Typical Profile of the Most Satisfied Physiotherpists Working in Kinshasa

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Abstract

Introduction: Job satisfaction is a positive emotional state resulting from a person's evaluation of their work. Job satisfaction is a central concept in understanding attitudes towards work (productivity, motivation, commitment) and in preventing psychosocial risks.The aim of this study is to describe the typical profile of the most satisfied physiotherapist in the exercise of their profession in hospitals around Kinshasa.

Method: The MSQ (Minesotta satisfaction Questionnaire) was administered to a group of 174 physiotherapists practising in Kinshasa hospitals, in order to assess their level of satisfaction. Of these, 40 were invited to a semi-structured interview for the qualitative analysis. The statistical approach consisted of ANOVA and Principal Component Analysis (PCA) to determine the typical profile of the most satisfied physiotherapist. The qualitative analysis shed light on the interpretation of the results of the quantitative analysis.

Results: The mean Global Satisfaction Index (GSI) was 3.16 ± 1.12, with 95% of physiotherapists satisfied with the practice of their profession. ANOVA showed that the GSI was influenced by 3 variables: diploma title, profession name and hospital work. The PCA revealed a number of determinants of satisfaction: professional experience, number and proxy of patients, investment (practice or training) and work organisation.

Conclusion: The typical profile of the most satisfied physiotherapists is similar to that of a graduate physiotherapist with an ISTM diploma who does not work in a hospital but in a rehabilitation centre. These determinants of job satisfaction could help physiotherapists or professional organisations of physiotherapists in their quest for well-being in their careers.

Keywords: Job Satisfaction; Well-Being At Work; Physiotherapy; Professional Commitment; Teamwork; Motivation

Introduction

Work refers to the physical and/or intellectual effort that must be made to achieve something or obtain a desired result. As a paid activity or occupation, work is synonymous with employment. For most people, work is experienced as a driving force that gives meaning to life, providing an identity and a social role for the worker and enabling him or her to meet basic needs [1].

According to the European Commission's Directorate-General for Employment and Social Affairs, work can have a positive impact on health and well-being when the business climate is favourable [2].

In social terms, physiotherapists play an important role in the healthcare system. Their work gives them a social status and a certain amount of recognition [3]. Physiotherapy, as a medical and technical discipline, has proven its effectiveness in various fields of medicine. In some cases, it is essential and/or indispensable to patients' functional recovery. An orthopaedic, neurological, cardiopulmonary or geriatric rehabilitation centre could never function without physiotherapists, who are the key players [3].

The difficult socio-economic situation in Kinshasa, as throughout the DRC, characterised by insecure employment, high unemployment and rampant social exclusion, means that the physiotherapists of Kinshasa are not fully employed. The average rate of use of healthcare services is estimated at 0.15 consultations per inhabitant per year [4]. Working hours fluctuate due to lack of activity or lack of patients, and salaries are modest [5]. Physiotherapists in Kinshasa are therefore subject to atypical employment characterised by occasional, partial and temporary work, which exposes them to a degree of precariousness and social and professional insecurity [6].

According to Oudot [1], these atypical forms of employment (part-time, occasional, temporary, interim) are rarely chosen but often suffered, and can be equated with job insecurity, with possible repercussions on the private life, well-being and physical and mental health of the worker. For Harrisson [7], the way in which individuals feel and act within the company or their work, the perception they have of their status, and the recognition they receive, influence their well-being and consequently their health.

Malenfant states that the relationship with work refers to the notion of job satisfaction and the meaning of work in the life project [8]. Oudot has shown that job satisfaction is the central factor influencing an individual's psychological, physical and organisational well-being [1].

Job satisfaction is a positive or pleasant emotional state resulting from a person's evaluation of their work or work experiences [9]. For Thévenet, satisfaction is also defined as a state after a work experience [10].

In human resources, job satisfaction is a central concept in understanding attitudes to work and preventing psychosocial risks. It is even considered to be an explanatory variable for organisational effectiveness, performance, staff turnover, strikes and resistance to change [10].

*In order to perform effectively, any healthcare system relies on its healthcare professionals to provide quality care to the population. The healthcare system must therefore be vigilant about human resources, i.e. the availability of providers, their distribution, their working conditions and their remuneration. If healthcare professionals are not satisfied with their work, there is a good chance that this will have repercussions on the quality of the service provided to patients, who in turn may be dissatisfied, to the detriment of healthcare institutions or the healthcare system in general [3].

Job satisfaction among healthcare professionals is increasingly recognised as a measure or variable to be included in a healthcare quality improvement programme [3].

