



Building a measure of the proactive personality of advanced handball players

Imad Saadallah Khamees

Anbar Education Directorate

Abstract

The current research aims to build the measure of the proactive personality of advanced handball players, and the researchers built the measure of proactive personality based on the theories that interpreted the proactive personality, as the sample of the construction of the scale (180) players as the measure was applied to the players and used the scientific foundations of the sincerity of statistical analysis of paragraphs such as the honesty of the content and the sincerity of construction by the adoption of the method of excellence of paragraphs, The researchers concluded after the analysis of the factors derived (6) factors by the number of paragraphs (26) paragraphs distributed among the six factors, and the researchers recommended the use of the measure built by the researchers to measure the proactive personality of advanced handball players.

1. Introduction

The concept of "proactive personality" is the constant tendency of an individual to do an impact on the environment (Crant, 2000: 435-462), "proactive individuals are known for their ability to make a difference in the positive direction in themselves and in their environment, despite restrictions that provide them with this unique advantage enough self-confidence to take the initiative to change things they do not prefer in their lives and environments." 2018, p:120) The problem of research is highlighted here as the researchers noted that the proactive personality variable of relatively recent variables in personality psychology and specifically in sports psychology for the scarcity of these studies, so the researchers saw going into this problem by building a tool to measure the proactive personality of the players applying handball, and this measure as far as the researchers know is not available in the field of sports and was not addressed by the researchers previously, which called the researcher To build this scale, the research aims to build a measure of the proactive personality of handball players, "personality is a complex system of features and characteristics possessed by individuals of all kinds and races" (Stagner; 1974:10) "The human self changes in the positions of the person during the interaction of the person in his own life or in the environment of the ocean" (Liebert & Spiegler: 1982:2),

"Thousands of frads are divided into pre-emptive people who examine situations. In order to modify the opportunities, to find the right things, to evaluate the course of the daft, to predict the problems, to do things in a way that is hidden, to take the right actions, to persevere and achieve satisfactory results, and they change their tools. They have repeatedly planned to follow the developments of ordinary people who are intellectually invisible and are not reminded of the methods that have met them in the same ways they do, and they are integrated into the current situation and are not jealous of them." Johnson:2015:22).

2- Search procedures

2.1 Research approach

The researchers chose the descriptive method in the survey method because it is the best curriculum suitable for the nature of the problem studied by the researchers.

2.2 Research and sample community

The research community included the advanced players in Iraq for the handball players of the Iraqi League for the year (2019-2020) and the number (224) players according to the statements of the Iraqi Central Federation, as the selection of the sample in the random way by draw as it was formed from (210) Players participating in the Iraqi league, and the researchers distributed the scale on Sunday (8/12/2019) to the clubs and excluded (14) form for incomplete answer, and (16) form For the reconnaissance sample, the main research sample (180) included players, representing a percentage of 80,36 percent of the original research community.

2.3 Search tools

"It means the means by which information is collected to answer search questions and test its assignments such as questionnaire, interview, observation and testing." Solomon:9 201:19)

2.3.1 Data collection methods

2.3.2 Data collection and data analysis

Auxiliary staff, stop watch, pens.

2.4 Measure construction puppies

"Measures to build the scale include the steps taken in the construction, which are based on principles and are subject to a well-defined action plan that determines in advance a number of stages, steps, necessary operational procedures and the foundations for building standards." (Michael:56:2016):

2.4.1 The purpose of building the scale

2.4.2 Identifying the phenomenon to be measured

2.4.3 Determining the dimensions of the scale

2.4.4 Preparing the initial version of the scale paragraphs

In order to prepare the initial version of the scale paragraphs, the researchers did the following:

2.4.4.1 Preparation of scale paragraphs

The researchers identified the dimensions of the scale and developed a suitable definition for each of them, he wrote the paragraphs based on Arab sources and previous studies for the purpose of benefiting from them.

