

# Using a simulation to raise awareness of issues faced by limited resource audiences

**Debra Pankow, Ph.D.** NDSU Extension Family Economics Specialist North Dakota State University

## Abstract

Since 1996, North Dakota State University Extension Service has been conducting poverty simulations as professional development for various groups around the state. The immediate impact of those simulations was measured in a post-program survey of 402 participants and then with a follow-up impact evaluation six months to two years after the simulation took place. Both surveys indicated significant change in attitudes, while behavioral changes were less noticeable. In addition, community impacts as a result of a poverty simulation are noted.

Keywords: poverty, simulation, limited-resource audiences, professional development.

#### Introduction

The poverty rate and number of families in poverty increased to 10.0 percent and 7.6 million in 2003, up from 9.6 percent and 7.2 million in 2002. Significantly more children (under 18 years of age) experience poverty, as estimates grew from 16 percent to 17 percent over the same time frame (ND KidsCount 2004). In addition, poverty rates for 18-24 year olds (2000) are estimated to be about 14 percent overall in the United States; for seniors (65+), 10.2 percent; and for single fathers, 16 percent. The highest poverty rates are found among single mothers, more than 32 percent of whom live at or below the poverty level (Dalaker 2001).

As educators develop programs or deliver services to this important audience, it's important for them to recognize the issues that this particular audience faces every day. Poor families, and especially poor families with children, face many barriers to becoming self sufficient: not having enough time, lack of transportation, lack of child care, difficulty understanding rules and filling out paperwork, lack of self confidence, health problems, unemployment, isolation, and lack of support from extended family and friends.

Research has shown that many professionals don't understand these issues because they had never experienced poverty (Shirer, Broschar, and Klemme 2003). In 1996, focus groups were conducted with Iowa State University Extension staff and human service agency personnel with whom they partner, and researchers found that a major barrier to successfully working with low-income audiences was the staff's lack of understanding of the issues encountered by poor youth and families (Shirer, Broshar, and Klemme 2003).

## Simulation-based learning

Participation in group exercises that include simulations is one way to develop empathy. Interactive group exercises for education and training purposes date back to the 1960s. More than 90 categories and subcategories have been identified, with particular emphasis on the criteria necessary to reflect key processes necessary to meet learning objectives (Gredler 1992).

Simulations are a type of interactive group educational exercise that promotes experiential learning as learners live through a 'real-life' situation. Simulations are an effective learning method that has been shown to be very useful, in some cases, in terms of retention of knowledge and attitude change (Iowa State University 2005). Participants assume an assigned role and experience the consequences of their decisions as they carry out the role (Gredler 1992). An important feature of effective simulations is 'reality of function;' that is, participants mentally accept the role that is assigned to them for maximal learning. Simulations are often fun for participants but also can evoke strong emotions. Simulations also can be counterproductive if learners do not have an opportunity to discuss and 'process' the experience following the simulation.

# The ROWEL poverty simulation

The ROWEL poverty simulation (ROWEL 1995) is one that has shown positive results related to building understanding and empathy for individuals working with limited-resource audiences. The ROWEL poverty simulation is designed to increase public awareness about issues related to poverty. It is a copyrighted learning tool created by the Reform Organization of Welfare (ROWEL) Education Association of Missouri. The simulation has recently been purchased and updated by the Missouri Association for Community Action. (See Appendix for purchase information.) The new simulation features ready-to-use materials and revised and updated information.

The program is suggested to take about three hours and involve 30-75 participants, who assume the roles of families living in poverty. Participants are placed into family groups, consisting of one- to four-person households. Some of the households have children, some are headed by single parents, some households have two parents, some include workers, and others contain one or two seniors. Each "family" receives a packet of information that describes their resources and needs. The task of each family is to provide for basic necessities for one month, which is represented by four 15-minute time periods (one "week" each). Families spend each 15-minute period buying food, paying rent, and interacting with other community resources.

