Care Relationship Scale. Preliminary Report

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Abstract

Aim of study: The aim of this study was to determine the psychometric properties of the Care Relationship Scale.

Material and methods: The participants of the cross-sectional quantitative study were 180 persons in the age range of 28-70 years (M=48.11; SD=7.53). The conducted procedures included: confirmatory factor analysis, correlation analyses and Student t tests for independent and dependent samples.

Results: A two-factor structure of the Care Relationship Scale (CRS) was identified. The final version of CRS consists of 60 statements, 36 of which refer to the dimension of affective care, and 24 items refer to the dimension of instrumental care. CRS has a high internal consistency. The validity of CRS was confirmed, indicating significant correlations between the scores on the CRS dimensions and 4DSQ, DFPS – PL, ADL, IADL, SF, BPNSF and MSPSS.

Discussion: The structure of CRS, which was determined in the author's own study, confirms the previous research results pointing out to the importance of both emotional and instrumental support in caring for family members, including elderly ones. It is noted that to a great extent it is the health situation and the disease stage that set the scope, kind and proportions of the provided support. The care relationship between adult children and their ageing parents was not differentiated by the gender of adult children.

Conclusions: The Care Relationship Scale is a reliable and valid tool for the measurement of the psychological aspects of care provided by adult children to their ageing parents. The conducted analyses give grounds for using CRS in scientific research.

adulthood; psychological measurement; care relationship; family.

INTRODUCTION

The demographic change taking place in Europe and all over the world, connected with the extension of human life and decline in fertility, has an obvious influence on the contemporari-ly observed phenomenon of society ageing. One of the consequences in the nearest decades will be the fact of Poland joining the group of countries with the oldest age structure. This situation brings a necessity to provide care to the oldest generations. It is noticed that in family centric societies, in which the Polish one is included, a common form of care is informal care provided by the family [1].

The issue of family care is an area relatively poorly researched by family specialists. The researchers emphasize the fact that one of the key impediments of the exploration of care relation-

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ships in ageing societies is insufficiency of psychological research tools enabling them to measure many aspects of the family environment functioning at the same time.

The search of the literature related to the situation of elderly people and their carers allows for the statement that the majority of the studies focus on the aspect connected with the physical ability of seniors, ignoring the mental sphere [2-3]. The scales used to assess the functioning of people in late adulthood, such as ADL [4], IADL [5] or Barthel [6], allow us to determine only indirectly the scope of care required by seniors or the assessment of the quality of their life and the life of their carers. Less interest is given to the areas where the authors would consider the relational aspect and the affective support. In the contemporarily conducted studies, it is being more and more strongly emphasized that when referring to care for elderly people, apart from the aspects connected with instrumental support, it is essential to remember about the quality of relationships, thanks to which it is possible to empower seniors in the process of supporting them [7]. It is indicated that the qualities important in providing care are the abilities of empathic understanding, showing warmth and kindness, listening to the needs of an elderly person. Instrumental competencies are regarded as secondary, more important for coping with deteriorating health and decreasing fitness of elderly people [8].

In the previous studies emphasizing the relational dimension based on the humanistic psychology concept by C. Rogers, the quality of the relationship which is considered is the one between seniors and their social carers, outside the family circle [8-9]. On the other hand, in other studies, the analysed element was the affective dimension occurring between the carer and the senior. It concerned the quality of the interpersonal relationship, especially such dimensions as: lack of conflict and criticism and warmth and attachment, measured by the QCPR[1] questionnaire [10] in the Polish adaptation of Malczewska and Janus [11]. However, the QCPR questionnaire is designed to survey carers and their patients with dementia [11], which limits the possibility to properly describe care relationships in case of elderly people suffering from other problems than dementia. The scientific studies where the issue of the affective dimension in care is raised are mainly carried out with the application of qualitative methods or more rarely quantitative ones, using sociological questionnaires developed for the purpose of the specific study [12-14].

