Title:

STUDENT NURSES' ATTITUDES TO SOCIAL JUSTICE AND POVERTY: AN INTERNATIONAL COMPARISON

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Abstract

Background: In both the United Kingdom (UK) and the United States (US), health inequities are proving resistant to improvement. Nurses are ideally placed to advocate for social justice. It is therefore important that nurse education encourages awareness of the social determinants of health and equips students to act to address health inequity. However, little is known about student nurses' attitudes to social justice and poverty and the impact of pedagogical strategies used to teach the determinants and patterns of health inequities.

Objectives: To assess and compare UK and US student nurses' attitudes toward social justice and poverty before and after learning about social determinants of health and health inequities.

Design: Cross-sectional study with embedded before and after design using validated measures.

Setting: Two universities: one urban UK university and one US university with urban and rural campuses.

Participants: 230 student nurses in the UK (n=143) and US (n=87) enrolled in courses teaching content including health inequities and social determinants of health.

Results: Student nurses generally disagreed with stigmatizing statements about people living in poverty and mostly agreed with statements promoting social justice. However, US students were significantly more likely to have positive attitudes towards both social justice ($p=0.001$) and poverty ($p<0.001$). In multiple regression analyses, engagement in social justice-promoting activities, activism and higher levels of education were associated with positive attitudes to social justice and poverty. Statistically significant positive changes in attitudes to poverty and social justice after their courses were observed only among US student nurses.

Conclusion: UK and US student nurses' attitudes to poverty and social justice were generally positive. Education around social determinants of health and health inequity had a different effect in the UK and the US. There is a need to explore further what specific components of educational programmes lead to positive changes in attitudes.

Keywords: Attitudes; Health inequity; Educational research; Social justice; Student nurses; Poverty; Undergraduate nursing education; Social determinants of health.

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1. Introduction

Nurses are often the first to encounter health consequences of ever-increasing health inequities. Given that those living in poverty generally have poorer health (Swinnerton, 2006), it is critical that nursing students know how to approach and work with vulnerable populations. In both the United Kingdom (UK) and the United States (US), health inequities have proven to be resistant to improvement. As a result, the gap between the most deprived and the most privileged continues to widen (Cylus et al., 2015; Dickman et al., 2017). The UK is facing a high level of disparities in health across different areas due to austerity economics. Although the population of the UK is currently healthier than ever before, the most deprived groups continue to fall behind (Cylus et al., 2015). In the US, inequities in health are increasing across the population particularly as a result of deepening economic inequity and disparate access to healthcare (Dickman et al., 2017).

Nurses are in positions to impact health and wellbeing of patients, communities and populations by influencing health outcomes (Winslade et al., 2013). As nurses work alongside patients, they are able to impact population health in different ways, such as making services accessible to people in marginalized situations, finding proper housing for patients, and facilitating access to resources including welfare benefits and supportive services (Atherton et al., 2017).

Therefore, it is important that the content of professional health education keeps pace with the evolving challenges of population health. Nurses internationally are ideally placed to lead transformative changes in population health as they are accountable for providing, leading and coordinating care tailored to the individual needs of the person (Atherton et al., 2017; Nursing and Midwifery Council (NMC), 2018). As for the US, nurses are recognized as critical members of the healthcare team when their scope of practice is maximized (Institute of Medicine (IOM), 2010). Moreover, due to the increasing gap between the demand for primary

care and the number of physicians, more nurses have taken on advanced practice roles, increasing the capacity to exert influence in achieving health equity.

The use of effective pedagogical strategies is essential to engage students in acting for social justice. A number of earlier studies confirm the association between educational interventions and student attitudes to social justice and poverty. Two different programmes (Noone et al., 2012; Patterson & Hulton, 2012) explored the influence of a poverty simulation on student nurses' attitudes to people living in poverty. Findings of these studies showed that the attitude of student nurses towards people who live in poverty changed in significant ways.

Another study examined the attitude of nursing students toward homelessness before and after participation in a service-learning clinical rotation with those experiencing homelessness (Loewenson & Hunt, 2011). Results suggested that clinical experiences positively influenced students' attitudes and support the value of integrating service-learning clinical opportunities with homeless individuals into nursing curricula. In addition, findings of Jarrell et al. (2014) showed that service-learning as an educational tool could enhance compassionate care, by changing student nurses' attitudes towards people living in poverty.

Education about the determinants of health and patterns of health inequities is already part of undergraduate nursing programmes in the UK and US. However, little is known about student nurses' attitudes to poverty and social justice in the context of these two countries and the impact of current pedagogical strategies remains unclear. The lack of comparative studies makes it difficult to determine which strategies are more effective in raising student nurses' awareness of social justice and poverty.