Working mainly in hospitals, rehabilitation centres or group practices, physiotherapists in Kinshasa are also confronted with the problems of atypical employment, low pay, relations and atmosphere with colleagues, career advancement, recognition, etc., all of which are determining factors in job satisfaction. It was against this backdrop that we conducted a survey of job satisfaction among physiotherapists in Kinshasa.

To measure job satisfaction, we opted for Weiss' MSQ (Minnesota Satisfaction Questionnaire) scale, as translated into French by Roussel in 1994, which highlights five main dimensions of satisfaction: intrinsic satisfaction, work climate and atmosphere, need for social relations, promotion and remuneration, and respect for the employee's moral values [11].

The aim of the study was to assess the job satisfaction of physiotherapists by calculating the Global Satisfaction Index (GSI) derived from the MSQ scale, and to determine the typical profile of the most satisfied physiotherapists in Kinshasa by comparing the GSI with socio-demographic data using ANOVA (Analysis of Variance) and PCA (Principal Component Analysis). This profile, with its determinants of job satisfaction, could guide physiotherapists or professional organisations of physiotherapists in their quest for well-being at work.

Methods

Methodology

Following the example of the study conducted by Kahumbera and Duranton [12], a mixed methodology combining quantitative and qualitative data collection was used. This data collection followed the sequential mixed explanatory study design devised by Creswell and Clark [13], which begins with the collection of quantitative data, followed by that of qualitative data in order to enrich, contextualise and qualify the quantitative results. As stated by El Achhab et al. [14], priority is given to quantitative data.

A. Quantitative part

Population

Based on the accidental sampling method [15], each physiotherapist met in the facilities visited was asked to participate in the study, without regard to the sample size per facility. The population studied was made up of physiotherapy graduates working in hospitals and rehabilitation centres in Kinshasa, who had agreed to take part in the study. To ensure a good representation of health care facilities, our study followed the DRC health pyramid, which categorises them according to their capacity and specialisation.

Health Pyramid Defined by the Ministry of Health:

-primary reference hospitals HGR1 (General Reference Hospitals in the Health Zones), secondary reference hospitals HGR2 (hospitals with a slightly higher technical platform than the HGRs in the Health Zones) and tertiary reference hospitals (provincial reference hospitals, university clinics HU3 and non-university tertiary level clinics HNU3).

-CRV rehabilitation centres: the CRHP physical disability rehabilitation centre, rehabilitation centres or structures in the "Bondeko villages" network and private rehabilitation centres.

There are Two Institutions That Train Physiotherapists in Kinshasa:

The physiotherapy department of the ISTM (Higher Institute of Medical Techniques), which trains graduate physiotherapists (3-year course) and licensed physiotherapists (5-year course).

The Faculty of Medicine at UNIKIN (University of Kinshasa), which trains physiotherapists known as "physical doctors" who complete a 5-year course.

Both streams are located on the UNIKIN campus.The questionnaire was either self-administered (60%) or completed face-to-face (40%), depending on participants' preferences.

A total of 193 questionnaires were collected. However, 9 questionnaires were deemed incomplete. This corresponds to a validity rate of 90%, leading to 174 eligible opinions.

Hardware

Each questionnaire consisted of two distinct parts. Firstly, a sociodemographic questionnaire, including items specific to the profession, such as hours worked, number of patients treated, recruitment method, etc. Secondly, the Weiss or Minesotta Satisfaction Questionnaire (MSQ), translated into French by Roussel (1994), leading to the calculation of the Global Satisfaction Index (GSI). The GSI is an arithmetic average of the sum of different job satisfaction items. The MSQ uses a 5-point Likert scale. An GSI > 2.5 indicates satisfaction.

Statistical Analysis

Descriptive statistics were performed using IBM SPSS Statistics software (version 25). An analysis of variance (ANOVA) and a principal component analysis (PCA) were used to study the influence of sociodemographic variables on the GHI.

The PCA Was Carried Out in 3 Main Stages:

1. Compliance with the postulates and verification of 3 indices which are prerequisites for the set of variables to meet the PCA criteria: the correlation matrix with values between 0 and 1, a KMO (Kaiser-Meyer-Olkins) index greater than 0.5 and a Bartlett's sphericity test with p<0.005.

2. Choice of principal component extraction method.

3. Interpretation and labelling of the components obtained.

B. Qualitative section

Collection of Qualitative Data

For our qualitative study, we opted for the construction of a framework analysis for a thematic analysis or qualitative content analysis. Like Gale [16], we sought to develop themes and models capable of clearly describing physiotherapists' satisfaction.