2.4.4.2 The validity of paragraphs

After the measure was adopted in its initial form, which includes (34) paragraphs with positive and negative phrases distributed on (5) dimensions and for the purpose of ascertaining the validity of the formulation of paragraphs linguistically, the researchers presented them to a specialist in the Arabic language for the purpose of linguistically evaluating them, and after the language modifications were presented to a group of experts for the purpose of judging their suitability in terms of their suitability to measure the dimensions of the proactive personality, and the experts suggested a number of observations such as deleting some paragraphs and modifying others and transferring a few of them to other dimensions more acceptable than the dimension in which they were replaced.

As well as verifying the five-year balance of estimate that the five answer alternatives were given (apply to me very largely, apply to me to a high degree, apply to me to a small degree, not apply at all) grades (1,2,3,4,5) for positive phrases and grades (5,4,3,2,1) for negative phrases, and to analyze the opinions of the expert gentlemen statistically the researchers used the test (K2).

2.4.4.3 Preparing scale instructions

The researchers stressed the need to answer all paragraphs of the scale and that any paragraph left will neglect the form and attach an example of how to answer the paragraphs of the scale with its paragraphs of (34) paragraphs that were written without mentioning the dimensions in preparation for the conduct of the reconnaissance experiment.

2.5 Reconnaissance experiment

The researchers conducted the reconnaissance experiment on a sample of Diyala handball club with 13 players and were randomly selected on the date (14-10-2019), and the reconnaissance experiment is a way to explore the suitability of the designed search tool and its compatibility with the research sample, as they were excluded from the main experiment (sample application of the scale).

2.6. The main experience (application of the scale)

The measure with its instructions and paragraphs (34) became a paragraph ready to be applied to the building sample and they are the players of the league handball clubs in Iraq number (180) players, the measure was applied to the building sample during the period from (14-12-2019) until (9-2-2020).

2-7 Scientific foundations for building the scale: -

2-7-1 The scale is true:

The researchers verified the sincerity of the scale with two indicators of honesty:

2-7-1-1 believe the content: -

This honesty was achieved after the concept of proactive personality was defined, as the researchers numbered the scale and determined its dimensions and paragraphs using a group of experts in psychology Riyadh to decide the validity of the paragraphs and thus the researchers got the sincerity of the content.

2-7-1-2 Believe the building: -

This type of honesty is "one of the most appropriate types of honesty for building metrics because it adopts empirical verification of the extent to which paragraph

scores match the characteristic or concept to be measured." (Al-Zuba'i and others,1984:68)

The researchers verified the sincerity of the construction through three indicators:

2-7-1-2-1 The distinguishing power of paragraphs: -

For the purpose of calculating paragraph discrimination transactions, the method of the two extremist groups was used, "it is one of the appropriate methods for calculating the discrimination of paragraphs, and finding the criteria for the paragraphs of the scale in the manner of the two extremist groups requires the following steps":(Allam,1986).

1-Order the grades obtained by the players on the scale descending from the highest to the lowest degree.

2- Deducting (33%) of the sample members from the top who received the grades to represent the highest-grade, and deducting the percentage (33%) From the members of the sample from below who got the lowest score to represent the lower class members, if the number of players in the top group (59) players, and the same number for the lower group.

The researchers used the method of testing(t) to find the factors of discerning paragraphs.

By comparing the results of the statistical analysis of the calculated t values and comparing them with the values of significance, all paragraphs were accepted and no paragraph was excluded.

2-7-1-2-2 internal consistency:

The researchers used internal consistency factors in the analysis of the paragraphs of the scale ythe simple link factor law was used for Pearson (Person) to extract the correlation between the grades of the members of the sample (180) players on each paragraph and between the overall degree of the scale using the statistical bag (SPSS), and to know its statistical significance compared to the values of indication, and in light of this criterion did not exclude any paragraph of the scale paragraphs.

2-7-1-2-3 global honesty: -

"This type is the finest form of honesty because it uses inference statistics and measures other species that use inference statistics" (Jawad:126:2017), a statistical method aimed at studying complex phenomena to extract the factors that influenced them by analyzing the correlations between the variables of the phenomenon, and working analysis based on knowledge of the main components of phenomena that are subject to measurement.

In order to achieve the research objectives, the researchers (34) subjected a paragraph to working analysis.

