Anxiety upon Awakening
and Attributes of
Dream Characters[1]

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ABSTRACT

Objective: To explore the attributes of dream characters related to anxiety upon awakening, and the possibility of using these attributes to construct a questionnaire administered to dreamers as an alternative to traditional methods of dream content coding via trained judges, such as those of Hall and Van de Castle and Gottschalk-Gleser. **Method:** A sample of 169 volunteers rated their dream characters with adjectives. Character attributes related to anxiety upon awakening were analysed through an exploratory factor analysis with orthogonal rotation. **Results:** With 37 character attributes a KMO sampling adequacy index of 0.83 was obtained and 33.87% of the variance was explained. Four factors were extracted: Psychological Threat, Auxiliary, Terrifying Threat and Spectator/Victim. Their corresponding alpha coefficients ranged between 0.85 and 0.73 and three of the factors presented significant ($p \leq 0.05$) correlations with the anxiety of subjects upon awakening. **Conclusions:** Our results indicate that self-report questionnaires about subjects' dreams are a reliable and valid alternative for assessing dream content. Information obtained about the characters allows for the assessment of the dream and provides indicators which allow for a simple interpretation, which does not contain biases due to the assessor or the ability of the subject to create a report.

Keywords: Content analysis, dreams, nightmares, questionnaires, sleep, state anxiety.

RESUMEN

Objetivo: Explorar las características de los personajes de los sueños relacionadas con la ansiedad en el momento del despertar, así como la posibilidad de utilizar estas características para confeccionar un cuestionario administrado a los soñantes, alternativo a los métodos tradicionales de codificación del contenido mediante jueces entrenados, como el de Hall y Van Castle y el de Gottschalk-Gleser. **Método:** Una muestra de 169 voluntarios calificaron con adjetivos a los personajes de sus sueños; se analizaron mediante un análisis factorial exploratorio, con rotación ortogonal, aquellas características de los personajes relacionadas con la ansiedad al despertar. **Resultados:** Con 37 características de los personajes se obtuvieron un índice de adecuación de la muestra KMO (Kaiser-Meyer-Olkin) de 0.83 y un 33.87% de la varianza explicada. Se extrajeron cuatro factores: Amenaza Psicológica, Auxiliar, Amenaza Terrorífica y Espectador/Víctima. Sus correspondientes coeficientes Alpha oscilaron entre 0.85 y 0.73, y se halló una correlación significativa ($p \leq 0.05$) entre tres de los factores y la ansiedad de los sujetos al despertar. **Conclusiones:** Nuestros resultados indican que los cuestionarios administrados a los sujetos sobre sus propios sueños son una alternativa fiable y válida en la evaluación del contenido de los sueños. La información obtenida de los personajes permite la evaluación del sueño y aporta unos indicadores que permiten una interpretación sencilla, que no contiene sesgos debidos al evaluador ni a la habilidad del sujeto para crear un relato.

Palabras clave: Análisis de contenido, ansiedad de estado, pesadillas, cuestionarios, sueño, sueños.

INTRODUCTION

Anxiety is an emotion involved in numerous psychological problems and which occasionally appears in dream reports. Dreams are experiences which we remember after awakening and which are usually accompanied by a strong sense of reality. Characters are elements which appear in dream content and which are related to the emotions which appear within them. This study aims to establish the value of the attributes of these characters in order to use this information for theoretical and/or applied assessment tasks.

During dreams, the dynamics and representation of characters do not entail a break from the state of wakefulness. The dreamer is accompanied by other characters 95% of the time (1), who are often known to them in waking life (2), and they relate to them through some sort of social interaction (3) which involves emotional and intellectual exchanges (4). As a result, the most frequent words in the reports of 326 Italian adolescents between the ages of 11 and 19 included boy/girl, friend, mother, father, brother/sister, schoolmate, uncle/aunt, cousin and teacher (5). In general, this does not consist of a predominance of reports which differ with respect to those collected during waking life (6), although it is also possible to find a significant increase in behaviours, such as talking to friends. The latter was observed in a sample composed of 133 psychology students (7). These observations reveal the social proximity of dream characters to the dreamer.

