



Investigation of the Relationship Between Altruism Levels of Terminal Patients' Relatives and their Ego Status Based on Transactional Analysis

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Abstract

Background This study was conducted to examine the relationship between altruism levels of terminal patients' relatives and their ego states based on transactional analysis.

Material and Methods This research, which is planned as descriptive-correlational type, was carried out between March and May 2020 in a hospital located east of Turkey. The target population of the study consisted of individuals with terminal stage patients in a hospital located east of Turkey. The sample of the study consisted of individuals who met the research criteria and agreed to participate in the study.

Results According to the findings obtained from the study, the Critical Parent (CP) score mean of the individuals was 0.17 ± 0.49 , the Nurturing Parent (NP) score mean was 0.22 ± 0.03 , the Adult (A) ego score mean was 0.21 ± 0.19 , the Adapted Child (AC) score mean was 0.19 ± 0.02 , Natural Child (NC) score mean was found to be 0.19 ± 0.03 . Altruism Scale Total score mean was found to be 67.53 ± 9.06 , the Family Sub-Dimension was 17.42 ± 2.49 , the Social Sub-Dimension was 14.94 ± 4.56 , the Helpful Sub-Dimension was 17.50 ± 3.10 , and the Responsibility Sub-dimension was 17.65 ± 2.75 .

Conclusions It has been determined that individuals have a high level of altruism and get the highest ego score from the Nurturing Parent ego state. The lowest mean ego score was found to be Critical Parent Ego Condition (CP). It is recommended to carry out studies to reduce the critical ego state and to conduct the study in larger groups.

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Introduction

Although the importance of the family as social support has been proven, families that care for patients also need support and empowerment. The long duration of this disease affecting the family, life-threatening, loss of the usual daily life order, being unable to return to work and social life can lead to self-sadness, mourning of their own losses, feelings of anxiety helplessness hopelessness and depressive for the patient may cause depressive affect in the relatives of the patient, and grief reactions may be observed in family members due to these losses. Being in a caregiver position places roles and responsibilities on the patient's relatives other than they are used to, and increases emotional burden.^{1,2} The nurses explained that family relatives want to control everything because of their distrust of the healthcare worker, do not want to leave the patient at all, the patient relatives do not believe in the treatment, reflect their anger on the healthcare worker, do not pay attention to the general care of the patient, and the relatives of the patient are afraid of being alone with the patient.²

Since altruism serves personal well-being, it is possible to say that altruism constitutes its own reward. Even if it has rewards such as feeling good for altruistic people, the main thing in altruism should be the well-being of the other person.³ It can be said that a kind of gift is offered to other individuals with altruistic behavior. While other individuals experience positive emotions with this gift, this situation becomes a reason for happiness for the individual who acts altruistically.⁴ Even if it seems to be done for other people, behaviors involving assistance are essentially shown with the intention of strengthening the ego. The ego feeds these helping behaviors and helping behaviors feed the ego.⁵ Transactional Analysis is defined as an approach that tries to explain the changing relationship and communication between individuals, the individual's difference from another individual and how he behaves when communicating with other individuals.^{6,7}

Basic elements of Transactional Analysis approach; Ego States, Transaction, Contact Messages, Psychological Games and Life Positions.^{6,7} Berne defines the ego state, which is one of the elements that make up the Transactional Analysis approach, as a consistent

pattern of emotions and thoughts associated with a behavioral model.⁷ Berne described each of the subjective experiences as an ego state, beginning with birth and prenatal, and stated that they all constitute personality.⁶ Ego states are examined in two different models, structural and functional. According to the structural analysis, there are three ego states in the personality of each individual, namely Parent, Child and Adult. Structural analysis is concerned with what is inside each of the Parent, Adult, and Child ego states.^{6,8}

The relationship between altruism and the ego states based on transactional analysis of individuals caring for terminal stage patients' relatives has not been studied before, and this study was conducted to determine the level of ego state and altruism in terminal stage patient relatives and the relationship between them based on transactional analysis.

Material and Methods

Study Design

This research, which is planned as descriptive-correlational type, was carried out between March and May 2020 in a hospital located east of Turkey.

