

UDC 331.108
JEL: M12, I11, I12

IMPACT OF JOB SATISFACTION ON THE LABOUR PRODUCTIVITY OF HEALTHCARE PERSONNEL

Nino Paresashvili*

Ivane Javakhishvili Tbilisi State
University,
Tbilisi, Georgia
ORCID iD: 0000-0001-6738-5409

Nanuli Okruashvili

Tbilisi State University,
Tbilisi, Georgia
ORCID iD: 0000-0002-9214-0451

Mzia Tikishvili

Ivane Javakhishvili Tbilisi State
University,
Tbilisi, Georgia
ORCID iD: 0000-0002-5240-9030

Ketevan Chitaladze

Ivane Javakhishvili Tbilisi State
University,
Tbilisi, Georgia
ORCID iD: 0000-0002-3403-6218

*Corresponding author:

E-mail: nino.paresashvili@tsu.ge

Received: 12/05/2024

Accepted: 10/09/2024

DOI: 10.61954/2616-7107/2024.8.3-4

© Economics Ecology Socium, 2024
CC BY-NC 4.0 license

Introduction. The healthcare sector, a cornerstone of society and the economy, brings together specialists from various fields and departments. As healthcare organisations grapple with similar human resource management and policy development challenges as other types of organisations, research on increasing job satisfaction, a key indicator of effective management and employee attitudes, becomes increasingly relevant.

Aim and tasks. This study aims to determine the level of satisfaction among those employed in the healthcare sector, particularly in Georgia, and to underscore its profound impact on performance.

Results. Findings revealed that various factors affect job satisfaction and, consequently, the quality of service provided. Using the F test, it was found that there is a significant statistical relationship between education (0.01 level ($p < 0.001$, $F = 9.992$)), work experience (0.01 level ($p < 0.001$, $F = 9.299$)), age (0.01 level ($P < 0.001$, $F = 9.164$)) and job satisfaction and quality of service. Also, the research results showed that 70% of the respondents believe job satisfaction enhances their performance. Specialized expertise, knowledge, and an appropriate strategy are required to manage these professionals. It is highly significant and essential for employees to have constant development opportunities, access to professional training, and work in a high-satisfaction environment.

Conclusions. That is critically important for improving performance in healthcare and any organization. However, it is worth mentioning this sector faces stress, high mental load, and burnout. In order to address these issues, organizations should have their own clear policy, properly distribute roles and resources, involve employees in processes from the start, and provide relevant information. Hinged on the previously conducted research, opportunities for personnel development and training are limited in Georgia, which in turn is leading to a shortage of qualified personnel and high staff turnover. The presented recommendations will help managers of organizations analyse the importance of job satisfaction in the growth of productivity and success of the organization and its constituent indicators and develop an appropriate strategy for their improvement in the future.

Keywords: employee development, motivation, organizational climate, job satisfaction, productivity.

1. Introduction.

The healthcare sector is one of the most competitive and rapidly growing sectors in the modern world, and its effectiveness and importance have been mainly reflected by the COVID-19 pandemic. At this time, the need for a close relationship between this sector and the state was highlighted most clearly, as well as its importance in maintaining stability. Moreover, as Georgia's healthcare sector is vital for assessing public welfare and making a significant economic contribution, it faces many obstacles and problems.

The increased funding during the pandemic was, of course, but there were still problems regarding staff remuneration and the allocation of insufficient resources by the state. Regardless of these problems, the healthcare sector is an attractive and popular field, as evidenced by the number of workers in the country.

Healthcare organisations face almost the same challenges in terms of human resource management and general policy development as other types of organisations. However, it is worth noting that this industry is characterised by higher stress levels and burnout. This has significantly increased during the COVID-19 pandemic due to increased workloads, constant tension, and uncertainty. The results of a number of studies, such as Prasada et al. (2021) study among US nurses and Pappa et al.'s (2021) study among Greek health sector workers highlight these challenges. Accordingly, the organisation's goal should be to create a working environment that will not create additional stressors for employees, allow them to have a balanced life, and enable them to reveal and develop their skills. This will ultimately increase job satisfaction, one of the main indicators for evaluating effective management and employee attitudes.

Prioritising and focusing on employee satisfaction is necessary because of its direct impact on staff turnover, motivation, and productivity. High levels of employee well-being can contribute to increased engagement and productivity (Warr & Nielsen, 2018). In turn, increasing employee satisfaction and productivity is only possible if a healthy work environment and positive organisational climate are created at the managerial level (Van den Heuvel et al., 2010).

Considering this, the level of job satisfaction of people employed in the health sector of Georgia was investigated. The impact of various factors on job satisfaction and the quality of service provided were considered. In addition, the influence of an organisation's internal organisational policy and its involvement in public welfare activities and reputation on satisfaction was investigated.

2. Literature review.

Research to determine the relationship between labour productivity and satisfaction began in the first half of the twentieth century and is still relevant. During this period, several connections and views were formed and highlighted regarding the mutual influence of these two variables (Judge et al., 2001).

Recognising the health sector's contribution to public welfare is crucial (Kuzey, 2018). Employee turnover in this industry can be caused by low job satisfaction, which also has a detrimental effect on individual and organisational productivity and patient satisfaction (Salvatore et al., 2018). From a commercial perspective, improving hospital service quality (Lim et al., 2018) is highly significant for raising profits and gaining a competitive advantage, wherein effective human resources management plays a key role.

The research by Berberoglu (2018) highlights a direct relationship between organisational climate and performance. Wang et al. (2022) also proved that the relationship between satisfaction, customer service, and performance is positive. However, it's important to note that burnout has a negative effect on these variables. Kuzey (2018) investigated job satisfaction indicators and the impact of each factor on performance. The research determined that the attitude of the managers and the reward system have the most impact on performance out of the 4 indicators. Abdullah et al. (2021) researched internal service quality that affects nurses' job satisfaction. Another indicator is staff turnover, which is kept low, increasing employee motivation and performance. Rostami et al. (2021) and De Simone et al. (2018) consider that the mental workload among people employed in the medical sector is high, which can be reduced by the correct distribution of roles and related responsibilities.

