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Full Length Research Paper

Exploring the lifeworlds of children in Hong Kong: Parents' report on after school time use

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This study aims to discuss the findings of a survey completed by 335 parents of children in Kindergarten 1 (3 to 4 years), Primary 1 (6 to 7 years) and Primary 5 (10 to 11 years) in Hong Kong, about their children's out of school time use. We wanted to explore the widely held notion that Asian students spend much of their time studying, with little leisure time, and there is scant information about Asian children's everyday lives outside schooling. The findings from the survey indicate that this cohort of parents reported that their children spend their time out of school engaged in a variety of activities. The children don't spend large amounts of time (that is, > 4 hours) on academic activities, but do on visiting friends and relatives and playing, indoors, outdoor and in organized sporting contexts. Doing school homework fell in the mid-range of activities. The students also did not spend a lot of time using technology. These findings reflect existing data collected in western contexts in terms of the time spent on leisure activities and homework, but contrast to other findings with older students where students in East Asia spent more time out of school engaged in academic work with minimal leisure time.

Key words: Children's time use, after school activity, Hong Kong, parents, lifeworlds.

INTRODUCTION

There has been significant commentary about the high performance levels of East Asian students in international high stakes tests (Mervis, 2010), and thus their schooling systems have been subjected to too much scrutiny.

Researchers and commentators have attempted to isolate features in schooling that support the persistent high performances of East Asian students for over a decade (McKinsey, 2007). Some researchers (Reid, 2012) maintain that the focus on in school variables to inform this discussion, is limited, and the issues of performance need a more balanced consideration. The example of Finland often provides a counterpoint. They

have maintained consistently high performance rankings in Program for International Student Assessment (PISA) yet have a very different educational system (Hattie, 2012) than any of the East Asian contexts.

Heckman and Krueger (2005) asserted that most of the effects that correlate with strong student performance in high stakes tests are related to out of school variables, yet he does not specifically explain or outline the effects. Goldhaber et al. (1999) concur, maintaining that background factors account for 60% of student achievement in school. And despite this, empirical research has largely focused on

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the *features of schooling systems* (McKinsey, 2012) to explain particular countries' consistently high performances. Secondary analyses of PISA, Trends in International Mathematics and Science Study (TIMSS) and Progress in International Reading Literacy Study (PIRLS) data have been concerned with demographic and family variables (McGaw, 2010; Ho, 2010), length of school year (Cheung and Chan, 2009), out of school tuition (OECD, 2011, 2014), school quality (Ng, 2008), the extent of local autonomy for schools (McConney and Perry, 2008), and the quality and type of homework set (Zhu and Leung, 2011).

There is obviously a clear need for this focus on such systemic and structural features to be complemented by research into a broader and more comprehensive range of the out-of-school variables, that take place in families and communities that may also have a critical influence on academic performance (Harding, 1991).

Hence, we were interested in investigating the lifeworlds of students. The lifeworlds of children include all aspects of their lived experiences that occur in school, at home and in social/community contexts. We use the term to explore the range of activities that students participate in and out of school, with their families and in their communities (Chen and Stevenson, 1995)

Specifically, in this study, we explore the after school activities of children in Hong Kong, from 3 to 11 years of age, as reported by their parents in responses to a survey, after school on weekdays and on the weekend.

LITERATURE REVIEW

Larson and Verma (1999) have noted that the study of how adults use their time has long been of interest in terms of establishing a measurable input to society in a human capital view of economics.

Similarly, while less time has been spent studying children's time use (e.g. Newman et al., 2007; Pew, 2015), from this perspective, the time factor can be viewed as a capital resource, where, "the quantity of hours and years that a population of children spends in school provides an approximate measure of human capital production" (Larson and Verma, 1999), and time spent on school related work is viewed as supporting the acquisition of skills and knowledge that can be marketised. Stevenson also contended that, "the way young children divide their time between home and school tells us something about the emphasis societies spend on schooling" (Stevenson, 1992).

Children's time use has also been of interest to those who are concerned about their well-being. Such studies have been designed in order to obtain better understandings about children's daily lifeworlds, and the socio-cultural factors at play as children participate in school and out of school experiences (Vogler et al., 2009).

So, for example, the time spent on playing computer

games and on the internet rather than engaging in physical activity (Mulvihill et al., 2000) has been of concern, as well as other considerations such as the amount of time fathers spend with their children (Yeung et al., 2001).

Vogler et al. (2009) also noted that exploring the family and social characteristics that impact on children's time use also gives us insights about how decisions are made in families based on cultural beliefs and informs us about how parents and children negotiate the nature of the activities in the context of such restraints. One relevant consideration here is the notion of the 'Tiger Mother' (Chua, 2011; Kiddera, 2001) in Asian cultures, and the major restrictions this places on the lives of middle class offspring in particular, both in and out of school (Chao and Tseng, 2002). It has also been noted by Tan (2017) that in Singapore, "better-educated parents with higher incomes adopt a more proactive interventionist parenting style by paying more for both academic and non-academic enrichment classes".

In their review of global trends in the afterschool activities of children from 5 to 18 years of age, Larson and Verma (1999) indicated that even when the data compared originates from different forms of reporting, there are large and consistent differences in findings across nations and different parts of the world. For example, they found that students in East Asia spent most of their after school time engaged in school associated work and students in North America and Europe had more leisure time than the East Asian students. These differences were most pronounced in adolescents from Junior High School onwards where students in Korea spent more than double the time on school related work at home than students in North America. Of interest was the time spent watching television was similar across the post-industrialised nations.

Larson and Verma (1999) did not discuss the role of socio economic class but rather focused on the differences between pre/ post industrialised nations, and the cultural traditions that are characterized in the East/West binary. In fact, Harding (1997) suggested that, "the relationships between race and class, and children's time use and between time use and outcomes have not been addressed adequately in the literature".

Some studies have indicated that socio-economic status is an important factor when related to organized activities after school (Caradoso et al., 2008; Lareau, 2000; Shih and Yi, 2014; Yamamoto and Brinton, 2010). The studies have noted that middle class parents tend to participate in organized after school activities, and they indicate that they do this because of the perceived benefits to their child's school work.

In comparing the after school time of students in the US and East Asia, Stevenson (1992) highlighted the cultural traditions noted by Larson and Verma (1999) in Asian families, who encouraged the children to always work hard at school and be diligent in their approach. In their

study, East Asian mothers stipulated that the primary task of their child was to do well at school. Further, Stevenson also found that US students had about half as much homework as their Asian counterparts, and that children in Chicago spent nearly twice as much time watching TV than children in Beijing. Interestingly, Stevenson (1992) contended that since Asian children had more breaks from class time for play that they were satisfied with less time to play after school.

The context for the current study was Hong Kong (Special Administrative Region (SAR)). Hong Kong consistently performs in the top five 'nations' in high stakes testing, and generates a great deal of interest regarding the reasons behind their consistent ranking in the top five countries performance globally. While we are aware that there are a number of studies about Asian minorities living in western countries (Jerrim, 2014) there is limited empirical data about Asian students living in their own location.

Further, most of the studies we found were with secondary students (OECD, 2011, 2014) with only a few located in the upper elementary grades. And, it is only recently that a few of these researchers have considered socio-economic class as a variable (Lareau, 2000; Shih and Yi, 2014) but again these were with older students.

Karsten (2015) study was concerned with Hong Kong childhoods in relation to the high-rise living environment, and the dominant parenting cultures among the middle-classes. She also noted the limited data on Hong Kong childhoods, and referred to a small study by Playright (a NGO located in HK) which indicated that children in Hong Kong (aged 6 to 16) spent more time doing their homework and watching television than playing. And when they did play it was mainly indoors.

Karsten (2015) project included 20 families, sixteen of whom had domestic helpers and three the assistance of a grandmother who lived in close proximity. The findings revealed highly organized after school activities that supported their definition of providing a 'good' childhood for their children with activities that developed their skills set. The children ranged in age from 4 to 14 years, and their schedules meant that they were never unsupervised with little leisure or free time and virtually no outdoor playtime since play was not high on the agenda for these families.

Accordingly, in order to broaden the body of inquiring concerning whether Asian students do in fact spend much of their time studying and little time engaged in leisure activities, we sought to collect empirical data from across the age range from 3 years of age to 11 years of age, from low socio-economic families.

METHODOLOGY

The study

This study reports on the results of survey data from the parents of children attending Kindergarten 1 (3- to 4 years), Primary 1 (6 to 7

years) and Primary 5 (10 to 11 years). The survey was part of a larger research project entitled Millennial Kids Learning, which took place over a period of two years in Hong Kong.

The study sought to gather empirical information about the lives of young people in Hong Kong of these ages from the students themselves but also from their parents. The junctures were chosen because Kindergarten (K1) represents the beginning of formal classes in Hong Kong, Primary 1 (P1) is the first year of Primary school and Primary 5 (P5) is the penultimate year of primary schooling, and we were advised that it was not possible to research in Primary 6 since the preparation for secondary school was intense and driven by specific agendas that focused on being able to perform well in tests in order to obtain a place in the school of your choice.

Conducting research in intact classrooms is not common in many areas of Hong Kong, and the schools were selected on the basis of Chinese colleagues informal networks in three different locations in the New Territories, and one in Kowloon. We needed schools that could be considered as being in low socio economic areas, and in the first instance we used Hong Kong Census data (Hong Kong Government, 2012) to isolate particular areas and then used the study networks in order to delineate specific school sites to ask their permission to conduct the research project.

The data for the study also included interviews with the teachers and classroom ethnographies (Yelland and Leung, 2016). Surveys were completed, analyzed and reported, by the P1 and P5 children in school (Yelland et al., 2013a, b) but here we concentrate on the surveys completed by parents, and how they reported how their children spend their time after school on weekdays and at the weekends.

