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Authors: Michał Machul, Beata Dobrowolska

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Michał Machul^{<https://orcid.org/0000-0003-2113-4027>}, Beata Dobrowolska^{<https://orcid.org/0000-0001-9178-9534>}

Department of Holistic Care and Nursing Management, Medical University of Lublin, Lublin, Poland

Spiritual care competence and caring abilities among Polish nurses: a correlation descriptive study

[Running title: Spiritual care competence and caring abilities among Polish nurses]

Address for correspondence:

Michał Machul, Department of Holistic Care and Nursing Management, Medical University of Lublin, Staszica 4/6, 20–081 Lublin, Poland

e-mail: michal.machul@umlub.pl

Abstract

Background: Spiritual care is an obligatory aspect of nursing care for a patient at the end of life and play an important role in providing quality nursing care. The aim of this study was to describe level of spiritual care competence and caring abilities of Polish nurses, and to examine the relationship between them.

Participants and methods: In the study based on the Caring Ability Inventory (CAI) and the Spiritual Care Competence Scale (SCCS) questionnaires descriptive, correlational, cross-sectional design was adopted. The study involved 451 clinical nurses.

Results: Respondents' overall score of SCCS was high (median = 101.22; mean = 103.00; SD = 17.14) and low in the overall score of CAI (median = 185.44; mean = 185.00; SD = 21.05). The

respondents who believe that nurses should assess the patient's spiritual needs obtained statistically higher scores in all subscales and the overall score of SCCS and CAI. The total score of spiritual care competence was also positively correlated with the level of caring abilities ($p < 0.01$). The caring abilities and competences to provide spiritual care of Polish nurses correlate, among others, with their age, professional experience, level of education and job satisfaction.

Conclusions: The implementation by academic teachers and nursing managers of strategies promoting patient-centred nursing care and humanistic values will contribute to strengthening the caring abilities of nurses and the skills to provide spiritual care to patients especially in the most basic human experience of dying.

Key words: caring, nurses, spiritual care, competence, caring abilities, palliative care

Introduction

For nursing care to be effective and efficient, patients' physiological, mental, socio-cultural, developmental, and spiritual needs must be met. However, compared to other matters of nursing care, spiritual care has received less attention. The biological model based on the positivist damage paradigm predominated in medicine and science during the nineteenth and twentieth centuries when spiritual care started to be disregarded [1]. Spiritual care is an obligatory aspect of nursing care, which should be provided by personnel with high spiritual competence [2]. Palliative and end of life guidelines [3], as well as professional standards and nursing theories emphasize and recognize the importance of spirituality and spiritual care in patient care [4, 5]. By implementing all aspects of care, nurses provide services at a high level and are able to meet all the needs of their patients [6]. Nurses must be educated in all aspects of healthcare to provide effective and efficient patient care. Giving patients access to spiritual care aids their recovery, even though most health services pay little attention to patients' spiritual needs [7]. As a result, in order to successfully and securely support patients' health, nurses must be knowledgeable in spiritual care.

The quality of nursing care is another important aspect of healthcare delivery. Healthcare delivery must consider whether the patient is receiving the desired level of care and satisfaction [8]. Previous studies have shown that nurses with high spiritual competences may provide care

of a higher quality [9]. Rationing or not providing spiritual care has a negative impact on the recovery of patients, often contributing to prolonged hospitalization and convalescence [10]. In addition, not taking into account spiritual care in patient care by nursing staff also contributes to the occurrence of social isolation and mental suffering among patients especially among terminally ill and those approaching the end of life [11, 12]. In relation to palliative care, Jo has shown that the empathy and caring abilities of nurses are significant predictors of terminal care efficiency [13].

Despite the important role of spiritual care in nursing practice, limited studies have been conducted to investigate the relationship between nurses' spiritual care competence and the quality of care reflected in the nurses' caring abilities, so far this relationship has not been explored in Poland. Identification of elements that affect nurses' caring abilities is of key importance for improving the quality of patient care, especially in the context of previous studies that showed that Polish nurses have low caring abilities. This study also appears useful because a better understanding of the relationship between the spiritual care competence and caring abilities will benefit nursing education and practice as well as improve the quality of nursing care and will answer to the question of what factors determine nurses' caring abilities in Poland. This study was conducted to determine the level of spiritual care competence and caring abilities of Polish nurses, and to examine the relationship between them.

