

Service Learning Project Paper: Frogtown Environmental Health Group

Nursing 498: Dimensions of Professional Practice I
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Statement of the Problem

Our overall problem was to find out what are the community's preferences for use of greenspace within the Frogtown area. We were joined by 11 students from Dr. Kistler's Human Ecology Class. Our goal was to produce a survey that incorporated community needs and wants for greenspace. We wanted to distribute the surveys throughout the community. Our objectives were to (a) produce a survey about public interest on greenspace, (b) to survey the community, and (c) to distribute the data collected to the community for community use.

We were trying to get an idea of what the Frogtown community wants done with their greenspace. We figured the best way to get that information was to survey the community at various functions and see what they wanted. We went to community meetings, schools, and even did some door to door surveys. We tried to get a wide variety of responses so that we could cover different areas of the Frogtown community. From these surveys we collected data and analyzed it. Then the results will be written up and distributed to the class and community through the Frogtown Times. In collaboration with Dr. Kistler's class we were hoping to gain some knowledge on this topic of interest so that the next classes can take over and begin to take off where we stopped.

Methodology

Setting

The setting for this quantitative research project was the community of Frogtown in St. Paul. This is a community that is tucked in the heart of the city. It is a culturally diverse area of the city in which there are many different races, ages, and cultural groups. In trying to determine the needs and desires of their community, it was necessary for us as researchers to go directly into the community where the citizens live to gather data. Much of our work was done at Bethel College with the Human Ecology students. However, our actual data collection went on within the community of Frogtown.

Participants

The participants in our study were of all ages, races, and cultures. We wanted to get a broad variety of subjects to answer our questions so that we had a better overall idea of what the community wanted for its greenspace. So we tried to go to different places to administer the survey. We had a range of ages from young children to very elderly men and women. Most of these participants were Caucasian. However, we also had African-American as well as Hmong participants. The participants had a choice as to whether or not they participated in the survey. They were given the opportunity to take part in the survey as well as give whatever information they felt would be helpful for our research. We were trying to get a sample from the population to

complete our surveys since we knew that we were not going to be able to get the entire population surveyed. So we figured, the more numbers that we could get, the better it would be. So we just tried to get as many surveys completed as possible.

Sampling Procedures

For our sampling, we wanted to gather a sample that was representative of the population through distribution of the survey. We knew that we would never be able to survey the entire population with this project, so we wanted to gather as many different people's responses as possible. One of our goals was to gather a representative sample of the population. The representative sample of our population would include children, adults, those from all different cultural and ethnic backgrounds, and areas of the community. We wanted an accurate representation of the community and a good representation of the wants and desires of the community. We did not want to divide these results since the perspective of the community as a whole is what we were looking for. However, we did gather some gender and race data along with the answers for a couple of reasons. We were interested in finding out what the demographics of our sample population were for this survey. And we also were interested in finding out what the different ethnic groups were interested in doing with the greenspace in the community. We wanted to see how and if the answers differed according to ethnic groups.

Data Collection

As stated previously, we decided to use a survey to gather data for this project. We partnered with Matthew Keiser from Bethel to get integrated into the community in order to gather some data. It was difficult for our group to simply jump into the community when we had no ties. It was hard for the community to trust us when we were a uninvolved group coming in wanting to get information from them. So Matthew was a great resource for getting our group through the door. He helped to connect us to community meetings and gatherings. We went to these different meetings to explain what we were doing and to ask them if they would like to help us (and their community) out by filling out a survey. The way that we gathered our data was not the most representative of the population. What tended to happen was that most of the same types of people (or even the same people) were at these meetings. We had a group of biased people at these meetings, because the people at these meetings were already the ones that were quite involved in the community. So they tended to have a higher interest placed in the community. But we were interested in getting a more representative sampling of the population. We wanted people who were involved as well as people who were not involved in the community and its decisions. We were able to gather some information from children, which helped to better represent the population. And a few groups went door to door with the surveys. However, this process took quite a long time, and they were only able to gather ten surveys or less within three hours. It was not a very efficient way of gathering information overall. If we had more time to work on this project, it would have been better to spend more time going door to door or going to the local grocery store and asking people to fill out surveys. This may have given us different results. With this time restraint, we were only able to gather a small amount of surveys as well. Overall, we had about 3% of the population of Frogtown surveyed. This did not give us an accurate and representative sample either.

Ethical Concerns

We wanted to find out what the community wanted, and this was quite straightforward. However we needed to decipher whether or not our questions were biased in any way or unnecessary. Were our questions phrased in such a manner that they were putting the community down? Did we need the demographic information asking them what their race was? Was this going to be offensive to the surveyed population? These were all questions that we were very concerned about. We thought very long and hard about these things, but we were able to work together as a team and phrase them in such a way that they were not offensive or threatening. Those that were surveyed were, for the most part, impressed with the survey and happy to answer our questions. We were able to gather the important demographic data as well as the more important greenspace interest data.

Results

The survey has provided us with valuable information in assessing the Frogtown community and their perceived need of greenspace. Table I describes our sample characteristics.

Table 1. Sample Characteristics (n=88*)

		<u>n</u>	<u>%</u>	
Age	Under 18		15	17.85
	18-34	19	22.61	
	35-54	26	30.95	
	Over 55	23	27.38	
Gender	Male	27	32.14	
	Female	55	65.47	
Ethnicity	African American	9	10.71	
	Asian/Pacific Islander	22	26.19	
	Caucasian	45	53.57	
	Hispanic	3	3.57	
Primary Language	English	56	66.66	
	Hmong	20	23.80	

*Not all participations provided information.

