Statistics for Social Research I

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Professor

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Assignment

**60 Day – Developmental Readings**

**Complete developmental readings using two statistics textbooks to address key elements**

**introduced in the syllabus and videos. Complete three journal articles that use statistical**

**analysis as a key part of the research. Complete three journal articles that address**

**research design and methodology and contain statistical research concepts (for a**

**minimum of six journal articles in total).**

**See the General Helps in AA-101 The Gathering Place in DIAL Assignments-Developmental**

**Reading Instructions, Grading Rubric, and Resources.**

**● Download the “Developmental Reading Assignment Template” Word document to use in**

**writing your developmental reading assignment.”**

**● Document all sources in APA style, 7th edition (APA 7 Reference Example, APA 7 Quick**

**Guide) for in-text citations and for Work Cited. Include page numbers.**

**● Include a separate Works Cited page, formatted according to APA style, 7th**

**edition**

**● Submit through DIAL to the professor.**

**Source One:** Srivarathan, A., Lund, R., Christensen, U., & Kristiansen, M. (2020). Social relations, community engagement and potentials: A qualitative study exploring resident engagement in a community-based health promotion intervention in a deprived social housing area.*International Journal of Environmental Research and Public Health, 17*(7), 2341. https://doi.org/10.3390/ijerph17072341

**Comment 1:**

**Quote/Paraphrase:**

The study builds on qualitative methods including participant observations combined with pre- and post-intervention interviews with a selected group of residents (n = 9). Data were thematically analyzed with focuses on participation in an everyday life context, concepts of othering, and territorial stigmatization (p. 1).

**Essential Element:**

Descriptive and Inferential Statistics

**Additive/Variant Analysis:**

The inhibiting factor of territorial stigmatization in this qualitative study is an addition to my knowledge in social research.

**Contextualization:**

Territorial stigmatization will be an obstacle that I will most likely have to overcome in my research. The subset I intend to observe is persons living in subsidized housing. One particular area in Washing, DC., my hometown, that suffers from territorial stigmatization is southeast. Washington, D.C. is divided into four quadrants. Most of southeast has traditionally been known as a low-grade socio-economic area ridden with crime. When one states they are from this area, they are immediately pre-judged. Although having grown up in upper northwest area, an area known for middle class families, I purchased a condominium in southeast in 2017 and have been living there ever since.

My immediate area is peaceful, with low crime activity but is considered an up-and-coming area. It is one of the last affordable areas to purchase real estate. People automatically assume that someone from southeast is under educated, low income and culturally ignorant. Person’s that grew up in southeast may not want to participate in social science study groups due to the stigma which may hinder my research goals.

**Comment 2:**

**Quote/Paraphrase**

“We conclude that participatory community-based interventions have a potential to enhance social relations in deprived social housing areas” (p. 1).

**Essential Elements:**

Test a claim (Hypothesis writing)

**Additive/Variant Analysis:**

A participatory based involvement in research adds to my knowledge of how to conduct research and the variety of observation methods available.

**Contextualization:**

Autonomy and participation promote empowerment. People in general, especially those from stigmatized areas, want to feel and need empowerment. If a researcher wants to conduct a study of a particular subset or variable, the identified subset being involved in the organization of the research allows the participant control in the study and allows them to let their guards down. Allowing my study group to be involved in decisions of how and where my research is conducted may provide more effective results.

**Comment 3:**

**Quote/Paraphrase**

“The research project entitled ‘Health, wellbeing and social relations in a changing neighborhood’ examines the effects of large-scale structural changes on health, wellbeing and social relations in a deprived social housing area in Denmark from a longitudinal perspective” (p. 2).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The use of a longitudinal study is an addition to my understanding of various observation methods.

**Contextualization:**

From my understanding, a longitudinal study is a repeated observation of the same variable over a lengthy period of time. This type of study appeals to me and may or may not coincide with the objectives I want to achieve in my research. My goal is to study people of different generations and cultures living in subsidized or affordable housing. The strategy may be to observe parents and their grown children, preferably of different cultures. It may not seem beneficial to conduct a longitudinal study for this objective.