A total of 335 parents of Kindergarten1 (123), Primary 1 (102) and Primary 5 (110) parents completed the survey that was sent home with their child with a written endorsement from the principal encouraging them to participate and return the survey. There were parents of 163 boys (49%) and 172 girls (51%). The percentages of boys and girls differ slightly across the three year levels, but the differences are not statistically significant ($\chi^2 = 2.24, p = 0.54$).

We advised that the survey could be completed by parents or guardians, since there is an increasing trend in Hong Kong for Mainland Chinese parents to send their children to school in Hong Kong with a relative or another person to care for them while they attended school.

Survey

The following research questions guided the design of the survey, for P1 and P5 children and all parents:

- (1) How do students in Hong Kong kindergartens and primary schools spend their time out of school?
- (2) How widespread are educational practices associated with private tutoring in this age group within this cohort?
- (3) Do students in low socio-economic areas have domestic helpers who support them with school work?
- (4) What types of technologies do students have in their homes and how are they used?
- (6) What are the students' views about aspects of their lives and schooling?

The survey was designed to contain direct (factual) and indirect (attitudinal) measures (Sapsford, 1999), and sought to discover how the students spent their time after school on weekdays and weekends, as well as information about the physical space, what resources (toys, media technologies) they owned as a family or individually, and also some items related to how they viewed the purpose of schools in Hong Kong, and if they thought it was

relevant to their child's needs and interests.

The survey consisted of three parts. The first part contained questions pertaining to the demographics of the cohort. Section 2 was related to the types of activities that the child might do after school and at weekends, as well as additional questions about how any 'free' time might be spent, what items the child has in his/her bedroom, and whether the bedroom was shared with a sibling? Information about the ownership of traditional and electronic toys was also sought.

Finally, in this section, we asked the parents to rate their level of agreement (Likert scale), they agreed with particular statements about education in general and in particular about their child's schooling experience. Section 3 was concerned with the levels of satisfaction about the school, how the parent felt about their child's experience at school, and how technologies were used in school. The survey was trialled in two kindergarten and primary schools in the year prior to the start of the study and modified on the basis of feedback received from Principals, teachers, parents and Primary 5 (aged 11 years) children. Here, we focus on the responses to the first two questions in Section 2 of the survey:

"How much time during weekdays and weekends (separately) outside school hours does your child spend on the following activities?" Parents responded to 28 activities.

Methods of analysis

The two survey questions required that the parents report how long their children were engaged in the particular activities in hours. In the next section, we present summaries of the parents' responses in a graphic format (Figures 1 and 2).

Also, we compare parent's responses according to the year level of their child (Kindergarten, P 1, and P2 in Figures 3 and 4), their child's gender, and to weekday activities as well as those on the weekend. We employed permutation tests to explore these relationships. The p-value returned by the permutation test can be interpreted in the same way as the p-value returned by conventional tests of statistical inference, but strictly, it is the proportion of random permutations of the data (here, 50,000 permutations) that generate a test statistic equal to or larger than the test statistic returned by the sample. The *coin* package (Hothorn et al., 2006; Hothorn et al., 2008), a package of the R statistical system (Team, 2015), was used to compute the permutation tests.

Parents responded on a four point scale (Not done; < 1 h; 1 - 3 h; > 4 h). The ordered nature of the response scale was taken into account in the analyses. Further, because each point on the scale is a time span, we assigned the mid-point of each span to each category so that the differences between the spans could be taken into account. The four midpoints were: 0, .5, 2.5, and 4.5 respectively (strictly, the last point on the scale is open ended, but it seems reasonable impose an upper limit of 5 h, and thus a midpoint of 4.5 h). Similarly, the children's year levels are ordered (Kindergarten, P1, and P5), and to assign a quantity to each category, we assigned an average age of children in each of the year levels: 3.5, 6.5, 10.5.

Testing for associations between times spent on an activity and year level was thus a test of linear-by-linear association, and extension of the general Cochran-Mantel-Haenszel (CMH) tests. Similarly, testing for association between gender and time spent on an activity was a linear-by-linear association test. Testing for associations between times spent on an activity on a weekday compared to the weekend required slightly different versions of the analysis: a test of marginal homogeneity was applied. Both tests are implemented in the *coin* package. Finally, in order to take account of multiple testing (across the 28 activities), we present Holms' adjusted p-values in Tables 1 and 2.

RESULTS AND DISCUSSION

The cohort of parents

Gender

Of the 335 surveys received from parents, 242 (72%) were completed by women (that is, wives, partners, mothers) while 93 (27.8%) were completed by men. Small differences across the three year levels of the child were not statistically significant ($\chi^2 = 0.8$, $p = 0.70$).

Location of residence

Most (80%) lived in the New Territories of HK (SAR). Smaller numbers (18%) lived in Kowloon, and 3% lived elsewhere (on the Islands off HK.).

Income

The parents were mostly low to middle income earners (Government of Hong Kong, 2012a, b). Nearly 31% reported a combined household income less than \$10,000 Hong Kong dollars per month (approximately \$1,300 US dollars), with another larger group (35%) reporting an income between \$10,000 and \$20,000; that is a total of 67% reporting an income less than the median income (the median monthly combined household income in Hong Kong is \$20,000 (approximately \$2,600 US dollars) (Government of Hong Kong, 2012a, b). Another 27% reported incomes between \$20,000 and \$40,000, and only 20 (6%) with incomes higher than \$40,000.

Domestic helper

Only 58 (18%) said they employed a domestic helper. These are foreign workers who live and work for families in HK at a fixed price determined by the Government, with many living in the family house. For this data there was a statistically significant association with Year level of the child ($\chi^2 = 9.15$, $p = 0.01$). A larger percentage of parents of kindergarten children (26%) employed domestic help compared to 12% for parents of P1 and P5 children.

Qualifications

The majority (88%) of parents had completed high school, either in Hong Kong (54%) or elsewhere (33%). Smaller numbers reported holding Associate Diplomas (16) or Bachelor degrees (18) or higher (Masters (1), PhD (1)). Six reported some other qualification. Of those with a spouse (56 reported not living with a spouse), 92%

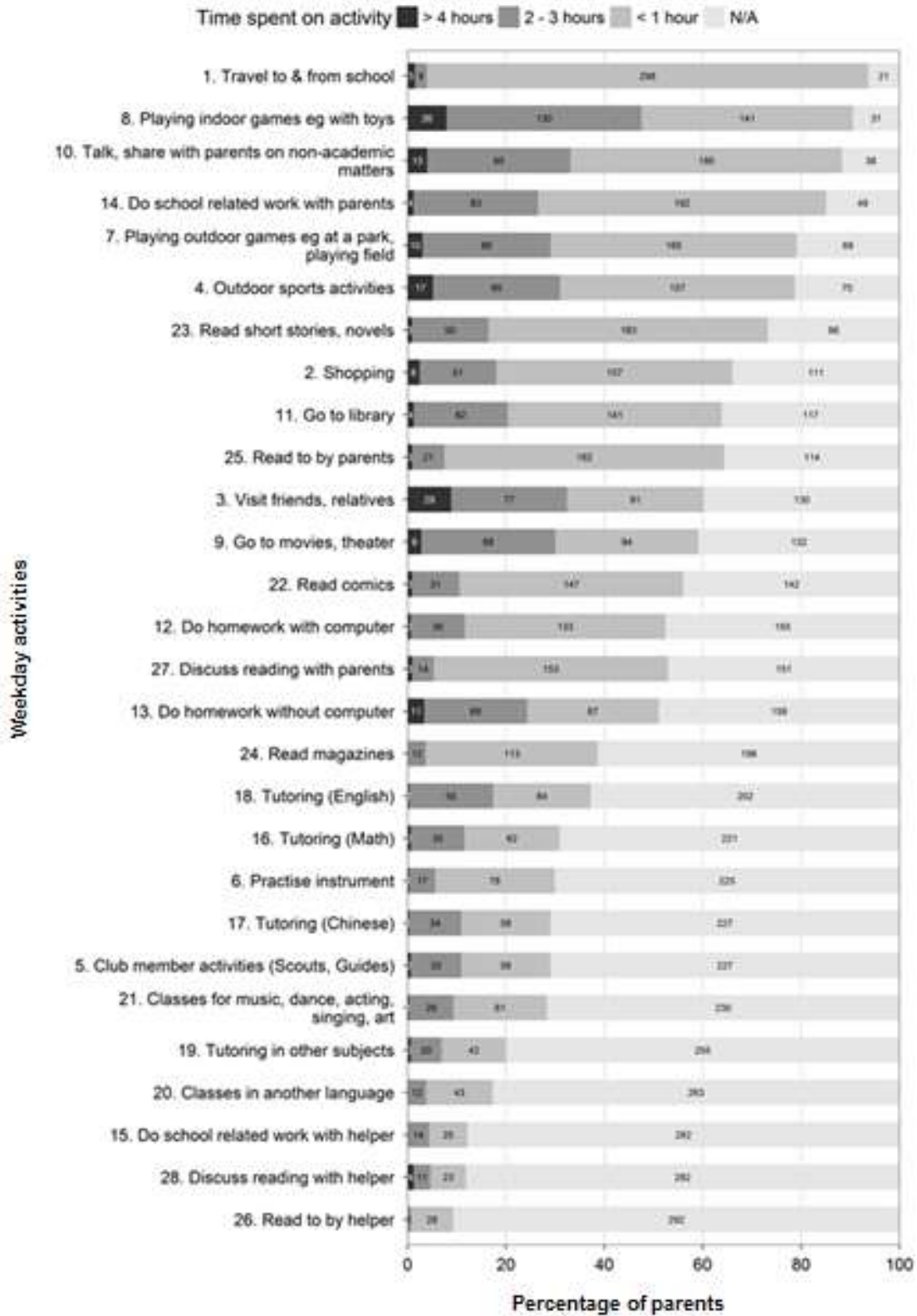


Figure 1. Parents' reporting of time their children spend on activities outside of school on a weekday.

reported that their spouse had completed high school, 4% reported tertiary qualifications, and 4% reported

