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Jackson
Design of Social Research
Measurement Assignment
10/30/17

Some of the most interesting and sought-after measures in social science cannot be directly observed. Instead, they must take steps to break down such measures into what can be observed. This process is called conceptualization. For this task, we will look at social standing in American society. We conceptualize social standing as the rank or status that an individual holds in relation to other persons in a society, typically allowing the individual greater privileges based on greater status.

In order to operationalize social standing, we broke it down into several indicators captured as variables in the General Social Survey (GSS). Those observable measures are explained below. We determined what variables to use by examination of previous work measuring social status and standing. These measures include employment status, occupational prestige, educational attainment, sex, race, and class identity. While we would also like to include a neighborhood measure like Area Median Income, the General Social Survey does not provide us with such a measure.

| **General Social Survey Variables** | |
|---|---|
| **Variable** | **Description** |
| Rs census occupation code (2010) | Respondent's Occupation, Prestige, and Industry |
| Rs highest degree | Highest level of education attained by respondent |
| Sex | |
| Race | |
| R income | Respondent’s income |
| Labor Force Status | The extent to which one is employed |
| Subjective Class Identification | Respondent identifies class to which he/she belongs |
| Marital status | Is respondent married? |

In order to decide which each variable has to contribute, we consulted past literature first, considering the difficulty of constructing a whole new index, especially the complex mathematical analytical methods like factor analysis. The widely used four factor index of social status by Hollingshead (1975) employs education, occupation, sex, and marital status as indicators. For social standing is a multidimensional concept, each indicator could contribute to a different aspect of social standing (they are reflective in this model). For example, occupational prestige can be measured on a scale of 9, with occupations like a higher executive ranking at the highest end,

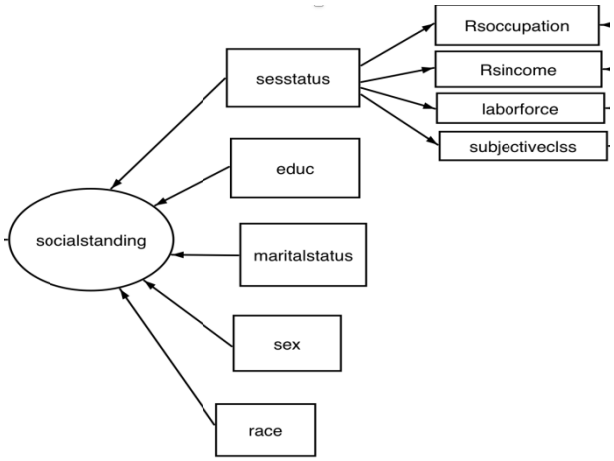
and farm laborers/ menial service workers at the lowest end. This is easily achievable, for we can correspond the three-digit codes by the census (Rs census occupation code) to the scores in the 9-level scale. Similarly, R income can also be measured on a 9-level scale, with people who earn the most getting the highest score. We will adopt the widely-accepted measure of the levels of education from Hollingshead (1957).

| Level of School Completed | Score |
|---|---|
| Less than seventh grade | 1 |
| Junior high school (9th grade) | 2 |
| Partial high school (10th or 11th grade) | 3 |
| High school graduate (whether private preparatory, parochial, trade, or public school) | 4 |
| Partial college (at least one year) or specialized training | 5 |
| Standard college or university graduation | 6 |
| Graduate professional training (graduate degree) | 7 |

We might be able to reduce the number of indicators if the subject being measured overlaps between two or more indicators. For example, as a respondent's income and occupation both reflect economic attainment social standing, we might consider dropping the income variable, as its measurement is also observed. As occupation tells us more about an individual's status (prestige, reward), we could drop the R income variable. However, at this time, we do not see a compelling reason to drop variables from this list, as we can see tangible and unique measures from all indicators. Income remains a more precise measure of what individuals are earning than simply their profession.

