Research Article

Determination of quality of working life of private veterinarians: validity and reliability study

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Abstract: With this study, it was aimed to determine the factors affecting the quality of working life of private veterinarians. In addition, it was aimed to develop a scale (Quality of Working Life Scale) that enables the evaluation of quality of working life of private veterinarians. The study included 367 people who work as private veterinarians in Turkey. For the structure validity, Cronbach alpha (α) coefficient was used for reliability analysis. Factor analysis was used for validity analysis. As a result of the data obtained from the study, it is stated that the "Quality of Working Life Scale" is reliable and valid for private veterinarians, and it can be used to determine the quality of working life of private veterinarians, as well as it is a scale that can be used to evaluate the quality of working life of veterinarians working in other fields and other professions in the field of health.

Key words: Factor analysis, private veterinarian, quality, working life, scale, veterinarian

1. Introduction

Although the concept of Quality of Working Life (QWL) initially meant keeping the employee within the organization, job security, financial income and interests, it started to become subjective as of the 1980s [1]. Wyatt and Wah [2] state that factors within the QWL include the issues such as democracy in the working environment, difficult working conditions, traditional goals, having a say over the decisions taken, the content of the work, resources, working conditions, organizational context, safe and healthy living conditions, the absence of unnecessary work stress, work mobility, the quality and quantity of leisure time, organizational and physical environment, the characteristics of the job, the chance to rise in the career steps, the working environment, the ability to use talents, having the future development opportunities, adherence to the rules, the relationship of work with society and issues such as justice, demonstrating individual characteristics, equal treatment, security, sufficient and fair wages, autonomy and control, good relations with colleagues, job security, healthy social relations in terms of employee welfare.

In the changing and developing world, it is inevitable that people should have various talents and qualities, and their desires should also be considered. In the face of social developments, it is seen that it is inevitable to organize both the training of the employees and the methods of doing business in order to maintain the continuity of the professions and the performance of institutions and organizations [3]. In this respect, it can be said that the success level of the programs to increase the QWL of the members of the veterinary profession, which is at a key point in terms of the EU process, will bring important consequences for the future of the profession.

In Turkey, in line with "no 6343 on The Law Regarding Practising The Profession of Veterinary Medicine, Organisation of Turkish Veterinary Medical Association and Chambers and Their Activities" [4], veterinarians authorized to perform their profession freely are called "Private Veterinarian" (PV) [5]. Besides containing many problems related to professional execution within its own structure [3,6], PVs also face important problems regarding to QWL (vital, social, self-actualization, ego) [7,8]. The success levels of the programs aimed at increasing the QWL will bring along many important results in terms of institutions [9]. In this direction, it was aimed to evaluate and determine the factors related to QWL in the practice of PVs.

2. Material and methods

The population of the study is comprised by veterinarians in Turkey who work as private veterinarians. For the

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sample that will represent the universe of the study, the data of January 2020, which is available on the official website of the Ministry of Agriculture and Forestry, was taken as the criteria.[1] Registered in Chambers of Veterinarians, there are 6842 clinics, 69 polyclinics, and 58 animal hospitals. The number of volunteers for participation in studies taken from Chambers of Veterinarians is given in Table 1 by region. The total number of volunteers in our population is 825. Data was obtained between 05-27 May 2020 by applying a data form to 367 PVs (Table 1) determined as a result of the power analysis (with 82.672% power) performed before the study.

$$n_0 = \frac{Nt^2pq}{d^2(N-1)+t^2pq} = \frac{825(2.57)^2 0.5*0.5}{(0.05)^2(825-1)+(2.57)^2*0.5*0.5} \cong 380$$

99% probability t table value = 2.57

Since there are male and female veterinarians p = 0.5 q = 0.5

N = Number of individuals in the population

p = Frequency of sight of the event to be examined

q = Frequency of absence of the event to be examined

t = theoretical value found in the t table at certain degrees of freedom and detected error level.

d = deviation to be made according to the frequency of occurrence of the event.