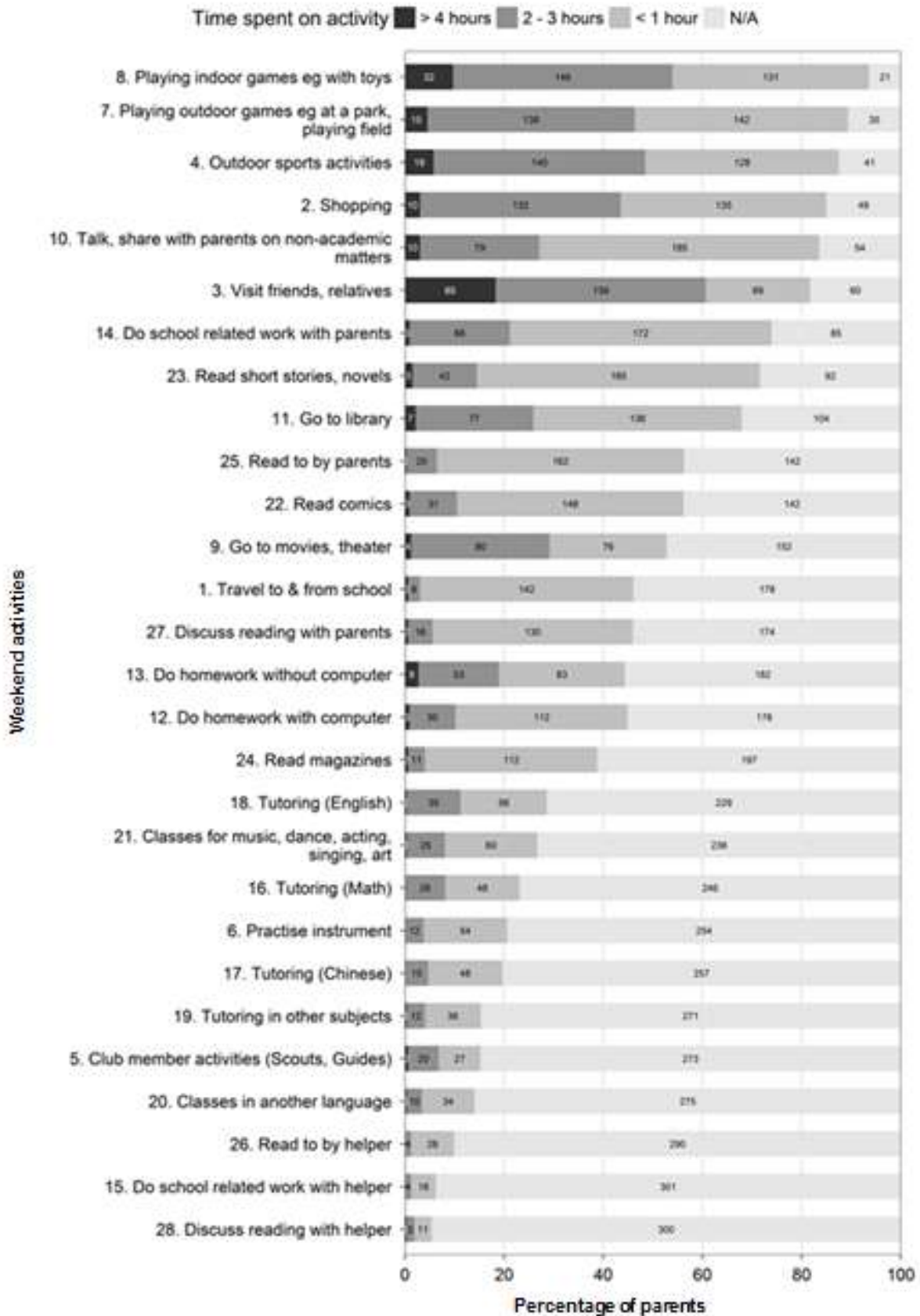


Figure 2. Parents' reporting of time their children spend on activities outside of school on a weekend.

another qualification.

Occupation

Twenty-six respondents did not answer this question. This meant that there were 309 responses, and of these 41% were housewives, 42% indicated that their employment was clerical, manual employment or in the service industry. 16% can be classified as professional for example, small business owner, civil servant, IT consultant) and 3% were not working or unemployed. This means that the majority of the cohort were either working in non-professional positions or were housewives.

What the parents say their children do out of school on weekdays and weekends

Parents were asked how long their children were engaged in certain activities after school on a weekday, and on weekends. There was some missing data among the responses so that the number of valid responses ranged between 318 and 332 for the weekday activities, and between 317 and 330 for the weekend activities.

Figures 1 and 2 show summaries of the parent's responses. The stacked bar charts gives the percent of parents (read off the horizontal axis) and the number of parents who responded in each category (the numbers in the bar segments). The charts organize the activities from top to bottom in increasing order of the number of parents who claimed that their child engaged in the activity.

At the top of Figure 1, is "travel to and from school", followed by activities to do with playing and sporting activities as well as activities related to parent involvement with school work at home. At the bottom of Figure 1 are tutoring activities, activities to do with extra classes, and activities involving the domestic helper, if the family had one.

At the top of Figure 2 (Weekends), are playing and sporting activities as well as broader leisure activities like visiting friends and shopping. That is, the activities to do with school work have moved down the list a little. At the bottom of the Figure are, again, activities to do with tutoring, extra classes, and activities involving the domestic helper that might occur on weekends.

According to the parents, their children are not spending extraordinary amount of time doing homework, being tutored, or in extra classes. Rather, they assert their children are engaged in non-school/ non-academic activities that can be described as 'leisure' time

With respect to doing homework, parents reported that their children spend approximately the same amount of time on the weekend doing homework as on weekdays, either using a computer or not (weekday: 51%, weekend: 44%), with a computer (weekday: 52%; weekend: 45%).

The majority of parents indicated their child does school related work with them (weekday – 87%; weekend – 80%). In addition, large numbers of parents claim that their child talks and shares with them regarding non-academic matters (weekday – 93%; weekend – 92%).

With respect to reading, large numbers of parents claimed their children read, in particular, short stories, novels (weekday – 73%; weekend – 72%), and comics (weekday – 55%; weekend – 56%) most often; but somewhat smaller numbers claimed that their children read magazines (weekday – 39%; weekend – 39%).

Table 1 shows a summary of results from the linear-by-linear association tests applied time spent of the activities and year level of the child for weekday and weekend activities. Significant χ^2 values have been bolded. For the set of activities common to both weekday and weekend, the direction of the association is that older children engage in the noted activities for longer periods of time. It should not be surprising that older children engage in homework activities, tutoring activities, reading activities, and activities associated with clubs for longer amounts of time.

Also, older children spend more time at the movies and the theatre than younger children, but only on the weekends. There are two weekday activities for which younger children spend more time than older children, that is, being read to by parents, and playing indoor games.

According to the parents, there are not large differences in the amount of time boys and girls spend on most of the activities listed. There are however, two exceptions to this in the weekday activities; tutoring in mathematics, and classes in the arts (music, dance, acting, singing, art). Not many students did these, but the direction of the relationship was that boys tend to be engaged a little more often than girls in mathematics tutoring; and girls tend to be a little more engaged in music and dance classes than boys.

Table 2 shows a summary results from the marginal homogeneity tests applied time spent of the weekday activities compared with time spend on weekend activities. Significant χ^2 values have been bolded. As one would expect, the children spend more time on a weekday than on a weekend travelling to and from school. Also, they do club activities, and school related work with parents more often on a weekday than on the weekend. There are also three activities in which only a few students participated (English tutoring, Chinese tutoring, and reading discussion with help) that they did more often on weekdays than weekends.

As it is also expected, there are activities that occur more on a weekend that included shopping, visiting relatives, and playing outdoor sporting activities. There is also a slight tendency for the children to visit a library more on a weekend than on a weekday. For the remaining activities, there are no significant differences between weekday and weekend.

Table 1. Summary of linear-by-linear association tests testing for significant associations between time spent on weekday and weekend activities.

Activity	Weekday		Weekend	
	χ^2	Holm's adjusted p	χ^2	Holm's adjusted p
Travel to and from school	0.02	1	0.70	1
Shopping	5.87	0.224	1.10	1
Visit friends, relatives	0.37	1	0.00	1
Outdoor sports activities	2.43	1	1.40	1
Club member activities (Scouts, Guides)	28.76*	<0.001	10.40*	0.015
Practise instrument	3.73	0.714	6.30	0.180
Playing outdoor games eg at a park, playing field	2.75	1	2.20	1
Playing indoor games eg with toys	11.30*	<0.001	2.29	1
Go to movies, theater	0.94	1	15.90*	0.001
Talk, share with parents on non-academic matters	0.02	1	0.	1
Go to library	15.90*	<0.001	21.60*	<0.001
Do homework with computer	34.54*	<0.001	26.10*	<0.001
Do homework without computer	35.95*	<0.001	33.50*	<0.001
Do school related work with parents	1.28	1	0.60	1
Do school related work with helper	1.74	1	1.20	1
Tutoring (Math)	31.06*	<0.001	28.80*	<0.001
Tutoring (Chinese)	16.72*	<0.001	16.80*	<0.001
Tutoring (English)	32.47*	<0.001	32.00*	<0.001
Tutoring in other subjects	7.36	0.102	5.70	0.204
Classes in another language	0.04	1	0.10	1
Classes for music, dance, acting, singing, art	3.02	1	4.40	0.497
Read comics	28.71*	<0.001	21.60*	<0.001
Read short stories, novels	21.31*	<0.001	20.30*	<0.001
Read magazines	7.10	0.102	6.40	0.139
Read to by parents	9.82*	0.018	2.70	1
Read to by helper	0.92	1	1.90	1
Discuss reading with parents	0.79	1	4.59	0.426
Discuss reading with helper	1.47	1	0.00	1

Conclusions

The parents' responses to the survey provide a view of the after-school lives of children in the age range from 3 to 11 years living in Hong Kong. Overall, the responses reveal that the children did not spend great amounts of time (that is, more than four hours) on any one activity, but rather engaged in a range of activities both on weekdays after school and on the weekend. They also did not appear to spend a great deal of time using technology.

