Examining Privilege as a Social Determinant of Health with Undergraduate Health Care Students

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ABSTRACT

Discussions about privilege as a social determinant of health (SDOH) may increase awareness of privilege and SDOH for health care students and improve quality of care. The study aimed to examine students' perception of privileges related to various SDOH, including race and social class. Health care students completed a pre-survey prior to a Modified Privilege Walk (MPW) and then a post-survey immediately after the MPW. Nonparametric tests were used to analyze data. Data included 18 matched pre- and post-surveys. The MPW assignment resulted in a significant improvement of 1.5 points in recognition of parents' education as a privilege ($p = 0.047$). Student responses showed a decline in guilt about personal privilege (-0.11 points, $p = 0.7656$). On average, students agreed the MPW assignment made them more aware of their privilege and positively impacted how they will interact with future patients. The pre- and post-survey identified SDOH that students, on average, felt gave them more privilege (e.g., parents' profession and education). This pilot project illustrates the need to teach about SDOH and include frank discussions about personal privilege as an integral component of SDOH.

Introduction

Teaching allied health professionals about social determinants of health (SDOH) may increase empathy in various health care fields outside of medicine and nursing (Cantey, Randolph, Molloy, Carter, & Cary, 2017; Martinez, Artze-Vega, Wells, Mora, & Gillis, 2015; Sharma, Pinto, & Kumagai, 2018). SDOH are conditions in which people live, work, learn, and play that can negatively or positively impact their health and quality of life (World Health Organization, n.d.). Studies show that certain factors, including genetics, health behaviors, health care infrastructure, and social and environmental factors, influence health outcomes (Artiga & Hinton, 2018). Generally, people with lower incomes and fewer resources have poorer health outcomes. In contrast, those with access to better opportunities (e.g., education, employment, and income) generally show better health. While teaching allied health professionals about SDOH, it would be a disservice not to take the discussion further and examine privilege as a SDOH, which may be an uncomfortable, but necessary topic to promote health equity for all patients.

Boler (1999) suggests a pedagogy of discomfort. Courses that promote learning surrounding uncomfortable topics and self-reflection may create more critical thinkers and empathetic leaders. Learning should not be comfortable; it should be an emotional experience where the student is allowed to be vulnerable (Bregman, 2019). Educators and students alike may experience discomfort; however, both can learn and grow to become more thoughtful educators and health care providers.

Examining privilege as a SDOH may be uncomfortable for certain audiences, especially if populations hastily assume "White Privilege." At a glance, privilege is associated with immunity (Privilege, n.d.), which means that something has no effect on a person (Immunity, n.d.). Privilege as a topic of discussion is not routinely accepted and generally has a negative connotation. However, health educators can dismantle this negative perception of privilege and change how audiences view privilege. If the concept of privilege is applied to SDOH, specifically SDOH that negatively

impact health (e.g., low socioeconomic status [SES]), we can advocate that all individuals and families have privileges or opportunities to reach their full health potential.
Privilege as a SDOH can come in many forms: (1) being "accepted" or "preferred" because an individual identifies as White (vs. minority) or heterosexual (vs. LGBTQ+ or lesbian, gay, bi-sexual, transgender, queer, etc.), (2) living in a home with two, higher incomes (vs. a single-parent home with lower income), or (3) having private health insurance (vs. having no health insurance or public health insurance). Health care curricula, particularly for allied health professionals, can embrace exercises and assignments that encourage students to examine how and why privilege as a SDOH can affect health outcomes (E. A. Brown & White, 2020; E.A. Brown, White, & Gregory, 2021). Allied health professional students have a unique opportunity to embrace these concepts and apply them in various disciplines and health care organizations.

Academic health educators can discuss privilege as a SDOH and increase students' awareness of privilege as a SDOH. For example, Paul Kivel created an exercise that challenges common assumptions of equal access (Kivel, 2002). For the exercise, participants stand on a line and silently move forward or backward based on their answers to questions related to race and social class (Kivel, 2002). Witten and Maskarinec (2015) continued Kivel's work by conducting a similar exercise in an elective "Social Justice in Health" course and exploring privilege as a SDOH. The goal was to measure students' change in awareness of specific SDOH that provided advantages over others (Witten & Maskarinec, 2015). Understanding one's own personal privilege is integral for future healthcare professionals to deliver equitable healthcare to all patients (Witten & Maskarinec, 2015). By having an SDOH course as a core component of health education curricula, students can gain the skills to identify possible underlying causes of poor health in their future patients, making them more empathetic, competent, and prepared to care for all patients.

