

ANALYSIS OF SELECTED SOCIODEMOGRAPHIC FACTORS AFFECTING ASSERTIVE BEHAVIOURS AMONG NURSES AND STUDENTS OF NURSING

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Authors' contribution:

A. Study design/planning • B. Data collection/entry • C. Data analysis/statistics • D. Data interpretation • E. Preparation of manuscript • F. Literature analysis/search • G. Funds collection

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SUBMITTED: 21.02.2019

ACCEPTED: 16.03.2019

DOI: <https://doi.org/10.5114/ppiel.2019.85173>

ABSTRACT

Introduction: Nursing is associated with patients' expectations related to considerable professional qualifications and skills, and demonstration of personality traits such as protectiveness and empathy. These traits are closely related to assertiveness based on a sense of dignity and tolerance for dissimilarity.

Aim of the study: The aim of the study was to analyse the level of assertiveness among nurses and students of nursing and demonstrate the influence of age, education, and work seniority on assertive behaviours.

Material and methods: The studies enrolled 142 nurses who were students of the Faculty of Health Sciences of the University of Bielsko-Biala. The study applied the diagnostic poll method with the use of the following tools: a self-written survey questionnaire and the Map of Assertiveness. The collected material was subjected to statistical analysis performed using SAS 9.4. software. The considered significance level was $p < 0.05$.

Results: The respondents obtained 133.04 out of a possible 170 points in the "general assertiveness level". Statistically significant differences were found between persons aged 22-37 years and of those aged 38-55 years, in the "general assertiveness level", the "expressing requests level", and the "contacts with an authority level". Statistically significant differences were found between the persons with secondary education and those with a bachelor's degree and those with up to 10 years and of those with 11-35 years of work seniority, in the general "general assertiveness level", the "expressing positive feelings level", and the "contacts with an authority level".

Conclusions: The nurses represented an average general level of assertiveness. Age, work seniority, and education were factors affecting the assertiveness level in the studied group.

Key words: education, age, nurse, assertiveness, work seniority.

INTRODUCTION

Nursing belongs to the group of professions of public trust, and one of its aspects is professionally accompanying the patients and their families in sickness and in health. The profession of nurse is associated with high patient expectations related to considerable professional qualifications and skills as well as demonstrating personality traits such as protectiveness, empathy, and patience. These personal characteristics are related to building honest relationships with other people, to the consistency of behaviour and an attitude of respect towards other people. These personality features are also strictly associated with assertiveness based on the sense of dignity and tolerance for dissimilarity.

Assertive behaviour is the fair and firm expression of one's opinions and attitudes towards another person, clear communication of one's needs with simultaneous respect for the other person's right to a different perception of the world [1-3]. Assertiveness is also a set of competences such as building relationships with authorities, expressing and accepting constructive criticism, and expressing emotions that demonstrate a mature and integrated personality during social interactions [4]. An assertive approach assumes that the common goal of the interacting parties is cooperation and real care for everyone's rights. Assertive behaviour allows one to act in the best interest of a person while simultaneously protecting one's own standpoint without anxiety [5]. Assertiveness is not inborn; it is a social behaviour that can be learned. It is a process that lasts

throughout one's whole life and is related to a human's personal development [1, 5]. The awareness of one's own emotions, empathy, and building satisfying relationships with others are characteristics of emotional intelligence that constitute an indispensable element of assertiveness and are a tool for creating a mutually respectful relationship with other people [5].

Nursing, in its specificity, is inseparably associated with a whole range of emotions that accompany an illness. The expectations of patients and of their families in reference to nursing care are high, and they take into consideration not only the biological aspect, but also the psychosocial one. Thus, the element necessary for maintaining balance between the interest of the patient and of the person taking care of him or her is assertiveness [6]. Assertive behaviour does not mean incivility, being aggressive, or adopting an attitude of superiority towards others. Assertiveness means that an employee has enough self-confidence to finish an unproductive conversation or to conduct it in such a way so as to reach constructive conclusions, without antagonising the interlocutor. Such an assertive employee is also able to find common points regarding which he or she can agree with the patient or with a member of the therapeutic team. This ensures friendly and empathic atmosphere favouring collaboration with the patient, and having good relations with the patient during the therapeutic process is of crucial importance [7].

