

Original Article

COMPARATIVE SOCIOMETRIC PROFILE OF REGULAR ALCOHOL DRINKING ADOLESCENTS

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Summary

Jacob Moreno defined sociometry as "the inquiry into the evolution and organization of groups and the position of individuals within them". Every person composes their own group of significant others and the social relations in this dominated by the person group of the most important people in their life is called sociometric profile. The sociometric profile provides an opportunity to reveal social bonds, dependences and influences that impact one's behavior. The aim of the study was to describe the sociometric profile of regularly drinking adolescents as a result from comparison with the sociometric profile of non-drinking adolescents. We conducted a survey among 903 students (aged 15-19), by means of a self-administered questionnaire about relations with father, mother, friends and lovers. Of these, 169 identified themselves as regular drinkers (RDAs) and 279 - as abstainers (NDAs). We compared these groups to reveal the comparative sociometric profile of drinking adolescents. It was found that RDAs were significantly more likely to be: 1) highly dependent on their lovers (OR=1.6); 2) detached from their mothers (OR=4.55); 3) in ambivalent relations with their friends; 4) without significant differences in relations with their fathers. It seems that the Stars of RDAs are their lovers, the Isolates are their mothers and friends are their ambivalent Mutual Choice. This comparative sociogram suggests that lovers are likely to be the most influencing person among RDAs' significant others and intimate relations might be the main target in alcohol prevention programs.

Key words: sociometry, significant others, adolescence, alcohol

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Introduction

Recently it has become increasingly clear that risk behavior emerges and persists in the social environment of significant others (parents, friends and lovers). The association between significant others' risk behavior and risk behavior of adolescents is well known, but still not well explained.

Parent's alcohol drinking is found to associate with increased risk of alcohol consumption among adolescents [1-3] and the role of parents is explained by means of the social learning theory [4-7] and the social control theory [7, 8]. The Social learning

theory emphasizes on exposure to alcohol-using role models and explains the positive association between parental alcohol use and drinking in their children as evidence of parental modeling [1, 9-11]. The Social control theory focuses on the constraining function of social bonds and explains adolescent alcohol use with poor parenting style [12-15].

Peer influence is considered to be a major cause of alcohol consumption among adolescents [16-18] in forms of modeling (i.e., adolescents adapt their drinking behavior to the drinking behavior of peers) and persuasion (i.e., adolescents are being encouraged or persuaded to adapt their alcohol consumption) [19]. Many studies found many similarities in drinking behavior in peer groups [20-22] that are often interpreted as the outcome of peer influence processes and close friends are found to affect initiation and persistence of alcohol use [18].

Social learning and social control are in fact manifestations of social dominance (unilateral social relations). The unilateral parental control is mainly represented by parental monitoring and consistent discipline, which have been shown to reduce adolescents' alcohol use [13-15] and/or delay initiation of alcohol use [1, 14]. Poor parental monitoring and inconsistent discipline have been found to associate with adolescents' alcohol use [10, 23]. Friendship can also be unilateral - some adolescents consider himself or herself friends of a peer, without this assumption being reciprocated. In early adolescence, respondents without a reciprocal friend are affected more by their desired friends than by the other members of the group [24] and respondents are most likely to adopt a friend's drinking behavior when the friend in question is a unilateral friend with a higher status [25].

In middle and late adolescence, youths tend to shift from unilateral to bilateral (mutual) relations with their friends and parents. In early adolescence [14] parental discipline is a dominant type of positive parenting style. Later, relations shift to bilateral interactions [26], based on communication, nurturance, and support. Emancipation of adolescents seems to be a universal process of establishment and validation of their own personality. In this regard, it is interesting to know whether there are differences in interaction and relations with significant others in adolescence that could be associated with increased chance of regular alcohol drinking. The aim of the study was to compare regularly drinking and abstaining adolescents

against the background of relations with significant others.

Materials and Methods

Conception

Jacob Moreno [27] defined sociometry as “the inquiry into the evolution and organization of groups and the position of individuals within them”. Sociometric explorations reveal the hidden structures that give a group its form: the alliances, the subgroups, the hidden beliefs, the forbidden agendas, the ideological agreements, the “stars” of the show. According to Moreno, “there is a deep discrepancy between the official and secret behavior of members”. Moreno advocates that before any “social program” can be proposed, the sociometrist should “take into account the actual constitution of the group”. Sociograms are the main tool of sociometry in analyzing choices or preferences within a group [28, 29]. They can diagram the structure and patterns of group interactions. A sociogram can be drawn on the basis of many different criteria: social relations, channels of influence, lines of communication, etc. Those points on a sociogram (social diagram) that have many choices are called Stars. Those with few or no choices are called Isolates. Individuals who choose each other are known to have made a Mutual Choice. One-Way Choice (unilateral relations) refers to individuals who choose someone but the choice is not reciprocated. Cliques are groups of three or more people within a larger group who all choose each other (Mutual Choice).