This study aims to address these gaps by providing answers to four research questions: (1) what are UK and US student nurses' attitudes toward social justice? (2) are there differences in attitudes to social justice and poverty between these two cohorts? (3) what socio-demographic factors impact the attitude of student nurses? and (4) do student nurses' attitudes

toward poverty and social justice change after teaching focused on health inequities? To answer these questions, this study assesses and compares the attitudes of students from two universities before and after teaching about health inequities.

2. Methods

2.1. Aim

This international study explored student nurses' attitudes to poverty and social justice before and after their courses with content on social determinants of health and health inequities. The purpose of this quantitative study was to examine attitudes of student nurses enrolled in a programme in the UK or US toward poverty and social justice, to identify differences between cohorts and to gain insight into the impact of the applied pedagogical strategies teaching population health.

2.2 Study design and participants

A quantitative approach was employed using an online survey, which combined two validated measures, one on attitudes to poverty and the other on attitudes toward social justice, with a set of socio-demographic questions. Study participants were recruited from cohorts of nursing students in their second year of study (n = 550 UK, n = 250 US). An announcement was posted on the virtual learning environments (VLE) to recruit participants for the study. Participation was voluntary.

2.3 Courses

Students were recruited before completing courses in the US and UK focused on health inequality and the social determinants of health. In the US, students completed a 10-week course 'Population Health Nursing' designed to engage students in community and population

health practice. Students spent 12-16 hours per week with theory and VLE discussion boards and two days per week in the same placement setting, working with a vulnerable population, for the 10 weeks of the course. The course was assessed through a persuasive writing paper that required students to identify a significant healthcare issue for their clinical population and write to an individual or organization with influence, such as a state legislator, governmental or community organisation. In addition, they had to successfully pass the clinical practice requirements. In the UK, students completed a 12-week course 'Effective Interagency Working in Healthcare' focused on equipping nurses to work in increasingly integrated health and social care settings that require joint-working between the publicly-funded National Health Service (NHS), local government, social care, and community organisations. Students spent 12-16 hours per week with theory and VLE discussion boards for the 12 weeks of the course, alongside a concurrent clinical placement one day per week. Due to the size of the cohort enabling students to be placed in a clinical setting working directly with vulnerable populations was not always possible, although students were encouraged to connect theoretical and practical learning. The course was assessed through an essay that asked students to discuss the extent to which they agreed with the following statement: 'Integrating health and social care services is the best way to tackle growing health inequalities in Scotland'.

2.4 Instruments

Two validated scales were used to measure attitudes to poverty and social justice: the attitudes to poverty scale (ATP) from Yun & Weaver (2010) and Social Justice Scale (SJS) developed by Torres-Harding et al. (2012).

2.4.1 Attitude to Poverty Scale (ATP)

The instrument includes a short form, 21-item version, of the original 37-item ATP scale (Atherton et al., 1993), which allows researchers to measure the attitudes toward poverty and people living in poverty in a more comprehensive manner (Yun & Weaver, 2010). Questions assess attitudes to poverty using a 5-point Likert scale, ranging from 1 = fully disagree to 5 = fully agree. The measure comprised three subscales: (a) Personal Deficiency, (b) Perception of Stigma, and (c) Structural Perspective (or explanation for poverty). The instrument was originally validated with a Cronbach's alpha of 0.87 (n = 319). Higher scores on the ATP scale indicate that students have a less positive attitude towards individuals living in poverty.

2.4.2 Social Justice Scale (SJS)

This instrument is a 24-item measure comprised of four subscales: (1) social justice attitudes; (2) social justice perceived behavioural control; (3) social justice subjective norms; and (4) social justice behavioural intentions (Torres-Harding et al., 2012). Questions are answered using a 7-point Likert type scale, ranging from 1 = fully disagree to 7 = fully agree. The instrument was originally validated with a Cronbach's alpha of 0.93 (n = 276). Higher scores for the SJS scale indicate that students were more positive towards the need for social justice to mitigate health inequity.

2.4.3 Socio-demographic variables

Socio-demographic information was collected through a series of closed questions that focused on age, gender, ethnicity, level of education, financial security, volunteering, healthcare experience, social justice promoting activities, faith community affiliation, and political preferences.

2.5 Data analysis

Data analysis was conducted in five stages. First, descriptive statistics were calculated for socio-demographic questions and each item of the ATP and SJS scales and presented as n (%). Second, scores for the ATP and SJS scales and their constituent subscales were calculated and reported as means (standard deviation [SD]). Negatively worded items from the ATP scale were reverse scored. Third, to compare the attitudes, subjective norms, perceived behavioural control and intentions to social justice and poverty, a Mann-Whitney U-test was conducted. The test was chosen based on non-normality of the data and the difference in number of respondents between cohorts. Fourth, to examine the relationship between socio-demographic variables and ATP and SJS scores and subscales linear regression models were built. Modeling strategies were applied for categorical independent variables. As the assumption for normal distribution of the residuals was not met, bootstrapping was applied as this is more accurate than the standard intervals obtained using sample variance. Fifth, to compare the paired samples from pre- and post-term survey data, a Wilcoxon signed rank test was undertaken. Data analysis was conducted using IBM SPSS Statistics 23 (Armonk, NY).

