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Evaluating Pattern of Educational Trips in Elementary and Preschool Grades and its Impact on Behavioral and Social Traits of Children based on the Child-Friendly City Approach and Walkability; Case Study: ShahrAra Neighborhood in Iran*

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ABSTRACT

Three social units of family, school, and urban spaces in urban communities play a vital role in nurturing and shaping the child's character. School routes are one of the spaces children are connected to more than other environments, providing a proper opportunity for students to be present on public platforms and experience the city. Now, expanded urbanization and the importance of movement pace in cities have increased the use of motor vehicles. This issue has led to concerns and challenges, including students' health. This problem has resulted in a study to identify factors affecting various methods of active transportation in educational trips of students. This study aims to investigate the educational trip patterns and factors affecting it based on indicators such as child-friendly city and walkability and examine the impact of various movement patterns on students' behavioral and social traits in the ShahrAra Neighborhood. The method used in this study is descriptive-quantitative regarding the nature of research and is applied in terms of objective. After 351 questionnaires containing 57 questionnaires were distributed among preschool and elementary students (with the age range of 5-12) in ShahrAra Neighborhood, data analysis was done through SPSS Software. In this analysis, the available data from questionnaires were interpreted by assessing the correlation between variables. The results of this study showed that the willingness to walk among students of the neighborhood is averagely lower than the medium level, and the common movement pattern is inactive so that only 29.9% of students in the studied sample use active patterns daily, and more than 67% use active movement patterns less than twice a weak. Also, movement patterns are selected by students under the influence of urban structure and socioeconomic characteristics of children. On the other hand, the type of movement pattern plays a significant role in shaping the character of children and affects their behavioral and social characteristics.

Keywords: Educational Trips, Child-Friendly City, Movement Pattern, Walkability.

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1. INTRODUCTION

Three vital social institutes in urban communities shape the character of children: family, school, and urban spaces. Children's presence in urban communities and spaces and urban life experience are highly important. It has been emphasized to create urban spaces for more presence of children due to limitations of children's social experience in small families. These spaces indeed provide a field for children to enter the social interactions in the environment of neighborhood and urban open space (Manso 2011). These interactions play an important role in the social maturation process increase children's awareness, and can change the character and identity of children in society. School routes are among the spaces that children are connected to them more than any other place. The school trip is an excellent opportunity for children to present in interact with communities and can provide a field for creating memories and forming their identity. Therefore, urban planners have paid more attention to the educational trips of students rather than in the past (Aemagan 2011).

Expanded urbanization and more importance of displacement speed have changed the structure of cities, and streets and public spaces are widely influenced by vehicles so that they get far away from the pedestrians' communication with social life (Jafari et al. 2019). This issue has made citizens use inactive movement patterns in their urban trips. Less city experience for children and their absence in urban spaces are some of the consequences caused by this issue. Nevertheless, the interaction between child and environment is highly substantial because this interaction embraces a spectrum from the formation of a child's character to the physical and mental growth of the child. Therefore, it is highly important to insist on creating safe, easy, accessible, responsive, attractive, and creative urban spaces and environments that are useful for the physical and mental growth of children. This point is considered by urban planners and designers based on the available studies and psychological facts about children. Moreover, the active participation of children in environment formation and exploitation is highly crucial. This participation approaches children to local social sense, environment awareness, and sense of belonging, and influences their living space (Sutton et al. 2002). Inattention to this issue has made transportation managers and urban planners worried about children's health. This worry has resulted in some attempts to identify effective policies in promoting active transportation techniques, such as walking and biking in educational trips and urban space planning for children's presence. In Tehran with its large scale and highway network structure, walking route towards schools is limited for children. Also, lifestyle changes in recent years and busy parents are among other factors limiting children's walking. Therefore, this study aims to investigate and evaluate the movement patterns of educational trips of elementary and preschool students based on the indicators of the child-friendly and walkable city and its effect on their behavioral and social traits (case study: ShahrAra Neighborhood in Tehran). Accordingly, personal, social, family, and environmental information of 351 preschool and elementary students (aged 5-12) in the ShahrAra Neighborhood was collected to examine the effect of each variable on choosing an educational trip model. The research method is then explained, data are gathered and described, and factors affecting the choice of students' movement patterns are investigated.

