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Community Profiling in Participatory Action Research

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The primary goal of social and health policies is to improve the well-being of local communities. Insofar as every plan of action requires knowledge of the research object—in this case the community—then getting to know the local context under study is the starting point of a successful intervention (Center for Urban Transportation Research, 2000; Forrest & Hill, 2013). Hawtin, Hughes, and Percy-Smith (1994) described the essence of the intervention through the following four steps: needs assessment, community consultations, social audits, and community profiling. Needs assessment is the preliminary goal for a researcher approaching a new social context. Knowing what local people are doing, how often, and with whom is a tool for auditing any dimension of community life at any given time. Within the framework of a community audit, Taylor and Burns (2000) focused specifically on local participation aided by such tools as baseline mapping, specific checklists, and measurement scales, in order to investigate and assess people's needs and their local participation. Moreover, Kirsten and Holt (2008) highlighted the benefit of involving the community in the decision-making process in assessing health priorities through community profiling.

Hawtin et al. (1994) described and discussed the procedure of community profiling as one approach to obtaining local participation. They highlighted its different aspects as follows: "A *comprehensive* description of the *needs* of a population that is defined, or defines itself, as a *community*, and the *resources* that exist within that community, carried out with the *active involvement of the community* itself, for the purpose of developing an *action plan* or other means of improving the quality of life of the community" (Hawtin, Hughes, & Percy-Smith, 2007, p. 5). In this chapter we shall first present the theory behind, and the steps involved in, community diagnosis and community profiling. We will then offer a case study illustrating the application of community profiling in an urban community.

INTRODUCTION TO COMMUNITY DIAGNOSIS AND COMMUNITY PROFILING

Community diagnosis based on community profiling constitutes a means for getting to know local communities (Arcidiacono, Sommantico, & Procentese, 2001). This is, indeed, a mindful and participatory way of reading people's needs. As such, it is a valuable aid for providing information related to the weaknesses and strengths of health, relational, and economic aspects of a community. At the same time it is a preliminary tool for community building and social change (Arcidiacono & Procentese, 2005).

Community diagnosis can be framed as a tool within the broader picture of participatory action research (PAR), a well-known methodology for identifying and solving common problems for individuals, groups, and organizations within a given community (Reason & Bradbury, 2008). This tool is designed to help people assess the quality of the place where they live, as well as to take action toward their betterment.

In PAR the understanding of social and psychological phenomena entails a thorough observation of the dynamics at stake in a given context.

Transformative theory and practice come together in a reciprocal process of mutual implementation in which hypotheses steer actions and the latter, in turn, stimulates and modifies theorizations. Cooperation between researcher and community member is crucial, and this can be built only on the mutual understanding of needs, competencies, and resources. PAR hinges on a process whereby local knowledge and professional expertise are merged to promote social change. Involving the very recipients of the intervention makes it possible to negotiate with the social actors to which the intervention is directed (Arcidiacono & Procentese, 2010). As a consequence, it helps to make important decisions more easily accepted by the members of the larger community. This technique plays an empowering role, in that its power to raise awareness and involve people in decision-making processes leads them to take action for social change.

Kagan, Burton, Duckett, Lawthom, and Siddiquee (2011) attempted to define the most relevant dimensions of community life that should be investigated in order to draw up a community profile, namely, characteristics of the population, local views and priorities, housing, education, environment, facilities and services, crime and safety, physical environment, transportation and communications, and health. They also drew up a list of different tools and methods to collect information for each dimension. Maps, data, and other forms of information from both local and national sources are considered, together with participant observations, community walks, focus group, interviews, diaries, video films, creative writing workshops, and services waiting lists. The aim is to investigate the characteristics of the community and, at the same time, to discover, together with the inhabitants, its cultural and symbolic representations, social structures, and eventually its own historical roots, "which still inform the contemporary understandings of what community means" (Kagan et al., 2011, p. 79). Cheong (2006) also highlighted the need to carefully recognize physical, psychological, sociocultural, economical, and technological domains. He specifically emphasized the importance of taking into account the relational features of the community, that is, the communication within and between different individuals and groups. Moreover, Kagan et al. (2011) introduced power as a further dimension to be considered. Related to this power dimension, the authors' experiences (Arcidiacono, 1996, 2004) in community profiling at the town level have made us aware of the importance of reflexivity among researchers and of trust between the latter and local bodies.