Study Purpose

This pilot study aimed to (1) examine differences in privileges related to race and social class and (2) assess which personal characteristics students recognize as providing more privilege following a Modified Privilege Walk (MPW).

Methods

Study Design

This study was an evaluation study in which we assessed if a MPW could change perceptions of privilege in one class setting.

Institutional Review Board

An Institutional Review Board (IRB) determined that this study was quality improvement (QI)/program evaluation and not human subjects research. Thus, the IRB deemed the project was not subject to further review.

Informed Consent

While this study was considered QI/program evaluation by the IRB, authors developed an informed consent statement so students knew that each survey was voluntary, they could stop completing the survey at any time, their participation (or nonparticipation) would not affect their grade, and all course data would be used for data analysis and publication purposes where data may be linked to students [INSERT/REFERENCE AUTHORS' PREVIOUS WORK AFTER MANUSCRIPT ACCEPTED]. The informed consent statement was included on all pre- and post-surveys.

Participants

Participants included health care students in an online undergraduate program at a large academic medical center. Students were enrolled in a fall SDOH course. Many students were "non-traditional" undergraduate students and allied health professionals, such as laboratory technologists, dental hygienists, occupational therapy assistants, and radiological technologists.

Pre- and Post-Survey

During one on-campus class session, in fall 2019, students completed a pre-survey, the MPW, and a post-survey. Surveys were adapted from (Witten & Maskarinec, 2015). The pre-survey was completed before the MPW, and the post-survey was administered immediately after the MPW in one class session. After completing the post-survey, the instructor led a discussion about privilege and its potential impact on patient outcomes. Students participated in the discussion then participated in a lecture about SDOH. Activities were done in this order to decrease biasing student responses on their surveys and MPW questionnaire.

Demographic variables, such as race, ethnicity, sex, and date of birth, were collected on the pre-survey. On the pre-survey, students were asked to define "privilege" in their own words. On both surveys, students answered questions about their personal privilege (general privilege, past experiences, and current experiences). Then, on a scale of 0 to10 (0 for none, 5 for somewhat, and 10 for much), students rated how much privilege each characteristic has given them over others. Some characteristics listed on the pre- and post-surveys included (1) English as your first language, (2) born in the United States, (3) housing conditions, (4) parents'/caregivers' education, and (5) health insurance. All surveys were developed, distributed, and submitted anonymously through REDCap (Research Electronic Data Capture), a secure web application designed to create and manage online surveys (Vanderbilt University, n.d.).

Modified Privilege Walk

The MPW was adapted from Kivel (2002) and consisted of 36 questions inquiring about privileges regarding race, ethnicity, and SES. Participants answered questions about their personal experiences and calculated their "total privilege" scores. Once students calculated their score, they received a representative number of Legos to build a privilege tower (E. A. Brown & White, 2020). For example, if the student had a privilege score of 20 points, the student received 20 Legos. Students with a zero score or negative score did not receive Legos. The Legos served as a visual aid to represent the participant's privilege. Authors created a figure illustrating privilege scores based on the MPW from the entire cohort where alphabet are randomly used to represent students (Figure 1).