Participants and methods

Study design

This was a descriptive, correlational, cross-sectional study conducted in 2022 in Poland. The research conformed to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement: Guidelines for Reporting Observational Studies.

Participants and setting

The Raosoft Sample Size Calculator was used to determine the sample size [14]. There were approximately 232,387 nurses in Poland at the end of 2021 [15]. For a confidence level of 0.95, a margin of error of 0.05, and a response distribution of 0.50, a sample size of 384 was required. Considering the loss of 10% of the sample, a sample size of 422 was required. The participants were selected based on the following criteria: (a) being an active registered nurse,

(b) minimum 2 years of working experience, (c) practising in the clinical settings, (d) access to the Internet, (e) speaking and understanding the Polish language, and (f) consent to participate in the study. Staff nurses who had no direct contact with patients prior to this study were excluded.

Measures

Three instruments were used in the study:

1. Spiritual Care Competence Scale. Van Leeuwen et al. [16] developed the Spiritual Care Competence Scale (SCCS), a self-reporting scale to measure nurses' spiritual care competence. It includes the following six subscales: Assessment and implementation of spiritual care; Professionalisation and improvement of the quality of spiritual care; Personal support and patient counselling; Referral to professionals; Attitude towards the patient's spirituality; and Communication. The questionnaire contains 27 items, all of which are scored on a 5-point scale from completely disagree to fully agree, scoring from 1 to 5. The minimum and maximum possible values are 27 and 135, respectively. A score lower than 64 indicates low spiritual competence, a score of 64–98 indicates average spiritual competence, and a score of 99 and above implies high spiritual competence [16]. Machul and Dobrowolska revised the Polish version of the SCCS (referred to as SCCS-PL), composed of 27 items displaying a five-factor structure. Polish version of the scale received 0.95 Cronbach alpha [17]. The Polish version of the SCCS-PL can be found in the Supplementary File 1.

2. Caring Ability Inventory. The Caring Ability Inventory (CAI) is a self-reporting instrument including 37 items with a 5-point Likert scale. It was constructed by Nkongho [18] and is intended to measure the degree of a person's caring ability. The CAI contains three dimensions: Knowledge (14 items), Courage (13 items), and Patience (10 items). The answers are organized on a Likert-type scale from 1 (I strongly disagree) to 7 (I strongly agree), with scores ranging from 37 to 259. The reliability of the CAI was measured by Cronbach's alpha which ranged from 0.71 to 0.84. The higher the score, the higher the level of care ability [18]. The Polish version of the CAI validated in 2022 by Machul and Dobrowolska (referred to as CAI-PL) consists of 36 items and the possible scores to be obtained range from 36 to 252 with Cronbach's alpha 0.715. The Polish version of the CAI-PL can be found in the Supplementary File 2.

3. A short self-made questionnaire. A short self-made questionnaire to collect socio-demographic characteristics such as: sex, age, marital status, degree of nursing education, postgraduate qualification, place of work, years of nursing experience, faith, job satisfaction, and an individual opinion on the initial assessment of spiritual needs.

Data collection

The study was conducted between January and the end of July 2022. Given that the research was conducted during the SARS-CoV-2 pandemic, an online questionnaire was prepared. A convenience sampling was conducted. The respondents were enrolled through invitations posted on blogs, discussion forums and social networking sites devoted to health sciences and nursing. The questionnaire was delivered to 1197 respondents, with 451 questionnaires (38%) correctly filled in and returned. To collect data, we used an online questionnaire, which was formatted using Survio software. The study was conducted with the international standard for information security requirements, and is fully compliant with the processing of personal details pursuant to the German personal data protection act. Each response was protected by an international safety certificate with extended validation (Organization Validation SSL Certificate). The online form contained information about the purpose and significance of the study, and informed the prospective participants of the fact that participation was completely voluntary.

Ethical considerations

The standards stipulated in the Declaration of Helsinki were followed during each step of the study. Participation was voluntary, anonymous and confidential. All the participants were informed about the study purpose and procedures on the first page of the online survey and were assured that all data would be confidential. In addition, they were allowed to withdraw from the study at any time. The data stored and managed in the questionnaire available via the Survio platform was handled by a personal account and a password that only one researcher had access to. Ethical approval was obtained from the Bioethics Commission of the Medical University of Lublin (KE-0254/222/2020).