Community profiling informs knowledge about a certain territory, including its characteristics, people's needs, resources, and the shortcomings of institutions and services, as proposed by Martini and Sequi (1988, 1995) and further developed by Francescato and Ghirelli (1988). Francescato and Zani (2013, p. 3) defined it as "structured participatory action research, that can be used to find out what particular problems and strengths characterize a local community in the eyes of different groups of residents and what are their most desired changes." It is regarded (Francescato, Arcidiacono, Albanesi, & Mannarini, 2007; Francescato, Gelli, Mannarini, & Taurino, 2004) as a participatory tool usually solicited by local administrations interested in more than mere temporary, extemporary, and stopgap measures. In their guidelines for procedures and data collection for community profiling, these authors proposed the construction of an interdisciplinary research group (IRG) that is formed by those members of the community who display a high level of expertise with respect to the profile analysis to be carried out. The group then carries out a preliminary analysis through brainstorming, that is, a technique aimed at bringing out those strong points and critical aspects that the members of the discussion group regard as being the most important. This is one of the reasons why the IRG should be formed by stakeholders of the community who vary on such dimensions as age, social status and role, profession, and degree of knowledge of the local community. This preliminary analysis helps to plan the next steps more clearly by, for instance, highlighting which aspects will be further investigated, as well as identifying other local stakeholders who might best be contacted. The second step is to develop in more detail this preliminary and rough community diagnosis by collecting data, thereby providing a more complete community profile, that is, those aspects that characterize the community in this model (territorial profile, demographic profile, services profile, institutional profile, productive activities profile, psychological profile, anthropological profile, and profile of the future).

Tables 35.1 and 35.2 provide an example (Tuozzi, 2013) of community profiling in the town

TABLE 35.1: COMMUNITY STRENGTHS

	IRG (Interdisciplinary Research Group)	Focus Group	Interviews	Questionnaires
Territorial	Natural resources Geographic location Cultural and artistic heritage	Natural resources Geographic location Cultural and artistic heritage	Natural resources Geographic location Cultural and artistic heritage	Natural resources Geographic location Cultural and artistic heritage
Demographic	Medium-high educational level	Young population	Young population Demographic growth	Young population
Productive activities	Agriculture	Agriculture	Agriculture	Food Tertiary activities: bank
Services		School services Spa treatments Community-based projects Soccer field Catholic youth center		School services Soccer field Catholic youth center
Institutional		Administrative activities Police station Courthouse	Police station Courthouse	Administrative activities Police station Courthouse
Anthropological	Openness/ solidarity/family	Openness/solidarity/ family Traditions	Openness/solidarity/ family Traditions Hard-working people	Openness/solidarity/ family Traditions
Psychological		Social support	Cohesion	Sense of belonging Social support

Source: Adapted with permission from *Profilo di Comunità di Carinola: Risorse e Potenzialità* [Community Profiling of Carinola: Resources and Opportunities] by T. Tuozzi, 2013, pp. 29–31.

of Carinola based on the guidelines of Francescato and her colleagues. In this work, the preliminary brainstorming among the IRG regarding the strengths and weaknesses of the community was followed by a series of data collection activities, involving individual interviews, focus group interviews, and semistructured questionnaires. The IRG was composed of eight citizens: one majority politician and one opposition politician who were members of the city council, a representative of community associations, a teacher, an elderly retired person, an unemployed youth, one precariously employed young worker, and a craftsman. Following the IRG's brainstorming, 18 key informants—the mayor, four city councillors, a city councilwoman, one majority politician, one opposition politician, the chief of the municipal police, the chief of the police station, the director of the local prison, five parish priests, an elderly man, and an immigrant—were involved by means of individual interviews. Subsequently, there were 12 focus groups composed of local inhabitants (varying in neighborhood, age, and gender) involving a total of 87 people, including young students, workers, unemployed persons, and retired elderly.

