

# FACTORS INFLUENCING THE CHOICE OF FRIENDS - ANALYSIS OF BULGARIAN FRIENDSHIP NETWORKS

## FACTORES QUE INFLUYEN EN LA ELECCIÓN DE AMIGOS: ANÁLISIS DE REDES DE AMISTAD BÚLGARAS

STANISLAVA YORDANOVA STOYANOVA  
South-West University "Neofit Rilski"  
Bulgaria  
avka@abv.bg

RECIBIDO: 13/12/07; ACEPTADO: 23/3/08

### RESUMEN

Este artículo presenta los resultados de una investigación que tiene lugar en 2006 usando un análisis sobre la red de amigos. Se estudian las relaciones de 223 pares de amigos. Había reciprocidad en las nociones de los que respondieron sobre el hecho de cómo percibían a sus amigos y cómo estos les percibían a ellos –como hombres o mujeres, como jóvenes, como habitantes de una ciudad, como vecinos, familiares, a través de características personales dominantes, como extranjeros, como europeos. Usualmente los amigos tenían la misma ocupación y el mismo estatus social. La identidad étnica, territorial Europea y de género influenciaban la elección de amigos y el desarrollo de la amistad.

Los miembros de la mayoría étnica en Bulgaria mantenían amigos principalmente con los miembros del grupo étnico y con gente que declaró la misma religión, mientras que la gente de minorías étnicas mantuvo más frecuentemente amigos con miembros de los grupos étnicos externos y con gente de diferentes religiones. La identidad europea unificó a los miembros a encontrar cosas más comunes entre ellos cuando tenían diferentes identidades étnicas. La identidad territorial y la identidad de género dominaban más en las amistades de la gente joven que de los mayores.

### ABSTRACT

This paper presents the results from a research carried out in 2006 in Bulgaria by using the analysis of friendship network. The studied relationships were between 223 couples of friends. There was reciprocity in the respondents' notions about the fact how they perceived their friends and how their friends perceived them – as men/women, as young people, as inhabitants of a city, as neighbours, as relatives, through dominant personal qualities, as foreigners, as Europeans. Usually the friends had the same occupation and the same social status. The ethnic, territorial, European and gender identity influenced the choice of friends and the development of the friendship. The members of the ethnic majority in Bulgaria maintained friendships mainly with the members of the ethnic in-group and with people

confessing the same religion, while the people from the ethnic minorities maintained most frequently friendships with members of the ethnic out-groups and with people confessing different religions. The European identity unified the friends to find more common things between them when they had different ethnic identities. The territorial identity and the gender identity dominated more in the young people's friendships than they did in the elderly people's friendships.

PALABRAS CLAVE: Análisis de redes sociales, Amistad, Identidad étnica, Identidad territorial, Identidad sexual

KEYWORDS: Network analysis, Friendship, Ethnic identity, Territorial identity, Gender identity

#### FRIENDSHIP

Friendship can be defined as an interpersonal relationship between two people that is characterized by mutual positive regard. Friendship is an intimate, caring relationship with attributes such as reciprocal tenderness and warmth of feeling; reciprocal desire to keep the friendship; honesty and sincerity; trust; intimacy and openness of self; loyalty; and durability of the relationship over time (Testo, 2008). For two individuals to form a friendship, they must be acquainted ahead of time, perhaps as a result of working at the same firm. Each individual must then exert effort, which could involve inviting the other person to dinner, buying gifts on special occasions, etc. Friendships form most easily when effort is reciprocated (Brueckner, 2006). When the racial and ethnic minorities become more integrated into friendship networks and these networks become more integrated into the overall culture, problematic behaviors might decline (Haynie & Payne, 2006).

#### SOCIAL NETWORK

A "network" signifies the existence of relationships that go beyond the group boundaries – the relationships between individuals, small groups, institutionalized groups and the realization of social regulation. The friendship network is an open network, that means it does not have any limits and it cannot be studied thoroughly (Ferrand & Federico de la Rúa, 2006). The friendship network is characterized by some kind of uncertainty of the relationship, the last one is not regulated like for example the relationships between superiors and subordinates. There is a social variability concerning the mean of the term "friend". There are close friends (we meet them frequently, we discuss the most intimate topics with them, we rely on them), simply friends and well-known people (they are considered as friends in so far as they have not done anything wrong to us and we could pass nicely together). Social network describes the complex interpersonal linkages in a social system and it is generally divided into structural and interactional dimensions. Size or range, density, proximity, type of relationship, homogeneity, and reachability are components of the structural dimension. Characteristics of individual ties such as frequency of contact, intimacy, duration, reciprocity, and durability, are considered as the interactional dimension. Several factors influence the formation of social networks: physical proximity or propinquity, reciprocity of liking and self-disclosure, individual judgment of the other person's characteristics (e.g., physical features, social skills, academic achievement, similarity), developmental stages, etc. (Tsai, 2006).

The *hypothesis* of the research was that the most friends share a lot of common features – they have the same status, they belong to the same social group (ethnic, professional, religious, etc.), they share their opinions. Another *hypothesis* supposed that the analysis of the friendship network would reveal that the ethnic, territorial, European and gender identity influence the choice of friends and the development of the friendship.

#### IDENTITY

The identity means standardization, comparing, equalization (Todorova, 2004). The identity is created by means of the achievement of the sense of belonging to a group. The individual compares oneself to the other people and establishes the similarities with the in-group and the differences with the out-groups. The identity is related to the internal co-ordination and stability, to the image of oneself as possessing some durable and stable traits in spite of the social roles that the individual executes in the different situations (Cuéllar, Nyberg, Maldonado & Roberts, 1997).