Statistical analysis

Data was analysed using the IBM SPSS Statistic suite in its 26.0 version. Numbers, percentages, and means (ranges) were used for the analysis. The Pearson's correlation coefficient (r) test was used to measure the association between nurses' age, experience, spiritual care competence and caring abilities. Non-normally distributed data were analysed using the Kruskal–Wallis and Mann-Whitney U tests. The statistical significance level was set at 0.05.

Results

Participants' characteristics

The study comprised 451 professionally active nurses. Among 451 participants, 96% (n = 433) were females. Their average age was 40.49 (SD = 10.92); 85.8% of them (n = 387) were Catholics, and 7.3% (n = 33) were non-religious; 85.2% (384) were not single (married or cohabitated). More than half of the participants (52.7%) had a Bachelor's degree. As for their professional experience, their average seniority was 16.26 years and it was found that they did not receive any training related to spiritual care. More than half (n = 256) of the participants stated 56.8% that nurses should make an initial assessment of the patient's spiritual needs upon admission to the hospital (Table 1).

Spiritual Care Competence Scale

The scores for the total scale and the subscales of SCCS-PL described nurses' spiritual care competence. The total score of SCCS-PL was 101.22 (SD = 17.14), ranging from 33 to 135. The highest score on competence was obtained for the 'Attitude towards the patient's spirituality' subscale, amounting to 4.34 (SD = 0.67), and the nurses had the lowest score for the 'Professionalization and improvement of the quality of spiritual care' subscale, amounting to 3.35 (SD = 0.86).

The nurses who completed their education at the level of medical high school had a higher mean SCCS score on the Communication, individual support and counselling subscale (SCCS = 4.19; p = 0.025) than the nurses with Bachelor's (SCCS = 3.95) or Master's degrees (SCCS = 3.81) (Table 2). The most statistically significant results concerned the following question: Does working as a nurse give you satisfaction? The nurses who provided an affirmative answer obtained statistically significantly higher scores in the following subscales: Assessment

and implementation of spiritual care (SCCS-PL = 3.64; $p = 0.009$), Communication, individual support and counselling (SCCS-PL = 3.93; $p = 0.03$), Professionalisation and improvement of the quality of spiritual care (SCCS-PL = 3.41; $p < 0.001$), and the overall score (SCCS-PL = 102.20; $p = 0.002$) (Table 2). The respondents who believe that nurses should assess the patient's spiritual needs upon admission to the hospital obtained statistically higher scores in all subscales and the overall score (Table 3).

Caring Abilities Inventory

The total score of CAI-PL was 185.44. The highest score was observed in the Knowledge subscale, amounting to 71.57 (SD = 10.62), then on the Courage subscale nurses obtained a score of 54.22 (12.37). The lowest score was obtained in the Patience subscale with the score of 65.63 (7.69). When analysing the care abilities and socio-demographic characteristics, Polish nurses with more years of work experience obtained higher overall caring abilities scores (Table 4). In the analysis of the relationship between these variables, it was found that the level of education was associated, in a statistically significant manner, with the Knowledge dimension ($p = 0.013$). The nurses who were professionally satisfied with their work achieved statistically higher scores in the overall scale ($p = 0.007$) and in the Knowledge dimension ($p < 0.001$). In the Knowledge ($p = 0.002$) and Patience ($p = 0.019$) dimensions, and in the overall score ($p < 0.001$), a statistically significant difference was observed between the nurses who claimed that an initial spiritual needs assessment should be done and those who claimed otherwise (Table 5).

Correlation among spiritual care competence and caring abilities

Table 6 shows positive Pearson's correlation between the dimensions of the SCCS and those of the CAI, whereby all dimensions (apart from 'Courage' and 'Assessment and implementation of spiritual care', and 'Courage' and 'Professionalisation and improvement of the quality of spiritual care') were positively correlated, with the correlation coefficient ranging from 0.113 to 0.458. The total score of spiritual care competence was also positively correlated with the level of caring abilities ($p < 0.01$).