This study tends to answer the questions below:

- How the educational trips of elementary and preschool grades are done in the ShahrAra Neighborhood?
- What are the factors affecting the choice of educational trip' pattern at elementary and preschool grades in the ShahrAra Neighborhood?
- What are the consequences and implications of various types of educational trips' patterns for social behaviors and traits of students in elementary and preschool grades in the ShahrAra Neighborhood?

2. BACKGROUND

Both kinds of studies related to the research subject, directly and indirectly, must be used in this study simultaneously. According to the efforts made to achieve methods and results of previous studies on educational trips, this study also investigates and evaluates the most important studies associated with this topic.

Amirreza Mamdoohi et al. (2021) carried out a study titled "Effective Factors in Light Rail Transit Modal Shift of Tarbiat Modares University Student' s Educational Trips" and found that determination of proper policies for increasing light train utility and changing trip method are applicable to facilitate policymakers' decision-making and planning in future transportation systems. In addition, Yaser Hatamzadeh, Mighat Habibian, and Ali Khodaee (2014) conducted a study titled "Factors Affecting the Selection of Walking Method in Educational Trips of Students based on Educational Grades" to investigate the walking behavior of students during educational trips. They examined some variables such as personal, family, trip, and environmental profiles and used Logit models for modeling. The research results showed that walking behaviors not only are similar in some grades but also show some differences. In a study titled "A Mode Choice Model of Elementary School Trips based on Parental Decisions," Amirreza Mamdoohi and Milad Mehdizadeh (2014) used the data collected from the questionnaires distributed in elementary schools located in Education District 1 in Rasht City. They adopted a discrete choice model through a multiple logit to analyze the parent's choices

about types of trips to the school. This analysis has been done by using NLOGIT Software.

Morteza Khalili, Ehsan Khalilzadeh, and Khalil Kalantari (2013) conducted a study titled "Analysis of the Factors Affecting Female Students Walking to the School" in which, they identified 8 key factors that had a high effect on students' walking activity by doing a factor analysis on a 20-variable collection. Footpath condition was considered the most important factor. An increase in every variable including trip cost, economic status of household, and role of parents in the walking behavior of students would decrease the probability of walking choice by the children. In a study titled "Method of Transporting Children to the School and Parents' Decision for allowing them to Walk or Cycle to the School," Masoud Badri et al. studied various aspects related to students' transportation to school. This study evaluated common transportation methods and frequency of car trips to the school in Abu Dubai City. Findings show that fewer children than expected rate use bicycles or walking methods to go to school, while more of them use motor vehicles.

In addition, Irvan et al. (2011) carried out a study titled "Promoting active transportation in trip behavior of students" in which, they used a multiple logit model to examine factors affecting the selection of method of transporting students to the school in Yogyakarta City, Indonesia. Research findings indicate that the distance between the living place and school is one of the underlying factors in deciding on the selection of an active transportation method. Moreover, in a paper titled "Influence of the Social Environment on Children's School Travel," McDonald and her research team (2010) investigated the relationship between parents' understanding of the social environment and walking and biking activities done by 10-14-years old children to reach school in San Francisco Area. Results of this study show that when the child-oriented social control level is increased in city streets then walking and biking activities to get the school are increased. In another study titled "School Trips: Effects of Urban Form and Distance on Travel Mode," Schlossberg et al. examined the relationship between urban spatial features and school trip models. They studied secondary schools in Oregon City and found a relation between urban form variables such as density of intersections and a lower ratio of dead ends with walking travel models to the school. In this research, some factors such as population density, distance from school, tree coverage near the school, parents' attitude towards neighborhood traffic, and the presence of walking facilities such as sidewalks were investigated.

2.1. Child-Friendly City

City and urban spaces may have a positive or negative influence on the lives of children (SaridarMarsi 2017). A child-friendly city means how urban officials manage and handle a city based on the needs and interests of children. However, those cities that observe the basic rights of children, such as health, transportation, social support, education, and culture not only become desirable cities for children but also become cities based on the needs and demands of children, which is built by children (Rashid Kolivar et al. 2020). Child-friendly city is a framework that helps cities move towards the objectives of a child-friendly city approaching it in terms of all environmental, governmental, and service aspects (Riggio 2020). A city interested in children is a city that provides an acceptable level of nutrition, health, population, and participation of children (Racelis and Aguirre 2002). A child-friendly city is a city that observes the basic rights of children, including health, social support, education, and culture, and considers them as citizens with certain rights and the right to express their opinions and viewpoints. Therefore, a child-friendly city not only is a good city for children but also a city that is built by them (Manichehri et al. 2014).