The component of the ethnic identity were the pride of the belonging to an ethnic group (related to the attachment to the ethnic in-group, the positive attitudes towards the ethnic in-group, the interest in the culture, history and the traditions of the ethnic in-group) and ethnic differentiation (the wish for having friends and conjugal partner from the ethnic in-group), the inclusion in the social life and cultural practices of the ethnic in-group (speaking the language of the ethnic in-group, confessing the religion of the ethnic in-group, celebrating the ethnic holidays, etc.). (Valk & Karu, 2001; Phinney, 1992; Verkuyten, 2002; Verkuyten, 2003).

#### METHOD

The *method* of this study included the unification of a name generator (every respondent indicates the initials of four of his/her friends) and a name interpreter (every respondent indicates his/her socio-demographical characteristic, his/her friends socio-demographical characteristic, as well as he/she answers the questions about the maintained relationships concerning the frequency of the meetings, the themes of the conversations, the duration of the relationship, the mutual perceptions of the two parts in the relationship). The research was carried out in 2006. The personal open friendship networks were studied – every respondent described the relationships between his/her friends. The analysis concerned these facts that were observed and marked by the actors in the network. The respondent is called «Ego», and the people he/she maintains some relationships with –«Alters» (Fer-rand & Federico de la Rúa, 2006).

Table 1. Name generator and name interpreter for studying the friendship networks

Your friend's first name	His/her gender	His/her age	His/her ethnic group	His/her religion	His/her occupation	How much time do you know him/her from?	How do you think your friend perceives you? (choose no more than 3 answers)	How do you perceive your friend? (choose no more than 3 answers)	How many times did you meet your friend during the past month?	Ordinarily, what are your relations with this person? (you could enclose all the letters that correspond to your answers)
	a) man b) woman		a) Bulgarian b) other (please, indicate which one) c) I do not know	a) Christian b) Muslim c) atheist d) other (please, indicate which one) e) I do not know	a) he/she studies (please, indicate what) ..... ..... ..... b) he/she works (please, indicate what) ..... ..... c) unemployed d) pensioner	a) from ..... years b) from ..... months c) less than a month	a) as a student b) as an European c) as an inhabitant of a city d) as a young person e) as a foreigner f) as a friend g) as a man/woman h) other (please, indicate what) . ..... .....	a) as a student a) as a student b) as an European c) as an inhabitant of a city d) as a young person e) as a foreigner e) as a foreigner f) as a friend g) as a man/woman h) other (please, indicate what) ..... .....	a) meetings every day b) meetings once per week c) meetings 2-3 times per week d) meetings 2-3 times per month e) meetings once per month f) only phone calls or messages, no meetings	a) you counsel with him/her b) you share your personal problems c) you speak about the politics d) you speak about your plans about the future e) you speak about other countries, other people and their manner of life f) you speak about travels g) you frequently feed together h) you go out together to the cinema, parties... j) you work/study together k) you live together
Your first name	Your gender	Your age	Your ethnic group	Your religion	Your occupation	Who of your friends mentioned above know each other?	What are the relations between your friends who know each other?			
	a) man b) woman		a) Bulgarian b) other (please, indicate which one) .....	a) Christian b) Muslim c) atheist d) other (please, indicate which one) ..... c) unemployed d) pensioner	a) you study (please, indicate what) ..... ..... b) you work (please, indicate what) ..... ..... c) unemployed d) pensioner	..... knows ..... ..... knows..... ..... knows..... ..... knows..... ..... knows.....	a) they avoid each other b) they know each other slightly c) they get on together a) they avoid each other b) they know each other slightly c) they get on together a) they avoid each other b) they know each other slightly c) they get on together a) they avoid each other b) they know each other slightly c) they get on together			

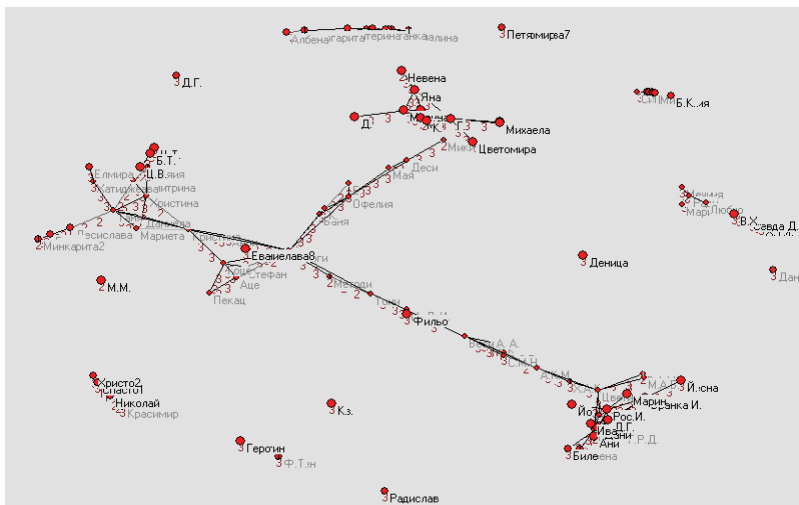
SAMPLE

The studied social network embraced 40 friendships of 10 students in psychology by correspondence in the second course, 88 friendships of 22 regularly students in psychology in the third course, 28 friendships of 7 regularly students in pedagogy in the fourth course in the South-West University in Bulgaria, and 40 friendships of 10 residents of village Kostenetz in Bulgaria. The data were elaborated by means of UCINET and PAJEK.

The studied relationships were between 223 couples of friends. 13 couples of friends, the respondents maintained friendships with, avoided each other. 34 couples of friends, the respondents maintained friendships with, knew each other slightly. 176 couples of friends, the respondents maintained friendships with, got on with each other.

RESULTS

Fig. 1 Scheme of the relationships between friends, three-dimensional image



1 indicated the respondents' friends who avoided each other; 2 indicated the respondents' friends who knew each other slightly; 3 indicated the respondents' friends who got on with each other.