Discussion

Nurses, with whom the patient and the caregivers spend most of the time, should have sufficient knowledge and experience to be able to provide spiritual care. In this study, the total score of Polish nurses' spiritual care competence was 101.22 (SD = 17.14) and it was at a high level. In line with the results of the present study, the professional competence of nurses was estimated as optimal in earlier investigations [19] and much higher than the result for Taiwan's clinical nurses [20]. In this and recent studies, the majority of nurses were Catholic [21] or Muslim [22]; however, in Hsieh studies almost half of the nurses (42.7%) had no religious preference [20]. These findings confirm the impact of the nurse's core beliefs and values on the delivery of patient care, and some researchers suggest that similar faith of nurses allows to provide spiritual care at a higher level [16].

The study findings also show the correlations observed by previous researches who have found the importance of work experience and age for the level of spiritual competence of nurses [23]. The average age of a Polish nurse in 2022 was 53.7 years [15]. In our study, we have found that older nurses, with more years of experience, got higher scores, both in total and in individual domains. The age of nurses and their work experience trigger an increased awareness of the spiritual needs of patients, which is due to, among others, greater life and professional experience, which also allows for the growth of personal spirituality [24]. The results of the research are confirmed by Kim's research, who stated that, with the increase in the seniority of nurses, their perception of spiritual care increased, as younger nurses and nurses with less professional experience were characterized by low competences in the field of spiritual care.

In previous studies, the nurses who were enthusiastic about providing spiritual care to patients showed a high sensitivity to spiritual care [25]. The results of the present study revealed that most of the Polish nurses who believed that patients' spiritual needs should be assessed upon admission to the hospital obtained statistically significantly higher scores in all the subscales and a higher overall score by over 13 points. These results are supported by a study conducted by Aldaz which revealed that the nurses who believed that spiritual care activities were effective with patients had high spiritual competence. The high awareness of nurses about the effectiveness of spiritual care is associated with a higher level of their spiritual sensitivity and ability to provide spiritual care [26].

The caring abilities of Polish nurses have rarely been studied at the national level. The analysis of the competence to provide spiritual care and the caring abilities of Polish nurses constitutes pioneering research in Poland. The identification of the basic values in nursing practice, which is caring and its level analysis, contributes to the development of educational processes at various levels of education, through which nurses can strengthen or shape their caring abilities. In this study, the overall score of the CAI indicates that Polish nurses display low caring abilities, which is in line with previous studies [27]. The analysis showed that the nurses' care ability varies for each dimension, with 'knowledge' being the highest, followed by 'patience', and 'courage' being the lowest, and all of the three dimensions were lower than the Nkongho norms. The research results seem to be related to the trend of medicalisation of nursing education described by Jeffers [28]. The education of Polish nurses is dominated by medical and scientific education, and students and nurses are more interested in technical knowledge and in gaining new competences and qualifications [29]. This is in line with previous research conducted by Wang, which showed that nursing students focus more on the technical dimension of care than on the emotional dimension, which results in a low level of caring abilities measured by the CAI [30].

The study findings indicate that the nurses who were professionally satisfied with their work achieved statistically higher scores in the overall scale ($p = 0.007$). The results of previous studies show that job satisfaction is a very important variable and is related to professional burnout [31]. The studies conducted by Mohammadi and Moseley indicated that the caring abilities of nurses are directly correlated with their professional quality of life and job satisfaction, and inversely correlated with the Burnout Inventory. Previous studies have shown that a lower level of professional burnout is associated with an increase in nurses' caring abilities [32]. The professional burnout among Polish is at an average level [33]. The average levels of emotional exhaustion, depersonalisation and job dissatisfaction are closely related to a low level of caring abilities. Undoubtedly, special attention should be paid to the problem of professional burnout and appropriate preventive programmes should be implemented in order to reduce the incidence of this phenomenon, which may contribute to raising the level of caring abilities among Polish nurses.

In the current study, the results indicate that clinical experience has an impact on caring abilities. The nurses with higher professional experience obtained higher results in the

Knowledge ($p < 0.001$) and Patience subscales ($p < 0.01$), and in the total score ($p < 0.05$). This is consistent with other research findings claiming that clinical practice is an important contributor to learning about caring [34]. One of the possible explanations for this phenomenon can be related to the fact that nurses with longer work experience have contact with more patients and caregivers, which enables them to establish a greater amount of therapeutic relationships. Work experience can also allow for a deeper understanding of professional priorities and attention to humanistic care, other than just the technical dimension of care [30].