Stratified sampling = 367/825 = 0.4449 (all samples)

The results of the power analysis made for Cronbach alpha are reported Appendix 3 [10,11].

Within the scope of the study, approval was obtained from the Ethics Committee of the Selçuk University Faculty of Veterinary Medicine Experimental Animal Production and Research Center on April 30, 2020, with the decision number 2020/46.

A data form was prepared utilizing Walton [12], Özaslan [9], CDC[2], and Aslım [8] as data collection tools. The questions were tested by asking them to 30 people and 3 experts based on the individual permissions received from the Chambers of Veterinarians. The prepared form was delivered to veterinarians wishing to participate via the internet.

In the study, reliability and validity analyzes were conducted for "*Quality of Working Life Scale*" (Appendix 1,2). Cronbach's alpha (α) coefficient was used for reliability analysis, while factor analysis was used for validity analysis. Compliance with factor analysis was evaluated with Bartlett's test of sphericity, and the adequacy of the number of samples was evaluated with the Kaiser-Meyer-Olkin (KMO) sampling adequacy statistics.

Descriptive statistics were given for categorical and continuous variables in the study. SPPS 25 (IBM Corp. Armonk, NY, USA) statistics package program was used in the assessment of the data. P < 0.05 and P < 0.01 levels were considered statistically significant.

3. Results

While the highest participation was from the Central Anatolia Region (n = 108), the least participation was from the Southeastern Anatolia Region (n = 31) (Table 2).

It was determined that there were no items with a total correlation value of less than 0.45 in the questionnaire and thus 36 items had high reliability values (Table 3).

Since each item of the measuring tool is scaled between 1–5, the Cronbach's alpha (α) reliability means reliability in terms of internal consistency, and the Cronbach's alpha (α) coefficient of the 36 item QWL section of the data form used in the study was determined as 0.946.

When the total variance explained was examined, it was determined that there were six factors for 36 items according to the application data and that 61.209% of the feature measured with this six-factor measurement tool could be measured (Table 4). In the validity study of the data form, factor analysis was performed using the Varimax method for the data collected on the items in the form and the findings are presented in Table 5.

The enthalpy–entropy chart was used in the study (Figure 1). In the graph, the cut-off point of the eigenvalues represents the 6th main component. Therefore, the basic component may not be taken by determining 6 factors. However, since the study aimed to explain a larger part of the total variability, a 6th main component was included.

In order to determine whether the data are applicable for factor analysis in the study, the Kaiser-Meyer-Olkin sample adequacy test and Bartlett's sphericity were applied to determine whether the relationships between the variables to be analyzed were significant and different from zero. The results obtained as a result of the tests are presented in Table 5. When the total variance explained is examined, it can be said that there are 6 factors according to the application data for 36 items and 61.209% of the feature measured by this 6-factor measurement tool. In social sciences, it is sufficient to have at least 55% of the total variance explained. The fact that the Kaiser-Meyer-Olkin sampling adequacy statistic is above 0.50 is an indicator that the sample size of the data is sufficient. Bartlett's test of sphericity tests the suitability of chi-square value data for factor analysis. The higher the ratio, the more suitable the data set for factor analysis. Therefore, it can be said that these data are suitable for factor analysis (P < 0.05). In general, it can be said that the construct validity of the measuring tool is provided to the factor analysis results.

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Table 1. Sampling selection made according to random regions.