2.2. Walkability

Walkability is an important index related to the general status of walkability in an urban area that is investigated at various scales from a plan site to street, neighborhood, and city. In this case, the quality of equipment related to walking, the status of riders, land-use patterns, social supports, security level, and ease of walking are evaluated as underlying factors (Shabanzadeh et al. 2020).

Walkability refers to the place's potential for connection between individuals and various destinations during the trip and presenting proper visual quality throughout the network (Zakaran and Ujang 2014). In urban planning and transportation, the concept of walkability has received great attention as the influence of the urban environment on walking activity, and many studies have shown that a proper physical environment for walking is one of the underlying requirements for promoting walkability (Sapawi and Said 2012). Attractive features of a walkable environment include the existence of trees, parks, landscapes, and open spaces, shade on hot days, benches or other places for rest, neighborhood units and historical buildings, and a sense of security (Pikora et al. 2003). According to the mentioned characteristics, walkability indicates how much the built environment for individuals matches their daily activities, such as living, purchasing, meeting others, entertainment, and spending leisure time (Karimi and Azmi 2012).

2.3. Educational Trips

Educational trips are those tours that are done by students in the educational institutions. In 2005, Macmillan defined the behavior of transportation to the school as the result of parents' decision-making process and studied some variables such

as distance between living place and school to explain the students' behavior in selection method of transportation to school. On the other hand, inactive trips consist of travel with a personal car, use of public vehicles, and school service. Fig 1 depicts different types of transportation techniques.

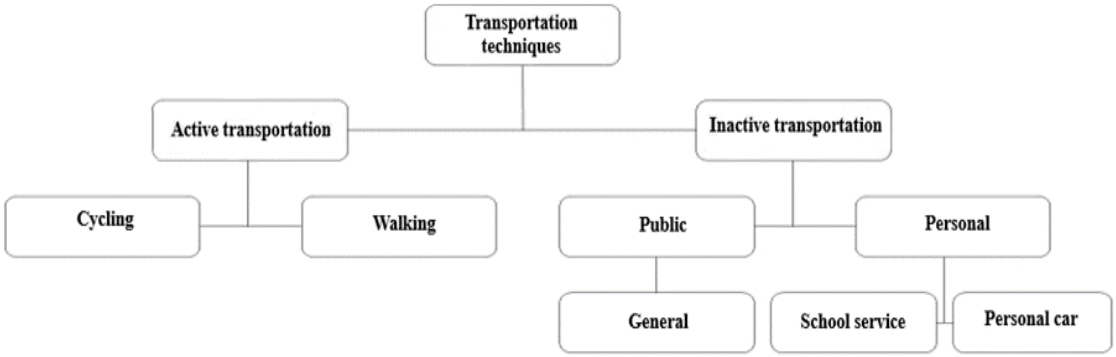

Fig. 1. Urban Transportation Techniques

(Armgan et al. 2011)

2.4. Influence of Experiencing Presence in the City on the Formation of a Child's Character

Children's experience of city space is different from adults' experience. Childhood experiences are more about the fabric and diversity of specific functions, and most of their experiences are more sensorily related to touch than sight. As one of the most sensitive and basic periods for the formation of human character, childhood has a considerable influence on their future life. Children play a significant role in the connection between past and future generations of every society; they are the agents who transfer traditions, cultures, beliefs, and individual-social identities. Reforms become possible in social environment by children if required. A major part of each person's identity is shaped during childhood based on their mental images, and collective and spatial memories. This formation paves the way for their main individual and social characteristics, including decreasing anxiety, achieving self-esteem, and creating collective and interactive morality (Saberi et al. 2017). Childhood includes three main stages: early childhood, preschool period, and elementary school. Perceptual capabilities of children are rapidly increased during elementary school; these abilities consist of feeling, perception, thoughts, and reasoning (Noghrehkar et al. 2018).

Urban space plays a considerable role in the process of accepting these abilities and various social and cultural roles of children. This space creates a sense of belonging to the environment, social and individual maturity, and self-awareness by making effective relationships between previous learning and current experiences of children (Mansori et al. 2011). Therefore, when children experience the urban environment when commuting between living places and school during elementary school then they are willing to play with their peers in urban space and connect to the physical environment of the city. If these needs are positively met, the child will make a positive relationship with the urban space and the base of urban and neighborhood identity is shaped by them (Noghrehkar et al. 2018).

