

## BUILDING NEUROLOGICAL LINGUISTIC PROGRAMMING NLP SCALE FOR APPLYING FOOTBALL PLAYERS

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### Abstract

Neurological Linguistic Programming (NLP) plays an important role in raising sporting and human activity. It helps man reform his thinking enhance his behavior, purify his habits, motivating and improving his intellectual abilities. Neurological Linguistic Programming (NLP) considers the issue of success and failure as a process that can be made and is not coincidental. Measurement is the only scientific Mean that should be used by sporting clubs to identify players' brain programming in order to enhance individual levels and solve problems facing him. We can say that this study is the first in the field according to the researcher as there was not any previous study tackled building a scale for Neurological Linguistic Programming (NLP) in sports in Iraq and the Arab World, so the current study is s scientific and knowledge addition in this field that may serve researchers and sporting club officials in our country.

Problem of the study: Is there a Neurological Linguistic Programming (NLP) scale for applying football players?

Objective of the study: Building a Neurological Linguistic Programming (NLP) scale for applying football players.

**Keywords: Neurological , Football mellitus , immune markers , risk factors , physical endurance**

### 1. INTRODUCTION

Sport achievements by athletes in various games in general and team games in particular were not coincidental. These achievements emerged through the development of various sport sciences as well as following correct scientific approaches in an attempt to invest human energy in its best forms. The researcher found that many modern psychological researches and studies refer that a lot of sport failures and not achieving the hoped results are due to multiple factors including weak personal experience, weakness of self-confidence, negative thinking and behavior, unclear goals of players, weakness success achievement and not changing negative beliefs into positive ones. Neurological Linguistic Programming (NLP) plays an important role in raising this type of human activity and helps man reform his thought, enhance his behavior, purifies his habits and motivates his mental abilities and skills. Neurological Linguistic Programming (NLP) considers success and excellence as a process that can be made and not a coincidental one as there is one of hypotheses of Neurological Linguistic Programming (NLP) that says: "There is no luck, there is a result. There is no coincidence, but there are reasons and causes". Neurological Linguistic Programming (NLP) links mind with body. Your way of thinking affects the way you run, breathe and feel. Your feelings affect your commitment, energy and motivation as mind and body are separate words of the same experience. Whenever we learn the effect of each on one another, we will be able to achieve the best results.

In addition, the importance of the study lies in that Neurological Linguistic Programming (NLP) plays this important role in sport performance, so it was important to measure Neurological Linguistic Programming (NLP) of football layers in Iraq. If we realize that there is no Arab and Iraqi sporting measurement tool for this concept, this will increase the importance of the study. Therefore, it is better to design a scale for Neurological Linguistic Programming (NLP) for football players in order to be used by trainers in measuring this concept in their players. As a result, this will contribute to sporting success in order to serve and develop the game in Iraq.

The problem of the study is represented in the absence of an Iraqi, Arab or foreign sporting measurement tool of Neurological Linguistic Programming (NLP), so the researcher decided to build a scale for Neurological Linguistic Programming (NLP) for applying football players as it was not present before and it is the one of its kind in this field. Neurological Linguistic Programming (NLP) is a helping method towards changing man. It is concerned with changing oneself and affecting others through thought reform, behavior enhancement, encouragement and modifying habits and supporting decisions. The science of Neurological Linguistic Programming (NLP) tackles a set of abilities of using language of the mind in a positive manner that enables us to achieve our goals.

- Programming: our thoughts, feelings and behaviors as it is possible to exchange familiar programs with other new and positive ones.
- Linguistic: it is the way by which we use the language of senses and words and how this affects our conceptions and the relation to the Inner world as language is a means of dealing with others.

- Neurological: it represents what happened in the brain and the neurological system and how it encodes and stores information inside memory and, in return, recall this information and experience once again. The neurological system is the system that controls body functions, performance and actions such as feeling, behavior and thinking.

## 2. METHODOLOGY:

The researcher chose the descriptive surveying method as it is the most proper approach to the nature of the problem.

### Community & Sample of the Study:

The community of the study is represented in applying football players in the Iraqi premier league (381 players). The sample of the study was chosen purposively for a number of football club players participating in the league except northern Iraq governorates. Table (1) shows the distribution of these players. The exploratory sample if the study included 24 players (6.29%) of community of the study building a scale on 300 players representing 78.74% of community of the study as shown in table (1).