The results also show a statistically significant correlation between the CAI and the SCCS scores ($p < 0.001$). The confirmation of our research can be found in the results obtained by Hoover, who showed that spiritual care has a major impact on the caring abilities of nursing students [35]. In his research, Hoover confirmed our thesis that the higher the level of spirituality and spiritual care, the better the nursing behaviour. In addition, the nurses who had a positive attitude towards spiritual care obtained higher scores for caring abilities [35].

Study limitations

The study was conducted online and the data were collected only from 38% of the respondents who had opened the online form. The study covered only people who had access to the Internet and obtained information from one of the distribution channels. Moreover, we investigated the associations between nurses' spiritual care competence and caring abilities. Other nursing factors that may also correlate with spiritual health, should be addressed in future studies. It would be also interesting to examine whether the level of caring abilities and competences to provide spiritual care changes over time, and if so, why, and to investigate the dynamic transformations of Polish nursing. Further longitudinal studies need to be conducted to provide evidence of the potential associations between nurses' caring abilities, spiritual care competence, and other variables.

Conclusions

The SCCS and the CAI are holistic methods of assessing spiritual care competencies in nursing practice and of testing nurses' caring abilities. Nurses in Poland have poor humanistic caring abilities while spiritual care competence is on a high level. The value of humanistic care

should be promoted and put into practice through undergraduate and postgraduate education of nurses. In order to strengthen the caring abilities and competence to provide spiritual care, it should be based on the clinical experience of students and nurses. Our study indicated that age, the level of education, job satisfaction and work experience were the main influencing factors of the overall caring ability and spiritual care competence. Nurse management systems should support nurses, especially young ones without substantial work experience, instructing them how to practise patient-centered care based on Watson's caring theory. Improving nursing skills in the field of spiritual care is a key factor in maintaining the quality of care provided to patients especially in the most basic human experience of dying.

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Conflict of interest

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Table 1. Characteristic of the study participants

Variables		N	%
Sex	Female	433	96.0
	Male	18	4.0
Civil status	Married	308	68.3
	In cohabitation	76	16.9
	Single	58	12.9
	Widowed	8	1.7
	Religious person	1	0.2
Place of residence	Urban area	299	66.3
	Rural area	152	33.7
Level of education	Medical High School	34	7.5
	Bachelor's degree	204	45.2
	Master's degree	208	46.2
	Doctoral degree	5	1.1
Religious	Catholic	387	85.8
	Protestant	3	0.7
	Jehovah's Witness	2	0.4
	Agnostic	1	0.2
	Catholic in past, now non-believer	1	0.2
	Non-believer	33	7.3
	I don't want to answer	24	5.4
In your opinion, should a nurse make an initial assessment of the patient's spiritual needs upon admission to the hospital?	Definitely yes	83	18.4
	Rather yes	173	38.3
	Hard to say	124	27.5
	Rather not	59	13.1

	Definitely not	12	2.7
Does working as a nurse give you satisfaction?	Definitely yes	216	47.8
	Rather yes	189	41.9
	Hard to say	35	7.8
	Rather not	8	1.8
	Definitely not	3	0.7

M — Mean; SD — Standard Deviation

Table 2. The level of education and work satisfaction in relation to the results of SCCS

	Medical high school		Bachelor's degree		Master's degree		p
	M	SD	M	SD	M	SD	
Attitude towards the patient's spirituality	4.39	0.70	4.31	0.62	4.35	0.70	0.318
Assessment and implementation of spiritual care	3.81	0.55	3.64	0.73	3.54	0.88	0.218
Referral, consultation and spiritual care	4.23	0.47	4.11	0.59	4.01	0.72	0.206
Communication, individual support and counselling	4.19	0.50	3.95	0.66	3.81	0.86	0.025
Professionalisation and improvement of the quality of spiritual care	3.61	0.59	3.36	0.80	3.30	0.94	0.13
	Yes		No		Hard to say		p
	M	SD	M	SD	M	SD	
Attitude towards the patient's spirituality	4.35	0.67	4.27	0.83	4.21	0.65	0.38
Assessment and implementation of spiritual care	3.64	0.79	3.10	1.02	3.33	0.79	0.009
Referral, consultation and spiritual care	4.09	0.62	3.73	1.10	3.92	0.74	0.231
Communication, individual support and counselling	3.93	0.74	3.20	0.99	3.83	0.85	0.03
Professionalisation and improvement of the quality of spiritual care	3.41	0.83	2.58	1.10	2.91	0.91	0.001
Total score	102.20	16.73	87.18	23.03	94.31	16.79	0.002