2-7-2 the stability of the scale: -

The stability of the test means "the accuracy of the scale in observation and its non-contradiction with itself and its consistency in the information provided to us on the behavior of the individual" (Tyler, Leona,1989:56), and the researchers verified the stability of the scale through the method of half fragmentation and factors of the vakronbach.

2-7-2-1 Half Retail Method: -

The researchers used to find stability on all paragraphs the relationship between individual and marital questions, amounting to (180) form and was used statistical bag (SPSS), and entered the data to it and then divided the paragraphs of the scale in half and extracted the stability factor between the total degrees The halves in Pearson's manner, and the correlation factor between the two halves (0.74) but these values represent the stability factor of half the test so the stability factor must be adjusted and corrected in order to get the test stability factor as a whole and therefore use the Spearman Brown equation to correct the correlation coefficient.

After correction, the stability factor (0.88) became a high stability factor that can be adopted to estimate the stability of the test.

2-7-2- 2 Alpha Cronbach coefficient: -

To calculate stability in this way for a measure the researchers relied on the sample of the construction of the statistically viable scale of (180) players, and when calculating the value of the stability factor turned out to be (0.893), which is an excellent value in sports education research and a high stability factor and reliable and reliable. (Safwat Faraj, 334)

2-8 Statistical means: -

Statistical data were treated using the ready-made program (spss).

3- Presenting, analysing and discussing the results

3.1 Presentation of statistical results and indicators

3.1.1 Working analysis

The results of the working analysis resulted in the crystallization of (10) factors before recycling, but these factors are inexplicable only after recycling, so the researchers used the perpendicular recycling method (Varimax) for Kaiser, because it leads to the best solutions that meet the characteristics of the simple composition of Thurston.

3-1.1.1 Factors before recycling

Through the procedures for obtaining the interconnection relationship as it is a step that paves the way to reach a summary picture of the most important factors, and the purpose of the use of working analysis is to explain the value of interfaces according to the lowest possible number of factors, and in order to obtain simple working construction the researchers used the method of basic components of hot telling principle components in the analysis of the matrix factor. It is a method preferred by Thompson, because it extracts the maximum correlation variation of the matrix as well as accepted by the Kaiser Tester to identify the factors and their correct single use in the country cells of the correlation matrix instead of the test stability factors and the results of the working analysis before rotation resulted in (10) factors and these factors are called direct factors, and table (2) shows the matrix of factors before rotation.

Table (2) shows factors before rotation

Paragraph No.	Factors before recycling										Contrast Interpreter
	1	2	3	4	5	6	7	8	9	10	
1	.389	.503	.490	-	-	-	.096	.048	-	.094	.954

				.221-	.450-	.173-			.089-		
2	.714	- .220-	- .182-	.455	- .302-	- .049-	- .197-	.016	- .103-	.025	.942
3	.636	.171	- .257-	.074	.303	- .064-	.368	- .079-	.134	.160	.786
4	.095	.134	- .077-	.126	- .294-	.452	.152	.138	- .295-	.443	.665
5	.390	.099	.502	.273	- .060-	.258	.100	- .278-	.327	- .045-	.755
6	.395	.633	- .032-	.134	.116	- .253-	.079	.056	- .286-	- .148-	.766
7	.294	- .443-	- .003-	- .437-	.029	- .359-	.038	- .213-	- .171-	.219	.728
8	.412	.438	.094	.150	.117	.157	- .028-	.120	.133	.538	.754
9	.493	- .122-	- .027-	.253	.028	.172	.238	- .046-	- .261-	- .157-	.505
10	.571	.145	- .094-	- .042-	.279	.141	.138	- .158-	.125	- .018-	.516
11	.508	.224	- .092-	- .335-	.153	- .077-	- .508-	- .237-	.037	- .046-	.776
12	.245	- .506-	.214	- .265-	- .240-	- .105-	.182	- .096-	.256	.019	.609
13	.074	- .305-	.528	.479	.268	- .332-	- .015-	.208	.105	.075	.849
14	.734	- .353-	- .086-	- .050-	.005	.154	.039	- .015-	- .281-	- .005-	.777
15	.555	- .208-	- .227-	- .258-	- .005-	.233	.230	.148	.267	.028	.670
16	.655	.006	- .048-	- .015-	- .213-	- .030-	.088	.188	.101	- .265-	.602
17	.532	.131	- .096-	- .329-	.222	.176	- .360-	.179	.194	.070	.702
18	.323	.212	- .292-	.298	.448	- .102-	.046	.318	.124	.182	.686
19	.643	- .114-	- .350-	- .137-	- .060-	- .331-	.201	.054	.166	.016	.752
20	.105	- .115-	.051	- .313-	.073	.186	- .259-	.715	- .101-	.030	.755