Region	Total number of private volunteer veterinarians Answering the data form	Strata weight (W_h)	Number of individuals per (n_h)
Mediterranean	71	0.086	32
Eastern Anatolia	73	0.088	32
Aegean	139	0.168	62
Southeastern Anatolia	70	0.085	31
Central Anatolia	243	0.295	108
Marmara	104	0.126	46
Blacksea	125	0.152	56
Total	825	1	367

Table 2. Distribution of the individuals participating in the study by region.

		n	%
Regions	Mediterranean	32	8.7
	Eastern Anatolia	32	8.7
	Aegean	62	16.9
	Southeastern Anatolia	31	8.4
	Central Anatolia	108	29.4
	Marmara	46	12.5
	Blacksea	56	15.2
Total		367	100

The summability test of the Anova Tukey scale was used to collect the scale and obtain a scale total score. When the summability column was examined, P was determined to be lesser than 0.05 (P < 0.05) (Table 6).

In this analysis, the summability test of the Anova Tukey scale was used to collect the scale and obtain a scale total score. Considering the summability column, it has been concluded that the scale is suitable for obtaining a scale total score by summing it as P < 0.05.

During the factor analysis, no item was removed due to the low factor scores in the study. Factor 1 (job guarantee and autonomy factor), covers the questions 24-33; Factor 2 (respectability [appreciation] factor), covers questions 16-23; Factor 3 (social needs factor) covers questions 34-36; Factor 4 (development and change factor), covers questions 7–15; Factor 5 (occupational health and safety factor), covers questions 3-6 and Factor 6 (economic needs factor) covers questions 1-2. Each factor was named appropriately by considering the subitems collected in the factors. Among the items, the score of the lowest item was determined as 0.452, and the score of the highest item was determined as 0.933 (Table 7).

4. Discussion

The reliability coefficient is calculated as an analysis method that is widely used in item selection and determines to what extent the items that constitute the measurement tool for reliability analysis are completely related to the measurement tool [11,13-17]. And item total score analysis is used for validity, together with reliability, for the structure validity of the scales. Item-total score correlation coefficients explain the relationship between the scores obtained from the test items and the total score of the test. The fact that this correlation is positive and high indicates that the test has high internal consistency, and the items exemplify similar behaviors. In addition, item-total score correlation is calculated with the correlation coefficient in tests using Likert-type rating scales [17]. The high correlation obtained for each item shows that the correlation of that item with the measured theoretical structure is high as such, in other words, the item is enough and effective in measuring the intended behavior [18]. In item selection, although not yet certain, it is suggested that the acceptable coefficient should be greater than 0.20 or even 0.25, and it is stated that items lower than 0.20 should not be included in the test [14,16]. Since there are no items with a total correlation value of less than 0.20 in the study scale (minimum 0.45), no items were removed from the data form prepared (Table 3) because all 36 items in the scale have high reliability values can be regarded as a highly favorable result for the study.

The ways to calculate the reliability coefficient differ according to the number of applications, source, and type of variables. These differences in the way of calculation also change the interpretive meaning of the reliability coefficient. The reliability coefficient is the degree of purity from random errors and provides information about the amount of error involved in the measurement results. The reliability, which takes values between 0 and +1, is desired to be close to +1. Accordingly, it is a desired result that the

Table 3. Item-based reliability coefficients and item-total correlation of the scale.