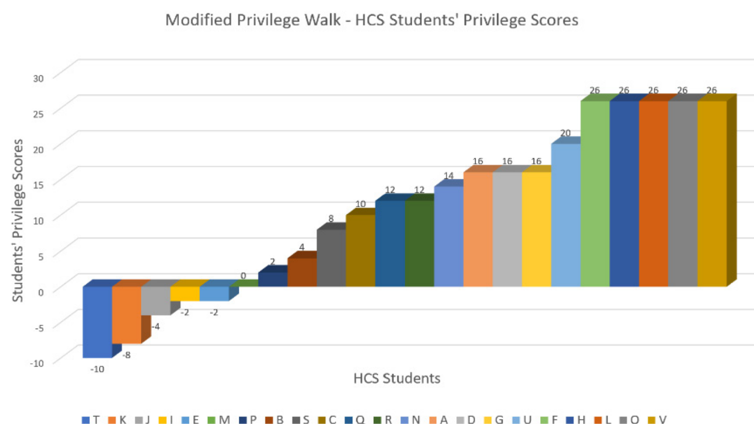

Figure 1. Graph of Students' Privilege Scores

Data Analysis

Data were collected in REDCap and downloaded to an Excel file. In Excel, we matched pre- and post-surveys based on demographic data. Quantitative data were then uploaded to SAS for final analysis. Race was initially coded as White, Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, or Other. Due to the small sample size, race was re-coded to White and minority. Ethnicity was coded as Hispanic or Latino or Not Hispanic or Latino. Date of birth was transformed into a continuous age variable. Due to the small sample size and non-normal data, the Wilcoxon signed-rank test was used to compare the difference in pre- and post-survey responses. Factors were considered significant at $p < 0.05$. All analyses were completed using SAS software, version 9.4 (SAS Institute, Cary, NC).

Results

All students (n=22) completed the MPW for a course assignment grade. For the voluntary pre-and post-surveys, 18 of 22 (81.8%) students had matched pre- and post-surveys (Table 1). Most survey respondents were White (n =11, 61.1%), non-Hispanic (n=17, 94.4%), female (n=16, 88.8%), and aged 26 years and older (n=11, 64.4%). The average age of survey respondents was 28 years old.

Table 1. Self-Reported Demographic Characteristics and Privilege Score[1]

	Pre- and Post-Survey Participants	Modified Privilege Walk Participants and mean privilege scores[2]
Demographics	n=18 (%)	n=22
Race		
White	11 (61.1)	18.2
Black	4 (22.2)	-1
Other[3]	3 (16.7)	0.4
Hispanic		
Yes	1 (5.6)	1
No	17 (94.4)	11.6
Sex		
Female	16 (88.8)	11
Male	2 (11.2)	7
Age Group (years)		
20-25	6 (35.0)	14.8

[1]Includes numbers and percentages for all non-missing data. Note: 18 students completed both voluntary pre- and post-surveys; however, 22 students completed the mandatory, in-class assignment measuring privilege.

[2] Total (highest) privilege score could be 36 points.

[3] Other race includes American Indian/Alaskan Native (AI/AN), Asian, Native Hawaiian or Other Pacific Islander (NHPI), Other.

26-30	2 (11.8)	8
31-35	6 (35.0)	11
35+	3 (17.6)	4.5

Modified Privilege Walk

All students (n=22) were required to complete the MPW for a grade. The following groups reported the highest average privilege score: White (18.2 points), ages 20 to 25 years (14.8 points), and non-Hispanic ethnicity (11.6 points) (Table 1). On average, Black students reported a lower privilege score compared to their White classmates (-1 pointsvs. 18.2 points). On average, male students reported a lower privilege score compared to female students (7 points vs. 11 points). Figure 1 illustrates privilege scores for the entire cohort.

Pre- and Post-Survey

On the voluntary, matched pre- and post-surveys (n=18), students rated which characteristics they believed gave them more or less privilege. From the matched pre- to post-survey, student recognition of parents'/caregivers' education as a factor that yielded higher privilege significantly increased by 1.5 points." (p=0.0469) (Table 2). There were also increases when students recognized that disability status (1.1 points, p=0.0938), parents'/caregivers' profession (0.94 points, p=0.2412), and race (0.94 points, p=0.1519) provided more privilege; however, these findings were not significant. Three characteristics had a rating that decreased from the pre-survey to the post-survey: parents'/caregivers' homeownership status (-0.33 points, p=0.7500), guilt about privilege (-0.11 points, p=0.7656), and access to reliable transportation (-0.05 points, p=0.9375); however, these findings were not significant.