Looking for a possibility of assessing the strength of a care relationship and determining the types of care for ageing parents in contemporary Polish family systems, some actions were taken to develop a psychological tool – the Care Relationship Scale (CRS).

The scale is designed to survey adult children who have an ageing parent or parents. It consists of 60 statements referring to father and mother. It is assumed that it will allow us to measure two dimensions of care – the instrumental and affective ones.

The presented division of types of care for ageing parents was made on the basis of the support type concept: the emotional and the instrumental/practical ones [15-16] and the specific and unspecific factors in performing the caring family function [17]. The unspecific factors refer to the physical and material resources (the dimension of instrumental, practical support). On the other hand, the specific aspects connect the provided care with the dimension of emotional support and its attributes such as: „unconditional love, belonging, intimacy, importance, status exclusivity, family life atmosphere, sense of security and support over a wide time horizon" [17].

When developing the Care Relationship Scale, the inspiration to create some of the items (referring to the affective care type) was drawn from the Questionnaire of Emotional Bond with Adult Children[2] and the remaining part was complemented with the issues from the literature of the subject devoted to the specificity of the care relationship between adult children and their ageing parents and the types of care regarding in-

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[1]   Quality of the Carer Patient Relationship [10]

[2]   Beata Bąk (2007): Emotional bond with adult children vs subjective mental well-being of parents in late adulthood. Unpublished master's thesis prepared under guidance of Ludwika Wojciechowska. Warszawa: Faculty of Psychology UW.

strumental support [18-21, 13]. The final number of items was included in CRS after getting feedback from eight competent experts who referred to their appropriateness during the conducted scientific research.

In CRS 36 statements refer to the dimension of care of an affective nature (AC), which is expressed by intimacy and interest. Adult children provide support to their parents, often meet and talk with them and enjoy spending time with them. They treat their parents' affairs as a priority, participate in events that are important for them, are open and ready to listen to their needs and concerns. On the other hand, 24 statements refer to the dimension of instrumental care, which is related to providing support to their ageing parents in respect to everyday activities. That concerns such activity areas as: doing the shopping, preparing meals, feeding the parents, helping to get dressed, maintaining hygiene, washing, cleaning, transporting, handling administrative procedures, paying bills and financial support. The surveyed persons can give their answers on a five-grade Likert scale, where 1 means „very often" and 5 – „never".

It is expected that the psychometric properties of the Care Relationship Scale will allow us to more comprehensively explore the psychological aspects of the relationship of care provided by adult children to their ageing parents.

Research issues

Four essential research goals were set.

1. Evaluation of unanimity of competent experts' opinions in respect of the validity of the items included in the scale.
2. Obtaining the assumed two-factor factor structure of CRS.
3. Evaluation of CRS's reliability.
4. Verification of the construct validity of CRS.

The following research hypotheses were adopted.

Hypothesis 1. The results of the factor analysis reveal the assumed two-factor structure of CRS. It is assumed that the factor of instrumental care is correlated with the factor of affective care. It is assumed that it is possible to calculate the general score on the care scale as well as obtain the results on its two dimensions.

Hypothesis 2. The considered reliability coefficient values for CRS is higher than 0.70.

Hypothesis 3. Some correlations between the scores on the CRS dimensions and the mental health dimensions, the filial piety dimensions, the assessment of basic and complex everyday activities of ageing parents, the familism dimensions, the dimensions of satisfaction and frustration of the basic life needs and the social support dimensions are confirmed.

Hypothesis 4. There is differentiation in the dimensions of CRS in the groups of adult children created according to gender.

METHOD

Procedure and materials

This research project was conducted in years 2022 – 2023 with the use of the CAWI method, following the ethical appropriate rules (resolution no. 1/KEBN-UŁ/II/ 2022-23 of 10 January 2023). The research was of a voluntary and anonymous nature and was not connected with any financial compensation for the respondents.

The statistical analyses were carried out using the IBM SPSS Statistics v.28 software.