A "director" trains the organizers and volunteer staffers in advance and facilitates the simulation. The simulation is conducted in a large room with families seated in the center. Tables representing community resources (a bank, employment office, grocery store, and pawn broker) are placed around the perimeter, and other players (a police officer, utility collector, landlord, and illegal activities person) also interact with families during the exercise. It is recommended that volunteers who have lived in poverty be recruited to represent community resources, or "staffers." Often a "commodity distribution" or coffee break is held between weeks. After the simulation, participants and volunteer "staffers" discuss their experiences (as a large group or in small groups) and share conclusions with the large group.

## Poverty simulations in other states

Nationally, many anti-poverty groups, such as Community Action, and educational organizations, such as the Extension Service, provide the poverty simulation as a means of educating professionals about the realities of living in poverty. In 1998, the New Jersey Food Stamp Nutrition Support Network, which includes Extension educators, conducted a simulation for several hundred professionals (Connexions 1998). In New York, a simulation was held at the spring 2001 conference of the New York State Community Action Association with extremely positive feedback (SENSES 2004). The University of Illinois is offering a simulation and director training as part of their professional development offerings for 2005 (University of Illinois 2004). A simulation was hosted in October 2004 by the Northland Unmet Needs Council in Kansas City, Missouri (Sun-News 2004).

The University of Wisconsin Extension Service has conducted numerous poverty simulations. Follow-up evaluations showed that participants dramatically increased their understanding of the difficulties and stressors faced by individuals in poverty. Participants expressed that the experience was an "eye opener," were very satisfied with the experience, and would recommend it to others. Participants in one community formed a network to meet and discuss the resources and needs of people in poverty. Another community conducted training to provide skill development to help staff work more effectively with low-income people (UW-Extension 2002). The University of Wisconsin received responses from 562 participants in a post-event participation survey. The results indicated an increase in understanding of the financial pressures, the difficult choices made each month when stretching limited income, the difficulties in improving one's situation and becoming self-sufficient, the emotional stresses and frustrations, and the positive and negative impacts of staff and volunteers they come into contact with. Focus group interviews conducted three to twelve months after the simulations were conducted to determine the long-term impact of their participation. Findings suggested that the poverty simulation increased participants' awareness and understanding of the situation of individuals in poverty, and changed the way they related to low-income families. (UW-Extension 2002).

Iowa State University Extension (ISU) first conducted a simulation for 75 Extension educators in September 1995. Since then, approximately 1,700 Extension staff, community partners, and citizens have participated in the simulation (Iowa State 2005). Shirer, Klemme, and Broshar (2003) posted the results of their study of the impact of the simulations conducted in 1997 and 1998. In post- then pre-assessment of the simulation, the simulation sensitized participants to the plight of families living in poverty. Many participants were surprised that the program could replicate the frustrations and stresses of being poor. Those employed in agencies said they would be or were much more understanding and less judgmental of their clients after participating in the program. Other findings from Iowa State's study were that the simulation had a ripple effect in a community, and after one year, 50 percent of participants said they had met with others to discuss ways to change programs, services, or business practices. The simulation was found appropriate for a wide variety of audiences, used in rural as well as urban areas, with youth, and in culturally diverse communities (Iowa State 2005).

# North Dakota's poverty simulations

To help reduce the empathy barrier and to enhance the ability of organizations and communities to work with low-income youth and families, North Dakota State University (NDSU) Extension Service is using the ROWEL poverty simulation exercise. The first simulation was an in-service for about 50 Extension educators in October 1996. Since then, NDSU Extension Service has been conducting poverty simulations for organizations, community groups and others interested in raising an awareness of issues faced by limited resource audiences. NDSU has three Poverty Simulation kits available for check out; state and county Extension Service staff are available to provide assistance to groups conducting the program.