We would combine the selected indicators give them weights based on our conceptualization of social standing. We hope to assign a value to each indicator to create a scale upon which any individual can be assessed, much like with Hollingsworth's four factor index. We hope that these weighted elements can be added up to determine where someone falls on the scale, with the highest being the greatest position on the scale. Each of these factors would be assigned weight based on importance. We believe that occupation and education are the most important contributing factors of social standing, and they would consequently receive a higher weight.

The model would be as follows:



There are a few different techniques to verify the validity and reliability of our social standing index. Reliable measures need to be stable and consistent over time. One method of verifying this is test-retest, in which we measure multiple individuals with the same characteristic(s) to see if the scale categorizes them correctly across multiple cases. We could measure equivalence within a unidimensional facet of the multi-scale index. For example, Rs occupation, labor force status, R income, and subjective class identification could all reflect the respondent's socioeconomic status, thus the split-half method could perfectly work here. However, it does not necessarily require the same for all indicators in the index, because we acknowledge indicators of different facets (e.g. education and socioeconomic status could correlate not so strongly). Similarly, we could measure the index for reliability by examining the indicators' scales for homogeneity using the internal consistency technique. This technique will let us know if the outputs on the scales are measuring the same thing. Finally, we could use intercoder reliability to assess whether different interviewers or coders using the same instrument get equivalent results.

Valid measures need to demonstrate that the operational definition and what is actually being measured fit together. We can test this with a number of techniques. One is subjective validation, which assesses if a measure can claim to measure the concept it intends to measure. It can be done by naming what the scale actually measures and by comparing it with the operational definition of what is being measured. We can also use a criterion-related validity technique, which measures whether an instrument (ie: the scales used to compose the index) is a useful measuring tool. Furthermore, we can assess for construct validity to assess how the meaning of responses are interpreted.

One method to produce a better index is to conduct an exploratory study prior to composing the index. This study could better inform what would take the most valid, reliable, and accurate measurements. We can also reflect on the questions asked and scales coded to see if there is any room for misinterpretation. Another way to augment the indicators provided would be to add levels to the individual scales used in this exercise. When we add more levels to individual scales, we can lower the error generated by using the scales themselves. This may be difficult for a coder in this project, but may yield more accurate results if we have the time and money to implement more leveled scales. Finally, we believe it would be helpful to have a locational indicator (area median income, for example), as geography has such a great influence on the social standing of individuals.

References

Hollingshead, A. B. (1975). Four factor index of social status.
Hollingshead, A. B. (1957). Two factor index of social position.

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Design of Social Research
Week 9
Group 2: Hector Biaggi, Katherine Smith, Qian Zhu, Ruichan Ma



Our index is comprised of four categories: demographics, education, economic status, and social status, all of which will help us define an individual's social standing in the United States. The variables we chosen within each category are as follows:

*Demographics* - sex (‘sex’), age (‘age’), citizen (‘citizen’), sexual orientation (‘sexornt’), religion (‘relig’), race (‘race’)

*Education* - highest degree of respondent (‘degree’), spouse (‘spdeg’), father (‘padeg’), and mother (‘madeg’)

*Economic* - class (‘class’), income (‘income’), wealth (‘wealth’), home ownership (‘dwelown’)

*Social status* - married (‘marital’), rank (‘rank’), prestige (’prestg10’), neighborhood safety (‘neisafe’)

Each variable we have chosen contributes to this new index because they measure some aspect of social standing in a way that creates relative comparisons between individuals. This allows us to begin forming a picture of the general social standing of individuals within the US. Every variable in the demographics category measures a descriptive characteristic that is generally attributed to us naturally. While it is unfortunate, these variables do have a say in a person’s relative social standing. Education (both our own and the people we surround ourselves with) also have an impact on our social standing, as it is very closely tied to how well we will perform in the future. The economic category may stand out the most in our purely capitalistic American society, and as such takes into account income, wealth, class, and home ownership. The last category, social status, includes variables that measure socially comparative characteristics of individuals.