Table 2: Mean Differences and 95% Confidence Interval (CI) for Various Characteristics, Pre- and Post-survey data on Privilege Questions

General Privilege Questions	**Mean (95% CI)**	**p-value**
Did you grow up privileged?	0.06 (-0.151, 0.263)	1.000
Are you currently privileged?	0.00 (-0.171, 0.171)	1.000
Can personal characteristics provide more privilege than others?	0.22 (-0.215, 0.659)	0.4316
Do you feel guilty for being more privileged than others?	-0.11 (-0.488, 0.266)	0.7656
Privilege – Past Experiences		
Born in the United States	0.00 (-0.818, 0.818)	0.9287
English as your first language	0.88 (-0.104, 1.881)	0.0947
Completed high school	0.33 (-0.206, 0.872)	0.1660
Housing conditions	0.22 (-1.179, 1.624)	0.1270
Neighborhood(s) you lived in before your 18th birthday	0.55 (-0.283, 1.295)	0.2277
Vacation outside of your home state before your 18th birthday	0.55 (-0.591, 1.702)	0.4346
Family dynamics	0.61 (-0.385, 1.607)	0.2100
Parents'/Caregivers' education	1.50 (-0.008, 3.008)	***0.0469**
Parents'/Caregivers' profession	0.94 (-0.595, 2.484)	0.2412
Parents'/Caregivers' home ownership status	-0.33 (-1.609, 0.943)	0.7500
Privilege – Current Experiences		
Age	0.11 (-0.966, 1.188)	0.8228

Race	0.94 (-0.349, 2.238)	0.1519
Ethnicity	0.61 (-0.455, 1.678)	0.2031
Gender identity	0.50 (-0.453, 1.453)	0.2852
Sexual orientation	0.88 (-0.132, 1.910)	0.1289
Secondary education	0.61 (-0.293, 1.515)	0.1943
United States citizenship	0.38 (-0.593, 1.370)	0.4629
Health insurance	0.05 (-0.788, 0.899)	0.9766
Health status	0.66 (-0.251, 1.585)	0.2305
Housing conditions	0.55 (-0.711, 1.823)	0.3264
Disability status	1.11 (-0.044, 1.266)	0.0938
Religion affiliation	0.77 (-0.334, 1.890)	0.1250
Access to reliable transportation	-0.05 (-0.681, 0.570)	0.9375

Definition of Privilege[1]

Students were asked to define privilege in their own terms on the pre-survey (Table 3). When defining privilege, many students used positive words or phrases, such as “advantage/advantages” and “access.”

Table 3. Student’s Definitions of Privilege

Student	Privilege Definition
1	Having advantages of access to better education and health benefits over other people that live in your population
2	Having an advanced or superceding [superseding] right to things that others are not allowed to or not able to
3	Privilege is having an advantage others do not.
4	Privilege is a factor that gives one person an advantage over another.
5	The ability to have something or do something that someone else does or needs.
6	Privilege is a thing that allows certain people to do certain things. It is not a legal entitlement but rather something that has more of a blurred line. Someone may have the right to an education, but it is a privilege to attend certain institutions of education. Some people believe they are privileged in ways that impact the community negatively such as a race or gender being better than others.
7	Privilege is when someone get something easily without working for it.
8	One's access to resources and opportunities based on economic, social, religious, political, and identity factors.
9	Privilege can be defined as having more chances or opportunities than another person or group.
10	Some type of characteristic that may enhance a persons quality of life
11	Privilege is generally some kind of advantage that not all people may have access to.
12	Privilege is a sense of entitlement.
13	Having opportunities based on where you come from.
14	Socio-economic level.
15	Privilege is what is easily accessible.

[1] Privilege definition data includes data from all pre-surveys (n=20), not just matched pre- and post-surveys (n=18).

16	Synonym for ease of access to a certain advantage
17	How you grew up- education, house, clothes, food, material things, vacations, family, friends, sport participation
18	Being afforded better opportunities due to certain status or characteristics.
19	Having advantages of access to better education and health benefits over other people that live in your population
20	Privilege is having an advantage others do not.