**Table (1): Distribution of Study community members and sample:**

Serial	Club	Total players	Exploratory questionnaire sample members	Exploratory trial sample members	Main trial sample members	Percentage
1	Baghdad	31	-	-	-	87%
2	Algawya	25	24	-	-	96%
3	Alzawraa	28	-	-	26	92%
4	Police Club	27	-	-	-	88%
5	Altalaba	29	-	-	25	%86
6	Karbalaa	35	-	-	32	%91
7	Alkarakh	33	-	-	30	%91
8	Alminaa	28	-	-	25	%89
9	Almasafi	23	-	-	20	%87
10	Naft Elganob	32	-	-	31	%96
11	Naft Misan	30	-	-	27	%90
12	Al Naft	28	-	-	26	%92
13	Al Nagaf	32	-	-	30	%93
Total		381	24	24	300	78.74%

### Scale Designing Procedures:

These procedures include steps followed in building the scale to contain conditions of psychometric characteristics such as validity, reliability, objectivity and ability to distinguish. Allen and Yen refer that the process of building any scale goes through main steps as follows:

#### Determining the issue that needs to be measured

#### Determining theoretical principles of building the scale

#### Determining Fields of the Scale:

The researcher accessed the available literature and scientific sources specialized in Neurological Linguistic Programming (NLP) in addition to literature review. All Arabic and foreign sources that collected by the researcher were presented. Accordingly, in the light of the definition of Neurological Linguistic Programming (NLP), the researcher presented a questionnaire to explore opinions of experts and specialists regarding the validity of the dimensions in the scale that are consistent with the sporting field. The questionnaire was presented to experts to determine the proper dimensions and eliminate improper ones. The experts suggested integration of some dimensions with one another as they measure the same characteristic. Dimensions were integrated according to specialists and experts' opinions and we got the following dimensions in table (2):

**Table (2): Experts’ opinions, the counted and table Chi2 value for measurement dimensions:**

Serial	dimensions	Experts		Counted chi2 value	Significance level
		Valid	Invalid		
1	Personal experience	5	12	2,88	Random
2	Personal distinction	15	2	9,94	Significant
3	Forming success model	12	5	2,88	Random
4	Determining and achieving goals	17	zero	17	Significant
5	Elements of good preparation of the hoped results	7	10	0,52	Random
6	Environment surrounding the used results and the used values	6	11	1,48	Random
7	Role of your subconscious mind	13	4	14,99	Significant
8	Building communication via consistency	8	9	0,058	Random
9	Building relation and communication	10	7	0,52	Random
10	Consistency & coordination	7	10	0,52	Random
11	Vision by your mind	5	12	2,88	Random
12	Using simplified linguistic structure	7	10	0,52	Random
13	Hierarchical order of ideas	8	9	0,058	Random
14	Using Milton linguistic patterns	6	11	1,48	Random
15	The para-model – deep structure and surface structure	7	10	0,52	Random
16	Warning of using metaphors	7	10	0,52	Random
17	Various feeling situation	6	11	1,48	Random
18	How to determine time line: time encoding	10	7	0,52	Random
19	Relation between behavior and levels of neurological system	6	11	1,48	Random
20	Frames and reframing	11	6	1,48	Random
21	Success strategies	17	zero	17	Significant
22	Determining and using strategies	3	14	2,44	Random
23	The 4 step model of success	9	8	0,058	Random
24	Convention strategy	5	12	2,88	Random
25	Understanding fixings and entering mental state	7	10	0,52	Random

**Chi2 value = (3.84), freedom degree (1) and significance level = (0.05)**

Dimensions accepted by experts to measure Neurological Linguistic Programming (NLP) in sports are:

(personal distinction, determining and achieving goals, role of subconscious mind and success strategies). In these dimensions, the counted ch2 value (3.84) was more than its table value at freedom degree: (1) and significance level (0.05) for the sake of the answer (valid), as it is the answer that accepts the most frequencies of experts’ opinions, while it can be invalid when the table value is more than the counted value.

**Preparing Initial Formula of the Scale’s Items:**

In order to prepare initial formula of the scale’s items, the researcher did the following:

**Preparing Items of the Scale:**

After determining scale dimensions and setting suitable definitions for them, the researcher wrote the items based on Arabic, foreign studies and literature reviews related to build scales to make use of them. The researcher presented an exploratory questionnaire on a sample of the study community (24 players) to help write the biggest number of scale items in a way that eliminates this sample in the main trial.

