

## **PERSONALITY AND MOTIVATIONAL DIMENSIONS IN KIDNEY PATIENTS<sup>(\*)</sup>**

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### **INTRODUCTION**

One of recent development in personality psychology has been called Health Psychology. Greater spaces has been devoted to the two problems of hypertension and cancer over the last 25 years. Unfortunately the results achieved in this area of knowledge have not come up to expectations, for various reasons, which in our opinion, are the following: (i) The greater number of published studies has been carried out from an "applied" stand-point and have given rise to what we have described in a previous study as "alphabet personality" (type A, B, C ... personality); (ii) The development of health psychology has come about, ignoring to some extent academic personality psychology, and thus the urgency of assistance and the seriousness of the problems treated have made one forget basic questions, and so rigour in the analysis has been lost; (iii) Contemporary bibliographies in psy-

chology (and in Health Psychology in particular) is characterized by, among other things, a lack of historical sense which has made one forget concepts, results and procedures which could applied widely in the field of health psychology and (iv) the special attention given to cardiovascular disorders and to cancer have made one forget the necessary attention which ought to be paid to other kinds of problems such as renal disorder which given the evolution of the average life-span people threatens to become a serious problem in the nex few years. Moreover, when the possibility of studying the interaction between functional systems within the medical sciences represent one of the challenges which the medical researcher must face.

In this study we have proposed the following objectives:

(1) To present data with respect to differential psychology of the personality of renal and non-renal patients, albeit chronic.

(2) To study the possible "help" that the incorporation of the "classic" instrumentation of personality can provide in the gestation of a differential psychology of illness.

(3) To offer data with respect to multivariate differentiation of types of factors, a differentiation which makes possible not only a description of the actual state of affaires but also, likewise, a kind of intervention at a level of possible structural change in the patients's personality.

(4) To study if the results can help to strengthen or weaken the series of "alphabet" personalities (A, B, C, D personality) which populate specialized bibliography.

## METHOD

\* A total of 136 chronic adult patients (table 1), with a age range between 18 and 60 years old, formed the sample of this study. They were recruited from two major state hospitals of Santa Cruz de Tenerife, Canary Islands (Spain).

\* Subjects were informed of the objective of the research and they were asked to participated voluntary. This study is part of a larger research project on quality of life.

\* Subjects were given a larger number of instruments than those that we shall mention later. In particular, the instruments used in this study were that ones that assess personality and motivational dimensions (table 2).

**TABLE 1: PATIENTS SAMPLE**

GROUPS	MALES		FEMALES		TOTAL	
	N	%	N	%	N	%
I. Hypertension patients	17	12,50	13	9,56	30	22,06
II. Dialysis patients	34	25,00	18	13,24	52	38,23
III. Trasplant patients	15	11,03	9	6,62	24	17,65
IV. Patients with others chronic diseases	16	11,76	14	10,29	30	22,06
<b>Total</b>	<b>82</b>	<b>60,29</b>	<b>54</b>	<b>39,71</b>	<b>136</b>	<b>100</b>

**“NORMAL” SAMPLE:**

**N**

R-3: RIGIDITY QUESTIONNAIRE:	595 Subjets
EME: MOTIVATION EXTREME OF PERFORMANCE:	595 Subjets
LUCAM: LOCUS OF CONTROL QUESTIONNAIRE:	1614 Subjets
MAE: MOTIVATION AND PERFORMANCE ANXIETY QUESTIONNAIRE:	426 Subjets

**RESULTS**

We are going to present results about the following questions:

\* Contrastation between patient groups and normal samples in the personality and motivational factors (Table 3)

\* We are going to present bivariate analysis (t-test) and multivariate (discriminant analysis) (Tables 4, 5 and 6)

\* Finally, we have studied how the personal and motivational dimensions are structured by means a factorial analysis (Table 7)