The semistructured questionnaires were distributed to 89 citizens of Carinola. They included, in addition to questions about the strengths and weaknesses of the community, some specific items investigating respondents' satisfaction with respect to the services offered by the territory and the work of institutions. Some questions also inquired into the sense of belonging and social support perceived by citizens. Finally, there were questions on the perception of the

TABLE 35.2: COMMUNITY WEAKNESSES

	IRG (Interdisciplinary Research Group)	Focus Group	Interviews	Questionnaires
Territorial	Scarce promotion of the cultural and artistic heritage	Scarce promotion of the cultural and artistic heritage		Scarce promotion of the cultural and artistic heritage
	Scarce promotion of the local area	Scarce promotion of the local area		Scarce promotion of the local area
Demographic	Scarce homogeneity between groups of different factions			
		Demographic degrowth/population aging	Demographic degrowth/ population aging	Demographic degrowth/ population aging
Productive activities	Scarce promotion of tourism	Scarce promotion of tourism		Scarce promotion of tourism
	Scarce promotion of agriculture	Scarce promotion of agriculture	Scarce promotion of agriculture	Scarce promotion of agriculture
Services	Inadequate school structures	Inadequate school structures		Inadequate school structures
		Inefficient social and health services		Inefficient social and health services
	Lack of recreational structures	Lack of recreational structures		Lack of recreational structures
Institutional	Administrative shortcomings	Administrative shortcomings	Administrative shortcomings	Administrative shortcomings
		The local church not very involved in the community life		
Anthropological		Influence peddling		Influence peddling
	Citizen apathy/scarce participation	Citizen apathy/scarce participation	Citizen apathy/scarce participation	Citizen apathy/scarce participation
Psychological	Separatism	Separatism	Separatism	Separatism
		Neglect		Neglect

Source: Adapted with permission from *Profilo di Comunità di Carinola: Risorse e Potenzialità* [Community Profiling of Carinola: Resources and Opportunities] by T. Tuozzi, 2013, pp. 31–34.

future and the Scale of Italian Sense of Community (Prezza, Costantini, Chiarolanza, & Di Marco, 1999). The questionnaire data were supplemented with data obtained through the movie technique (see later), drawings, and participant observation, all of which were shared subsequently in community meetings with the IRG, local administrators, and research participants. These discussions allowed us to develop a more comprehensive psychological profile of Carinola. The detailed information collected through the individual interviews, focus groups, questionnaires, and supplemental data produced a fairly complete picture of the area, outlining all of the different profiles noted earlier.

Once this preliminary analysis of Carinola was completed, the next step consisted of the development of a shared idea of what that community was like and what changes were to be hoped for. The researchers used frequencies analysis to highlight those aspects most widely shared by Carinola's citizens. The results were then presented by the IRG in a final meeting in which citizens of Carinola

proposed specific issues that they considered to be priorities for change.

There are numerous benefits in using profiles for community diagnosis. The technique depicts an accurate picture of the community; also, it does not restrict the analysis to mere data collection but also includes the feelings and thoughts of the members of the community collected through focus group and interviews. Indeed, the combination of objective (e.g., demographic and economic information) and subjective (provided by the stakeholders, informants, and questionnaire respondents) data allows for the identification of opportunities and deficiencies of the local community, as well as how these are perceived by the local people. However, along with the objective and subjective features, we should add a third one, the symbolic level, which emerges from involving local citizens in the use of free expressive tools, such as taking and discussing photographs (photovoice), making a drawing of the neighborhood (the "draw your neighborhood" technique), and developing a plot for a movie script about the community. The latter, called "the movie" technique, is a creative participatory tool that allows participants to "pick a genre of movie (e.g., historical, science fiction, comedy, or detective) and come up with a title, a plot, main characters, and dramatization, if they wish, for particular relevant scenes" (Francescato & Zani, 2013, p. 4).

The active participation of the local people in this type of research is crucial because, in addition to a mere diagnosis of the community's state of affairs, it enables an intervention of development and promotion of community life that hinges on confrontation, communication, and exchange of knowledge. In this light, community profiling allows for a self-sustained and self-determined process of social change (Martini & Sequi, 1995). Table 35.3 summarizes the data and the tools that were employed in the work done in Carinola.

The community profiling technique, however, does require a considerable amount of time and resources. This is especially important if the researcher aims at recruiting a representative sample by resorting to all of the instruments required for a complete community profile (Prezza & Santinello, 2002). With regard to this, a number of shorter community profiling versions are under development. In some of these, for instance, only some representative groups of local people are involved in the preliminary analysis and in the "movies." In some cases, it is advisable to carry out the research by focusing only on some key dimensions and issues that particularly concern the local community (Messer & Townsley, 2003). This is true for our case study, which we present next.