The sample comes from the population of 174 physiotherapists interviewed in the quantitative part of this study. During the quantitative phase, the interviewers selected a group of experienced physiotherapists for the semi-structured interviews. They showed a particular interest in the satisfaction survey and were sensitive to the issue of physiotherapists' working conditions and the promotion and enhancement of the physiotherapy profession.

Main Inclusion Criteria Were:

-to have at least 10 years' experience in a hospital or rehabilitation centre.

-to show an interest or motivation in the subject of the survey, i.e. physiotherapists' job satisfaction and working conditions (judgment or subjective point of view of the interviewer).

- to accept the offer to take part in the qualitative part with a semi-directive interview.

This group of experienced physiotherapists is a guarantee for the credibility of the statements and therefore for the collection of quality information. In order to carry out a qualitative study of high quality, El Achhab [14], Mayaka [17] and Kahombera [12], like us, selected the participants on the basis of their expertise or their interest in the subject studied.

Forty physiotherapists who agreed to be interviewed were therefore likely to participate in the qualitative part of the study. However, 17 of the 30-minute semi-structured interviews with these physiotherapists (11 men and 6 women) reached the semantic and theoretical saturation point.

Each Interview Was Recorded Using a Dictaphone. The Interview Guide Covered the Following Themes Relating to Job Satisfaction:

-Choice of and interest in studying physiotherapy

-view of the profession

-possible mismatch between the apprenticeship period and the reality on the ground

-elements of job satisfaction or dissatisfaction

-financial and salary satisfaction

-point of view on working conditions

-Suggestions for improving working conditions.

-point of view on physical or psychological suffering at work

Data Analysis

The data was analysed and collected manually, following the steps in the analysis framework defined by Ritchie and Spencer [18].

Each recorded interview was transcribed verbatim, prior to familiarisation, which consisted of reading and re-reading the transcribed text in order to assimilate the content or emerging themes. In the coding stage, short sentences or text extracts were labelled or coded according to themes, in relation to the physiotherapists' satisfaction. An analytical framework was then developed by grouping or categorising the various themes or sub-themes in a matrix. Finally, there was the mapping and interpretation phase, which consisted of reviewing all the themes in order to identify trends and link these themes to the objective of our research, with the aim of giving meaning and an overall understanding to the set of qualitative data.

The following figure illustrates the analytical framework used to present our results.
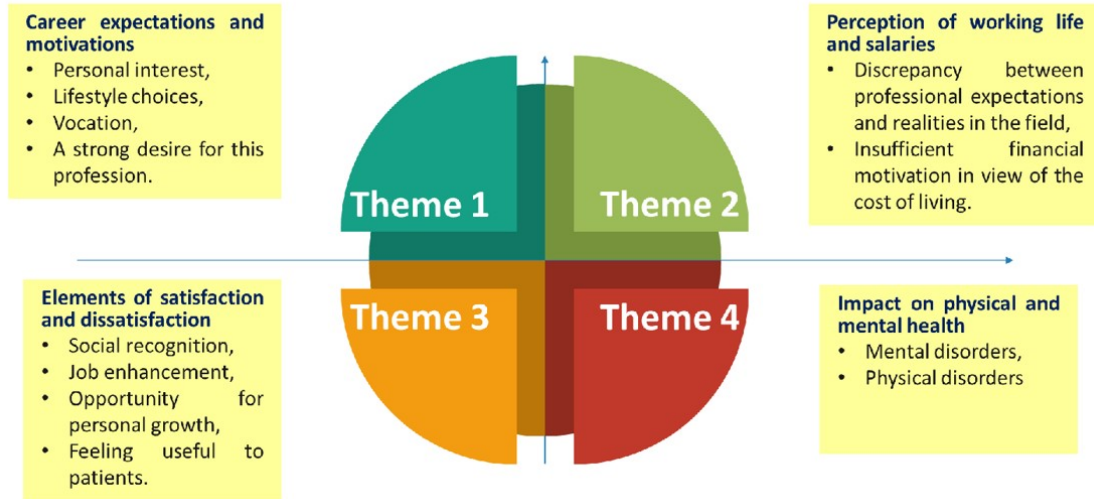
Figure 1: Framework for analysing the job satisfaction of physiotherapists in Kinshasa

Theme 1: Career expectations and motivations (personal interest, lifestyle choices, a strong desire for this profession.

Theme 2: perception of working life and salaries (discrepancy between professional expectations and realities in the field, insufficient financial motivation in view of the cost of living.

Theme 3: Elements of satisfaction and dissatisfaction (social recognition, job enhancement, opportunity for personal growth, feeling useful to patients.