**Determining the Method and Principles of Items Formulation:**

The researcher used the Likert model in building Neurological Linguistic Programming (NLP) scale as a way of measuring for the following reasons:

1. Providing more homogeneous scale.
2. Allowing the biggest contrast among individuals.
3. Allowing respondents to indicate the degree of their feelings.
4. Characterized by high reliability and validity.
5. Validity tends to be good because of great field in the allowed responses.

**Validity of Items:**

After completing initial measurement (including 80 items with positive and negative phrases) and to ensure the correct linguistic formulation of items, the researcher presented them to an Arabic language specialist for linguistic evaluation. After linguistic modifications, items were presented to a group of experts and specialists for the purpose of judgment as in the following table (3):

**Table (3): Number of distributed items on dimensions:**

Serial	Dimension	Item number
1	Success strategies	20
2	Role of subconscious mind	20
3	Personal distinction	20
4	Determining & achieving goals	20
	Total	80

Experts have suggested a set of observations such as deletion of some items, modifying others and transferring a part of them to other more accepted dimensions than the dimensions in which they are in. In addition, the researcher reformulated some items and transferred others before presenting them once again to experts to show their final situation about these items. After that, specialists and experts in sporting psychology, general psychology, measurement and evaluation in sporting and psychological field expressed their observations and opinions. They suggested removing some items from some fields, whether for their meaning redundancy or for not expressing the related field. To analyze opinions of experts statistically, the researcher used the Chi2 test.

**Table (4): results of chi2 of experts’ opinions concerning validity of scale items**

Serial	Field	Item number	Experts		Counted chi2 value	Significance level
			Agree	Disagree		
		7,8,2,1,18,16,15,9				
1	Personal distinction	5,3,11,12,13,20 10,14,17,19,	25	5	13,32	Significant
		4,6	30	zero	30	Significant
		3,8,20,19,11,13,2 14,17,	12	18	1,2	Random
2	Role of subconscious mind	1,4,10,17,12,18,15	28	2	22,54	Significant
		5,6,9,7	21	9	4,8	Significant

		2,3,6,8,12,15,17,20	14	16	0,12	Random
3	Success strategies	,1,4,5,16,11,19	23	7	8,52	Significant
		13,14,7,10,18,9	26	4	16,12	Significant
		4,8,6,13,20,9	13	17	0,52	Random
4	Determining & achieving goals	2,3,7,5,11,19	24	6	10,8	Significant
		1,10,12,14,15,16,17,18	27	3	19,2	Significant
		7,8,2,1,18,16,15,9	19	11	2,12	Random

Chi2 table value, freedom degree (1), error (0.05) equals (3.84).

### Preparing Scale Instructions:

Scale instructions are the guiding evidence for respondents, so they were considered to be easy, understandable and hiding the real purpose of the scale (not writing the scale's name). In addition, the researcher asserted not mentioning the scale's name as the goal of measurement is only for scientific research. The researcher also asserted the answer of all items of the scale and not ignoring any of them. She also mentioned an example of how to answer the 60 items of the scale that were written without mentioning dimensions to perform the exploratory experiment.

### Scale Correction:

After collecting respond documents of the sample, their total degrees were extracted using the related correction key as follows in the table 5:

Serial	Replacement	Negative items marks	Positive items marks
1	Never applies at all	5	1
2	Applies in a small degree	4	2
3	Applies in a fair degree	3	3
4	Applies in a great degree	2	4
5	Applies to a very great degree	1	5

In order to extract full mark, all marks of the player's responses in the 60 items of the scale are collected, so the highest mark is 300 and the least one is 60..

### Scientific Principles of Scale Building:

#### Validity:

Validity is one of the most important psychometric characteristics that should be found in the scale as it refers to the ability of the scale to measure what should be measured. It is a basic and important feature in evaluating any tool and aims to determine how valid the tool is in measuring the measured side showing the test's ability to achieve its task as it should.

The researcher checked the scale validity using two indicators:

First: content validity

Second: structure validity

#### Content Validity:

This type of validity is checked through reasonable analysis and determining of scale content based on self-judgments. There are two types of validity:

##### A- Face Validity:

The best way of extracting face validity is represented in showing items of the scale on a group of experts to judge them in measuring any feature in the current scale, so its items were presented to a group of psychology and sport psychology experts.