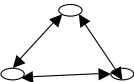

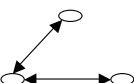
The symmetry of the friendships could be established because the students frequently indicated as their friends other respondents who were studied, too. In the friendship networks, we found some structures where the respondents maintained close relationships only with other respondents.

The clique is a structure composed by no accidental connections between the actors where all the actors are related between them. 15 cliques were found - unifications between at least five of the actors. The kernel of the actors in the network who were the most strongly related between them was the students in psychology in the third course and their friends. The density of this kernel was 2.19; the density of the periphery was 0.055. The density was computed as the number of the directed connections was divided into the number of the ordered couples.

The measurement of the centrality was based on the number and the length of the direct ways (connections) between the actors. The students in psychology in the third course had the most connections with the other actors in the social network. For all of the respondents, the average index of centrality degree=11.075; SD=5.399. The coefficient of variation = 48.8%, namely the studied social network was moderately homogeneous in its structure positions. The minimum number of connections between the actors was 3, the maximum was 43. The network centralization expresses the degree of inequality. In this case, Network Centralization = 16.12%, that is to say that the advantages to what the positions of the actors in the network were related were almost uniformly distributed in the network. There was no a leading actor who centralized big power and resources compared to the other actors. The homogeneity of the network= 0.62%, that is to say the network consisted of heterogeneous actors.

One actor could be related to a big number of other actors, but they could be unconnected with the rest part of the network as a whole. In this case, the actor is central only for a section of the network – Closeness centrality. The studied social network was broken; there were interminable distances, a few actors who were not connected between them. The students in psychology in the third course had the biggest closeness to the other actors in the network. For all of the respondents, the average index of Closeness centrality was  $n_{\text{Closeness}}=35156.518$ ; SD=5235.667. The coefficient of variation = 16.6%, that is to say the studied social network consisted of some relatively unconnected between them elements. There were a few components of the network that were connected between them, but unrelated to the other parts of the network. Two of the parts of the network (loops, closed chains) were isolated by the other parts of the network. The density of the network= 0.0194 (with the loops). The number of couples who were not connected to the other elements of the network was 35050. The average distance between the couples who were connected between them was 4.10602 (the couples needed four mediators to be joined). The outermost members of the network had a distance of 11 mediators far from the other members of the network. The group cohesion was very little (Distance-based cohesion = 0.049; this index varies from 0 to 1, the big values indicate the big cohesion). The fragmentation of this network was big (Distance-weighted Fragmentation = 0.951).

Table 2. Kinds of relationships – triads in the investigated friendship network

TYPE OF TRIADS	NUMBER OF SUCH TRIADS
	75802
	309
	1256649
	540

(The type of triad was indicated according to Borgatti, Everett, and Freeman's scheme (1999) defining the existence of 16 possible triads in each network).

The reciprocal friendships existed only between 5.75% out of the actors in the triads.

#### THE ETHNIC CHARACTERISTICS OF THE FRIENDSHIP NETWORK

The respondents were 44 Bulgarians, 3 Macedonians, 1 Serb and 1 Turk. 179 (91.3%) were the maintained friendships with Bulgarians; 8 (4.1%) were the maintained relationships with Macedonians; 6 (3.1%) were the maintained relationships with Serbs and 2 (1%) were the maintained relationships with Turks. The ethnic characteristics were important in the friendship because every respondent was informed about his/her friend's ethnic belonging.

The Serb and 93.2% out of the Bulgarians (N=41) maintained friendships only with the members of the own ethnic group. 6.8% out of the Bulgarians (N=3) and one Macedonian maintained friendships with people from the own ethnic group and with people from another ethnic group. Two Macedonians and the Turkish woman maintained friendships with people from the own ethnic group and with people from two other ethnic groups. One Macedonian maintained friendships with three Macedonians and one Bulgarian; two Macedonians maintained friendships with two Macedonians, one Bulgarian and one Serb. One Turk maintained friendships with two Turks, one Bulgarian and one Macedonian. The studied foreigners had 8 Macedonian friends, 6 Serb friends, and 2 Turk friends. *The members of the ethnic majority in Bulgaria maintained friendships mainly with the members of the ethnic in-group, while the people from the ethnic minorities maintained most frequently friendships with members of the ethnic out-groups* ( $\chi_{[6]}^2=41.439$ ;  $p=0.000$ ).

12.5% out of the studied Macedonians (1 out of 8 relationships) perceived their friends as foreigners. All respondents of the other ethnic groups (179 relations with friends Bulgarians, 6 relations with friends Serbs, 2 relations with friends Turks) did not perceived their friends as foreigners ( $\chi_{[3]}^2=23.495$ ;  $p=0.000$ ). 12.5% out of the studied Macedonians (1 out of 8 relationships) were perceived by their friends as foreigners. 100% of the respondents of the other ethnic groups (179 relations with friends Bulgarians, 6 relations with friends Serbs, 2 relations with friends Turks) were not perceived by their friends as foreigners ( $\chi_{[3]}^2=23.495$ ;  $p=0.000$ ). *The Macedonians were the studied ethnic group whose members maintained the most frequently friendships with the members of the ethnic out-groups.*

62.5% out of the studied Macedonians (5 out of 8 relationships) perceived their friends as a man/a woman (through the gender belonging). The majority of the respondents of the other ethnic groups (148 out of 179 relations with friends Bulgarians, 4 out of 6 relations with friends Serbs, 2 relations with friends Turks) did not perceived their friends through the gender belonging ( $\chi_{[3]}^2=11.187$ ;  $p=0.011$ ).