The aim of the study was an analysis of the level of assertiveness among nurses and students of nursing, demonstrating the influence of age, education, and job seniority on assertive behaviours.

MATERIAL AND METHODS

The studies enrolled 142 nurses studying at the Faculty of Health Sciences of the University of Bielsko-Biała. The studies were carried out in the period from October to December 2013. Before the commencement of the study, the surveyed persons were informed about its purpose, the principle of anonymity, and the voluntariness of participation. A total of 150 survey questionnaires were distributed among the studying nurses, and 142 of those were returned.

The study was performed using the diagnostic poll method with application of the following tools: the authors' own survey questionnaire, including questions referring to sociodemographic characteristics, and the Questionnaire of Assertive Behaviours – developed basing on the Assertiveness Map by Maria Król-Fijewska [1]. The complete Assertiveness Map consists of 11 subscales and includes questions referring to the use of the right to assertive behaviour or forbearing this right, i.e. defending one's rights in social situations (OSPSSO), defending one's rights in private relations (OSPKO), initiative and social contacts (IKT), expressing requests (WP), expressing opinions (WO),

expressing and receiving criticism and praise (WPKP), expressing positive feelings (WUP), expressing negative feelings (WUN), public appearances (WP), contact with authority (KA), and intruding on someone else's territory (NCT). The studied subjects indicate the behaviours they prefer in a five-point scale, where 1 stands for 'almost never', 2 – 'rarely', 3 – 'from time to time', 4 – 'often', and 5 – 'almost always'. The studies were carried out in accordance with the ethical standards of the Committee and with the 1964 Declaration of Helsinki.

The collected material was subjected to statistical analysis performed using SAS 9.4. software. In order to select the appropriate test to verify the hypotheses, for the assessment of the distributions of dependent variables, first their histograms were drawn up with an overlaid normal distribution curve, the parameters of which were estimated basing on an empirical trial. After the preliminary analysis of the histograms, the compliance of empirical distributions with the normal distribution was verified using the Kolmogorov-Smirnov test, the Cramér-von Mises test, and the Anderson-Darling test. Levene's test was applied for the assessment of the homogeneity of variance of dependent variables in the groups. In the case of meeting the test assumptions, comparison of the results in the studied groups was performed using ANOVA analysis of variance. Multiple comparison post hoc testing with Tukey's correction (Tukey's range test) was carried out for more than two comparison groups. If the ANOVA assumptions were not met, the comparison between groups was performed using the Wilcoxon non-parametric rank sum test for two samples, also referred to as the Mann-Whitney-Wilcoxon test (the Mann-Whitney *U* test), and in the case of more than two comparison groups the Kruskal-Wallis test was used with a subsequently performed multiple comparison test with Bonferroni correction. The considered significance level was $p < 0.05$.

RESULTS

The studies enrolled 142 nurses studying at the Faculty of Health Sciences. The respondents studied Nursing at first- and second-cycle degree studies. The mean age of the surveyed subjects was 35.76 years. The youngest person was 22 years old, and the oldest one was 55 years old. The mean job seniority was 12.7 years – from bachelor students who had not yet worked as nurses to nurses with 35 years of professional experience.

The analysis of the level of assertiveness in the studied group demonstrated that the respondents obtained 133.04 points out of a possible 170 in the "general assertiveness level" (OPA) subscale. The highest score (27.49 points) was obtained in the subscale WPKP, whereas the lowest one (5.65 points) was in the

subscale KA. The remaining results from particular subscales are presented in Table 1.

For the purpose of the assessment of the potential differentiation of the level of assertiveness in the analysed subgroups, the studied subjects were divided

based on the median age of the studied group, i.e. 38 years. Statistically significant differences were found in the level of assertiveness between the persons aged 22-37 years and those aged 38-55 years, both in the OPA general scale ($p = 0.0328^*$) as well as

Table 1. Characteristics of the scales and subscales of the assertiveness questionnaire