MPW Evaluation[1]

On the post-survey, 20 students rated the MPW based on how the exercise (1) changed how they view privilege, (2) made them more aware of their personal privilege, and (3) positively impacted how they will interact with future patients. Most respondents either agreed (n=11, 55%) or strongly agreed (n=1, 5%) that the MPW changed how they view privilege (data not shown). Most respondents either agreed (n=12, 60%) or strongly agreed (n=4, 20%) that the MPW made them more aware of their personal privilege. Lastly, most students agreed (n=11, 55%) or strongly agreed (n=4, 20%) that the MPW positively impacted how they will interact with future patients.

Discussion

Healthcare professional students participated in one class session to learn about privilege as a SDOH by participating in a MPW and completing a survey on characteristics that may increase or decrease privilege. Most survey respondents were non-Hispanic, White, and female. On average, White, younger, and female students reported more privilege compared to their counterparts. Of numerous characteristics, there was a significant improvement in recognizing parents'/caregivers' education as a privilege that gave students advantages over others. Most students either agreed or strongly agreed the MPW was an effective exercise in changing perceptions about privilege and impacting how they will treat future patients.

When examining why White students would receive a higher privilege score based on questions surrounding race and social class, it is necessary to highlight disparities among minority groups in comparison to Whites. White students may have benefited from privileges or opportunities created by racial inequities regarding SES circumstances, leading them to report higher privilege scores. Specific advantages or privileges throughout life can determine an individual's experience regarding their access to a stable and safe living environment, access to education, mobility for personal and professional purposes, access to health care, and so forth.

Parents' Educational Attainment

Students recognized parents'/caregivers' education as a privilege. Researchers reported that families in which the parents obtained higher education are less likely to face financial instability, unemployment, poor health, and poverty (Assari, 2019). Parents who completed higher education may be more likely to act as an educational role model, or to motivate their children throughout primary and secondary school and encourage them to pursue higher education goals afterward (Assari, 2019). There may be more books in the house, and more frequent trips to educational events and facilities, such as museums, art galleries, and science fairs. Students recognizing their own personal privilege may have realized their parents' education and profession being linked to SES, possibly leading to more privilege or resources that improved their health and quality of life. During the class session, one of the topics discussed was if parents valued higher education or supported pursuing higher education, perhaps a result of parents earning a higher

[1] MPW evaluation data includes data from all post-surveys (n=20), not just matched pre- and post-surveys (n=18).

degree. Students may have reflected on their own lives and parental/guardian relationship to conclude that their parents' education was a privilege.

Educational Attainment Disparities

Several MPW questions focused on parents' educational attainment, profession, and income. Educational attainment can largely determine employment opportunities and advancement, major factors that form an individual's SES. It is generally accepted that education impacts employment, which impacts income. Further, SES, which includes education, employment, and education, can impact overall health—which researchers refer to as the social gradient in which lower income generally means increased risk for poor health outcomes (Wilkinson & Marmot, 2003).

According to the 2018 American Community Survey (ACS), in the United States, 11.5% of Hispanics or Latinos, 13.6% of Blacks or African Americans, and 22.2% of non-Hispanic Whites have a bachelor's degree (United States Census Bureau, n.d.). In South Carolina, compared to Whites, a lower percentage of minorities attain a bachelor's degree: 9.7% (Black or African Americans), 11.4% (Hispanics or Latinos), and 21.1% (non-Hispanic Whites) (United States Census Bureau, n.d.). Hispanics are twice as likely to live below the poverty line and four times more likely to not complete high school (Velasco-Mondragon, Jimenez, Palladino-Davis, Davis, & Escamilla-Cejudo, 2016). Considering that minority groups have lower rates of high school and college graduation, it is possible our minority students had lower privilege scores because of their responses on questions related to SES.

Educational attainment and employment or profession impact income. In 2017, the Bureau of Labor Statistics stated that the median incomes of those with doctoral or professional degrees were more than triple the income of those without a high school diploma (Torpey, 2018). In 2019, the U.S. Census Bureau reported that Blacks had a lower median household income ($45,111) compared to non-Hispanic White households ($67,937) (Guzman, 2019). Thus, it is plausible that those with lower educational attainment may learn less income. Income disparities can negatively impact asset allocation, financial stability, emergency preparedness and resiliency, retirement savings, generational wealth, and mobility freedom. White students may have reported higher privilege scores because they or their families benefited from opportunities arising from the generational wealth or SES that created and sustained the racial income gap.