One of our goals was to identify the community's preferences for the use of vacant space within Frogtown. Table 2 displays our results in relation to greenspace preferences.

Table 2. Preferences for the use of open space (strongly agree and agree)

	<u>n</u>	<u>%</u>	<u>Mean</u>
Greenspace	75	89.28	4.41
Housing	61	72.61	4.11
Parking	75	89.28	2.6
New Businesses	44	52.38	3.5

The mean tells us that based on our survey scale (5 = strongly agree, 1 = strongly disagree) that community members desire greenspace and housing more than parking or new businesses. We also surveyed the use and value of greenspace for certain activities. Table 3 will provide the results for the potential uses of greenspace within Frogtown.

Table 3. Identified use and value of greenspace in a neighborhood (5-point scale)

Use	Mean
Family or community gathering	4.35
Walking	4.32
Neighborhood appearance	4.21
Summer sports and recreation	4.20
Education	4.14
Decorative gardens	4.02
Food gardens	3.86
Winter sports and recreation	3.84

As nurses we were specifically looking for the health related implications on the Frogtown community because of its urban location and lack of greenspace. Table 4 displays the data collected on the perceived connections of health and the environment by Frogtown residents.

Table 4. Health related results (includes strongly agree, agree, and neutral responses)

	n	%
Children play in healthy areas	56	66.66
Perception of safety in open spaces	65	77.38
Well being of community affected by greenspace	70	63.33
Positive influence of outdoors on individual health	72	88.09
Perception of urban living impact on health	64	73.80

We tried to focus our health-related questions for urban living on the issue of greenspace availability, though numerous questions could have been asked.

Discussion

Sample Characteristics

Our sample was not very representative of the community of Frogtown. Tony Schmitz, editor of the Frogtown Times, estimated that the community was divided into thirds ethnically — Caucasian, African American, and Hmong. Our sample was also rather small and was based on availability and convenience rather than random sampling.

Greenspace Preferences

We identified that about half (51%) of the community feels there is a need for more greenspace. But when asked how available land should be used the issue of housing was a close second (see Table 2). We found a strong feeling of community within Frogtown. Only 6 (7%) surveyed answered in the disagree categories to the question, "I interact frequently with friends and neighbors in my neighborhood." And on the questions that asked about preferences for greenspace use, the community interaction uses were valued highly.

Health Implications

From the data collected from the survey in Frogtown, we learned that the community is aware that interaction with greenspace is beneficial to general health and well being. We failed to identify whether or not individuals feel that living in the city positively or negatively affects health. The strongest correlation (0.6683) was between the agreement of feeling of safe in current greenspace and the agreement to volunteer in the upkeep of greenspace. Safety may be an issue to address in order to increase the use and upkeep of greenspace within Frogtown, and therefore benefit the health of the residents.

It would have been interesting to identify whether or not ethnicity was correlated with any specific questions or responses. This information may allow health workers to more

specifically meet the needs of that ethnic group, or for greenspace designers to focus on meeting the more specific needs and desires of the ethnic group.

Recommendations

For Nursing Practice

The data gathered from our information from the Frogtown community has shown that the people in the community feel that being outdoors is beneficial to their health. Therefore as nurses, we can further encourage time spent outdoors as a means of promoting health (or perceived health) to urban dwellers. By using the information gathered in this survey, we can suggest possible uses for the greenspace development within the community to promote the health of its citizens.

Further Study

This research project was a good start. However, we did not gather enough surveys to have a representative sample of the population. For the furthering of this study, we would need a lot more time and resources (such as interpreters) to focus on this project. More time would allow us to go directly into the community and the people's homes to gather a wider variety of information. We also feel that more information could be gathered from the Frogtown community on urban living. Our specific project covered only one small area of the whole person. There are many aspects to the health and well being of the entire person. Further studies might be able to gather information concerning how things such as crime, violence, racial and cultural differences, and pollution affect the health of urban communities.

This project has the potential for the collaborative efforts and successes of many classes to come. With open communication and teamwork between the Human Ecology students and the Nursing students, this project can take many avenues. One such suggestion that was brought up was to involve the children of the community. Going into the schools and doing educational programs on the uses and benefits of greenspace could produce more involvement of the community, which will be needed to ultimately improve overall health. By working with the Ecology students, we have been able to gain a broader understanding of greenspace and health and how they coincide. We were able to get a great start for this short amount of time and will support the furthering of this research with the future classes.

BETHEL COLLEGE

April 13, 2000

Dear Frogtown Resident:

We are cooperating in a project to determine the desire, need, and uses for greenspace in your community. Greenspace can be defined as natural (nonbuilt) areas within your community that are designed and maintained to improve the aesthetic, physical, mental, and ecological well being of community residents and to allow for their connection to and appreciation of nature in the urban environment. Examples might include: grassy play areas, park-like areas for picnics and family or community gatherings, community flower or vegetable gardens, natural areas, school nature areas, or other open areas for aesthetic or ecological purposes.

We, a collaboration of students and faculty in the Nursing and Biology Departments at Bethel College, are working in partnership with residents of Frogtown to collect information for the community to use in community planning for greenspace.

The results of the attached survey will be made available to the District 7 Planning Council to assist in community planning and a summary of the results will be published in an upcoming issue of the Frogtown Times. We hope that the results of the survey will be used by both the community and future classes at Bethel College to aid in community planning in your neighborhood.

Sincerely,

Students and Faculty
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