

Job Satisfaction Among Psychomotor Physiotherapists in Norway

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Marte Kimo Rosenberg, MSc¹ and Tore Bonsaksen, MSc^{1,2} 

Abstract

The objective of the study was to investigate (i) levels of job satisfaction among employed and self-employed psychomotor physiotherapists in Norway and (ii) factors associated with job satisfaction. Although there are several studies on job satisfaction among physiotherapists, there is limited knowledge about job satisfaction among psychomotor physiotherapists in Norway. A cross-sectional survey was distributed to Norwegian psychomotor physiotherapists ($n=64$) via a weblink. Job satisfaction was measured with 2 different scales (Warr's and Speakman's Job Satisfaction Scales). Group differences were analyzed with chi-squared tests and independent sample t -tests. Adjusted associations with job satisfaction were analyzed with multivariate linear regression. Fifty-eight women (90.6%) and 6 men (9.4%) were included in the study. The results revealed an overall high level of job satisfaction among the participants. None of the independent variables were associated with ratings on Warr's Job Satisfaction Scale. When using Speakman's Job Satisfaction Scale as outcome, employed practitioners had a higher level of job satisfaction, compared to their self-employed counterparts ($P < .01$). Being employed was associated with a higher level of job satisfaction, compared to being self-employed. Self-employed physiotherapists also felt more overworked and experienced the job to be more physically demanding than their counterparts.

Keywords

cross-sectional study, job satisfaction, linear regression analysis, self-employment

What do we already know about this topic?

Several studies have indicated that health professionals in Norway, including general practitioners, nurses, and physiotherapists, have high levels of job satisfaction.

How does your research contribute to the field?

This study contributes to the knowledge about job satisfaction among psychomotor physiotherapists working in Norway, and demographic variables associated with job satisfaction.

What are your research's implications toward theory, practice, or policy?

The study implies that self-employed physiotherapists have lower job satisfaction than their employed counterparts.

Introduction

Job satisfaction concerns the degree to which someone likes or dislikes their job—in general or related to specific areas. Job satisfaction can be studied using different approaches. While global measures of job satisfaction obtain an overall indication of a person's liking or disliking the job, other measures are designed to help researchers study more specific aspects of the work situation.¹

Job satisfaction has been associated with employee well-being and mental health.¹⁻³ According to Karasek and Theorell,⁴ the combined level of workplace demand and employee control influence the amount of perceived job strain. While high demands are not considered harmful per se, high demands may be problematic in cases where the

worker has low control. This combination is commonly perceived to increase job strain, potentially resulting in poor outcomes such as health problems, reduced productivity at work and sickness absence.⁴

¹Inland Norway University of Applied Sciences, Elverum, Norway

²VID Specialized University, Stavanger, Norway

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Corresponding Author:

Tore Bonsaksen, Department of Health and Nursing Science, Faculty of Social and Health Science, Inland Norway University of Applied Sciences, Terningen Arena, Hamarveien 112, Elverum 2418, Norway.

Email: tore.bonsaksen@inn.no



High job demands, high workload, low peer-support and poor relationships with peers are all sources of strain.⁴⁻⁶ Prolonged job strain can increase the worker's vulnerability for burnout,^{5,7} and researchers have reported higher job strain to be associated with increased risk of depression.⁷ A high workload has been shown to contribute to musculoskeletal symptoms.⁸ In a study of physiotherapists by Brattig et al,⁹ nearly half of the participants experienced "emotional stress" in their work. According to Piko⁵ burnout is strongly associated with job dissatisfaction among health professionals. Rössler reported that health professionals experience high levels of stress and are more vulnerable than other professionals,¹⁰ due to high levels of workplace demands and intense relationship with patients. Experiencing continuous physical and psychological distress over time increases the risk of negative health outcomes, such as cardiovascular disease.¹¹

Several studies have indicated that health professionals in Norway, including general practitioners, nurses, and physiotherapists, have high levels of job satisfaction.^{12,13} Research on physiotherapists in Norway have mostly been conducted on therapists employed in the public healthcare services, where most have reported to be satisfied with their job.^{14,15} In contrast, some international studies on job satisfaction among physiotherapists have indicated moderate levels of satisfaction.¹⁶⁻¹⁸