The main coding system for dream reports reflects this familiarity and social proximity of the characters to the dreamer. It consists of the Hall and Van de Castle coding system (1), analysed extensively by Domhoff (8) and applied in a number of different studies (6, 9, 10). This coding system classifies people, animals and mythical figures as characters, whether they act as groups or individuals, whether they are present or not in the reported scene, or appear totally or partially. The coding procedure includes a large number of attributes in terms

of the number, gender, age and identity of the characters. For their identity, it is necessary to record the level of familiarity of the character with the dreamer, as well as geographical and occupational references. The familiarity of characters consists of options such as belonging to the immediate family, other relatives, known characters, prominent people or figures, and strangers.

Another notable study was carried out by Zlotowicz (11), who performed a correspondence analysis on activities data of characters from nightmares of children between the ages of five and 10. As a result, he classified characters into three types: aggressors, auxiliaries and victims. Aggressors are the perpetrators of a wide range of violent actions, whilst victims are the characters who suffer these actions. Auxiliaries are intermediate characters between the other two types in several respects. Auxiliaries perform helper functions and often show their opposition to the aggressors through aggressive actions: imprisoning and killing. The Gottschalk-Gleser verbal content analysis scale (12, 13) also allows for the coding of hostility. With this, lower overt or covert outward hostility was observed in reports by schizophrenic patients (14), which comprise destructive, damaging or critical thoughts or hostile actions directed towards others.

In general, dream coding systems take the report as their starting point. This entails working on an unstructured description of a private experience. According to Foulkes, those who study the process of dreaming always remind their readers, and themselves, that the data of a dream analysis is the dream report, and not the dream (15). This argument is added to by the difficulty for the researcher to control private memories, feelings, etc. which are present while the dream is taking place (16). This even leads one to think of the possibility of training subjects to obtain more detailed and accurate information (4).

From an applied perspective, the study of dreams is useful in clinical circles, in the study of some cognitive processes and in the improvement of knowledge regarding some psychological pathologies. In a review of different models of

dream interpretation by Pesant and Zadra (17) it was found that clinicians have much to gain from paying attention to their patients' dreams. Benefits include increased involvement in therapy (17, 18) and an enrichment of the clinician's understanding of the patient's dynamics and clinical evolution (17, 19).

The existence of emotions has been analysed in relation to dreaming. Hall and Van de Castle (1) coded an average of 1.4 emotions per dream. Emotion was found to be associated with dreams 83% of the time in a laboratory study with a sample of 12 university students (20). However, this study found that the emotion was only relevant in 66% of dreams. In another study, feelings of anxiety and/or fear were present in 49.5% of reports analysed (21). Nevertheless, reports were not related to the state of anxiety upon awakening in these studies.

OBJECTIVE

The question which this study aims to answer is whether it is possible to evaluate dream content without recurring to judges. To this end, it aims to use a questionnaire to collect information on dream characters from the subjects themselves. This would provide two main advantages with respect to classical coding systems. The first is to save training on coding information about the dream. The second is the systematic and exhaustive collection of information. This avoids the effect of the ability of the subject to construct the report. In addition, all items are examined, whether they were reflected in the report or not. This hypothesis will be tested by selecting the items which are important in terms of their relationship with anxiety when the subject awakens. In a second stage, the possibility of obtaining indicators which assess the anxiogenic content of dreams based on the selected items has been explored.

MATERIAL AND METHODS

The sample is composed of 236 dreams belonging to 169 people of between 16

and 63 years of age, the majority of whom contributed one or two reports. In eight cases the contribution was between three and 11 reports. As shown in Table I, 68 of the 236 dreams belonged to men and 168 to women. The participants were volunteers who responded to a request made via the internet and other channels. Their participation was accepted provided that their first language was Spanish.

TABLE I – Description of the sample

	Sex	16-27	28-39	40-51	52-63	Missing	Sum total
		Age Categories					
	Male	24	20	3	2		49
	Female	75	26	6	6	7	120
People	Sum total	99	46	9	8	7	169
	Male	29	33	3	3		68
	Female	98	43	6	14	7	168
Questionnaires	Sum total	127	76	9	17	7	236
	Male	103	101	10	9		223
	Female	376	143	22	32	27	600
Characters	Sum total	479	244	32	41	27	823
	Male	1,325	977	65	76		2,443
	Female	4,938	1,488	127	346	393	7,292
Attributes	Sum total	6,263	2,465	192	422	393	9,735

The Anxiety upon Awakening Assessment questionnaire was used in order to measure anxiety upon awakening (22). This questionnaire consists of 25 items which cover physiological and cognitive responses upon awakening. Five factors are obtained from the questionnaire, two of which have been used as criteria for selecting the attributes of characters: General Anxiety (factor 1) and Terror (factor 4). Subjects' factor scores in these two factors were used for this.