The simulations have ranged in time frame from one-and-one-half hours to three hours. To date, more than 20 simulations have been conducted with more than 1,300 participants. Poverty simulations in North Dakota have been conducted with a variety of audiences: professionals such as Head Start teachers, agency administrators, social workers, educators, college and high school students, local and state decision makers, and business leaders. Poverty simulations in North

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Dakota have been conducted with groups of more than 150 to groups as small as 40 participants. Rooms used for the simulation have varied from school gyms to motel banquet rooms to a group of rooms in a university physical therapy department. While the simulations have not always followed the "guidebook," comments from participants immediately following simulations have been overwhelmingly positive.

To further understand the impact of participation in a simulation, and to determine the impact on local communities of having a simulation involving community representative, a post-program and a follow-up evaluation were conducted of participants in poverty simulations in North Dakota. In addition, organizations sponsoring the simulation for the purpose of community organization were contacted.

#### Impacts of the North Dakota State University poverty simulation

The impact of the NDSU poverty simulation was measured using a post-program survey during 2001-2003. Participants were asked to indicate how their perceptions of issues faced by limited-resource audiences had changed as a result of the simulation. A Likert style scale was used, providing choices ranging from "a lot," "somewhat," or "very little." Four hundred and two individuals completed post-program surveys of the poverty simulations conducted in North Dakota. More than 90 percent (93.5 percent) of the participants had just participated in their first simulation. More than 80 percent (80.8 percent) indicated they had changed their perception of issues faced by limited-resource audiences as a result of participating in the simulation.

Specific issue	, v	Somewhat (percent)	A lot (percent)
Day care	47.5	32.8	19.7
Transportation	10.5	33.3	56.2
Agency attitudes	9.9	45.5	44.6
Business attitudes	12.8	47.5	39.7
Self esteem	10.4	39.4	50.2
Consumer issues	11.4	50.2	38.4
Family relations	11.6	44.4	44.0

Table 1. How has this simulation changed your perception of issues faced by people living
in poverty? (N=402)

The greatest change in perception related to issues of transportation, self-esteem, agency attitudes, and family relations (Table 1). More than half (56.2 percent) changed their perception "a lot" regarding transportation issues for this audience, and another third (33.3 percent) "somewhat changed their perceptions." Nearly 90 percent of the participants changed their perceptions regarding self-esteem issues, either "a lot" (50.2 percent) or "somewhat" (39.4 percent). More than 90 percent (90.1 percent) changed their perceptions of agency attitudes either "a lot" (44.6 percent) or "somewhat" (45.5 percent). More than 90 percent of the participants changed their attitudes regarding agency attitudes, and nearly 90 percent changed their attitudes regarding family relations in poverty-level households.

The least change in perception related to day care for limited-resource households, where only 19.7 percent changed their perception "a lot" and 32.8 percent changed their perception "somewhat." The majority of respondents (47.5 percent) changed their attitudes the least with regard to day care, choosing the lowest level of change in perception, "very little." This may be due to the fact that many of the participants were already very aware of the issue of day care for limited-resource households.

Participants were asked if they knew of other groups that could benefit from participation in the simulation. More than two-thirds said that they did. Eighty-eight percent of the participants said they would tell others about their poverty simulation experience.

When asked open-ended questions about how their perceptions had changed, participants mentioned increased empathy for individuals living in poverty and an increased understanding of their frustration. One participant noted "I need to be more understanding when people call the office." Another respondent mentioned an increased understanding of "...the time spent trying to make a living for themselves and their children."

In addition, a more qualitative follow-up telephone survey of a small (n= 14) representative group of participants was conducted in winter 2004, six months to two years after the simulations had been held. Participants who volunteered for the impact evaluation were asked questions to determine the long-term impact of the simulation. Approximately 23 percent of the sample had participated in two or more poverty simulations. Most (92.7 percent) recalled the specific role they played in the simulation, and 84.6 percent of the respondents recalled the exact format of the simulation. The same percentage remembered their attitude changes.