	Average to be valid if an item is removed from the scale	Variance to be valid if an item is removed from the scale	Total item correlations	Reliability to be valid if an item is removed from the scale Cronbach's α coefficient
Q1	76.84	496.54	0.52	0.95
Q2	76.42	490.45	0.51	0.95
Q3	77.74	519.80	0.52	0.95
Q4	77.72	519.48	0.53	0.95
Q5	76.93	496.71	0.54	0.95
Q6	76.68	498.73	0.46	0.95
Q7	77.51	506.47	0.49	0.95
Q8	77.56	502.73	0.54	0.95
Q9	77.16	493.19	0.61	0.94
Q10	77.47	500.74	0.59	0.95
Q11	77.27	496.42	0.60	0.94
Q12	76.84	490.03	0.62	0.94
Q13	77.47	498.81	0.63	0.94
Q14	77.53	499.92	0.65	0.94
Q15	77.47	499.64	0.63	0.94
Q16	77.29	498.63	0.58	0.95
Q17	77.17	495.70	0.64	0.94
Q18	77.31	495.63	0.66	0.94
Q19	77.39	503.07	0.60	0.95
Q20	77.46	503.11	0.60	0.95
Q21	76.85	490.56	0.64	0.94
Q22	76.77	485.65	0.66	0.94
Q23	77.05	491.77	0.67	0.94
Q24	77.00	496.30	0.53	0.95
Q25	75.74	488.12	0.58	0.95
Q26	76.49	487.84	0.60	0.94
Q27	76.95	493.03	0.56	0.95
Q28	77.21	497.95	0.59	0.95
Q29	77.38	503.13	0.54	0.95
Q30	77.12	496.28	0.61	0.94
Q31	76.64	485.01	0.68	0.94
Q32	76.84	492.87	0.59	0.94
Q33	76.92	495.12	0.54	0.95
Q34	75.66	487.13	0.58	0.95
Q35	75.93	486.89	0.60	0.94
Q36	75.82	488.59	0.56	0.95

reliability coefficient is higher than 0.70 [19]. Since each item of the measurement tool is scaled between 1-5 Likert-type, Cronbach's alpha (α) reliability means a reliability in terms of internal consistency [17]. With determination of the Cronbach's alpha (α) coefficient of the 36 item QWL section of the data form used in the study as 0.946, it can be said that the data form is quite suitable for use, since this coefficient is higher than 0.80.

Table 4. Data form validity coefficient.

Sum of squares of factor as a result of varimax rotation			
Factor	Total	% of variance	Cumulative variance %
1	4.91	13.63	13.63
2	4.48	12.43	26.06
3	4.19	11.64	37.7
4	4.13	11.48	49.19
5	2.3	6.38	55.56
6	2.03	5.65	61.21

Table 5. Results of Kaiser–Meyer–Olkin and Bartlett's sphericity test.

Kaiser-Meyer-Olkin	0.938	
Barlett's Sphericity Test	Chi-square	17724.536
	Degress of freedom (df)	630
	P value	0.001

Structure validity provided by factor analysis method is defined as showing the accuracy of the sign related to the theoretical structure to be measured [20,21]. It is stated that the sample size used in the study is not enough and the values between 0.60-0.69 can be considered as good if the value of the KMO test performed before the factor analysis is below 0.50 [22,23]. In addition, the result of Barlett's sphericity test analysis should be found to be statistically significant in order to determine whether the sample size is enough or not [22,24]. Bartlett's sphericity test Chi-square value measures the suitability of the data for factor analysis, and the higher this ratio means the more suitable the data set is for factor analysis [25]. In the study, KMO test was determined as 0.938 and Barlett's sphericity test analysis Chi-square value was determined as $\chi 2 = 17724.536$ before factor analysis. Finding that these results are statistically significant (P < 0.01), and thus the values obtained in the study show that these data are suitable for factor analysis (P < 0.05). It can also be said that, in

general, the factor analysis results and the measurement tool provide the structure validity.

In order to obtain a total scale score by summing the scale, the summability test of the Anova Tukey scale is used [26]. Considering the summability column of the test application result in the study, it can be stated that the scale is suitable for obtaining a scale total score by summing up since P < 0.05 (Table 5).

Şirin [27] developed a scale consisting of 35 items and five-factors that can be used in measuring the quality of work life of nurses within the scope of "Validity and Reliability Study of Nursing Job Quality of Life Scale." In the study conducted to determine "Validity, Reliability and Development of Health Personnel Working Life Quality Scale", a scale of 27 questions and six-factors were developed and it was stated that this scale was a valid and reliable scale for determining the working life quality of healthcare workers [28]. In their study, Taşdemir Afsar and Burcu [29] conducted for the adaptation and verification of "Working Life Quality Scale" to Turkish culture developed by Sirgy et al. [30] according to the confirmatory factor analysis results of the adapted scale; they stated that the adaptation of the model to current data was at an acceptable level and it was a reliable and valid measurement tool for
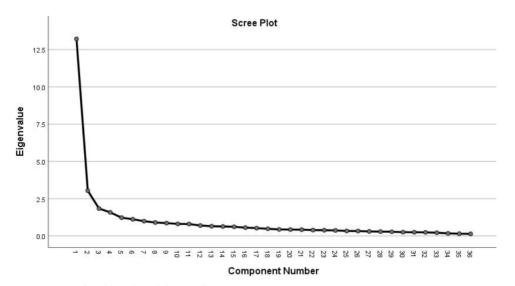