Subscale	Description	n	M	Me	Max	Min	SD
OPA	General assertiveness level	142	133.04	132	170	110	9.79
OSPPSO	Defending one's rights in social situations	142	16.22	16	27	7	3.65
OSPKO	Defending one's rights in private relations	142	18.99	19	25	12	2.69
IKT	Undertaking initiative and social contacts	142	11.05	11	20	5	1.97
WPR	Expressing requests	142	7.10	7	10	3	2.03
WOP	Expressing opinions	142	10.92	11	18	4	2.13
WPKP	Expressing and receiving criticism and praise	142	27.49	27.5	37	14	4.00
WUP	Expressing positive feelings	142	7.38	8	10	2	2.04
WUN	Expressing negative feelings	142	12.16	12	20	4	2.85
WPUB	Public appearances	142	7.15	7.5	10	2	2.29
KA	Contacts with an authority	142	5.65	6	10	2	1.32
NCT	Intruding on someone else's territory	142	8.92	9	20	4	2.85

n – numerical value, *M* – mean, *Me* – median, *Max* – maximum value, *Min* – minimum value, *SD* – standard deviation, *OPA* – general assertiveness level, *OSPPSO* – defending one's rights in social situations, *OSPKO* – defending one's rights in private relations, *IKT* – initiative and social contacts, *WPR* – expressing requests, *WOP* – expressing opinions, *WPKP* – expressing and receiving criticism and praise, *WUP* – expressing positive feelings, *WUN* – expressing negative feelings, *WPUB* – public appearances, *KA* – contacts with an authority, *NCT* – intruding on someone else's territory

Table 2. Distribution of assertiveness level results with the division based on age

Subscale	From 22 to 37 years					From 38 to 55 years					<i>p</i>
	<i>M</i>	<i>Me</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>	<i>M</i>	<i>Me</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>	
OPA	134.48	133.00	113.00	156.00	9.30	131.14	130.00	110.00	149.00	9.08	$F = 4.65$ 0.0328
OSPPSO	15.93	16.00	10.00	25.00	3.64	16.50	16.50	7.00	27.00	3.66	$Z = -0.916$ 0.3598
OSPKO	19.20	19.00	12.00	25.00	3.03	18.70	19.00	13.00	23.00	2.22	$Z = 0.533$ 0.5943
IKT	11.31	11.50	5.00	20.00	2.20	10.79	11.00	7.00	14.00	1.69	$Z = 1.415$ 0.157
WPR	7.46	8.00	3.00	10.00	2.02	6.75	7.00	3.00	10.00	1.99	$Z = 2.117$ 0.0343
WOP	11.01	11.00	8.00	15.00	1.90	10.83	11.00	4.00	18.00	2.34	$Z = 0.358$ 0.7203
WPKP	27.41	27.50	19.00	37.00	4.20	27.57	27.50	14.00	35.00	3.83	$Z = 0.637$ 0.5238
WUP	7.67	8.00	2.00	10.00	2.11	7.10	7.50	2.00	10.00	1.94	$Z = 1.906$ 0.0567
WUN	12.63	12.00	4.00	20.00	3.02	11.71	12.00	5.00	18.00	2.61	$Z = 1.741$ 0.0817
WPUB	7.19	7.00	2.00	10.00	2.35	7.11	8.00	2.00	10.00	2.26	$Z = 0.232$ 0.8162
KA	5.87	6.00	4.00	8.00	1.10	5.44	5.00	2.00	10.00	1.47	$Z = 2.172$ 0.0297
NCT	5.63	6.00	4.00	7.00	0.89	5.38	5.00	2.00	8.00	1.38	$Z = 1.495$ 0.135

M – mean, *Me* – median, *Min* – minimum value, *Max* – maximum value, *SD* – standard deviation, *p* – significance level, *OPA* – general assertiveness level, *OSPPSO* – defending one's rights in social situations, *OSPKO* – defending one's rights in private relations, *IKT* – initiative and social contacts, *WPR* – expressing requests, *WOP* – expressing opinions, *WPKP* – expressing and receiving criticism and praise, *WUP* – expressing positive feelings, *WUN* – expressing negative feelings, *WPUB* – public appearances, *KA* – contacts with an authority, *NCT* – intruding on someone else's territory

in the WPR ($p = 0.0343^*$) and KA ($p = 0.0297^*$) subscales. Moreover, differences in the level of assertiveness were found among the studied age subgroups at the edge of statistical significance in the WUP subscale ($p = 0.0567$). The younger persons aged 22-37 years demonstrated a higher general level of assertiveness ($M = 134.48$) significantly more frequently than the older persons aged 38-55 years ($M = 131.14$). In the case of the younger persons high levels of assertiveness both in the WPR ($Me = 8.00$) and in the KA ($Me = 6.00$) subscales were noted significantly more frequently than in the case of older persons (Me : WPR = 7.00; KA = 5.00, respectively) (Table 2).