Theme 4: Impact on physical and mental health (mental disorders, physical disorders).

Results

I. Descriptive Statistics

Socio-Demographic Data

Table 1 below shows the numbers and percentages of different qualitative variables from the socio-demographic questionnaire.

Table 1: Percentage of qualitative variables in the population.

Qualitative variable		Number of employees (out of 174)	Percentage (%)
Gender :	Men	71	41
	Woman	103	59
Congolese nationality :		174	100
Status :	Married	107	61
	Divorced	1	1
	Single	63	36
	Widower	3	2
Profession :	Physiotherapist	161	93
	Physical Physician	13	7

Institute :	ISTM	161	93
	Faculty of Medicine	13	7
Diploma :	Degree	129	74
	Licence	44	25
	Doctorate	1	1
Net salary:	< 50000FC	28	16
	50000 - 100000FC	51	29
	> 100000FC	95	55
Years of experience:	<10 years	93	53
	10-20 years	52	30
	>20 years	29	17
Hospital :	Yes	164	94
	No	10	6
Cabinet :	Yes	88	51
	No	86	49
Domicile :	Yes	154	88,5
	No	20	11,5
Combination :	Hospital + private practice	12	7
	Hospital + Home	92	53
	Office + Home	45	26
	Hospital + private practice + home	25	14

Abbreviations: ISTM (Institut supérieur des techniques médicales), FC (Congolese francs).

According to the exchange rate at the time of the survey, 50,000FC was worth $50.

The 174 physiotherapists included in the study were all Congolese, 41% men and 59% women. Their average age was 39, ranging from 22 to 72 years, with an average professional experience of 11 years. *53% of the physiotherapists in our study had less than 10 years' experience, 30% had between 10 and 20 years' experience and 17% had more than 20 years' experience. We found that 61% of physiotherapists were married, 1% divorced, 36% single and 1% widowed.

In terms of professional status, our study counted 93% of physiotherapists who had studied at the ISTM and 7% of physical physicians who had studied at the UNIKIN medical school. If we consider only the academic title, we obtained 74% of graduates (3-year course), 25% of licentiates (5-year course) and 1% of doctors of physiotherapy.

Fifty-five percent of the sample earned more than 100,000 Congolese francs (CF) net per month, compared with 29% earning between 50,000 and 100,000 CF, and 16% earning less than 50,000 CF. All physiotherapists combined at least two places of work: hospital private practice or treatment in the patient's home.

Weiss Questionnaire (MSQ) / IGS

The table below details the Satisfaction Index with the number of physiotherapists, the mean, the standard deviation and the extremes in each clinical category.

Table 2 : Sample size, mean score, standard-deviation and extremums of GSI

GLOBAL SATISFACTION INDEX				
Cat. Clinic	Workforce	Mean ± E.T	Minimum	Maximum
HGR1	41	3,26 ± 0,54	2,10	4,25
HGR2	19	3,63 ± 0,32	2,90	4,20
HU3	7	3,55 ± 0,32	3,20	4,00
HNU3	16	3,45 ± 0,61	1,80	4,40
CRV	91	3,56 ± 0,46	1,85	4,50
Total	174	3,16 ± 1,12	1,80	4,50

The average Global Physiotherapist Satisfaction Index was 3.16 ± 1,12, with a minimum of 1.80 and a maximum of 4.50.

The high Satisfaction Index was obtained in the Revalidation Centre (CRV) category, where patients had a Satisfaction Index of 3.56 ± 0.46.

The lowest Satisfaction Index was obtained in the Primary General Referral Hospital category (HGR1), where patients had a Satisfaction Index of 3.26 ± 0.54.

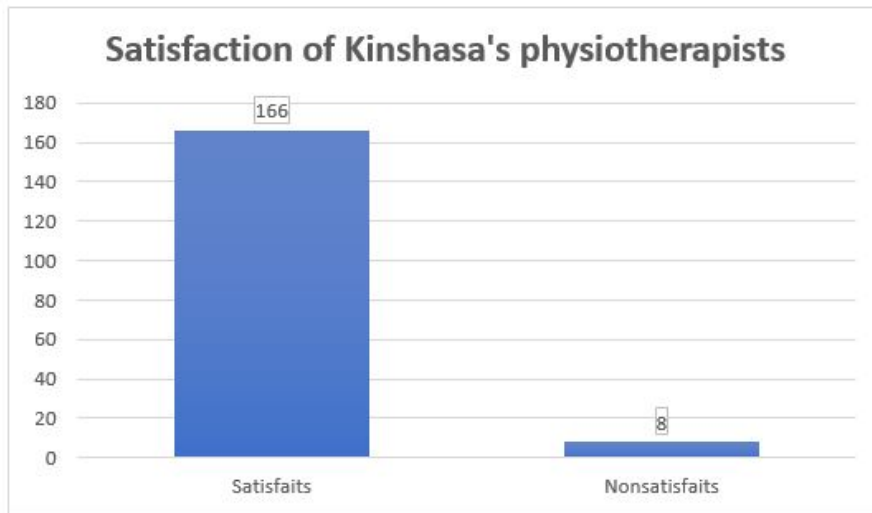Of the 174 physiotherapists in the sample, 166 (95%) were satisfied and 8 (5%) were not satisfied.