3. METHODOLOGY

This is a descriptive-quantitative study conducted to provide practical solutions in the field of child-friendly cities and walkability. In this research, data are collected through field studies and library documents. Assessment indicators are first extracted by using components of child-friendly and walkable cities, and then the educational trip pattern of children is investigated based on these indicators. Appropriate (objective and subjective) measures are determined for these indicators. Library references are indeed used for objective data, and subjective data are collected from questionnaires and in-depth interviews. The Likert Scale has been also used in questionnaires to classify and collect data. The considered data are then analyzed through SPSS Software, and diagrams, frequency tables, and correlations between variables are prepared.

The statistical society of this study comprises preschool and elementary school students in the ShahrAra Neighborhood located in Zone 3, District 2 of Tehran City. According to demographic data of the neighborhood, the number of children aged 5-12 equaled 4165 children that were selected as statistical society size of the study. According to the available size of statistical society in the studied area, one of the most common methods i.e., the Cochrane formula was used to measure the studied sample size. The convenient sampling method was then used to select the sample size and statistical society was placed in the Cochrane formula based on the error level of 0.05, so the sample size equaled 351. The steps below were evaluated to examine the content validity of

the questionnaire, and finally, the questionnaire was designed:

First Step: children's attitudes and experiences about the studied topic were reviewed based on the descriptive method by running an open test.

Second Step: the objective-content table was formulated regarding the hypotheses and subjects related to the topic. In this table, the main components of the research were placed in the main rows and columns. Each cell of the table at least contains one question that is asked to evaluate the topic related to the row and assess its relevant goal.

Third Step: to ensure clarity of the questionnaire's items, an oral exam was done for a small group of children (n=31), and results were obtained. In this test, children were invited in a row to read the questions one by one and explain the meaning of each question.

Fourth Step: After the validity of questions was ensured, a preliminary test was done on 61 children. The questions of the initial questionnaire were then evaluated based on the factor analysis method, and improper items were deleted. Finally, the final questionnaire containing 65 questions was prepared and its validity and reliability were evaluated. The common Cronbach's alpha method was used to examine the reliability of the questionnaire, and its result equaled 0.796 indicating the suitable reliability of the questionnaire.

Ultimately, the questionnaire has been distributed among 351 students at preschool and elementary grades (aged 5-12) of which, around 335 questionnaires were filled out and returned. After the initial collected data were analyzed, those questionnaires with more than three missing data were removed from analyses, so 316 questionnaires were used in the study. Sampling was done in each grade of schools randomly in one classroom and among six schools, two preschool classrooms, two female elementary classrooms, and two male elementary classrooms were sampled to consider more diversity in the sample.