The following descriptive statistics were determined: mean values, standard deviations, minimum values, maximum values, skewness and kurtosis values together with the Student t test for dependent and independent samples. For the evaluation of unanimity of competent experts' opinions, the mean value of the Cohen ϰ inter-rater agreement measure was applied. While determining the factor structure of CRS, a confirmatory factor analysis was conducted on the sample (n=180). The reliability of CRS was assessed using the McDonald ω reliability measure. The construct validity on the sample (n=30) was determined with the use of the Pearson r and Spearman ϱϱcorrelation coefficients (in case of variables with distribution different from normal). The adopted level of significance was $\alpha = 0.05$.

Evaluation of unanimity of competent experts' opinions

The aim of the research, in which eight competent experts (members of Student Scientific Club of Social Psychology at the Institute of Psychology in University of Łódź) took part, was to assign the individual scale items to the dimension of affective care or to the one of instrumental care. As a result, the obtained mean value of the Cohen ⊚ inter-rater agreement measure was 0.64, i.e. below the recommended threshold value of 0.75 [22].

Verification of the factor structure and evaluation of reliability of the CRS questionnaire

Surveyed persons

The analyses aimed at determination of the factor structure and reliability of CRS were conducted on the scores of 180 persons aged 28-70 years (M=48.11; SD=7.53). They were 143 women aged 28-70 years (M=48.80; SD=5.91) and 37 men aged 33-61 years (M=46.62; SD=6.45).

In the majority of cases, the parents of the respondents were fully self-contained. More than a half of the surveyed persons (n=117; 65.0%) did not live with their parents. The average distance between the place of residence of the respondents and their parents was 20.15 kilometres (SD=61.93).

In order to verify the factor structure of the scale, a confirmatory factor analysis was carried out. The goodness of fit for three models was analysed, i.e. the model in which the items from 1 to 34 make up the dimension of affective care and the items from 35 to 60 make up the dimension of instrumental care, whereby both the dimensions are correlated with each other. And another model, in which, apart from the above mentioned scales, the existence of the general score has also been assumed, identified as II order factor and the *bi-factor* model, in which each item of the scale was both the indicator of the result on the particular scale dimension and the indicator of the general score. The obtained indicators of fit are presented in table 1.

Table 1. Confirmatory factor analysis scores

Model	NFI	CFI	RMSEA	SRMR
Correlated scales	0.75	0.78	0.12	0.06
II-order general factor	0.75	0.78	0.12	0.06
bi-factor	0.80	0.83	0.11	0.06

NFI – normed fit index; *CFI* – comparative fit index; *RMSEA* – root mean square error of approximation; *SRMR* – standardized root mean square residual

The threshold values meaning the optimum fit of the model to the analysed data are *NFI* >=0.95 [23], *CFI* >=0.95 [30], *RMSEA* < 0.06 [24], *SRMR* < 0.08 [24]. None of the three analysed variants was fitted well enough to the data. Therefore, in the next stage the analysis of main components was conducted. The obtained scree plot is presented in picture 1.
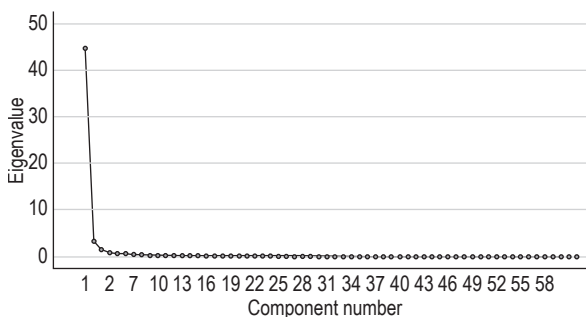

Figure 1. Scree plot obtained from analysis of main components of CRS questionnaire.

Based on the shape of the scree plot, two dimensions were identified and treated with the Oblimin Promax Rotation. The factor load values obtained after the rotation are shown in table 2. Values lower than 0.40 were no included.

Table 2. Factor loads obtained in the analysis of the main components of CRS.