In order to collect character attributes, a questionnaire has been created which allows information to be obtained on up to five characters. Each character can be assigned up to 164 different attributes, generally adjectives. The possible values of each attribute were: absent (0) or present (1). An attribute was considered to be present when it appeared at some time in the dream and in one of the characters. This questionnaire collected information on 823 characters who were attributed

9,735 attributes, as shown in Table I.

The age and sex of the dreamer were also recorded. These were the only variables recorded on the profile of subjects. For statistical calculations on age, this has been grouped into quartiles. Subjects were also asked for other information which may have contaminated the responses given on the attributes of characters such as: type of awakening (spontaneous or provoked), characteristics of the awakening stimulus, frequency of nightmares, total dream time, etc. The analysis of these variables goes beyond the scope of this study.

Subjects were sent questionnaires for completion via regular post. In the instructions for completion, it was indicated that they should be filled out on the same day that they remembered the dream. It is known that the assessment of nightmares after a period of time can lead to underestimations (23). They were warned that their contribution would not be valid if they did not proceed as indicated. Instructions for scoring characters in terms of attributes were as follows:

> "[…] tell us what they were like, how they were or what they were doing during your dream. If the words describe the character appropriately, mark the corresponding box with an X. Mark if at any time during your dream the character presented that aspect".

Factor analysis was performed on the variance-covariance matrix of the character attributes using the Principal Factors method. Factors with eigenvalues of greater then one and which were also interpretable were extracted. A factor was considered to be interpretable if was saturated by at least three attributes with a value of 0.3 in their rescaled factor coefficients. To obtain the greatest differences between coefficients in the factor matrix a Quartimax rotation was applied, thereby obtaining an orthogonal solution.

Attributes which fulfilled the following conditions were included in the factor analysis:

- Generated differences in either of the factor scales used as criteria: General Anxiety and Terror (22). For this the Mann-Whitney U Test was used, given the marked departure of these factor scales from a normal[0,1] distribution.

- Formed part of a homogenous group of attributes: those attributes which did not initially reach an MSA (Measure of Sampling Adequacy) value of 0.7 were ignored.

- Were related differentially in a single factor: with a view to obtaining a simplified factor solution, attributes which saturated in two or more factors were eliminated.

The Kruskal-Wallis test was used to study the differences generated by sex and age variables. Given the lack of normality of the criteria of General Anxiety and Terror, calculation of their correlation with the factors extracted from the factor analysis was obtained via Spearman's rho coefficient. A 95% confidence interval was used in all statistics for the interpretation of the results.

RESULTS.

The data obtained allowed for the identification of four easily interpretable factors which explained 33.87% of the variance of 37 attributes related to anxiety upon awakening. The 37 attributes included in the factor analysis fulfilled the rest of the selection criteria listed in the previous section. As such, a value of 0.83 was reached for the KMO (Kaiser-Meyer-Olkin) sampling adequacy index, which indicates that the variables form a homogeneous group given the relationship between them. The value of the index can be described as meritorious, according to Kaiser's criteria (24) for factor analysis. In accordance with the order in which they were extracted, the factors explained 11.61%, 9.59%, 6.51% and 6.15% of the total variance. The rotated and rescaled factor matrix is shown in Table II.

TABLE II – Analysis of the criteria of selection, Factor Analysis and of Reliability.