While Gray et al. (2018) examine mental health concerning the organisation's overall success, and their findings show a positive relationship between the two variables.

As mentioned, one of the main factors contributing to job satisfaction is effective management, proper assignment of roles and tasks, and fair and consistent attitudes from managers, all of which can enhance employee satisfaction and performance. The right policies selected by top managers can improve employee engagement and communication across all levels (Vainieri et al., 2019).

Curado and Santos (2022) investigated the influence of transformational leadership on performance and figured out that job satisfaction is a crucial part of improving the interaction between these two variables, which leads employees to be more creative.

Specchia et al. (2020) investigated the connection between leadership style and worker job satisfaction in the healthcare industry and found that, among other types, transformational leadership positively influences contentment.

Tamer (2021) emphasised the importance of moral leadership and how it enhances organisational competitiveness, employee loyalty, and drive.

Recent Georgian labour market studies reveal that employees face numerous problems and challenges. Among Paresashvili et al. (2021), discrimination in different Georgia sectors occurs. Furthermore, discrimination is manifested in the career development and employment of women in high positions, which worsens the shortage of professional personnel (Pirtskhalaishvili et al., 2021).

The healthcare sector significantly contributes to Georgia's economy and needs a more comprehensive study of employee satisfaction, productivity, and overall human resource management.

According to Koblianidze et al. (2018), staff in this field need assistance accessing professional development opportunities, leading to high turnover and recruitment problems. It is important to note that many staff received their education in the Soviet Union, which may not meet modern requirements (Gamkrelidze et al., 2002).

3. Methodology.

In order to gauge and investigate the factors influencing job satisfaction among healthcare system personnel, a database derived from questionnaire responses provided by 452 participants was utilised and analysed using the statistical software SPSS. Frequent distributions, summary descriptive statistics, contingency and cross-tabulation tables, dispersion analysis, and graphical analysis were employed for data analysis. This study investigated the awareness and responsibility of healthcare system personnel from various perspectives. In addition, the role of job satisfaction was investigated in terms of the quality of the services they provide, considering various influencing factors. The key determinants of job satisfaction as the primary drivers of service quality across different demographic groups are comprehensively discussed. For this purpose, the following hypotheses were formulated and tested:

H1: The level of education is directly related to the level of awareness and responsibility regarding the work performed in the healthcare system.

H2: The education of healthcare system personnel affects their perception of the relationship between job satisfaction and the quality of services provided.

H3: The length of work experience significantly affects the direct relationship between staff job satisfaction and the quality of services they provide.

H4: Age significantly determines the relationship between the job satisfaction of healthcare personnel and the quality of services they provide.

H5: Among male and female respondents employed in the healthcare system, notable trends exist regarding their job satisfaction and the quality of services they provide.

H6: Job satisfaction is the primary driver of high-quality service among healthcare system personnel.

H7: The level of income significantly affects the job satisfaction of healthcare personnel.

H8: Employee job satisfaction is determined by the company's reputation and its contribution to the welfare of society.

H9: The company's potential contribution to society's well-being significantly impacts employee job satisfaction.

4. Results.

4.1. Hypothesis testing.

The level of education is directly related to the level of awareness and responsibility regarding the work performed in the healthcare system.

To comprehend and gauge the way how respondents, perceive and prioritize work in the healthcare sector, refer to Figure 1, which illustrates these perceptions and their perceived significance.

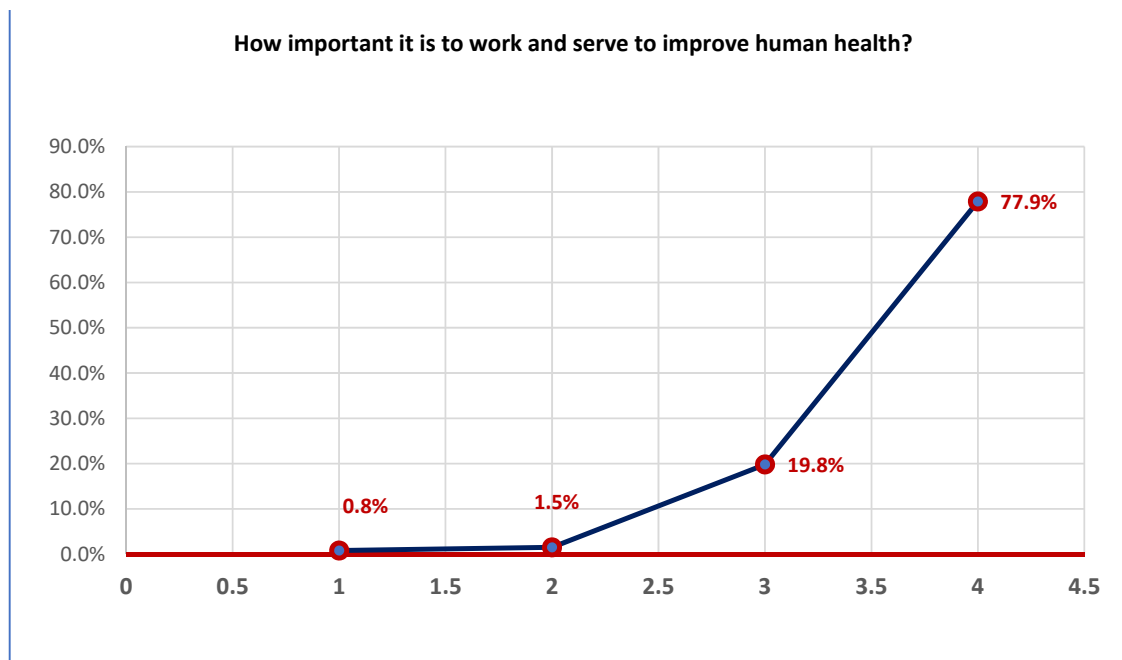


Figure 1. Attitude of healthcare workers toward their work responsibilities.
 Source: authors' findings.