No.	Content	AC	IC
20	I and my mother/father are close to each other	1.08	–
13	I am happy about my father's/ mother's successes	1.05	–
15	My father/mother can always talk with me about his/her needs, concerns	0.96	–
6	Being with my father/mother makes me happy	0.96	–

#	Item		
9	I am happy when I can please my father/mother	0.96	–
23	I take part in the events that are important for my father/mother	0.96	–
19	I try to cheer up my father/mother when I see that he/she is worried about something	0.96	–
30	I always wish all the best to my father/mother	0.94	–
12	I show my father/mother that he/she is important for me	0.94	–
26	I like to give my father/mother presents	0.92	–
34	I and my father/mother often smile at each other	0.91	–
28	If needed, I stand up for my father/mother	0.91	–
24	I feel that my father/mother trusts me	0.90	–
21	I show my father/mother how much he/she means to me	0.90	–
32	I talk with my father/mother about different personal issues	0.89	–
4	When I meet with my father/mother, we can talk for hours	0.89	–
33	I enjoy spending time with my father/mother	0.88	–
31	I like to call my father/mother to ask how he/she is doing	0.87	–
14	I know how my father/mother is doing	0.86	–
7	I miss my father/mother when I do not see him/her for quite some time	0.86	-
25	I am happy to visit my father/mother on my own initiative	0.86	–
22	I experience my father's/mother's problems as if they were my own	0.85	–
5	My father/mother shares his/her joys and sorrows with me	0.85	–
27	I am a real support for my father/mother	0.85	–
3	I ask how my father/mother is feeling	0.83	–
11	In a difficult situation my father/mother can count on my help	0.81	–
29	I like to hug my father/mother	0.81	–
10	My father/mother can always count on me	0.78	–
52	I call my father/mother to find out if he/she needs anything	0.71	–
8	I feel that I give a lot of support to my father/mother	0.70	–
53	I give my father/mother advice and support when he/she has any problem	0.69	–
16	My father's/mother's affairs are more important than mine	0.66	–
2	I often tell my father/mother that I love him/her	0.60	–
18	I always remember about my father's/mother's birthday/name-day	0.54	–
1	I keep in touch with my father/mother	0.48	0.43
51	When my father/mother needs help, he/she turns to me in the first place	0.48	0.43
45	I help my father/mother to get dressed	-	1.03
44	I prepare/give medicines to my father/mother	–	1.03
47	I help my father/mother in hygiene-care activities (washing, bathing, etc.)	–	1.02
42	I help my father/mother to transport him/her to rehabilitation, medical check-ups, etc.	–	0.95
46	I help my father/mother to walk, move	–	0.95
43	I buy medicines for my father/mother	–	0.95
38	I feed my father/mother	–	0.93
60	I pay for a person who helps my father/mother to do everyday activities	–	0.90
58	I pay for additional aids, medicines, rehabilitation equipment for my father/mother	–	0.89
37	I prepare meals for my father/mother	–	0.88
39	I help my father/mother in everyday activities (e.g. cleaning, washing)	–	0.87
57	I pay for my father's/mother's additional doctor appointments	–	0.86

41	I drive my father/mother to a doctor	–	0.83
40	I take care of my father's/mother's administrative procedures (correspondence, payments, etc.)	–	0.82
59	I buy additional rehabilitation, medical treatments for my father/mother etc.	–	0.82
17	My father/mother needs to ask me for help for a long time before he/she gets it from me	–	0.78
50	I support my father/mother financially if necessary	–	0.77
56	I find out what solutions are beneficial for elderly people and try to convince my father/mother to use them (e.g. rehabilitation equipment, etc.)	–	0.76
48	I drive my father/mother to church, cemetery	–	0.65
35	I do shopping for my father/mother	–	0.62
49	My father/mother turns to me for help in different everyday matters	–	0.59
55	I give my father/mother advice and consult with them the solutions which can help them in everyday functioning (e.g. house facilities, additional rehabilitation)	–	0.58
54	I try to search for information about some sources of support for my father/mother	–	0.58
36	I take my father/mother shopping	–	0.45

AC – affective care; IC – instrumental care

The first identified dimension of affective care (AC) explained 74.7% of variance and the second one of instrumental care (IC) – explained 5.8% of variance. The AC and IC dimensions were highly correlated with each other. The Pearson r correlation coefficient value was $r=0.81$, $p<0.001$.