p-value < 0.05, M — mean; SD — standard deviation

Table 3. The relationship between the nurse’s opinion according assessment of spiritual needs of the patient and scores of the SCCS

	Yes		No		Hard to say		p
	M	SD	M	SD	M	SD	
Attitude toward the patient’s spirituality	4.38	0.70	4.22	0.66	4.31	0.58	0.03
Assessment and implementation of spiritual care	3.74	0.74	3.22	0.91	3.53	0.77	< 0.001
Referral, consultation and spiritual care	4.15	0.63	3.86	0.72	4.03	0.61	0.002
Communication, individual support and counselling	4.06	0.69	3.51	0.86	3.79	0.73	< 0.001
Professionalisation and improvement of the quality of spiritual care	3.53	0.79	2.84	0.99	3.27	0.78	< 0.001

p-value < 0.05; M — mean; SD — standard deviation

Table 4. Correlations between the respondents' ages and the CAI scores

	Age	Work experience
Knowledge	0.217***	0.189***
Courage	-0.070	-0.055
Patience	0.119*	0.139**
Total score	0.107*	0.109*

***p-value < 0.001; ** p-value < 0.01; * p-value < 0.05

Table 5. The relationships between the level of education, postgraduate education, opinion about work, spiritual assessment and CAI scores

		Knowledge		Courage		Patience		Total score	
		M	SD	M	SD	M	SD	M	SD
Level of education	Medical high school	76.09	11.34	55.24	11.82	66.65	8.47	191.74	22.26
	Bachelor's degree	71.23	9.92	53.38	12.61	66.10	6.79	184.64	18.86
	Master's degree	71.19	11.04	54.87	12.24	65.01	8.33	185.21	22.70
	Statistic	p = 0.013		p = 0.455		p = 0.442		p = 0.086	
Does working as a nurse give you satisfaction?	Yes	72.28	10.08	54.37	12.44	65.90	7.32	186.55	20.50
	No	63.73	17.88	56.27	11.23	60.45	15.53	174.73	31.38
	Hard to say	65.83	11.48	51.89	12.02	64.14	7.92	176.00	20.83
	Statistic	p < 0.001		p = 0.519		p = 0.258		p = 0.007	
Should a nurse make an initial assessment of the patient's spiritual needs upon admission to the hospital?	Yes	72.92	10.29	55.00	12.99	66.38	7.29	188.25	20.28
	No	68.70	11.72	51.87	10.85	63.77	8.63	178.59	20.18
	Hard to say	70.44	10.26	53.98	11.78	65.13	7.75	183.58	22.12
	Statistic	p = 0.002		p = 0.107		p = 0.019		p < 0.001	

p-value < 0.05; M — mean; SD — standard deviation

Table 6. Correlations between the SCCS and the CAI

	Knowledge	Courage	Patience	Total score
Attitude towards the patient's spirituality	0.244 ^{***}	0.258 ^{***}	0.292 ^{***}	0.368 ^{***}
Assessment and implementation of spiritual care	0.327 ^{***}	0.064	0.200 ^{***}	0.265 ^{***}
Referral, consultation and spiritual care	0.419 ^{***}	0.142 ^{**}	0.347 ^{***}	0.404 ^{***}
Communication, individual support and counselling	0.382 ^{***}	0.113 [*]	0.279 ^{***}	0.346 ^{***}
Professionalisation and improvement of the quality of spiritual care	0.454 ^{***}	0.078	0.244 ^{***}	0.350 ^{***}
Total score	0.458 ^{***}	0.134 ^{**}	0.310 ^{***}	0.406 ^{***}

*** p-value <0.001; ** p-value <0.01; * p-value <0.05