental health. The contributions of present and

future development activities will depend a great deal not only on attentiveness to the social consequences and the effectiveness of techniques in terms of socioeconomic program goals, but also on techniques for adequately assessing the consequences of various types of community development activities for mental health.

As stated in the introduction, one reason for the lack of efforts to determine the mental health consequences of development programs has doubtless been the anticipated difficulty of measuring mental health or illness. The investigators planning the Stirling County Study were plagued by this problem and tried several indirect and unsystematic means such as collecting hospital records, interviewing key informants, and setting up an outpatient clinic. Fortunately, it also planned to include a set of psychological screening questions in the struc-tured questionnaire interview, along with a health history. These two sec-tions, supplemented by comments from as many local doctors who knew the subject and by a hospital record where one had been found, eventually provided the material which was carefully edited and given to psychiatrists to evaluate.

In addition to the psychiatric evaluation, which was done from a base of clinical experience by a method developed to achieve reliability between raters, the screening questions could be scored independently and compared with the psychiatrists' ratings. Comparisons of the age/sex distributions of psychiatrists' ratings with the mean score of the screening questions (17) indicated that the two ways of assessing the data give very similar results. At the same time, there is the interesting fact that psychiatrists judged people 70 years of age or over to be "healthier" than the next younger age group, while the screening test score continues to rise with age. Which view of the oldest group is "right" remains to be settled.

The method of making a rating by using psychiatrists' judgments has proved stable, reliable, and teachable (30), and it yields a list of symptom patterns, an estimate of confidence that the person has or has not any psychiatric condition, and an estimate of how much his functioning has been impaired by such a condition. A computer program has been prepared which provides ratings that are as reliable as those of any pair of evaluating psychiatrists (5, 26). The questionnaire has also been shown to discriminate validly between groups of known psychiatric patients (20) and community groups.

The full scale method has, however, two principal drawbacks: it is a time consuming data gathering technique and without a computer it is a psychiatrist consuming analytic technique. Once the 1952 survey had been completed and reported, it appeared highly desirable that some briefer means of achieving an approximate mental health estimate be developed for use in less painstaking and less well-financed research efforts in order to expand understanding of the dimensions of the mental health/sociocultural envirnoment relationships under many diverse circumstances.

A Brief Mental Health Assessment Instrument

Naturally enough, thoughts turned to the psychological screening questions for this purpose. The set that had been used in the questionnaire had been selected and standardized by Allister M. Macmillan, beginning with such sources as the Armed Forces' Neuropsychiatric Screening Adjunct and the Cornell Medical Index and eventually encompassing most of the sets of psychiatric screening questions that had been devised in the post-World War II years up to about 1950. Macmillan tried out seventy-five such questions in an area quite similar to Stirling County, eliminated duplicates in various sets, standardized them against a group of neurotic patients in metropolitan hospitals, and selected the most useful ones by discriminant function analysis. He also tested their reliability in re-interview, and had a psychiatrist examine a sample of his subjects (18). All indications were that the screening questions, labeled the Health Opinion Survey (HOS), did reasonably competent in distinguishing various levels of psychiatric involvement by means of a numerical score. (The HOS is a set of questions, response categories, and scoring weights utilized in Myers and Bean {21} and in Rogler and Hollingshead {22}). The refinements of the psychiatrists' rating described above were not, of course, available.

When the opportunity arose in some Nigerian villages to conduct a study modeled on the Sterling County study, the screening questions were included (13). The necessity to translate the entire questionnaire into the Yoruba language brought to attention some aspects of the screening questions that had not been particularly noticed before. One of these, "Have you ever felt as if you would have a nervous breakdown?" presents obvious problems of imprecision in spite of the fact that it had been used successfully with English speakers and can be translated into Spanish without difficulty (22). A second point was that it seemed inadvisable to add to the complications of interviewing subjects through interpreters a variation in the answer modalities. Macmillan had experimented with several answer choice patterns and answer weights, but it seems imperative to simplify the procedure, and so standard answers ("often," "sometimes," or "never") were used. The need for translation also served to considerably improve the grammatical form of some of the questions.

Once the Nigerian study was completed, statistical members of the research team identified twenty questions from all those that had been used that (1) agreed best with the overall psychiatric ratings, and (2) had been usable in Nigeria. The latter point resulted from the desire to have screening questions that could be used under diverse sociocultural conditions. A final improvement, made a little later, consisted in framing all questions clearly in the present tense and eliminating the word "ever" from them. This change arose from a wish to use the screening questions to measure clinical change in psychiatric patients, where a definite time referent would be required. The present tense version is as follows:

The Health Opinion Survey for Assessing Mental Health Levels

1. Do you have any physical or health problems at the present?
2. Do your hands tremble enough to bother you?
3. Are you troubled by your hands or feet sweating so that they feel damp and clammy?
4. Are you bothered by your heart beating hard?
5. Do you tend to feel tired in the morning?
6. Do you have any trouble getting to sleep or staying asleep?
7. How often are you bothered by having an upset stomach?
8. Are you bothered by nightmares (dreams that frighten or upset you)?
9. Are you troubled by "cold sweats"?
10. Do you feel that you are bothered by all sorts (different kinds) of ailments in different parts of your body?
11. Do you smoke?
12. Do you have loss of appetite?
13. Does ill health affect the amount of work (or housework) that you do?
14. Do you feel weak all over?
15. Do you have spells of dizziness?
16. Do you tend to lose weight when you worry?
17. Are you bothered by shortness of breath when you are not exerting yourself?
18. Do you feel healthy enough to carry out the things that you would like to do?
19. Do you feel in good spirits?
20. Do you sometimes wonder if anything is worthwhile anymore?