This is not an exhaustive list. The variables we have chosen are the characteristics that we feel have the greatest effect on social standing. We could easily add more variables in, and given the number of options the GSS provides, it would behoove us to condense these all into one simple indicator. For example, there is no question that asks how extroverted the respondent is, therefore one would have to create a sub-index to determine the level of extroversion. For our purposes, we would not reduce the number of variables used because we feel they are all important enough to stand on their own in our index.

Our categories can be weighted to reflect the significance of particular characteristics in our assessment of social standing. We believe that the variables in the economic category are most important for social standing in our American society and should be weighted more than the other categories because economic standing is related to every other measure of social standing. The education and social status categories should be treated normally and equally because they are strong indicators of economic standing. Finally, the demographics category influences all the other categories - perhaps not to the same extent that economics does - but enough so that it should be included in our index.

We can assume from the GSS data that the reliability of our questions is fair enough. The GSS is a respected data institution that its merits over the years. However, the validity of questions is always up in the air. For example, our variable for race has the interviewer assume the race of the respondent if it is obvious. In this case, what may be obvious to one interviewer may not be obvious to another (or, for that matter, correct.) In addition to this, we also combine many different variables within this index that are answered subjectively (e.g. respondents will answer their own class and rank), whereas others are measured more objectively (e.g. the response for prestige is determined by census occupation classification, so all respondents are treated fairly).



Accuracy is the main concern we have in our index, as we are the ones doing the interpretations. In assuming neighborhood safety in our assessment, we interpret it to be a proxy for the quali-

ty of a neighborhood. This may or may not be true, however we think it's a fair instrumental variable for our purposes. Obviously, we would need many more variables to properly estimate social standing, but we believe that these core variables are necessary for any social standing index.

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SOC.GA.1301
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Analytical Task: Measurement

Our goal is to create a provisional generalized indicator using the General Social Survey from recent years, and to offer a plan to revise and augment GSS indicators in future years to produce an improved generalized social standing index. To this end, we want to do the following:

### 1. *Identify what existing indicators in the GSS are relevant to our goal.*

Below are examples of potential variables from the GSS relevant to the goal of producing an improved generalized social standing index.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **R's Marital Status** | Married | Never Married | Divorced | Separated | Widowed | | |
| **How Often R Attends Religious Services** | More than once a week | Every or Nearly Every Week | 1-3x a month | Several Times a Year | Once a Year | Never | |
| **R's Class** | Lower | Working | Middle | Upper | | | |
| **R's Health** | Excellent | Good | Fair | Poor | | | |
| **How Often Work Exhausts R** | Always | Often | Sometimes | Hardly Ever | Never | | |
| **R's Labor Force Status** | Full Time | Part Time | Temp Not Working | Unemployed/Laid Off | Retired | School | Keeping House/Other |
| **R is Proud of R's Own Work** | S Agree | Agree | N A/D | Disagree | S Disagree | | |
| **R is Proud of R's Work at Firm** | S Agree | Agree | N A/D | Disagree | S Disagree | | |
| **Your Interest in Politics** | Very Interested | Fairly Interested | Somewhat Interested | Not Very Interested | Not at all Interested | | |
| **Political Views** | Extremely Liberal | Liberal | Slightly Liberal | Moderate | Slightly Conservative | Conservative | Extremely Conservative |
| **Highest Year of School Completed** | 0-02 | 03-05 | 06-08 | 09-11 | 12-14 | 15-17 | 18-20+ |