All the respondents-Turks (2 relationships) perceived their friends as neighbours, relatives or through some dominant personal characteristics. The majority of the respondents of the other ethnic groups (157 out of 179 relations with friends Bulgarians, 8 relations with friends Macedonians, 6 relations with friends Serbs) did not perceived their friends as neighbours, relatives or through some dominant personal characteristics ( $\chi_{[3]}^2=16.215$ ;  $p=0.001$ ).

In 66.7% of the friendship relations with Serbs, the politics was discussed (4 out of 6 relations). In the majority of the friendships with the other ethnic groups, the politics was

not discussed (145 out of 179 relations with friends Bulgarians, 7 out of 8 relations with friends Macedonians, 2 relations with friends Turks) ( $\chi_{[3]}^2=9.061$ ;  $p=0.028$ ).

All respondents (131 relationships) who shared some personal problems did not perceive their friends as foreigners. 3.1% out of the respondents (2 out of 65 relationships) who did not share any personal problems perceived their friends as foreigners. *The respondents kept themselves in control not to reveal themselves towards their friends - foreigners* ( $\chi_{[1]}^2=4.072$ ;  $p=0.044$ ).

#### THE RELIGIOUS CHARACTERISTICS OF THE FRIENDSHIP NETWORK

44 out of the respondents (89.8%) were Christians and 5 out of the respondents (10.2%) were Muslims. 173 (88.3%) were the maintained friendships with Christians. 14 (7.1%) were the maintained friendships with Muslims. 8 (4.1%) were the maintained friendships with atheists. 1 (0.5%) was the maintained friendship with a person whose religion was not known by his/her friend. The religion was important in the friendship because almost all respondents were informed about his/her friend's religion.

79.5% out of the Christians (N=35) and two of the Muslims maintained friendships only with people confessing their own religion. 13.6% out of the Christians (N=6) and no one Muslim maintained friendships with people confessing their own religion and with people confessing another religion. 3 out of the Christians and one Muslim maintained friendships with people confessing their own religion and with people confessing two other religions. One Muslim and no one Christian maintained friendships with people confessing the same religion and with people confessing three other religions; one Muslim and no one Christian maintained friendships with people confessing different of his/her religions. *The people from the ethnic majority in Bulgaria maintained friendships mainly with people confessing the same religion, while the people from the ethnic minorities more frequently maintained friendships with people confessing different religions* ( $\chi_{[4]}^2=20.167$ ;  $p=0.000$ ).

In the majority relations with friends whose religion was not known, in the majority friendships with atheists and Muslims, the friends talked about other countries, other people and their way of life<sup>1</sup>, and for travels<sup>2</sup>. In the majority friendships with Christians, the friends did not talk about other countries, other people and their way of life<sup>3</sup>, or about travels<sup>4</sup>.

#### THE OCCUPATIONAL CHARACTERISTICS OF THE FRIENDSHIP NETWORK

36 out of the respondents studied (73.5%). 4 out of the respondents worked (8.2%). 2 out of the respondents were unemployed (4.1%). One respondent was a pensioner (2%). 6 out of the respondents studied and worked (12.2%).

106 out of the investigated 196 friendships (54.1%) were between people who studied. 60 (30.6%) friendships were between people who worked. 14 (7.1%) friendships were between people who were unemployed. 8 (4.1%) friendships were between people who were pensioners. 8 (4.1%) friendships were between people who studied and worked. The

<sup>1</sup> 1 relation with a friend whose religion was not known; 4 out of 8 friendships with atheists and 9 out of 14 friendships with Muslims;

<sup>2</sup> 1 relation with a friend whose religion was not known; 4 out of 8 friendships with atheists and 11 out of 14 friendships with Muslims;

<sup>3</sup> 140 out of 173 friendships with Christians;  $\chi_{[3]}^2=20.901$ ;  $p=0.000$ ;  $\Phi=0.327$ ;

<sup>4</sup> 109 out of 173 friendships with Christians;  $\chi_{[3]}^2=11.037$ ;  $p=0.012$ ;  $\Phi=0.237$ ;



occupation was important in the friendship because every respondent was informed about his/her friend's occupation.

33.3% (N=12) out of the students and two workers maintained friendships with people having the same occupation like theirs. 22.2% (N=8) out of the students and one unemployed man, and one pensioner maintained friendships with people having the same occupation like theirs and with people having a different occupation. 30.6% (N=11) out of the students and two workers maintained friendships with people having the same occupation like theirs and with people having two different occupations. 11.1% (N=4) out of the students, one unemployed man and three respondents who studied and worked maintained friendships with people having the same occupation like theirs and with people having three different occupations. One student and one respondent who studied and worked maintained friendships with people having different occupations. *The respondents who studied and worked maintained friendships with members of the most various social groups* ( $\chi_{1161}^2=34.687$ ;  $p=0.004$ ).

61.7% out of the respondents (29 out of 47 relations) who perceived their friends as students were perceived by their friends as young people. 70.5% out of the respondents (105 out of 149 relations) who did not perceive their friends as students were not perceived by their friends as young people. *The students frequently maintained friendships with young people* ( $\chi_{111}^2=15.822$ ;  $p=0.000$ ). All respondents (2 relations) who perceived their friends as foreigners were perceived by their friends as students. 69.1% out of the respondents (134 out of 194 relations) who did not perceive their friends as foreigners were not perceived by their friends as students. *The investigated students had a few friends foreigners who studied in the South-West University* ( $\chi_{111}^2=4.367$ ;  $p=0.037$ ).