While analysing the dependencies between the job seniority and the level of assertiveness, statistically significant differences were found in the general assertiveness level between persons with job seniority of up to 10 years and persons with job seniority ranging from 11 to 35 years, both in the OPA general scale ($p = 0.0257^*$) as well as in the WUP ($p = 0.0022^*$) and KA ($p = 0.0235^*$) subscales (Table 3).

Based on Table 4 it is possible to observe a relationship between age and job seniority. Persons with short job seniority (0 to 10 years) are mainly young persons aged 22-37 years ($n = 63$), and they constitute 88.73%

of the number of persons in this job seniority group. Only 5.63% of this group were older persons aged 38-55 years. In the group with greater job seniority, in turn, (11-35 years), as much as 90.14% of persons were those of older age, i.e. 38-55 years ($n = 64$). Only 9.86% of persons in this job seniority group were young persons aged 22-37 years. In other words, as much as 90% of the group of young persons (aged 22-37 years) were those with short job seniority (0-10 years), and only 10% of this group were persons with longer professional experience. Among older persons (aged 38-55) 88% were those with greater job seniority (11-35 years), and only 11.11% were those with lower job seniority.

The analysis of the dependencies between education and the level of assertiveness in particular subscales demonstrated statistically significant differences in the level of assertiveness between persons with secondary education and those with higher bachelor education, in the OPA general scale ($p = 0.0328^*$) and in the WUP ($p = 0.0158^*$) and KA ($p = 0.0108^*$) subscales. Persons with higher education demonstrated a high general level of assertiveness significantly more frequently ($M = 134.26$) than persons with secondary education ($M = 130.89$). Similarly, in the WUP subscale the persons with higher education achieved

Table 3. Distribution of assertiveness level results according to job seniority

Subscale	From 0 to 10 years					From 11 to 35 years					p
	M	Me	Min	Max	SD	M	Me	Min	Max	SD	
OPA	134.53	133.00	113.00	156.00	9.27	131.04	131.00	110.00	149.00	9.08	$F = 5.09$ 0.0257
OSPSSO	15.62	16.00	8.00	25.00	3.62	16.82	17.00	7.00	27.00	3.60	$Z = -1.827$ 0.0677
OSPKO	19.24	19.00	12.00	25.00	3.10	18.75	19.00	13.00	25.00	2.22	$Z = 0.925$ 0.3548
IKT	11.31	12.00	5.00	20.00	2.09	10.79	11.00	7.00	15.00	1.82	$Z = 1.403$ 0.1608
WPR	7.27	7.00	3.00	10.00	2.12	6.93	7.00	3.00	10.00	1.93	$Z = 1.033$ 0.3014
WOP	10.96	11.00	8.00	16.00	1.94	10.89	11.00	4.00	18.00	2.32	$Z = 0.253$ 0.8007
WPKP	27.76	28.00	19.00	37.00	4.08	27.23	27.00	14.00	35.00	3.93	$Z = 0.676$ 0.4988
WUP	7.85	8.00	2.00	10.00	2.08	6.92	7.00	2.00	10.00	1.90	$Z = 3.068$ 0.0022
WUN	12.63	12.00	4.00	20.00	3.02	11.69	12.00	5.00	18.00	2.60	$Z = 0.035$ 0.0702
WPUB	7.21	8.00	2.00	10.00	2.43	7.08	7.00	3.00	10.00	2.16	$Z = 0.475$ 0.6347
KA	5.90	6.00	4.00	8.00	1.19	5.41	5.00	2.00	10.00	1.40	$Z = 2.265$ 0.0235
NCT	9.28	9.00	4.00	20.00	2.77	8.55	8.00	4.00	17.00	2.90	$Z = 1.592$ 0.1115

M – mean, Me – median, Min – minimum value, Max – maximum value, SD – standard deviation, p – significance level, OPA – general assertiveness level, OSPSSO – defending one's rights in social situations, OSPKO – defending one's rights in private relations, IKT – initiative and social contacts, WPR – expressing requests, WOP – expressing opinions, WPKP – expressing and receiving criticism and praise, WUP – expressing positive feelings, WUN – expressing negative feelings, WPUB – public appearances, KA – contacts with an authority, NCT – intruding on someone else's territory

a high assertiveness level significantly more frequently (Me = 8.00) than persons with secondary education (Me = 7.00). Also, in the KA subscale the persons with higher education achieved high results related to the assertiveness level significantly more frequently

(Me = 6.00) than those with secondary education (Me = 5.00) (Table 5).