A 5-point scale assessment was utilised to measure the importance of working and serving to improve people’s health. A score of 1 indicates “not at all important”, 2 denotes “not important”, 3 represents “neutral”, 4 signifies “significant” and 5 means “extremely significant”. As shown in the diagram, only 2.3% of the respondents considered this issue unimportant (0.8% rated it as "completely unimportant" and 1.5% as "unimportant"). In contrast, a substantial majority (77.9%) recognised the critical importance of this issue, assigning it the highest rating of five, while a significant proportion (19.8%) rated it as four.

The impact of education on the awareness and responsibility of personnel employed in the healthcare system concerning their work was examined using a One-Way ANOVA. This method allows for assessing the relationship between a quantitative variable and a nominal or ordinal variable across different categories.

A significant statistical relationship between education and the dependent variable is indicated by the results of Levene’s test for equality of variances, presented in Table 1, with a p-value of less than 0.001, demonstrating a high level of statistical significance at the 0.01 level.

Table 1. Test of Homogeneity of Variances

q1 The importance of working and serving to improve human health			
Levene Statistic	df1	df2	Sig.
53.046	3	448	.000

Source: authors' findings.

The dispersion analysis Table 2 reveals a significant statistical relationship between the groups at the 0.01 level, with a p-value less than 0.001. Additionally, the F-statistic is notably high, at 51.648, indicating a strong relationship.

Table 2. ANOVA.

q1 The importance of working and serving to improve human health					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.546	3	12.182	51.648	.000
Within Groups	105.668	448	.236		
Total	142.214	451			

Source: authors' findings.

In line with the significant statistical relationship, there was a directly proportional linear relationship between the variables. This in return implies the positive association between the level of education and the level of awareness and responsibility for the work performed in the healthcare system. This conclusion is supported by the results of the Spearman's correlation test, as detailed in Table 3.

Table 3. Correlations.

		q1 the importance of working and serving to improve human health	q36 education
Spearman's rho	q1 the importance of working and serving to improve human health	Correlation Coefficient 1.000	.123*
		Sig. (2-tailed) .	.015
		N 393	393
q36 education	q36 education	Correlation Coefficient .123*	1.000
		Sig. (2-tailed) .015	.
		N 393	393

Source: authors' findings.

Spearman's test established a weak positive linear relationship ($r = 0.123$) between the variables. This supports the confirmation of Hypothesis H1: The level of education is directly related to the level of awareness and responsibility regarding the work performed in the healthcare system. To test hypotheses H2, H3, H4, and H5, a multifactorial dispersion analysis (Univariate Analysis of Variance) was employed. This evaluates the influence of multiple ordinal-nominal variables on one dependent variable. Education, work experience, age, and gender were independent variables in

the analysis, while the quality of service provided, assessed on a 5-point scale, was the dependent variable. The scaled from 1 ("not at all important") to 5 ("extremely significant").

Table 4 displays the results of the homogeneity of variance test based on the analysis of dispersion tables. It is established that all four factors – education, work experience, age, and gender – jointly influence the variable "How much does your job satisfaction affect the quality of service provided?" with very high reliability at the 0.01 level of statistical significance ($p < 0.001$).

Table 4. Levene's Test of Equality of Error Variances.

Dependent Variable: q32 To what extent does your job satisfaction affect the quality of service you provide?			
F	df1	df2	Sig.
8.488	41	351	.000

Source: authors' findings.

Tables 5, 6, 7, and 8 illustrate the evaluation of the influence of individual factors – education, work experience, age, and gender –on the dependent variable. Table 5 indicates a significant statistical relationship between education and the dependent variable at the 0.01 level ($p < 0.001$, $F = 9.992$), with an average correlation dependence, and effect size ($\text{Eta} = 0.079$).

Table 5. Univariate Tests.

Dependent Variable: q32 to what extent does your job satisfaction affect the quality of service you provide?						
	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	23.202	3	7.734	9.992	.000	.079
Error	271.687	351	.774			

Source: author's findings.

The F tests the effect of education. This test is based on the linearly independent pairwise comparisons among the estimated marginal means. Table 6 demonstrates a significant statistical relationship between work experience and the dependent variable at the 0.01 level ($p < 0.001$, $F = 9.299$), with a moderate effect size ($\text{Eta} = 0.096$).

Table 6. Univariate Tests.

Dependent Variable: q32 to what extent does your job satisfaction affect the quality of service you provide?						
	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	28.790	4	7.198	9.299	.000	.096
Error	271.687	351	.774			

Source: authors' findings.

The F tests the effect of experience. This test is based on the linearly independent pairwise comparisons among the estimated marginal means. Table 7 shows that there is also a significant statistical relationship between the age variable and the dependent variable at the 0.01 level ($P < 0.001$, $F = 9.164$), with an average correlation dependence, effect size = 0.095).

Table 7. Univariate Tests.

Dependent Variable: q32 to what extent does your job satisfaction affect the quality of service you provide?						
	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	28.372	4	7.093	9.164	.000	.095
Error	271.687	351	.774			

Source: authors' findings.

The F tests for the effect of age. This test is based on linearly independent pairwise comparisons among the estimated marginal means.

Table 8 clearly indicates that there is no statistical relationship between gender and the dependent variable.

The level of statistical significance was $p = 0.672$, which was greater than the threshold of 0.05. The results showed no significant difference between male and female respondents regarding the connection between job contentment and the quality of the service provided. As a result, H5 was not confirmed.

Table 8. Univariate Tests.

Dependent Variable: q_32 to what extent does your job satisfaction affect the quality of service you provide?						
	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	.138	1	.138	.180	.672	.001
Error	269.012	351	.766			

Source: authors' findings.

The F tests the effect of gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means. Figure 2 obtained from the dispersion analysis, illustrates the joint dependence of the observed and residual results on the variable "To what extent does your job satisfaction affect the quality of the services you provide?"

Figure 2 demonstrates that the combined effect of all four factors – education, work experience, age, and gender – shows a positive

trend. This indicated a proportional relationship between the observed and expected results. Collectively, these factors contribute to improving the quality of services provided in the healthcare sector.