Moreno has analyzed the group as social fact, describing social value of the personalities in it, but some groups are formed by personal choices around a central dominating person. Everyone forms such a group of significant others that consists of family members and close friends. Significant others are positioned in a personal social environment, often called social capital – all the people that the person interacts with without making them close friends. Personal social environment is positioned into the general social environment – anonymous groups of people that form society and the rules that a person obeys. One can see these three groups as nested spheres with a person in their center, and this is the *socium* from a personal viewpoint. This personalized *socium* plays an important role for personal life style and quality of life. The description of the personalized *socium* can be defined as a sociometric profile with its three

parts: monocentric, dialogic and ideological. Unlike classical sociometric technique, a sociometric profile is attained using self-completed questionnaire about evaluations of, attitudes to and interactions with significant others. The sociometric profile describes the true position of the person in the group of his/her significant others, as seen by the studied person, and gives information about the social comfort of that person. If the person is a “Star” for his/her significant others, he/she could influence their behavior and would dominate their decisions. If someone of the significant others is a “Star”, the person is in a dependent position and will follow the Star's considerations when motivating his/her own behavior. By comparing the sociometric profiles of differently acting homogenous groups, an investigator could reveal social bonds, dependencies and influences that impact behavior of people with similar personalities. This is the fundamental basis of the comparative sociometric profile survey (CSPS).

As far as these considerations are applied to adolescence, one can easily find that sociometric profiles of different groups of adolescents with similar ideological (living in same society) and dialogic (studying in same school) features should vary only in their monocentric aspects (i.e., personality-driven relations with significant others) and so the CSPS can be limited to investigating the significant others.

Study design

All students in the 9th to 12th grade (age range 15-19 years) attending three secondary schools in Stara Zagora, Bulgaria were invited to participate in the survey. The study protocol was approved by the Ethics Committee for Clinical Research of the Medical Faculty, Trakia University, Stara Zagora, Bulgaria and the Regional Inspectorate of the Ministry of Education of Bulgaria. To increase response rate, the survey was conducted in class hours in cooperation with school authorities. The students were placed in a large room, and seated at a sufficient distance from each other to provide independent and anonymous answers to the questions. To provide maximum reliability of the data, the responses were collected in a sealed box and each student was free to refuse participation.

Participants

A total of 1077 students were invited to participate in this study. Of these, 1051 accepted to participate (consent rate 97.6%), and 903 filled

out the questionnaire correctly (response rate 83.8%). According to their answers, 169 students (18.72%) identified themselves as regular alcohol drinkers (RDAs), and 279 (30.9%) - as abstainers (NDAs). These groups were compared statistically.

Measurements

The self-completed questionnaire assessed model of drinking, description of personality, behavior of and mutual interactions with parents, friends and lovers.

Model of alcohol drinking were categorized into non-drinking (abstainers), casual drinking (social drinking only on special and rare occasions), and regular drinking (no need of special occasions to drink). As we studied drinking models (habits), we did not ask respondents to give details on the quantity and type of alcohol beverages consumed. Respondents reported their own usual type of drinking, as well as that of their parents and peers.

The sociometric profile was investigated by means of an original questionnaire, divided in four sections: assessments of the significant others' personalities, communication, relationships and interactions. The adolescents assessed their significant others by choosing positive (fascination, originality, friendliness, generosity, justice) and negative (selfishness, obstinacy, injustice) definitions. Communication was assessed as interesting, enjoyable, annoying, unpleasant, important, indifferent, insufficient/sufficient. Interactions were assessed in terms of love, understanding, misunderstanding, demanding, insulting, anger, hitting. Relationships were assessed as feelings of security, uncertainty, dependence, and support.

Data analysis

We compared RDAs and NDAs by means of descriptive statistics, χ -square test and logistic regression.

Results

RDAs were significantly more likely to have regularly drinking fathers, mothers, friends and lovers (Table 1). The magnitude of odd ratios (ORs) was highest among lovers followed by friends and mothers, and lowest among fathers.

Table 1. Regular drinking among significant others of RDAs and NDAs

	RDAs (n=169) % (SE)	NDAs (n=279) % (SE)	p value	OR	95% CI
My father drinks regularly	53.85 (3.83)	35.13 (2.86)	p<0.001	2.15	1.46-3.18
My mother drinks regularly	24.26 (3.30)	5.73 (1.39)	p<0.001	5.27	2.85-9.74
My friends drink regularly	67.46 (3.60)	23.30 (2.53)	p<0.001	6.82	4.46-10.44
My girlfriend/boyfriend drinks regularly	34.32 (3.65)	6.81 (1.51)	p<0.001	7.15	4.07-12.56

We found relatively small differences in the sociometric profile of significant others (Table 2). No significant differences were found in indicators about fathers. RDAs' mothers were found to be described by RDAs significantly less

likely as understanding and more likely as annoying and boring persons (OR=4.55), and these were all the significant differences we found about mothers.