Thus, the commonly held view that Asian students spend most of their time doing schoolwork and little time engaged in leisure activities is not borne out by these survey results. In fact, the data shows that the children spent most, that is more than 4 h, of their out-of-school time visiting friends and relatives, playing indoors and outdoors, playing organized sport or club activities, shopping and sharing (non academic talk) with their

parents.

Doing homework, with and without a computer, was basically in the middle of the 28 activities provided on the survey in terms of time spent engaged in each. We included a category of 'school work', that is not set homework, but time spent on, for example, seeking out information for a project as well as practice in the basics of literacy and numeracy. This activity had more time spent on it, both after school on weekdays as well as on weekends, than homework. After homework, and in the lower half of the time ranges, a variety of other schoolwork related tasks followed.

It was also interesting to note that reading (short stories/ novels) was in the upper part of the activity range but with most parents saying their child spent less than an hour on this type of reading. They also read to their children and discussed reading for short periods of time. The parents also indicated that their children read magazines and comics but not for great lengths of time.

Table 2. Summary marginal homogeneity tests testing for significant associations between time spent on weekday activities and time spent on weekend activities.

Activity	χ^2	Holm's adjusted p
Travel to and from school	14.12	<0.001
Shopping	28.11	<0.001
Visit friends, relatives	28.28	<0.001
Outdoor sports activities	6.52	<0.001
Club member activities (Scouts, Guides)	14.10	0.005
Practice instrument	2.50	0.169
Playing outdoor games for example, at a park, playing field	13.77	<0.001
Playing indoor games for example, with toys	4.13	0.133
Go to movies, theater	1.12	1
Talk, share with parents on non-academic matters	0.18	0.134
Go to library	7.26	0.047
Do homework with computer	1.76	1
Do homework without computer	1.61	0.144
Do school related work with parents	4.41	0.013
Do school related work with helper	1.78	0.089
Tutoring (Math)	2.88	0.109
Tutoring (Chinese)	5.93	<0.001
Tutoring (English)	2.82	0.017
Tutoring in other subjects	3.72	0.104
Classes in another language	0.40	1
Classes for music, dance, acting, singing, art	0.04	1
Read comics	0.09	1
Read short stories, novels	0.01	1
Read magazines	0.41	1
Read to by parents	0.00	0.964
Read to by helper	0.00	1
Discuss reading with parents	0.07	1
Discuss reading with helper	2.61	0.005

Most of the parents reported that their child visited the library both on weekdays after school, but also on weekends. Again the majority reported this to be for less than an hour.

In this cohort, there were not many parents who indicated that their children were engaged in doing 'extra' academic work. That is, there was minimal time spent in tutoring schools, learning a musical instrument or learning another language. As is often the case, this initial exploration of the after-school lives of Hong Kong children raised additional questions that might be fruitful for future investigations, including:

- (1) What differences in types of activities might be apparent with a different socio-economic class cohort of parents?
- (2) What type of organized after-school activities (after school, weekend and school holidays) are provided in Hong Kong, if any, and to what extent do children participate in them?
- (3) Do families with domestic helpers have children with

more or less focus on academic time after school?

Answering these questions might make it possible to ascertain whether the empirical data collected and analyzed here is unique to low socioeconomic families in Hong Kong. Further, in lamenting the lack of research on the topic of the after school lives of East Asian students, Larson and Verma (1999) also posed some questions that they believe need to be answered. They were:

- (1) How do differing populations of children and adolescents spend time? With rapid changes occurring in nearly all societies of the world, it is critical to have data on youths' time as a social indicator.
- (2) What is the relationship between time in specific contexts and developmental outcomes?
- (3) What shapes time use?

Taken together, the questions illustrate that there is still a lot of space for new investigations. The age range of the children in this study was broad in order to consider the wide array of possibilities at the different junctures of

schooling. While it is apparent that the literature indicates age is an important variable, it is also evident that middle class East Asian parents (Stevenson, 1999) do place a premium on academic work and this is reflected in the structure and nature of out of school activity. With no studies conducted with parents in the low socio economic range, there is still a long way to go to collect evidence if they share the beliefs and child rearing practices of their more affluent counterparts.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

An alternative educational method in early childhood: Museum education

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According to the preschool education program that came into effect by Turkish Ministry of Education in Turkey in 2013, teaching should be offered not only in classrooms but also in places outside classrooms likely to boost learning. The program required utilizing learning techniques, and environments different from conventional ones. The aim of the present study was to raise awareness about history through a museum education program created as described by the Ministry in 2013, and offering information about cultural heritage of Turkey and other cultures, and to test effectiveness of the program. The study was conducted in İzmir Tarih ve Sanat Müzesi (The History and Art Museum in İzmir, Turkey). Data were collected at face to face interviews with a semi-structured interview form created to determine what children thought about museums. Obtained data was evaluated with content analysis. The analysis showed that the education program offered was effective.

Key words: Preschool education, museum education, and preschool education program.

INTRODUCTION

According to the International Council of Museum (ICOM), museums are institutions which are open to public use to collect and protect things witnessing history of human beings and their environment, to display them for educational and entertainment purposes, to do research on them, to share obtained knowledge through this research with people and to contribute to development of societies (McLean, 1996). They have collections related to art, science, history, health and technology which give understanding to protect, examine and evaluate cultural values and to enhance esthetic values of societies (Riviere, 1962).

At present, learning is not restricted to books or school. Based on contemporary learning theories, learning require that individuals should be active, put what they

have learned into practice, think about what they implement and make sense of them, utilize their linguistic skills and participate in social activities.

Museums are defined as “classrooms without walls”. They are known to be important educational environments and offer a considerable learning potential. Museum education involves effective use of museums as experiences based on multifaceted learning and as living environments during life-long learning. They enable students to understand the value of and protect historical artifacts and cultural heritages, to respect different cultures and to adopt multiculturalism (Sheppard, 2001).

Collections exhibited in museums allow students to see how history is evaluated and to develop critical thinking skills about history (Marcus, 2007). Historical artifacts

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help to preserve national identity, culture and memory and transmit historical and cultural heritage to future generations (Crane, 2000).

It is clear that education should also take place outside classrooms. In the present era, in addition to their respective historical value, museums are places where individuals' ability to search information, question, criticize, analyze and create can be raised. All modern approaches underscore the idea that what is learned through on the job training or experiences can be retrieved for a long time (Hooper-Greenhill, 1994).

Education offered in museums contributes not only to learning about artifacts available there but also to the development of cognitive, affective and linguistic skills such as verbal expression, observation skills and making associations (Ampartzaki et al., 2013; Synodi, 2014; Hackett, 2014).

Constituents of a museum create an important opportunity for on-site learning. Main learning methods employed during museum education are touching original or false objects, performing dramas, working at a protected natural area, carving sculptures or drawing, attending a performance and using a voice recorder or a video recorder (Hooper-Greenhill, 1994).

It has been revealed that museums do not have educational programs, are not advertised well and are not usually used for educational purposes but are visited only as part of a sightseeing program (Mercin, 2002). However, at present, all activities in museums are considered as potential educational opportunities and museums develop educational programs directed towards learners. These programs are usually created by education departments or educators in museums. Museum education primarily involves scheduled educational activities. Science, culture and art courses directed towards children and adults are organized in museums in many countries (Seidel and Hudson, 1999).

Museums as learning environments

Theoretical and empirical studies show that there is a strong connection between museum visits and learning. Museum education defines education via museums.

Museum education helps individuals to identify themselves and other people, maintain cultural heritages, associate between the past, the present and the future and develop intercultural understanding and empathy. It establishes a relation between objects coming from the past and learners (İlhan and Okvuran, 2000).

As earlier mentioned in different studies, physical spaces of museums could be imposing and intimidating for young children. Despite this, there is consistent evidence that young children can and do engage positively in museums (Piscitelli, 2001; Piscitelli and Anderson, 2002; Piscitelli et al., 2003), creating imaginative insights and new perspectives (Jeffers, 1999) when they have the opportunity and motivation to do so.

According to Hooper-Greenhill (1994), current education approach does not give emphasis on the result. Instead, it gives emphasis on skills, activities, experience and creative potential that lead to the result. One of the most significant aspects of museum visits is that students get a chance to study actively with tangible evidence while they encounter with alternative learning methods.

For some children, this method brings about the skills and abilities, that are rarely seen in the classroom environment which is more formal compared to museum environment. It is encouraging for all children to go somewhere new, meet new people, try new methods and encounter with real materials (Hooper-Greenhill, 1994).

It is known that education in the museums, beyond a simple museum visit, contributes positively to teachers and students (Xanthoudaki, 1998). Falk and Dierking (2000) emphasize that children develop not only knowledge but also social skills in the museums. Museum education and classroom education should be considered as complementary rather than comparative (Miotto, 2002).

In the 19th century, J.J. Rousseau put on emphasis on the fact that education for the children must be given based on their senses. Montessori, Froebel, Pestalozzi, McMillan ve Isaacs, who are early childhood education pragmatics, suggest that organizing rich environments that can provide necessary skills for both school and day-to-day life and letting them be free are effective in gaining problem-solving skills without any adult help (Bilton, 2010).

Throughout early childhood, children learn more easily when their senses are stimulated and when they actively participate in activities, have direct experiences, interact with people around, join trips and observe and discover things. As well as providing information about things exhibited, education offered in museums lead children to improve their verbal expressions, observation skills and cognitive abilities like making sense of things and making associations (Ampartzaki et al., 2013).

Preschool age, occupying 3 to 5 years of life, is an important stage of life during which children develop their linguistic and social skills. Education directed towards senses and providing children with opportunities to encounter different objects give significant support for their development. Therefore, one of the most effective ways to equip preschool children with appropriate skills is museum education (Dilli and Dümenci, 2015). Akman et al. (2015) found that although preschool education teachers believed that museum education was necessary, they were not found to be competent enough in use of museums as educational environments.