The study results referring to the actual level of assertiveness and the sense of assertiveness declared by the studied persons are interesting. Statistically

Table 4. Two-way contingency table – job seniority vs. age

Job seniority		Age		Total
		From 22 to 37 years	From 38 to 55 years	
From 0 to 10 years	<i>n</i>	63	8	71
	Expected frequency	35	36	
	%	44.37	5.63	50
	% from verse	88.73	11.27	
	% from column	90	11.11	
From 11 to 35 years	<i>n</i>	7	64	71
	Expected frequency	35	36	
	%	4.93	45.07	50
	% from verse	9.86	90.14	
	% from column	10	88.89	
Total	<i>n</i>	70	72	142
	%	49.3	50.7	100

N – numerical value, % – percentage value

Table 5. Distribution of assertiveness level results with the division based on education

Subscale	Secondary education					Higher bachelor education					<i>p</i>
	M	Me	Min	Max	SD	M	Me	Min	Max	SD	
OPA	130.89	130.00	113.00	155.00	9.85	134.26	133.00	115.00	156.00	8.45	<i>F</i> = 4.65 0.0328
OSPSSO	16.45	17.00	8.00	24.00	3.53	16.06	16.00	9.00	25.00	3.45	<i>F</i> = 0.43 0.5153
OSPKO	18.73	19.00	13.00	25.00	2.37	19.16	19.00	12.00	25.00	2.88	<i>Z</i> = -0.870 0.3846
IKT	10.84	11.00	7.00	14.00	1.66	11.18	11.00	5.00	20.00	2.14	<i>Z</i> = -0.694 0.4876
WPR	6.89	7.00	3.00	10.00	1.91	7.23	7.00	3.00	10.00	2.10	<i>Z</i> = -1.008 0.3136
WOP	10.91	11.00	4.00	16.00	2.35	10.93	11.00	7.00	18.00	1.99	<i>Z</i> = 0.554 0.5793
WPKP	28.00	28.00	18.00	35.00	3.68	27.17	27.00	14.00	37.00	4.18	<i>Z</i> = 1.189 0.2346
WUP	6.84	7.00	2.00	10.00	2.11	7.72	8.00	2.00	10.00	1.92	<i>Z</i> = -2.413 0.0158
WUN	11.69	12.00	5.00	20.00	2.69	12.46	12.00	4.00	20.00	2.92	<i>Z</i> = -1.603 0.1089
WPUB	6.82	7.00	2.00	10.00	2.36	7.36	8.00	2.00	10.00	2.24	<i>Z</i> = -1.267 0.2051
KA	5.31	5.00	2.00	10.00	1.40	5.87	6.00	3.00	8.00	1.22	<i>Z</i> = -2.550 0.0108
NCT	8.40	8.00	4.00	17.00	2.83	9.24	9.00	4.00	20.00	2.83	<i>Z</i> = -1.764 0.0777

M – mean, *Me* – median, *Min* – minimum value, *Max* – maximum value, *SD* – standard deviation, *p* – significance level, OPA – general assertiveness level, OSPSSO – defending one’s rights in social situations, OSPKO – defending one’s rights in private relations, IKT – initiative and social contacts, WPR – expressing requests, WOP – expressing opinions, WPKP – expressing and receiving criticism and praise, WUP – expressing positive feelings, WUN – expressing negative feelings, WPUB – public appearances, KA – contacts with an authority, NCT – intruding on someone else’s territory

significant differences were found in the results of the assertiveness level analysis in the case of the results measured in the WPR ($p = 0.0089^*$) and the WPUB ($p = 0.0001^*$) subscales, whereas the multiple comparisons test demonstrated significant differences in the subscales in question between persons considering themselves as assertive (ME = 8.00) and those who did not consider themselves as assertive (ME = 7.00) ($p = 0.0048^*$). In the case of the WPUB scale measurement, the persons considering themselves as assertive demonstrated a lower assertiveness level (ME = 6.00) than those considering themselves as not assertive (ME = 8.00) ($p = 0.0001^*$) (Table 6).

