

## The Exploration of Protective Factors on Prevention Working Children's Substance Abuse

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### Abstract

#### Background

Child labor is one of the challenges among most big cities in the world. In recent years, substance abuse among working, and street children has become a common phenomenon. Thus, in the present study, the protective factors affecting the prevention of substance abuse among Iranian working children were identified by using the social-ecological approach.

#### Materials and Methods

The participants included seventeen 8-15-year-old children who were the members of Imam Ali and Ilia non-governmental organizations (NGOs). Semi-structured in-depth interviews were used for data collection. Purposive sampling began in December 2015 and continued till data saturation in June 2016. Data were analyzed based on qualitative content-oriented analysis.

#### Results

Different protective factors were identified and classified at five levels of the social-ecological model. Four themes (belief, knowledge, attitude, skill) at the personal level, two themes (family and relatives) at the interpersonal level, two themes (governmental organizations and non-governmental organizations) at the organizational level, the class of living environment at the community level, and two themes (supportive policies and restrictive policies) at the public policies level were considered.

#### Conclusion

The protective factors affecting the prevention of substance abuse are related to personal, household, social, organizational, and public policy factors. Thus, personal and social empowerment, social participation and capacity building seem necessary to strengthen the protective factors which play a significant role in the prevention of substance abuse among Iranian working children.

**Key Words:** Child Labor, Protective Factors, Substance Abuse, Socio -Ecological Approach.

\*Please cite this article as: Esmaili Shahmirzadi S, Shojaeizadeh D, Taghdisi MH, Mohammadi E, Majlesi F, Sadeghi R. The Exploration of Protective Factors on Prevention Working Children's Substance Abuse. *Int J Pediatr* 2017; 5(9): 5655-66. DOI: [10.22038/ijp.2017.23644.1993](https://doi.org/10.22038/ijp.2017.23644.1993)

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Received date: Jun.10, 2017; Accepted date: Jul. 12, 2017

## 1- INTRODUCTION

Child labor is not a new phenomenon, as it has been prevalent around the world since the ancient times. This phenomenon emerged more than ever during the industrial revolution when children had to work up to 12 hours a day under dangerous conditions. Based on the definition of the International Labor Organization, the children below 18 years old who work at least 43 hours per week are categorized as "working children" (1). The statistics of the International Labor Organization in 2013 indicated that there were about 264 million working children ranged between 5-17 years old around the world. Most of these children (about 78 million) belonged to Asia and Oceania (2-4). However, there are not accurate statistics on the number of working children in Iran. It was only the unofficial statistics related to the last decade that estimated the number of working children in Tehran as 20,000 children (5). Most of these children belonged to low-income and immigrant families (6). The previous studies indicated that the majority of working children spend most of their times on streets by beggary, colportage or some other economic activities to support themselves and their families (7).

Thus, the lifestyle of this group of children made them attend the streets continually for a long time and for this reason, they could be exposed to the risk of substance abuse (7-9). Unfortunately, the problem of substance abuse among working, and street children has become a common phenomenon in developed and developing countries in recent years (7). Since changing some factors related to substance abuse is difficult and impossible, it is very important to identify and study the protective factors for planning some preventive policies, especially among those who are exposed to risk (10). Protective factors refer to the conditions or features which reduce the

person's chance for substance abuse (11, 12). Today, a failure has taken place in most interventions in the field of substance abuse prevention among working children (7). Perhaps, the lack of success in the plans and programs of substance abuse prevention is due to the fact that protective factors can have different effects on various groups of people, based on age, gender, ethnicity, culture and environment (11).

Thus, it seems that the identification of social-cultural determiners in substance abuse is necessary in order to achieve success in preventive plans (7). In this regard, many researchers emphasized the importance of personal, household, environmental and social factors in the prevention of substance abuse (13). Therefore, since the social-ecological approach considers the mutual effects of different factors at personal, household, peers and society levels (14). Social ecological model was introduced by Bronfenbrenner in 1970 (14, 15). The social ecological perspective assesses individuals' behavior within their social and physical environment. Social ecological factors include the interactive effects of various factors at individual, familial, and peer levels (16).

At the individual level, this model encompasses personal, biological, and psychological characteristics, such as age, gender, education level, occupation, knowledge, attitudes, skills, motivation, enjoyment, stigma, and others, which increase or reduce the possibility of the adoption of a behavior by the individual. The interpersonal level entails the person's social and familial interactions with family members, spouse, parents, friends, colleagues, and, generally, the surrounding people. At this level, the community's education and the enjoyment of support groups and encouraging factors can facilitate the change of behavior (17, 18).