Figure 2: Number of physiotherapists satisfied (166) and not satisfied (8)

II. Inferential Analysis

ANOVA GSI

A one-way ANOVA enabled us to identify the existence of a statistical link between the GSI and socio-demographic data.

Table 3 groups together the socio-demographic variables that showed a statistically significant association with the IGS.

Table 3: Socio-demographic variables statistically associated with the GSI

ANOVA Global Satisfaction Index Physiotherapists				
Qualitative variables		Workforce	Mean±E.T	p-Value
Diploma	Degree	129	3,54 ± 0,42	0,003*
	Licence	44	3,31 ± 0,62	
Profession	Physiotherapist	161	3,51 ± 0,45	0,050*
	Med Phys	13	3,23 ± 0,86	
Hospital	Yes	164	3,47 ± 0,48	0,027*
	No	10	3,82 ± 0,53	

The ANOVA showed that the variables Diploma, Profession and Working in hospital significantly influenced the IGS. Physiotherapists with a degree were more satisfied than those with a diploma. Physiotherapists who graduated from the ISTM were more satisfied than those who graduated from the UNIKIN medical school (physical physician*). Physiotherapists who do not work in hospitals are more satisfied than those who do.

*Physiotherapists who have graduated from the UNIKIN Faculty of Medicine are referred to as "physical doctors" in DRC. We have used this term to distinguish them from physiotherapists who are graduates of the ISTM.

III. Principal Component Analysis / PCA

PCA is based on the specific variance of the variables and makes it possible to extract a minimum number of factors that explain most of the specific variance. In this study, 22 variables were subjected to PCA, including the IGS.

Analysis of the correlation matrix revealed a determinant of 0.08 (different from 0.0 and 1.0), a KMO index of 0.584 (greater than 0.5) and a highly significant Bartlett test ($p<0.001$). The 3 conditions of the correlation matrix were met for a PCA to be applied to our sample (see table in appendix).

The nine components extracted from the PCA condense 62% of the data contained in the 22 original variables, thereby ensuring minimal loss of data [19]. The 8 principal components resulting from our analysis are listed below:

C1 :Institution, profession and diploma (TITLE)

C2 :Age, years of experience and marital status (EXPERIENCE)

C3 :Number of patients per day and treatment time (SERVICE)

C4 :Clinical category and workplace (WORKPLACE)

C5 :Speciality and practice (INVESTMENT 1)

C6 :Training seminar and therapeutic approach (INVESTMENT 2)

C7: Treatment at home, other activities and combination of workplaces (ORGANISATION)

C8 :Patient power of attorney (PROXY)

These 8 components constitute the explanatory factors or determinants of physiotherapists' job satisfaction.

IV. Qualitative Analysis

Seventeen physiotherapists, including 11 men (65%) and 6 women (35%), with an average age of 50 (22-70), made up the population that enabled both the semantic and theoretical thresholds to be reached.

The results of the qualitative analysis of job satisfaction gave rise to an analytical framework consisting of 4 main themes supported by the literature. The results are supported by a number of selected and coded verbatims (K: physiotherapist, M or F: man or woman).

Theme 1: Career expectations or motivation [20]

Two main trends emerged from the participants' discussions:

- No expectations" due to a lack of prior knowledge or specific information about the physiotherapy profession. In fact, it was through no fault of their own that the participants embarked on physiotherapy studies; for example: no place or unsuccessful application in other fields of study of their choice.

- *When I wanted to enrol in law at UNIKIN (University of Kinshasa) and IFASIC (school of journalism), there were no places left because of the regional quota system. In the end, it was an uncle who works at the university clinics who steered me towards physiotherapy. K.H3*

- *I originally enrolled in nursing and didn't even know what physiotherapy was. To my great surprise, at the start of the academic year, my name appeared in the physiotherapy section of the ISTM." K.F5.*

- Motivation and a specific interest in patient re-education and rehabilitation" in physiotherapists who had been previously informed or who had been positively confronted with this profession in an extrinsic or intrinsic way, and had therefore found a real interest and vocation in it.