Dependent Variable: to what extent does your job satisfaction affect the quality of the service you provide?

Figures 3, 4, 5, and 6 show the relationship of a separate factor with the dependent variable.

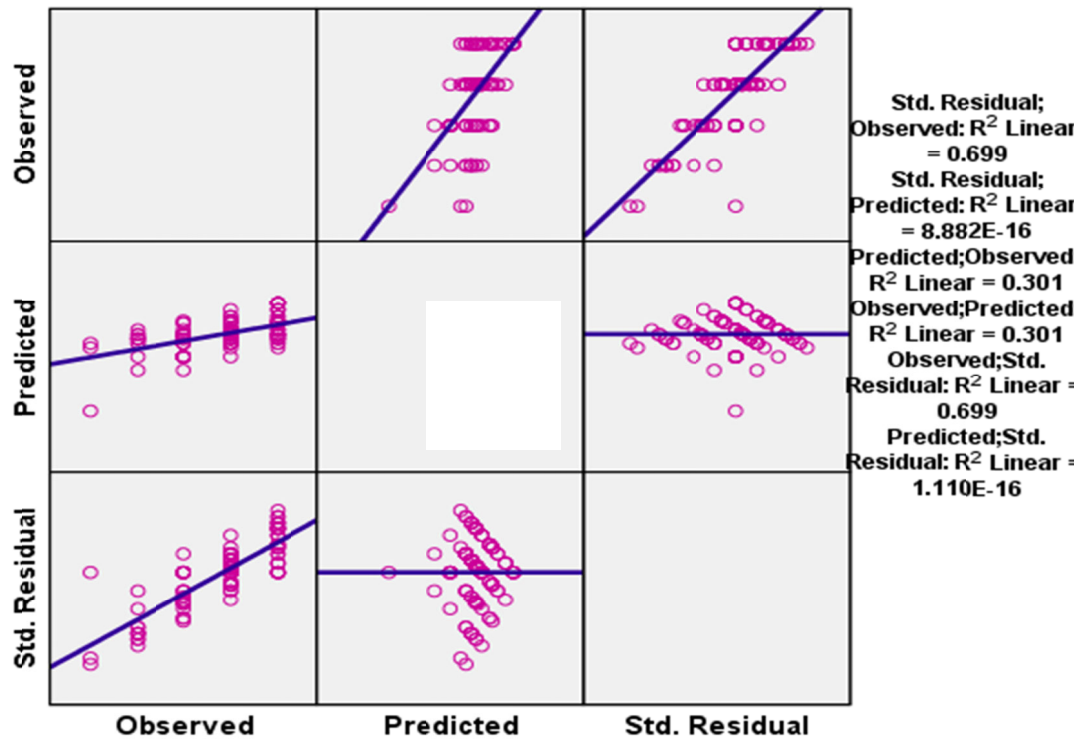


Figure 2. Relationship between service quality and job satisfaction considering 4 factors.

Source: authors' findings.

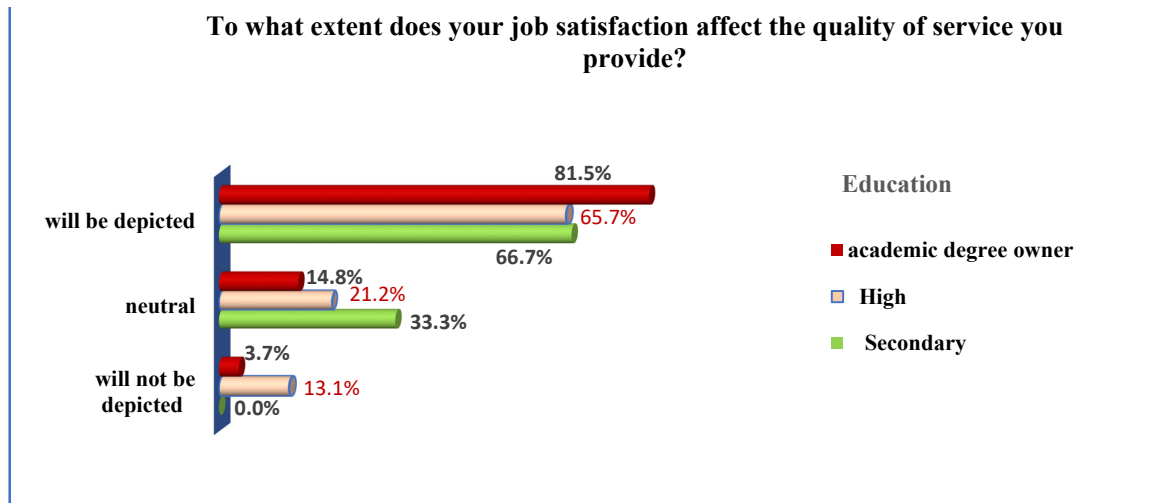


Figure 3. Job satisfaction caused by the quality of service provided, considering the education.

Source: authors' findings.

As can be seen from Figure 3, the level of satisfaction of the staff with an academic service provided is most affected by the job degree.