**B- Sampling validity**

This type of validity requires accurate indication to subjects or field of the test. The more accurate these subjects are, the higher the sampling validity is. This type of validity focuses on questions and items, while face validity focuses on contents of questions or items regardless of their number. This type of validity is available in the current scale at the beginning of preparing the scale through the definition of Neurological Linguistic Programming (NLP) concept and determining its dimensions with the help of some a group of experts in psychology, sport psychology, measurement and evaluation whose opinions are used in accepting items. After that, the needed modifications were made based on experts’ opinions and observations who agreed on the scale, its 4 dimensions and 60 items.

**Second: Construct Validity**

It is also called concept validity or proposed content validity because it depends on empirical checking of how applicable the scale degrees to concepts or hypotheses on which the researched depended in his construction. This type of validity is sometimes called “concept validity” and is one of the most appropriate types of validity to build the scale as it depends on empirical checking. The researcher ensured construct validity through three indicators as follows:

**1- Discriminatory power of items**

It means the ability of items in discriminating higher level individuals from lower level ones relative to the feature measured by the item. This is considered an evidence of construct validity. In order to count discriminatory factors of items, the researcher used the method of the two extreme groups as one of the suitable methods to count items discrimination. It recommends finding discriminatory factor of measurement items using the two extreme groups in the following steps:

- 1- Ordering degrees of players in the scale gradually from the highest to the lowest degree.
- 2- Deduction of (27%) of higher sample members who got the highest degrees to represent the highest degrees and deduction of (27%) of the lower one to represent members of lower degrees. Higher group contained 81 players and the same number for lower one.
- 3- Finding discriminatory factor for each item using the T-test

**Table (6) arithmetic means, standard deviations and counted T values for higher, lower groups and their significance to scale items.**

Item No.	Higher marks		Lower marks		T counted value	Error	significance
	Mean	S.D	Mean	S.D			
1	5.000	0.000	2.252	0.857	34.242	0.000	Distinct
2	5.000	0.000	2.157	0.812	37.385	0.000	Distinct
3	5.000	0.000	1.930	0.803	40.832	0.000	Distinct
4	5.000	0.000	2.296	0.805	35.851	0.000	Distinct
5	5.000	0.000	2.252	0.826	35.540	0.000	Distinct
6	5.000	0.000	2.722	0.600	40.514	0.000	Distinct
7	5.000	0.000	2.835	0.457	50.532	0.000	Distinct
8	5.000	0.000	2.887	0.454	49.659	0.000	Distinct
9	5.000	0.000	2.713	0.574	42.557	0.000	Distinct
10	5.000	0.000	2.878	0.462	49.072	0.000	Distinct
11	4.896	0.307	1.730	0.680	45.320	0.000	Distinct
12	4.939	0.240	1.104	0.307	105.039	0.000	Distinct
13	4.174	0.819	1.000	0.000	41.363	0.000	Distinct
14	5.000	0.000	1.713	0.803	43.698	0.000	Distinct
15	5.000	0.000	2.887	0.318	70.940	0.000	Distinct
16	5.000	0.000	3.139	0.674	29.483	0.000	Distinct
17	5.000	0.000	2.235	0.831	35.543	0.000	Distinct