**Comment 4:**

**Quote/Paraphrase**

The community-based intervention was developed on the solid foundation of detailed knowledge from a previously collected ethnographic study, which, in turn, was based on qualitative interviews among the two largest resident groups (Danes and Turks), in combination with a baseline survey questionnaire from 2018 on health, wellbeing and social relations (p. 2).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

An ethnographic study is an extends my knowledge and understanding of social research.

**Contextualization:**

Wanting to compare the different cultures withing the buildings I have managed in the past and understand the individual customs, habits and traditions within subsidized housing falls under the category of an ethnographic study. The type of study may very well contribute to my end goals and objectives. It has been a privilege to manage buildings with a majority of either Korean, Hispanic, and Ethiopian. Each ethnicity and culture have a different approach or perspective to why they are in subsidized housing and the strategy to gain financial independence. An ethnographic study is also a qualitative research design which is more desirable to me than a quantitative study.

**Source Two:** Richardson, J., Postmes, T., & Stroebe, K. (2022). Social capital, identification and support: Scope for integration.*PLoS One, 17*(4) https://doi.org/10.1371/journal.pone.0266499

**Comment 5:**

**Quote/Paraphrase**

From the large number of studies on social relations and their benefits we can safely say that this topic has the interest of a large community of researchers that stem from quite different scientific backgrounds such as clinical and social psychology, sociology and economics (p. 2).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The absence of theology within this interdisciplinary collaboration of those interested in social relations is variant to my understanding of social research.

**Contextualization:**

The author’s quote portrays the lack of collaboration between theology and other disciplines within the social sciences. If there is one group of researchers that would be interested in how people relate socially, it should be theologians or Christian social practitioners. Christian social practitioners with advanced research in the social sciences can provide a biblical perspective and kingdom minded solution to the ills of society. One reason I chose to attend OGS is because of my pursuit of scholarship from a Christian perspective. Kingdom minded researchers must use an interdisciplinary approach utilizing data from economics, psychology and the social sciences. OGS is teaching me how to conduct this type of research and be open minded to information provided by other researchers in other fields.

**Comment 6:**

 **Quote/Paraphrase:**

“The current work aims to shed light on the potential differences and commonalities between constructs that are considered theoretically central to the conceptualization of social relations: social support, multiple group memberships and social identification, and social capital” (p. 2).

**Essential Element:**

 Language and role of statistics in social research

**Additive/Variant Analysis:**

The various constructs associated with social capital, social identification and multiple group memberships would be an addition to my knowledge of social quality and how it may apply to those living in subsidized housing.

**Contextualization:**

Social quality theory is a theory I am recently familiarizing myself with. Although I’ve never lived in subsidized housing, I understand the benefit of belonging to social groups, being a member of alumni groups and civic organizations as well as the social capital I have gained from my network over the years. As I further my research, these constructs will be vital to my theory of those living in subsidized housing needing social support in various degrees to gain financial independence.

 **Comment 7:**

 **Quote/Paraphrase:**

“Cobb describes social support as a signal that one is cared for and loved for, esteemed and a member of a beneficial network” (p. 3).

**Essential Element:**

Test a claim (Hypothesis writing)

**Additive/Variant Analysis:**

The provided definition of social support is not an addition to my knowledge of social relations, in some cases may be variant to what I have observed.

**Contextualization:**

One of the hypotheses I would like to test in my research is the type of social support those in subsidized housing receive as well as the lack of social support. When one is not receiving benefits from his or her network, then there is a lack of social capital which can affect a person’s success. As a property manager, I have observed young adults that live in affordable housing and do not receive any social support from family members. The dynamic within the family may be toxic and destructive. On the other hand, those with healthy family ties, usually get a leg up in life and are able to move towards mental wellness and financial independence.

 **Comment 8:**

**Quote/Paraphrase:**

“The literature on the relationship between social identity and health identifies four mechanisms that are thought to explain the positive relation between social identity and health: social identity as a determinant for symptom appraisal and responses, social identity as a determinant of norms and behavior, social support as a consequence of shared social identity and social identity as a coping resource” (p. 3).