Figure 1. Quality of working life attitude items.

Table 6. Tukey's test of additivity.

			Sum of squares	df	Mean square	F value	P value
Between population			12003.21	824	14.56		
Within population			8544.89	35	244.14	311.52	0.001
	Residual	Nonaddivity	578.49[a]	1	578.49	757.52	0.001
		Balance	22023.38	28839	0.76		
		Total	22601.87	28840	0.78		
	Total		31146.77	28875	1.07		
Total			43149.99	29699	1.45		

df : Degress of freedom.

Table 7. Factor scores.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Q1						0.63
Q2						0.53
Q3					0.93	
Q4					0.93	
Q5					0.65	
Q6					0.71	
Q7				0.57		
Q8				0.66		
Q9				0.69		
Q10				0.67		
Q11				0.73		
Q12				0.62		
Q13				0.62		
Q14				0.68		
Q15				0.61		
Q16		0.54				
Q17		0.54				
Q18		0.64				
Q19		0.56				
Q20		0.53				
Q21		0.53				
Q22		0.45				
Q23		0.47				
Q24	0.81					
Q25	0.67					
Q26	0.48					
Q27	0.52					

Table 7. (Continued).

Q28	0.68					
Q29	0.65					
Q30	0.67					
Q31	0.60					
Q32	0.66					
Q33	0.51					
Q34			0.87			
Q35			0.83			
Q36			0.81			

studies aimed at determining the quality level of working life. Akar and Üstüner [31] have revealed in their study that the work life quality scale developed by Van Laar et al. [32] is a scale that can be used in determining the quality of work life of teachers in educational institutions in Turkey. There is a study [8] previously conducted on the evaluation of the QWL of veterinarians who worked in the Ministry of Agriculture and Forestry, but a scale study has not been conducted on the QWL of veterinarians working both as a private and in other work areas. It can be argued that the scale developed in line with the data obtained in the study is a scale that can be used in studies conducted for the evaluation of private veterinarians' QWL, but it can also be used as an important data form that can be used in the evaluation of the QWL of professionals working in other work fields.

In the analyses made in the current study, it was determined that 6 sub-factors affect the quality of working life overall, and variance explanation ratio starting from the highest: social needs, occupational health and safety, development and change, job guarantee and autonomy, economic needs and respectability.

As a result, according to the research findings it can be said that "Quality of Working Life Scale" is reliable and valid for private veterinarians, it can be used in the evaluation of quality of working life of veterinarians and will contribute to the studies to be conducted in this field.

Ethics Committee Approval: Decision by Selçuk University, Faculty of Veterinary Medicine, Ethic Committee on 30.04.2020 (approval number: 2020/04).

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Appendix 1. Quality of working life scale (English version).

Q1. The wages I earn are enough to fulfill my needs.

Q2. I think the wage I'm paid is fair (the wage I deserve).

Q3. In my working life, I encounter situations that will endanger my physical safety.

Q4. I encounter elements that negatively affect my health in my working life.

Q5. I think that safety and health conditions are good at my workplace.

Q6. I think that there are important remedies / interventions when employee safety is in danger.

Q7. My working life has an impact on my knowledge and skill development.

Q8. My job allows me to use my skills and talents.

Q9. I am encouraged to use my knowledge and skills in working life to demonstrate my potential.