Except for the first question, which is answered yes or no, all answers are chosen from "often," "sometimes," or "never." Scoring is accomplished by giving three points to the "sick" answer, one to the "well" answer, and two to the "sometimes" answer. Questions 2, 3, 4, 8, 9, and 17 can be used as a subscore for anxiety, and questions 5, 13, 16, 18, 19, and 20 for depression.

These direct, inoffensive, easily understood questions are frequently regarded as a medical history, having much in common with a brief standardized history. No systematic attempt has yet been made to test wording changes or to scatter the questions throughout a longer interview schedule. The aim of each question is to convey its meaning to the subject, and any slight modification to assist in this is justifiable. All are matters of opinion with regard to symptoms commonly associated with reactions to stress, so that it is of no significance whether the person actually has a demonstrable basis for his opinion: *the degree of his concern is the measure of his mental health status.*

The strength of the instrument lies partly in the variety of organ systems covered, including the possibility of registering overall reactions (fatigue, sleep, mood). The answer categories offer some measure of frequency and intensity, and are generally better received than the yes/no or agree/disagree pattern of some other scales. It seems quite likely that this instrument, the result of largely pragmatic experimentation, may in the end prove to be firmly founded on psycho-physiological interactions involving emotional, hormonal, and neural components. For example, Dr. Richard Udry found, in studying the outcome of pregnancy in a sample of some 2,000 women, that those who had a successful outcome could be differentiated from unsuccessful ones on the basis of whether they chose the "often" or the "never" answer to a set of the HOS querstions. A medical expert felt that the differential choice of response could be clearly associated with differential hormonal factors.

Evidence from a study focused on cardiovascular disease, in which the HOS was given to two random samples of a population who also answered an extensive sociological questionnaire and health history and received a searching physical exam and laboratory tests, will soon advance our knowledge of the relationship of physical symptoms and findings to HOS responses (4).

This screening instrument has now been used in a number of other studies, some of which have been published or will be published in the near future. The populations tested include a sample of the patients of public health nurses in North Carolina (16); a sample of the population of three rural counties in North Carolina and Virginia (6); a cross section of the patient population of four state mental hospitals; an entire university freshman class; university students who had consulted the psychiatrists in the student health service (31); a sample of Makah Indians in Washington (32); several small Indian groups in various sub-arctic communities; the Pine Ridge Sioux (19); five different types of work organizations in New York state (23,24,25); and 1,280 aged respondents in a sample of New York state communities (28). It was also used in the follow-up of the New Haven Study (21) and in a study of schizophrenic families in Puerto Rico (22). A new application that seems promising is in determining stress points in a school population, in which the version given above is used for grades seven to twelve, while a modification is used for grades three to six (15).

Analysis can be done by comparing mean scores of various subgroups or by scrutinizing the characteristics of individuals found near the ends of the scoring range or both. In addition to the screening questions, data are usually gathered on common demographic variables and on other characteristics in which the investigator is interested or which he believes to have some probable influence on mental health. The score can be thought of as a symptom count, or a stress score or mental health level, the lower levels being "healthy" as compared to the upper levels. Experience has indicated that the 20 to 30 range is within normal limits. A sharp dividing point between "sick" and "well" does not

seem appropriate in most instances. So far the instrument has only been tested for group estimations. It remains to be seen how useful it may be in work with individuals, such as in measuring clinical change.

Generally speaking, correlation of mean group scores with such variables as age, sex, race, socioeconomic status, and so on, serves to indicate which subgroups of the population studied are under some sort of excess stress. More refined examination of the high scoring groups may indicate which characteristics are most strongly related to the score elevation. *Consistency of correlation of any given characteristic (e.g., sex) with high or low score should not be expected,* since score level will depend on the intensity of stressful forces impinging on either sex at a particular point in history and in a particular cultural setting. Rather, the score level tends to point out which groups are currently in trouble and which are adapting satisfactorily in the population studied.

Summary and Discussion

This (article) has set forth a rationale for anticipating that certain kinds of social changes will diminish the amount of psychiatric disorder that a community group shows and has further detailed a case study where this, in fact, happened. It has mentioned a study (which could not be included because of space considerations) where the rationale was intentionally implemented; and it has described and discussed an instrument for measuring mental health which can be readily applied by nonpsychiatrists.

This is obviously only a drop in the seething social bucket, but it is a beginning. Investigation needs to be continued and expanded in order to fill in the outlines suggested here and to refine our understanding of the ways in which the social behavioral sciences can supplement each other and illuminate new pathways to better human functioning. We need to combine Meyer's ideas of the psychobiological integration of each person with the intuitive insights of Freud and the methods of modern social science (not available to either of the masters) in order to forge improved ways of thinking about the maladaptations of mankind and fresh ways of solving its problems.

It is worth emphasizing that, although there was a wealth of psychopathology apparent in residents of The Road, the ten-year improvement took place without the benefit of psychiatry and with comparatively little medical input of any kind beyond symptomatic relief for such conditions as were traeated by the local doctors. No one can say with certainty whether an intense effort by mental health workers to find and treat cases by conventional methods would have resulted in similar improvement. At the same time, the events and interactions described fit into current notions of cause and effect quite compellingly and incline one to say of the outcome, "Why, of course!" There is a great need for further monitored experiments to clarify the forces at work.

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