The target population of the study consisted of individuals with terminal stage patients in a hospital located east of Turkey. The sample of the study consisted of individuals who met the research criteria and agreed to participate in the study.

Collection of Data

An Introductory Information Form, Altruism Scale and Ego States Scale (ESS) were used to collect research data. Volunteers among the patients' relatives of terminal-stage patients and those who could use a telephone/computer were included in the study. After explaining the purpose of the study, verbal consent was obtained from those who voluntarily accepted to participate in the study, and the data were collected online using the Google form prepared by the researchers.

Data Collection Tools

Introductory Information Form: It consists of questions created by the researchers and containing the introductory characteristics of the individuals.

Altruism Scale: The altruism scale is a scale developed by London and Bower (1968) to

measure altruistic behavior. Its adaptation and standardization to Turkish was made by Akbaba et al. (1991) to be used in Akbaba’s study “The effect of group counseling on altruism, which is a social psychological concept”.⁹ The scale consists of four sub-dimensions. There are five items for each sub-dimension. 1th, 2nd, 3rd, 4th and 5th items are on the family dimension, Items 6th, 7th, 8th, 9th and 10th are on social dimension, 11th, 12th, 13th, 14th and 15th items are on benevolence dimension, 16th, 17th, 18th, 19th and 20th items belong to the dimension of responsibility. Each item has 5 answer options. The altruism score of the individual is determined by gathering the marked options. In the adaptation studies of Akbaba (1991), the Cronbach Alpha internal consistency coefficient was found to be .85. In our study, the Cronbach Alpha internal consistency coefficient was found to be .75.

Ego States Scale (ESS)

It was developed by Williams in 1978.¹⁰ The adaptation to Turkish was made by Ari in 1989.¹¹ ESS is a list of 95 adjectives that qualify human. The test subject is asked to mark the adjectives that “define himself and see as a feature of himself” with free selection technique. There is no restriction on the number of adjectives to mark. In the scale; Each adjective and ego state is measured with five different standard values (Critical Parent (CP), Nurturing Parent (NP), Adult (A), Adapted Child (AC), Natural Child (NC)) ranging from 0-4. The scores obtained from the referees for the five ego states of each marked adjective are added to reach five separate total scores. These scores are then divided by the highest score (coefficient) that

can be obtained from the scale for each ego state. Five ego state scores from this process are added and by dividing each division result by this general sum, ego state scores showing the proportions of each ego state in a whole are obtained.

Analysis of Data

The analysis of the data was done on the computer using the Statistical Package for the Social Sciences (SPSS-22) statistical software. Frequency, descriptives, percentage, mean, standard deviation, explore and normality plots with tests were used as descriptive statistical methods. Kolmogorov–Smirnov test was used to test normality distribution with analytical tests. Mann-Whitney U test was used for binary groups. Kruskal-Wallis test was used for groups more than two. Spearman correlation test was used to determine whether there is a linear relationship between the two numerical measurements, the direction and severity of this relationship, if any. In our study (p<0.05), it was accepted as statistically significant difference.

Ethical Principles

Consent from the Scientific Research Ethics Committee (Date: 27.02.2020 and number: 14) and written permission from the institutions where the study will be conducted was obtained. The necessary explanations were made to the individuals included in the study and verbal permission was obtained from those who wanted to participate in the study.

Table 1. Descriptive Characteristics of Individuals (N=134)

Variables	n	%
Gender	Female	39 29.1
	Male	95 70.9
Marital status	Single	80 59.7
	Married	54 40.3
Education Level	Illiterate	17 12.7
	Primary education	30 22.4
	High school education	47 35.1
	High education	40 29.9
Income rate	Less than income	94 70.1
	Income equal to expense	15 11.2
	More than income	25 18.7
Age	$\bar{X} \pm SD$ 35.14±16.02 (min.19,max 68)	

(Frequency, descriptives, mean, standard deviation)

Results

It was determined that 70.9% of the individuals participating in the study were male, 59.7% were single, 35.1% were graduates of high school education, 70.1% of their income is less than their expenses and the average age of the group was 35.14 ± 16.02 (Table 1).