Hooper-Greenhill proposes a three-stage model for educational studies in museums to support school learnings. In this model; the first stage is defined as the preparation of the class for the visit of the museum, the second stage is defined as the visit of the museum, and the final stage is defined as evaluation in class after the

visit. According to the model, the studies carried out in the classroom following the visit of museum contribute to the achievement of the museum education's aim. In the three-stage model, museum education is considered as an important complement to classroom education (Hooper-Greenhill, 1994). In this study, a study is applied in accordance with this model.

Considering the aforementioned views, the present study was directed towards offering knowledge about cultural heritages of Turkey and other prior cultures to preschool children, and to raise their awareness about history and prior lifestyles through museum education created in accordance with the preschool education program of The Turkish Ministry of Education. The research problem was whether museum education designed in accordance with the education program of Turkish Ministry of Education would increase preschool children's knowledge of museums.

MATERIALS AND METHODS

The study had a qualitative design with semi-structured interviews. One of the most frequently used data collection tools in qualitative research is to conduct interviews. They are very strong tools utilized to reveal points of view, subjective experience, feelings, values and perceptions (Yıldırım and Şimşek, 2008). A semi-structured interview form taking account of the aim of the study was developed by the researchers. The form was composed of two sections. Section I included questions about personal characteristics and section II included questions about students' opinions about museums. Students' responses to the questions were recorded by the researcher. Data were collected at face to face interviews with 30 students in autumn 2015 before and after museum education was given. Care was taken in order not to influence the students during the interviews, which took 15 min on average. Obtained data was analyzed with content analysis, and codes and categories were created.

Study group

The study group was formed by using convenience sampling, and included 30 preschool students who were studying at government and municipality schools in İzmir and the researchers could access. The group in which the study was conducted consists of children between the ages of 5 and 6, who are at lower and middle socioeconomic levels. Children have no previous experience with museums. They did not receive this kind of education before the museum education.

Procedure

The module was composed of interactive education sessions in Tarih ve Sanat Müzesi (the history and art museum), located in İzmir, and educational trips to historical places in and near İzmir, including Agora, Bergama, Ephesus, Metropolis, Teos, Urla underwater archeological excavation site, Klazomenai, Boncuk Köy (a village famous for beadmaking) and Archeological Museum. In museum education, booklets for children prepared by Çakır et al. (2009), appropriate methods and techniques to be used in activities held in museums are presented and dramas and games are shown to be the most effective ones. In this study, during interactive

museum education sessions, the students performed dramas, watched a 3D cartoon about historical and cultural heritages of İzmir, and joined games and activities in the garden based on preschool abilities and learning outcomes. They had opportunities to examine historical artifacts closely, and were informed by the museum teacher. They were asked to draw pictures of the objects in the museum on pieces of paper given to them. They also made sculptures from clay and displayed them in an open-air museum.

Data collection

Data was collected before and after the museum education module prepared according to the preschool education program of The Turkish Ministry of Education. The semi-structured interview form was completed face-to-face with 30 children before and after the museum education module to test its effectiveness. In this interview form; children were asked about what a museum is, what historical artifacts are in a museum, and what can be found in a museum. This interview form was applied before and after the museum education, and the answers of the children were recorded.

Data analysis

Content analysis of obtained data was made. For this reason, the data was coded separately by two researchers. To achieve intercoder reliability, the reliability coefficient was calculated. It was found to be 0.90. Frequencies of coded data were calculated and presented in tables. Children's comments were directly quoted to enhance validity.

RESULTS

The results of the pre- and post-tests performed to determine changes in knowledge of the children attending the museum education module will be presented here. The children were asked the following questions in the tests:

- (1) What can you find in a museum?
- (2) What is a historical artifact?
- (30) What is a museum?

Children's responses to these questions are presented in Tables 1, 2 and 3. It was striking that most of the children's responses in the pre-test to the question what can be found in a museum were either wrong or irrelevant, while they were more relevant in the post-test. A higher number of children were found to give correct answers in the post-test as in the following:

"Historical artifacts and old coins and plates etc. can be found in a museum". This may suggest that the children had a more positive perception about museums after the museum education module.

Given that there are different types of museums and that there can be very different works in the museum, it would not be appropriate to say that the answers given by the children in the pre-tests are wrong. However, in general,

Table 1. What can be found in a museum based on children's responses.

What can be found in a museum?	
Pre-test	Post-test
Historical artifacts (sculptures and old vases, lambs, glasses, plates, paintings, toys and coins) (n=11)	Historical artifacts (sculptures and old vases, plates, glasses, paintings, toys and coins) (n=22)
Radios, smoke machines, old telephones, gramophones (n=3)	Historical artifacts, which have been kept so far (n=2)
I don't know. (n=4)	Bones, fossils and dinosaurs (n=4)
Old articles (n=2)	I don't know (n=1)
Books, cupboards (n=2)	-
Bones, fossils, dinosaurs, mummies (n=6)	-
Atatürk, Atatürk's mother, Atatürk's father (n=1)	-

Table 2. Children's opinions about what a historical artifact is.

What is a historical artifact?	
Pre-test	Post-test
Valuable works created in old times (n=3)	Valuable objects used in old times (n=17)
Historical artifacts (n=2)	Things unearthed from soil and kept so far (n=5)
Spoiled fruit juice (n=1)	The place where there are vases (n=1)
Things unearthed from soil (n=1)	Sculptures found on the beach (n=4)
I don't know (n=19)	I don't know (n=2)
Very important things (n=3)	-

Table 3. Children's opinions about what a museum is.

What is a museum?	
Pre-test	Post-test
A place where there are sculptures of Atatürk - Atatürk's home (n=5)	A place where historical artifacts are found and exhibited. (n=6)
A place visited (n=3)	A place visited to see sculptures (n=9)
Dinosaur museum (n=2)	A place where there are beautiful things (n=1)
Articles kept since old times (sculptures, plates) are displayed. (n=2)	Articles kept since old times (sculptures, plates) are exhibited (n=7)
A place where there are bones (n=3)	A place where bones of dinosaurs and fossils are found (n=4)
-	A place where there are enemies (n=1)
I don't know (n=12)	I don't know (n=1)

it can be said that the answers given to the pre-tests are somewhat "naïve" when it is thought that museums are places that contain various cultural heritage items. Participant 9 responded to the question "what can be found in a museum" before (C1) and after (C2):

C1: "There are cupboards and books. There are old things."

C2: "There are historical artifacts and valuable objects, which have been kept so far."

Participant 15 responded to the same question before

(C1) and after (C2):

C1: "There are Atatürk's clothes in the museum".

C2: "There are historical artifacts, that is, old sculptures, coins, fossils and dinosaurs in a museum".

The question "what is a historical artifact?" was answered correctly by very few students in the pre-test while it was striking in the post test that the number and variety of correct responses were very high. Although, many students did not know in the pre-test what a historical artifact is, the number of the students responding to the

question correctly increased to 27 in the post-test. These findings show that the students had a positive change in their perceptions about the concept of historical artifacts after the museum education module. The participant 7 responded to the question “what is a historical artifact?” before (C1) and after (C2):

C1: *“Historical artifacts are things dug out of soil after a long time.”*

C2: *“Historical artifacts are valuable things used in the past.”*

The participant 8 responded to the question before (C1) and after (C2) the module as follows:

C1: *“I don’t know what a historical artifact is.”*

C2: *“Historical artifacts are things kept since old times and valuable articles dug out of soil.”*

When the answers of the question “What is a historical artifact” are examined, it can be said that the children have a more accurate understanding of the concept of historical artifacts after the education they received in the museum, and the responses in the final tests are shaped by their learning there. Twelve students did not know the answer to the question what a museum is, and some students could not make a correct explanation in the pre-test. However, 27 were found to give a correct definition of the museum in the post-test. The high number of such responses as “articles, sculptures and plates used in the past are found in a museum” in the post-test suggests that the children were influenced by works of art and historical artifacts in History and Art Museum in a positive way and displayed a considerable increase in their knowledge of a museum. Participant 12 responded to the question “what is a museum?” before (C1) and after (C2):

C1: *“a place visited and seen”*

C2: *“Places where historical artifacts are found and exhibited. Sculptures, stones and old coins are exhibited there.”*

Participant 28 answered the same question before (C1) and after (C2):

C1: *“a place where bones are found. We visit it to see them.”*

C2: *“a place where historical artifacts are found and exhibited.”*

After their experiences in the museum, it is observed that children’s knowledge has developed regarding the museums.

DISCUSSION

The findings of this study showed that the museum education module offered to preschool children was

effective. The education module increased children’s knowledge about what a museum and a historical artifact are, and what can be found in a museum.

Several studies investigating the benefits of field trips showed that students who visited museums showed clear cognitive gain, compared with those who had not (Stronck, 1983; Griffin, 2004). Some studies found no difference in cognitive or affective learning (Borun and Flexer, 1983; Griffin, 2004) while some studies expressed more positive attitudes and motivation toward learning after visiting museums (Orion and Hofstein, 1991).

Middle East Technical University Development Foundation (1997), conducted a project about museum education in 1997. The purpose of the project was to examine effects of a museum education program based on input from teachers, students and experts on cognitive, affective and psychomotor abilities. Observations and practices in the project revealed that the relationship between teachers, students and museums have a role in use of museums as active learning environments. At the end of the project, it was recommended that development and establishment of pilot museum education services and school-based museum education projects could be useful.

Topallı (2001) reported that the number of students visiting museums was low, and that students more frequently considered a museum as an archeology museum. However, the researcher noted that students had fun during three-dimensional activities after a visit to a museum, and that what they learned was permanent. The findings obtained in the pre-test in the present study were similar to findings of the study by Topallı (2001). In fact, the participants of this study gave far-fetched answers to the questions what a museum is, and what can be found in a museum before museum education; however, the education program created a considerable difference in their answers.