Table 3 presents the descriptive statistics for the identified AC and IC dimensions and the McDonald ⍵ reliability measure values. The scores for the identified dimensions were calculated as mean values of the scores obtained for the answers to individual items, which allowed us to compare the mean values obtained on the identified dimensions in the situation when each of the dimensions is based on a different number of items.

Table 3. Descriptive statistics for AC and IC dimensions

Variables	M	SD	min	max	S	K	⍵
Affective care	1.42	1.22	0	5	0.50	-0.23	0.99
Instrumental care	2.29	1.78	0	5	-0.19	-1.51	0.99

The reliability of assessment on the identified dimensions AC and IC was very high. Based on the Student t test value for dependent samples, it was found out that the mean value of the scores obtained on the instrumental care dimension was significantly statistically higher than the mean value obtained on the affective care dimension, $t(359)=-17.25$, $p<0.001$.

Validity analysis

In order to assess the construct validity, we used six psychological questionnaires with good psychometric properties and a poll survey. The applied tools included: the Four-Dimensional Symptom Questionnaire (*4DSQ*) [25], the Dual Filial Piety Scale (DFPS-PL) [26], Activity of Daily Living (ADL) and Instrumental Activity of Daily Living (IADL) – KATZ Scale, the Familism Scale, the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS) [28], the Multidimensional Scale of Perceived Social Support (MSPSS) [29] and the poll questionnaire.

*The Four-Dimensional Symptom Questionnaire (4DSQ), i*n the adaptation of Czachowski, Izdebski, Terluin and Izdebski [25] is designed to measure the four dimensions of mental health: distress, anxiety, depression and somatization. The 4DSQ questionnaire has sufficient psychometric properties to apply it in scientific research. The Cronbach α coefficient for the individual dimensions falls in the range from 0.82 to 0.88 [25].

The Dual Filial Piety Scale (DFPS*)* in the adaptation of Różycka – Tran, Jurek, Olech and Dmochowski [26] consists of 16 items. Eight items measure Reciprocal (RFP) and eight Authoritarian (AFP) filial piety. The Cronbach α coefficients are strong for both the factors: for the RFP factor 0.87 and 0.77 for the AFP factor [26].

The Activities of Daily Living Scale (ADL), also called the Katz scale, is designed to assess the functional capacity in respect of simple every-

day life activities. This scale allows us to access the patient's ability to move, eat, control physiological activities and maintain hygiene [4].

The Instrumental Activities of Daily Living Scale (IADL), also called the Lawton scale, is used to assess eight kinds of complex everyday life activities. It allows us to assess the life self-sufficiency, the ability to cope independently at home and outside home. The assessed abilities are following: using the phone, getting to places farther than the usual walking distance, doing the shopping, preparing meals, doing basic house chores, taking medicines and managing the money matters [5].

The Familism Scale (MACVS) [27] in the adaptation of Walęcka-Matyja [27] measures five familism dimensions, i.e. family support, respect, religion, material success and achievements and individualism. The reliability indicators of the FS dimensions are in the range from 0.95 to 0.63 [27].

The Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS) in the adaptation of Kuźma and Szulawski [28] measures the satisfaction and frustration of the three universal life needs according to the self-determination theory, i.e. autonomy, competence and relationality. The scale includes a six-dimensional structure, which allows us to differentiate between the satisfaction component and the frustration one for each of the three needs. The tool has good psychometric properties. The Cronbach α coefficient for the individual scales falls in the range between 0.72 and 0.83 [28].