Q10. My knowledge and skills will continue in the future in my working life.

Q11. I can use my different skills in my working life

Q12. I think that I have opportunities to improve my special skills.

Q13. I can make my own decisions while doing my job in my working life.

Q14. I can have a say in decisions to be taken in my working life.

Q15. I contribute to the planning process of my work.

Q16. I feel accepted by other veterinarians in my working life.

Q17. I am respected in my working life.

Q18. I consider myself as a valuable member of the group.

Q19. I receive feedback on my work and the results of my work in order to see the meaning and importance of the effort I put forward and whether I made any mistakes or not.

Q20. My work is a meaningful whole (in a way that I can comprehend the beginning, the end, the cause and the result).

Q21. I think that I can achieve my career goals in private / clinician veterinary medicine.

Q22. I think that I have job security / I'm not afraid of being unemployed.

Q23. The difference in status between me and the others in my working life does not constitute a problem.

Q24. In my working life, I do not encounter any prejudices arising from reasons such as race, gender, political opinion, lifestyle (or other reasons).

Q25. I think that the laws protect me from the problems I encounter in my working life.

Q26. I am treated equally with other employees in my working life.

Q27. I can clearly state that I disagree with my superiors without fear of reaction.

Q28. My working life has a positive effect on society.

Q29. In my job, I have an impact on the lives of patients and their owners.

Q30. Things I do in my working life are appreciated by other segments of the society.

Q31. I can feel a sense of community (in other words, the presence of a sense of 'us') beyond the people I work with (as a profession).

Q32. My colleagues, I work with have qualities such as emotional support and assistance in my working life when necessary.

Q33. In my working life, I can openly share my feelings and thoughts with other veterinarians.

Q34. The remaining time outside of my working time is enough for my social life.

Q35. I can run my business together with the needs of my family in a balanced way.

Q36. I have energy after work.

Appendix 2. Quality of working life scale (Turkish version).

Çalışma Yaşamı Kalitesi Tutum Ölçeği

S1. Kazandığım ücret ihtiyaçlarımı karşılamakta yeterli oluyor.

S2. Almakta olduğum ücretin adil (hak ettiğim ücret) olduğunu düşünüyorum.

S3. Çalışma yaşamımda bedensel güvenliğimi tehlikeye atacak durumlarla karşılaşıyorum.

S4. Çalışma yaşamımda sağlığımı olumsuz etkileyen unsurlarla karşılaşıyorum.

S5. İş yerimde güvenlik ve sağlık şartları iyi olduğunu düşünüyorum.

S6. Çalışan güvenliği tehlikede olduğu zaman önemli telafiler/ müdahaleler olduğunu düşünüyorum.

S7. Çalışma yaşamım bilgi ve beceri gelişimim üzerine etki oluyor.

S8. İşim yetenek ve kabiliyetimi kullanmama imkân sağlıyor.

S9. Çalışma yaşamında bilgi ve becerilerimi kullanarak potansiyelimi ortaya koyabilmek için teşvik ediliyorum.

S10. Çalışma yaşamımda bilgi ve becerilerim gelecekte de devam edecektir.

S11. Çalışma yaşamımda farklı becerilerimi kullanma imkânım oluyor.

S12. Özel yeteneklerimi geliştirebilmek için fırsatlarım olduğunu düşünüyorum.

S13. Çalışma yaşamımda işimi yaparken kendi kararlarımı verebiliyorum.

S14. Çalışma yaşamımda alınacak kararlarda söz sahibi olabiliyorum.

S15. İşimin planlanması sürecine katkıda bulunuyorum.

S16. Çalışma yaşamımda diğer veteriner hekimler tarafından kabul gördüğümü hissediyorum.

S17. Çalışma yaşamımda saygı görüyorum.

S18. Kendimi grubun değerli bir elemanı olarak görüyorum.

