



RESEARCH REPORT

Nigerian physiotherapists' perceptions of their profession's prestige and implications[†]

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KEYWORDS

Nigeria; occupational prestige; physiotherapists' perception; physiotherapy profession Abstract This study investigated Nigerian physiotherapists' perceived prestige of their profession relative to 11 selected occupations and how their perception was influenced by selected sociodemographics. A total of 368 copies of a questionnaire adapted from a previous study were sent to registered physiotherapists working in Nigeria as of May 2007. Data were analysed using Chi-square, Kendall's W, and multidimensional scaling analysis. Two hundred sixty copies of the questionnaire were completed and returned (70.7% response rate). Respondents included 161 men (62%) and 99 women (38%). Most of them (78.5%) were aged between 20 years and 39 years and were bachelor degree holders (67.2%). Physiotherapy was ranked second on level of education, third on usefulness to the society, fifth on level of responsibility, sixth on social standing, and seventh on income. Physiotherapy was rated fifth overall. The only sociodemographic variable that significantly influenced overall perceived occupational prestige of physiotherapy was type of workplace. Physiotherapists in Nigeria perceived their profession as having moderate occupational prestige, placing it in the fifth position below accountant, lawyer, doctor, and engineer. Physiotherapists in Nigeria need to work hard on improving the prestige standing of their profession. Copyright © 2011, Elsevier. All rights reserved.

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Introduction

A characteristic of any profession is that it occupies a social standing relative to other professions [1]. According to Daniel [2], social position in modern society is determined to a great extent by a person's occupation or that of his or her parents rather than inherited standing. There is also evidence that a person's character, level of intelligence and education, ability, and personal acceptability are assumed from an occupational label [2,3]. Certain professions, including medicine, politics, and legal professions are associated with power, prestige, and material reward [2]. The social standing of a profession is referred to as occupational prestige, and it is usually evaluated as the perception of that profession relative to other occupations by different groups of people in the society [1]. It is also frequently evaluated on five dimensions, which are levels of income, education, social standing, responsibility, and usefulness to the society [4]. Occupational prestige is a useful indicator of the profession's marketability and desirability [1].

The social standing of an occupation is frequently of interest to its members, and physiotherapy is no exception [4]. Several studies have reported that physiotherapy had poor image and little in the way of professional status granted to it by medical practitioners and laymen [5-8]. A few studies have evaluated physiotherapy students' perception of their prospective profession relative to other occupations [1,4,9]. In one such study, physiotherapy students and the public in England ranked physiotherapy as an intermediate occupation rather than as a profession [1]. On the other hand, physiotherapy students in Australia ranked their future profession as having overall high prestige standing alongside doctor, judge, and solicitor [4]. Furthermore, the results of this study suggested that physiotherapists have a high level of social standing and occupational prestige and align themselves with high-status professions [9].

Physiotherapy practice started in Nigeria in 1946 by an expatriate chartered physiotherapist [10]. The Nigeria Society of Physiotherapy (NSP) was inaugurated in August 1959 and became a full member of the World Confederation of Physical Therapy in 1967 [11]. Physiotherapy training in Nigeria commenced in 1966 at the University of Ibadan, and today, degrees in physiotherapy are available in six other universities in Nigeria. The products of these courses continue to enhance physiotherapy practice in Nigeria. Physiotherapy services are available in tertiary and secondary health institutions in all state capitals, the federal capital territory, and most other major towns in the country. Physiotherapy services are also available in a few private clinics and hospitals, sports commissions, schools, and institutionalised care centers for individuals with physical disabilities. Community-based physiotherapy services are few and are supported by nongovernmental "leprosy and tuberculosis care" organisations. Industrial physiotherapy practice is at its rudimentary stage in Nigeria. Physiotherapy practice in Nigeria is regulated by the Medical Rehabilitation Therapists Registration Board.

Relatively few studies have evaluated physiotherapists' perceptions of their profession [4]. In addition, published

data on occupational prestige of physiotherapy from Nigeria are not readily available. This study was, therefore, conducted to determine Nigerian physiotherapists' perception of their profession's prestige relative to 11 selected occupations.