At the organizational level, geographic and environmental factors, such as climatic conditions, population density, and access to recreational, sports, and welfare facilities are considered as determinants of behavior. At the community level, the social ecological model represents features, such as socio-economic status, ethnic and gender factors, media, and ethnic-racial discrimination. Public policies constitute the outermost layer of social ecological model that includes the policies, regulations, and rules that affect behavior. In this model, different levels influencing behavior have been considered as the layers that affect each other. The total of these factors and their mutual effects provide a comprehensive image of the effective factors in the change of behavior (19, 20). Social ecological model was selected as the theoretical framework of the study for the oriented-content analysis of qualitative interviews with the purpose of identifying the protective factors related to substance abuse among working children.

## **2- MATERIALS AND METHODS**

The present study was conducted based on a qualitative approach to oriented-content analysis during 2015 to 2016. The participants included 17 working children (7 males and 10 females) with the average age of  $10.7 \pm 1.89$  years old.

### **2-1. Participants**

Working children refer to those working on streets but returned to their families at the end of the day and took advantage of social services and facilities like school or relation with other social groups. According to the definition of the UNICEF (1984), these children were categorized as "children on the street" (21).

### **2-2. Setting of the study**

Furthermore, it should be noted that the working children participating in this study

were the members of Imam Ali and Ilia NGO organizations in Iran. These non-profit and non-governmental organizations began their activities in order to support the children exposed to risk, especially working children, and Deliver to them free training and supporting services. These training and supporting services include education, the distribution of a daily hot meal, health services, medical services, social work and psychology which have been working with the participation of compassionate volunteers since 10 years ago.

### **2-3. Inclusion and Exclusion criteria**

This study was conducted on the children without any kind of substance abuse, but there was at least one addicted person in their families (including father, mother, brother or sister). Further, the age range of 8-15 years, membership in Imam Ali and Ilia NGO organizations, a history of at least a three- month membership and a tendency to attend the study were regarded as other inclusion criteria in this study. Homeless children and runaway children, the children with aggressive behaviors, the children with behavioral-cognitive disorders (in the field of understanding the question), hearing and speech disorders (difficulty in establishing relationships) , and the children with the history of substance abuse were excluded from the study.

### **2-4. Data Collection**

In order to collect data, semi-structured in-depth interview were Conducted for 40 minutes. The present study included the purposive sampling first but as no new code was extracted in the last three interviews and data was saturated with seventeen interviews, the sampling was stopped. Interviews began with an open question and based on the data given by the participant, the question was raised in order to clarify the concept. The questions of next interviews were adjusted according

to the Children's responses. The questions raised for the purpose of this study included: how do you protect yourself in order not to be addicted? What factors can help your peers in order to avoid substance abuse?

### **2-5. Data analyses**

Data were simultaneously analyzed after they were collected by using the oriented-content analysis raised by Hsieh and Shannon (2005) (22). Since the researcher was not allowed to record the interviews, a colleague helped her with writing down the interviews. Then, after each interview, the content of the interviews was written word by word and after reviewing with them for several times, the process of coding began by using MAXQDA software. In the field of predicting the protective factors influencing the prevention of substance abuse among working children, 170 initial codes were categorized Based on socio-ecological approach. The criteria of transferability, dependability and conformability raised by Linclon and Guba (1985) were used to study the validity of the qualitative data (23)

### **2-6. Ethical considerations**

Before the implementation of this study, a permission was taken from the ethics Committee of Tehran University of Medical Sciences (TUMS). The authorization letter was submitted to the managers of Imam Ali and Ilia non-governmental organizations on behalf of the vice chancellor for research at TUMS. After receiving the managers' permission, the researcher introduced him and the research objectives simply and asked the participants to deliver the consent form to their parents or legal guardians in order to fill out and hand over the form. In the consent form, the research objectives were clearly explained. The parents were also asked to announce their agreement or disagreement on recording and taking

notes. They were ensured that all their personal information would be kept confidential at the time of releasing the results and the voice records of the interviews would be deleted at the end of the study. Further, it was emphasized that if the parents had no tendency to let their children participate in the study, no problem would occur in receiving services on behalf of the relevant non-governmental organizations for their children. Since the parents and managers of the relevant centers did not allow the researcher to record the children's voice, the interviews were merely written down.