There is limited knowledge about sociodemographic factors that may be associated with job satisfaction. Previous studies have found that regardless of profession, job satisfaction tends to increase with age.^{1,12,19} With regards to work-related factors, studies from Norway and Germany have indicated that autonomy, or "having sufficient amount of control in decision making," is important for physiotherapists' job satisfaction.^{9,14,15,20} According to Richardsen and Martinussen²¹ physiotherapists are considered to have more autonomy compared to other health professionals, such as nurses. Several studies have found that physiotherapists enjoy their work when it is perceived as meaningful and when they experience peer support.^{9,20,22} A good work environment with sufficient opportunity for support appears to be important for job satisfaction among physiotherapists.^{14,15,23}

Type of employment may also play a role in determining job satisfaction, and there may be differences between employed and self-employed physiotherapists. A study based on data from 3 European countries and the United States compared job satisfaction among self-employed and employed individuals.²⁴ That study found that self-employed participants were significantly more satisfied with their job than those who were employed. Blanchflower also found that self-employment was related to higher job satisfaction,²⁵ and self-employed workers have been found to enjoy greater autonomy at work.²⁶ According to Prottas and Thompson,²⁶ self-employed individuals generally perceive higher levels of autonomy than those who are employed.

As distinct from other physiotherapists, psychomotor physiotherapists have completed formal further education focused on emotional problems and how these are related to and expressed in bodily sensations and movement.²⁷ Psychomotor physiotherapists are therefore well qualified to assess and provide treatment for a number of psychosomatic problems, and psychomotor physiotherapy has indeed been shown to be effective for decreasing pain and increasing self-esteem and quality of life among people with multi-faceted health complaints.²⁷ Although several studies on job satisfaction among physiotherapists exist,^{9,15-18,20,22,23} there is limited knowledge about job satisfaction among psychomotor physiotherapists in Norway. Studies of job satisfaction among psychomotor physiotherapists, and factors that may contribute to their job satisfaction, may be important for job retention as well as physical and mental health in this group of healthcare personnel.

Aim of the Study

The aims of this study were to examine job satisfaction among psychomotor physiotherapists working in Norway, and to investigate demographic variables associated with job satisfaction.

Materials and Methods

Design

This study was conducted using an online cross-sectional survey. The data were collected in the fall of 2020.

Sampling

The participants were recruited from the private (self-employed physiotherapists) and public (employed physiotherapists) sectors. The public sector workplaces included hospitals, rehabilitation institutions, and primary care services in the municipality, while the private sector workplaces involved physiotherapy institutes where the participants were self-employed. There were 2 inclusion criteria: participants were required to be members of the Norwegian Association of Psychomotor Physiotherapy, and to have a further education degree or a master's degree in psychomotor physiotherapy.

Data Collection

In September 2020, information about the study and a web-link to the survey was sent by e-mail to the leader of the Norwegian Association of Psychomotor Physiotherapy. In turn, the information and weblink was forwarded to the members via an information e-mail from the association in November 2020. During the same period, the link to the

survey was further published multiple times on the association's closed Facebook-group. The association has 400 psychomotor physiotherapist members. Before participating in the study, the participants provided their informed consent to participate. This was done by checking one mandatory consent question before proceeding with the survey. Sixty-nine psychomotor physiotherapists responded to the survey (response rate 17.3%). In the beginning of December 2020, the data collection was finalized.

Measures

Sociodemographic variables. The study included age group, gender, education level (further education, master's degree, specialist, other) and years of experience (≤ 5 years; 6-15 years; ≥ 16 years). Due to its distribution, age group was recoded prior to analysis (≤ 41 years; 42-52 years; ≥ 53 years). The participants also informed about whether they were employed or self-employed.

Job satisfaction. The Job Satisfaction Scale (JSS) is a frequently used 10-item questionnaire targeting several work domains, where the overall scale score provides a comprehensive measure of overall job satisfaction.²⁸ The domains include opinions toward their job, pay, working hours, working environment, relationship with peers/colleagues, freedom to choose your own method of working, recognition, amount of variety, opportunity to use our abilities, and how you feel about your job in general. Due to its comprehensiveness, it was considered appropriate for this study. Each of the 10 items are scored on a scale ranging from 1 to 7 (1 = strongly disagree; 7 = strongly agree), and a total sum score (ranging 10-70) is calculated.^{13,28} Internal consistency of the 10 items, as calculated from our current dataset, was good (Cronbach's $\alpha = .79$).