The Multidimensional Scale of Perceived Social Support (MSPSS) in the adaptation of Buszman and Przybyła-Basista [29] is designed to measure the perceived social support network. The scores allow us to determine the perceived social support network in the general dimension and in the three specific ones. They are following: friends support, family support and significant person support. The Cronbach α coefficient is 0.89 and indicates the high internal consistency of the Polish adaptation of MSPSS.

The poll questionnaire includes questions referring to the surveyed person and their parents/parent. The questions concerning the respondent cover: gender, age, place of residence, education, family of origin structure, marital status, children, economic situation, parents status (both/one living parent), distance from place of residence to parents' home. The questions referring to the parents situation cover: their age, economic situation, place of residence, household structure, assessment of health and occurring diseases. The remaining questions concern the time devoted to providing care to the parents and the motivation of the respondents to provide care for their ageing parents.

Tables 4 and 5 present the characteristics of the surveyed persons, the information about the parents of the respondents and the opinions of the respondents on the care for the ageing parents.

Table 4. Characteristics of the surveyed persons

Age of respondents (n=30)	40-61 years (M=49.83; SD=5.79)		
Age of women (n=20)	40-60 years (M=48.80; SD=5.91)		
Age of men (n=10)	45-61 years (M=51.90; SD=5.09)		
Place of residence of respondents	Country 46.7%	Town > 50 thousand 23.3%	City < 50 thousand 30.0%
Education	Higher 60.0%	Secondary 36.7%	Vocational/ Primary 3.3%
Economic situation	Very good 13.3%	Good 86.7%	Bad 0.0%
Family of origin structure	Full 83.3%		One-parent 16.7%

Marital status	Marriage/cohabitation 86.7%	Single/ widower/widow 13.3%
Children	Yes 96.7%	No 3.3%
Living parents	Both parents 53.3%	One parent 46.7%

Table 5. Characteristics of situation of respondents' parents

Description of situation of respondents' parents				
Age of mothers	67-93 years (M=76.70; SD=6.43)			
Age of fathers	68-84 years (M=77.53; SD=4.93)			
Economic situation	Very good 10.0%	Good 80.0%		Bad 10.0%
Place of residence	Country 46.7%	Town > 50 thousand 23.3%		City < 50 thousand 30.0%
Household situation	Alone 60.0%	With respondent 23.3%		With another child 16.7%
Distance from place of residence	0 to 200 km (M=15.87; SD=41.84).			
Diseases occurring in Mothers	Cardio-vascular diseases 50.0%	Diseases of the locomotor system 33.3%	Diabetes 33.3%	Parkinson disease 6.7%	Alzheimer disease 3.3%
Diseases occurring in Fathers	Cardio-vascular diseases 23.3%	Diseases of the locomotor system 16.7%	Diabetes 6.7%	Alzheimer disease 3.3%	Cancers 3.3%
Length of care provision	Less than 1 year 23.3%	From 1 to 2 years 16.7%	From 2 to 5 years 30.0%	From 5 to 10 years 3.3%	More than 10 years 3.3%
Respondent's opinion on provided care	„natural period in life" 46.7%	„gratitude" 40.0%	„duty" 10.0%	„giving up on oneself" 3.3%

DESCRIPTIVE STATISTICS

Table 6 shows the descriptive statistics for the analysed interval variables.

Table 6. Descriptive statistics

Variables	M	SD	min	max	S	K
somatization	8.43	6.82	1	24	0.78	-0.36
stress	8.47	6.63	0	29	1.20	1.94