2. *Explain and justify how we would produce a generalized social standing index from these indicators. Include an answer to each of the following:*
    - *How might you decide what each has to contribute?*
        - The indicators selected above from the GSS fall into these domains: Marriage/Relationship Status, Religion, Class, Health, Work, Political Views, and Educational Attainment.
        - To construct an index that attempts to identify a causal relationship between these variables and social standing, the researcher must address criteria including **association between variables**, **proper time order**, and **nonspuriousness of the association**.
            - **Association** between two variables by itself is insufficient evidence of a causal relationship. This point is commonly made by the expression, "Correlation does not prove causation."
            - **Time order** explains how variation in the presumed cause (independent variable) must occur before the variation in the presumed effect (dependent variable). This proves especially significant if the researcher seeks to produce an index for general social standing.
            - **Nonspuriousness** is when a relationship between two variables is not due to variation in a third variable. By accounting for more variables, extraneous explanations can be better accounted for.
        - Perhaps, having a triangulation of multiple quasi-experimental research designs might empirically address these criteria most effectively.
    - *Would you reduce the number of indicators you use, and if so, how?*
        - The goal, by reducing the number of indicators, might be to shorten the time it takes for the respondent to complete the survey. However, this must be exercised with great caution as certain questions can not be combined - no matter how similar they seem - and a shorter survey might worsen certain effects, such as **assimilation effects**, **ordering effects**, and **social desirability bias**. Ultimately, rather than reduce the quantity, the focus must be to ameliorate the quality of the content and measurement of each indicator. Depending on the number of final indicators in question, the researcher should aim to make the answer to each survey question as **chronically accessible** as possible to the respondent.
    - *How would you try to verify to worth of your combined index? How would you assess its validity, reliability, and accuracy?*

      The validity, reliability, and accuracy of the index could be assessed through an empirical series of **pretesting** and **posttesting** in a **multiple group before-after design**. In this design, the researcher makes several before-after comparisons involving the same independent and dependent variables but with different groups. Such things including **alternate-forms reliability**, **content validity**, **endogenous changes**, **generalizability**, **internal (causal) validity**, and **measurement validity** can be more effectively controlled for and more efficiently cross-analyzed. Randomization, for example, would eliminate selection bias and bias due to endogenous change.

- Additionally, in a **nonequivalent control group design**, another type of quasi-experimental design, there are experimental and comparison groups that are designated--but not created through random assignment--before the pretest occurs. The groups can be created either through individual matching of subjects or matching of group characteristics. This will allow certain comparisons to be made between certain indexes. In either case, this design can allow the researcher to establish the existence of an association and time order of effects; though, unfortunately, it can not ensure that some unidentified extraneous variable did not cause what we think of as the effect of the independent variable.

3. ***Offer suggestions of how to revise or augment the existing indicators to produce a better generalized index in the future.***

The quality of the indicators determines the quality of the generalized index. It is critical that we as researchers fastidiously assemble and employ only questions that are not amorphous but **clear and concise**, and that provide an exhaustive list of **mutually-exclusive responses** for each question from which respondents can select. In terms of their overall structure, the indicators must follow a **logical order** or may otherwise produce context or order effects in which the ordering of each indicator influences how respondents answer the other indicators (e.g., A respondent could answer a question on general work satisfaction, which could affect how the respondent answers the next question on general life satisfaction).

To ensure our indicators accurately measure social standing, and, to avoid the possibility of gathering misleading results, we should survey an initial group of respondents before administering the survey to our entire sample. **Pre-testing** the survey before it is publicly distributed not only tests the reliability of the survey's measurements for consistency and determines what order of the questions is **most logically sound**, but also ensures that the questions and answers themselves are **focused**, **germane** to the subject of the survey, and **comprehensible** to as many respondents as possible.

Through the pre-testing process, we will evaluate the quality of the questionnaire and will be able to address any aesthetic, structural, and terminological flaws before distributing it. In doing so, we will make certain that the questionnaire (1) **does not include biased, loaded words or confusing phrasing**—such as "don't you agree?," dog-whistling questions, or litotes—that persuade respondents to answer in a socially-desirable way; but rather, it (2) **employs neutral language in wording and phrasing** (e.g., "Do you not work all the time?" vs. "How often do you typically work every week?"). It (3) **provides an exhaustive range of options for each question** from which the respondents may choose without having to negotiate or compromise their initial response to the question. It (4) **allows the respondents to answer a question of which they are uncertain with accommodating options** (e.g., "Uncertain;" "neutral;" "never"); and, it (5) **filters out questions that some respondents would be otherwise unable to answer** (e.g., "Have you failed to complete your taxes?"...1) Yes; 2) No [skip next follow-up question]). Furthermore, it (6) **uses simple questions with non-enigmatic terms**, and (7) **has only one question being asked at a time**—with complex subject matter broken down into additional questions if necessary. Lastly, it (8) **includes control variables that reduces the possibility of spurious**

**relationships**; and, it (9) **is direct, coherent, and valid** in that each question asks what the researcher intends the question to ask.