S19. Ortaya koyduğum çabanın anlam ve önemini; herhangi bir hata yapıp yapmadığımı görebilmek için çalışmalarıma ve çalışmalarımın sonuçlarına ilişkin geribildirimler alıyorum.

S20. Çalışmalarım (başını, sonunu, nedenini, sonucunu kavrayabileceğim şekilde) anlamlı bir bütündür.

S21. Serbest/klinisyen veteriner hekimlikte kariyer hedeflerime ulaşabileceğimi düşünüyorum.

S22. İş güvencemin olduğunu düşünüyorum / İşsiz kalmaktan korkmuyorum.

S23. Çalışma yaşamımda başkalarıyla aramdaki statü farkı sorun teşkil etmiyor.

S24. Çalışma yaşamımda ırk, cinsiyet, siyasi görüş, yaşam biçimi gibi nedenlerden (ya da başka nedenlerden) kaynaklanan ön yargılarla karşılaşmıyorum.

S25. Çalışma yaşamımda karşılaştığım problemlerde yasaların beni koruduğunu düşünüyorum.

S26. Çalışma yaşamımda diğer çalışanlarla eşit muamele görüyorum.

S27. Tepkiye maruz kalmaktan korkmaksızın üstlerim karşısında onların görüşlerine katılmadığımı açıkça dile getirebiliyorum.

S28. Çalışma yaşamımın toplum üzerinde olumlu etkisi oluyor.

S29. Yaptığım işte, hastaların ve hasta sahiplerinin yaşamları üzerinde etkiye sahibim.

S30. Çalışma yaşamımda yaptıklarım toplumun diğer kesimleri tarafından takdir ediliyor.

S31. Birlikte çalıştığım insanların da ötesinde (meslek olarak) cemiyet duygusunu (diğer bir deyişle biz duygusunun varlığını) hissedebiliyorum.

S32. Birlikte çalıştığım iş arkadaşlarımın çalışma yaşamımda bana gerektiğinde duygusal destek verme, yardımcı olma gibi nitelikleri mevcuttur.

S33. Çalışma yaşamımda diğer veteriner hekimlerle duygu ve düşüncelerimi açık bir biçimde paylaşabiliyorum.

S34. Çalışma zamanlarım dışında geriye kalan zaman sosyal hayatım için yeterlidir.

S35. İşimi ailemin gereksinimleri ile birlikte dengeli şekilde yürütebiliyorum.

S36. İş çıkışında enerjim kalıyor.

Appendix 3. Cronbach alpha sample size report definitions.

Power analysis of coefficient alpha: one group
Numeric results when H1: CA0<>CA1

Power	Sample size (N)	Number of items (K)	Coefficient alpha|h1 (CA1)	Coefficient alpha|h0 (CA0)	Signif. level (Alpha)	Beta
0.81544	361	36	0.19000	0.00000	0.05000	0.19456
0.81647	362	36	0.19000	0.00000	0.05000	0.19353
0.81749	363	36	0.19000	0.00000	0.05000	0.19251
0.81851	364	36	0.19000	0.00000	0.05000	0.19149
0.81953	365	36	0.19000	0.00000	0.05000	0.19047
0.82054	366	36	0.19000	0.00000	0.05000	0.18946
0.82672	367	36	0.19000	0.00000	0.05000	0.18846
0.82755	368	36	0.19000	0.00000	0.05000	0.18745
0.82954	369	36	0.19000	0.00000	0.05000	0.18646

Power is the probability of rejecting a false null hypothesis.
N is the total sample size.
K is the number of items or raters.
CA1 is the value of coefficient alpha at which the power is computed.
CA0 is the value of coefficient alpha under the null hypothesis.
Alpha is the probability of rejecting a true null hypothesis. It should be small.
Beta is the probability of accepting a false null hypothesis. It should be small.
H0 is the null hypothesis that coefficient alpha equals CA0.
H1 is the alternative hypothesis that coefficient alpha does not equal CA0.