- *I was very impressed by the physiotherapeutic management of both my parents' conditions. My mother had made a full recovery from her hip operation. My father, although he had recovered his ability to walk independently, still had some after-effects of his hemiplegia. This motivated me to study physiotherapy". K.H1.*

Theme 2: perception of working life and salaries [21,22]

All physiotherapists, male and female, agree on the obvious discrepancy between professional expectations and the reality on the ground. Physiotherapists working in state institutions suffer from a crying shortage of equipment and resources. On the other hand, those working in the private sector are faced with a plethora of patients to treat within limited timeframes, which often seemed to be perceived as a form of exploitation.

- *The reality we live in is very different from the dreams we had as students. Working conditions are difficult, patients have limited financial resources, and our salary doesn't allow us to make ends meet. It's a real disillusionment. K.H2.*

On the social front, all the speeches converge on the reality of major financial difficulties, making it impossible to meet family needs with one's salary. Whether in the public or private sector, salaries are described as miserable.

- *The reality is that the life of a physiotherapist is difficult and full of frustrations. We do a lot of hard work, but in return we are paid a pittance. We have to do what we can to support our families: send our children to school, pay the rent...". K.F3*

Theme 3: Elements of satisfaction and dissatisfaction [23]

The elements of satisfaction highlighted by all the physiotherapists in the study are summarised below:

-Having a job in the Congo brings with it a sense of privilege and therefore satisfaction, despite the fact that pay, conditions and organisation at work leave something to be desired.

- *When you find work in the Congo, it's already a miracle because most of the unemployed have a higher education or university degree". K.F5*

- A feeling of satisfaction also comes from having obtained a diploma (personal satisfaction added to the social recognition linked to the level of the diploma) and from practising a profession that is valued and recognised as being of great value, in the service of others.

- Physiotherapists all feel a sense of satisfaction when their treatments are successful, when they gain the recognition of the patient or the trust of the prescribing doctor. They also appreciate the opportunities for personal growth, such as the professional experience they gain over time, the therapeutic freedom they enjoy and the chance to work independently.

- *First of all, I'm satisfied because I'm doing what I love. When I treat patients and they recover, that gives me satisfaction". KF2*

Kinshasa's physiotherapists were also unanimous in their concerns and dissatisfaction:

- The country's catastrophic socio-economic situation means that salaries are poor and out of line with the cost of living. Physiotherapists struggle to make a living from their profession, which is poorly paid, underpaid and sometimes unpaid.

- Poor working conditions, including pay, lack of equipment, lack of recognition by the political authorities, and the cost of treatment or care all contribute to dissatisfaction.

- The treatment of chronic or long-term illnesses can become a financial drain, sometimes leading patients to stop their treatment.

-Failure of rehabilitation or inability to achieve satisfactory therapeutic or functional results in the patient's care.

- *The difficulty is that the State does not intervene in the care of patients, who are sometimes forced to interrupt their treatment due to lack of resources". K.H1*

Theme 4: Impact on physical and mental health [24]

As far as physical problems are concerned, the physiotherapists complain of aches and pains in the muscles and joints as a result of the physical strain of their work. Public transport in Kinshasa is another factor contributing to physical fatigue, which is a real ordeal.

The group of women physiotherapists stress the fatigue associated with combining their profession with their role as housewives.

As far as psychological repercussions are concerned, physiotherapists mention a heavy psychological and mental burden as a result of the difficulties of the job, stress, insomnia, mental fatigue, and low pay despite the efforts made. This last aspect seemed to be particularly prevalent in the private sector.

"Physiotherapy is a physically demanding profession. Fatigue and exhaustion after work are our daily lot. On top of this physical exhaustion comes mental exhaustion due to poor pay".K.H5

Discussion

The aim of this study was twofold: firstly, to assess the satisfaction of physiotherapists in Kinshasa by calculating the IGS, and secondly, to draw up a typical profile of the most satisfied physiotherapist. A mixed methodological approach was adopted.

The results of this study indicate that 95% of the Kinshasa physiotherapists in our sample are satisfied in the exercise of their profession (GSI > 2.5) because they have a mean GSI score of 3.16. By way of comparison, the percentage obtained in our study is higher than the 70% obtained by Sultan Hakamy et al [25] when administering the MSQ to Saudi physiotherapists. Our mean GSI of 3.16 is lower than the mean GSI of 3.59 obtained among physiotherapists in the public sector and the mean GSI of 3.33 obtained among physiotherapists in the private sector by Motloutsi in South Africa [3].