Materials and methods

This survey was approved by the University of Ibadan and University College Hospital Research Ethics Committee. Participants were physiotherapists, registered with the Medical Rehabilitation Therapists Registration Board of Nigeria and were recruited between May and September 2007. Data were collected using a self-administered questionnaire, adapted from that used in the study by Turner [4]. The questionnaire by Turner [4] was modified during a focus group discussion. Four physiotherapists and four career guardians/counsellors participated in the focus group discussion. The lead author moderated the discussion, another author took notes, and a third author served as an observer at the focus group discussion. The focus group discussants agreed that in Nigeria, chiropractics was not practised and the job of post-person was no longer available, and it should therefore be replaced by some other occupations; police constables are often referred to as police officers and solicitors are better known as lawyers in Nigeria; and judges are primarily lawyers and should be replaced by another occupation. It was also agreed upon that the jobs of mechanic, barperson, post-person, and cleaner do not require long periods of training or more than primary school education and should, therefore, be replaced with those that require some form of postsecondary school education to avoid redundancy in response. At the end of the group discussion, the 12 professionals included in the adapted questionnaire were engineer, pharmacist, accountant, architect, doctor, nurse, physiotherapist, secondary school teacher, police officer, lawyer, medical laboratory scientist, and journalist. The adapted questionnaire was pretested among 10 physiotherapists, who were then involved in a debriefing interview. They reported no difficulty in understanding or completing the questionnaire.

Copies of the guestionnaire were mailed to one contact person in each of the 36 states and the federal capital territory of Nigeria, who served as facilitators for distribution and collection of copies of the questionnaire from other physiotherapists in their areas. The contact persons were members of the state chapters of the NSP, who had given their words to facilitate the questionnaire administration. The 2006 register of the Medical Rehabilitation Therapists Registration Board of Nigeria served as a useful guide in determining the number of copies of the questionnaire to be sent to each state and the federal capital territory of the country. Each facilitator was provided with two large stamped envelopes to facilitate the return of completed copies of the questionnaire. Regular telephone communication was maintained with the facilitators to ensure good return rate. A total of 368 copies were sent out. The physiotherapists were requested to rank the listed 12 occupations, using a 6-point bipolar interval scale on five dimensions (levels of income, education, social standing,

responsibility, and usefulness to the society). On the scale, 1 and 2 represent low, 3 and 4 moderate, and 5 and 6 high ranking. To counter possible order effect, four versions of the questionnaire were represented by colours; two orders of the professions were shown as green and red, and two orders of dimensions were shown as blue and black [4].

Data were summarised using mean and standard deviation and frequencies. Influence of age, education, years of working experience, and type of workplace on the respondents' overall perceived occupational prestige was analysed using Chi-square test. Alpha was set at 0.05.

The level of agreement among participants for each dimension was measured using Kendall's coefficient of concordance (Kendall's W). In addition, a nonmetric multidimensional scaling analysis was performed to calculate overall prestige.

Results

Two hundred sixty out of 368 copies of the guestionnaire distributed were completed and returned, giving a 70.7% response rate. Respondents were aged 33.9 ± 7.2 years, and most of them were within the 20-year to 39-year age group (Table 1). There were more male (62%) than female (38%) physiotherapists. Table 1 also shows that most of respondents held a bachelor degree (67.3%) and practised in tertiary and secondary health institutions (91.2%). Most (69.3%) of the respondents had less than 10 years of practising experience as physiotherapists (Table 1). The level of agreement (Kendall's W) was greater in two dimensions in female participants (level of responsibility and usefulness) and greater in the other dimensions in male participants (Table 2). Level of social standing had the highest degree of consensus (Kendall's W) of all the dimensions. The level of usefulness had a poor degree of consensus for male participants (Table 2), with Kendall's W = 0.039, whereas level of income had the lowest degree of consensus for female participants (Kendall's W = 0.043).

Table 1	Sociodemographic characteristics of respondents
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Parameters	Subgroups	Frequency	%
Age group (yr)	20–29	84	32.3
	30-39	120	46.2
	40-49	44	16.9
	50-59	12	4.6
Sex	Female	161	61.9
	Male	99	38.1
Highest educational	Diploma	5	1.9
attainment	First degree	175	67.3
	MSc	75	28.9
	PhD	5	1.9
Type of workplace	Tertiary	152	58.5
	Secondary	85	32.7
	Private	23	8.9
Years of working	0-4	87	33.5
experience	5—9	93	35.8
	10–14	43	16.5
	15—19	15	5.8
	20+	22	8.5

 Table 2
 Degree of consensus (Kendall's coefficient of concordance, W)

Dimension	Kendall's W			
	Male	Female	Both sexes	
Level of income	0.045	0.043	0.041	
Level of education	0.090	0.066	0.076	
Level of social standing	0.098	0.092	0.093	
Level of responsibility	0.057	0.082	0.064	
Level of usefulness	0.039	0.072	0.050	
All dimensions	0.083	0.079	0.081	