18	5.000	0.000	3.139	0.687	28.929	0.000	Distinct
19	5.000	0.000	3.017	0.418	50.583	0.000	Distinct
20	5.000	0.000	2.287	0.856	33.841	0.000	Distinct
21	4.991	0.093	1.209	0.408	96.465	0.000	Distinct
22	5.000	0.000	2.322	0.812	35.233	0.000	Distinct
23	5.000	0.000	2.313	0.872	32.891	0.000	Distinct
24	5.000	0.000	2.278	0.801	36.292	0.000	Distinct
25	5.000	0.000	2.183	0.844	35.651	0.000	Distinct
26	5.000	0.000	2.365	0.787	35.732	0.000	Distinct
27	5.000	0.000	2.443	0.703	38.813	0.000	Distinct
28	5.000	0.000	2.061	0.851	36.872	0.000	Distinct
29	5.000	0.000	2.835	0.438	52.793	0.000	Distinct
30	5.000	0.000	2.983	0.662	32.536	0.000	Distinct
31	5.000	0.000	1.739	0.807	43.163	0.000	Distinct
32	4.896	0.307	2.226	0.859	31.245	0.000	Distinct
33	5.000	0.000	2.200	0.829	36.050	0.000	Distinct
34	5.000	0.000	2.548	0.775	33.779	0.000	Distinct
35	5.000	0.000	2.870	0.363	62.618	0.000	Distinct
36	5.000	0.000	1.870	0.822	40.658	0.000	Distinct
37	5.000	0.000	1.809	0.837	40.728	0.000	Distinct
38	4.739	0.441	1.000	0.000	90.522	0.000	Distinct
39	5.000	0.000	2.765	0.535	44.579	0.000	Distinct
40	5.000	0.000	2.043	0.831	37.973	0.000	Distinct
41	5.000	0.000	2.061	0.809	38.800	0.000	Distinct
42	5.000	0.000	2.722	0.586	41.538	0.000	Distinct
43	5.000	0.000	2.930	0.645	34.253	0.000	Distinct
44	4.678	0.469	1.165	0.373	62.579	0.000	Distinct
45	5.000	0.000	3.470	0.705	23.182	0.000	Distinct
46	5.000	0.000	3.478	0.680	23.898	0.000	Distinct
47	5.000	0.000	1.270	0.446	89.370	0.000	Distinct
48	5.000	0.000	1.296	0.458	86.295	0.000	Distinct
49	5.000	0.000	2.835	0.687	33.633	0.000	Distinct
50	5.000	0.000	3.096	0.621	32.748	0.000	Distinct
51	5.000	0.000	2.000	0.806	39.757	0.000	Distinct
52	5.000	0.000	1.809	0.815	41.789	0.000	Distinct
53	5.000	0.000	2.287	0.856	33.841	0.000	Distinct
54	5.000	0.000	2.496	0.852	31.385	0.000	Distinct

55	5.000	0.000	3.243	0.630	29.790	0.000	Distinct
56	5.000	0.000	2.183	0.864	34.803	0.000	Distinct
57	5.000	0.000	3.409	0.605	28.062	0.000	Distinct
58	4.983	0.131	2.313	0.862	32.685	0.000	Distinct
59	5.000	0.000	3.330	0.780	22.840	0.000	Distinct
60	5.000	0.000	1.748	0.793	43.788	0.000	Distinct

**2- Content Validity:**

Content validity coefficient is used to determine items consistency in measuring behavioral phenomena. This factor shows correlation between each item and total mark of the scale. The researcher used Pearson correlation coefficient rule to extract the correlation between sample elements (300 players) on each item using the Statistical Package for the Social Sciences (SPSS). After comparing the correlation coefficient with significance values, it was shown that all items of measurement are statistically significant.

**Table (7): Content Validity Coefficient**

Item No.	Correlation coefficient	Significance values	Significance level	Item No.	Correlation coefficient	Significance values	Significance level	Item No.	Correlation coefficient	Significance values	Significance level
1	**184	0.000	Significant	2	**214	-07E3	Significant	3	**183	-05E1	Significant
4	**200	-06E2	Significant	5	*107	-02E1	Significant	6	**205	-07E8	Significant
7	*093	-02E3	Significant	8	*106	-02E1	Significant	9	**213	-07E3	Significant
10	**161	-04E1	Significant	11	**148	-04E4	Significant	12	*100	-02E2	Significant
13	**244	-09E4	Significant	14	**129	-03E2	Significant	15	**147	-04E5	Significant
16	**163	-05E9	Significant	17	**169	-05E5	Significant	18	**275	-11E3	Significant
19	**152	-04E3	Significant	20	**115	-03E6	Significant	21	**123	-03E3	Significant
22	**148	-04E4	Significant	23	*087	-02E4	Significant	24	*096	-02E2	Significant
25	**109	-02E1	Significant	26	**142	-04E7	Significant	27	**125	-03E3	Significant
28	*086	-02E4	Significant	29	**166	-07E5	Significant	30	**192	-06E4	Significant
31	*106	-02E1	Significant	32	**179	-05E2	Significant	33	**153	-02E3	Significant
34	*090	-02E3	Significant	35	*091	-02E3	Significant	36	**345	0.000	Significant
37	**291	0.000	Significant	38	**315	0.000	Significant	39	*168	0.046	Significant
40	**226	0.007	Significant	41	**168	0.000	Significant	42	*175	0.037	Significant
43	**323	0.000	Significant	44	**228	0.006	Significant	45	**212	0.000	Significant
46	**297	0.000	Significant	47	**239	0.004	Significant	48	**148	-05E4	Significant
49	**213	-04E3	Significant	50	**163	-05E4	Significant	51	**291	0.000	Significant
52	**129	-05E2	Significant	53	**115	-04E2	Significant	54	**205	-04E6	Significant
55	**343	0.000	Significant	56	**315	0.000	Significant	57	**149	-02E4	Significant
58	**160	-04E7	Significant	59	**143	-04E2	Significant	60	**162	-05E6	Significant