In 62.5% out of the relations with friends who were pensioners (5 out of 8 relations), the respondents were perceived as neighbours, relatives or through their dominant personal qualities. In the majority of the relations with friends who studied, worked, or were unemployed people (100 out of 106 relations with friends who studied; 51 out of 60 relations with friends who worked; 11 out of 14 relations with friends who were unemployed; 7 out of 8 relations with friends who studied and worked) the respondents were not perceived as neighbours, relatives or through their dominant personal qualities ( $\chi_{141}^2=24.603$ ;  $p=0.000$ ). In 62.5% out of the relations with friends who were pensioners (5 out of 8 relations), the respondents perceived their friends as neighbours, relatives or through their dominant personal qualities. In the majority of the relations with friends who studied, worked, or were unemployed people (101 out of 106 relations with friends who studied; 50 out of 60 relations with friends who worked; 11 out of 14 relations with friends who were unemployed; 7 out of 8 relations with friends who studied and worked) the respondents did not perceive their friends as neighbours, relatives or through their dominant personal qualities ( $\chi_{141}^2=26.584$ ;  $p=0.000$ ). *The biggest part of the friendships between pensioners was between neighbours or relatives.*

In 50% of the relations with unemployed friends (7 out of 14 relations) and in 87.5% of the friendships with pensioners (7 out of 8 relations), the politics was discussed. In the majority of relations with friends who studied and worked (94 out of 106 relations with friends who studied; 48 out of 60 relations with friends who worked; 7 out of 8 relations with friends who studied and worked at the same time), the politics was not discussed ( $\chi_{141}^2=36.065$ ;  $p=0.000$ ). *The politic themes were related to the unemployed people and pensioners' economical problems.*

## THE AGE CHARACTERISTICS OF THE FRIENDSHIP NETWORK

The respondents did not indicate the age of 8 of their friends. Two respondents did not indicate their age. We collected the date for the age of 188 friends-alter and 47 friends -egos. The age was less important in the friendship than the other discussed factors because more respondents were not informed about his/her friend's age than about his/her friend's other characteristics like the ethnic belonging, the occupation and the religion.

The friends-alter were from 16 to 84 years old (37 friends were from 15 to 20 years old – 19.7%; 122 friends were from 21 to 35 years old – 64.9%; 29 friends were from 36 to 84 years old – 15.4%), the respondents were from 18 to 63 years old (8 respondents were from 15 to 20 years old - 17%; 33 respondents were from 21 to 35 years old – 67.3%; 6 out of the respondents were from 36 to 63 years old – 12.8%).

20 respondents maintained friendships only with people from the same age group. 18 respondents maintained friendships with people from the same age group and with people from another age group. 9 respondents maintained friendships with people from the same age group and with people from two other age groups. *The age of the respondents was not related to their preferences for friendship with some age groups* ( $\chi_{[8]}^2=13.163$ ;  $p=0.106$ ).

The elderly people more frequently perceived their friends as neighbours, relatives or through their dominant personal qualities than the young people did (in 31% out of the friendships with people from 36 to 84 years old or in 9 out of 29 relations; in 8.2% out of the friendships with people from 21 to 35 years old or in 10 out of 122 relations; in 10.8% out of the friendships with people from 15 to 20 years old or in 4 out of 37 relations) ( $\chi_{[2]}^2=11.468$ ;  $p=0.003$ ). The elderly people more frequently were perceived by their friends as neighbours, relatives or through their dominant personal qualities that the young people were (in 37.9% out of the friendships with people from 36 to 84 years old or in 11 out of 29 relations; in 5.7% out of the friendships with people from 21 to 35 years old or in 7 out of 122 relations; in 13.5% out of the friendships with people from 15 to 20 years old or in 5 out of 37 relations) ( $\chi_{[2]}^2=22.686$ ;  $p=0.000$ ). *The elderly people like the pensioners more frequently had friends among their neighbours and relatives that the young people did.*

The elderly people more frequently talked about the politics with their friends than the young people did (in 69% out of the friendships with people from 36 to 84 years old or in 20 out of 29 relations; in 9.8% out of the friendships with people from 21 to 35 years old or in 12 out of 122 relations; in 18.9% out of the friendships with people from 15 to 20 years old or in 7 out of 37 relations) ( $\chi_{[2]}^2=49.919$ ;  $p=0.000$ ).

## THE GENDER CHARACTERISTICS OF THE FRIENDSHIP NETWORK

11 out of the respondents were the men (22.4%) and 38 were the women (77.6%). 60 out of their friends were the men (30.6%) and 135 were the women (68.9%). The gender of one of 196 alters was not indicated. 22 out of the respondents maintained friendships only with people from the same gender. *The gender of the respondents was not related to their preferences towards friendships with people from the same or the other gender* ( $\chi_{[3]}^2=7.248$ ;  $p=0.064$ ).

69.6% out of the investigated women (94 out of 135 relations) went out with their friends to the cinema, parties and other places. 60% out of the investigated men (36 out of 60 relations) did not go out with their friends to the cinema, parties and other places. *The women went out more frequently with their friends to the cinema and parties than the men did* ( $\chi_{[1]}^2=15.262$ ;  $p=0.000$ ).

*The homophily was a relation between two actors who belong to the same group/ category (Ferrand, & Federico de la Rúa, 2006). The strongest was the homophily according to the ethnic belonging, then according the religious confession, the gender, the age and the most heterogeneous were the friendships according to the occupation.*