Ítem	English	Spanish	U of General Anxity z value	p value	U of Terror z value	p value	Communality	MSA (a)	Psychological Threat	Auxiliary	Physical Threat	Spectator/Victim	Alpha	Corrected item-total correlation	Alpha if Ítem is removed
1.1	ANNOYING	MOLESTO	-3,25	0,00	-1,30	0,20	0,471	0,842	0,679	0,059	0,041	0,065		0,627	0,834
1.2	HUMILIATING	HUMILLADOR	-3,66	0,00	-0,04	0,97	0,448	0,889	0,624	0,096	0,131	0,178		0,603	0,837
1.3	AUTHORITARIAN	AUTORITARIO	-2,57	0,01	-0,86	0,39	0,435	0,877	0,623	0,134	0,081	0,152		0,616	0,835
1.4	DEMANDING	EXIGENTE	-3,98	0,00	-2,73	0,01	0,437	0,869	0,614	0,232	-0,059	0,047		0,581	0,839
1.5	IRRITABLE	IRRITABLE	-3,83	0,00	-0,18	0,86	0,420	0,898	0,612	0,106	0,187	0,000	0,854	0,572	0,839
1.6	BOISTEROUS	VOCIFERANTE	-2,59	0,01	-0,22	0,82	0,393	0,890	0,592	0,027	0,191	0,075		0,564	0,840
1.7	DIFFICULT	INTRATABLE	-3,31	0,00	-1,19	0,23	0,362	0,869	0,583	0,023	0,072	0,128		0,543	0,842
1.8	ANGRY	ENFADADO	-2,79	0,01	-1,05	0,29	0,342	0,838	0,553	0,151	0,074	-0,088		0,498	0,846
1.9	RUDE	GROSERO	-2,28	0,02	-0,15	0,88	0,270	0,864	0,500	0,096	0,004	0,103		0,483	0,847
1.10	DOMINANT	DOMINANTE	-3,16	0,00	-0,96	0,34	0,323	0,867	0,494	0,211	0,157	0,099		0,506	0,846
2.1	BRAVE	VALIENTE	-2,61	0,01	-1,17	0,24	0,466	0,825	0,020	0,660	0,162	-0,057		0,574	0,790
2.2	SMART	LISTO	-2,22	0,03	-1,03	0,30	0,385	0,792	0,082	0,608	-0,005	-0,093		0,513	0,794
2.3	HUMBLE	HUMILDE	-2,37	0,02	-0,23	0,82	0,354	0,740	0,060	0,569	-0,054	0,154		0,510	0,794
2.4	PROTECTIVE	PROTECTOR	-2,49	0,01	-1,23	0,22	0,273	0,814	0,068	0,513	0,071	0,005		0,451	0,799
2.5	FAST	RAPIDO	-1,98	0,05	-0,29	0,77	0,349	0,844	0,183	0,495	0,261	-0,050		0,471	0,798
2.6	SELF-CONFIDENT	SEGURO	-2,84	0,00	-1,84	0,07	0,299	0,874	0,071	0,492	0,122	0,193		0,466	0,798
2.7	SWEET	DULCE	-1,85	0,06	-2,24	0,02	0,270	0,783	0,006	0,472	0,102	0,192	0,812	0,434	0,801
2.8	NERVOUS	NERVIOSO	-3,77	0,00	-2,47	0,01	0,314	0,829	0,286	0,455	-0,104	0,121		0,463	0,798
2.9	OBSERVANT	OBSERVADOR	-2,41	0,02	-1,95	0,05	0,226	0,815	0,064	0,427	-0,035	0,196		0,419	0,802
2.10	TALL	ALTO	-1,73	0,08	-2,35	0,02	0,246	0,891	0,201	0,419	0,122	0,121		0,416	0,802
2.11	INSTIGATIVE	INCITANTE	-3,17	0,00	-1,61	0,11	0,179	0,772	0,133	0,381	0,107	0,066		0,377	0,805
2.12	UPSET	ALTERADO	-2,92	0,00	-1,25	0,21	0,255	0,877	0,292	0,366	0,148	0,118		0,397	0,803
2.13	SAD	TRISTE	-2,18	0,03	-1,25	0,21	0,242	0,829	0,266	0,354	-0,209	0,049		0,347	0,807
3.1	TERRIFYING	TERRORÍFICO	-3,92	0,00	-0,94	0,35	0,463	0,782	0,136	0,128	0,653	-0,033		0,613	0,732
3.2	SAVAGE	SALVAJE	-2,74	0,01	-1,19	0,24	0,476	0,810	0,079	0,206	0,653	0,034		0,558	0,749
3.3	DANGEROUS	PELIGROSO	-2,80	0,01	-0,25	0,80	0,399	0,859	0,219	0,072	0,586	0,054	0,783	0,521	0,754
3.4	DESTRUCTIVE	DESTRUCTIVO	-4,58	0,00	-0,15	0,88	0,427	0,829	0,300	0,089	0,557	0,136		0,562	0,743
3.5	UNSTOPPABLE	IMPARABLE	-1,98	0,05	-0,75	0,45	0,358	0,810	0,226	0,203	0,502	0,117		0,480	0,763
3.6	PURSUING	PERSEGUIDOR	-3,51	0,00	-0,71	0,48	0,338	0,852	0,235	0,167	0,496	0,096		0,510	0,760
4.1	STILL	QUIETO	-2,25	0,02	-1,71	0,09	0,367	0,673	0,026	0,086	0,018	0,599		0,492	0,704
4.2	IMPASSIVE	INMUTABLE	-2,12	0,03	-2,18	0,03	0,332	0,729	0,174	0,021	0,046	0,547		0,479	0,708
4.3	MOTIONLESS	INMÓVIL	-1,56	0,12	-2,57	0,01	0,300	0,767	0,110	0,075	0,040	0,529		0,450	0,713
4.4	INANIMATE	INANIMADO	-2,75	0,01	-2,09	0,04	0,314	0,717	-0,034	0,247	0,070	0,497	0,742	0,431	0,718
4.5	SILENT	SILENCIOSO	-1,81	0,07	-2,49	0,01	0,248	0,756	0,110	0,122	-0,086	0,462		0,410	0,721
4.6	REMOTE	ALEJADO	-3,27	0,00	-3,23	0,00	0,284	0,826	0,261	0,188	0,027	0,425		0,434	0,716
4.7	DISTANT	DISTANTE	-3,32	0,00	-1,68	0,09	0,264	0,761	0,233	0,174	0,045	0,421		0,423	0,719
4.8	UNALTERABLE	INALTERABLE	-3,80	0,00	-1,03	0,30	0,204	0,752	0,125	0,083	0,139	0,402		0,375	0,727