 **Essential Element:**

 Descriptive and Inferential Statistics

 **Additive/Variant Analysis:**

Empirical evidence citing the correlation between social identity and good health provides an addition to my knowledge of social identity.

 **Contextualization:**

In many sermons I’ve heard statistics on how belonging to a church supports good health, especially mental wellness. The church as a social network and support base allows for freedom of worship during church services, which has been known to decrease depression. The church is also a network that provides social capital in the form of shared information in the form of seminars and retreats and also individual friendships that are formed where social support and resources are exchanged. One of the questions in my qualitative study will be to find out how many in my subset belong to a house of worship or religious organization and what type of social benefits they have received from said faith based organization.

 **Comment 9:**

 **Quote/Paraphrase:**

Despite several attempts to include this measure in different ways (e.g., by including individual items rather than sum scores), we could not find a way of scoring this scale that would improve its internal reliability or its relation to the other concepts we measured. In sum, we were unable to resolve this issue in the present research; in the future we would like to include other operationalisations of social capital to settle these issues. We believe such other measures should use Likert scales that leave more room for perceived connectedness (p. 20).

 **Essential Element:**

Types of Data

 **Additive/Variant Analysis:**

The use of the Likert scale is an addition to my knowledge on the most effective way to conduct research, especially for the concept of social capital.

 **Contextualization:**

Identifying which social capital operationalizations are best to study and measure to test my hypotheses will be a challenge. Asking questions such as what type of resources you have gained from various relationships, e.g. friends in the same apartment complex, friends from church or other groups may be a start. For myself most of my social capital has been gained from people I know at school and church. Even something as small as finding a natural hair stylist that is affordable and talented has been a benefit.

Because my mother has basic knowledge about investments and retirement savings, she was able to refer me to a bank that offered a great interest rate on certificates of deposit. These are the types of shared knowledge that can undergird someone in affordable housing, and these are types of questions I would ask in a survey. I will also need to familiarize myself with the Likert scale.

**Source Three:** Lechuga-Peña, S., Becerra, D., Mitchell, F. M., Lopez, K., & Sangalang, C. C. (2019). Subsidized housing and low-income Mother’s school-based parent involvement: Findings from the fragile families and child wellbeing study wave five.*Child & Youth Care Forum, 48*(3), 323-338. https://doi.org/10.1007/s10566-018-9481-y

 **Comment 10:**

 **Quote/Variant:**

“Although research on parent involvement among different racial and ethnic groups has grown in the past two decades, there continues to be limited literature on Latino parent involvement” (p. 325).

 **Essential Element:**

 Test a claim (Hypothesis writing)

 **Additive/Variant Analysis:**

The statistics on parental involvement in the life of Latino children would be an addition to my knowledge of the socialization construct in Latino families living in subsidized housing.

 **Contextualization:**

Currently I manage a building that is majority Latino or Hispanic. Part of my research interest are to compare the various cultures I have had the privilege of working with while managing apartments buildings in the Washington, DC area. A child’s educational success is a critical component in breaking the curse of generational poverty and breaking the cycle of generational living in subsidized housing. One of the hypotheses I may test is the ways in which Latino families living in affordable housing are involved in their child’s schoolwork compared to African Americans living in affordable housing.

One of the benefits I had growing up is that my father was retired and substituted at my school. My mother helped me with my schoolwork on a regular basis and both my mother and father attended all parent-teacher meetings. This dynamic provided support as well as discipline.

 **Comment 11:**

 **Quote/Paraphrase:**

“Taking into consideration the challenges of parent involvement faced by African American and Latino parents, socioeconomic status adds a complex layer to their school-based involvement” (p. 325).

 **Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The effects of one’s socioeconomic status on their parental involvement in their child’s schooling as an addition to my knowledge of socialization.