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Design of Social Research Analytical Task 9

**Conceptualization of "social standing:"**

Social standing is defined as, "a person's importance in relation to other people within a society" (Collins, 2017). Importance will be further defined as "the state or fact of being of great significance or value" (Collins, 2017). Thus, our theoretical framework is based on the reasoning that person of higher social standing will have more significance or value relative to other people in society. Consequently, for the purpose of creating our index, an individual's social standing will be weighted through indicators capable of *displaying* either the tangible rewards the individual already receives or owns and indicators capable of *predicting* the tangible rewards the individual is expected to receive or own.

**Indicators in the GSS relevant to our goal:**

1) **Wealth**

Wealth is operationalized as the value of your house plus the value of your vehicle's, stocks and mutual funds, cash, checking accounts, retirement accounts including 401(k) and pension assets, and any other assets minus what you owe for your mortgage and your debts.

We chose the individual's wealth as an indicator of social standing because based on our conceptualization of social standing, wealth is capable of displaying the amount of tangible rewards an individual owns. The more wealth an individual has, the higher his or her social standing. We also chose wealth of the individual's family as an indicator of an individual's social standing because we assume that the wealth of the family will predict the amount of tangible rewards the individual owns in the form of inheritance, if he or she has one, or in the form of valuable things passed down to the individual from the parents through wills.

(GSS CODE)
TOTAL WEALTH OF RESPONDENT
NEED WEALTHY FAMILY TO GET AHEAD

2) **Income**

Income is operationalized as the sum of all the wages, salaries, profits, interests payments, rents, and other forms of earnings received in a given period of time for households and individuals.

We chose the individual's income as an indicator of social standing because it is capable of displaying the amount of tangible rewards an individual receives. The more income an individual receives, the higher his or her social standing (income itself is the tangible reward). Similarly, we

also chose the income of the individual's family as an indicator of social standing as well because we assume that the income of the individual's family will influence the individual's own disposable income (parents may gift the individual money). However, since parents' income is not as relevant as the individual's income in determining tangible rewards for the individual, it will be weighted less.

(GSS CODE)
WERE RESPONDENTS PARENTS BORN IN THIS COUNTRY
NUMBER OF PERSONS IN HOUSEHOLD
HOW MANY IN FAMILY EARNED MONEY
TOTAL FAMILY INCOME
RESPONDENTS INCOME

**3) Education**

Education is operationalized as the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits.

We chose education of individual, as an indicator of social standing because it is capable, to an extent, of predicting the tangible rewards an individual is expected to receive or own in the future, such as income or wealth. The higher the degree obtained, the higher the individual's expected amount of tangible rewards. Consequently, the more rewards an individual receives (in this case more rewards through more education), the higher the individual's social standing.

Similarly, we also chose the education of both the individual's mother and father as indicators because we assume this information is capable of also predicting the individual's expected tangible rewards. We assume the the education of the parents predict the education of the individual; thus, the level of education the individual ultimately obtains as a consequence of his or her parents' level of education can predict the prestige of his or her occupation. The prestige of occupation then predicts the tangible reward of income for the individual, and the more income the individual has, the higher his or her social standing.