DISCUSSION

Nursing belongs to the group of professions in which empathy, personality, reliability, and assertiveness are very important in social contacts. The last of the mentioned elements, assertiveness, demonstrates itself as *inter alia* resoluteness without violence, gentleness towards others, strength, and decisiveness. An element that is important for a person considering the possibility for assertive behaviour is the feeling that “what I want to do is appropriate”, “I’ve got the right to this particular behaviour, to such a reaction to the situation”. This moment of internal consent is the basis for the decision to behave assertively [8]. In our own studies, the nurses declared a medium general level of assertiveness, similarly to the students of nursing studied by Erdösi *et al.* [9]. However, in particular subscales in our own studies, the results proved to differ in some degree. The highest results were observed for the subscale “expressing and receiving criticism and praise”, and slightly lower results were observed for the subscales “defending one’s rights in private relations”, “defending one’s rights in social situations”, and “expressing negative feelings”. The respondents declared a medium level of assertiveness in reference to “undertaking initiative and social contacts” and “expressing opinions”. A low level of assertiveness was obtained by the nurses in the scope of subscales such as “intruding on someone else’s territory”, “expressing positive feelings”, “public appearances”, “expressing requests”, and “contact with authority”. Similar study results were obtained by Sobczak and Rakowska. The hospital management staff examined by them also declared a medium general level of assertiveness. The mentioned study results demonstrated differences in the level of assertiveness depending on the gender. In the subscales “defending one’s rights in social situations” and “expressing and receiving criticism and praise” women obtained higher results than men. The remaining subscales demonstrated the opposite trend [10]. In our own studies, due to a homogenous study group (only women), results relating to this variable were not obtained. As suggested by studies by other

authors, the majority of persons related to a health service attained a medium competence level in terms of assertiveness. Only one in five persons in the studies held by Tychmanowicz and Kuśpit obtained high indicators in terms of assertive behaviours [11]. These authors also underline the importance of social competence, including assertive behaviours, in the treatment process and in the professional functioning of the health service staff. The authors also encourage undertaking actions aimed at improving and developing these indicators [11].

As results from our own studies, age is the factor that is important in reference to the declared level of assertiveness. Younger persons, aged 22-37 years, demonstrated a higher general level of assertiveness significantly more frequently than older persons, aged 38-55 years. Statistically significant differences were found in the level of assertiveness between these groups both in the general scale – “general level of assertiveness”, as well as in the subscales “expressing requests” and “contact with authority”. In the studies carried out by Sobczak and K. Rakowska, the authors demonstrated dependencies in the subscales “undertaking initiative and social contacts” and “expressing feelings” [10]. Another factor influencing the sense of assertiveness is job seniority. It may seem that nurses with greater experience should be more assertive. However, the results of our own studies show the opposite trend: persons with short job seniority demonstrated a high general level of assertiveness significantly more frequently than persons with job seniority exceeding 10 years. Moreover, in the presented results we can see a statistically significant dependence between age and job seniority. In this case, it should be suspected that it is age, and not job seniority, that reflects a higher level of assertiveness.

The results of our own studies demonstrate also that education is important in terms of the sense of assertiveness; persons with higher education demonstrated a high “general level of assertiveness” significantly more frequently than persons with secondary education, similarly in the subscales “expressing positive feelings” and “contact with authority”. The studies held by Sobczak and Rakowska, also demonstrated high results in the scope of the sense of assertiveness (except for the subscale “expressing feelings”) [10]. In other studies, by Sobczak *et al.*, the authors highlight the importance of the education factor in the development of assertive behaviours. The nurses surveyed by them, who were graduates of bachelor studies, achieved the highest results in terms of “general level of assertiveness”. Results included in the range of high values were also obtained by persons with MA degrees [12].