Accountants and lawyers were ranked highest (4.54, i.e. mean rank) on level of income. Physiotherapists and medical laboratory scientists were ranked seventh (4.27) below doctor (4.51), engineer (4.41), and pharmacist (4.36), on level of income (Fig. 1A). On level of education, physiotherapist was ranked (4.69) second to doctor (4.75). Lawyer was ranked (4.65) next to physiotherapist (Fig. 1B). The professional in the first position on the level of social standing was accountant (4.86), followed by lawyer (4.81) and engineer (4.65). Journalist was ranked fourth (4.52). doctor was fifth (4.46), and physiotherapist was sixth (4.38) on level of social standing (Fig. 1C). On level of responsibility, physiotherapist was ranked fifth (4.76) below accountant (4.88), doctor (4.86), nurse (4.83), and secondary school teacher (4.82) (Fig. 1D). On the level of usefulness to the society, physiotherapist was ranked third (4.79) below secondary school teacher (4.99) and doctor (4.83) (Fig. 1E). In all the five dimensions of occupational prestige, architect was ranked 11th and police officer ranked lowest. Fig. 1F shows that overall, physiotherapist was ranked fifth (22.72) on occupational prestige. The professional with the highest mean overall ranking was accountant (23.28), followed by lawyer (23.20) and doctor (23.18). The professionals with the two lowest occupational prestige rankings were architect (19.33) and police officer (18.49).

Fig. 2 shows the overall perceptions of the occupations by the Nigerian physiotherapists. Within the space, the occupations can be divided into three groups, from high prestige standing at the one extreme (doctor and architect) to low prestige standing at the other extreme (police officer and secondary school teacher). The occupations in all prestige standing show marked differentiation except the group in intermediate prestige standing, where they were closely grouped together. Journalist is aligned very closely with nursing and medical laboratory scientist, whereas physiotherapist is closely aligned with lawyer and accountant. Pharmacist is also aligned closely with engineer. The only sociodemographic variable that significantly influenced the overall perceived occupational prestige of physiotherapy was type of workplace (Table 3). Physiotherapists working in tertiary health institutions ranked physiotherapy higher than those who were working in either secondary health or private institutions.

Discussion

The response rate of 70.7% is high, considering the mode of administration and retrieval. The sample could be said to

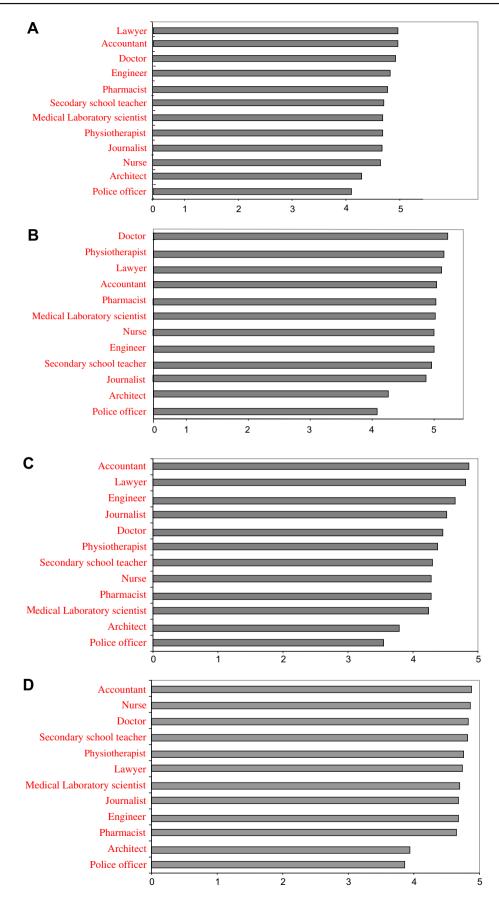
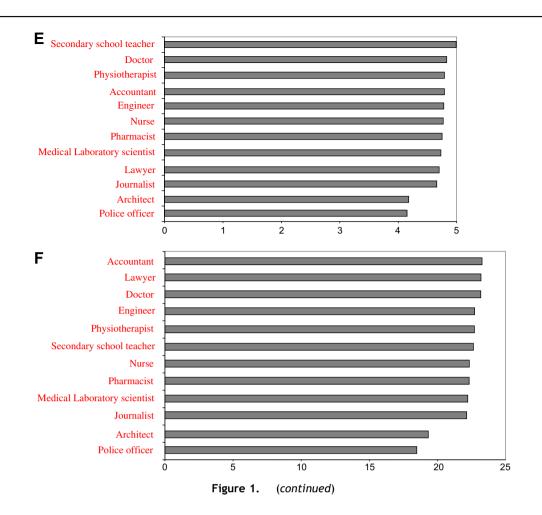