According to the findings obtained from the study, it was determined that the CP total score mean of the individuals was 0.17 ± 0.49 , the total score mean of NP was 0.22 ± 0.03 , the A total score mean was 0.21 ± 0.19 , the AC total score mean was 0.19 ± 0.02 , and the NC total score mean was 0.19 ± 0.03 . Altruism Scale Total score mean was 67.53 ± 9.06 and individuals were found to have a high level of altruism. Among the Sub-Dimensions of the Altruism Scale, it was determined that the Family Sub-Dimension was 17.42 ± 2.49 , the Social Sub-dimension was 14.94 ± 4.56 , the Helpful Sub-Dimension was 17.50 ± 3.10 , and the Responsibility Sub-dimension was 17.65 ± 2.75 (Table 2).

The total score mean of CP was found to be statistically significantly higher in single, higher education graduates, and those with higher income than expenses ($p < 0.05$).

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of education level, the total score mean of CP was found that the score mean of those who graduated from high school education and higher education

was higher than those who were illiterate and graduated from primary education.

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of the income level, the CP total score mean was found that the score mean of those whose income is more than their expenses are higher than both groups.

The total mean score of NP was found to be statistically significantly higher in married, illiterate, and low-income group ($p < 0.05$).

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of education level, the total score mean of NP was found that the score mean of the illiterate and primary school graduates was higher than the groups with high school education and higher education.

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of the income level, the total score mean of NP was determined that the score mean of those whose income was higher than the expense of both groups.

The total score mean of A was found to be statistically significantly higher in males, married, illiterate, and those whose income was less than their expenses ($p < 0.05$).

In the advanced analysis (Games Howell) conducted to determine which group originated

Table 2. Individuals' Altruism Scale Total and Sub-Dimension Mean Scores and their Ego Status Mean Scores

	Mean \pm SS	Min-Max
Critical Parent Ego Condition (CP)	0.17 ± 0.49	0.11-0.31
Nurturing Parent Ego State (NP)	0.22 ± 0.03	0.13-0.26
Adult Ego State (A)	0.21 ± 0.19	0.18-0.25
Adapted Child Ego State (AC)	0.19 ± 0.02	0.13-0.23
Natural Child Ego State (NC)	0.19 ± 0.03	0.11-0.24
Altruism Total Score	67.53 ± 9.06	45-84
Family Sub-dimension	17.42 ± 2.49	12-22
Social Sub-Dimension	14.94 ± 4.56	5-25
Benevolent Sub-Dimension	17.50 ± 3.10	12-23
Responsibility Sub-Dimension	17.65 ± 2.75	14-23
(Mean, standard deviation)		

the difference between the groups in terms of education level, A total score mean was found that the score mean of those who graduated from high school education was lower than that of the illiterate group.

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of the income level, the A total score mean was determined that the score mean of those whose income is more than their expenditure is lower than both groups.

The total score mean of AC was found to be statistically significantly higher in those who graduated from higher education and those whose income was less than their expenses ($p < 0.05$).

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of educational level, the AC total score mean was determined that the score mean of the higher education graduates is lower than the illiterate and primary school graduates.

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of income level, the AC total score mean was found that the score mean of those whose income was less than their expenses were higher than both groups.

It was found that the total score mean of NC was statistically significantly higher in those who

graduated from higher education and those whose income was equivalent to their expenses ($p < 0.05$).

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of educational level, the total score mean of NC was found that the score mean of the higher education graduates was higher than the illiterate group.

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of income level, the total score mean of NC was found that the score mean of those whose income was less than their expenses were lower than both groups (Table 3).

The total score mean of the altruism scale was found to be statistically significantly higher in singles, those who graduated from higher education, and those whose income was higher than their expenses ($p < 0.05$).

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of educational level, the altruism scale total score mean was found that the score mean of the graduates of higher education is higher than all groups.