The Speakman Job Satisfaction Scale (SJSS) was selected because it was developed specifically in a physiotherapy context, allowing us to compare one general and one physiotherapy-specific measure in the assessment of job satisfaction. The SJSS consists of 5 positive and 5 negative statements.¹⁷ The 5 positive statements are scored from 1 (maximal dissatisfaction) to 7 (maximal satisfaction), whereas on the negative statements 1 indicates maximal satisfaction and 7 maximal dissatisfaction. The negatively formulated items were recoded prior to analysis, so that higher scale scores would reflect higher job satisfaction. The total score ranges 10 to 70. Internal consistency for the items constituting this scale, as calculated from our current dataset, was moderate (Cronbach's $\alpha = .68$).

In their initial study,¹⁷ an importance scale was used as well as the agreement scale regarding these statements. However, all statements were rated as equally important, and the authors reported that they would have been excluded from the scale if they were to be rated as not important. In view of this, we chose to use only the agreement scale in our study.

As a part of developing and adapting a Norwegian translation of the SJSS, we were guided by Beaton et al.²⁹ They recommend that there should be several, at least 2, translations to be compared. This may provide the most optimal choice of words and secure that the phrases in the 2 languages are identical in meaning.³⁰ The 2 authors first developed separate translations, which were compared against each other. A final Norwegian translation, harmonized on the basis of the 2 initial translations, was sent to a researcher who had English as her native language while also being fluent in the Norwegian language. She translated the statements to back into English. This back-translated version was scrutinized for meaning consistency with the original SJSS to make sure that the translated items reflected the same meaning content as the original statements. Two psychomotor physiotherapists piloted the questionnaire before the survey was opened for responses and distributed to the target group. Some adjustments were made to secure that the questionnaire was easy to understand and not too time-consuming.

Statistical Analysis

The SPSS software was used in the statistical analyses.³¹ Descriptive analyses were performed on both job satisfaction scales, and the analyses were performed for the total sample and for each of the 2 groups of participants (employed and self-employed). Formal comparisons between the 2 groups were performed with chi-square tests for categorical variables and with independent *t*-tests for continuous variables. We conducted a Kolmogorov-Smirnov normality test for both job satisfaction scales. The analysis showed that the distributions did not deviate significantly from the normal distribution ($P = .07$ for JSS and $P = .06$ for SJSS). Thus, we concluded that the assumptions underpinning parametric testing were satisfied.

To investigate adjusted associations between job satisfaction, and demographic factors and type of employment, 2 linear multiple regression analyses were conducted. The 2 consecutive analyses used the JSS and the SJSS ratings as the dependent variables. In each of these analyses, the independent variables were; (1) age-group, (2) education level, (3) years of experience, and (4) type of employment. In all analyses, $P < .05$ constituted statistical significance. Five participants had missing values on one or more of the employed variables, and they were therefore excluded from the analyses.

Ethics and Informed Consent

This study was approved by the Norwegian Centre for Research Data (data protection agency) on the 28th of October 2020 (protocol code: 388470). Participation in the study was voluntary, and all participants provided explicit consent to participate in the study as part of their completion of the survey.

Table 1. Sample Characteristics in the Total Sample and by Type of Employment.

Variables	Total n = 64	Employed n = 18	Self-employed n = 46	<i>P</i>
Age group		<i>n</i> (%)	<i>n</i> (%)	.11
≤41 years	20	8 (40.0)	12 (60.0)	
42-52 years	25	8 (32.0)	17 (68.0)	
≥53 years	19	2 (10.5)	17 (89.5)	
Gender				.67 ^a
Female	58	17 (29.3)	41 (70.7)	
Male	6	1 (16.7)	5 (83.3)	
Education level				.14
Further education	16	6 (37.5)	10 (62.5)	
Master's degree	18	6 (33.3)	12 (66.7)	
Specialist	27	4 (14.8)	23 (85.2)	
Other	3	2 (66.7)	1 (33.3)	
Years of experience				<.01
≤5 years	18	10 (55.6)	8 (44.4)	
6-15 years	29	6 (20.7)	23 (79.3)	
≥16 years	17	2 (11.8)	15 (88.2)	

^aFisher's Exact test. All other tests are Chi-square tests.