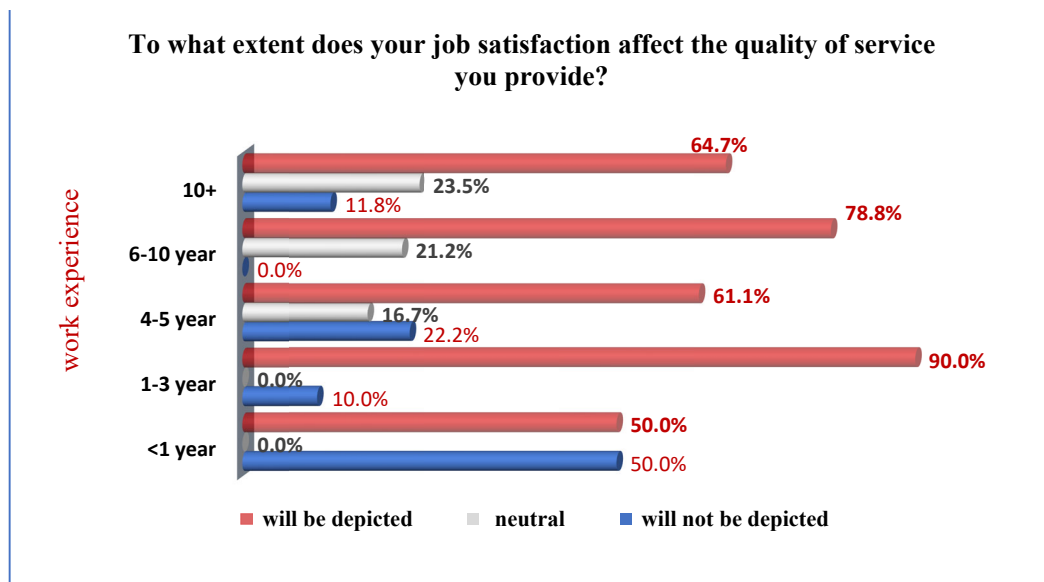


Figure 4. Job satisfaction caused by the quality of service provided, considering the working experience.

Source: authors' findings.

Based on Figure 4, the impact of job satisfaction on service quality varies with work experience. The highest proportion of respondents who report that job satisfaction significantly affects service quality are those with 1-3 years of work experience (90%). This is followed by respondents with 6-10 years of work experience (78.8%), those with more

than 10 years of experience (64.7%), and, finally, those with 4-5 years of experience (61.1%). Figure 5 reveals that the highest proportion of respondents who believe job satisfaction affects the quality of their services are those aged 46-55 (77.3%). This is followed by respondents aged 18-35 (71%) and those aged 36-45 (64.3%).

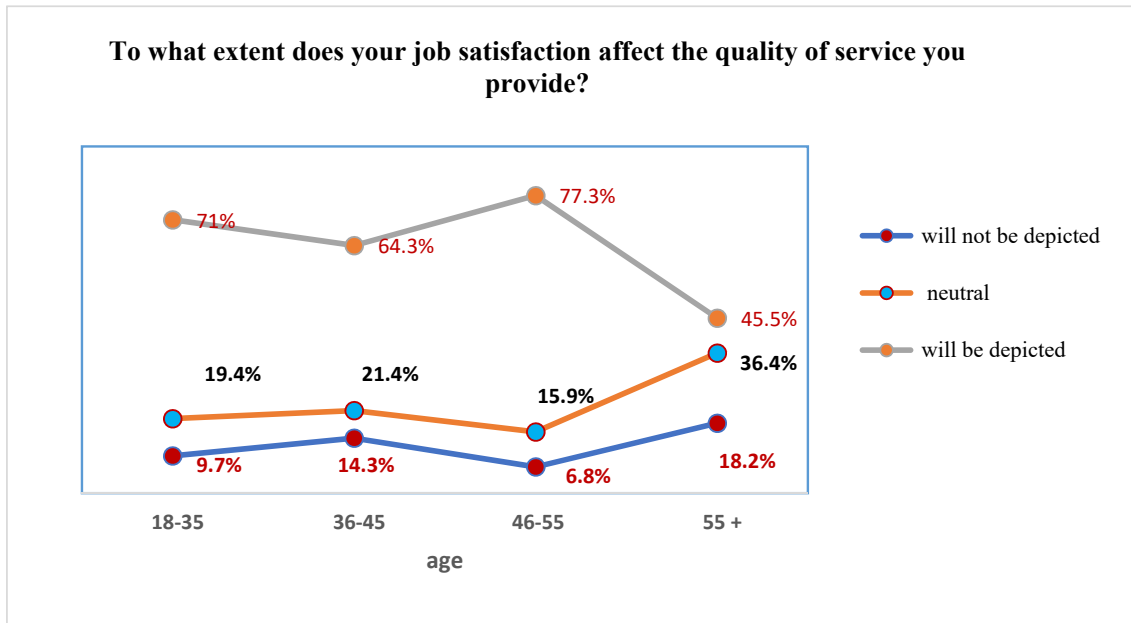


Figure 5. Job satisfaction caused by the quality of service provided, considering the age
 Source: authors' findings.

Figure 6 illustrates the relationship between gender and the variable "To what extent does your job satisfaction affect the quality of the service you provide?" As noted during hypothesis testing, this figure confirms that both male and female respondents exhibit similar tendencies. A large majority of respondents from both genders (up to 70%) report that job satisfaction significantly impacts the quality of their services.

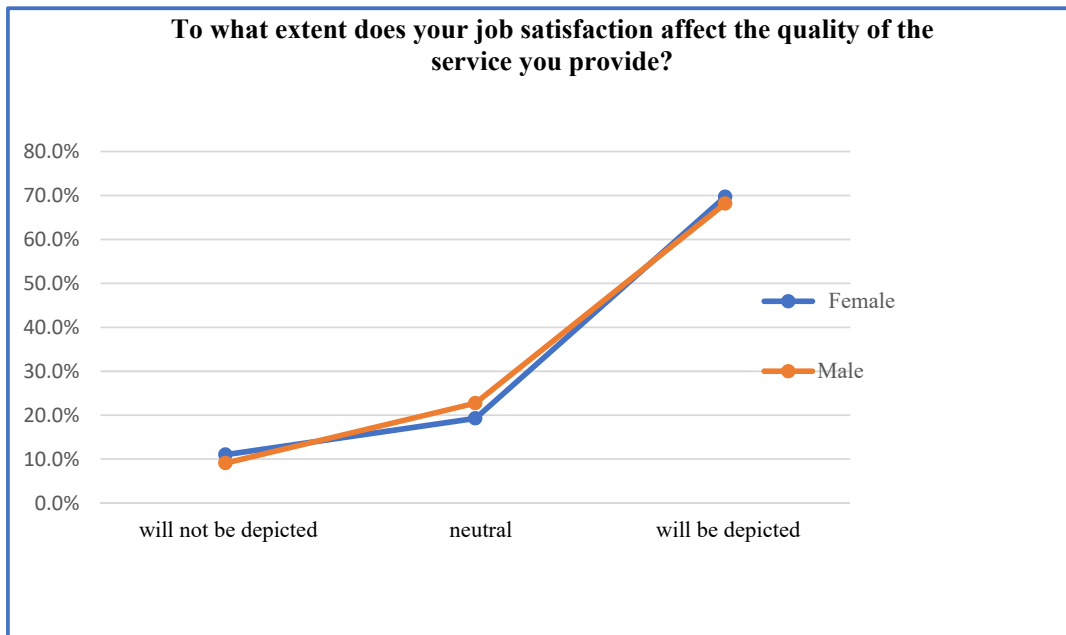


Figure 6. Job satisfaction caused by the quality of service provided, considering the gender
 Source: authors' findings.