In the advanced analysis (Games Howell) conducted to determine which group originated the difference between the groups in terms of income level, the altruism scale total score mean was found that the score mean of those whose

Table 3. Comparison of Individuals' CP, NP, A, AC, NC Mean Scores According to Socio-Demographic Features (N=134)

Variables		CP		NP		A		AC		NC		
		N	$\bar{X} \pm SD$	Test and Significance								
Gender	Female	39	0.18±0.04	U=1534.0 p=0.118	0.21±0.03	U=17044.0 p=0.466	0.21±0.01	U=1141.0 p=0.001	0.19±0.02	U=1531.0 p=0.115	0.19±0.04	U=1807.0 p=0.823
	Male	95	0.17±0.05		0.22±0.03		0.22±0.01		0.18±0.02		0.18±0.03	
Marital status	Single	80	0.19±0.05	U=1171.0 p=0.000	0.21±0.03	U=1387.0 p=0.000	0.21±0.02	U=1503.0 p=0.003	0.18±0.02	U=1914.0 p=0.264	0.19±0.04	U=2026.0 p=0.543
	Married	54	0.15±0.01		0.23±0.01		0.22±0.01		0.19±0.01		0.19±0.02	
Education Status	Illiterate	17	0.13±0.01	KW=69.360 p=0.000	0.25±0.01	KW=56.437 p=0.000	0.23±0.01	KW=27.950 p=0.000	0.20±0.01	KW=27.136 p=0.000	0.17±0.03	KW=8.657 p=0.034
	Primary education	30	0.14±0.02		0.23±0.01		0.22±0.01		0.20±0.01		0.18±0.02	
	High School Education	47	0.20±0.03		0.21±0.03		0.20±0.01		0.18±0.02		0.19±0.02	
	High education	40	0.21±0.02		0.20±0.02		0.22±0.02		0.17±0.02		0.20±0.04	
Income status	My income is less than my expenses	94	0.16±0.03	KW=49.340 p=0.000	0.23±0.02	KW=57.694 p=0.000	0.22±0.01	KW=56.667 p=0.000	0.19±0.02	KW=20.745 p=0.000	0.17±0.03	KW=29.545 p=0.000
	My income is equal to my expenses	15	0.15±0.01		0.21±0.01		0.21±0.01		0.17±0.01		0.22±0.01	
	My income is more than my expenses	25	0.24±0.05		0.17±0.02		0.19±0.01		0.16±0.02		0.21±0.04	

(Mann-Whitney U, Kruskal-Wallis) Critical Parent Ego Condition (CP), Nurturing Parent Ego State (NP), Adult Ego State (A), Adapted Child Ego State (AC), Natural Child Ego State (NC)

income is equivalent to their expenditure was lower than both groups (Table 4).

A statistically significant negative correlation was found between the total score of CP and the the Responsibility sub-dimension of Altruism Scale, NP, A, AC, and age (p<0.05). A positive statistically significant relationship was found between the total score of CP and the family and social sub-dimensions of the Altruism scale (p<0.05).

A statistically significant negative correlation was found between the total NP score and the Social sub-dimension of the Altruism Scale, CP and NC (p<0.05). A positive statistically significant correlation was found between total NP score and A, AC, responsibility sub-dimension of Altruism scale and age (p<0.05).

A statistically significant negative correlation was found between the A total score and the Social and benevolent sub-dimensions of Altruism Scale, CP, NC (p<0.05). A positive statistically significant relationship was found between A total score and the responsibility sub-dimension of the Altruism Scale, NP, AC, and age (p<0.05).

A statistically significant negative correlation was found between the total score of AC and the Social sub-dimension of Altruism scale, CP, NC (p<0.05). It was found that there was a statistically significant positive correlation between AC total score and the responsibility sub-dimension of Altruism Scale, NP, A, and age (p<0.05).

It was found that there was a statistically

significant negative correlation between NC total score and the responsibility sub-dimension of the Altruism Scale, NP, A, and AC (p<0.05). A positive statistically significant relationship was found between the total score of NC and the social and benevolent sub-dimensions of the Altruism scale, NP, A (p<0.05).

A positive statistically significant relationship was found between the total score of the Altruism Scale and the Altruism Scale sub-dimensions (p<0.05). A statistically significant negative correlation was found between altruism scale total score and age (p<0.05).