(a) Final value from the Measure of sampling adequacy

The four factors revealed very marked attributes of dream characters, facilitating the assignment of names for their conceptual identification. In accordance with the nature of their content, the following factors were obtained:

- **Psychological Threat.** Corresponds to the first factor extracted, with items 1.1 to 1.10 standing out for their saturations (Table II). The four attributes with the largest factor coefficients were Annoying, Humiliating, Authoritarian and Demanding. The attributes of this factor are related to central characters in the action who posed a controlled threat which, in itself, did not threaten the physical integrity of the dreamer. Characters with these attributes act aggressively or through social confrontation facilitated by a superior or equivalent status to that of the dreamer. They often represent people close to the dreamer who disapprove of the dreamer's behaviour. For illustration purposes, some of the characters who scored on these attributes, along with their main activity, were: J. who argues and does not listen to reason, M. who rejects her and throws things from the past back in her face, a uniformed lady who orders him to correct an action which he has not performed, a sister who she argues with and has to leave her own house as a result, father of a friend who gets angry with his son and tries to hit him, friends of her boyfriend who do not believe her and do not want to know anything about her, etc.

- **Auxiliary.** This was the second factor extracted and had greatest saturations in items 2.1 to 2.13. The attributes Brave, Smart, Humble and Protective stand out. It relates to characters with an important role in the action of the dream, who accompany and are well-appreciated by the dreamer. These attributes do not necessarily imply an action which reveals their abilities during the course of the plot. If the action requires, they offer social and/or physical support revealing their positive nature. They allow the dreamer to support himself or at least act as an active companion in an

awkward situation. Characters who were scored high by dreamers were: pet (cat) who is startled and jumps, boyfriend who consoles her and reprimands his friends for their behaviour, dad who has a big relationship problem and suffers an accident, friend who challenges her to a game of strength and does well, grandma who pays attention to appreciate what is happening, mum who does not realise her panic, ex-boyfriend who asks for another chance, etc.