**Scale Consistency:**

Test consistency is considered one of the important psychometric features because it refers to items consistency in what is measured in an accepted degree of accuracy. The researcher ensured consistency of the Neurological Linguistic Programming (NLP) scale through the split-half and alpha Cronbach methods.



**Split-Half Method:**

It is one of the most used methods of reliability because it avoids the defects of some methods such as retesting. This method saves time and effort and measures consistency among items as this refers to how consistent the performance of respondents is on all items. The researcher used the relation between single and double questions to find reliability based on the data of the main sample of the trial (300 forms). The researcher also used the Statistical Package for the Social Sciences (SPSS) and entered data from it, and then items of Neurological Linguistic Programming (NLP) scale were divided into two parts between single and double items. Correlation coefficient between both rows was 0.83, but this represents half of the test, so it should be modified on the coefficient of the entire test. The researcher used the Spearman – Brown formula  $(1+r/2r+1)$  to correct the coefficient to be (0.91) which is high consistency that can be depend on to estimate test reliability.

**Alpha Cronbach Coefficient:**

This type of reliability is called internal consistency which is one of the most common and appropriate coefficients to graded scales. It refers to strength of correlations among scale items. To count reliability using this method in the Neurological Linguistic Programming (NLP) scale, the researcher used the sample of 300 players and counted coefficient value to reach (92.13) which is a very high reliability coefficient that can be used to estimate test reliability.

**Exploratory Trial:**

It is to explore conditions surrounding the phenomenon that the researcher wants to study. It is also considered a practical exercise to determine positive and negative sides facing him during tests to treat them. After finishing the scale’s final formula, inserting instructions, assessment balance, he performed the exploratory trial on a sample of study community (24 players). The researcher asked sample members to write down their observations on items that were not understood. After discussing items and instructions with exploratory sample members, it was found that they are understood and do not need modification. The answer time ranged between 20 and 30 minutes. The exploratory trial was performed on Saturday 15/03/2014 at 4:00 pm.

**Main Trial of the Scale: (Surveying Study)**

After the scale of Neurological Linguistic Programming (NLP) with its 60 items became ready to apply on the sample (300 premier league football club players) out of a total of 381 players, for statistical analysis of scale items, choosing valid and eliminating invalid ones based on the discriminatory ability (and the two extreme groups method and content validity), the researcher seeks to extract indicators of reliability and validity of the scale. Allam said that test and scale should contain some basic psychometric characteristics such as its validity and reliability. The scale was applied on the construct value in the period from 17/03/2014 to 29/04/2014.

**3. RESULTS, ANALYSIS AND DISCUSSION**

**Factorial Analysis:**

Factorial validity is one of the important indicators that can be used to study complex phenomena and extract factors affecting them through analyzing correlation coefficients between variables of the phenomenon. In addition, factorial analysis determines the main contents of phenomena subject to measurement and it is considered one of the most important statistical indicators of finding internal consistency (Keats, 1967).

The researcher used this method to determine the efficiency of scale items in their ability to measure the study sample and contents of Neurological Linguistic Programming (NLP) concept and whether it has one or more related fields. Therefore, 60 items of factorial analysis were inserted through 300 forms (answer papers). Factorial analysis resulted in 12 factors that vague unless being processed so the researcher used the Varimax method by Kaiser because it leads to the best solutions related to characteristics of simple construction.