#### THE DURATION OF THE ACQUAINTANCE— ANTIQUITY

189 (96.4%) friendships were between people who have known each other from more than one year (10 friendships dated from one year; 20 friendships dated from two years; 37 friendships dated from three years; 3 friendships dated from four years; 10 friendships dated from five years; 7 friendships dated from six years; 10 friendships dated from seven years; 8 friendships dated from eight years; 3 friendships dated from nine years; 12 friendships dated from ten years; 3 friendships dated from eleven years; 2 friendships dated from twelve years; 2 friendships dated from thirteen years; 11 friendships dated from fifteen years; 5 friendships dated from sixteen years; 1 friendship dated from seventeen years; 4 friendships dated from eighteen years; 2 friendships dated from nineteen years; 9 friendships dated from twenty years; 3 friendships dated from twenty one years; 1 friendship dated from twenty two years; 1 friendship dated from twenty five years; 7 friendships dated from thirty years; 6 friendships dated from thirty five years; 1 friendship dated from forty years; 2 friendships dated from forty five years; it was indicated that 9 friendships dated from more than one year without any specification of the period) and 5 (2.6%) friendships were between people who have known each other from less than one year, but more than one month (1 friendship dated from three months, 1 friendship dated from six months, 1 friendship dated from nine months, 1 friendship dated from ten months, 1 friendship dated from eleven months). The mean age of the respondents was 25.81 years old (SD=10.4 years old). *The most respondents maintained friendships from childhood days and they indicated namely these friends as close, they though of them firstly.* The antiquity of the relation is a condition for the increase of the interchange, the reinforcement of the confidence and of the investments (time, emotional attachment, money, etc.).

Table 3. According to the respondents, their friends perceived them as:

Category of perception	Number of friends who perceived the respondents in this way N=196	Percentage of friends who perceived the respondents in this way <sup>5</sup>	
Friend	185	94.4%	
Young person	70	35.7%	
Student	62	31.6%	
Man/woman	38	19.4%	
An inhabitant of a city	9	4.6%	
European	7	3.6%	
Foreigner	2	1.02%	
Other N=24; 12.2%	Colleague	2	1.02%
	Neighbour	8	4.1%
	Relative	7	3.6%
	Personal qualities	5	2.6%
	A loved person	1	0.5%
	A familiar person	1	0.5%

<sup>5</sup> The summarized percentages were most than 100, because the respondents provided more than one answer, one respondent provided maximum 4 answers.

According to almost all of respondents, their friends perceived them simply as friends. 1/3 out of the respondents considered that their friends perceived them as young people (the respondents' average age was 25.81 years old, SD=10.4 years old) and as students (39 out of the respondents were students). A big deal among the friendships was between fellow-students. 1/5 out of the respondents considered that the gender belonging dominated their friends' perception. Very few friends (one out of 25) were perceived as relatives, very few were the neighbours (one out of 25) and the colleagues among the friends, that is 8.67% out of the investigated friendships according to the perceptions of the alters about the ego were polyvalent – several roles were presented in the same relationship between the two actors. *The respondents indicated mainly objective characteristics, not personal qualities, when they defined how their friends perceived them.*

Table 4. The respondents perceived their friends as:

Category of perception		Number of perceived friends in this way N=196	Percentage of perceived friends in this way <sup>6</sup>
Friend		180	91.8%
Young person		77	39.3%
Student		47	23.98%
Man/woman		35	17.9%
An inhabitant of a city		12	6.1%
European		3	1.5%
Foreigner		2	1.02%
Other N=24; 12.2%	Colleague	2	1.02%
	Neighbour	8	4.1%
	Relative	11	5.6%
	Personal qualities	2	1.02%
	A loved person	1	0.5%

Almost all of the respondents perceived their friends simply as friends. More than 1/3 out of the respondents perceived their friends as young people and as students. A big deal among the friendships was between fellow-students. 1/5 of the respondents perceived their friends through the gender belonging. Very few respondents (one out of 20) perceived their friends as relatives, very few were the neighbours (one out of 25) and colleagues among the friends, that is 10.71% out of the investigated friendships according to the perceptions of the ego about the alters were polyvalent – several roles were presented in the same relationship between the two actors. *The respondents indicated mainly objective characteristics, not personal qualities, when they defined how they perceived their friends. The territorial and the European identity did not dominate in the perception of the friends.*

<sup>6</sup> The summarized percentages were most than 100, because the respondents provided more than one answer, one respondent provided maximum 4 answers.

## RECIPROCITY OF THE PERCEPTIONS IN THE FRIENDSHIP

91.5% out of the respondents (43 out of 47 relations) who perceived their friends as students were perceived by their friends as students, too. 87.2% out of the respondents (130 out of 149 relations) who did not perceive their friends as students were not perceived by their friends as students, too ( $\chi_{[1]}^2=102.426$ ;  $p=0.000$ ).

84.4% out of the respondents who perceived their friends as young people (65 out of 77 relations) were perceived by their friends as young people, too. 93.3% out of the respondents who did not perceive their friends as young people (111 out of 119 relations) were not perceived by their friends as young people ( $\chi_{[1]}^2=120.734$ ;  $p=0.000$ ).

79.2% out of the respondents (19 out of 24 relations) who perceived their friends as neighbours, relatives or through their dominant personal qualities were perceived by their friends as neighbours, relatives or through their dominant personal qualities. 97.1% out of the respondents (167 out of 172 relations) who did not perceive their friends as neighbours, relatives or through their dominant personal qualities were not perceived by their friends as neighbours, relatives or through their dominant personal qualities ( $\chi_{[1]}^2=113.985$ ;  $p=0.000$ ).

All respondents (2 relations) who perceived their friends as foreigners were perceived by their friends as foreigners. All respondents (194 relations) who did not perceive their friends as foreigners were not perceived by their friends as foreigners ( $\chi_{[1]}^2=196$ ;  $p=0.000$ ).