Crosstabulation and the chi-square test was employed to evaluate the following hypothesis: H6: The primary driver of high-quality service among healthcare system personnel is their job satisfaction.

Table 9 presents the crosstabulation of job satisfaction with the variable – q32: To what extent does your job satisfaction affect the quality of the services you provide?

Table 9. Crosstabulation: Job satisfaction quality of provided services.

		q32 To what extent does your job satisfaction affect the quality of the services you provide? (Row N%)		
		Does not affect	Neutral	Affects
q11 Are you satisfied with the authority assigned to you in your position?	yes	10%	21%	69%
	no	30%	20%	50%
	Cannot answer	4.8%	14.3%	81%

Source: authors' findings.

Of the unequivocal responses (yes or no), among those who are satisfied with their given authority, 60 per cent, the majority, report that their job contentment positively affects the quality of the services they provide. Table 10 presents the results of the chi-square tests conducted on the same data.

The test indicates a significant statistical relationship between the variables at the 0.01 level ($p = 0.01$). This confirms the validity of Hypothesis H6, which states that job satisfaction is the primary driver of high-quality service performance among staff members.

Table 10. Pearson Chi-Square Tests.

		q32 To what extent does your job satisfaction affect the quality of the services you provide?
q11 Are you satisfied with the authority assigned to you in your position?	Chi-square	19.268
	df	4
	Sig.	.001 ^{a,b}

Source: authors' findings.



Figure 7. Relationship between job satisfaction and income level.

Source: authors' findings.

As observed, higher levels of job satisfaction (indicated by the "yes" category) correspond to a more significant impact on the quality of the service provided. The Kruskal-Wallis test was utilized to test hypothesis H7: The level of income significantly affects the

job satisfaction of healthcare system personnel, which is analogous to a one-way analysis of variance.

Table 11 presents the average ranks for each income category, as determined by the Kruskal-Wallis test.

Table 11. Ranks.

	q38 monthly income (in Georgian Lari)	N	Mean Rank
q11 Are you satisfied with the authority assigned to you in your position?	1 <1000	108	221.71
	2 1000-2000	150	188.15
	3 2001-3000	54	162.25
	4 3000+	81	203.61
	Total	393	

Source: authors' findings.

Table 12 shows the results of the chi-square test, from which it is determined that job satisfaction has a significant statistical relationship at the 0.01 level with the level of income (p does not exceed 0.001, the chi-square coefficient is equal to 20.610).

Therefore, hypothesis is confirmed. According to Figure 8, the majority of positive responses to the job satisfaction of the staff were recorded only in the case of the 2001-3000 and more than 3000 GEL groups.

Table 12. Test Statistics.

	q11 Are you satisfied with the authority assigned to you in your position?
Chi-Square	20.610
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test.

b. Grouping Variable: q38 monthly income (in Georgian Lari).

Source: authors' findings.

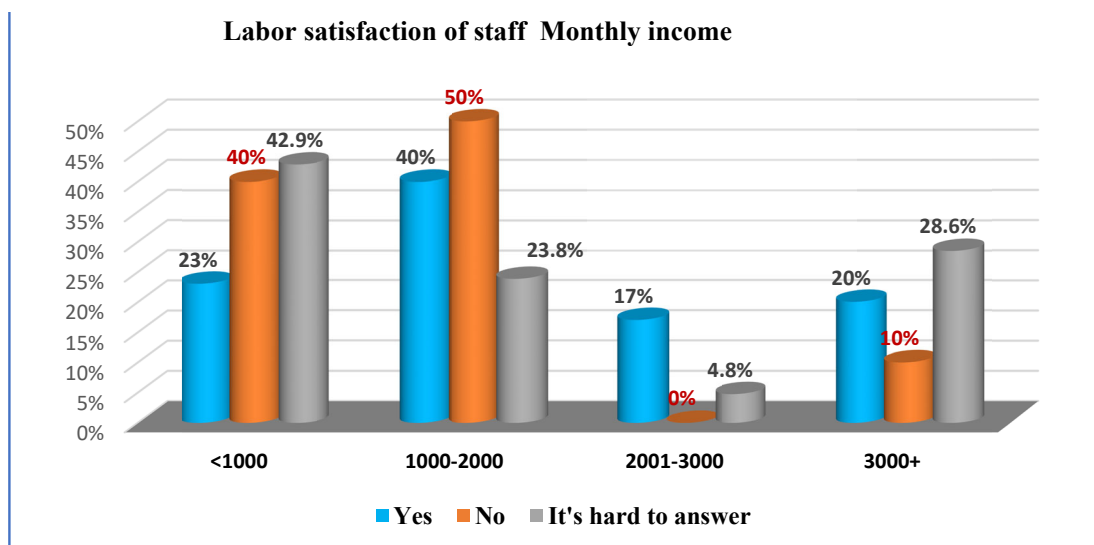


Figure 8. Relationship between job satisfaction and monthly salary.

Source: authors' findings.

Hypotheses H8 and H9 were tested using a consumer crosstabulation Table 13 and a chi-square test (Table 14). The crosstabulation table found that perceptions of the company’s reputation and image and the belief that the company contributes to societal welfare have a very high reliability influence on staff job satisfaction. Those who value the company’s reputation and societal contributions are

significantly more satisfied with the authority associated with their positions compared to other categories. The chi-square test results, presented in Table 14, clearly demonstrate, with very high reliability (0.01), that both independent variables are statistically related to staff job satisfaction. Hypotheses H8 and H9 are also confirmed.