## **3- RESULTS**

**Table.1** indicates the demographic characteristics of the working children participating in the present study. By analyzing the personal interviews with the participants, the protective factors affecting the prevention of substance abuse among working children were identified and classified at five levels of the social-ecological model. Four Sub themes (belief, knowledge, attitude, skill) at personal level, two Sub themes (family and relatives) at interpersonal level, two Sub themes (governmental organizations and non-governmental organizations) at the organizational level, two (supportive policies and restrictive policies) at the public policies level, and the Sub themes of living environment at the community level were considered in the present study. **Table.2** represents these protective factors. It is worth noting that these factors could totally affect each other although they were organized at different layers of this model.

### **3-1. Individual level**

In protective factor themes, the Sub themes of belief, knowledge, attitude and skill were explained. It seems that these protective factors increase the probability of adopting a preventive behavior.

### 3-1-1. Belief

The working children participating in this study expressed their belief in God and belief in substance pathogenicity as the inhibiting factors of addiction. Receiving support from God encountering life problems and mental pressures leads to their spiritual and mental tranquility, so that they can trust in God instead of abusing substance to forget their problems.

*"I very much believe in God, he helps me in moments of difficulties, when I've got a problem I don't take drugs as I know God will help me"* (Participant No.9, Female, 12 years old).

Furthermore, the results indicated that the children's belief in substance abuse or smoking can cause physical diseases, and inhibit their tendency towards substance abuse.

*"I don't like smoking or doing drugs, as their smoke enters the lungs and makes problem"* (Participant No.15, male, 13 years old).

### 3-1-2. Knowledge

Knowledge was another concept extracted from the analysis of the interviews with children. Learning facts and acquiring insight in relation to the negative consequences of substance abuse and the ways for its prevention are considered among the protective factors against substance abuse among working children.

*"I don't like doing drugs as I know after you get addicted you have to become a prostitute, collect garbage or get beaten, nothing more than that"* (Participant No.17, Female, 14 years old).

### 3-1-3. Attitude

The results obtained from the interviews with children indicated that inner belief in that substance abuse can cause adverse consequences for the children. In other words, they have a negative attitude toward substance abuse.

*"I hate drugs. Using drugs is a bad thing. It's a chemical substance harmful to the body"* (Participant No.16, male, 10 years old).

### 3-1-4. Skill

The results obtained from the interviews with children indicated that resistance skills like self-efficacy to say "No" and the skill to leave the place of substance abuse have a close relationship to the use or non-use of substances.

*"My friend told me to take it, it's attractive, he insisted on my accompanying him, but I said no"* (Participant No.7, Female, 10 years old).

*"While my dad is taking drugs, its smoke enters our room and we feel it; my siblings and I go upstairs to keep ourselves from using drugs; since my mom has told us that if we stay when my dad is taking drugs, we may also get addicted"* (Participant No.3, Female, 9 years old).

## 3-2. Interpersonal level

The results obtained from the analysis indicated that the protective factors of the interpersonal level include the sub themes of family and relatives.

### 3-2-1. Family

Further, refusing to abuse substances by parents at the presence of children, keeping children away from the tools of substance abuse, creating a negative attitude among parents toward substance abuse, emotional - psychological supports by parents, monitoring children by their parents, lack of addiction among parents, and the presence of a healthy behavioral pattern in the family were considered as the families' protective factors against the tendency toward substance abuse were explained.

*"Kids like me should not go out alone not to become an addict, or if their parents let them go out freely, they should be in a healthy environment, if not they will get addicted"* (Participant No.5, Female, 11 years old).

old). *"Drug using tools such as picnic heater, pipe, skewer or opium pipe..."* (Participant No.2 Female, 11 years old).

### **3-2-2. Relatives**

Based on the results, parenting by qualified people and emotional - psychological supports of relatives were considered as the protective factors of substance abuse at the level of relatives.

*"My mother sent me and my brother to my aunt's house, because our parents are addict and if we stayed with them, we would get addicted too; we came to our aunt's house not to get addicted"* (Participant No.3, Female, 9 years old).

### **3-3. Organizational level**

In the class of protective factors at the organizational level, the sub-themes of governmental and non-governmental organizations were explained according to the content-oriented analysis approach.

#### **3-3-1. Governmental organizations**

The working children believed that teaching via television and radio (media), teachers, schools and textbooks can increase their awareness in the field of substance abuse disadvantages.