(GSS CODE)
HIGHEST YEAR OF SCHOOL COMPLETED, RESPONDENT
HIGHEST YEAR SCHOOL COMPLETED, FATHER
HIGHEST YEAR SCHOOL COMPLETED, MOTHER
FATHERS HIGHEST DEGREE
MOTHERS HIGHEST DEGREE
TYPE OF COLLEGE RESPONDENT ATTENDED
WHEN RECEIVED HS DEGREE
WHEN RECEIVED COLLEGE DEGREE
TOTAL NUMBER OF STUDENTS IN COLLEGE RESPONDENT ATTENDED
RATE OF BA DEGREE EARING IN COLLEGE RESPONDENT ATTENDED
RATIO TO GRADUATE STUDENTS TO UNDERGRADUATE STUDENTS IN COLLEGE RESPONDENT ATTENDED
NON-COLLEGE POST SECONDARY EDUCATION
POST SECONDARY INSTITUTION ATTENDED FOR CREDIT

**4) Occupation**

Occupation is operationalized as an activity in which one engages like a job or profession.

We chose occupation as an indicator or social standing because it is capable of predicting the tangible rewards an individual is expected to receive. A more prestigious occupation is expected to entail more rewards than a less prestigious occupation. Although occupation is tied to income, the amount of tangible rewards the individual already receives through his or her occupation (in the form of income) is not focus of this indicator; rather, it is the predicted amount of the individual's tangible rewards in other related forms, for example, salary raises (versus static income, which is what the indicator "income" measures) or vacation time. Thus, a more prestigious occupation is capable of predicting more tangible rewards, and more tangible rewards entails a higher social standing.

(GSS CODE)
FATHERS CENSUS OCCUPATION CODE
FATHERS OCCUPATIONAL PRESTIGE SCORE
FATHER'S OCCUPATIONAL PRESTIGE SCORE USING THRESHOLD METHOD
MOTHERS CENSUS OCCUPATION CODE
MOTHERS OCCUPATIONAL PRESTIGE SCORE
MOTHERS OCCUPATIONAL PRESTIGE SCORE USING THRESHOLD METHOD

**5) Spending**

Spending is operationalized as an exchange of money for goods and services and include all private purchases of durable goods, nondurables and services.

We chose spending as an indicator or social standing because it is capable of displaying how much tangible rewards an individual receives and owns. We assume that the more an individual spends (and subsequently owns because he or she bought it), the more income the individual has; thus, this indicator displays the amount of tangible rewards an individual receives or owns through the amount of money he or she spends because we assume that he or she is using his or her income (or a credit card, but we also assume that he or she is capable of paying the money back because he or she has enough income). Overall, the more an individual spends, the higher his or her social standing because we assume a higher income for that spending.

(GSS CODE)
SPENDING FOR PRENATAL CARE
SPENDING FOR HEALTH CARE
SPENDING FOR HEAD START
SPENDING FOR CHILDCARE FOR POOR
SPENDING FOR CHILDCARE FOR WORKERS
SPENDING FOR HOUSING
SPENDING FOR DISABLED KIDS
SPENDING FOR DRUG TREATMENT
SPENDING FOR FOOD, ETC.

SPENDING FOR BIRTH CONTROL

**6) Race/Ethnicity**

Race is a way of categorizing humans into groups based on combinations of shared physical traits, ancestry, genetics, and social or cultural traits. Ethnicity is a category of people who identify with each other based on similarities such as common ancestry, language, society, culture or nation. They both have a strong influence over contemporary social relations.

We chose race/ethnicity as an indicator or social standing because play a major role in an individual's social standing. Especially in the United States, there is a flux on how people are perceived by their backgrounds. Take immigrants for example, people believe that a large migration of immigrants in a central area will lead to more crime. This is false, it is the following generations who become Americanized are more likely to commit crimes. So, a person's race or ethnicity plays the perception of one's social standing.

Gender within races and ethnicities also have an effect on social standing. For example, asian men and women generally have higher hourly earning than white men and women, respectively. White men and women have higher hourly wages than black men and women, respectively. Black men and women have a higher hourly wage than hispanic men and women, respectively. This pattern indicates that race within gender influences wages, which influences the tangible reward of income (Patten, 2016).