**Contextualization:**

Socioeconomic status can be a brand or label, an advantage or barrier to success. Black and Latino people may already have barriers to quality marriage partners, social capital, and high-level jobs and to have challenges serving in one of the most important roles of parenthood, a child’s educational advocate, this status poses an additional burden. As a property manager, I’ve seen firsthand the obstacles low-income parents have to face. In one of the buildings, I had to manage, each lease holder or family member over eighteen was issued an electronic key fob for access into the building. One single mom requested that her son be given a fob because he arrived home from school well before she arrived home from work.

The corporate required her to fill out a special accommodations application which would indicate the reason for her son needing a key. If my memory serves me correctly, she was denied the request. This scenario let me know that the child was left on his own for at least a couple of hours to finish homework and by the time the mother arrived home, she had to cook dinner and may have not had enough quality time with her son to help him with his homework and just talk about life. This is a totally different experience than what I had.

For years my father volunteered at my elementary school as a substitute teacher. During the years he did not volunteer at my school, either he or another parent picked me and a friend up. Once I arrived home, my father was there to make me a snack. Once mom arrived home from work (my father was retired), she’d go over any homework I had left. My parents were heavily involved in my schooling. They volunteered, went to PTA meetings and were always around to discuss any challenges I was having (like math). This parental involvement is crucial to preparing for a future in higher education and

**Source Four:** Kucheva, Y. (2018). Subsidized housing and the transition to adulthood.*Demography, 55*(2), 617-642. <https://doi.org/10.1007/s13524-018-0656-9>

**Comment 12:**

**Quote/Paraphrase:**

I also find that the subsidized housing program may accelerate the formation of households in early adulthood but only when that household is formed in a subsidized apartment. These findings suggest that the subsidized housing program could support young adults not by extending how long they live with their parents but rather by providing affordable housing where one can form their first independent household (p. 638).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

This statistical finding of young adults forming their own families in subsidized housing is an addition to my knowledge of subsidized housing demographics.

**Contextualization:**

If parents are raising their children in subsidized housing only for the child to begin a family of their own at a young age inside the structures of subsidized housing instead of going to college or getting a high enough paying job to rent and apartment on their own without subsidy, this is a disappointing cycle. Not to mention that the first generation may never move out and become financially independent. It too is a disturbing fact. One would hope that when a husband and wife or mother and father cohabitating, rears children in subsidized housing, the child would not have children of their own too young but be able to work towards a successful future hinderance free.

One would also hope that the same parents would not have to rear the children to full adulthood inside subsidized housing but that before the child matures into puberty the family could move out into a house that they own with more disposable income. A couple of years after graduating college, I was able to move out of my parent’s house and secure a junior one-bedroom apartment all on my own. This is a time when rent was reasonable, and I also had a decent job with a promising career in the field I had graduated in.

Just yesterday, I was at a seminar for work and the presenter (black married female) mentioned how her oldest daughter had purchased a condominium, moved out of the hose and left a slew of books in her old bedroom. Security begets security. If a child chooses not to go to further their education, they should be able to stay in their parents home for a limited amount of time to save up towards become independent which includes buying or renting.

**Source Five:** Rumsey, D. J., (2019). Statistics essentials for dummies. John Wiley and Sons, Inc.

**Comment 13:**

**Quote/Paraphrase:**

“An observational study is one in which data are collected on individuals in a way that doesn’t affect them (p. 5).

**Essential Element:**

Types of Data

**Additive/Variant Analysis**:

The nuance of an observational study is an addition to my knowledge of statistics in general.

**Contextualization:**

To be honest, I have already participated in an observational study of families living in affordable and subsidized housing. Through my job as a property manager, I have worked close enough with families and observed behaviors, employment patterns, family dynamics and collected financial data from each individual. Of course, I would not be able to use any of the financial and employment data collected over the years and do have it in my persona possession. One’s habitat is intimate, private and sensitive. When it came to complete their annual housing recertifications, they would actually give me passwords to their online bank statements and retirement accounts simply because they either did not have a computer or they had trouble figuring out how to access the information required for recertification.