*"Once I saw in TV that there were someone who wasn't an addict, but his friend suggested him smoking a cigarette, well he smoked too and get addicted little by little"* (Participant No.3, Female, 9 years old).

*"It's great that teachers tell the students drugs and cigarette are bad things and shall not be used, as most of them don't know they are bad things"* (Participant No.11, Female, 11 years old).

#### **3-3-2. Non-governmental organizations**

In the present study, NGOs play an important role in the prevention of substance abuse by considering ten sub-theme of emotional - psychological supports, accurate monitoring by teachers, providing cultural-religious programs, providing free counseling services, and

sport, healthy recreational, and educational facilities, training professional skills, helping parents to quit substance abuse, and creating boarding facilities for protecting working children.

*"Here (science house), when we've got a problem, the teacher talk to us, advise us, we can talk about our problems and they help us"* (Participant No.8, Female, 10 years old).

*"My dad didn't let me go to school. He hit me and told me I should go to work. I minded for a while but I told my mom that I want to study. Then my mom took me here and registered, because they don't take any money, now I'm ten years old, but I'm grade two as I came late. Still my dad comes and hits me, he tells me go to work, but I like to study, I don't mind, because I may become an addict like my dad unless I come to this center"* (Participant No.16, male, 10 years old).

### **3-4. Community level**

In the class of protective factors at the community level, the theme of living environment was explained according to the qualitative approach to content analysis. This sub-theme includes the concept of safe shelter, living in healthy environment, and living in happy environment.

#### **3-4-1. Having Safe shelter**

One of the problems mentioned by the working children was related to the lack of a safe shelter and good housing. These children had to live with their parents on streets or the camps for substance dealing. For this reason, some of these children believed that they had to run away from substance retailers in order to protect themselves.

*"I know some kids like me who work in the street, but they don't have any place to sleep, so they go to hangouts and become an addict there. If they had a shelter they wouldn't stay out anymore and at nights lie with fear"* (Participant No. 16, male, 10 years old).

*"If children live in safe houses, they will not stay outside and not sleep with fear at night, and nobody will hurt and rape them. Many children are killed and kidnapped at hangouts"* (Participant No. 12, Female, 15-years old).

### **3-4-2. living in healthy environment**

The interview analysis with children also indicated that the person exposed to substance abuse is moved toward addiction if there are good conditions and backgrounds for unhealthy behaviors at home, street, school, and surroundings.

*"There are lots of addicts in the neighborhood we live, when we came here my older brother get addicted in the same neighborhood, now for protecting me and my sister, my mom is going to take the home to the village, near our uncle"* (Participant No.2, Female, 11 years old).

### **3-4-3. living in happy environment**

Some working children who had addicted brothers and sisters stated that they were accompanied by their siblings to vendor up in the past, but after a while their siblings started substance abuse to get rid of depression and achieve happiness and joy. It seems that living in happy environment is regarded as one of the basic needs of any child, especially for those working children, who are subject to stress more than other children in the society.

*"My sister and I sold fortunes and napkins in the street together, she doesn't like to work but we have to, we hadn't any fun or happiness. She got depressed after a while, for that she hung out with her friends and started to take drugs to have fun. Having fun is good for people"* (Participant No.1, male, 8 years old).

## **3-5. Policy level**

Regarding the class of protective factors at the level of policies, the sub-class of supportive policies and restrictive policies

were explained, based on the content analysis.

### **3-5-1. Supportive policies**

In addition, based on the results, the development of organizational supports and the establishment of care and treatment centers for addicted working children can reduce the probability of substance abuse among working children.

*"I have lots of friends working in the street like me but they don't have any place to stay at night. Although I know many kids who are addicts and there's no place for them to quit addiction, I think there should be a place to stay at night for kids who don't have good supervisors"* (Participant No.2, Female, 11 years old).

### **3-5-2. Restrictive policies**

Restrictive policies are those policies which make substance more rare and expensive in living environment and reduce the probability of substance abuse among children. The fight against the public substance dealing is one of the policies, resulted from the analysis of the interview with the children participated in the study. Most working children participated in the present study stated that there are some stamping grounds in their neighborhoods for substance dealing and most children could easily buy substances by referring to these places. Thus, it seems that the purification of neighborhoods from such stamping grounds and the certain fight against public substance dealing due to the reduction of children access to substances can reduce the probability of substance abuse.

*"There are some places in our neighborhood called hangout. Drug dealers sell drugs there. I've seen much that kids in my age went to such hangouts and bought drugs from the drugs dealer"* (Participant No.7, Female, 10 years old).