2.6 Ethical considerations

Permission to undertake the study was obtained from the Research Integrity Committee in the UK university and the Institutional Review Board of the US university. Participants received information sheets and were provided informed consent before participation. Participants were notified that data from the survey would be processed anonymously and confidentially. To further assure anonymity of the participants, each participant was asked to create a unique identifier known only to them.

3. Findings

3.1. Sample

Sample characteristics are shown in Table 1. Most respondents in both cohorts were women, aged 21-30 years old, Caucasian, had prior caring experience, felt 'somewhat secure' financially, and did not identify as activists. Cohorts differed in terms of the highest education level prior to entry to nurse education, with US students significantly more likely to have another bachelor's degree. US students were also significantly more likely to be part of a faith community, to volunteer, and to be engaged in social justice-promoting activities. The main political affiliation of participants differed between cohorts, with students from UK more often identifying as 'moderate' and US students as 'liberal'. This might be a result of the fact that the area of the US where students were studying is well-known for its liberal politics. In addition, the relatively low response rate for this item likely reflects differences in the understanding of these terms in each country (e.g., liberal is associated with a specific political party in the UK [i.e., Liberal Democrats]).

3.2 Attitudes to poverty

Table 2 shows students' responses to the ATP scale from both cohorts. In both UK and US cohorts the statement with which the most students agreed was that "poor people are discriminated against." For UK students, this was followed by "people who are poor should not be blamed for their misfortune" and "society has the responsibility to help poor people". For the US cohort, the relative ranking of these two statements were reversed. Moreover, the statement with which the most students from both countries disagreed was that "Children raised on welfare will never amount to anything", followed by "Poor people are dishonest." This statement was followed by "Poor people are dirty" for the UK students, while in the US cohort, the statement "Poor people generally have lower intelligence than non-poor people do" was ranked third.

3.3 Attitudes to social justice

The results obtained for the SJS scale are shown in Table 3. In the cohort of UK students, the statements with which the most students agreed was that "I believe it is important to respect and appreciate people's diverse social identities" and "I believe it is important to promote the physical and emotional well-being of individuals and groups," followed by "I believe it is important to allow others to have meaningful input into decisions affecting their lives." The statement "I believe it is important to promote the physical and emotional well-being of individuals and groups" was mostly agreed on amongst the US cohort. This statement was followed by three other statements with the same rank: "I believe it is important to make sure that all individuals and groups have a chance to speak and be heard, especially those traditionally ignored or marginalized groups," "I believe it is important to allow others to have meaningful input into decisions affecting their lives," and "I believe it is important to support community organizations and institutions that help individuals and groups achieve their aims."

3.4 Comparison UK and US student nurses

Table 4 shows the results for the ATP and SJS scale and constituent subscales for UK and US students before taking part in the course on health inequities. There was a statistically significant difference between cohorts in the mean overall attitude to poverty score ($p < 0.001$), with UK students scoring 2.25 and US students scoring 1.78, indicating that UK students have a less positive attitude towards individuals living in poverty. Significant differences in two ATP subscales – 'stigma' and 'structural perspective' – were observed in the same direction, with US students holding more positive attitudes ($p < 0.001$). No statistically significant difference was found for the subscale 'personal deficiency,' indicating that both students from the UK and US held similar attitudes towards individuals living in poverty (Table 4).

There was a statistically significant difference between cohorts in the mean overall SJS score ($p = 0.001$) with students in UK scoring 5.89 and in US scoring 6.23, indicating that US students had more positive attitudes towards social justice (Table 4). Significant differences in three SJS subscales – 'attitudes,' 'subjective norms,' and 'behavioural intentions' – were observed in the same direction, with US students more likely to hold positive attitudes towards social justice ($p = 0.002$), to feel supported by their environment to act for social justice ($p < 0.001$), and to intend to act for social justice ($p = 0.001$). No statistically significant difference was found for the subscale 'perceived behavioural control' indicating that both cohorts felt equally able to exert influence and act to promote social justice and change in communities.

3.4 Predictors of ATP and SJS scores

In a multiple regression analysis, level of education, being engaged in activities promoting social justice and identifying as an activist were independent predictors of students' positive attitudes towards poverty (Table 5). Involvement in activities promoting social justice and identifying as an activist were independent predictors of positive attitudes towards social justice, as well as each of the three subscales of this measure (Table 5). In addition, level of education was a predictor of subjective norms subscale (Table 5). Higher levels of education, involvement in activities promoting social justice, and identification as activists were associated with higher levels of disagreement with statements that stigmatize the poor and more social justice-promoting behaviour.