CASE STUDY

Background

Porta Capuana is one of the most ancient gates of the City of Naples and gives its name to the surrounding district. Its geographical location lies next to the central train station, the airport, and the port and, therefore, presents a high logistical potential together with a high tourism impact (enhanced by the presence of churches, as well as its architectural and monumental heritage). However, today Porta Capuana stands out as a pocket of urban degradation. For instance, it does not take advantage of its culinary heritage, the labor market is unregulated, and organized crime is widespread and deceptively concealed. This urban deprivation is also coupled with the presence of groups of migrants lacking in resources.

Psychology Loves Porta Capuana is a project developed by a research team of the University of Naples Federico II. The initiative is part of a broader endeavor championed by the I Love Porta Capuana project, which is a body of associations and institutions working together on participatory and sustainable urban regeneration. The organization has the goal of "developing a synergic network of local people, entrepreneurs, and social actors of the neighborhood of Porta Capuana in order to give value to the monuments as well as the local culinary and artisan heritage" (http://www.portacapuana.it). Invited by the I Love Capuana organizers, the authors were able to engage in community profiling of the area, with the aim of uncovering its needs and requests, both explicit and implicit. Given our awareness of the importance of reflexivity among researchers and trust between the latter and local bodies, we developed a research strategy enabling rich interaction and discussion among various stakeholders, associations, and researchers.

Research Procedures and Instruments

Small (i.e., two- to five-member) groups of undergraduate students from the University of Naples Federico II were invited by the researchers to

TABLE 35.3: COMMUNITY PROFILES: DESCRIPTION OF AIMS, THEMES, AND INSTRUMENTS

Profile	Description	Instruments
Territorial profile	This includes data regarding the characteristics of the local area, such as geographical extension, physical composition, climate, natural resources, infrastructures, environmental degradation, space allocation (e.g., housing, working environment, free time), and their usability.	Maps Town plan Tourism leaflets Photographs Observations "Community walk"
Demographic profile	This refers to the population size, distributed by age, sex, education, growth/degrowth rate, migration waves, and social mobility. Data on immigration/emigration are also included.	List of data provided by competent offices Data analysis
Productive activities profile	Productive activities are broken down into *primary, secondary, and tertiary*. Activities are to be sourced, taking into account the occupation of the people in all aspects (e.g., job security, unemployment, crisis in the labor market, illegal labor), as well as the rate of environmental pollution related to given productive activities.	Data collecting and analysis Semistructured interviews Questionnaires Observations
Services profile	Services include health services, socio-educational services, and cultural-recreational services. The data collected refer to the presence of these facilities, as well as their location, accessibility, user base, organization, and operation. Sometimes it is useful to draw a map of the connection between different structures and services.	Data collection and analysis Meetings Semistructured interviews Observations Focus groups
Institutional profile	This profile refers to the setup of the administrative and political organization of the local community, as well as the presence of its ideological landmarks and specific institutions, such as police stations, prisons, and churches, as well as the possible connection with social and community issues.	Data collection and analysis Interviews Analysis of institutional networks
Anthropological profile	This profile refers to the history of the community, its conception, value, traditions, individual and social responses to community issues, level of cohesion among its members, and their engagement in community life.	Books, booklets Statements Observations Interviews Photographs and videotapes Analysis of printed texts
Psychological profile	This profile indicates emotional dynamics, sense of belonging, and elements of collective identification. The data refer to the extent and density of social networks; the level of openness/closeness among various social subgroups within the community; and their level of participation, collaboration, and emotional safety.	Social support questionnaires and sense of community questionnaires Open and semistructured interviews Sociogram for small groups "Draw your neighborhood" technique
Profile of the future	This profile explores people's expectations with regard to the perceived future of their community. It can also identify the influence of the media on the perception of togetherness and community life.	Focus groups "Movie" technique

participate in an ethnographic observation of the area—the "community walk"—at different times of the day. These groups were also asked to take photographs of places of interest and post them on a Facebook group page that had been previously set up with the purpose of sharing experiences and research material. Each group was also asked to write a short report of its observations, describing what its members had observed and including their own comments and feelings. A total of 750 photographs were subsequently posted online and discussed in the classroom.