**Table-1:** Demographic characteristics of working children participating in the study

Variables	Groups	Absolute frequency (n)	Relative frequency (%)
Age (year)	8-11	11	64.7
	12-15	6	35.3
Gender	Girl	10	58.8
	Boy	7	41.2
Nationality	Afghan	4	23.5
	Iranian	13	76.5

**Table-2:** Protective Factors to prevention of substance abuse based on Social Ecological Model

Individual level	Interpersonal level	Organizational level	Community level	Public Policy
<b>Beliefs</b> I. Believing in God II. beliefs about pathogenesis of drugs	<b>Family</b> I. Parents refrain from using drugs in the presence of children II. Keep children away from drug use tools III. Parents negative attitude towards drug use IV. Psychic Emotional support of children V. Parental supervision VI. Parental training to children VII. Lack of parental substance abuse VIII. Having a healthy role models in the family	<b>Governmental Organizations</b> I. Education through the media II. Training of teachers at schools III. The revision of the school curriculum IV. Education through textbooks at schools	<b>Living Environment</b> I. Having Safe shelter II. Living in healthy environment III. Living in happy environment	<b>Supportive policies</b> The development of organizational support II. Launch and development centers of maintenance and treatment of addicted Working Children
<b>Knowledge</b> I. Literacy II. Understand the consequences of addiction		<b>Non-governmental organizations</b> I. The psychological-emotional support II. Strict supervision of coaches III. Religious and cultural programs IV. Providing free counseling services V. Providing sports facilities VI. Providing recreational facilities VII. Providing educational facilities VIII. Vocational skills training IX. Helping for quit of parents addiction X. Providing Boarding maintenance centers for Working children		
<b>Attitudes</b> I. Negative attitude toward drug abuse II. Negative attitude towards the consequences of drug use	<b>Relatives</b> I. Assignment Child custody to qualified relatives II. Relatives Psychic Emotional support of children			<b>Restrictive policies</b> I. Combat with drug dealing in public
<b>Skills</b> I. Refusal Self Efficacy II. Resistance Self Efficacy				

#### 4- DISCUSSION

The present research revealed some important findings. First, regarding the personal level, trust in God revealed as an

effective factor in the prevention of substance abuse. It seems that the spiritual relationship between children and God leads to the children's spiritual and mental

tranquility at the time of encountering concerns, life problems and mental pressures and can prevent their tendency towards substance abuse while encountering problems. In line with the results Arthur et al. (2002), identified the risk and protective factors of substance abuse based on the ecological model on 11-18 year old teenagers in America and indicated that religious beliefs were recognized as a protective factor against substance abuse at the personal level (24).

Further, the negative attitude towards substance abuse and the self-efficacy of saying "No" and leaving the place of substance abuse were regarded as other personal protective factors affecting the prevention of substance abuse. In this regard, in another cross-sectional study, Barkin et al. (2002), focused on the effect of teenagers' social attitudes and skills on the probability of substance abuse among 2,646 seventh-grade teenagers at public schools of Winston in North Carolina, the USA. The results indicated that the probability of substance abuse had a significant relationship with self-efficacy variables of saying "No" and positive attitudes toward substance abuse (25). Furthermore, Hecht et al. (2008), conducted another research on a group of Mexican- American students in Phoenix, Arizona in order to examine the relationship among the skills of resistance, refusal self-efficacy, decision-making and substance abuse. Their results supported the role of social skills in the prevention of substance abuse (26).

Another important protective factor at the interpersonal level is related to the family and relatives. The present study indicated that family and relatives were effective in the prevention of substance abuse by different methods like refusing to use substances by parents at the presence of children. According to results of research by Ahangaran et al. (2014) on 266 parents with children in Qom City (Iran), the

children of families with higher familial cohesion have lower tendency to commit criminal behavior (27). Keeping children away from the tools of substance abuse; creating a negative attitude toward substance abuse among parents, emotional-psychological supports by parents, monitoring children by their parents, lack of addiction among parents, the presence of a healthy behavioral pattern in the family as the protective factor of family against the tendency towards substance abuse. In this regard, the results of research by Ayubi et al. (2016) with the aim to investigate effects of parents' addiction on childhood adverse poisoning indicate that 74.7% of children with methadone poisoning have addicted parents. Furthermore, results of this study indicate that there is a significant statistical relationship between children harassment and neglecting them with their parents' drug abuse (28).