**Table (8): Arithmetic means and standard deviation values of Neurological Linguistic Programming (NLP) scale**

Serial	Item code	Mean	S.D	Serial	Item code	Mean	S.D
1	X1	3.947	1.1952	31	X31	3.747	.7688
2	X2	3.873	1.1981	32	X32	4.720	.6133
3	X3	3.820	.9647	33	X33	4.643	.5921
4	X4	3.923	.7828	34	X34	4.770	.5144
5	X5	3.560	.8136	35	X35	4.823	.4156
6	X6	3.440	.7128	36	X36	4.550	.6498
7	X7	3.713	.7788	37	X37	4.543	.6755

8	X8	3.820	.7412	38	X38	4.680	.5585
9	X9	3.750	.7807	39	X39	4.663	.5696
10	X10	3.337	.6038	40	X40	4.647	.5623
11	X11	4.617	.7057	41	X41	4.543	.6853
12	X12	3.850	.6849	42	X42	4.540	.6080
13	X13	3.777	.6745	43	X43	4.690	.5430
14	X14	3.703	.8109	44	X44	4.490	.7292
15	X15	3.737	.6234	45	X45	4.650	.5614
16	X16	4.783	.4587	46	X46	4.600	.6388
17	X17	3.810	.6699	47	X47	4.650	.6235
18	X18	3.800	.6594	48	X48	4.557	.7497
19	X19	3.623	.6294	49	X49	4.660	.6577
20	X20	3.750	.7678	50	X50	4.543	.7233
21	X21	3.840	.6995	51	X51	4.713	.5020
22	X22	3.997	.5812	52	X52	4.693	.4968
23	X23	3.787	.5907	53	X53	4.660	.6525
24	X24	3.830	.5907	54	X54	4.660	.5587
25	X25	3.660	.7657	55	X55	4.637	.6372
26	X26	3.673	.8616	56	X56	4.063	.7624
27	X27	3.857	.7334	57	X57	3.790	.8133
28	X28	3.900	.8240	58	X58	3.760	.7240
29	X29	3.757	.7343	59	X59	3.750	.7590
30	X30	3.907	.8948	60	X60	3.823	.7708

**Factorial Analysis of the Inetr-Linkages Matrix:**

The factorial analysis of the study starts with the complete correlation matrix of the study variables and ends with the brief factorial matrix. Results of correlations are collected, summed and divided into coefficients. As a result, the scale is briefed to a small number of shared coefficients or features that are called the main fields of the phenomenon to be measured by the scale. The researcher extracted the inter-linkages matrix for 60 items and resulted in 1770 correlations as the study sample members were 300, so correlation coefficient values ranged between 0.502 and 0.926.

**Factors before Processing**

The factorial analysis resulted in finding 12 factors called direct factors that are hard to be psychologically explained unless after processing them. Although factorial construct is technically intact, it is hard to explain and the purpose of processing is to get simple factorial construct.

**Factors after Processing**

After processing using the Varimax method, the researcher determined factors that can be explained based on saturation of items as (+50) saturation was the minimum of accepting items and factors saturating three or more items equaling or more than (+50). The researcher has the right to chose the increased test and its saturation is equal to (0.50 – 0.30). Four factors were accepted to constitute Neurological Linguistic Programming (NLP) scale for football players and the fifth and sixth factors were eliminated for not complying with factor acceptance conditions.

Table no. (9) shows initial factors matrix after processing with numbers of items saturated with factors.

Factors									
Serial	Factor1	Factor2	Factor3	Factor4	Serial	Factor1	Factor2	Factor3	Factor4
X1		0.830			X31			0.908	
X2				0.633	X32				
X3					X33	0.790			
X4	0.570				X34			0.866	
X5		0.507			X35			0.903	
X6	0.518				X36		0.735		
X7	0.755				X37				0.926
X8			0.699		X38				
X9					X39			0.727	
X10				0.511	X40	0.611			
X11					X41				
X12	0.892				X42				0.811
X13			0.690		X43				
X14		0.763			X44			0.922	
X15		0.521			X45				
X16				0.602	X46	0.672			
X17	0.729				X47	0.831			
X18					X48				0.788
X19		0.543			X49				
X20					X50				
X21		0.694			X51		0.613		
X22	0.836				X52				
X23					X53				0.709
X24			0.789		X54				
X25					X55				
X26					X56				
X27		0.689			X57				
X28				0.652	X58				
X29	0.601				X59			0.890	
X30			0.590		X60	0.502			

**Final Form of the Scale**

After completing statistical processing, application and explanation of man conditions, the researcher found four dimensions representing components of Neurological Linguistic Programming (NLP) scale for applying football players including 39 items and table (10) shows the final formula of the scale.