The ability to remember specific details of a simulation learning activity six months to two years after participation is evidence of the value of the poverty simulation. Participants remembered their roles, the format, and their attitude changes. The long-term impact as it relates to empathy and understanding of this kind of learning activity cannot be underestimated. While the follow-up impact evaluation did not generate information about professional affiliation or personal

characteristics of the participants, the recall of format, attitude, and role act was similar for those who participated in the simulation once and for those who had participated in the poverty simulation more than once.

When asked if they recalled their feelings, every participant answered "yes." Comments regarding their feelings during the poverty simulation included terms such as: "compassion," "discrimination," "empathy," "frustration," "humble," "self-esteem," "interesting," "helpful," "powerless," and "people not listening."

In addition, participants were asked if participation in the simulation had changed them personally in any way. Comments related to this question included "a better understanding of what clients go through," "I have become more sensitive with students who may not have sufficient resources to bring to class or to do project," "more awareness," and "more understanding."

Participants were asked if they participated in any further activities as a result of participation in the simulation, such as telling others about it, arranging or suggesting a simulation for another group, or taking policy action. More than half (53.8 percent) answered that they had.

Changes that participants reported as a result of their participation in the simulation included changed opinions, helping with a second simulation, and suggesting the training to other groups. In several communities, the poverty simulation was used to bring a variety of agencies and decision makers together to build support for "family service centers" or "family service agency networks".

The director of the simulation contacted representatives from groups coordinating the simulations to determine community impact of the educational activity. To date, four communities (Minot, Bismarck, and Fargo, North Dakota; and Moorhead, Minnesota) that hosted poverty simulations have made progress toward some type of family service center. In addition, the vast majority of NDSU Extension Service simulations have been requested by a person who either participated in a simulation or had learned about the simulation from another participant.

# Summary

In general, the simulation made participants more sensitive to the plight of families living in poverty. The issues of transportation, family relations, agency attitudes, business attitudes, self-esteem, and consumer issues, in particular, were presented in such a way that participants changed their perceptions of the impact of these issues on limited-resource households. Many participants were surprised that the program could replicate the frustrations and stresses of being

poor. Those employed in agencies said they would be or were much more understanding and less judgmental of their clients after participating in the program.

One hundred percent of the small sample contacted six months to two years after the simulation recalled the feelings of frustration and helplessness during the simulation. Changes in individual attitudes did not automatically translate into changes in specific action or changes in programs and policies. While 50 percent of the respondents in the follow-up survey indicated that they had participated in some follow-up activities, people reported mostly talking about the simulation with others, and very little concrete action. Anecdotal evidence and community follow-up, however, has shown that groups participating in the poverty simulation have made progress in some shared goals, such as steps toward the creation of family service centers.

The poverty simulation is a successful learning tool available to the citizens of North Dakota through the land grant university Extension Service. Not only has participation been shown to facilitate increased sensitivity and empathy for participants but poverty simulations have served as a conduit to bring agencies, organizations, and community leaders together to address limited resource audience issues. The simulation is also available in other states from land grant universities or from community action agencies. The experience of a rural state such as North Dakota suggests that the simulation is a valuable teaching tool even when audiences may be small or when ideal facilities are not available.

Participants noted remarkable changes in attitudes and increased levels of understanding and empathy. Many participants were motivated to something more after the simulation. Additional work and follow-up evaluation is needed to track any additional behavior change, including community impacts resulting from the poverty simulations.

# Appendix

In 2003, the Poverty Simulation was redesigned and can now be purchased by contacting: Elaine West Missouri Association of Community Action Phone: 573-634-2969 Email: <u>ewest@communityaction.org</u>

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## Author

Debra Pankow, Ph. D. NDSU Extension Family Economics Specialist North Dakota State University 277 EML Hall Fargo ND 58105 701-231-8593 (Phone) 701-231-9645 (Fax) dpankow@ndsuext.nodak.edu