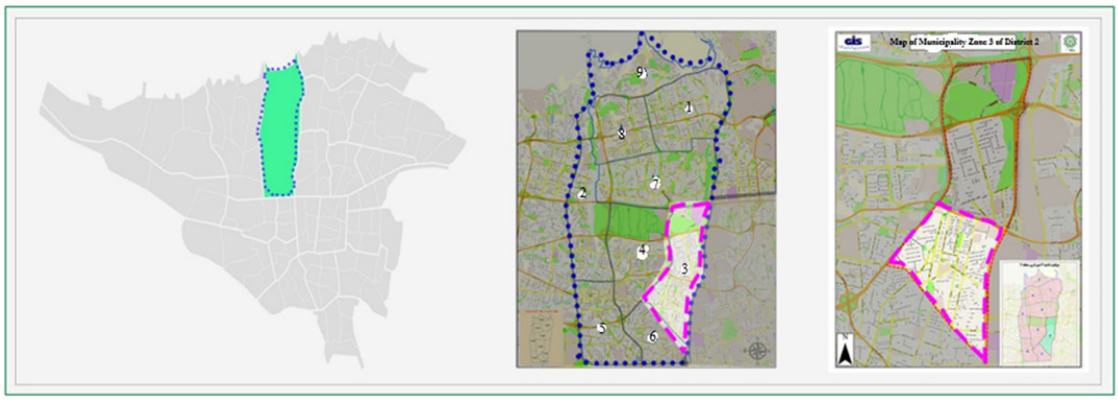

Fig. 2. Studied Area, ShahrAra Neighborhood in Zone 3, District 2 of Tehran City

4. FINDINGS

The data collected from children in the ShahrAra Neighborhood are investigated for better and more accurate analysis in this step of the study by using inferential and descriptive statistics. According to the obtained results, 29.8% of sample students use active movement patterns for educational trips. Out of the total students, 70.2% use the pattern of inactive trips of which, 49.9% use school services, 13% personal cars, and 7.8% use public transportation for educational trips. According to the obtained results, movement patterns are chosen under the effect of environmental (urban structure), social-individual, and economic conditions. This research presents a more accurate analysis of the effect of these variables on the movement patterns for educational trips in the ShahrAra Neighborhood.

4.1. Individual and Economic Variables

The age range was divided into two 5-8 and 9-12 intervals to facilitate evaluation of the age component and its effect on the selection of movement patterns. The correlation between students' age and type of movement pattern was then examined to find the connection between these two variables. The results show that the coefficient of correlation between age and type of walking movement pattern equals 0.673. This result indicates a strong and significant relationship between these two variables so that when students get older, they become more interested in using walking movement patterns. Accordingly, 68.4% of students that use active movement patterns are aged 9-12.

According to Table 1, the statistical society of this study comprises 57.1% female students and 49.1%

male students. The relationship between gender and type of movement pattern was examined based on the correlations between these two variables, and it was concluded that boys use active movement patterns (walking) more than girls in the ShahrAra Neighborhood. Accordingly, among 65 boys, 24 members (36.92%) walk to the school and 41 members use inactive movement patterns. On the contrary, among 87 girls, 21 students (24.13%) use the active transportation method.

The coefficient of correlation between income and inactive movement pattern equaled 0.729 indicating that income rise leads to a higher tendency for the use of inactive movement pattern. In contrast, the coefficient of correlation between income and active movement pattern equals -0.770 indicating that income rise leads to lower willingness for selecting walking movement pattern.

Moreover, car ownership and inactive movement patterns had a correlation coefficient of 0.634 indicating that children of the families with ownership per capita of two cars or more are more interested in using inactive movement patterns.

On the other hand, the correlation between the number of employees in the family and the dominant movement pattern indicates that the number of employees with a correlation coefficient of 0.719 is known as one of the considerable factors in choosing an inactive movement pattern.

4.2. Urban Characteristics

According to the results of the questions asked about the quality of the walking route, both students who use active and inactive methods on their educational trips believe that the walking route of students from school to home and vice versa has a relatively proper quality. Other factors affecting the children's choice of movement pattern were investigated and assessed based on the mentioned result.

The conducted analyses showed that walking duration or the distance between home and school is one of the most substantial factors affecting the choice of active or walking movement pattern. This case is examined based on the reverse correlation and correlation coefficient of 0.051 that indicates the increased duration of walking from home to school leads to lower interest in using the walking method. Also, analyses show that all students use active or walking movement patterns within a distance of 5-10 min walking duration from school, with 15.9% of girls and 12.1% of boys living at such distance.

The distance from public transportation is another factor that affects the choice of inactive movement pattern. According to the reverse correlation of 0.144 between distance from public transportation stations and inactive movement patterns, when the distance between children and public transportation stations is decreased then they will show more interest in using inactive movement patterns.

According to the correlation coefficient of other indicators, some factors such as group trips, possible trips with family, and acquaintances with residents of the neighborhood have positive correlations with walking movement patterns.

Table 1. Frequency of Data based on the Social, Economic, and Physical Variables of Study

Characteristic	Frequency (%)	Characteristic	Frequency (%)
The Educational Grade of the Student		Available Benches along the Pedestrian Path	
Preschool	27.3	Yes	31.7
Elementary School	68.8	No	61
Gender of Student		Proper Lighting of the Pedestrian Path	
Female	57.1	Very Poor	26
Male	42.9	Poor	22.1
		Average	36.4
		Strong	10.4
		Very Strong	2.6
Age		Performance and Number of Recreational and Leisure used in the Neighborhood	
5-8	41.8	Very Poor	9.1
9-12	58.2	Poor	11.7
		Average	50.6
		Strong	34.7
		Very Strong	0.
Household Income		Use Diversity in the Neighborhood	
Very Poor	2.6	Very Poor	.
Poor	3.9	Poor	6.5
Average	59.7	Average	44.2
Strong	28.6	Strong	37.7
Very Strong	5.2	Very Strong	7.8