Next, a team of four researchers carried out the thematic categorization of all of the observational texts and conducted a SWOT analysis of these observations' reports by categorizing strengths, weaknesses, opportunities, and threats (i.e., SWOT) that the student-researchers had attributed to the area (Arcidiacono, Grimaldi, Procentese, & Di Martino, 2015; Braun & Clarke, 2006). This categorization constituted a good starting point for the local association representatives and the researchers to finalize the research objectives, locate key people and stakeholders (i.e., institutional and association representatives, migrants, retailers, craftsmen, hoteliers, restaurateurs, service providers, and school representatives) to interview, and develop interview guidelines. We also included tourists and casual visitors, as they are key informants able to reveal the impact that tourism has on the area and offer their own comments and suggestions.

Based on our preliminary work and the observations of the student-researchers, we outlined a quick and comprehensive image of the local area. This highlighted that, despite its architectural beauty as well as cultural heritage, the district of Porta Capuana was in a state of high deprivation, uncleanliness, and neglect. Thus, in formulating our interview guidelines, special attention was given to narratives concerning relational habits, meeting points, significant traditions, well-known songs and mottos, and knowledge of events of the area. Our goal was, in fact, not only to collect information but also feelings, memories, and emotions connected to the area.

We thus identified thematic areas for the interview grids and trained our student-researchers in how to carry out focused interviews (that is, narrative interviews that delve into specific research areas of interest) with the aforementioned stakeholders. In accordance with Arcidiacono (2015, in press), we constructed interview guidelines that would allow the interviewees to freely express their thoughts while at the same time focusing on the research questions. This method is a further development of the interactive structured interview proposed by Richards and Morse (2007), which is able to collect the "spontaneous voice" of respondents, thereby acquiring further knowledge on the topics of interest. Our aim was to collect data on the area's livability, as well as possible plans of action and projects for the future.

Results and Discussion

The transcribed interviews were then analyzed by means of Atlas ti.7. Four main themes emerged from the analysis of the content of the 359 interviews conducted: degradation (89%), garbage and uncleanliness (83%), lack of security (87%), and tourism as a possible resource (70%).

It is interesting to note how the interviews highlighted that, although some of the objective issues of the community, such as degradation, dirt, and lack of institutional intervention, were widely recognized, perceptions of their causes, as well as identification of resources, varied greatly among stakeholders and key informants. Love, Boxelaar, O'Donnell, and Francis (2007) underlined the potential of community profiling in facilitating the expression of the diverse voices of a community. In our case, for example, the local school staff, unlike retailers and restaurateurs, considered migrants to be a resource for the district, while the collective perception appeared to point to migrants as being the scapegoat for all problems in the district, being blamed for the widespread sense of insecurity, the lack of livability, and the garbage. At the same time, such a massive denouncement of degradation coming from all the stakeholders and key informants suggested the necessitiy of collective actions to tackle the issue.

Following the analysis of the interviews, feedback meetings, which were conducted through a series of *discussant cafés* (i.e., small discussion groups between researchers and members of the community), allowed for virtuous circles to take place, in which the community members proposed a number of interventions for the betterment of Porta Capuana, such as the following: security, road maintenance, antique market, street lighting, car parks, cleaning, video surveillance,

interventions for the local deprived youth, meeting places, well-groomed playgrounds, and a research center. In these meetings, as well as in dicussions with local associations and government authorities, an important communication tool that we used to discuss the main issues uncovered by the research were short videos summarizing the most significant results.

What are the distinctive features of this intervention as a whole? We believe that its success rests on the synergy that we have built with the associations operating in the district. Because of this, the research team could access the considerable amount of information required to cover the various profilings suggested by Francescato and Zani (2013) without a costly deployment of resources in terms of time and money. Conversely, in return, the associations obtained a thorough feedback analysis of the district's livability, which allowed for the making of plans based on the priorities of the local area. In fact, the network of associations has turned into an institutional body that has started to draw actively on new resources and power coming from the district of Porta Capuana. For example, the mayor of Naples, after attending some of our meetings, started a proactive collaboration with some of his council members in order to tackle some of the issues that were already well known to the various associations but were more clearly highlighted by the interviews. Also, the area of Porta Capuana has become included among the goals of the USEACT project, a European Union-sponsored program, on which the Porta Capuana municipality and the I Love Porta Capuana committee have begun to collaborate.