Results

Participants

A total of 69 respondents participated in the study, while 64 participants were included in the analyses after removal of participants with missing values. The majority of the participants were female ($n=58$, 90.6%) and self-employed ($n=46$, 71.9%). The age group analysis showed that 20 (31.3%) participants were 41 years or younger, while there were 25 (39.0%) participants in the age group 42 to 52 years, and 19 (29.7%) participants were 53 years or older. Table 1 displays the demographic characteristics of the participants by employment type. Participants who were self-employed had significantly more experience than those who were employed. Otherwise, no significant group differences occurred.

Job Satisfaction

Both groups of physiotherapists had relatively high levels of job satisfaction, based on their scores on the JSS and the SJSS. In the total sample, the mean scale ratings were 58.4 ($SD=6.5$) and 53.1 ($SD=6.2$) on the JSS and SJSS, respectively. On the JSS, the mean scale score among the employed ($M=59.5$, $SD=5.3$) was similar to the mean scale score among the self-employed ($M=58.0$, $SD=7.0$, *ns.*). On the SJSS, the mean scale score among the employed ($M=55.6$, $SD=4.5$) was higher than the mean scale score among the self-employed ($M=52.1$, $SD=6.5$, $P<.05$).

Considering the group differences on the SJSS, we explored further possible group differences on each of the items on the SJSS scale. The results are displayed in Table 2.

Compared to the employed participants, those who were self-employed had higher levels of agreement on 2 statements: "I am overworked" ($M=4.7$ vs 3.2 , $P=.001$), and "My job is too physically demanding" ($M=3.0$ vs 2.0 , $P=.02$). Otherwise, no significant group differences were found.

Associations With Job Satisfaction

In order to investigate factors concurrently associated with job satisfaction, 2 multivariate linear regression analyses were conducted, using JSS and SJSS as the dependent variables, consecutively. None of the independent variables were found to be significantly associated with the participants' JSS ratings, and the model was not statistically significant. The results are shown in Table 3.

Using the SJSS as dependent variable, type of employment was significantly associated with job satisfaction ($\beta=-.35$, $P<.01$), while the model was borderline statistically significant ($P=.05$). The result indicates that participants employed in the public healthcare services perceived higher job satisfaction than those who were self-employed. The results are shown in Table 4.

Discussion

The aim of this study was to investigate the level of job satisfaction among Norwegian psychomotor physiotherapists and examine whether demographic variables were associated with job satisfaction. Overall, we found that the psychomotor physiotherapists had a high level of job satisfaction (mean 5.8 on the JSS items). In her study on physiotherapists in Norwegian hospitals, Stømner¹⁴ reported a JSS item mean score of 5.6. Both studies indicate relatively high levels of job satisfaction among physiotherapists in comparison to other groups of health professionals. For example, among other health practitioners in Norway, nurses have been reported to have a mean score of 4.6,¹³ while a mean score of 5.3 have been reported among general practitioner physicians.¹² Possibly, higher levels of control and autonomy and less routine tasks in the work situation among physiotherapists and general practitioner physicians may contribute to explain their higher levels of job satisfaction, compared to nurses.⁴

The results shown for the SJSS also showed that the participating psychomotor physiotherapists were satisfied with their jobs. The use of the SJSS also allowed for more detailed analysis of several aspects of the job situation that have been shown to have particular bearing for physiotherapists' job satisfaction. In our study, the highest item scores were shown for the items expressing that the job was interesting and that the job was fulfilling. Şenduran et al's study of Turkish physiotherapists also reported a high score on the statement "job as interesting," and also on "sufficient independence in decision-making."¹⁶ As an overall interpretation, experiencing interest and control in the job, and experiencing fulfillment

Table 2. SJSS Mean Scores in the Total Sample and by Type of Employment.