The finding that 95% of physiotherapists in Kinshasa are satisfied with their work raises questions, as it contrasts with the socio-economic reality of physiotherapists in Kinshasa. The precarious working conditions and difficult socio-economic situation do not augur well for an optimal socio-professional situation [26]. This contrast in fact reveals the resilience that characterises Kinshasa's physiotherapists, who are able to give their all in order to serve the population, despite the difficulties inherent in their work.

In addition, the qualitative analysis highlighted strong elements of satisfaction expressed by the physiotherapists in Kinshasa (pride in having a profession that is valued in the service of the population, etc.) which could justify this high percentage of satisfied physiotherapists.

The highest average Global Satisfaction Index was obtained in the Revalidation Centre category (3.56). Physiotherapists working in rehabilitation centres, such as the Centre de Rééducation pour Handicapés Physiques de Kinshasa (CRHP), have a certain closeness with their patients who live with disabilities, and develop a certain empathy and sympathy which encourage them to invest in their patients' functional recovery. The slightest progress made by the patient is experienced as a victory, an encouraging factor, a source of satisfaction. And this goes beyond other factors of dissatisfaction that could have a negative impact on the physiotherapist. The following verbatim from the qualitative analysis could explain this result:

- *Firstly, I'm satisfied because I'm doing what I love. When I treat patients and they recover, that gives me satisfaction". KF2*

Teamwork and a good group dynamic could contribute to this high level of satisfaction. De Bonnières, in his study of the determinants of job satisfaction among palliative care workers, states that job satisfaction is essentially based on teamwork and the quality of care provided within a specific work organisation [27]. Pimlott finds that the greatest source of satisfaction comes from the feeling of working together as a team, supporting and helping each other despite physically and mentally demanding work [28]. Kutzcher also praised the benefits of teamwork on job satisfaction in his study entitled "The impact of teamwork on staff perceptions of empowerment and job satisfaction" [29].

Finally, this contrast highlights the lack of adaptation of valid, standardised psychometric tools in Western literature to the socio-economic realities of disadvantaged countries. Pending the development of psychometric tools specific to these disadvantaged countries, some authors have associated these Western tools with indices of well-being, malaise or self-assessment of health [30].

Typical Profile of the Physiotherapist Most Satisfied at Work

The typical profile of the physiotherapist most satisfied at work was studied using the results of the ANOVA, supplemented by those of the PCA.

The ANOVA showed that the IGS was influenced by the variables diploma, profession and hospital work.

-Diploma: The physiotherapist with an undergraduate diploma is more satisfied than the physiotherapist with a licentiate degree.

This is because the physiotherapist with undergraduate diploma, in general, quickly enters the job market and could therefore find work directly. The physiotherapist with a licentiate degree, on the other hand, who has an additional 2 years of studies often finds themselves working in the same conditions as the physiotherapist with an undergraduate diploma. This could be seen as a source of frustration. However, the study of effort-reward imbalance carried out among physiotherapists in Brussels showed that doctors and graduates in physiotherapy had a higher self-esteem than graduate physiotherapists [31].

-Profession: the physiotherapist (a graduate of the ISTM) is more satisfied than the physical physician (a physiotherapist with a degree from the Faculty of Medicine). The physical doctor's low level of satisfaction stems from the fact that his status places him between the doctor (medical doctor) and the physiotherapist, a situation that is unclear and less well defined legally (in the organisation chart of care structures). The physical physician would like to give orders or direct the physiotherapist (ISTM) but sometimes he has to resolve to work like any physiotherapist.

-Working in hospital: non-hospital physiotherapists are more satisfied than hospital physiotherapists because they have more freedom by working in the patient's home or in a private practice, have less pressure waiting for a low salary, and are not subject to random work or lack of work as it is the case in hospitals. A Swiss "Focus RDC" study stated that the number of physiotherapists working in a hospital, like that of all employees, was less than half the required number because working hours fluctuate due to lack of work or lack of patients, and also because of the low salary [5].

Enberg [32] and Birgit [33] have shown that physiotherapists working in hospitals are less satisfied than those working in private practice, and experience more stress.

Finally, the typical profile of the most satisfied physiotherapist at work is similar to that of a physiotherapist with an undergraduate diploma of the ISTM and who does not work in a hospital, but in a revalidation centre.

This profile is enriched by explanatory factors for job satisfaction extracted from the PCA, namely: experience, services (number of patients), patient proxy, and investment (having a practice, specialising) and work organisation (home, other income-generating activities).