(GSS CODE)
RACE OF RESPONDENT

**7) Gender**

Gender is an influence to social standing due to gender wage gaps amongst males and females. Men are more likely to earn higher hourly earnings than women across all races and ethnicities. Since men generally have a higher income, they are able to afford and attain more tangible rewards, where women who acquire the same position will have more difficulty gaining these same rewards (Patten, 2016).

(GSS CODE)
RESPONDENT'S SEX

**Explain and justify how we would produce a generalized social standing index from these indicators. Include an answer to each of the following:**

**i) How might you decide what each has to contribute?**

Each indicator chosen was based on our evaluation of its ability to differentiate levels of "importance" (as we defined importance) among people in society.

**ii) Would you reduce the number of indicators you use, and if so, how?**

We would reduce the number of indicators by eliminating neighborhood of residence. A reason for this is because we may not have up to date information on people's addresses due to the high rate of mobility in certain neighborhoods. Also, it is generally much more difficult to obtain information regarding people's neighborhoods in comparison to the other indicators.

**iii) How would you combine the selected indicators to produce the aggregate index of social standing.**

Determine the individual's score on each separate indicator, assign different weights to each indicator, multiply the individual's score for each separate indicator by the respective weight, then add the individual's weighted scores together.

**iv) How would you try to verify the worth of your combined index? How would you assess its validity, reliability, and accuracy?**

To test the validity of our composite variable, we would build a linear regression model for the relationship between the aggregate index and all the indicators in the GSS, using the different indicators as the explanatory variables. Race/ethnicity, gender, occupation and neighborhood of residence would be set up as dummy variables in the model. We would look at the correlation coefficient to determine whether our model is reliable and accurate since the r^squared value tells us what percentage of the variation in aggregate index of social standing can be explained by our explanatory variables. As such, the higher the r^squared value is, the more reliable and accurate our model is for predicting the aggregate index score. Moreover, we would test the significance between each individual indicator and the combined index to make sure each indicator is a valid predictor of the aggregate index.

**Offer suggestions of how to revise or augment the existing indicators to produce a better generalized index in the future.**

If the p-value for the significance test between the individual indicator and the aggregate index is not <.05, we would remove that indicator as a predictor in the model. If the correlation coefficient is low, it shows that our model does not accurately predict the aggregate index and the existing indicators need to be augmented. To determine how to revise the current indicators, we would look at what variables could have caused the inaccuracies in prediction and adjust how the indicator is used for the model.

References

Definition of 'social standing'. (n.d.). Retrieved October 30, 2017, from https://www.collinsdictionary.com/us/dictionary/english/social-standing

Patten, E. (2016, July 01). Racial, gender wage gaps persist in U.S. despite some progress. Retrieved October 30, 2017, from http://www.pewresearch.org/fact-tank/2016/07/01/racial-gender-wage-gaps-persist-in-u-s-despite-some-progress/

# Measuring Social Standing

Xinyi Gong, Matthew Jahns, Sandhya Ramakrishnan, Xinyi Zhang

## Indicators of Social Standing

There is a general consensus that in the U.S. individuals are divided into strata characterized by inequalities in various social domains—economic, political, and cultural. The composite of one's position in these different domains can be identified as an individual's social standing. Conceptually, we consider three dimensions widely regarded as accurate bases to evaluate social stratification: wealth, power, and prestige (Haller & Portes, 1973). We operationalize these dimensions by investigating three broad categories of social variables—wealth, occupation, and education. Income and property are the main predictors of wealth. Income represents the dynamic of a person's wealth as demonstrated through annual accrual, while property represents a person's fixed wealth condition. Occupation is indicative of power. While one's occupation may change in early adulthood, it tends to stabilize over time. Education is a major indicator of prestige as it implies a person's acquired knowledge and cultural tastes. In addition, a high degree of education is often the prerequisite for access to occupations of high power, prestige, and income. We also take into account parents' occupation and education to account for generational transmissions of wealth and knowledge.