In a study by Arıkan (2001), visual and auditory elements like cartoons in museum education helped students acquire knowledge and target behavior more quickly. As in prior studies, the current study also provided children with opportunities to watch cartoons, work with three-dimensional materials and clay, and look for historical artifacts in a sandpit. These activities encouraged the children to join trips to historical places and museums.

As well as a rise in motivation, the museum education module brought about an increase in children’s knowledge of museums and artifacts as shown by their responses to the questions “what is a museum?”, “what is a historical artifact?” and “what can be found in a museum?”. In fact, 12 children did not know what a museum is in the pre-test, only one child gave the same response in the post test.

In addition, before the museum education module was offered, four children reported they did not know what can be found in a museum, and two children said there were

cupboards and shelves in a museum. After the module, only one child still did not know what a museum has. The children's responses to the question what an artifact is clearly showed effectiveness of the education given. Before the education module was given, only three children could define an artifact, the number of children not knowing about an artifact decreased to two after the education. Akman and Güler (2009) in their study on opinions of 6-year-old children about a museum found that the children focused on collection, protection and exhibition functions of museums.

Akdağ and Erdiller (2006) offered an education program to 11 preschool children in Tabiat Tarihi Müzesi (a museum displaying findings of research about earth sciences like geology, mineralogy and paleontology) to give information and to increase awareness about protecting seas and underwater life. The program was effective in enhancing children's knowledge and awareness about the issue.

Dilli and Dümenci (2015) in their experimental study with a control group, investigated effects of museum education on cognitive skills of 6-year-old children in a state kindergarten about extinct animals which once lived in Anatolia. They found that knowledge of the experimental group significantly increased.

Abacı and Usbaş (2010) in their experimental, controlled study on 42 6-year-old children provided the experimental group with visits to four museums and education activities before, during and after the visits and the control group with just visits to four museums; namely, The Istanbul Archaeology Museum, The Turkish and Islamic Art Museum, The Beylerbeyi Palace, and The Rahmi Koç Museum.

The results of the study revealed that the children offered educational activities were more successful in the post-test for the education given, which is consistent with the results of the present study. Similarly, Önder et al. (2009) in their experimental study with a control group on fifth-year students attending primary school reported that knowledge about an archeology museum and clothing significantly differed between the groups, and the difference was in favor of the experimental group. Miglietta et al. (2008) in their study, reported that students retained information they had learned up to three months after a museum visit. In light of the findings of the present study and evidence from other studies, it can be concluded that museum education lends support for school education programs and contributes to learning.

RECOMMENDATIONS

A museum atmosphere offers an opportunity to have alternative learning methods, and to actively work on tangible evidence. In this study, a museum education program administered in a museum and historical places was found to be effective in early childhood. Based on

the results of the study, the following recommendations can be made:

(1) Since use of environments other than classrooms in early childhood ensures direct access to objects and situations, it enables students to retrieve what have been learned for a long time. Education programs offered in these environments and based on gains and indicators reported by The Turkish Ministry of Education can inform children about cultural heritage of the country and make learning permanent.

(2) Museum education programs help children learn about and become aware of cultural heritage of the country. Therefore, importance should be placed on these education programs in early childhood. Children should be taken to museums, and be allowed to interact with objects displayed there. Educational activities to be offered at these programs should be planned beforehand and incorporated into the education programs designed by The Turkish Ministry of Education. They should be appropriate for developmental stages of children, entertaining and allow them to be active participant. They should also be combined with practicums, dramas and art related activities.

(3) Curriculum for undergraduate preschool teacher education should include museum education related courses and pre-service and in-service training programs can also provide such courses.

(4) Education departments should be established in museums. This can help museums to adopt educational services in addition to their exhibition roles.

(5) The present study was performed on learners in their early childhood, and only sought for answers to the questions "what is a museum, what is an artifact and what can be found in a museum?". Therefore, it could be useful to investigate effects of museum education on children from different age groups and on developments of children in different fields.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

Students' conception of learning environment and their approach to learning and its implication on quality education

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Quality of education in higher institutions can be affected by different factors. It partly rests on the learning environment created by teachers and the learning approach students are employing during their learning. The main purpose of this study is to examine the learning environment at Mizan Tepi University from students' perspective and their approach to learning, and evaluate its implication on quality education. The study is descriptive survey in its nature of quantitative approach. The Course Experience Questionnaire (CEQ) and Approaches and Study Skills Inventory for Students (ASSIST) are employed to measure the learning environment and approach to learning respectively. The study was targeted at six colleges of Mizan-Tepi University and randomly selected 382 students participated in the study. The following conclusions were derived from analysis made using correlation, cluster analysis, ANOVA and independent t-test. The learning environment/context as redefined in this study represents the teaching activities conducted in the classroom only. The whole picture of the response shows that the learning environment is conducive for students learning. However, the ANOVA result confirmed the existence of statistically significant difference among the six colleges on this variable. Gender is not a function to perceive the learning environment differently. A statistically significant and positive relationship was found between learning environment, deep approach and students' performance. It was confirmed that those students who perceived their learning context as conducive for their learning, adopted deep approach and have better achievement. But, those who conceived the learning environment as less conducive; adopted surface approach and have lower score. Finally, the result from cluster analysis shows 54% (n=207) of students in the sample perceived their learning environment as supportive of their learning and adopted a desirable (high quality) learning approach while 46% (n=175) perceived their learning environment as less conducive and adopted a low quality learning approach. Hence, it can be inferred that the teaching learning practice in this university is promising in the journey of ensuring quality education but it needs a great effort at all levels to make it to the standard.

Key words: Learning approach, learning environment, quality education, students learning.

INTRODUCTION

Education promotes the culture of productivity by enabling individuals to discover the creative potentials in them and apply same the improvement of the existing skill and technique of performing specific tasks, thereby

increasing the efficiency of their personal societal efforts (Orji, 2012).

Higher education is becoming a major driver of economic competitiveness in an increasingly knowledge

driven global economy (OECD, 2009). This shows that education and development has a strong relationship. Ethiopia is also investing a very huge capital on expansion of education ranging from primary schools to higher education institutions. Currently, it is bringing a visible change in countries development, in supplying man powers for different sectors.

According to Daniel (2004), higher education institutions are expected to produce graduates capable of bringing about changes and improvement in the society. Due to this, like the rest of the world, Ethiopia also gave a due attention to the expansion of higher education across the country. More than anything, graduates of these institutions are expected to be well equipped with knowledge, skills, understanding and attitude in order to serve the society effectively.

The quality of education captures the central idea in all educational institutions including higher education in today's Ethiopia. Despite the lack of consensus over the concept of quality, formal quality assurance has now become one of the central components of reform and policy instruments to adapt higher education institutions to the increasing expectations from both internal and external stakeholders all over the world (Nega, 2012).

The concept of quality education by its nature is very broad, and it is too difficult to measure from few perspectives and to define precisely. However, there are many indicators, by which effective accomplishment of them can lead to infer the quality of education. The increasing concern for quality in many Sub-Saharan African countries comes at a time from growing recognition of the potentially powerful role of higher education for growth and its rapid expansion since the new millennium (Materu, 2007).

The Higher Education Relevance and Quality Agency (HERQA, 2006) in Ethiopian have designed different criteria to ensure the quality of education in higher institutions. It has also proposed many focus areas through which the quality of education can be ensured; some of these include governance and management system, infrastructure and learning resources, program relevance and curriculum, teaching learning process, research and outreach activities and the like.

The imperative for countries to improve employment skills calls for quality teaching within the educational institutions (Hartley 2005). This is to mean that, more than the others, the teaching learning process is very determinant in ensuring quality education. According to the organization for economic cooperation and development (OECD) report of 2009, "quality education might stem from the internal quality assurance systems that regard teaching as one of the pillars of quality along with research and management." Nega (2012) also

stated that quality of education and its assurance come at the forefront of all crucial issues in the context of increasing recognition of the role of higher education for national development.

Though the fact is there are no adequate researches conducted with specific to quality education in higher education. The study conducted by Nega (2012), mainly focuses on the systems established to assure quality education in a broader perspective. Tadesse et al. (2013) research also focuses on the general view of quality education from the focus areas proposed by HERQA so it has generalist view. However, this study particularly focuses on the teaching learning practices at the classroom instruction level.

Since the teaching learning process plays a paramount role in ensuring quality of education, it should be given a due attention for its effectiveness. There may not be single definition for what effective teaching is, but scholars agree on the idea of active engagement of students in the teaching learning process and teachers' effort to promote their learning leads to effective teaching. Effective teaching is about bringing effective and meaningful students learning (Hativa, 2000).

Similarly, Ramdsen (1992) viewed good teaching as "striving continually to learn about students understanding and the effect of teaching on it". Therefore, teaching should stimulate students' curiosity and active learning, encouraging students' analytical, logical and creative thinking, and increase both their desire and capacity for future learning.

The teaching learning process in higher education needs to encourage the students to actively participate in the process. Many scholars have forwarded their view towards students' involvement in their learning. These views lie on the assumption that students will learn more, when they are actively engaged in the teaching learning process and when they have given guidance and feedback by their teachers.

HERQA also proposed many criteria through which quality education will be assured. Of these, one is the teaching learning aspect. These criteria highly focus on the active engagement of students in the process and teachers emphasis to employ different techniques during teaching and assessing students learning. Beside this, the approach students adopt in their learning contributes a lot for their performance in the school and in their world of work. With this regard, teachers' reflection on quality teaching in Ethiopia higher education by Daniel (2004) raised students learning approach as one problem for quality education.

The role teachers' play in the teaching learning process is very crucial. They are the one who closely monitor students' progress and adopt different mechanisms to

enhance their learning. They are also agents who expose children's with new world and guide them how to deal with it. No matter how the good the curriculum may be and how well it is organized, and whether or not teaching materials are available, ultimately the quality of education rests mainly on the methodology of instruction employed by the teachers (Yalew, 2004).