Our next step for the project involves responding to the local needs that we have identified through this research. To this end, we are outlining some guidelines for the future urban plans of the city council and will work in synergy with the local organizations to apply for regional and European funds for urban regeneration. In the framework of participatory action research, the employment of community profiling has acted as the driving force for the outlining of shared objectives and plans of action.

CONCLUSION

This chapter has attempted to demonstrate how community profiling can provide a three-way interpretation of a local area, that is, through (a) practical facts and data (e.g., socioenvironmental and structural data), (b) perceptions and representations (e.g., the voices of residents, practitioners and providers of services, representatives of institutions, and tourists), and (c) symbolization (e.g., photos and videos). With respect to the specific aim of symbolization, for example, in Porta Capuana our students made short movies about the area with respect to impact, advantages, and threats, which were also useful in helping to understand the mood of the context. Throughout the chapter, we have emphasized the importance of interaction with local organizations and bodies as a tool to obtain information from stakeholders and key informants.

Community profiling can help us answer many questions arising from a local context by taking into account social, relational, and symbolic features of that context. The work that we have described in the case study took into consideration individual feelings and desires, the interests of stakeholders, and information from key informants. Public officers, employees, and health and social personnel dealing with people living in the area on a daily basis are, indeed, "raw experts" with respect to the local context, and their non refined data provide a ready indicator of what is occurring in a community, as well as the reasons for what is occurring. We encourage those seeking to conduct action research to consider seriously community profiling as a methodology for providing a quite comprehensive understanding of the coummunities in which they are working.

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AFTERWORD

Over the past 30 years, the number of statistical methods has burgeoned. Whereas once it was sufficient to receive training in basic methods (e.g., probability theory, analysis of variance, factor analysis), this is no longer the case. Currently, graduate programs are pressed to teach classes where students learn more advanced methods, which are considered de rigueur for the doctoral degree and future research careers. Existing scholars and practitioners must also keep abreast of the latest trends. The current volume is a compendium of cutting-edge statistical techniques currently used in community science and community-based research. The utility of this book is that each chapter provides a thoughtful overview of a specific method so that the reader can understand its usefulness and, if necessary, pursue additional resources to build on this basic knowledge. In addition, the examples in each chapter demonstrate to the reader the application of the methods as well as how they advance community science and practice. Of course, the book is not an exhaustive compendium, and, yet, there are 11 qualitative approaches, 10 quantitative approaches, and 13 mixed methods approaches included. One feels humbled by all there is to learn.

But why should we care about newer methods? Why aren't the older methods good enough? One often encounters the notion that somehow newer methods are unnecessary, or, worse, that they can obfuscate and unnecessarily complicate the findings. In other words, many feel that older methods are sufficient for answering the crucial questions in a particular field. Therefore, it is important to ask: Do newer methods advance science? The methods described in this book indicate that the resounding answer to that question is "yes."

Greenwald (2012), in an incisive article, argued that one of the most important roles of methods is that they often lead us to good theory. He tracked the history of Nobel Prizes in the sciences between 1991 and 2011 and found that the overwhelming majority of the awards were for methods (82%). This same trend held for the field of psychology. Although only nine awards have been made to psychologists since World War II (in medicine and economics, given that there is no Nobel Prize for psychology), 78% were for methods. Clearly, research methods, as defined by Greenwald, cover a broad range of activities, not necessarily statistical. However, the significance of Greenwald's article is that methods are important, and this importance is documented and recognized by the organization that honors the "best" in a field of study. I believe the same case can be made for the importance of statistical methods.

Greenwald argued that there are two main reasons that the preponderance of Nobel Prizes focus on methods. The first is that "existing theories often provided the basis for design of awarded methods" (p. 106). The second is that "awarded methods had served to generate previously inconceivable research findings, which, in turn, led to previously inconceivable theories" (p. 106). If, in part, the latter is the case, to the extent that we privilege theory over methods, we run the risk of not discovering interesting and important theories. That is, the theories we cannot imagine now are waiting to be illuminated by the sophisticated methods we bring to bear as we engage in our research endeavors.