anxiety	2.73	3.39	0	13	1.59	2.32
depression	1.10	2.09	0	10	3.11	11.34
reciprocity	45.60	6.68	29	56	-0.63	0.24
filial piety	23.30	7.25	8	37	0.21	-0.43
functional capacity assessment – mother	5.03	1.94	0	6	-2.03	2.81
functional capacity assessment – father	3.83	2.83	0	6	-0.62	-1.65
complex life activity assessment – mother	21.20	8.38	0	27	-1.81	2.20
complex life activity assessment – father	15.83	12.40	0	27	-0.51	-1.78
family support and obligations	11.17	2.90	4	17	0.16	0.34
respect	8.27	2.12	4	13	0.02	0.19
individualism	8.20	2.17	5	13	0.31	-0.36
materialism	9.60	1.50	7	13	-0.11	-0.49
autonomy satisfaction	16.33	1.95	12	20	0.12	-0.34
autonomy deprivation/ frustration	9.60	3.35	4	15	0.07	-1.19
relationality satisfaction	17.53	2.11	13	20	-0.74	-0.44
relationality deprivation/ frustration	6.47	2.37	4	13	0.94	0.29
competence satisfaction	16.57	1.96	12	20	-0.23	0.07
competence deprivation/ frustration	7.27	2.59	4	12	0.17	-1.12
support from significant person	22.34	5.20	8	28	-0.95	0.42
support from family	20.08	6.00	5	28	-0.62	-0.46
support from friends	21.13	5.31	4	28	-1.42	2.57
general perceived social support	63.55	14.18	26	84	-0.92	0.73

M – mean value; *SD* – standard deviation; min – minimum value; max – maximum value; *S* – skewness measure; *K* – kurtosis measure

It was found out that the skewness and kurtosis measure values went beyond the range of – 1 to 1 characteristic of the normal distribution for the scores on the scales of stress, anxiety, depression, functional capacity assessment and complex life activity assessment of mother and father and the scores on the scale of conflict and support from friends. The further analyses with these variables were conducted based on non-parametric statistical methods.

The validity of the measurement with the Care Relationship Scale was estimated by correlations between the scores obtained by means of CRS and the scores received with the use of: 4DSQ, DFPS – PL, ADL, IADL, SF, BPNSF, MSPSS.

The scores obtained on the scales of stress, anxiety, depression, functional capacity assessment and complex life activity assessment of mother and father as well as the scores on the scale of conflict and support from friends were examined based on the values of the non-parametric Spearman ◎◎correlation coefficient due to statistically significant deviations from normal distribution. The remaining analyses were carried out on the basis of the Pearson r correlation coefficient values (table 7).

Table 7. Results of analyses of correlations between CRS and *4DSQ, DFPS – PL, ADL, IADL, SF, BPNSF, MSPSS*

		Mother		Father	
		CRS dimensions			
Variables	n	AC	IC	AC	IC
somatization	30	0.356	0.333	0.178	0.026
stress	30	0.500**	0.227	0.278	0.286

anxiety	30	0.316	0.009	0.027	-0.055
depression	30	0.296	0.008	0.147	0.033
Reciprocity RFP	30	-0.515**	-0.117	-0.020	0.097
filial piety AFP	30	-0.228	-0.042	-0.283	-0.240
functional capacity assessment – mother	30	0.494**	0.689**	0.113	0.219
functional capacity assessment – father	30	-0.059	0.018	0.812**	0.872**
complex life activity assessment – mother	30	0.355	0.823**	-0.086	0.247
complex life activity assessment – father	30	-0.066	0.228	0.677**	0.887**
family support and obligations	30	0.156	0.083	-0.166	-0.164
respect	30	0.324	0.199	-0.060	-0.117
individualism	30	0.206	0.141	-0.032	-0.009
materialism	30	0.069	0.167	-0.369*	-0.283
autonomy satisfaction	30	-0.129	-0.036	-0.194	-0.099
autonomy deprivation/ frustration	30	0.154	0.120	0.043	-0.018
relationality satisfaction	30	-0.085	0.004	-0.014	0.116
relationality deprivation/ frustration	30	0.090	-0.005	0.051	-0.067
competence satisfaction	30	-0.052	-0.162	-0.212	-0.088
competence deprivation/ frustration	30	-0.050	-0.037	0.089	-0.061
support from significant person	53	-0.208	-0.032	0.190	0.334*
support from family	53	-0.192	0.193	0.093	0.284*
support from friends	53	-0.218	0.109	-0.004	0.174
general perceived social support	53	-0.180	0.075	0.145	0.323*

n – number of respondents; * *p*<0.05; ** *p*<0.01

It was found out that the scores on both the identified dimensions – affective care (AC) and instrumental care (IC) were positively correlated with the assessment of functional capacity and complex life activities of mother and father. Also, it was noticed that the scores on the affective care dimension in respect of mother were positively correlated with the scores on the scale of stress and negatively correlated with the scores on the scale of reciprocity. The scores on the instrumental care dimension in respect of father were positively correlated with the strength of support from a significant person, from the family and with the general perceived social support.