21	.540	- .181-	.383	- .275-	.514	.110	.026	- .100-	- .221-	.018	.883
22	.062	- .285-	.520	.438	.233	- .294-	- .089-	.285	.209	- .040-	.822
23	.648	.232	- .117-	- .211-	- .020-	- .025-	- .305-	- .207-	.196	- .015-	.707
24	.499	.079	.450	.229	- .071-	.247	- .004-	- .254-	.286	.001	.722
25	.674	- .220-	- .199-	.445	- .305-	- .059-	- .227-	- .014-	- .101-	.040	.901
26	.350	- .231-	.475	- .345-	- .250-	- .029-	.207	.302	- .087-	- .079-	.732
27	.631	- .343-	- .047-	- .017-	- .019-	.254	.009	- .095-	- .184-	- .073-	.632
28	.669	- .213-	- .205-	.454	- .307-	- .042-	- .220-	- .012-	- .078-	.017	.892
29	.549	.113	- .378-	- .196-	- .108-	- .384-	.251	.198	.199	- .158-	.821
30	.023	.152	- .033-	.064	- .013-	.569	.272	.209	.142	- .409-	.658
31	.520	- .231-	.379	- .195-	.481	.107	- .046-	- .055-	- .204-	.020	.794
32	.324	.420	.067	.211	.353	- .195-	.231	- .057-	- .351-	- .256-	.738
33	.281	.226	.153	- .012-	- .066-	.058	- .550-	.101	- .009-	- .308-	.569
34	.389	.503	.490	- .221-	- .450-	- .173-	.096	.048	- .089-	.094	.954

3.1.1.2 Factors after recycling

The researchers used Kaiser's Varimax to reach Thurston's Simple Structure (Faraj:122).

Kaiser's test stops accepting factors whose latent root is less than the correct one (Hassanian,1983:247), and after the factors were rotated, the researchers identified the interpretable factors based on the saturation of vertebrae and factors, "The researcher has the right to choose a test that has increased or equally saturated (± 0.30) and the factor on which three tests are saturated and more is accepted after rotation" (John Asnazi,1989:696), and by adopting a saturation ratio (+0.30) 6 factors that make up the scale and table (3) have been accepted, and the co-rotation of factors after rotation has been accepted and we note from table 3 that saturations of factors have changed when compared to values before rotation.