Characteristic	Frequency (%)	Characteristic	Frequency (%)
Having Personal Car		Playground for Children	
Yes	89.6	Very Poor	19.5
No	10.4	Poor	26
		Average	31.2
		Strong	15.6
		Very Strong	5.2
Number of Personal Cars		The Presence of Lines, Pedestrian Routes, Speed Breakers, and CCTV in the Path	
0	8.2	Yes	74
1	62.6	No	24.7
2	24.4		
3	2.6		
Number of Students of the Family		Dividing Riding Side from Sidewalk with Fences	
1	45.5	Yes	29.9
2	32.5	No	68.8
3	6.5		
Number of Employees in the Family		The Proper Width of the Sidewalk	
1	51.9	Yes	67.5
2	29.9	No	31.2
3	1.3		
Duration of Walking to the School			
5-10min	14.3		
10-15min	42.9		
15-20min	31.2		
>20min	10.4		

4.3. Active Trips

According to Table 2, car ownership, income level, duration of walking to the school, same route of parents, and distance from transportation station have a reverse relationship with the choice of active movement pattern. In other words, an increase in these factors leads to a lower probability of choosing an active movement pattern.

In this field, the lowest correlation rate (0.05) is related to the duration of walking to the school and the active trip pattern. Therefore, a longer duration of walking path from home to school leads to lower interest in using active movement patterns. This variable is followed by the lowest correlations related to household income (0.077), car ownership (0.12), and the same route of parents (0.16), respectively. On the contrary, some factors such as possible group trips, the possibility of trips along with the family, and acquaintance with residents living in the neighborhood have a direct relationship with the active trip choice. The highest correlation rate (0.472) belongs to the trip with the family followed by the duration of walking from home to the school (0.330), possible group trip (0.303), and acquaintance with neighborhood residents (0.297), respectively.

4.4. Inactive Trips

The rate of correlation between determined components and inactive trip patterns was assessed in this step (Table 2). The results show the highest correlation (0.729) between inactive trip patterns and income. The next higher rates of correlation belonged to the number of employees (0.719), car ownership (0.634), duration of walking to the school (0.33), and same route with parents (0.318), respectively. In other words, an increase in household income leads to a higher probability of using inactive movement patterns. The lowest correlation rate belongs to some indicators, such as possible group trips, possible walking trips with the family, and acquaintance with the residents.

Table 2. Correlation between Inactive Trips' Pattern and Studied Components

	Indicators	Pearson Correlation	Sig. (2-tailed)		Indicators	Pearson Correlation	Sig. (2-tailed)
Active Movement Pattern	Individuals' Age	0.573	0.000	Inactive Movement Pattern	Individuals' Age	0.162	0.000
	Household Income	-0.77	0.000		Household Income	0.729	0.000
	Car Ownership	-0.120	0.000		Car Ownership	0.634	0.000
	Employees of the Family	0.265	0.000		Employees of the family	0.719	0.003
	Duration of Walking to the School	-0.051	0.000		Duration of Walking to the School	0.330	0.005
	Public Transportation	-0.198	0.000		Public Transportation	0.144	0.000
	Possible Group Trip	0.297	0.000		Possible Group Trip	0.162	0.000
	Same Route as as Parents' Workplace	-0.167	0.000		Same Route as as Parents' Workplace	0.318	0.001
	Possible Walking Trip along with the Family	0.472	0.000		Possible Walking Trip along with the Family	-0.050	0.006
	Acquaintance with the Residents	0.303	0.000		Acquaintance with the Residents	-0.170	0.000

4.5. The Nexus between Movement Patterns and Individual-Social Traits

This section investigates the nexus between individual social traits and types of movement patterns among preschool and elementary school students. According to the table below, it should be noted that active movement pattern has a positive correlation with some individual and social traits, including being sure of your ability, being creative, and being capable of making relationships with others. Those children who use active movement patterns in their educational trips indeed have more autonomous personalities, more ability to make relationships with others and higher creativity. They also experience a lower rate of stress, fear, and dependence on others when doing their affairs. On the contrary, children who use inactive movement patterns in their educational trips are usually more dependent on others, have less ability to make relationships with others, and have lower activity. They also may feel more stress and fear showing lower self-confidence when doing their tasks. Examinations also show that those children who do their educational trips actively feel less stress in walking paths rather than other children. Furthermore, some indicators such as security in the path are more appropriate among students who use walking movement patterns rather than other students. These indicators include the active presence of women and children, high public surveillance, lack of private corners, suitable lighting, and installed fence between the riding route and sidewalk.