In most instances, I would reject access to their online accounts. Many times, families wanted to invite me into their homes to have tea or invite me to sit down after I completed an inspection. There may have been two residents in my whole career whose homes I was comfortable enough to visit in and sit down. It was best to keep it professional with a certain emotional distance between us. The one reason I believe I would be able to go back and begin an observational, longitudinal study is because most of the residents trusted me to the fullest.

**Comment 14:**

**Quote/Paraphrase:**

“A downside of surveys is that they can only report relationships between variables that are found, they cannot claim cause and effect” (p. 6).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The downside of surveys is an addition to my knowledge.

**Contextualization:**

One of the observations in a study on families living in low-income or affordable housing is the why or how. It’s easy to have the tenant fill out a survey and answer yes or no to questions or place themselves in certain categories. What I would really want to know is background and reason. As mentioned, one person’s reason for entering subsidized housing may be different than another’s. One person’s reason for not having children may be different than another’s. One person’s reason for not investing their money may be different than another’s or why a person chose a particular investment versus another are interesting facts for my research.

**Comment 15:**

**Quote/Paraphrase:**

“When it comes to measures of center, the average doesn’t always tell the whole story and may be a bit misleading because of outliers” (p. 16).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The consideration of outliers is an addition to my knowledge of statistical analysis.

**Contextualization:**

When observing the many people living in low-income housing, there are many variables to consider. People in this subset are not monoliths. It may be true that the average parent raising their children are working in low waged jobs but I expect to find outliers such as parents who have come from other countries with college degrees, parents who once had high paying jobs but due to sickness they could no longer stay in that field or parents who choose a certain job because of its schedule which would allow them to be at home with the child. One may also assume reasons for single mothers being left on their own but there may be outliers that contributed to this circumstance.

**Comment 16:**

**Quote/Paraphrase:**

“If you represent the owners, you want to show how much everyone is making and how much you are spending, so you want to take into account those superstar players and report the average. But if you’re on the side of the players, you want to report the median, because that’s more representative of what the players in the middle are making” (p. 17).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The contextual use and benefits of the mean and average are an addition to my knowledge of statistics.

**Contextualization:**

It will be interesting to assess which measure of central tendency I find most beneficial in my final research project for families living in low-income housing. One of the variables I may want to study is the spending habits of the family or individuals. What is disposable income spent on, how much savings are put away each month and how savings goes towards saving for a home or put into retirement accounts. These are the factors that progress a family toward financial independence. I may decide to categorize the spending and use a mode tendency or in terms of the amount of dollars spent, use the mean which is the average.

**Comment 17:**

**Quote/Paraphrase:**

“A percentile is not a percent; a percentile is a number that is a certain percentage of the way through the data set, when the data set is ordered (p. 20).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The definition of percentile is an addition to my knowledge in terms of statistics and demographics.

**Contextualization:**

When I read articles that contain statistics and a group or individual has been placed into a specific percentile, I never really thought to research what it meant. The word percentile has always been associated with percentage, which now I know is incorrect. Usually, this statistical analysis is put in the context of class ranking. It will be determined later on in my OGS program whether this type of analysis is beneficial for my research. It may be advantageous for me to figure out what percentile kids in low-income housing are placed in school.

**Comment 18:**

**Quote/Paraphrase:**

“The purpose of the five-number summary is to give descriptive statistics for center, variability, and relative standing all in one shot (p. 21).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The five-number summary is an addition to my knowledge on how to gather data.

**Contextualization:**

The five-number summary is a convenient way to gather descriptive data for a sub-set. In researching single fathers or single mothers in affordable housing, I may want to know the average number of black fathers who have higher education degrees compared to Ethiopian fathers. Black fathers may end up in the third quartile or it may be the opposite. This method of gathering data will have to be further investigated depending on my hypothesis and research goals.

**Comment 19:**

**Quote/Paraphrase:**

“A time chart can present information in a misleading way, such as charting the number of crimes overtime, rather than the crime rate (crimes per capita) (p. 26).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The nuances of time charts and how to use them are an addition to my knowledge of statistical data gathering.