I would also argue that generating new theories in the field of community science (or any field of inquiry) is a rare event. Perhaps, then, it is also fair to say that methods often lead us to ask better research questions or develop more interesting models of the phenomenon under study. There is a synergy, as Greenwald suggested. Sophisticated statistical methods allow us to ask different research questions, and the research questions we ask cannot be answered without the sophisticated methods at our disposal. That is, methods can provide a framework for conceptualizing the research we conduct and the theory we generate.

In recent years, I have been thinking and writing about the issue of methods as it relates to a person-oriented approach to psychological research. Most published research is not only quantitative but also variable oriented—theoretical and/or statistical approaches that describe relationships between one or more variables (e.g., as income goes up, depression goes down). The variable-oriented approach focuses on finding differences (or sameness) on the specific dimension under measurement. It also focuses on finding universal laws that allow us to predict behavior, broadly defined. Most of the quantitative methods chapters in this book fall under this broad rubric. There is much to recommend this approach, as it has been the dominant paradigm in psychological research since the early part of the 20th century. However, there is another, complementary quantitative approach that does not focus on linear relationships or the search for generalizable, universal laws of behavior. Similar to qualitative research methods, person-oriented approaches can be more context specific. Person-oriented research focuses on finding patterns or profiles of individuals (or communities or organizations; see Bogat, 2009; Bogat, Zarrett, Peck, & von Eye, 2012) within a sample that take into account more than one variable. In other words, individuals, communities, organizations, and so on are complicated and multifaceted and cannot be described with one variable. It is the pattern of variables that, taken together, constitutes the individual, community, or organization. By taking such an approach, the researcher can discover subgroups within the larger group that are not necessarily the a priori subgroups the researcher might have expected to find. As Williams and Kibowski note in Chapter 15 in this volume, latent class analysis and latent profile analysis are two techniques that can be employed to find such subgroups. Statisticians are working on other approaches, including modifications of variable-oriented statistical techniques such as structural equation modeling and log-linear modeling (see, e.g., Bogat, von Eye, & Bergman, in press), to facilitate person-oriented research.

There are always difficulties incorporating new methods into mainstream science. For example, in her overview to the mixed methods section, Anderson in Chapter 23 notes the inherent difficulty in understanding when to use mixed methods and how to integrate them (she mentions at least 35 different types of mixed methods designs). She also notes that mixed methods have both benefits and challenges. This is true of all approaches and is something for professionals to keep in mind as they attempt to match theory/research questions with statistical methods.

One of the problems inhibiting the integration of new methods into the professional mainstream is the gap that exists between the scientists and practitioners using the new methods and the audience reading the research. The problem starts with reviewers who may or may not be familiar with various statistical techniques. Recently, my colleagues and I submitted an article to a biologically oriented journal. The analysis used was structural equation modeling—a fairly standard statistical approach used in many fields of psychology. However, the comments indicated how poorly the individual reviewers understood this statistical method—its purpose as well as what our particular findings were and their interpretation. Both reviewers repeatedly asked us to conduct several analyses of variance (ANOVAs), even though such analysis would not have thoroughly answered our research questions and doing so would have violated the basic assumptions of ANOVA. I am purposely using an example from a journal that was not in the field of community science, but I am sure that similar issues arise regularly in all journals. If the problems exist with reviewers not understanding structural equation modeling, then what happens when authors use one of the numerous newer techniques presented in the current book?

As professionals, we have a responsibility to be cognizant of the different methods available for data analysis, and this responsibility starts with those who review manuscripts for journals. As stated earlier, reviewers should understand the statistical techniques for the manuscripts they review. Otherwise, situations like the one described in the prior

paragraph result. It should not be incumbent on the paper's authors to write a treatise on a specific statistical technique in order to educate reviewers or editors.

But there is also another, more positive, role that reviewers may play. The best reviewers understand that authors may have collected important and interesting data but that the data analyses have not fully realized the potential of that data to answer the stated research questions, especially if the methods do not match the questions. Reviewers can aid the entry of newer statistical techniques into the mainstream by making suggestions about alternative statistical methods the authors might use for data analysis. The current book provides a vast panoply of the newest statistical methods that authors can use, and reviewers can suggest, as we advance the field of community science.

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