Figure 1. Mean ranks for (A) level of income, (B) level of education, (C) social standing, (D) level of responsibility, (E) level of usefulness, and (F) all the five dimensions.



be representative of physiotherapists in Nigeria because response was obtained from all states of the federation and the federal capital territory. There were more male than female participants in this study. This implies that there are probably more male than female physiotherapists in Nigeria, and it corroborates the finding of a previous study

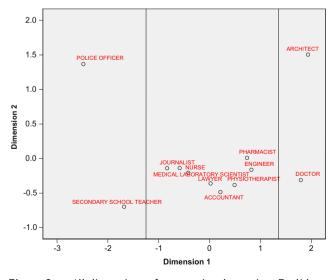


Figure 2. All dimensions of occupational prestige: Euclidean model.

[12]. Most respondents were working in tertiary and secondary health institutions. This finding supports the observation that in Nigeria, most physiotherapists work in government facilities, especially university teaching hospitals and state/general hospital. Only a small proportion of physiotherapists in Nigeria practise in primary health care centres, private clinics, or industries [12]. Although physiotherapy practice was introduced into the country in the 1940s, it was only in the 1980s that private physiotherapists to date. Another explanation for this could be that unlike physiotherapists in Australia, New Zealand, and the United States, physiotherapists in Nigeria do not practise as first-contact health providers.

Physiotherapists in Nigeria ranked their profession seventh on the level of income. This finding is similar to those of Whitfield et al [1], Turner [4], and Mandy and Mandy [9], where students in England, Australia, and America ranked physiotherapy fifth and sixth on level of income related to other 11 selected occupations. The professionals who were ranked above physiotherapist on level of income in this study are lawyers, accountants, doctors, engineers, pharmacists, and secondary school teachers. In Nigeria, there seem to be more doctors, lawyers, engineers, and pharmacists practising in the corporate and private sectors than physiotherapists. This can explain why physiotherapists perceived them higher on level of income. On level of education, physiotherapist was

Table 3 Influence	e of sociodemographics Age	Sex	YWE	Edu.	Workplace
	Age	Jex		Luu.	νυικριατε
Engineers	0.00	0.57		2.04	2.57
χ^2	0.88	0.57	1.66	3.91	3.57
р	0.83	0.45	0.65	0.04*	0.17
Pharmacist					
χ^2	4.22	0.86	0.73	3.07	6.77
р	0.24	0.36	0.87	0.08	0.03*
Accountant					
χ ²	5.42	0.62	2.24	3.90	2.82
p	0.14	0.42	0.52	0.04*	0.24
Architect χ^2	0.52	0.69	0.99	6.83	6.26
χ p	0.92	0.69	0.99	0.03	0.04*
	0.72	0.41	0.01	0.01	0.04
Doctor					
χ^2	0.63	0.17	1.05	1.71	4.42
p	0.89	0.68	0.79	0.19	0.11
Nurse					
χ ²	5.30	0.01	1.21	1.59	1.64
p	0.15	0.93	0.75	0.44	0.44
Physiotherapist					
χ^2	1.98	0.36	0.22	1.45	7.66
л. p	0.58	0.55	0.98	0.23	0.02*
Secondary school te					
χ²	2.72	0.24	0.80	0.44	1.05
p	0.44	0.62	0.85	0.51	0.59
Police officer					
χ^2	3.33	1.43	4.24	0.17	2.23
х. p	0.34	0.23	0.24	0.68	0.33
	0.51	0.25	0.21	0.00	0.55
Lawyer χ ²	2.42	• • •		. = 0	
	3.42	0.06	1.94	1.78	0.34
p	0.33	0.81	0.59	0.18	0.84
Medical laboratory		0.17	2 90	0.00	2.34
χ^2	12.27 0.01	0.17 0.68	3.80 0.28	0.00 0.97	2.34 0.31
р	0.01	0.00	0.20	0.97	0.51
Journalist					
χ^2	2.75	0.01	1.41	0.03	1.60
р	0.43	0.93	0.70	0.87	0.45

*Significant.

Edu = highest educational qualification; workplace = type of workplace; YWE = years of working experience.

ranked second only to doctor. This finding is also similar to those of Whitfield et al [1] and Turner [4]. In these previous studies, physiotherapy students in England and Australia ranked physiotherapy second to third on level of education relative to other selected occupations. It is, however, interesting to note that physiotherapist was ranked above lawyer, engineer, pharmacist, and accountant, who require the same number of years of education at university level. Physiotherapists in Nigeria ranked their profession sixth on level of social standing. The professions perceived as having higher social standing by physiotherapists than their own profession are those that are probably better known and are accorded more respect by the Nigerian public. The ranking of physiotherapists on level of social standing in this study is lower than the ranking reported in the studies by Whitfield et al [1] and Turner [4]. In these studies, physiotherapist was ranked among the top three professionals on level of social standing by physiotherapy students.