**TABLE 2: INSTRUMENTS**

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**1. R3-RIGIDITY QUESTIONNAIRE (PELECHANO, 1972)****R1: EXTREME AND RIGID OVERVALUE OF THE LABORAL WORLD****R2: OVERWORK SELF-DEMAND AND CONTEMPT OF OTHERS****R3: OVERVALUE OF SOCIAL NORMS AND RIGID OBSEVATION OF DUTIES****2. LUCAM-LOCUS OF CONTROL QUESTIONNAIRE (PELECHANO y BAGUENA, 1983)****LUCAM1: FATALISM IN PERSONAL RELATIONSHIPS****LUCAM2: SELF-EXONERATION IN FAILURES****LUCAM3: SELF-RESPONSABILITY IN PERSONAL AND LABORAL SUCCESS****3. MAE-MOTIVATION AND PERFORMANCE ANXIETY QUESTIONNAIRE (PELECHANO, 1975)****MAE1: TENDENCY TO "WORKHOLISM"****MAE2: INDIFFERENCE TO WORK AND SEPARATION BETWEEN PRIVATE AND LABORAL WORLD****MAE3: LABORAL SELF-DEMAND****MAE4: POSITIVE MOTIVATION TO ACTION. POSITIVE AMBITION****MAE5: INHIBITORY PERFORMANCE ANXIETY****MAE6: FACILITATING PERFORMANCE ANXIETY****4. EME-EXTREME MOTIVATION OF PERFORMANCE (PELECHANO, 1973)****EME1: EXTREME AND FANTASTIC OVERVALUE OF ONESELF****EME2: EXTREME AND FANTASTIC OVERVALUE OF ONE'S WORK**

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### **Contrastation between patient groups and normal samples in the personality and motivational factors**

In the table 3 allows us to contrast the group of patients suffering from chronic illness with normal samples of reference whit regard to the different factors of personality and motivation. To do this we have taken the centile scores of the normal sample and the average scores of the groups of patients.

Many factors can be seen in which renal patients are differentiated visibly as much above as bellow the normal group which indicated that this seid patients possess personal dynamic which is not totally normalized. This fact might suffest that the dimensions of personality and of motivation could taken on an important role in the way to confront the kind of life that the illness itself can impouse.

### **The differences between groups of patients in the personality and motivational factors**

- In the table 4 when we compare the dialysis group with the other patient (renal or hypertense) each difference favours the dialysis group.

- On comparing kydney transplant patients with the others patients, except the comparison already mention, with the dialysis group we find that each difference favorus the transplant patients except MAE-2 where the group of other renal patients score significantly higher.

- The comparison hypertense-others is favourable to the former group, except again the MAE-2.

- We can say that the observed differential pattern is: the dialysis group is always high-scoring, followed by the transplant patients, hypertension patients and finally by the group of patients with other renal diseases.

- The results of the table 5 and 6 do not support the hypotesis that there is a clear differenciation between the different groups of chronic patients due to personality and motivational dimensions employed in this study.

- On comparing the different renal patients (dialysis versus others and transplant patients. Table 5) the percentage of correctly classified subjects is not high. The same occur when we compare the dialysis patients with chronic patient, but who do not suffer from renal diseases (Table 6). Of the 14 dimensions employed only two in one case and three in the other belong to the discriminant function, which mean that more than 80% of the dimensions employed are unable to discriminate between groups.

**TABLE 3: CENTILE SCORES OF GROUPS ON MOTIVATIONAL AND PERSONALITY FACTORS**

Factors	Groups			
	Dialysis CS	Transplanted CS	Others CS	Hypertension CS
<b>R1:</b> Extreme and rigid overvalue of the laboral world	35	35	20	35
<b>R2:</b> Overwork self-demand and contempt of others	70	60	45	60
<b>R3:</b> Overvalue of social norm and rigid observation of duties	80	60	50	65
<b>MAE1:</b> Tendency to "workholism"	50	55	25	50
<b>MAE2:</b> Indifference to work and separation between private and laboral world	90	70	90	70
<b>MAE3:</b> Laboral self-demand	30	30	25	40
<b>MAE4:</b> Positive motivation to action	45	45	15	20
<b>MAE5:</b> Inhibitory performance anxiety	75	75	65	85
<b>MAE6:</b> Facilitating performance anxiety	40	25	40	25
<b>LUCAM1:</b> Fatalism in personal relationships	65	50	65	75
<b>LUCAM2:</b> Self-exoneration in failures	85	70	85	85
<b>LUCAM3:</b> Self-responsability in personal and laboral success	50	50	45	45
<b>EME1:</b> Extreme and fantastic overvalue of oneself	65	40	45	50
<b>EME2:</b> Extreme and fantastic overvalue of one's work	55	40	55	55