Items	Total	Employed	Self-employed	Test <i>P</i>
	n=64 M (SD)	n=18 M (SD)	n=46 M (SD)	
There is too much paperwork	4.3 (1.4)	4.4 (1.2)	4.2 (1.5)	.67
My job is challenging in a positive sense	6.2 (0.8)	6.4 (0.5)	6.1 (0.9)	.08
I am not given enough autonomy (freedom to do my work the way I want to)	2.2 (1.3)	2.2 (0.9)	2.2 (1.4)	.97
My job is fulfilling (ie, enables me to use my abilities)	6.3 (0.8)	6.2 (0.5)	6.3 (0.9)	.61
My job is mentally stressful	4.8 (1.4)	4.3 (1.4)	4.9 (1.3)	.13
I have sufficient independence in decision-making	6.1 (0.8)	6.1 (0.4)	6.1 (1.0)	.86
My job is too physically demanding	2.7 (1.5)	2.0 (1.3)	3.0 (1.5)	.02
My work is interesting	6.6 (0.9)	6.7 (0.5)	6.5 (1.0)	.63
I am overworked	4.2 (1.7)	3.2 (1.5)	4.7 (1.5)	.001
I am learning and improving in my work	6.1 (0.9)	6.3 (0.6)	6.1 (1.0)	.38

Note. Statistical analysis is independent t-tests. Mean scores indicate level of agreement with item content.

Table 3. Linear Regression Analysis Showing Associations With JSS Ratings (n = 64).

Independent variables	Job Satisfaction Scale	
	β	<i>P</i>
Age	-.01	.96
Education level	.06	.69
Years of experience	.30	.11
Type of employment	-.19	.16
Explained variance	9.8%	.18

Note. Type of employment: 1 = employed, 2 = self-employed. On all other variables, higher scores indicate higher levels. Table content is standardized beta weights, indicating the strength of association with Job Satisfaction Scale ratings while adjusting for all included variables. The full model explained 9.8% of the outcome variance, which was not statistically significant.

from it, appear to be important aspects of physiotherapists' job satisfaction.

While there were no factors significantly associated with JSS ratings among the participants, the regression analyses using the SJSS as outcome revealed that the employed physiotherapists had higher job satisfaction than those who were self-employed. In view of previous studies, demonstrating higher levels of job satisfaction and perceived autonomy among self-employed individuals compared to those employed,²⁴⁻²⁶ this was somewhat contrary to our expectations. To obtain a more comprehensive picture of what might explain the contrasting results of our study, we reviewed the initial descriptive results for the SJSS at the item level. This analysis showed that the self-employed physiotherapists felt significantly more overworked than the physiotherapists who were employed in public healthcare. This may indicate that self-employment among psychomotor physiotherapist implies not only more control over one's work schedule. It may also add to job-related stress, as self-employment also means having responsibility for a business. Having to

Table 4. Linear Regression Analysis Showing Associations With SJSS Ratings (n = 64).

Independent variables	Speakman Job Satisfaction Scale	
	β	<i>P</i>
Age	.25	.14
Education level	-.04	.79
Years of experience	.08	.65
Type of employment	-.35	<.01
Explained variance	14.6%	.05

Note. Type of employment: 1 = employed, 2 = self-employed. On all other variables, higher scores indicate higher levels. Table content is standardized beta weights, indicating the strength of association with Speakman Job Satisfaction Scale rating while adjusting for all included variables. The full model explained 14.6% of the outcome variance, which bordered on statistical significance.

manage both the clinical and the business aspects of physiotherapy practice is likely to add to the overall workload. Therefore, the higher perceived workload among the self-employed participants may partly explain their lower job satisfaction.

The comparisons at the SJSS item level also revealed that the self-employed participants reported that their job was more physically demanding, compared to their employed counterparts. It is possible that people who seek self-employed psychomotor physiotherapists for treatment present with health problems that frequently require physically demanding "hands-on" treatment (eg, massage), and more so than those who come into contact with psychomotor physiotherapists employed in the public health services. Clearly, not every physiotherapist would experience a high workload and heavy physical work as a source of stress. However, longer periods with a high workload and considerable job strain, both physical and emotional, may result in decreased job satisfaction and may also have negative effects on physical and mental health.^{5,7,11}