Table (3) shows factors after rotation

Paragraph No.	Factors after rotation										Contrast
	1	2	3	4	5	6	7	8	9	10	Interpreter
1	.024	.002	.067	.936	.148	.154	-.034-	.132	.084	-.046-	.954
2	.927	.033	.184	.042	.132	.034	.113	.096	.051	-.048-	.942
3	.159	.276	.628	-.068-	.011	.295	-.034-	.372	.242	-.002-	.786
4	.281	.019	-.194-	.188	-.292-	-.047-	-.350-	.518	-.129-	.136	.665
5	.157	.210	-.033-	.295	.134	-.091-	.273	.178	.595	.333	.755
6	.102	-.009-	.184	.281	.173	.772	-.036-	.121	.022	.007	.766
7	.079	.431	.268	.084	-.024-	-.219-	-.078-	-.184-	-.045-	-.606-	.728
8	.074	.060	.097	.201	.187	.140	.065	.792	.090	.012	.754
9	.474	.365	.132	.017	-.152-	.226	-.020-	-.004-	.105	.209	.505
10	.112	.369	.381	-.039-	.230	.178	-.078-	.222	.248	.137	.516
11	.095	.225	.146	.050	.771	.115	-.178-	.031	.059	-.222-	.776
12	.102	.248	.299	.228	-.094-	-.538-	.127	-.227-	.131	-.115-	.609
13	.102	.131	-.091-	.007	-.152-	.033	.879	.041	.049	-.110-	.849
14	.590	.585	.252	.043	.051	-.024-	-.108-	.014	-.080-	-.012-	.777
15	.196	.317	.592	.005	.076	-.282-	-.143-	.152	-.063-	.221	.670
16	.418	.119	.474	.288	.192	.051	.042	-.076-	-.039-	.236	.602
17	.053	.280	.278	.009	.636	-.065-	-.059-	.290	-.204-	.072	.702
18	.092	-.005-	.379	-.293-	.086	.376	.243	.271	-.131-	.040	.686
19	.323	.104	.768	.064	.087	.018	-.037-	.003	-.003-	-.184-	.752
20	-.019-	.179	.014	.094	.199	-.162-	.100	.128	-.768-	.175	.755
21	-.014-	.892	.064	.085	.190	.101	.145	.060	.020	-.066-	.883
22	.077	.065	-.065-	.012	-.041-	-.019-	.898	-.018-	-.003-	.003	.822
23	.231	.142	.329	.152	.646	.040	-.161-	.128	.185	-.079-	.707
24	.248	.249	-.008-	.298	.232	-.103-	.238	.213	.522	.265	.722
25	.910	.008	.158	.021	.144	.021	.093	.089	.059	-.082-	.901
26	.073	.386	.170	.606	-.091-	-.234-	.163	-.163-	-.238-	.084	.732

27	.537	.529	.162	.004	.081	-.095-	-.114-	-.026-	.025	.092	.632
28	.905	-.006-	.165	.012	.147	.018	.094	.083	.070	-.048-	.892
29	.178	-.071-	.833	.166	.122	.162	-.069-	-.075-	-.096-	-.044-	.821
30	-.034-	.040	.065	-.018-	-.060-	.027	-.134-	-.011-	-.007-	.793	.658
31	.053	.833	.021	.050	.199	.064	.210	.059	-.013-	-.060-	.794
32	.040	.233	.117	.096	-.005-	.795	.079	-.010-	.129	.062	.738
33	.200	-.013-	-.159-	.183	.628	.131	.091	-.099-	-.117-	.165	.569
34	.024	.002	.067	.936	.148	.154	-.034-	.132	.084	-.046-	.954

3-2 Explanation of the factors derived (Bahi and others,2002:44)

"Factors must be interpreted after the rotation of the axes as the total variation of the matrix is redistributed again in the light of the characteristics of simple construction, which lead to the distinction of the single variable with high saturation on one factor, unless it expresses forms of contrast that are prominently distributed with many matrix variables."

❖ Conditions for accepting the worker:

1- The worker with at least three function paragraphs is accepted, according to Gilford'±0.30).

2-Factors are explained in the light of large saturations equal to or greater (±0.30).

3-Function factors whose underlying root is equal to at least the right one according to Kaiser's test.

4- Explaining the factors in the light of the results after the perpendicular rotation.

5-Follow Thurston's instructions, which include ((economics in the working description of unique aspects, different saturations of factors, meaningful interpretations).)

Paragraphs were ranked downwards in each factor and high saturation paragraphs were selected from +0.30) More, this value is a high indicator of the acceptance of factor saturations, and by the time this test is adopted (6) factors have been accepted.

We will review the factors that make up the scale and name it according to the saturations of the paragraphs on those factors, and the factors are:

3-2-1 Interpretation of the first factor:

The first factor consists of paragraphs with the highest saturations according to the conditions for interpreting the approved factors, which have reached their saturation (.474 and above and the number of (6) paragraphs with significant values (+0).30) and more and Pence (23,07%) From the total number of paragraphs and table (4) shows the paragraphs that make up this factor.