Teachers are also responsible to link assessment with the teaching and learning, which is a key for the improvement of the practice. The view teachers have for the purpose of assessment whether "assessment of learning" or "assessment for learning" highly influences the teaching practice and students learning. According to Richard (2002), for teaching staff, recognizing the potent effects of assessment requirements on student study habits and capitalizing on the capacity of assessment for creating preferred patterns of study is a powerful means of reconceptualising the use of assessment.

According to Educational Testing System (ETS) 2003, what teachers assess, how they assess and how they communicate the results send a clear message to students about what worth learning, how it should be learned and how well expect them to perform.

Similarly, the way we teach our students clearly influences them with regard to their style of learning, level of understanding and finally their performance.

According to Wilkonsin in Walker 2006, "how we teach reflects our respect for the students, our commitment to the academic community and our responsibility for the world... our commitment to our community entails inculcating in the students an enjoyment of the pursuit of difficulty so that they reach the highest intellectual level of which they are capable". Therefore, teachers must play a pervasive role in linking or reinforcing teaching, learning and assessment. This helps them to improve the teaching practice and enhance students learning.

Students on the other side contribute a lot for the betterment of the teaching learning process. The effort they put and the approach they follow in their learning is highly related to their achievement. As Pace in Hativa (2000) suggested, "the largest contributor to students learning gains at the post-secondary level is the effort they put in to their work". Beside this, the approach adopted by students in their learning influences their achievement.

According to Daniel (2004), "students gain understanding when they have the motive to adopt a deep approach to learning". On the other hand, students who adopt a surface approach are primarily interested in meeting the demands of getting good grades. Since students are expected to solve the societies' problem under different context, they need to have an understanding of the nature of that particular issue, rather than mere knowledge of facts or principles.

According to Walker (2006), "Understanding is more significant than to know what". Therefore, to learn how to explain things or events is to be able to grasp the

principles which underlie and make sense of their working, and thus to enable us to recognize their occurrence on some future occasion even though the surface characteristics appear to be different.

All the aforementioned key issues show that, teachers and students are very important in determining the effectiveness of the teaching learning process by creating conducive learning environment and adopting good approach in their learning respectively. Therefore, Students' perceptions of their educational environment are a useful basis for modifying and improving the quality of education.

Ethiopia needs graduates capable of solving real life problems in the society. This becomes true when higher education institutions prepare manpower, which are well equipped with knowledge, skill, understanding and attitude. Mere knowledge of facts and principles in their learning does not enable them to perform their activities as intended. Different scholars in the area underlined on the assumption that students of higher education should be encouraged to focus on "understanding in their learning" and they have to have the ability to apply it in different contexts at their work place.

To affirm this, the role teachers play in creating conducive environment for students learning, integrating the teaching learning process, promoting students learning etc. are the desired practice. Beside this, students must devote their time on their learning and use learning approach which enables them to understand what they have learnt. Even though, scholars recommend these key issues for effective teaching learning process in higher education, instructors and students are not giving attention to implement it in their practices.

Nowadays in Ethiopia, there are criticisms raised by politicians and society through media on the actual performance of graduates at their work place, which is directly linked to the quality of teaching learning process in the university. In the teaching learning process, the environment in which students learn and the approach students adopt create a great impact on the quality of graduates. The researcher experience at Mizan-Tepi University as a lecturer and professional trainer, teachers strive to cover the course content within the given time while students focus on getting high scores in the exams regardless of their learning. This kind of teaching and learning approach contributes little for quality education with regard to modern pedagogue. This calls the higher education community (teachers' and researchers) to evaluate the context in which students are learning and their approach to learning.

Therefore, examining how students' perceive their learning environment and the approach employed in their learning and finally looking its implication on quality education is the concern of this study. To this end, the following research questions were raised:

(1) How students are conceiving the environment

(particularly of their department) in which they are learning?

(2) What approaches students are using in their learning? What are the factors for their choice of the particular approach?

(4) Is there a relationship between conception of learning environment and students approach to learning?

(5) What is the implication of the learning environment and students learning approach in enhancing quality education in the university?

By addressing all these questions, the study fills the gap observed in policy making with regard to capacity building of faculties. In addition, the study will also add insights on the relation between teaching practice and students learning quality.

MATERIALS AND METHODS

Population and samples of the study

Population

Students of Mizan-Tepi University are the population of the study. The University has a total of 4693 students under six colleges of which 3095 are males while the rest 1598 are females. The study particularly focused on 2nd and 3rd year students of the university. These students can give adequate and reliable information on teaching practice in their department than the new entrants.

Sample, sampling technique and procedures

The study includes samples from all colleges of the university. From the whole population of the study, 414 students were taken as a sample of the study of which 382 samples returned their response for final analysis. The corresponding sample size taken from each college is: Social Science and Humanities (n= 72 students), Natural and Computational Science (n= 85 students), College of Business and Economics (n = 40 students), College of Agriculture (n= 51), College of Health Science (n=48) and College of Engineering (n=86). These colleges were included purposively with the intention of looking the whole situation of the university. Simple random sampling (lottery method) was employed to represent departments from each college and proportional stratified random sampling was used in selecting individual students from each department. The diversity of samples from different departments is considered in order to know the whole picture of the issue at the university level.

Data gathering tools and procedures

Scale was the tool employed in collecting data for this study. To measure students' conception of their learning environment, the Course Experience Questionnaire (CEQ) was adapted. It consists of 37 items which measures the learning environment of departments on five different elements. The reliability of the scale in this study is $\alpha=.94$

Approaches and Study Skills Inventory for Students (ASSIST) was used to measure students learning approach. The scale used here, considers the three approaches to learning by testing student responses on 52 items each belonging to 13 identified sub-scales (Deep Approach: seeking meaning, relating ideas, use of evidence,

and interest in ideas.

Surface-apatetic approach: Lack of purpose, unrelated memorizing, syllabus-boundness, and fear of failure. Strategic

Approach: Organized study, time management, alertness to assessment demands, achieving, and monitoring effectiveness). For each question, students were instructed to give their agreement or disagreement using a five-ordered response scale. The reliability of the instrument in this study is $\alpha=0.91$

Methods and tools of data analysis

The responses obtained from the participants of the study were analyzed using Statistical Package for Social Science (SPSS). Pearson product moment correlation, Independent t-test, one way analysis of variance (ANOVA) and cluster analysis are the statistical tests employed in analyzing the data. The level of significance at all level is set at $\alpha=0.05$.

RESULTS AND DISCUSSIONS

A scale was administered for 414 students and response rate of 92.27% was obtained. These numbers of complete response were taken as good enough to know the whole picture of the university on the issue under investigation. Therefore, the finding is the response of 382 students who were included as a sample.

Students learning environment

To know the status of the learning context in facilitating quality learning, students' conception of the learning environment at college level was analyzed. The general picture of the response of the samples taken from the university population shows as the learning environment is conducive for their learning. This is good news for the university community because students perceived the teaching practice as if it is suitable for their learning. The descriptive statistics of the six colleges on the variable learning environment which is a result of 37 items having five alternatives of likert type is presented hereunder (Table 1).

The result shows that the total average mean of the six colleges on the variable learning environment is above the expected mean ($\bar{x} = 122.94$, $S=27.83$). Even though, the result is admirable at the university level, there is a difference among the six college students in perceiving the context of learning. As shown on Table 1, colleges of Agriculture, Business and Economics, Social Science and Humanities and college of Natural Science have the highest mean while the rest two colleges (Health science and Engineering) have low scores on the variable learning environment. The mean of the six colleges on the variable learning environment was compared using

Table 1. Descriptive statistics of learning environment at college level

Strata	n	\bar{x}	S
College of Engineering	86	108.74	23.47
College of Agriculture	51	131.78	18.79
College of Health Science	48	102.98	22.96
College of Business and Economics	40	135.05	22.87
College of Social Science and Humanities	72	137.50	28.68
College of Natural Science	85	125.24	27.84
Total	382	122.94	27.83

ANOVA. The result shows there is significant difference among the students of the six colleges at $F(5.376) = 20.003$, $P < 0.001$ in conceiving their learning environment.

The post hoc test using the LSD was made to confirm where the difference lies or to identify which colleges are most importantly conducive for students learning. The result shows as colleges of Social Science Humanities (with a $\bar{x} = 137.5$ and $S = 28.68$), college of Business and Economics ($\bar{x} = 135.05$, $S = 22.87$), Agriculture ($\bar{x} = 131.78$, $S = 18.80$) and Natural science ($\bar{x} = 125.25$, $S = 27.84$) are perceived as supportive of students learning while colleges of Health science ($\bar{x} = 102.98$, $S = 22.96$) and Engineering ($\bar{x} = 108.74$, $S = 23.47$) are perceived as less supportive. The first four colleges are known for their experienced staff profile.

To make colleges conducive for students learning, there has to be good teaching practice, students are communicated the clear goals and standards set, focuses on generic skills, appropriate assessment is conducted, there is appropriate workload, and the teaching learning process emphasizes on independent learning.

Good teaching practice comprises, teachers activity related to motivating students to do their best, giving prompt feedback on students work, understanding students problem and find solutions. In addition to these, teachers' ability in communicating/explaining the contents of the course, making the subject thought so interesting so that students will be attracted to learn, giving students a chance to involve in the teaching process and make them to benefit from it.

The learning environment has clear goals and standards when, it is designed in all domain and level of educational outcome, teachers communicate the students what they are expected to do and to achieve in advance. Then it becomes easy for students what they are expected and how to deal with it.

The other important component of learning environment is the generic skill students developed. This

is related to problem solving skills, sharpening one's analytic and communication skills, developing the ability to work as a team member, the ability to tackle unfamiliar problems and the ability to plan one's own work. These points describe weather the environment in which students are learning is suitable for students to develop generic skills.

Appropriate Assessment and workload are the other elements which constitute the learning environment. They become encouraging of learning when the assessment demands higher order thinking on the side of the learners, there is continues feedback on student's progress, and when students are given enough time to understand the tasks they are expected to learn. Besides, the activities given for students should not be taken as a high workload.