Definition of Privilege

Based on students' definitions of privilege, most students defined privilege as having advantages and access to resources in life. If students can comprehend that there is an unequal distribution of opportunities, then they can better understand and confront social injustices in society. Sharma et al. (2018) claims that "critical consciousness" and focusing on SDOH in its relation to justice and health inequities can be useful to expand the understanding of privilege, power, and inequities in social relationships. The intended goal being to inspire health professionals to address social justice through critical consciousness (Sharma et al., 2018).

Sharma et al. (2018) explains the importance of understanding privilege, power, and inequities by teaching what SDOH are, as well as how they came to be, who is benefiting, who is suffering, how to address them, and what can be done (Sharma et al., 2018). Through this comprehensive teaching method, the authors believe students would develop a more critical conceptualization of privilege and equity, thus leading to conducting more meaningful interactions with patients that help reduce stigma, blame, and discrimination. A social justice foundation can inspire medical professionals to be allies in social transformations. The teaching method may promote health equity for patients because health care professionals are more aware of patients' struggles, privileges, and inequities. We propose that curricula need to not only teach about SDOH but also how to address SDOH and initiate social change. Similar to our study, Sharma et al. (2018) focused on how expanding the knowledge of SDOH can help future healthcare professionals provide equitable care.

Guilt Associated with Privilege

The results show a decline in guilt about personal privilege. However, this outcome is an acceptable because the purpose of this teaching method was not to impart guilt or shame on the students. Rather, the purpose was to increase awareness and knowledge of how privilege may affect health outcomes and quality of life.

MPW Evaluation

Our study builds on privilege as a SDOH in medical education (Witten & Maskarinec, 2015); however, there were distinct differences between the two studies. Our main differences were the population studied and the order of activities to reduce bias. We (1) implemented the project with undergraduate health care students where many identified as allied health professions (vs. medical students), (2) led a group discussion and lecture immediately after the MPW and post-survey (vs. having the post-survey after the lecture and discussion), and (3) had a slightly higher sample size (n=18 vs. n=9).

In our single class session, the MPW created an organic and emotional discussion on privilege, culture differences, and sexual orientation. Not only does group discussion enhance the learning environment and encourage cultural awareness, but it allows the students to talk about privilege without the restriction of societal taboos in a safe classroom space focused on education and growth. In order to teach privilege as an SDOH, students need to feel comfortable with the topic, and be able to understand its' complexities go further than their own experiences. Group discussion provides an open and welcoming environment for students to share their experiences with privilege, negative or positive, which allows other students to gain an understanding beyond their own personal experience.

Researchers reported that classroom activities that help students realize their structural advantages increase the students' perception of the disadvantages experienced by systemically underprivileged communities (Muntaner, 1999). Discussing privilege as a SDOH, predominantly a negative SDOH (e.g., poverty, homelessness, racism), could bring emotions to the surface that stem from past or present experiences. A student could feel anxious or uneasy discussing SDOH topics, such as issues in the LGBTQ+ community, poverty, racism, discrimination, lack of access to health care or quality education, and so forth. Likewise, a student may feel uneasy discussing how they have benefited from privileges in the presence of those who have not had much privilege or opportunities. Moving forward, we recommend having a licensed counselor available should students feel the need to speak to someone at any point during the activity or share contact information for student counselors on campus. It is essential, if not a necessity, to have this service available to students.

Conclusion

Discussing privilege as a SDOH and having uncomfortable discussions about privilege could lead to more empathetic health professionals, increase the quality of care, and increase advocacy within health care settings for underserved populations. More educational research is needed on teaching about privilege as a SDOH to allied health professionals and exploring privilege dynamics. By normalizing the discussion of privilege, we can increase awareness and perception of personal privilege and how privilege as a SDOH can affect individual health outcomes.

Limitations

Our sample size was small; however, we accounted for this issue using a nonparametric statistical test. Nonresponse bias may be present because both pre- and post-surveys were voluntary. Individuals who responded to the surveys may have been different from those who chose not to respond to the surveys.

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