**Contextualization:**

The author has pointed out a poignant analysis that I may need to use in my research. Crime in and surrounding public or subsidized housing is a key factor in housing stability and housing quality. Currently, the District of Columbia city council is proposing to revamp archaic crime laws that do not match the current statistical crime trends in the city. Because we are not a state, Congress has to approve the measure and they have denied it. Many advocates of the new DC crime bills are stating that congress is ignoring key statistics (because they have not really read the full bill) and accusing the council of being lax on crime.

Analyzing the crime rate over time (car jackings for instance) versus looking at current crime rates, which the council says has decreased may be one of the factors Congress has denied the changes. At this point, I am unsure what how I am going to analyze crime in the city and its social effects on subsidized housing,

**Comment 20:**

**Quote/Paraphrase:**

“Binomial means “two names” and is associated with situations involving two outcomes” success or failure” (p. 35).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The statistical term binomial is unfamiliar to me and an addition to my knowledge.

**Contextualization:**

Within my field of research, a binomial conclusion may or may not be appropriate. One of the questions in a qualitative research survey could be whether nor not the males and females (separate variables) are happy or not. This seems like a binomial outcome that I could aggregate into useful data. Another question may be whether they feel their future is moving toward success or failure. These are some of the things I want to know about people living in low-income housing in order to understand the culture and ethos of the subgroup. More understanding of this statistical distribution will be necessary.

**Comment 21:**

**Quote/Paraphrase:**

“The confidence level of a confidence interval corresponds to the percentage of the time your result would be correct if you took numerous random samples” (p. 72).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The importance of confidence levels in research are an addition to my knowledge of statistical analysis.

**Contextualization:**

When listening to the news, I sometimes hear the pundits mention the confidence level of a particular breaking news scenario. With the war in Ukraine, we have heard quite of national security information that has had low or high confidence levels. For my research, the author leads me to believe that I will have to use many random samples in order to ensure a high confidence level. To me, results published with a high confidence level, are more reliable, trusted and respected.

**Comment 22:**

**Quote/Paraphrase:**

In addition to testing hypotheses about categorical variables (having or not having varicose veins is a categorical variable), you can also test hypotheses about numerical variables, such as the average commuting time for people working in Los Angeles or their average household income (p. 88).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The various means of categorizing variables in statistics are an addition to my knowledge of statistics.

**Contextualization:**

It may be advantageous for me to not only categorize how many couples in subsidized housing are married or cohabitating, their religion of choice, or how many were reared in subsidized housing themselves, but I may also want to know how many years they have been living in their current housing or average amount of time they stay on a job. All of this information are factors which determine preparation for moving out of subsidized housing and provide key data on the culture of the subset I am wanting to research.

One of the variables I observed through conducting annual recertifications is the number of times a person had quit a job or had been fired. This type of employment instability affects one’s ability to accumulate savings in their 401k provided by an employer. The type of benefits available at a job and whether or not one had a matched retirement account is key information as well.

**Source** **Six:** Hsu, H.P. PhD., (2020). *Probability, random variables, and random processes*. McGraw Hill Education.

 **Comment 23:**

 **Quote/Paraphrase:**

“The study of probability stems from the analysis of certain games of chance, and it has found applications in most branches of science and engineering” (p. 1)

**Essential Element:**

 Language and role of statistics in social research

**Additive/Variant Analysis:**

The use of probability analysis for various interdisciplinary studies, excluding the social sciences, is variant to my knowledge.

**Contextualization:**

The author has mentioned two fields or one if you combine them into STEM but has excluded the use of statistical probability analysis in other fields, such as the social sciences or even theology. It is quite possible (a high probability) that I will want to use this type of analysis in my research dealing with the culture of persons living in low-income housing. In wanting to know for example, the chances of a family moving out of subsidized housing this analysis will be appropriate.

 **Comment 24:**

 **Quote/Paraphrase:**

“The main purpose of using a random variable is so that we can define certain probability functions that make it both convenient and easy to compute the probabilities of various events” (p. 50).

 **Essential Element:**

 Type of Data

 **Additive/Variant Analysis:**

The appropriateness of random variables is an addition to my knowledge in statistical analysis.