The results of our own studies demonstrate dependencies between age, job seniority, and education among students of nursing and nurses raising their

Table 6. Distribution of assertiveness level results with the division based on the degree of one's sense of own assertiveness

Subscale	Yes					No					I don't know					p
	M	Me	Min	Max	SD	M	Me	Min	Max	SD	M	Me	Min	Max	SD	
OPA	134.18	134.00	113.00	170.00	10.10	132.71	131.00	110.00	155.00	9.12	128.50	129.50	115.00	142.00	8.88	H = 4.585 0.1010
OSPPSO	16.78	17.00	8.00	25.00	3.57	15.34	15.00	9.00	24.00	3.40	15.53	15.00	11.00	21.00	2.67	F = 2.79 0.0651
OSPKO	18.99	19.00	13.00	25.00	2.49	19.29	19.00	12.00	25.00	3.20	18.33	18.00	14.00	24.00	2.38	H = 1.8947 0.3878
IKT	11.18	11.00	7.00	20.00	1.91	10.88	11.00	5.00	15.00	2.19	10.83	11.00	7.00	14.00	1.76	H = 1.0615 0.5882
WPR	7.53	8.00	3.00	10.00	2.04	6.34	7.00	3.00	10.00	1.88	6.83	7.00	4.00	10.00	1.86	H = 9.4362 0.0089
WOP	10.73	11.00	4.00	18.00	2.34	11.39	11.00	8.00	15.00	1.84	10.72	11.00	7.00	14.00	1.60	H = 3.3233 0.1898
WPKP	28.18	28.00	21.00	37.00	3.59	26.24	27.00	14.00	37.00	4.85	27.17	27.50	22.00	33.00	3.00	H = 5.4491 0.0656
WUP	7.64	8.00	2.00	10.00	2.11	6.98	7.00	2.00	10.00	2.04	7.11	8.00	4.00	10.00	1.53	H = -4.0720 0.1306
WUN	12.08	12.00	4.00	20.00	2.92	12.51	13.00	7.00	20.00	2.90	11.72	11.50	5.00	16.00	2.40	H = 0.9251 0.6297
WPUB	6.53	6.00	2.00	10.00	2.20	8.32	8.00	2.00	10.00	2.01	7.33	8.00	3.00	10.00	2.35	H = 17.9698 0.0001
KA	5.69	6.00	2.00	10.00	1.42	5.76	6.00	4.00	8.00	1.16	5.28	5.50	2.00	7.00	1.13	H = 1.0905 0.5797
NCT	8.72	8.00	4.00	20.00	2.83	9.66	10.00	5.00	16.00	2.62	8.11	7.50	4.00	17.00	3.20	H = 5.7528 0.0563

M – mean, Me – median, Min – minimum value, Max – maximum value, SD – standard deviation, p – significance level, OPA – general assertiveness level, OSPPSO – defending one's rights in social situations, OSPKO – defending one's rights in private relations, IKT – initiative and social contacts, WOP – expressing requests, WPR – expressing opinions, WPKP – expressing and receiving criticism and praise, WUP – expressing positive feelings, WUN – expressing negative feelings, WPUB – public appearances, KA – contacts with an authority, NCT – intruding on someone else's territory

professional qualifications. It is necessary to take into consideration the fact that the ability to be assertive is the key to providing professional care; it is one of the most important abilities for nurses in the workplace, especially for the purpose of reducing interpersonal stress, and building appropriate relationships in the therapeutic team. As has been reported by Suzuki *et al.* [13], low assertiveness among nurses is related to a high risk of professional burnout, the intention to leave the workplace, and lower engagement in professional duties. According to Yoshinaga *et al.* [14] and Nakamura *et al.* [15], undertaking actions that increase the level of assertiveness, in the form of trainings in this scope, results in long-term beneficial effects.

CONCLUSIONS

The nurses declared a medium general level of assertiveness. Younger persons demonstrated a higher general level of assertiveness significantly more frequently than older persons. Having higher education correlated with a high general level of assertiveness. Persons with lower job seniority demonstrated a higher general level of assertiveness than persons with long work experience. In the subscale “public appearances” the persons considering themselves as assertive demonstrated a lower actual level of assertiveness than the persons considering themselves as not assertive. It is recommended that actions are taken allowing health care employees to improve and develop their assertive behaviours, which are significant for the satisfactory fulfilment of professional duties.

Disclosure

The authors declare no conflict of interest.

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