*Usually the friends had the same occupation and the same social status. The friends were people having the same characteristics. There was reciprocity in the respondents' notions about the fact how they perceived their friends and how their friends perceived them.*

All respondents (3 relations) who perceived their friends as Europeans were perceived by their friends as Europeans. 97.9% out of the respondents (189 out of 193 relations) who did not perceive their friends as Europeans were not perceived by their friends as Europeans. There was reciprocity of the respondents' notions about one's European identity and the friend's European identity ( $\chi_{[1]}^2=82.259$ ;  $p=0.000$ ). *The European identity was not yet a part of the respondents' identity during the time when this study was carried out – in December 2006.* 50% out of the respondents (1 out of 2 relations) who perceived their friends as foreigners were perceived by their friends as Europeans. 96.39% out of the respondents (188 out of 194 relations) who did not perceive their friends as foreigners were not perceived by their friends as Europeans. *The European identity unified the friends to find more common things between them when they had different ethnic identities* ( $\chi_{[1]}^2=12,648$ ;  $p=0,000$ ).

58.3% out of the respondents (7 out of 12 relations) who perceived their friends as inhabitants of a city considered that their friends perceived them as inhabitants of a city. 98.9% out of the respondents (182 out of 184 relations) who did not perceive their friends as inhabitants of a city considered that their friends did not perceive them as inhabitants of a city. There was reciprocity of the respondents' notions about one's territorial identity and the friend's territorial identity ( $\chi_{[1]}^2=84.269$ ;  $p=0.000$ ). *The territorial identity did not dominate in the respondents' identity.* 75% out of the respondents who perceived their friends as inhabitants of a city (9 out of 12 relations) were perceived by their friends as young people. 65.2% out of the respondents (120 out of 184 relations) who did not perceive their friends as inhabitants of a city were not perceived by their friends as young people. *The territorial identity dominated more in the young people's notions about their friends than it did in the elderly peoples' notions about their friends* ( $\chi_{[1]}^2=7.796$ ;  $p=0.005$ ).

8.3% out of the respondents (1 out of 12 relations) who perceived their friends as inhabitants of a city were perceived by their friends as foreigners. 99.5% out of the respondents (183 out of 184 relations) who did not perceive their friends as inhabitants of a city were not perceived by their friends as foreigners. *The territorial identity was related to the ethnic identity, but the connection between them was weak* ( $\chi_{11}^2=6.768$ ;  $p=0.009$ ). According to Moser and Lidvan (1992), a person feels comfortable if the quarter he/she is living in is a bigger one, if he/she likes the population of this quarter, if he/she frequently meets the other people living in this quarter, if he/she has some friends living in this quarter and if he/she has a strongly expressed territorial identity.

88.6% out of the respondents (31 out of 35 relations) who perceived their friends as a man/a woman were perceived by their friends as a man/a woman. 95.7% out of the respondents (154 out of 161 relations), who did not perceive their friends as a man/a woman were not perceived by their friends as a man/a woman. There was reciprocity in the respondents' notions about the fact how they perceived their friends and how their friends perceived them ( $\chi_{11}^2=130.49$ ;  $p=0.000$ ). 65.7% out of the respondents (23 out of 35 relations) who perceived their friends as a man/a woman were perceived by their friends as young people. 68.9% out of the respondents (111 out of 161 relations) who did not perceive their friends as a man/a woman were not perceived by their friends as young people. *The perception of the gender identity more dominated in the young people's friendships than it did in the elderly people's friendships* ( $\chi_{11}^2=14.775$ ;  $p=0.000$ ). 83.9% out of the respondents who perceived their friends simply as friends (151 out of 180 relations) were not perceived by their friends as a man/a woman. 56.3% out of the respondents who did not perceive their friends simply as friends (9 out of 16 relations) were perceived by their friends as a man/a woman. *In the friendships where the gender identity dominated, the relations developed in something more than the friendship was* ( $\chi_{11}^2=15.147$ ;  $p=0.000$ ).

Table 5. Frequency of the contacts between friends:

Frequency of the contacts during the past month	Number of friends N=196	Percentage of friends
Meetings 2-3 times per week	77	39.3%
Every day meetings	44	22.4%
Meetings once per week	25	12.8%
Meetings once per month	20	10.2%
Phone calls or messages, no meetings	15	7.7%
Meetings 2-3 times per month	13	6.6%
Meetings once per week and phone calls or messages	1	0.5%
Meetings 2-3 times per month and phone calls or messages	1	0.5%

More than a half of the respondents met their friends every day or 2-3 times per week, that means frequent interactions. The other indicators for the intensity of the relationships were the long standing 96.4% out of the friendships, as well as the big number of the discussed themes with one and the same friend.

Table 6. The respondents defined their friendships in the following ways:

Categories of the relationships	Number of friends the respondents maintained such relations with N=196	Percentage of friends the respondents maintained such relations with <sup>7</sup>
Share personal problems	131	66.8%
Counsel with him/her	125	63.8%
Go out together to the cinema, parties...	119	60.7%
Speak about the plans for the future	113	57.7%
Speak about travels	80	40.8%
Frequently feed together	67	34.2%
Work/study together	49	25%
Speak about other countries, other people and their manner of life	47	23.98%
Speak about the politics	39	19.9%
Live together	27	13.8%

More than a half of the friendships were characterized by the sharing of the personal problems, counseling, going out together, and speaking about the plans for the future. In 1/3 out of the investigated friendships, the conversations about travels and the feed together were typical. 1/4 out of the friends worked or studied together. 1/5 out of the friends have spoken about other countries, other people and their manner of life, as well as about the politics. 1/10 out of the friends have lived together, 29 out of the respondents (59.2%) were regularly students and had room-mates who also were students.

Table 7. Scope of the friendships:

Number of the categories in the friendships	Number of such relationships N=196	Percentage of such relationships <sup>8</sup>
1	23	11.7%
2	25	12.8%
3	32	16.3%
4	43	21.9%
5	23	11.7%
6	21	10.7%
7	15	7.7%
8	8	4.1%
9	6	3.1%

<sup>7</sup> The summarized percentages were most than 100, because the respondents provided more than one answer, one respondent provided maximum 9 answers.

<sup>8</sup> The summarized percentages were most than 100, because the respondents provided more than one answer, one respondent provided maximum 9 answers.