3.5 Impact of educational strategies

Post-term questions were completed by 57 students; 24 respondents from both cohorts completed both pre-term and post-term surveys (UK, n = 11; US, n = 13). No statistically significant change was observed on the ATP scale before and after the term ($p = 0.09$, $Z = -$

1.69). At a cohort level, only in the US was a statistically significant (positive) change in attitudes to poverty observed ($p = 0.01$, $Z = -2.76$). No statistically significant change was observed on the SJS scale before and after the term ($p = 0.39$, $Z = -0.85$). At a cohort level, only in the US cohort and for the 'perceived behavioural control' subscale was a statistically significant (positive) change observed ($p = 0.01$, $Z = -2.64$).

4. Discussion

4.1. Principal findings of the study

Examination of attitudes to poverty and social justice showed that student nurses in both countries disagreed with stigmatizing statements towards people living in poverty. Additionally, students mostly agreed with statements promoting social justice. Statistically significant differences were found when comparing attitudes to poverty, attitudes to social justice, subjective norms and behavioural intentions to social justice-promoting behaviour. US students showed a more positive attitude to poverty and social justice, had higher levels of environmental support to perform behaviours promoting social justice, and showed higher intention to carry out social justice and poverty-related behaviours. The level of perceived behavioural control was similar for both groups of student nurses. Nonetheless, results showed that students who are currently involved in social justice-promoting activities, consider themselves activists, or have bachelors degrees or higher were more likely to have a more positive attitude to poverty and social justice. This could be explained by the fact that this particular group of students have more often been face-to-face with people living in poor circumstances, resulting in a better understanding of the determinants of health.

Regarding the effect of pedagogical strategies of the population health courses, overall results indicate that information on health inequities did not change the attitude to poverty and social justice of nursing students. Nevertheless, on a cohort level, a change was seen in attitudes

to poverty and perceived behavioural control for US students following a dedicated population course of study. Findings showed that the course decreased the attitudes to poverty scores, while increasing the perceived behavioural control subscale scores. In other words, students showed less stigmatization to people living in poverty and believed they have more ability to act for social justice.

4.2. Comparison between main findings and literature

Student nurses who participated in the present study disagreed the most with the items from the ATP subscale personal deficiency. This finding differs from the study from Patterson & Hulton (2012), in which the score was lower for statements included in the structural perspective subscale. Moreover, observed scores for the ATP scale are lower in this study of student nurses than other international studies of qualified nurses. Noone et al. (2012) examined the attitudes of undergraduate nursing students before and after poverty simulation. The pre-simulation ATP mean score obtained from the experimental group for this study was 3.75. Furthermore, Wittenauer et al. (2015) examined the attitude of US registered nurses to poverty using the same ATP scale from Yun & Weaver (2010) as the present study. Results showed that the attitude average score of registered nurses was 2.78. Additionally, the study suggests that nurses were more likely to agree with stigmatizing statements on poverty than statements that attributed poverty to personal deficiency or structural factors. Consequently, Wittenauer et al stated that there is a need for tailored education programmes for nurses that addresses poverty stigmatization. The observed scores for this study was 2.25 (UK) and 1.78 (US) for the ATP scale. Student nurses involved in this study had more positive attitudes to people living in poverty compared to US registered nurses. This suggests the need for future research to examine how attitudes to poverty and social justice change over time, especially as individuals transition from student to registered nurses.

4.3 Strengths and limitations

This study is the first comparative evaluation of UK and US student nurses' attitudes to poverty and social justice. It provides information to suggest nurse educators should develop curricular content and pedagogical strategies to support students' learning – and action – around poverty and social justice. A notable strength of the study is the use of validated measures of attitudes to poverty and social justice and the use of the same administration procedures and similar population used in the validation study (Kimberlin & Winterstein, 2008).

However, our study has three main limitations. First, only one university in each of the UK and US was sampled, limiting generalizability. Further comparative research involving additional institutions is required to gain a more complete picture of student nurses' attitudes to poverty and social justice in each country. This is especially important given the different composition of the samples, in terms of previous education and involvement in volunteering or social justice-promoting activity. Larger samples across more institutions could enable matching of participants by socio-demographic characteristics to reveal further insight. Nonetheless, this study has established the feasibility of comparative research using these measures.

Second, there is potential for social desirability bias to have influenced the results (Andersen & Mayerl, 2017), especially given that student nurses would likely consider themselves to be expected to hold positive attitudes towards people living in poverty, which may limit disclosure of attitudes that did not meet this expectation. Nonetheless, ensuring anonymity through the use of an unique identifier created and known only by each participant minimised this risk.

Third, the small number of students who completed the post-term questionnaire in both the UK and US limits before and after analysis of the effect of education around health inequity

and the social determinants of health. Further research that investigates the impact of pedagogical strategies in nursing curricula to promote social justice is therefore required.