Table 3. The Relationship between Active and Inactive Movement Patterns and Individual Traits of Students

Individual and Social Traits	Active Movement Pattern		Inactive Movement Pattern	
	Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Fear in the Society	0.246	0.04	**0.633	0.000
Being Sure of your Ability	*0.361	000	-0.196	0.04
Stress and Anxiety	-0.121	000	0.323	0.018
Creativity	*0.393	000	-0.136	0.000
Rate of Relationship with Others	*0.333	0.02	0.234	0.016
Dependence in doing Tasks	0.227	0.009	**0.758	0.000

5. DISCUSSION AND CONCLUSION

The educational trip patterns of students at preschool and elementary school grades and the effect of movement pattern type on the behavioral and social traits of children were investigated regarding the important topic of children and encouraging them to be present in society and experience the city. The results showed that the studied neighborhood (ShahrAra) does not have proper status in terms of movement pattern choice, so more than 67% of children use walking transportation method less than two times a week when going to school. To examine this subject, the relationship between age, gender, and type of movement pattern was studied based on the correlation between these variables. The coefficient of correlation between walking movement pattern, age, and gender indicates that when children get older, they use more walking movement patterns. In addition, girls used less active movement patterns rather than boys. Investigation of other socioeconomic traits of students and calculation of correlation between these factors and movement pattern type indicated that some factors, such as income rise, ownership of two or more cars, and number of employees in the family would decrease their willingness to walk movement pattern choice. Therefore, the use of inactive movement patterns will be increased among children. Accordingly, the highest rate of choice by students and the highest coefficient of correlation were chosen as the factors affecting the type of movement pattern. The factors affecting movement pattern choice include gender, age, income, ownership and number of cars, number of employees in the family, distance from transportation station, duration of walking from living place to the school, possibility for same roue with parents, possible group trip, and travel with the family with walking, and security indicators. According to the results of this study, movement patterns would finally affect the formation of behavioral traits of students. Examination of children's educational trips indicated that those students who use active methods to go to school have higher self-confidence and can make relationships with others that may be due to an active presence in society and urban spaces. Also, these students have higher creativity. These students indeed have less anxiety, stress, dependence, and fear of being present in society rather than those students who use inactive methods for their educational trips. According to the explained reasons, the complexity and diversity of environmental factors affecting the formation of children's characters must be emphasized. The presence of children in urban spaces and child experience in the city has a significant effect on the child's character growth. When children choose active transportation method, they form relationships with the city, so such connection and presence of children in society can provide the field for enhancing self-confidence and growth of the independent personality of the child while decreasing children's fear of presence in society and alleviating anxiety, stress and dependence in the children.

The results of this study show that neighborhood children's interest in walking for educational trips is averagely less than the average rate, and the common movement pattern among most students is an inactive movement pattern that can be a factor in forming and nurturing students' character. It is therefore suggested to take some measures for improving this status: planning educational-social programs such as training parents and informing about harms caused by the inactive movement patterns in formation of children's character, training children in schools about their presence in the society and behave with society individuals, teaching environmental issues to the children by parents and improving quality of sidewalk spaces based on the walkability indicators and child-friendly indicators in the neighborhood, observing the suitable distance of access to schools, designing child-friendly routes within proper distances from schools, creating appropriate space for rest and recreation especially near the schools, designing local parks, public spaces for residents' presence particularly women and children in the neighborhood, existence of proper elementary school and preschool in the neighborhood, creating traffic culture and teaching students to participate in the urban space. These strategies can be implemented to improve walking conditions and choose the active movement pattern for students in elementary and preschool grades in the neighborhood.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

MORAL APPROVAL

The authors commit to observe all the ethical principles of the publication of the scientific work based on the ethical principles of COPE. In case of any violation of the ethical principles, even after the publication of the article, they give the journal the right to delete the article and follow up on the matter.

PARTICIPATION PERCENTAGE

The authors state that they have directly participated in the stages of conducting research and writing the article.

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