 **Contextualization:**

In the last six months, social capital has become an intriguing concept. This type of social quality emerges when a group that is familiar with one another, friends or close acquaintances, shares information and supports each other in various functions. A short term experiment studying random variables may give me data on whether or not social capital has been achieved for persons living in mixed income developments.

Perhaps conducting several social activities across a specified number of days in order to observe how many people make significant contacts with someone in the building they had not previous rapport with can give me an idea on whether social capital can be achieved amongst the random sample chosen. The random probability a social contact would be the goal.

**Comment 25:**

**Quote/Paraphrase**

“In many applications it is important to study two or more r.v.’s defined on the same sample space” (p. 101).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The nuances to using random variables are an addition to my knowledge.

**Contextualization:**

Random variables seem to be unstable when it come to testing a hypothesis. If two are more are used in the same sample space, then a result with high confidence is more probable. It is unclear what exactly a sample space is. A sample space in my area of research may be a group of fifty residents in an apartment building with random variables such as the number of residents who would move out in any given year or the number of times a resident may quit a job in any given year. The second random variable could be offset by figuring out how many residents would stay on their current job for the next twelve months. It can only be assumed, that this is what the author is intimating.

**Comment 26:**

 **Quote/Paraphrase:**

“Finally, the laws of large numbers and the central limit theorem, which is one of the most remarkable results in probability theory, are discussed (p. 149).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

The central limit theorem or CLT is an addition to my knowledge of statistical central tendencies.

**Contextualization:**

One of the areas of my research, I will have to figure out is how large my sample will be which will determine its chances of being normally distributed. One subsidized apartment building may have two hundred people living in it over the age of eighteen and one apartment building may have three hundred. These two buildings may be in two different areas of the city, but the demographics may be similar, such as age, years one has lived in the building and the number of Christians in each. In order to get a normal distribution of a combined sample of each building, the CLT may be a good method to use.

**Comment 27:**

 **Quote/Paraphrase:**

“Random processes provides useful models for the studies of such diverse fields as statistical physics, communications and control, time series analysis, populations growth, and management sciences” (p. 207).

 **Essential Element:**

 Language and role of statistics in social research

 **Additive/Variant Analysis:**

Random processes and the fields they are most useful in in terms of statistical analysis, is an addition to my knowledge.

 **Contextualization:**

Because the author mentioned growth, random processes may or may not be useful in my area of research. It may behoove me to study the population growth inside of a particular low-income housing building. It would be interesting to know how many babies are born to mothers inside of this subset. Further population growth studies may be to figure out how many girls versus how many boys and whether or not people tend to have large families inside of subsidized housing versus the size of a family who lives outside side of such an environment and if this has an impact on the number of years a family stays in subsidized housing.

**Comment 28:**

**Quote/Paraphrase:**

“First, we introduce the definitions of stochastic continuity, stochastic derivatives, and stochastic integrals of random processes. (p. 271).

**Essential Element:**

Types of Data

**Additive/Variant Analysis:**

Stochastic probabilities are an addition to my knowledge.

**Contextualization:**

To my knowledge, stochastic processes are random, unpredictable and not precise. This process may not be beneficial for my type of research. One of the reasons I would prefer to conduct qualitative research instead of quantitative is because I do not want to rely on random variables for inference. My desire is give people a voice and gather information straight from the horses mouth and make inferences from there. Stochastic processes seem more appropriate for disciplines such as education and science.

**Comment 29:**

 **Quote/paraphrase:**

“There are many situations in which we have to make decisions based on observations or data that are random variables. The theory behind the solutions for these situations is known as *decision theory* or *hypothesis testing* (p. 331).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

Decision theory is an addition to my knowledge of statistical methodology.

**Contextualization:**

It is unclear whether decision theory will be beneficial in my research. In observing families in low-income housing, many variables will have to be weighed. If a controlled environment exists and I have time to observe the subset in multiple scenarios, such as family dynamics at play, children doing school work with or without parental involvement or even religious tendencies and traditions. Perhaps the decision theory may help my research. This I am unclear of at this juncture. It may be observing parents deciding on career paths while raising kids or which school to send their kids to. Inferences can be made from observing several families in this decision-making process and then deciding on probabilities of success.