Table 13. Job satisfaction by company traditions and by potential to contribute to the welfare of society.

			q11 Are you satisfied with the authority assigned to you in your position?		
			yes	no	Cannot answer
q29 Are there company traditions or events that you enjoy?	yes	Count	290	7	28
		Row N %	89.4%	2.1%	8.5%
	no	Count	17	17	14
		Row N %	35.7%	35.7%	28.6%
	cannot answer	Count	38	10	31
		Row N %	47.8%	13.0%	39.1%
q30 Do you think the company has the potential to contribute to the welfare of society?	yes	Count	311	24	55
		Row N %	79.6%	6.2%	14.2%
	no	Count	7	7	3
		Row N %	40.0%	40.0%	20.0%
	cannot answer	Count	28	3	14
		Row N %	61.5%	7.7%	30.8%

Source: authors’ findings.

Table 14. Pearson Chi-Square Tests.

		q11 Are you satisfied with the authority assigned to you in your position?	
		Chi-square	Sig.
q29 Are there company traditions or events that you enjoy?	Chi-square	133.275	
	df	4	
	Sig.	.000 ^{a,b}	
q30 Do you think the company has the potential to contribute to the welfare of society?	Chi-square	38.477	
	df	4	
	Sig.	.000 ^{a,b,c}	

Source: authors’ findings.

According to the chi-square coefficient, the factor related to the company’s reputation and image shows a more substantial influence (r = 133.275). The factor contributing to societal welfare has a chi-square value of r = 38.477.

In both cases, p-values were less than 0.001. Figure 9 clearly illustrates the relationships between the factors and the dependent variable.

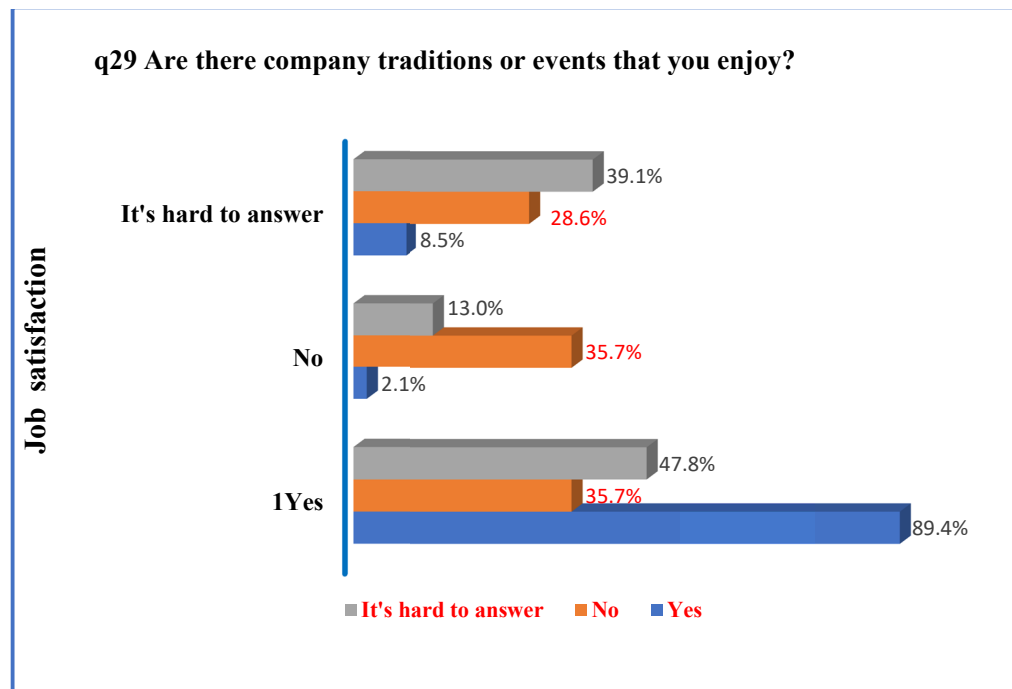


Figure 9. Employees' attitude towards company traditions.

Source: author's findings.

5. Conclusions.

To maintain the overall well-being of the country's healthcare sector, bringing together experts and professionals from various fields is crucial. Similarly, healthcare organisations must efficiently accomplish and gain a competitive edge and position in the market, which is impossible without proper human resources management. Among the vast range of characteristics which allow the evaluation of management and its approaches, job satisfaction is a crucial indicator closely linked to employee performance. Performance, in turn, directly influences the quality of services provided and, in general, impacts the organisation's overall success.

The research results show that content employees are crucial to providing high-quality services and increasing customer satisfaction. For every gender, job satisfaction is influenced by factors such as age, work experience, and income; however, it is worth mentioning that higher levels of these factors do not always lead to higher job satisfaction. Therefore, managers should consider that increasing salaries or work experience may not constantly improve job satisfaction.

Managers need to develop different strategies and consistently gauge their current state. Education is another factor that affects satisfaction and contributes to improved service quality and staff responsibility. This leads to the conclusion that organisations should prioritise increasing staff education levels and promoting continuous learning.

Every organisation is responsible for actively participating in and contributing to promoting public welfare and related activities. This is especially crucial for organisations operating in the health sector, as they directly impact human life and general well-being. Therefore, in addition to internal organisational strategy and policy, employee satisfaction in this sector is influenced by the organisation's level of involvement in social welfare improvement initiatives.

Overall, based on the research conducted, job satisfaction is a crucial indicator for providing high-quality services to healthcare organisations and increasing the labour productivity of their staff. Job satisfaction depends on various factors, including the organisation's approach to its staff and related decisions, its societal position, and its strategy for public welfare.