**Note:** Standardization samples

R3-Rigidity Questionnaire: N = 595 normal adults

EME-Extreme Motivation of Performance: N = 595 normal adults

LUCAM-Locus of Control Questionnaire: N = 1614 normal adults

MAE-Motivation and Performance Anxiety Questionnaire: N = 426 normal adults

**TABLE 4: SIGNIFICANT COMPARISONS ON T-TEST BETWEEN GROUPS. PERSONALITY AND MOTIVATIONAL FACTORS**

Factors	t-test confidence levels					
	D/T	D/O	D/H	T/H	T/O	O/H
R1: Extreme and rigid overvalue of the laboral world	-	.04(D)	-	-	-	.05(H)
R2: Overwork self-demand and contempt of others	-	.06(D)	-	-	-	-
R3: Overvalue of social norms and rigid observation of duties	-	.03(D)	-	-	.04(T)	-
MAE1: Tendency to "workholism"	-	.06(D)	-	-	.03(T)	.10(H)
MAE2: Indifference to work and separation between private and laboral world	.01(D)	-	.03(D)	-	.04(O)	.08(O)
MAE3: Laboral self-demand	-	-	-	-	-	-
MAE4: Positive motivation to action	-	.05(D)	-	.04(T)	.02(T)	-
MAE5: Inhibitory performance anxiety	-	-	-	-	-	.06(H)
MAE6: Facilitating performance anxiety	-	-	-	-	-	-
LUCAM1: Fatalism in personal relationships	-	-	-	-	-	-
LUCAM2: Self-exoneration in failures	.07(D)	-	-	-	-	-
LUCAM3: Self-responsability in personal and laboral success	-	-	-	-	-	-
EME1: Extreme and fantastic overvalue of oneself	.09(D)	.08(D)	-	-	-	-
EME2: Extreme and fantastic overvalue of one's work	-	-	.08(D)	-	-	-

Note: - Figures indicate significance of difference

- Differences favour:

D: Dialysis patients

T: Transplanted patients

H: HYPertension patients

O: Other renal patients

### Factor analysis (varimax rotated) of personality and motivational dimensions in chronic renal patients

As can be seen in the table 7:

- The first factor is made up of motivation dimensions. This factor suggest a notable dimension referring to motivation to towards action where performance may tend to be overvalued.

- The second factor indicates a clear rigidity component related to internal attribution of positive achievements and external attribution of the failures. This would mean an important dimension of hypervaluation of one-self.

**TABLE 5: DISCRIMINANT ANALYSIS OF THE FACTORS OF PERSONALITY AND MOTIVATIONAL. DIALYSIS (N = 52) VERSUS OTHERS RENAL DISEASES (N = 54)**

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#### ONE FUNCTION (.32)

#### SIGNIFICANT VARIABLES DISCRIMINANT FUNCTION

	Favour Group
EME 1: Extreme and fantastic overvalue of oneself	(D)
LUCAM 2: Self-exonerations in failures	(D)

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#### CLASSIFICATION RESULTS

ACTUAL GROUP	Nº OF CASES	PREDICTED GROUP MEMBERSHIP			
		DIALYSIS		OTHERS RENALS	
		N	%	N	%
DIALYSIS	52	30	57.7	22	42.3
OTHERS RENAL DISEASES	54	19	35.2	35	64.8

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% of grouped cases correctly classified: 61.3



**TABLE 6: DISCRIMINANT ANALYSIS OF THE FACTORS OF PERSONALITY AND MOTIVATIONAL. DIALYSIS (N = 52) VERSUS HYPERTENSION (N = 30)**