**Table (10): final scales after factorial analysis with dimensions, items and correction key representing Neurological Linguistic Programming (NLP) scale:**

<b>Personal Distinction</b>						
Serial	Items	Applies on me very much	Applies on me much	Applies on me fairly	Does not apply on me fairly	Does not apply on me at all
1	I improve my skills to be distinct in my game	5	4	3	2	1
2	I feel difficulty in performing some skills in my game	1	2	3	4	5
3	I work harder than partners to achieve personal distinction in field	5	4	3	2	1
4	I feel it easy to perform distinct skills and difficult moves in the match	5	4	3	2	1
5	I improve my skill that makes me feel success and distinction	5	4	3	2	1
6	I can achieve personal goals that I want to achieve in the match	5	4	3	2	1
7	I use my utmost abilities to win	5	4	3	2	1
8	I can change my way of thinking and performance in the field	5	4	3	2	1
9	I feel easy to perform distinct skills and difficult moves in the match	5	4	3	2	1
10	I feel unable to own and perform distinct skills	1	2	3	4	5
11	I can overcome and beat opponents easily during the match	5	4	3	2	1
12	I am able to show high level during playing	5	4	3	2	1
<b>Success Strategies</b>						
Serial	Items	Applies on me very much	Applies on me much	Applies on me fairly	Does not apply on me fairly	Does not apply on me at all
13	I do my best to beat opponents in the match	5	4	3	2	1
14	I do my best to achieve success	5	4	3	2	1
15	I compete hard with others	5	4	3	2	1
16	I overcome difficulties and obstacles in the match	5	4	3	2	1
17	I seek to win all competitions	5	4	3	2	1
18	I make better performance than my previous one	5	4	3	2	1
19	I feel that my performance level is advancing	5	4	3	2	1
20	I make others feel that I am the best in the match	5	4	3	2	1
21	I show my utmost abilities in playing	5	4	3	2	1
22	I feel that I am the best player in the match	5	4	3	2	1

<b>Role of Subconscious Mind</b>						
Serial	Items	Applies on me very much	Applies on me much	Applies on me fairly	Does not apply on me fairly	Does not apply on me at all
23	I perceive myself as a winner in all matches	5	4	3	2	1
24	I feed my mind with positive thoughts	5	4	3	2	1
25	I can do everything through my subconscious mind strength	5	4	3	2	1
26	I am unable to change my negative thoughts	1	2	3	4	5
27	I can read others' minds well	5	4	3	2	1
28	I reject fear from myself by positive self-simulation	5	4	3	2	1
29	I repeat positive phrases with myself after ending training or the match	5	4	3	2	1
30	I can think positively before the match	5	4	3	2	1
31	I think that I am in my best condition during the match	5	4	3	2	1
<b>Determining and Achieving Goals</b>						
Serial	Items	Applies on me very much	Applies on me much	Applies on me fairly	Does not apply on me fairly	Does not apply on me at all
32	I use my available information and experience to determine my goal	5	4	3	2	1
33	I am not responsible for not achieving players' goals	1	2	3	4	5
34	One of my abilities' requirements is helping my trainers to achieve the highest performance level	5	4	3	2	1
35	I set training goals for myself	5	4	3	2	1
36	I feel that hard obstacles can stop me from achieving goals	1	2	3	4	5
37	I set special goals for myself that make me feel challenging and joy	5	4	3	2	1
38	I feel that my exercises are useless	1	2	3	4	5
39	I prefer challenging goals considering risks to be achieved	5	4	3	2	1

**4. Conclusions:**

Through discussing results of the sample of the study, the researcher concluded the following:

- 1- The researcher found the tool of measuring Neurological Linguistic Programming (NLP) concept for football players. In the light of factorial analysis, 4 factors were extracted to measure Neurological Linguistic Programming (NLP).
- 2- Neurological Linguistic Programming (NLP) is an integrated process including dimensions that must be found for achieving the hoped results.

### Recommendations:

- 1- Using Neurological Linguistic Programming (NLP) scale designed by the researcher as one of the indicators to measure Neurological Linguistic Programming (NLP) for applying football players.
- 2- Providing psychological specialists in Iraqi clubs to help players overcome their problems and motivate them achieve in sports.
- 3- Legalizing the scale designed by the researcher by other researchers and post-graduate students.

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