4.4 Implications for nurse education

Notwithstanding these limitations, the findings of this study have notable implications for nursing education and research. The use of the ATP and SJS assisted in gaining a better understanding of student nurses' attitudes to people living in poverty and social justice. Findings showed that the score for perceived behavioural control was lower compared to the score for attitude to social justice and poverty. This could indicate that students find it important to promote social justice and improve the situation of those who experience poverty but are less aware that they can actually make a difference as nurses. Educational strategies should focus on this finding, integrating learning material that helps the students understand the impact of their role as nurse in addressing health inequity. These implications should be taken up by individuals involved in development of educational strategies at the UK and US universities, as well as nurse educators elsewhere.

Additionally, when comparing both cohorts, it was apparent that UK students tend to offer more neutral responses compared to the US students, selecting 'neither agree nor disagree'. This might suggest that UK students did not fully understand the concepts of social justice and poverty when completing the online survey (Baka et al., 2012). Furthermore, the US course had an impact on student nurses' attitudes to poverty and perceived behavioural control, while the course in the UK had no significant effect on attitudes. This might be explained by differences in the methods used to teach the courses, their content, or the characteristics of the students. The course in the UK involved face to face teaching, independent studying, and online learning, while the course in the US involved not only teaching in the classroom, independent studying, online discussion, but also clinical

experiences with a population-specific project. Having the opportunity to apply learning from theory in clinical settings in the same term may have a positive effect.

4.5 Recommendations for further research

The study findings also emphasize the need for further research. It would be helpful to know if the results of this comparative study hold for a period of time, such as 3 or 6 months. However, further learning could be a confounder, as this might influence students' awareness of the social determinants of health. In addition, further research with a larger population might focus on other universities which involve undergraduate nurse education. This could not only help draw more comprehensive conclusions about student nurses' attitudes within each of the countries but could also give insight into a wider range of educational strategies to increase awareness and action around poverty and social justice among student nurses. In addition, unexpected findings from this study suggest that the attitudes of students are relatively more positive compared to registered nurses. The formation of attitudes to people experiencing poverty could be explained by other factors that were not considered in the earlier research. Accordingly, it may be interesting to conduct further research focusing on finding explanations for this possible difference between student nurses and registered nurses.

Another logical step is to gain more in-depth knowledge about attitudes of student nurses, in order to have more understanding about their statements of the online survey. Focus groups could be used to reflect on the course and explore what educational approaches students think should be used to explore issues of social justice and poverty. This provides the opportunity to review and analyse the online survey results and tailor the subsequent in-depth focus group interview instrument to follow-up on significant responses (Driscoll et al., 2007).

Moreover, when looking at the problem as a whole, health inequity is complex and unlikely to be changed by one group of actors alone. Also, the expectation that one group of

health professionals could address this problem is perhaps unrealistic. Therefore, the integration of these types of courses could also be investigated for other allied healthcare professionals, such as dieticians and social workers.

5. Conclusions

Student nurses' attitudes to poverty and social justice in both the UK and US were largely positive. However, US students had more positive attitudes to poverty and social justice, had a higher level of environmental support to perform behaviours promoting social justice, and showed higher intention to carry out social justice and poverty-related behaviours. Engaging in social justice-promoting activities, being an activist, or holding a bachelor degree or higher were associated with more positive attitudes to poverty and social justice.

Nurses need to advocate for change to address deepening disparities in health. The use of effective pedagogical strategies is essential to engage and empower students to challenge societal norms and act for equity. Findings of this study provide a platform for nurse educators to design and deliver courses and curricula that put population health at their heart and highlight the important role of undergraduate nurse education and student nurses as agents of change to achieve health equity.

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Table 1: Sample socio-demographic characteristics (n=230)

Demographic Variable		Characteristic n (%)		P-value [b]
		UK (n=143)	US (n=87)	
Age				
	Under 30	91 (63.6)	45 (51.7)	<0.001
	31-40	36 (25.2)	28 (32.2)	
	41 and over	16 (11.2)	14 (16.1)	
Gender				
	Female	133 (93.0)	75 (86.2)	0.015
	Male	10 (7.0)	12 (13.8)	
Ethnicity				
	White/Caucasian	135 (94.4)	71 (81.6)	<0.001
	Other	8 (5.6)	16 (18.4)	
Highest education				
	Secondary/High School/College	104 (72.7)	32 (36.8)	<0.001
	Bachelor's Undergraduate Degree	30 (21.0)	45 (51.7)	
	Master's Postgraduate Degree/PhD	9 (6.3)	10 (11.5)	
Healthcare-related experience				
	Yes	83 (58.0)	56 (64.4)	0.404
	No	60 (42.0)	31 (35.6)	
Financial security				
	Secure	51 (35.7)	26 (29.9)	0.632
	Somewhat secure	56 (39.2)	30 (34.5)	
	Somewhat insecure	21 (14.7)	16 (18.4)	
	Insecure	15 (10.5)	15 (17.2)	
Part of faith community				
	Yes	32 (22.4)	36 (41.4)	0.003
	No	111 (77.6)	51 (58.6)	
Engaged in social justice promoting activities				
	Yes	41 (28.7)	50 (57.5)	<0.001
	No	102 (71.3)	37 (42.5)	
Identify as activist				
	Yes	23 (16.1)	23 (26.4)	0.063
	No	120 (83.9)	64 (73.6)	
Volunteer				
	Yes	34 (23.8)	45 (51.7)	<0.001
	No	109 (76.2)	42 (48.3)	
Political affiliation [a]				
	Conservative	10 (7.8)	11 (13.6)	0.001
	Moderate	76 (59.4)	24 (29.6)	
	Liberal	42 (32.8)	46 (56.8)	