A statistically significant negative correlation was found between age and the total score of Altruism and CP (p<0.05). A statistically significant positive correlation was found between age and benevolence sub-dimensions of Altruism, NP, A, AC (p<0.05) (Table 5).

Discussion

For centuries, scientists have attempted to define the natural and dynamic tension of the relationship between supporting one’s own wants and needs (self-interest) and meeting other people’s wants and needs (altruism). People who focus on meeting their own needs are generally defined by negative concepts (eg, egocentric, hedonistic, selfish), while those who focus on the needs of others are defined by positive concepts (eg, generous, altruistic).¹² Regarding the balance between self-interest and

Table 4. Comparison of Altruism Scale Mean Scores According to Socio-Demographic Features (N=134)

Variables		Altruism Scale Mean Scores		
		N	$\bar{X} \pm SD$	Test and Significance
Gender	Female	39	68.48±5.53	U=1689.0 p=0.420
	Male	95	67.14±10.16	
Marital status	Single	80	72.22±6.77	U=519.50 p=0.000
	Married	54	60.59±7.44	
	Illiterate	17	53.47±8.23	
Education Status	Primary education	30	67.73±6.06	KW=42.785 p=0.000
	High School Education	47	67.82±6.68	
	High education	40	73.02±7.42	
Income status	My income is less than my expenses	94	68.36±9.63	KW=25.497 p=0.000
	My income is equal to my expenses	15	59.40±1.54	
	My income is more than my expenses	25	69.32±6.82	

(Mann-Whitney U, Kruskal-Wallis) Critical Parent Ego Condition (CP), Nurturing Parent Ego State (NP), Adult Ego State (A), Adapted Child Ego State (AC), Natural Child Ego State (NC)

social commitment, Freud (1960) suggested that simple self-interest (id) must come to terms with the expectations of society (ego). On the other hand, Maslow (1950) found that self-actualized individuals are both altruistic and self-interested, based on the assumption that self-actualized individuals openly enjoy their altruistic behaviors and that these behaviors also serve them.¹³ Studies on prosocial behavior reveal that egoistic processes play an important role in helping other people.¹² The emotional states of individuals who care for terminal stage patients' relatives may affect the care they provide. In this study, the level of altruism and ego states of individuals is discussed in the light of the literature.

In our study, it was found that there was a statistically significant negative correlation between the total score of CP and the Responsibility sub-dimensions of the Altruism scale ($p < 0.05$). CP is the prejudiced thoughts, feelings, and beliefs of the personality learned from parents or parent figures. The Critical Parent is to protect social rules/values and to criticize those who do not obey them.¹⁴ Our study suggests that the reason for such a result is that critical caregiving individuals adopt the stubborn, strong, principled, punitive and task-bearing position as a principle¹⁵, and they approach negatively to the responsibilities of

individuals other than their own.

A positive statistically significant relationship was found between the total score of CP and the family and social sub-dimensions of the Altruism scale ($p < 0.05$). Using the critical parental aspect, a person aims to keep the social rules that he learned from those who convey the culture of the society to him and gradually adopt them correctly and to transfer them to future generations.¹⁴ Because of these features, it is thought that critical caregivers approach familial and social altruism more positively.

A statistically significant negative correlation was found between the total NP score and the Social sub-dimension of the Altruism Scale ($p < 0.05$). A Nurturing Parent is protective and guardian. He speaks affectionately when he thinks harm will come. He is based on social values and thinks that if social values go beyond, they will suffer. The Nurturing Parent is curious, caring, forgiving, supportive, permissive, compassionate, protective and anxious.¹⁵ A high score in the social dimension indicates that the person participates in social activities and undertakes duties and responsibilities in these activities, while low scores indicate that the social side of individuals is weak. Because of these features, it makes us think that caregivers with higher social aspect have less

Table 5. The Relationship Between Individuals' CP, NP, A, AC, NC and Altruism Scale Total Score Means and Scale Sub-Dimensions and Age