- **Terrifying Threat.** This was the third factor extracted from the analysis, with greatest saturations in items 3.1 to 3.6. The four most important attributes were Terrifying, Savage, Dangerous and Destructive. These attributes correspond to characters who threaten the physical integrity of the dreamer and are out of social control due their very nature or the nature of the situation. Dreamers scored the following characters in this way: man with a mask who disappears every time he turns around, soldiers stabbing and shooting each other at close range, murderer who shoots an elderly lady, a wolf who chases us, serpent-dragon who threatens me, etc.

- **Spectator/Victim.** This was the fourth factor extracted and presented greatest saturations in items 4.1 to 4.8. Notable attributes were Still, Impassive, Motionless and Inanimate. The characters stood out based on their lack of involvement, their inactivity and/or their remoteness, and could be described based on their passiveness as victims or as "doing nothing". Often they were not important to the plot, with their main function being that of "existing" or "being". Characters who scored high were: people at home who eat and take up lots of space, M. who awaits his arrival, relatives who are in the house, sister of a famous actor who is by his side, girl who gets shot, my husband who appears in the scene, rest of the family who wait and talk amongst themselves, people from the first part of the dream who wear light clothes, smile and are happy, etc.

The characters used to illustrate the factors were selected for having been described with the four most important attributes of each factor and, at the same time, because they were different in their main attributes from the remaining factors.

TABLE III – Selected factors. Influence of the age and sex in each one of them.

	K-S Normality (a)		K-W Sex (a)		K-W Age (a)	
	Z	p value	Chi-square (1 df)	p value	Chi-square (3 df)	p value
Psychological Threat factor	1.784	0.003	1.118	0.290	22.132	0.000
Auxiliary Character factor	1.827	0.003	5.045	0.025	17.140	0.001
Terrifying Threat factor	3.635	0.000	1.534	0.216	4.838	0.184
Spectator-Victim factor	1.560	0.015	0.006	0.938	1.851	0.604

As can be seen in Table III, the influence of the sex and age variables does not affect the four extracted factors in the same way. In the Auxiliary factor, differences are generated as a result of both variables. Being male and being older favours the appearance of plots with a lesser presence of attributes from the Auxiliary factor. Psychological Threat only presents differences attributable to age, with lower values in the final quartile.

TABLE IV – Comportment of the factors obtained regarding the criteria of General Anxiety and Terror.

	General Anxiety Criterion		Terror Criterion	
	rho	p value	rho	p value
Psychological Threat factor	0.234	0.001	-0.072	0.329
Auxiliary Character factor	0.190	0.009	-0.204	0.005
Terrifying Threat factor	0.056	0.446	0.133	0.069
Spectator-Victim factor	0.160	0.029	-0.221	0.002

The behaviour of the factors obtained with respect to the criteria of General Anxiety and Terror are very different (Table IV). What is most surprising is that there is no significant relationship between the criteria of Terror upon awakening

and the most terrifying attributes of characters. The response of Terror upon awakening turns out to be most intense when the characters have fewer attributes related to the Auxiliary factor and the Spectator/Victim factor.

In accordance with the resulting factor structure, Table II shows the homogeneity indices of the items and the Alpha coefficients obtained. As we can see, reliabilities range between 0.85 for Psychological Threat and 0.74 for Spectator/Victim. The corrected item-total correlations are found between 0.35 for the item Sad and 0.63 for the item Brave.

DISCUSSION

In this study, a total of 37 attributes of dream characters have been obtained (Table II), which present a series of properties making them particularly interesting:

- o   They form a homogenous group given the magnitude of their interrelations.
- o   Considered separately, they are valid in terms of the fact that they generate significant differences with respect to the criteria of General Anxiety and/or Terror upon awakening.
- o   The information they cover is structured into four factors which are easily applicable to theoretical interpretation.
- o   The results present evidence of validity insofar as three of these factors have significant relationships with the criteria of General Anxiety and/or Terror on awakening.
- o   As other authors have observed, significant differences were found in content by sex (5, 25, 26) and age (5). The effect of these variables on content affects two of the factors.
- o   It is feasible to design a questionnaire with four subscales, given that the reliabilities obtained are quite promising.