a Variable includes 21 missing values
b P-values were calculated from chi-square analysis. A p-value of 0.05 was considered statistical significant.

Table 2: Student nurses' attitudes towards poverty (n=230)

Scale item [a]	UK (n=143) n (%)			US (n=87) n (%)		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
Subscale: Personal deficiency						
1. Poor people are different from the rest of society. [c]	100 (70.4)	34 (23.9)	8 (5.6)	61 (70.9)	15 (17.4)	10 (11.7)
2. Poor people are dishonest.	133 (93.0)	8 (5.6)	2 (1.4)	78 (89.7)	7 (8.0)	2 (2.3)
3. Most poor people are dirty. [b]	123 (86.6)	16 (11.3)	3 (2.1)	74 (85.1)	9 (10.3)	4 (4.6)
4. Poor people act differently. [b]	91 (64.1)	33 (23.2)	18 (12.7)	50 (57.5)	22 (25.3)	15 (17.2)
5. Children raised on welfare will never amount to anything.	139 (97.2)	2 (1.4)	2 (1.4)	84 (96.6)	2 (2.3)	1 (1.1)
6. I believe poor people have a different set of values than do other people. [b]	83 (58.0)	44 (30.8)	16 (11.2)	68 (79.1)	10 (11.6)	8 (9.3)
7. Poor people generally have lower intelligence than non-poor people do.	115 (80.4)	17 (11.9)	11 (7.7)	75 (86.2)	10 (11.5)	2 (2.3)
Subscale: Stigma						
8. There is a lot of fraud among welfare recipients. [c]	80 (56.7)	38 (27.0)	23 (16.3)	62 (71.3)	17 (19.5)	8 (9.2)
9. Some "poor" people live better than I do, considering all their benefits.	60 (42.0)	36 (25.2)	47 (32.9)	70 (80.5)	9 (10.3)	8 (9.2)
10. Poor people think they deserve to be supported.	61 (42.7)	48 (33.6)	34 (23.8)	61 (70.1)	18 (20.7)	8 (9.2)
11. Welfare mothers have babies to get more money.	92 (64.3)	40 (28.0)	11 (7.7)	75 (86.2)	7 (8.0)	5 (5.7)
12. An able-bodied person collecting welfare is ripping off the system.	87 (60.8)	30 (21.0)	26 (18.2)	70 (80.5)	11 (12.6)	6 (6.9)
13. Unemployed poor people could find jobs if they tried harder.	69 (48.3)	52 (36.4)	22 (15.4)	68 (78.2)	14 (16.1)	5 (5.7)
14. Welfare makes people lazy.	49 (34.3)	62 (43.4)	32 (22.4)	71 (81.6)	8 (9.2)	8 (9.2)
15. Benefits for poor people consume a major part of the government budget. [b]	50 (35.2)	47 (33.1)	45 (31.7)	56 (64.4)	18 (20.7)	13 (14.9)
Subscale: Structural perspective						
16. Poor people are poor due to circumstances beyond their control.	21 (14.7)	56 (39.2)	66 (46.2)	5 (5.7)	28 (32.2)	54 (62.1)
17. I would support a programme that resulted in higher taxes to support social programmes for poor people.	45 (31.5)	52 (36.4)	46 (32.2)	18 (20.7)	16 (18.4)	53 (60.9)
18. If I were poor, I would accept welfare benefits.	17 (11.9)	35 (24.5)	91 (63.6)	12 (13.8)	12 (13.8)	63 (72.4)
19. People who are poor should not be blamed for their misfortune.	11 (7.7)	34 (23.8)	98 (68.5)	4 (4.6)	19 (21.8)	64 (73.6)
20. Society has the responsibility to help poor people.	12 (8.4)	38 (26.6)	93 (65.0)	3 (3.4)	14 (16.1)	70 (80.5)
21. Poor people are discriminated against.	13 (9.1)	24 (16.8)	106 (74.1)	1 (1.1)	5 (5.7)	81 (93.1)

a Respondents could respond to the items on a scale from 1–5: from 1 = strongly disagree to 5 = strongly agree. Response options were aggregated to minimise disclosure risk and improve the interpretation of survey results. Totals may not sum to 100% due to rounding.