Table 8 shows the mean values of the scores on the AC and IC dimensions obtained in the group of women and the group of men. The table was complemented with the Student t test values for independent samples.

Table 8. Mean values of scores on affective care and instrumental care dimensions in groups of women and men

	Women		Men				
Parent/Variables	M	SD	M	SD	t	df	p
Mother							
AC	1.71	0.98	2.18	1.00	-1.24	28	0.226
IC	3.45	1.58	3.75	1.43	-0.50	28	0.618
Father							

| AC | 1.60 | 1.40 | 1.48 | 1.35 | 0.22 | 28 | 0.830 |
| IC | 2.78 | 2.13 | 2.62 | 2.28 | 0.19 | 28 | 0.847 |

No statistically significant differences between the scores obtained in the group of women and the group of men on the Affective care and Instrumental care dimensions were discovered.

DISCUSSION

The aim of this study was to determine the psychometric properties of the author's own psychological tool – the Care Relationship Scale. As a result of the conducted analyses, it was proved that CRS allows us to measure the care relationship in the general dimension and on the two specific care dimensions, i.e. the affective and the instrumental ones The above-mentioned findings confirm the assumptions of the first hypothesis.

Considering the obtained result, it has been shown that it is consistent with the previous research results, which emphasize the importance of both the emotional support and the instrumental one in care for family members. It is indicated that such elements as health and a disease stage can determine the scope and the kind of help. The emotional support is especially important in case of the physically fit seniors or in the initial stages of the disease. On the other hand, the instrumental support is more significant as help to adapt to everyday life in the home environment, for example, after the hospitalization period [30] or in everyday functioning of chronically ill people [31]. Furthermore, it is indicated that with the senior's age and the progressive process of ageing, apart from giving emotional support, it becomes more and more important to provide help in activities requiring physical strength and fitness, such as doing the shopping or house chores, and then in everyday life activities, such as maintaining hygiene and getting dressed [32].

The results of the author's own study enable confirmation of the assumptions of the second hypothesis. It was proved that CRS has a very high internal consistency.

The results of the correlational analyses aimed at assessing the construct validity conform the assumptions of the third hypothesis. We found correlations running in expected directions whose strength was from weak to moderate. For example, some correlations were detected between the scale dimensions (AC and IC) and the evaluation of the capacity in respect of basic and complex life activities, with the scores on the scales of stress and reciprocity, with the strength of support from a significant person, from the family, and with the general strength of the perceived social support.

Due to the correlational nature of the study, we did not calculate the test-retest reliability, which should be checked in the future studies. Moreover, it is worth assessing the construct validity of the Care Relationship Scale on a larger sample with a comparable number of women and men.

In the carried out study no differentiation was found on the dimensions of affective care and instrumental care in the groups made up according to the gender of adult children. Thus, the fourth of the presented hypotheses was not confirmed. The obtained result indicates discrepancy in relation to other research results, in which differences were found between genders in respect of forms of support provided to elderly family members. Women more often provide help in doing house chores and care whereas men are in a greater degree responsible for material support and arranging administrative procedures [33]. The lack of differentiation in women and men in the author's own study may indicate lack of division into typically female and male roles occurring in modern families [34,17], which is emphasized by family specialists. It can also result from the gender distribution in the surveyed sample.

The results of the conducted study allow us to regard CRS as a reliable and valid tool designed to measure the strength of the care relationship with the ageing parents and determine its type in respect of two dimensions: the affective and the instrumental ones.

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