Table (4)

The sequence, numbers and saturations of the paragraphs of the first factor show a descending order by saturation degree

to	Paragraph No.	Saturation degree
1	2	.927
2	25	.910
3	28	.905
4	14	.590
5	27	.537
6	9	.474

3.2.2 Interpretation of factor

The third factor consists of paragraphs with the highest saturations according to the conditions for interpreting the approved factors, which have reached their saturation (.379) and above and the number (7) paragraphs with significant values (+0.30) and above, and by (92,26%) From the total number of paragraphs and table (5) shows the number of paragraphs that make up this factor.

Table (5)

Shows the sequence of paragraphs, numbers and saturations of the factor three t grade descending according to the degree of saturation

to	Paragraph No.	Saturation degree
1	29	.833
2	19	.768
3	3	.628
4	15	.592
5	16	.474
6	10	.381
7	18	.379

3.2.3 Interpretation of the fourth factor

The fourth factor of the paragraphs with the highest saturations shall be in accordance with the conditions for interpreting the approved factors, which have reached saturation (.606.) More and more (3) paragraphs, with significant values (+0.30) and more, with the percentage (11,53%) Of the total number of paragraphs and table (6) shows the paragraphs that make up this malady.

Table (6)

Shows the sequence, numbers and saturations of the fourth factor descending according to saturation degree

to	Paragraph No.	Saturation degree
1	1	.936
2	34	.936
3	26	.606

3.2.4 Interpretation of the fifth factor

The fifth factor of the paragraphs with the highest saturations is based on the terms of the interpretation of the approved factors, which have reached their saturation (.628) and above, and the number (4) paragraphs with significant values (+0.30) and above, and by a percentage (15,38%) Table 7 shows the paragraphs that make up this factor.

Table (7)

The sequence, numbers and saturations of the fifth factor show a descending order by saturation degree

to	Paragraph No.	Saturation degree
1	11	.771
2	23	.646
3	17	.636
4	33	.628

3.2.5 Explanation of the sixth factor

The sixth factor consists of the paragraphs with the highest saturations according to the conditions for interpreting the approved factors, which have reached saturation. 538) and above, and the number (3) paragraphs with significant values (+0.30) And more, if the percentage of the paragraphs of the sixth worker (11.53%) Table 8 shows the paragraphs that make up this factor.

Table (8)

The sequence, numbers and saturations of the paragraphs of the sixth factor show a descending order according to the degree of saturation

to	Paragraph No.	Saturation degree
1	32	.795
2	6	.772
3	12	.538-

3.2.6 Interpretation of the ninth factor

The ninth factor consists of the paragraphs with the highest saturations according to the conditions for interpreting the approved factors, which have reached saturation. 522) and more, and the number (3) paragraphs with significant values (+0.30) And more, if the percentage of the paragraphs of the ninth worker (11.53%) Table 9 shows the paragraphs that make up this factor.

Table (9)

The sequence, numbers and saturations of the paragraphs of the ninth factor show a descending order according to the degree of saturation

to	Paragraph No.	Saturation degree
1	20	-.768
2	5	.595
3	24	.522

3.3 Excluded factors:

Factors that did not meet the requirements for the worker's admission were excluded as follows:

Factor 2 (only two paragraphs) were filled with it, factor 7 only saturated with tan poverty, factor 8 was saturated with only second poverty, factor number (10) was saturated with only second poverty.

4- Conclusion

In light of the results of the analysis of the workers, the researchers reached, the construction of the measure of the proactive personality of advanced handball players, and in the light of the results of the working analysis was drawn (6) factors for a scale, the number of paragraphs of the scale for handball players (26) paragraphs and the researchers recommended the use of the measure built by the researchers to measure the proactive personality of advanced handball players, as well as the legalization of the scale built by the researchers, building the proactive personality scale for various individual games, the use of a measure of the proactive personality of advanced handball players, as well as the legalization of the scale built by the researchers, the construction of the proactive personality scale for various individual games, the use of a measure of the proactive personality of advanced handball players, as well as the legalization of the scale built by the researchers, the construction of the proactive personality scale of various individual games, the use of a measure of the proactive personality of advanced handball players. The proactive personality that the researchers built on different samples after making appropriate adjustments to it in accordance with the type of sample being applied to it.

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