The most frequently the friendships were characterized by four categories: sharing of the personal problems, counseling, going out together, and speaking about the plans for the future.

#### DISCUSSION

The hypothesis of the research that the most friends share a lot of common features – they have the same status, they belong to the same social group (ethnic, professional, religious, etc.), they share their opinions – was proved. The friends were people having the same characteristics. There was reciprocity in the respondents' notions about the fact how they perceived their friends and how their friends perceived them – as men/women, as young people, as inhabitants of a city, as neighbours, as relatives, through dominant personal qualities, as foreigners, as Europeans. Usually the friends had the same occupation and the same social status. The respondents who studied and worked maintained friendships with members of the most various social groups. The students frequently maintained friendships with young people. The elderly people like the pensioners more frequently had friends among their neighbours and relatives that the young people did. The biggest part of the friendships between pensioners was between neighbours or relatives. The elderly people more frequently talked about the politics with their friends than the young people did. The politic themes were related to the unemployed people and pensioners' economical problems. The most respondents maintained friendships from childhood days and they indicated namely these friends as close, they thought of them firstly.

The hypothesis that the ethnic, territorial, European and gender identity influence the choice of friends and the development of the friendship was proved, too. The respondents indicated mainly objective characteristics, not personal qualities, when they defined how their friends perceived them and when they defined how they perceived their friends.

The ethnic characteristics were important in the friendship because every respondent was informed about his/her friend's ethnic belonging. The members of the ethnic majority in Bulgaria maintained friendships mainly with the members of the ethnic in-group, while the people from the ethnic minorities maintained most frequently friendships with members of the ethnic out-groups. The respondents kept themselves in control not to reveal themselves towards their friends – foreigners. The European identity was not yet a part of the respondents' identity at the end of 2006, the European identity did not dominate in the perception of the friends, but the European identity unified the friends to find more common things between them when they had different ethnic identities. The territorial identity was related to the ethnic identity, but the connection between them was weak.

The people of the ethnic majority in Bulgaria maintained friendships mainly with people confessing the same religion, while the people from the ethnic minorities more frequently maintained friendships with people confessing different religions. The religion was important in the friendship because almost all respondents were informed about his/her friend's religion. The friend's different religion impels the members of the ethnic majority to speak about other countries, other people and their way of life, or about travels.

The territorial identity did not dominate in the respondents' identity. The territorial identity dominated more in the young people's notions about their friends than it did in the elderly peoples' notions about their friends.



In the friendships where the gender identity dominated, the relations developed in something more than the friendship was. The perception of the gender identity more dominated in the young people's friendships than it did in the elderly people's friendships. The women went out more frequently with their friends to the cinema and parties than the men did.

The analysis of the friendship network is a method that could be successfully used to clarify the factors that influence the choice of friends.

## REFERENCES

- Borgatti, S.P., Everett, M.G. & Freeman, L.C. (1999). UCINET 6.0 Version 1.00. Natick, Analytic Technologies.
- Brueckner, J. K. (2006). Friendship Networks. *Journal of Regional Science*, 46; No. 5; 847–865.
- Cuéllar, I., Nyberg, B., Maldonado, R. E. & Roberts, R. E. (1997). Ethnic Identity and Acculturation in a Young Adult Mexicanorigin Population. *Journal of Community Psychology*, Vol. 25; No. 6; 535–549.
- Ferrand, A. & De Federico de la Rúa, A. (2006). Méthodes d'analyse des réseaux sociaux. En Caselli, G., Vallin, J. y Zunsch, G. (coords.): *Encyclopédie de démographie: analyse et synthèse. Volume VIII. Observation, méthodes auxiliaires, enseignement et recherche*. Paris : INED; 459-495.
- Haynie, D. L. & D. C. Payne. (2006). Race, Friendship Networks, and Violent *Delinquency*. *Criminology*, vol. 44, No. 4; 775-805.
- Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and youth adults from diverse groups. *Journal of Adolescent Research*, 7; 156-176.
- Moser, G. & Lidvan, P. (1992). Environnement et sentiment d'insécurité. En Bernard, Y. y Segaud, M. (coords.): *La ville inquiète*. Paris, :Editions de l'Espace Européen; 53-66.
- Testo, R. Friendship and Friends: The Study of Friendship and the Rules to Maintain It, <http://people.wcsu.edu/mccarneyh/acad/testo.html>, Retrieved on 24 March 2008].
- Todorova, L. (2004): Bulgarian Identity in the European Cultural and Educational Sphere, en Tsvetanova-Churukova, L., Dimitrov, D. Kr., Hristova, S., Dimitrov, D. G., Georgieva, V., Stancheva-Popkostadinova, V., Stoyanova, T., Levunlieva, M. Y Bouresh, M. (coords.): *The Educational Heritage and Dialogue in the European Pedagogical Space*. Blagoevgrad, University Press "Neofit Rilski"; 311-316.
- Tsai, J. H.-C. (2006). Xenophobia, Ethnic Community, and Immigrant Youths' Friendship Network Formation. *Adolescence*, vol. 41, No. 162, Summer 2006; 285-298.
- Valk, A. & Karu, K. (2001). Ethnic Attitudes in Relation to Ethnic Pride and Ethnic Differentiation. *Journal of Social Psychology*, Vol. 141, No. 5; 583–601.
- Verkuyten, M. (2002). Ethnic Attitudes among Minority and Majority Children: The Role of Ethnic Identification, Peer Group Victimization and Parents. *Social Development*, Vol. 11, No. 4; 558-270.
- (2003). Ethnic In-group Bias among Minority and Majority Early Adolescents: The Perception of Negative Peer Behaviour. *British Journal of Developmental Psychology*, 21; 543–564.