We considered how social variables such as gender, race/ethnicity may, and immigration status affect one's social standing because members of these groups have been systematically denied access to the primary dimensions of wealth, power, and prestige mentioned above throughout American history. However, we remove these factors from the measurement construct because of the conceptual distance between these variables and social standing, as their influence on social standing is indirect and may be subject to additional interactions.

## Existing Indicators of Social Standing in the General Social Survey (GSS)

Income and Property

- "RINCOME": Respondent's income
- "INCOME": Total family income
- "EVBUYHME": Has the respondent ever purchased a home

Occupational Prestige

- "PRESTG10": Occupational prestige score
- "MAPRES10": Mother's occupational prestige score
- "PAPRES10": Father's occupational prestige score
- "WRKSLF": Self-employed or working for somebody
- "YOUSUP": How many people respondent supervises directly[1]
- "MAWRKSLF" Mother self-employed or working for somebody
- "PAWRKSLF" Father self-employed or working for somebody else



[1] See Wodtke (2016) for detailed discussion on creating typologies of occupational prestige.

Education

- "EDUC" - Highest years of school completed
- "MAEDUC" - Highest year of school completed, mother
- "PAEDUC" - Highest year of school completed, father

**Generalized Social Standing Index**

Income and Property: The sum of the score of income and the score of property will be the final scale of an individual's scores for income and property. The previous year's income indicator (RINCOME) is scored on a 12-point scale. There is no need to stratify income because it is already measured as an ordinal variable. We apply the same method to family income (INCOME), giving this indicator a lighter weight. Property is represented by the home ownership indicator (EVBUYHME); we assign a score of 1 to those who own property, and 0 to those who do not. It is worth noting, however, that the current scale has a lower power in measuring the groups at either tail of the income spectrum. For example, the 2016 GSS makes no distinction between a respondent making $170,000 and a respondent making $10,000,000 the previous year. Both respondents will receive 12 points on the scale.

Occupational Prestige: Occupation, prestige, and industry indicators are coded as ordinal variables. We assign scores of occupational prestige on a 5-point scale based on the standard deviation interval of the standard scores each respondent receive for their occupation and industry in the GSS. In addition, we use a scale to measure occupational prestige based on the typologies developed by Wodtke (2016) that include proprietors (self-employed and supervise others), independent producers (self-employed and do not supervise others), managers (work for someone else and supervise others), and workers (work for someone else and do not supervise others). We apply the same method to parents' occupational prestige, but give the score a lighter weight. It is also worth noting that occupational prestige, unlike income and education, is an indirect measure, and thus is more susceptible to measurement errors.

Education: The highest year of school completed in the GSS is an interval-level variable from 1 to 20, and we stratify this variable into five categories (primary school, middle school, high school, college, and graduate and more) and assign scores 1-5 to these categories. We apply this scale to the parents' highest year of schooling, but assign the overall score a lighter weight. Similar to the income category, this scale has lower power explaining social standings of people who fall on the extreme ends of the spectrum.

Finally, we weight the scores one receives under each category based on its relative importance. We give the largest weight to occupation because differential rewards are assigned to occupational function in contemporary American society (Hodge & Treiman, 1968). Income and property receive a lighter weight than occupation, as they are largely dependent upon occupation and can be translated into goods and services, that is, standard of living. We assign education the smallest weight under the assumption that the effects of education are largely translated into one's occupational prestige, income, and property. In our final index, a higher score indicates higher relative social standing. We can test the validity of this objective index of social standing by comparing it with the self-reported class variable within the GSS, with the expectation that respondents will overestimate their class standing. Should the index result differ wildly from the self-reported class identity, the index model may require additional examination.

**References**

Haller, A. O. & Portes, A. (1973). Status Attainment Processes. *Sociology of Education 46* (1), 51-90.

Hodge, R. W., & Treiman, D. J. (1968). Class Identification in the United States. *American Journal of Sociology 73*, 535-547.

Wodtke, G. (2016). Social Class and Income Inequality in the United States: Ownership, Authority, and Personal Income Distribution from 1980 to 2010. *American Journal of Sociology 121*(5), 1375-1415.