**Comment 30:**

 **Quote/Paraphrase:**

“Applications of queueing theory are found in fields as seemingly diverse as traffic control, hospital management, and time-shared computer system design” (p. 349).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

Although familiar with the concept of queueing, queueing theory used as a statistical analysis and which fields it would be useful in is an addition to my knowledge of statistics.

**Contextualization:**

The numbers it takes for a family to wait for a voucher or available apartment in subsidized housing is an interest to me. It may be beneficial to compare the wait for the various types of housing such as mixed income properties, subsidized housing, low-income tax credit apartments. At this point, I am not sure how else this theory will benefit my research.

**Source Seven:** Ellen, I. G., Dragan, K. L., & Glied, S. (2020). Renovating subsidized housing: The impact on tenants' health.*Health Affairs, 39*(2), 224-232,232A-232E. <https://doi.org/10.1377/hlthaff.2019.00767>

 **Comment 31:**

 **Quote/Paraphrase:**

This study had some limitations. First, we could not account for many potential differences between the housing developments, such as the social ties among residents and special programs that could influence the health status of either group (for example, community building activities or fitness classes) (p. 228).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The benefits of socialization on physical and mental health within low-income housing are an addition to my knowledge of the social sciences.

**Contextualization:**

Surely, there are health benefits to people gathering together, socializing with one another and forming bonds within their environment. Not only can depression, anxiety, fear and loneliness be reduced by engaging in social activities but going to activities within one’s apartment complex on a regular basis does provide a minimal amount of exercise. Low-income developments that have walking groups, and exercise classes can provide fitness opportunities that some may otherwise not be able to participate in because of finances. Participating in civic activities such as local governance meetings, tenant association meetings and focus groups provides intellectual stimulation, opportunities to meet new people and the pride of a sense of accomplishment that one contributed to bettering one’s community.

Within senior buildings, book clubs, board games and ice breakers stimulate the brain. When a blind tenant in one of my buildings was lonely, depressed and feeling isolated, my staff and I made sure to get him a day home health aide who would not only take care of him inside of his apartment but also escort him down to some of the social activities where he could interact with his neighbors.

**Source Eight:** Sieg, H., & Yoon, C. (2020). Waiting for affordable housing in New York city.*Quantitative Economics, 11*(1), 277-313. https://doi.org/10.3982/QE1160

**Comment 32:**

 **Quote/Paraphrase:**

“Moreover, the housing authority does not evict households after they have lost their eligibility for housing aid. Consequently, these policies imply that public housing is not necessarily allocated to the most deserving low-income households” (p. 279).

**Essential Element:**

Language and role of statistics in social research

**Additive/Variant Analysis:**

The statistical analysis of how many residents stay in assisted housing once they are past the eligibility threshold is an addition to my knowledge.

**Contextualization:**

Affordable housing policies are crucial for our communities and provide a necessary benefit. It seems, however, that some policies need to be revamped. Although I would not be in favor of evicting a family immediately after they have lost their eligibility status, I would be in favor of a policy that gives them a fair timeline to gradually prepare themselves to move out and provides the family assistant to secure housing that they can afford on their own. The system seems drained, and many are taking advantage of it. There are so many adults who seemingly are able to complete trade programs, take workforce development courses or get associate degrees in order to get jobs that would pay stable wages.

Unfortunately, many adults that seem capable have mental disorders that we can detect just from an initial introduction. In one of the buildings I managed, a mother and son both received social security payments. The son was receiving disability. When you look at him, you would not think that he would be disabled in any way. In my opinion, some households and the environment they have been reared in has contributed to a mental illness and dependence on the system whereas they are not used to managing their own affairs and making decisions on their own. One analysis I make want to conduct is to figure out how many adults in subsidized housing are past the eligibility status and discuss the circumstances and reasons they are staying in subsidized housing.

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