b The item includes one missing variable

c The item includes two missing variables

Table 3: Student nurses' attitudes to social justice (n=230)

Scale item [a]	UK (n=143) n (%)			US (n=87) n (%)		
Subscale: Attitudes	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
22. *I believe that it is important to:*						
a. Make sure that all individuals and groups have a chance to speak and be heard, especially those traditionally ignored or marginalized groups.	3 (2.1)	2 (1.4)	138 (96.5)	0 (0.0)	1 (1.1)	86 (98.9)
b. Allow individuals and groups to define and describe their problems, experiences, and goals in their own time.	3 (2.1)	9 (6.3)	131 (91.6)	1 (1.1)	1 (1.1)	85 (97.7)
c. Talk to others about societal systems of power, privilege, and oppression. [b]	5 (3.5)	15 (10.6)	122 (85.9)	2 (2.3)	4 (4.6)	81 (93.1)
d. Try to change larger social conditions that cause individual suffering and impede wellbeing.	3 (2.1)	10 (7.0)	130 (90.9)	2 (2.3)	2 (2.3)	83 (95.4)
e. Help individuals and groups to pursue their chosen goals in life. [c]	2 (1.4)	4 (2.8)	136 (95.8)	0 (0.0)	3 (3.5)	82 (96.5)
f. Promote the physical and emotional well-being of individuals and groups.	1 (0.7)	1 (0.7)	141 (98.6)	0 (0.0)	0 (0.0)	87(100.0)
g. Respect and appreciate people's diverse social identities.	1 (0.7)	1 (0.7)	141 (98.6)	1 (1.1)	1 (1.1)	85 (97.8)
h. Allow others to have meaningful input into decisions affecting their lives.	1 (0.7)	2 (1.4)	140 (97.9)	1 (1.1)	0 (0.0)	86 (98.9)
i. Support community organizations and institutions that help individuals and groups achieve their aims.	1 (0.7)	4 (2.8)	138 (96.5)	0 (0.0)	1 (1.1)	86 (98.9)
j. Promote fair and equitable allocation of bargaining powers, obligations, and resources in our society. [b]	1 (0.7)	11 (7.7)	131 (91.6)	3 (3.5)	3 (3.5)	80 (93.0)
k. Act for social justice.	1 (0.7)	10 (7.0)	132 (92.3)	2 (2.3)	3 (3.4)	82 (94.3)
Subscale: Perceived behavioural control						
23. I am confident that I can have a positive impact on others' lives. [b]	2 (1.4)	9 (6.3)	132 (92.3)	0 (0.0)	4 (4.7)	82 (95.3)
24. I am certain that I possess an ability to work with individuals and groups in ways that are empowering.	3 (2.1)	8 (5.6)	132 (92.3)	3 (3.4)	6 (6.9)	78 (89.7)
25. If I choose to do so, I am capable of influencing other to promote fairness and equality. [b]	4 (2.8)	19 (13.3)	120 (83.9)	5 (5.8)	9 (10.5)	72 (83.7)
26. I feel confident in my ability to talk to others about social injustices and the impact of social conditions on health and well-being.	13 (9.1)	30 (21.0)	100 (69.9)	9 (10.3)	11 (12.6)	67 (77.0)
27. I am certain that if I try, I can have a positive impact on my community. [b]	7 (4.9)	13 (9.1)	123 (86.0)	2 (2.3)	8 (9.3)	76 (88.4)
Subscale: Subjective norms						
28. Other people around me are engaged in activities that address social justice issues.	33 (23.1)	34 (23.8)	76 (53.1)	5 (5.7)	10 (11.5)	72 (82.8)
29. Other people around me feel it is important to engage in dialogue around social injustices.	22 (15.4)	44 (30.8)	77 (53.8)	5 (5.7)	10 (11.5)	72 (82.8)
30. Other people around me are supportive of efforts to promote social justice. [b]	23 (16.1)	35 (24.5)	85 (59.4)	7 (8.1)	10 (11.6)	69 (80.2)
31. Other people around me are aware of issues of social injustices and power inequalities in our society.	23 (16.1)	30 (21.0)	90 (62.9)	11 (12.6)	9 (10.3)	67 (77.0)
Subscale: Behavioural intentions						
32. In the future, I will do my best to ensure that all individuals and groups in my community have a chance to speak and be heard.	6 (4.2)	17 (11.9)	120 (83.9)	1 (1.1)	4 (4.6)	82 (94.3)
33. In the future, I intend to talk with others about social power inequalities, social injustices, and the impact of social forces on health and well-being.	10 (7.0)	19 (13.3)	114 (79.7)	2 (2.3)	6 (6.9)	79 (90.8)
34. In the future, I intend to engage in activities that will promote social justice.	9 (6.3)	21 (14.7)	113 (79.0)	1 (1.1)	4 (4.6)	82 (94.3)
35. In the future, I intend to work collaboratively with others so that they can define their own problems and built their own capacity and solve problems.	7 (4.9)	7 (4.9)	129 (90.2)	1 (1.1)	3 (3.4)	83 (95.4)