Table 2. Significant differences in sociometric profile of RDA and NDA significant others

	RDAs (n=169) % (SE)	NDAs (n=279) % (SE)	p value	OR	95% CI
Mother					
My mother does not understand me	29.59±3 .51	18.28±2 .31	0.010	1.88	1.20-2 .94
To be with my mother is annoying and boring	11.83±2 .48	2.87±1 .00	0.001	4.55	1.96-0 .57
Lover					
My beloved person's opinion is important to me	57.23±3 .84	47.23±3.26	0.050	1.49	2.23-1.01
I badly need what my beloved person gives me	47.59±3 .88	36.17±3.13	0.050	1.60	2.40-1.07
Friends					
I have insulted my friends	16.57±2 .86	6.81±1 .51	0.010	2.72	1.47-5.04
I have hit my friends	27.22±3 .42	12 .19±1 .96	0.001	2.69	1.65-4 .41
My friends have hit me	15.38±2 .78	8 .24±1 .65	0.050	2.02	1 .11-3 .68
At every moment I can fully rely on at least one of my friends	82.84±2 .90	74.91±2 .60	0.050	1.62	1.01-2 .62
My friends often invite me to parties	56.80±3 .81	29.03±2 .72	0.001	3.21	2.16-4 .79

Only two significant differences were found in indicators about lovers (Table 2). The lovers' opinion was significantly more likely to be important for RDAs, and RDAs were significantly more likely to badly need their lovers.

The significant differences we found about friends were ambivalent (Table 2). RDAs were significantly more likely to insult and hit their friends, as well as to be hit by them. On the other hand, RDAs were more likely to feel being supported by their friends and invited to parties.

Discussion

Many studies have found that adolescent's alcohol consumption is affected by the alcohol

consumption of significant others [1-3, 16-18, 30, 31] and we replicated these findings. Although all the RDAs' significant others were more likely to drink regularly, as concerns OR values, fathers seemed to have minimal impact, at least 2.5 times less than mothers and 3 times less than friends and lovers in eventual induction of regular drinking pattern. The fathers' induction could not be explained by differences in conscious decisions resulting from social interaction, as we found no sociometric differences in the indicators for assessment of fathers.

Sociometric indicators about mothers, although limited in number, showed that mothers tended to be playing the role of Isolates and this corresponded with the association between

regular drinking in mothers and regular drinking in adolescents. Some authors suggest that parenting style can influence parental modeling, and adolescents model parent's substance use, if they had a relatively good or moderate relationship with that parent but did not model parent's use if the relationship with that parent is relatively poor [32]. This means that parent modeling is not a convincing explanation of drinking styles association between mothers and adolescents. Other authors have found that poor parent monitoring associates with adolescents' alcohol use [10, 23]. Since in middle and late adolescence child-parent relations shift to bilateral interactions [26], based on communication, nurturance, and support, our data suggest that perhaps regularly drinking mothers are less supporting and this might simultaneously predispose regular drinking in adolescents and personal detachment.

For RDAs, lovers were significantly more important and needed persons. This means that RDAs felt themselves more dependent on their lovers than NDAs. These findings, analyzed together with association between lovers' drinking and adolescents' drinking supposed a possible link between drinking and psychosocial dependence. We can propose that, in this case, modeling could be a conscious act, which provides homogeneity in support of intimacy and this process could be unilateral, as well as bilateral.

Comparative sociometry has revealed that RDA friendship is significantly more ambivalent than a NDA one. Relations with friends seemed to be more aggressive but also bilateral and close to notion Mutual Choice, as aggression is obviously less important than mutual attraction. Increased ambivalence of relations with friends, together with strong association between friends' drinking and adolescents' drinking suggest that decreased ability for building consistent friendships associates with regular drinking, and that drinking may serve as additional interpersonal bond.

Conclusions

Comparative sociometric profile of RDAs is distinctive with detachment with mother, ambivalent friendship and increased dependence on lovers as compared to NDAs. These changes in social bonds could be interpreted as signs of social discomfort and deviations in social relations. It seems that RDAs are less able to

build harmonious bilateral relations. This inability may predispose to increased psychological stress and may motivate, at least partially, alcohol consumption. Maybe some psychological help in building harmonious bilateral relations and interactions could decrease the need for alcohol, as a social bonding and a frustration-relief tool in adolescence.

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