Physiotherapists are at risk of job strain due to high physical demands in their line of work.⁸ In addition, self-employed physiotherapists may have limited time available for rest in their schedules. It may be difficult to balance their energy because of their responsibility toward both their patients and the business. As Rössler pointed out,¹⁰ professionals working in mental health care may be at risk of high job strain due to their commitment toward establishing and maintaining therapeutic relationships with people suffering from mental distress. Providing help for patients in difficult life situations, in particular when being the solo care provider for the patient, can place a high toll on the physiotherapist's personal mental health. Self-employed psychomotor physiotherapists are often such solo care providers, and the double obligation toward their patients and their own business may translate into long work hours and a feeling of being overworked. Conversely, psychomotor physiotherapists employed in public healthcare may have daily access to peer-support and multidisciplinary team cooperation, which may relieve some of the burden. Thus, despite the high levels of job satisfaction found among the self-employed psychomotor physiotherapists in this study, they may experience higher levels of combined physical and psychological stressors that can be important for their job satisfaction, job retention, as well as personal health and well-being outcomes, in a longer time perspective.⁹

Study Limitations

Among the physiotherapists who participated, the majority was self-employed. This may have influenced the sociodemographic composition of the study sample and the results may therefore not be representative of the study population. A notable limitation of the study is therefore our lack of knowledge about the wider population of psychomotor physiotherapists in Norway. This lack of knowledge makes it difficult to assess the representativity of the sample, and therefore the external validity of the study results.

The sample size was relatively small, and the response rate was low. Only 4 variables were tested as possible predictors in multivariate models of the physiotherapists' job satisfaction. No power calculation was done to estimate sample size required to detect group differences of the given magnitude. However, a rule of thumb for multiple linear regression analysis is to use a sample size that exceeds 15 persons for each included predictor variable.³² Given the sample size used in the regression analyses ($n=64$) and the number of included predictor variables ($n=4$), our analyses fulfilled these requirements. The use of larger and more heterogeneous samples and a greater variety of possible predictive factors seems to be a logical way forward in this field of research.

Recruitment of participants was challenging, and future studies may preferably consider alternative ways of effectively securing a sample of sufficient size. One may also consider

data collection strategies that exclude the possibility of participants completing the survey more than once. In this study, it was technically possible to provide "double responses" to the web-based survey. However, we consider the probability of double responses to be minimal. In the analysis, age-groups were used instead of exact age due to its distribution, the results concerned with age should therefore be treated with particular caution.

The cross-sectional study design means that causal attributions cannot be verified, but only cautiously suggested. Well-controlled longitudinal studies are needed to address factors that may possibly be causal agents in determining psychomotor physiotherapists' job satisfaction. While the JSS measure has been used in several studies, also in Norway, we found fewer studies where the SJSS had been used. While the SJSS may address aspects of the work situation that are particularly relevant for physiotherapists, its low-frequent use among researchers in the field result in few comparative studies. We also noted that the internal consistency between the SJSS items was lower than desired. Taken together, the limitations mean that one should exercise caution in generalizing the study results to the larger population of psychomotor physiotherapists.

Implications for Further Research

Few studies appear to address job satisfaction among psychomotor physiotherapists. Given the importance of job satisfaction for the physiotherapist, for the retention of professional practitioners in a vital part of the healthcare services, and for the quality of treatment provided, more studies of psychomotor physiotherapists' job satisfaction and the factors that influence it, are needed. This study revealed that self-employed psychomotor physiotherapists reported being more overworked and experienced their job to be more physically demanding than the employed physiotherapists. One tentative interpretation is that these differences might contribute to explain the lower overall job satisfaction found among the self-employed physiotherapists. In order to gain more knowledge about how job satisfaction is shaped for self-employed psychomotor physiotherapists, the causes of feeling overworked and what leads to experiencing high physical demands in the job situation, may be addressed in further studies.

Conclusion

This study investigated job satisfaction among Norwegian psychomotor physiotherapists and factors associated with their job satisfaction. Overall, the psychomotor physiotherapists had a high level of job satisfaction. However, compared to the employed psychomotor physiotherapists, the self-employed physiotherapists were significantly less satisfied with their job, and were more inclined to agree that they were overworked and that their job was too physically demanding. We cautiously point toward these differences as possible

sources of the overall lower job satisfaction among the self-employed physiotherapists, while we also stress that more research is needed to appropriately address questions of causality.

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ORCID iD

Tore Bonsaksen  <https://orcid.org/0000-0001-6315-1111>

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