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) CP	r	-										
	p	-										
(2) NP	r											
	p											
(3) A	r											
	p											
(4) AC	r											
	p											
(5) NC	r											
	p											
(6) Altruism	r											
	p											
(7) Family Sub-dimension	r											
	p											
(8) Social Sub-Dimension	r											
	p											
(9) Benevolent Sub-Dimension	r											
	p											
(10) Responsibility Sub-Dimension	r											
	p											
(11) Age	r											
	p											

(Spearman Correlation Test) (* $p < 0.05$, ** $p < 0.01$) Critical Parent Ego Condition (CP), Nurturing Parent Ego State (NP), Adult Ego State (A), Adapted Child Ego State (AC), Natural Child Ego State (NC)

protective thoughts.

A positive statistically significant correlation was found between the total NP score and the responsibility sub-dimension of the Altruism scale ($p < 0.05$). The Nurturing Parent is curious, caring, forgiving, supportive, permissive, compassionate, protective and anxious.¹⁵ It is thought that protective individuals have a positive attitude towards taking the responsibility of the individual they care for because of their supportive and compassionate attitude. Similar results have been found in the literature.¹⁶⁻¹⁸

A statistically significant negative correlation was found between the total score of A and the social and benevolent sub-dimensions of the Altruism scale ($p < 0.05$). The adult parent is defined as the current set of realistic and autonomous emotion, thought and behavior patterns.¹⁵ It is thought that they display a negative attitude towards the social and benevolent aspects of the other person due to having autonomous feelings and thoughts.

A positive statistically significant relationship was found between the total score of A and the responsibility sub-dimension of the Altruism scale ($p < 0.05$). Adult ego state can also be viewed as a data processing center. This part of the personality correctly processes the data heard, seen and thought, proposes solutions to problems, and evaluates existing data without relying on biased thoughts or emotions.¹⁹ This suggests that individuals due to this situation evaluate the events rationally and look positively to take responsibility. Similar results have been found in the literature.¹⁶⁻¹⁸

It was found that there was a statistically significant negative correlation between AC total score and Social sub-dimension of Altruism scale ($p < 0.05$). Adapted Child is part of our personality, which consists of parent messages.¹⁶ The adapted child ego state manifests itself with the behaviors of submission or rebellion. Unlike the natural child, Adapted Child reacts as if his parents are watching him.⁸ Because of these features, it is thought that among the caregivers who have a high social aspect, they use the less adapted child side. Similar results were found in Akar's study.¹⁶

A positive statistically significant relationship was found between AC total score and responsibility sub-dimension of Altruism scale ($p < 0.05$). The Adapted Child reacts as if his parents are listening or watching him. He is

hardworking, well-behaved, rebellious, or uses any of his parental figures as a reference.⁶ Due to these characteristics, it is thought that caregivers have the feeling that they should take responsibility.

It was found that there was a statistically significant negative correlation between NC total score and responsibility sub-dimension of the Altruism scale ($p < 0.05$). The natural child is spontaneous, behaves as he/she intends to, is active, creative, is the untrained side of personality.^{14,6,8} Due to these characteristics, it is thought that caregivers do not want to take responsibility.

A positive statistically significant correlation was found between the total score of NC and the social and benevolent sub-dimensions of the Altruism scale ($p < 0.05$). The natural child takes care of the physical needs of the person and is creative.^{14,6,8} It is thought that individuals due to these characteristics have the feeling that they should help each other's needs.

Conclusions

It has been determined that individuals have a high level of altruism and get the highest ego score from the Nurturing Parent ego state. The lowest mean ego score was found to be Critical Parent Ego Condition (CP). It is recommended to carry out studies to reduce the critical ego state and to conduct the study in larger groups.

Conflict of interest

The authors declared that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Limitations

The fact that the study was conducted in only one city is a limitation of the study.

Authors' Contribution

Study Conception: MY, GO; Study Design: YS; Supervision: MSY, GO; Funding: MY; Materials: MSY, GO; Data Collection and/or Processing: YS; Statistical Analysis and/or Data Interpretation: MY, GO; Literature Review: MSY; Manuscript Preparation: YS, GO; and Critical Review: MY.

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