a Respondents could respond to the items on a scale from 1–7: from 1 = entirely disagree to 7 = entirely agree. Response options were aggregated to minimise disclosure risk and improve the interpretation of survey results. Totals may not sum to 100% due to rounding.

b The item includes one missing response

c The items includes three missing responses

Table 4: Scale averages and comparison

	UK			US			
Scale	N	Mean (SD)	Range	N	Mean (SD)	Range	P-value [b]
Subscale 1: Personal Deficiency	143	1.77 (0.56)	1.00-4.57	87	1.66 (0.65)	1.00-5.00	0.058
Subscale 2: Stigma	143	2.57 (0.78)	1.00-4.63	87	1.80 (0.86)	1.00-5.00	<0.001
Subscale 3: Structural Perspective [a]	143	2.38 (0.71)	1.00-5.00	87	1.89 (0.76)	1.00-3.83	<0.001
ATP (Total)	143	2.25 (0.51)	1.24-3.52	87	1.78 (0.65)	1.00-3.86	<0.001
Subscale 1: Attitudes	143	6.36 (0.75)	2.92-7.00	87	6.63 (0.59)	4.18-7.00	0.002
Subscale 2: Perceived behavioural control	143	5.79 (0.96)	2.40-7.00	87	5.83 (0.94)	3.20-7.00	0.746
Subscale 3: Subjective norms	143	4.82 (1.33)	1.00-7.00	87	5.59 (1.24)	1.75-7.00	<0.001
Subscale 4: Behavioural intentions	143	5.81 (1.10)	3.00-7.00	87	6.26 (0.89)	2.00-7.00	0.001
SJS (Total)	143	5.89 (0.75)	2.92-7.00	87	6.23 (0.63)	4.00-7.00	0.001

a. Responses for Factor 3 are reversed as they reflect attitudes that are opposite to the items of both Factor 1 and 2.
b. P-values are calculated by Mann-Whitney U test. A p-value of 0.05 was considered statistical significant.

Table 5: Poverty and social justice subscales regressed on socio-demographic characteristics

Variable	Attitudes poverty		Attitudes social justice		Behavioural control		Subjective norms		Intentions	
	b (SE)	p	b (SE)	p	b (SE)	p	b (SE)	p	b (SE)	p
Healthcare experience	-0.42 (1.67)	0.80	-0.43 (1.03)	0.69	-0.25 (0.65)	0.69	-0.75 (0.76)	0.33	-0.11 (0.57)	0.87
Age 31 or over	0.19 (1.67)	0.91	1.52 (1.09)	0.16	1.08 (0.63)	0.09	0.32 (0.68)	0.62	0.29 (0.58)	0.61
Male	-0.22 (2.56)	0.93	1.69 (1.52)	0.25	1.77 (0.93)	0.05	1.45 (1.08)	0.17	0.62 (0.94)	0.51
White/Caucasian	1.35 (2.86)	0.65	1.05 (2.24)	0.64	-1.10 (1.22)	0.36	-1.23 (1.28)	0.33	0.95 (1.21)	0.42
Bachelor degree or higher	-4.28 (1.73)	0.02	1.36 (1.12)	0.21	-1.21 (0.63)	0.05	2.26 (0.67)	<0.01	0.56 (0.55)	0.31
Financial secure	2.08 (1.67)	0.20	1.60 (1.08)	0.15	0.78 (0.73)	0.28	0.42 (0.80)	0.58	0.07 (0.63)	0.92
Faith	1.23 (1.79)	0.49	0.74 (1.22)	0.53	-0.35 (0.69)	0.63	0.09 (0.80)	0.90	0.55 (0.59)	0.36
Promoting social justice	-5.50 (1.77)	<0.01	3.27 (1.13)	0.01	2.34 (0.66)	<0.01	2.31 (0.69)	<0.01	2.10 (0.54)	<0.01
Activist	-8.99 (1.95)	<0.01	2.37 (1.07)	0.03	1.86 (0.65)	0.01	2.82 (0.79)	<0.01	2.26 (0.51)	<0.01
Volunteer	3.27 (1.70)	0.06	-1.97 (1.05)	0.06	-0.24 (0.59)	0.71	-0.47 (0.70)	0.52	-0.23 (0.55)	0.70
Adjusted R^2	0.18		0.09		0.10		0.17		0.13	