The results of this study, as defended by other authors, suggest that it is appropriate to analyse the content of dreams based on self-report questionnaires, leaving the report as an illustration of the experience or for use in subsequent qualitative analysis. This method of collecting information may avoid biases resulting from the ability of the dreamer to construct the report and of the judges who subsequently proceed to code it. This alternative is not too far removed from collection in typical topics (25) and the assessment of emotions (20, 24) insofar as the responsibility for assessing the dreamed experience is given to the dreamer in these studies.

From a theoretical perspective, what is shown to be important in the assessment of the plot is the attitude of the dream characters, expressed in the factors obtained in this study, and less so the closeness of the character to the dreamer in waking life. It is interesting to note the absence, in the solution obtained, of attributes related to the Hall and Van de Castle character coding system (1). These consist of those related to the social role and other static attributes of characters. Role attributes such as friend, father, mother, relative, colleague and acquaintance were not included in the analyses performed, given that they did not meet the selection criteria. Nor were those associated with sex and age included in the analyses: male, female, old, young and child. The results may indicate the difficulty in obtaining valid evidence of the state of anxiety of the dreamer based on social attributes of characters and, consequently, the difficulty in obtaining valid indicators based on the Hall and Van de Castle coding system.

Overall, according to Domhoff (8) the Hall and Van de Castle coding system is more useful than other systems reviewed by him because: 1) the categories used are more explicit; 2) it does not make assumptions about weightings or ranks; and 3) it can be used to a create a group of psychopathology indicators. Following these arguments, the assessment system presented in this study: 1) evaluates easily

identifiable attributes for subjects; 2) weights attributes with a quantitative technique widely used in psychology; and 3) allows for indicators of the plot related to the state of anxiety of the dreamer on awakening to be obtained.

The results also provide an explanation as to how character selection occurs during the dream. It is possible that our brain constructs or selects characters in accordance with the attitudes which they develop during the plot. The social coherence of characters may be a reduced function during dream generation or play a secondary role. This may be a reason for the strangeness with which the appearance of some of them in the plot strikes us on occasions. In other words, the attitude of the character in the dream is more important than the role played by the character in waking life.

Also in terms of attitudes, the results are very similar to those obtained by Zlotowicz (11), with the exception of the differences in the sample investigated here with adults. The results take on some additional nuances, presenting aggression with a side of psychological mistreatment and another of physical threat. This can be interpreted as a logical evolution in the passage from childhood to maturity. Something similar occurs with the victims. Their role is expanded to a more passive role: that of a mere spectator. Nevertheless, the auxiliary figure was reflected just as Zlotowicz (11) defines it. However, we should note that the methodology followed in this case imposes a solution which avoids the shared attributes between auxiliaries and aggressors which the author warns us about.

In terms of the relationship or influence of the attributes of characters with the state of anxiety upon awakening, these present two very different trends. The response of General Anxiety is accompanied by a threat in the plot which does not place the physical integrity of the dreamer at risk, given that this threat is expressed through the social medium. Another aspect which accompanies General Anxiety is the presence of third parties, whether characters capable of supporting the dreamer, victims and/or simple witnesses. On the contrary, a profound

loneliness in the plot of the dream increases or is related with a probability of awakening with an intense emotional response.

The data suggest that it is possible to relate the state of anxiety upon awakening and dream content through the dreamer's own assessment. The results can be applied to clinical practice. The questionnaire used allows for the determination of the nature and evolution of dream characters, as well as the effect of treatment, whatever its nature may be. This could be especially suitable for patients who report dreams during consultations and in disorders which are accompanied by nightmares.

All in all, the data analyses only permit the explanation of a limited amount of the information covered by the 37 attributes selected. It is evident that due to the nature of the characters, other aspects related to the dramatic profile of the character are also assessed and require future analysis.

It can be concluded from this study that it is possible to assess dream content with the use of a self-report questionnaire completed by dreamers. This technique involves a lower cost than assessment systems based on judges and avoids the biases which these introduce. Through the use of a questionnaire, the information is collected systematically and uniformly for all subjects, thereby also avoiding biases due to report construction. These advantages facilitate the analysis of content in clinical practice and in research, by obtaining valid indicators, by being related to a criterion of anxiety, and which show promising reliability coefficients. The indicators found in this study provide information on the dramatic role of characters based on their role in the plot, and show that dreamers can face two types of threats in their dreams: one to their physical integrity and another of a social nature.

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