The perceived high level (third) of usefulness to the society in this study corroborated that of Whitefield et al [1] and Turner [4], who reported that a physiotherapist was ranked third in terms of the perceived usefulness to the society by physiotherapy students, below doctor and judge. Mandy and Mandy [9] reported it to be second below doctor. The perception of the respondents of their own profession on level of responsibility could be said to be moderate (fifth) below accountant, nurse, doctor, and secondary school teacher in that order. This finding agrees with that of

Chung and Whitfield [3], who reported that Korean and Australian public perceived physiotherapist as having intermediate level of responsibility along with police and nurse. However, police is perceived to have the lowest occupational prestige in all dimensions by physiotherapists in Nigeria. The perceived level of responsibility of physiotherapist by respondents in this study is, however, lower than those reported by Turner and Whitfield [13] and Turner [4], who reported physiotherapist to be among the "top three" professionals, behind only the judge and doctor. Physiotherapists in Nigeria perceived their profession as having overall moderate occupational prestige below four other professionals (accountant, lawyer, doctor, and engineer). This finding is different from that of Turner [4], who reported physiotherapy as having high occupational prestige among the Australian physiotherapy students.

The occupational prestige ranking of physiotherapists in this study (4.54) was less than 5.2, as reported by Turner [4], but closer to that of Whitfield et al [1] of 4.8. Also, based on the profile of each occupation, as shown by Euclidean space, Nigerian physiotherapists perceived physiotherapy to have only intermediate prestige standing. This was similar to the study of Mandy and Mandy [9], which placed physiotherapy in intermediate position in Euclidean model. In contrast, physiotherapy students in Australia placed physiotherapy in high overall prestige standing, allied to the "big three" of doctor, judge, and solicitor [4]. The results demonstrated a lower degree of consensus across the dimensions compared with the previous reports of Turner [4] and Mandy and Mandy [9]. The level of income and usefulness dimensions, however, did show particularly low levels of concordance. This concurs with the earlier work that reported equally low levels for income dimension [4,9].

This study reveals that only the type of workplace significantly influenced the occupational prestige rankings of the various occupations. Physiotherapists practising in the tertiary health institutions ranked the occupations higher than those working in either the secondary or private health institutions. This could be because of the fact that, in Nigeria, in the tertiary health institutions, the work environment, interprofessional interaction, and earnings are better than those in the secondary health institutions. Most private health institutions are owned by individuals and are at the level of small-scale entrepreneurship.

The Nigerian physiotherapists' perception of their profession as having overall moderate occupational prestige may be regarded as a reflection of their self-worth as professionals. If there is any time that the prestige of physiotherapy should be perceived as high, at least by its incumbents, it is in the 21st century. According to Dean [14], physiotherapists in the 21st century are uniquely positioned to lead in health promotion and prevention of lifestyle conditions, which have escalated to epidemic proportions in many high-income, middle-income, and even low-income countries [14]. Lifestyle conditions include hypertension, obesity, Type 2 diabetes mellitus, cardiovascular disease, obstructive lung disease, stroke, osteoporosis and cancer; and are associated with life-threatening consequences [15]. These conditions require behavioural modifications and physiotherapists have an important role to play in this. Generally, physiotherapy practice in Nigeria still remains at the traditional level of prescribing education and therapeutic exercise to address health, illness, injury, and disability. There is an urgent need to make Nigerian physiotherapists realise that, as noninvasive practitioners, they are uniquely gualified to promote healthy communities through the health of its individuals. The NSP, the Medical Rehabilitation Therapists Registration Board of Nigeria, and other stakeholders should also take steps to promote the adoption of health-focused practice rather than illnessand disability-focused practice among physiotherapists in Nigeria. Entry-level physiotherapy curricula in Nigerian universities should also be reviewed to include epidemiology, the elements of health, risk factors, and chronic conditions as recommended by Dean [14]. When Nigerian physiotherapists understand and perform their role as noninvasive practitioners in promoting the health of individuals and the society, they probably will have better perception of their profession's prestige.

Conclusions

Nigerian physiotherapists perceived their profession as having moderate occupational prestige standing. There is a need for the NSP and other stakeholders to make Nigerian physiotherapists understand their role in the 21st century as noninvasive practitioners in promoting the health of individuals and the society. This understanding will promote health-focused rather than illness- and disabilityfocused practice among Nigerian physiotherapists and improve their self-worth as professionals.

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