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**ONE FUNCTION (.51)**

**SIGNIFICANT VARIABLES OF DISCRIMINANT FUNCTION**

	<b>Favour Group</b>
R-3: Overvalue of social norms rigid observation of duties	(D)
MAE2: Indifference to work and separation between private and laboral world	(D)
MAE5: Inhibitory performance anxiety	(H)

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**CLASSIFICATION RESULTS**

	Nº OF	PREDICTED GROUP MEMBERSHIP					
		ACTUAL GROUP	CASES	DIALYSIS		HYPERTENSION	
				N	%	N	%
DIALYSIS	52	33	63.5	19	36.5		
HYPERTENSION	30	11	36.7	19	63.3		

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**% of grouped cases correctly classified: 63.4**

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**TABLE 7: FACTOR ANALYSIS (VARIMAX ROTATED) OF PERSONALITY AND MOTIVATIONAL DIMENSIONS IN CHRONIC RENAL PATIENTS (N = 106)**

VARIABLES	FACTORS				h <sup>2</sup>
	FI	FII	FIII	FIV	
R1: Extreme and rigid overvalue of the laboral world	-	-	-	.44	.57
R2: Overwork self-demand and contempt of others	-	.72	-	-	.67
R-3: Overvalue of social norms rigid observation of duties	-	.48	-	-	.60
MAE-1: Tendency to "workholism"	.79	-	-	-	.71
MAE-2: Indifference to work and separation between private and laboral world	-	-	-	-.68	.61
MAE-3: Laboral self-demand	-	-	-	.82	.71
MAE-4: Positive motivation to action. Positive ambition	.71	-	-	-	.60
MAE-5: Inhibitory performance anxiety	-	-	.82	-	.82
MAE-6: Facilitating performance anxiety	.63	-	-	-	.55
EME1: Extreme and fantastic overvalue of oneself	.67	-	-	-	.74
EME2: Extreme and fantastic overvalue of one's work	.52	-	-	-	.72
LUCAM-1: Fatalism in personal relationships	-	-	.81	-	.72
LUCAM-2: Self-exonerations in failures (E)	-	.70	-	-	.66
LUCAM-3: Self-responsability in personal and laboral success	-	.62	-	-	.46
<b>Eigenvalue</b>	2.75	2.60	1.99	1.84	
<b>% Variance accounted</b>	19.6	18.6	14.2	13.1	

Note: Only > .50 factorial loading included

- The third factor is formed by fatalism and inhibitory performance anxiety dimension, which suggest a dimension of withdrawal in the face of the supposedly inevitable and negative.

- The fourth factor is related to work demands on oneself, rigid demands which impede the differentiation between labour- and social-world.

- Motivation towards action, extreme self-stimulation, withdrawal with fatalism and over-responsibility in work would represent the four main axis accounting for the interrelationships between variables studied in renal patients.

## **DISCUSSION**

In synthesis, the results obtained in this study seem to suggest the following issues:

(i) that chronic patients, renal and non-renal, tend to obtain scores away from the normal (either higher or lower). This can be observed when we look at the centiles in which these subjects are placed. This suggests that the patients chronic illness situation plays an important role in the assessed personality and motivation factors (see, for example, the trend of all groups to obtain high scores in the factor of external locus of control in front of failures: Lucan 2).

(ii) that the groups which show the greatest volume of differences in personality and motivation factors are precisely those in which the consequences of the illness are more constraining and threatening, namely, dialysis patients and kidney transplant patients.

(iii) that the differentiation power of personality and motivation dimensions between patient groups is quite moderate in looking at the percentage of right classifications offered by the obtained discriminant functions. The result has, at least, two important implications for the authors. First, in order to characterize the different patient groups, together with the variables studied here other types of variables, perhaps of a more situational nature need to be taken into account. Second but no less relevant, it is the fact that we believe that these results speak against the idea of a specific personality for each type of illness, because only a few of the studied variables have been able to differentiate among groups (renal within themselves or renal patients versus other type of patients), moreover the ones capable of differentiating among groups do not offer by themselves enough strength.

Nevertheless, we are aware of the provisory nature of these results. The inclusion of other variables, considered in the general project of which this research is a part, and the increase of the assessed patients will allow to go deeper in the field of health psychology in relation to personality psychology.

**NOTES**

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