In practice, the results of our study are as follows:

On the strength of their professional conscience, physiotherapists in Kinshasa use resilience to serve their patients. This willingness to treat patients well despite socio-economic difficulties will lead to patient satisfaction, which is an indicator of the quality of care and the smooth running of a healthcare system.

Teamwork is a non-negligible strength which enables physiotherapists to support each other in order to better face professional challenges linked to progress in patient treatment or linked to their working conditions. This strength of teamwork could be a major determinant of physiotherapists' satisfaction in the exercise of their profession.

Health policy decision-makers, hospital managers and physiotherapists' professional organisations can use the determinants that make up this typical profile to put in place solutions to ensure that physiotherapists do not suffer from burnout or musculoskeletal disorders but are satisfied in their work, with a view to the performance of the healthcare system.

Conclusion

The results of this survey show that 95% of the physiotherapists in our sample are satisfied in the exercise of their profession. The resilience they show enables them to commit themselves professionally to serving the population, and to derive positive benefits from the unfavourable socio-economic context which characterises the DRC. Finding work as a physiotherapist in the DRC, work-

ing as part of a team in a structure such as a rehabilitation centre, and the good results achieved in terms of patient functional status are the main factors explaining this high level of satisfaction among physiotherapists.

The typical profile of the most satisfied physiotherapist in Kinshasa is a graduate physiotherapist, with a diploma from the ISTM and working in a structure such as a rehabilitation centre. This profile is also influenced by factors such as experience, number of patients, investment in a practice or in a specialisation and organisation of work at home or in another remunerative activity, presence of pain, type and number of physiotherapy sessions. These determinants of job satisfaction should be taken into account by physiotherapists in their quest for well-being in the exercise of their profession.

In addition, this study highlights the effectiveness of a mixed methodology, including a quantitative analysis, combining ANOVA and PCA, to precisely define the typical profile of the most satisfied physiotherapist, and a qualitative analysis allowing the results to be contextualised by taking into account the physiotherapists' experiences. The qualitative approach also highlighted the poor working conditions, including the lack of equipment, financial difficulties and repercussions on the physical and mental health of physiotherapists in Kinshasa.

Teamwork emerges as the key element in professional satisfaction among physiotherapists.

Practical Implications

-Our study promotes teamwork as a major determinant of physiotherapist satisfaction.

Western psychometric tools are hardly adapted to African social realities and there is a risk that they may produce quantitative results which are completely out of step with the socio-economic situation in poor countries.

-Resilience is truly a driving force behind the commitment of Kinshasa's physiotherapists to serving the population.

-The dual approach to quantitative analysis has proved beneficial in two ways:

1) PCA enabled us to highlight synthetic factors composed of socio-demographic variables, completely ignored by ANOVA, but which proved to be determinants of physiotherapists' satisfaction; even if PCA only represents, in this case, 62% of the information contained in all the variables.

2) the fine (arithmetic) definition of the standard profile is the sum of the results of the ANOVA and those of the PCA.

Appendices

I. Principal Component Analysis Procedure

Correlation Matrix

Correlation Matrix	
Determinant	0,08
KMO Index	0,584
Sphéricity Test of Bartlett	0,000

Extraction Method

*Total Explained Variation

Component	Variance totale expliquée	
	Initial Own Values	
	Total	cumulative %
1	2639	11997
2	2382	22825
3	1893	31429
4	1679	39063
5	1461	45703
6	1323	51716
7	1126	56832
8	1032	61521
9	0,959	65882
10	0,898	69962
21	0,207	99188
22	0,179	100000

Observing the table of explained variance above and analyzing the initial eigenvalues of each of our 22 variables, we note that only 8 obtain an eigenvalue > 1. These variables condense 62% of the information in all 22 base variables. PCA allowed us to reduce or factorize our 22 base variables into eight principal components or factors for a more straightforward analysis.

Interpretation and Labeling of Factors

Factor Component Matrix Rotation

Basic Variables	Composantes Principales							
	1	2	3	4	5	6	7	8
Institution	0,88							
Profession	0,82							
Dilploma	0,71							

Age		0,866						
Years of experience		0,833						
Marital Status		0,63						
		8						
Number ofpatient/d			0,757					
Treatment time			0,736					
Salary								
Clinic Category				0,703				
Work place				0,577				
Speciality					0,718			
Cabinet					0,684			
Seminar/formation						0,739		
Therapeutic approach						0,721		
Home treatment							0,704	
Other remun activit							0,619	
Combination							0,524	
Proxy/patients								0,712

This matrix provides the eight principal components retained. Each column has the weight or coefficient of base variables whose value is greater than or equal to 0.5. These variables and the principal components (factors) they form constitute the main determinants of patient satisfaction.

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