REFERENCES

- Abdullah, M. I., Huang, D., Sarfraz, M., Ivascu, L., & Riaz, A. (2021). Effects of internal service quality on nurses' job satisfaction, commitment and performance: Mediating role of employee well-being. *Nursing Open*, 8(2), 607-619. <https://doi.org/10.1002/nop2.665>.
- Berberoglu, A. (2018). Impact of organizational climate on organizational commitment and perceived organizational performance: empirical evidence from public hospitals. *BMC health services research*, 18, 1-9.
- Curado, C., & Santos, R. (2022). Transformational leadership and work performance in health care: the mediating role of job satisfaction. *Leadership in Health Services*, 35(2), 160-173. <https://doi.org/10.1108/LHS-06-2021-0051>
- De Simone, S., Planta, A., & Cicotto, G. (2018). The role of job satisfaction, work engagement, self-efficacy and agentic capacities on nurses' turnover intention and patient satisfaction. *Applied Nursing Research*, 39, 130-140. <https://doi.org/10.1016/j.apnr.2017.11.004>
- Gamkrelidze, A., Atun, R., Gotsadze, G., MacLehose, L., & McKee, M. (2002). Health care systems in transition: Georgia. World Health Organization.
- Gray, P., Senabe, S., Naicker, N., Kgalamono, S., Yassi, A., & Spiegel, J. M. (2018). Workplace-Based Organizational Interventions Promoting Mental Health and Happiness among Healthcare Workers: A Realist Review. *International Journal of Environmental Research and Public Health*, 16(22), 4396. <https://doi.org/10.3390/ijerph16224396>.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376–407. <https://doi.org/10.1037/0033-2909.127.3.376>
- Koblianidze, T., Kochlamazashvili, L., & Chakhunashvili, T. (2018). Healthcare System and Problems of Medical Personnel in Georgia. *Total health*, 7(6.9), 2-8.
- Kuzey, C. (2018). Impact of health care employees' job satisfaction on organizational performance support vector machine approach. *Journal of Economics and Financial Analysis*, 2(1), 45-68.
- Lim, J., Lim, K., Heinrichs, J., Al-Aali, K., Aamir, A., & Qureshi, M. (2018). The role of hospital service quality in developing the satisfaction of the patients and hospital performance. *Management Science Letters*, 8(12), 1353-1362. <http://dx.doi.org/10.5267/j.msl.2018.9.004>
- Pappa, S., Athanasiou, N., Sakkas, N., Patrinos, S., Sakka, E., Barmpareassou, Z., Tsikrika, S., Adraktas, A., Pataka, A., Migdalis, I., Gida, S., & Katsaounou, P. (2021). From recession to depression? Prevalence and correlates of depression, anxiety, traumatic stress and burnout in healthcare workers during the COVID-19 pandemic in Greece: A multi-Center, Cross-sectional study. *International Journal of Environmental Research and Public Health*, 18(5), 2390. <https://doi.org/10.3390/ijerph18052390>
- Paresashvili, N., Tikishvili, M., & Edzgvradze, T. (2021). Employees discrimination issues based on the statistical analysis using SPSS (Case of Georgia, Republic of). *Access to science, business, innovation in digital economy*, 175-191, [https://doi.org/10.46656/access.2021.2.2\(5\)](https://doi.org/10.46656/access.2021.2.2(5))
- Pirtskhalaishvili, D., Paresashvili, N., & Kulinich, T. (2021). The gender aspects of career development and leadership in organizations. *Journal of Eastern European and Central Asian Research (JEECAR)*, 8(2), 255-266. <https://doi.org/10.15549/jeeecar.v8i2.654>
- Prasad, K., McLoughlin, C., Stillman, M., Poplau, S., Goelz, E., Taylor, S., Nankivil, N., Brown, R., Linzer, M., Cappelucci, K., Barbouche, M., & Sinsky, C. A. (2021). Prevalence and correlates of stress and burnout among U.S. healthcare workers during the COVID-19 pandemic: A national cross-sectional survey study. *EClinicalMedicine*, 35(100879), 100879. <https://doi.org/10.1016/j.eclinm.2021.100879>
- Rostami, F., Babaei-Pouya, A., Teimori-Boghsani, G., Jahangirimehr, A., Mehri, Z., & Feiz-Arefi, M. (2021). Mental workload and job satisfaction in healthcare workers: The moderating role of job control. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.683388>

- Salvatore, D., Numerato, D., & Fattore, G. (2018). Physicians' professional autonomy and their organizational identification with their hospital. *BMC Health Services Research*, 18(1). <https://doi.org/10.1186/s12913-018-3582-z>
- Specchia, M. L., Cozzolino, M. R., Carini, E., Di Pilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2020). Leadership Styles and Nurses' Job Satisfaction. Results of a Systematic Review. *International Journal of Environmental Research and Public Health*, 18(4), 1552. <https://doi.org/10.3390/ijerph18041552>
- Tamer, G. (2021). The role of ethical leadership in increasing employees' organizational commitment and performance: the case of healthcare professionals. *Journal of Life Economics*, 8(1), 133-146. <http://dx.doi.org/10.15637/jlecon.8.1.13>
- Vainieri, M., Ferrè, F., Giacomelli, G., & Nuti, S. (2019). Explaining performance in health care: How and when top management competencies make the difference. *Health Care Management Review*, 44(4), 306–317. <https://doi.org/10.1097/hmr.000000000000164>
- van den Heuvel, S. G., Geuskens, G. A., Hooftman, W. E., Koppes, L. L. J., & van den Bossche, S. N. J. (2010). Productivity loss at work; Health-related and work-related factors. *Journal of Occupational Rehabilitation*, 20(3), 331–339. <https://doi.org/10.1007/s10926-009-9219-7>
- Wang, X., Li, C., Chen, Y., Zheng, C., Zhang, F., Huang, Y., & Birch, S. (2022). Relationships between job satisfaction, organizational commitment, burnout and job performance of healthcare professionals in a district-level health care system of Shenzhen, China. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.992258>
- Warr, P., & Nielsen, K. (2018). Wellbeing and work performance. In E. Diener, S. Oishi, & L. Tay (Eds.). *Handbook of well-being*. Salt Lake City: UT: DEF Publishers.