Also the results were consistent with those of Kumpfer et al. (1990), in which they indicated that negative household environments had a significant relationship with the increase of substance abuse among the youth. New theories in the field of criminal behaviors were mentioned in order to explain this finding. Based on these theories, the primary living environment of children plays a pivotal role in their socialization process (13). In addition, Belcher et al. (1986), and Hawkins et al. (1998), concluded that household factors predicted substance abuse due to the effect of genetic and environmental factors (10, 29).

According to the working children, training by teachers is one of the most important factors of the organizational level that made the studied working children avoid substance abuse. Since a major part of children are studying at public schools, teaching the negative consequences of substance abuse is essential. The results of the present study

were congruent with Espada et al.'s study (2010), which was designed and implemented in the form of substance abuse prevention programs at schools. The participants included 341 Spanish students in Saluda and the results indicated that the intention to use alcohol and substances among the students received educational intervention in the fields of social and problem-solving skills at schools reduced significantly, compared to those in the control group (30). Therefore, social support by other people can lead to a positive response as a voluntary act (31). Living in healthy environments was one of the protective factors against substance abuse that was extracted from the interview analysis with working children. In this regard, in the study done by Mayberry et al. (2009), the effectiveness of society and environment on substance abuse by teenagers was attributed to the Social Disorganization Theory. Based on this theory, the cities dealing with social disorganization are very poor both socially and economically, resulting in reducing the ability to control and monitor the teenagers' behaviors. Thus, there is an increase in the probability of adopting risky behaviors like substance abuse (32).

Given the findings at the level of public policies, the restrictive policies identified in this study include the policies which make substances more rare and expensive in living environment, which reduces the probability of substance abuse among working children. In this respect, the studies of the association of working and street children with the cooperation of the National Institute of Mental Health and Neurosciences in Bangalore, India in 1996 indicated that the price of substances and their availability were the key factors influencing the expansion of substance abuse by this group of children (33).

#### **4-1. Limitations of the study**

Our work clearly has some limitations: First, the researchers were not allowed to

record the interviews. Thus, the research group just took notes from the interviews. Then, immediately after each interview, the manuscripts of the researcher were compared to the manuscripts of the assistant and the contents were modified. Second, the results obtained from this qualitative study cannot be generalized to other populations. Finally, a few studies were conducted on the protective factors of substance abuse among working children on street.

#### **5- CONCLUSION**

According to findings of this research, drug abuse is rooted in a variety of factors. Therefore, prevention of working children from drug consumption is influenced by various factors; hence, this study seeks to provide a deep understanding of these protecting factors based on the socio-ecological model, and thus it identifies and classifies various protective factors at the personal, interpersonal, social, organizational and political levels. Four themes (belief, knowledge, attitude, skill) at the personal level, two themes (family and relatives) at the interpersonal level, two themes (governmental organizations and non-governmental organizations) at the organizational level, the class of living environment at the community level, and two themes (supportive policies and restrictive policies) at the public policies level were considered.

It seems that interventions should be designed with a holistic approach including different layers of the social-ecological model in order to prevent substance abuse among this group of children. Thus, a pattern based on protective factors can be designed by using the obtained results to design, implement and evaluate the interventions of health promotion by focusing on personal, household, organizational and social factors which is used in youth detention centers, the societies for protecting

working and street children and organizing centers for street children. Thus, personal and social empowerment, social participation and capacity building seem necessary to strengthen the protective factors which play a significant role in the prevention of substance abuse among Iranian working children.

## 6- CONFLICT OF INTEREST

## 7-ACKNOWLEDGMENTS

This study is a part of the first author's PhD Dissertation approved by Tehran University of Medical Sciences (No. 29213). This project was confirmed in the ethics Committee of Tehran University of Medical Sciences with code No. IR.TUMS.REC.1394.1704. Thereby, I would like to appreciate Dr. Mohsen Roshanpajoo, the deputy director of addiction prevention and treatment office, Mr. Asadi, the expert of addiction prevention and treatment office in the Welfare Organization of Iran, Mrs. Zahra Rahimi, the managing director of Imam Ali Popular Students Relief Society, Ms. MonirehArezoumandi, the director of Iranian Life Quality Empowerment (Ilia) charity, Ms. MarietGhazarian, the deputy head of the Department of the prevention of addiction prevention, psychologists and social workers, Imam Ali and Ilia non-governmental organizations and the dear children participating in this study.

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