In addition to the aforementioned elements of learning environment, an opportunity for independent learning is the other crucial components in learning. The learning environment invites for independent learning when students have a great deal of choice over how they are going to learn in this course and they are given a lot of choice in the work they have to do. Besides, there should be discussion with their teachers or tutors how they are going to learn in this course.

The access to educational resources also play very significant role in encouraging independent learning. Gojeh and Worku (2015) also stressed in their research that library collections should be on open access for all library users' consultation through browsing and usage so that it will improve the quality of teaching, learning and research for quality education in the University

Conversely, when these elements of learning environment are not well practiced in the classroom, it makes the learning context not to be conducive for students learning.

To look weather there is a difference on the perception of the learning environment between the two sex groups; independent t-test was computed. The result shows there is no significant difference between male ($n = 259$, $\bar{x} = 121.71$, $S = 27.43$) and females ($n = 123$, $\bar{x} = 125.54$,

Table 2. Correlation between components of learning environment and learning approach.

Variable	LE-	CGS	GS	IL	GT	AWI	AAs	DA	StA	SA
Learning environment (LE)	-	-	-	-	-	-	-	-	-	-
Clear goals and stand.(CGS)	0.579**	-	-	-	-	-	-	-	-	-
Generic Skills (GS)	0.602**	0.564**	-	-	-	-	-	-	-	-
Independent learning (IL)	0.639**	0.657**	0.699**	-	-	-	-	-	-	-
Good teaching (GT)	0.619**	0.667**	0.681**	0.784**	-	-	-	-	-	-
App. workload (AWs)	0.536**	0.531**	0.508**	0.524**	-	-	-	-	-	-
App. Assessment (AA)	0.641**	0.640**	0.530**	0.598**	0.580**	0.547**	-	-	-	-
Deep approach (DA).412**	290**	0.272**	0.302**	0.359**	0.276**	0.294**	-	-	-	-
Strategic approach (StA)	0.341**.	0.486**	0.356**	0.492**	0.481**	0.319**	0.421**	0.472**	-	-
Surface approach (SA)	0.305**	0.404**	0.373**	0.427**.	0.427**	322**.	0.433**	-0.378**	0.651**	-
CGPA	0.195**	0.141**	0.144**	0.152**	0.184**	132**	0.188**	0.105**	0.098	0.160**

**P < 0.01 (2-tailed); *P < 0.05 (2-tailed).

S=28.60) in perceiving their learning environment at $t(380) = 1.256, p > 0.05$.

This shows that, all students of Mizan-Tepi University perceived their learning environment similarly regardless of their sex. So, we can conclude that the classroom are gender responsive.

Relationship among learning environment, learning approach and academic performance

To know the relationship that exists among the three variables stated earlier, Pearson moment correlation have been computed. The result shows, those students who perceived the learning environment as supportive of their learning adopt more of deep and strategic approach and they are better in their academic performance. Conversely, those students who perceived their learning context as less supportive, adopted surface approach and have less academic score (Table 2).

Among the components of learning environment as presented on the table 2, clear goals and standard ($r=0.579$), generic skills ($r= 0.602$), Independent learning ($r= 0.639$), good teaching ($r=0.619$), appropriate workload ($r= 0.536$), appropriate assessment ($r= 0.641$), and the learning approaches that is deep approach ($r=0.412$) and strategic approach($r= 0.341$) are positively correlated with learning environment at $p < 0.01$.

On the other hand, surface approach is correlated significantly and negatively with the learning environment ($r= -0.485$) clear goals and standards ($r= -0.404$), generic skills ($r= -0.373$), Independent learning ($r= -0.427$), good teaching ($r= -0.427$), appropriate workload ($r= -0.322$), appropriate assessment ($r= -0.433$), deep approach ($r= -0.378$) and strategic approach($r= -0.651$) at $p < 0.01$.

The relationship between components of learning environment and learning approaches is meaningful and as was anticipated in the theory. As indicated in Table 2, the approach adopted by students is the reaction they have for the learning environment. Those students who perceive the components accounted in the learning environment as less suitable for their learning are more likely to adopt surface approach and aim to score grades through simple strategy. Conversely, those students whose learning environment is supportive of their learning adopt deep approach to benefit more from their learning.

Learning environment and approach preference

To know how individual students perceived their learning environment and approach their learning at the university level a cluster analysis was conducted aimed at identifying subgroups of classes with similar scores on these key variables. The analysis was made at the level of component variables for learning environment and approach to learning.

Standardized scores on these key variables were used in hierarchical cluster analysis using the Wards method in identifying an appropriate number of clusters (based up on the increasing value of the squared Euclidean distance between clusters). The analysis indicated that the two clusters solution was the most acceptable. Accordingly, the result of all students in the two groups on key variables of the study is presented in its standardized form as shown in Table 3.

The score of students identified in the cluster analysis show consistent, but different sets of relations between variables. The first group composed of 207 students who, on average, have perceived their learning environment as

Table 3. Mean (and standard deviation) cluster scales Z-score for learning environment, components of learning environment an approach to learning.

Cluster 1; Cluster 2	N (207) students	N (175) students	P
Learning environment	0.45(0.65)	- 0.53(1.07)	0.000
Good teaching	0.62(0.67)	- 0.73(0.82)	0.000
Clear goals and standards	0.63(0.58)	- 0.74(0.88)	0.000
Appropriate assessment	0.54(0.76)	-0.63(0.88)	0.000
Appropriate workload	0.45(1.0)	- 0.53(0.69)	0.000
Generic skills	0.54(0.83)	-0.63(0.79)	0.000
Independent learning	0.60(0.65)	- 0.71(0.86)	0.000
Deep approach	0.36(0.98)	-0.43(0.84)	0.000
Strategic Approach	0.66(0.85)	-0.78(0.45)	0.000
Surface approach	-0.47(1.09)	0.56(0.45)	0.000

supportive of their learning. They perceived the environment as conducive for their learning; adopt more of deep approach and less of surface approach than their mates in cluster 2. Therefore, 54% of the participants of this study reported as the learning environment is suitable for their learning and are adopting deep and strategic approach. While the remaining 46% of students in the sample perceived their learning environment as less supportive of learning and they have adopted more of surface approach.

Students in cluster 2 (n= 175), perceived the context of their department as if it does not allow them to learn in a better way. They are not satisfied with the activities done in the classroom by teachers because it does not encourage them to engage in the teaching learning process. Not only this, but also the way they learn is also different from that of their mates in cluster one. They are employing the learning approach which is not desirable in higher education. This contributes a great impact in hindering quality teaching and learning which can in turn results graduates not capable of solving society's problem.

It is possible to look at the disjunction between the formal requirements of academic environments (thought, creativity, competence, independent thinking, critical thinking) and the actual requirements as perceived by 175 students (memorization, fact-gathering, conformity, rote learning). Then it becomes very interesting to compare this disparity with regard to making students capable of solving societal problem.

A "deep" approach involves concentration on the meaning of the article and active attempts to relate what it said to previous knowledge and the student's personal life. In contrast, students using a "surface" approach anxiously try to memorize parts of the text and treat it as a phenomenon isolated from them (Ramdsen, 2003). Many findings show that deep level processing is more likely to lead to a full understanding of a text than surface level processing (Kember, 1996, Entwistle, 1991, Richardson, 2010). The notion of deep level processing

shows a remarkable similarity to what scholars in many disciplines have described as a desirable goal of higher education - the development of "critical thinking" (Marton and Saljo, 1976).

It is true that students should rely on deep approach which is compatible with the normal goals of higher education which stress the development of critical thinking, problem solving skills and the ability to tackle ill-defined issues. If the courses were achieving these aims, deep approach scores would be expected to rise markedly during a degree program as these higher order learning goals can only be achieved if students are aiming to understand course material. Unfortunately nearly half of the samples included in this study employed surface approach to address their learning. This needs a great attention in order to achieve the ultimate goal of the university which is quality education.

Implication on quality education

Obviously, it is known that the term quality education cannot be defined sufficiently from few angles. It is the amalgamation of different aspect of education that brings quality education. From these, the teaching learning process can be seen as one of the elements. Scholars in the area have suggested that, the teaching learning process is the pillar of all other components/focus areas of quality education. Because, this is the point where students mind operates and capture what we intend them to be. Therefore, examining how students perceive their learning environment and the approach they use in their learning becomes important.

The result shows that almost half of the samples in the study perceived the context in which they are attending their lessons is supportive of their learning and relied on desirable learning approach. This implies that, these students are satisfied with the subject matter knowledge and pedagogical skill of their lecturers. It can also be inferred that, these students are learning through

understanding, critical and analytical thinking which highly enable them to become problem solvers in different situation. If this is so, these students are in a position to meet the needs of the country; that is being graduates who are capable of solving society's problem.

On the reverse, there are still many students who perceived the learning environment not supportive of learning and relying on surface approach which is not desirable in higher education. Nega (2012) also confirmed that, there is a quality gap between the intended and actual quality assurance practices, and quality of education, particularly student learning is constrained by a multitude of interrelated problems from both the internal and external environment of the universities. Tadesse et al. (2013) found that, most of the colleges have the position that teaching learning has to be student centered and active as well; but, still many of them are applying teacher-centered approach of teaching.

Literatures and experience of different countries evidenced that graduates who learned through this approach faces difficulty in applying their knowledge in different situations of their lives. This will become practically true for these students. If this is so, these students are not passing through quality learning which will seriously affect their work lives. As a result of this, the country will not benefit from these graduates as intended. Therefore, there should be an intervention on how the learning environment will become conducive for these students and change their learning style.

Above all, the culture of constructing knowledge by the students themselves through independent learning should be developed. To do this, students should be able to access different learning materials in the university. Gojeh and Worku (2015) also found that, the extent students are using library resources is not optimum. So, there has to be an environment which encourages students to engage knowledge construction in their own effort.

The study also gives us insights regarding teacher's role in creating the environment which encourages students to learn in a constructive way. So, there has to be an effort in building teachers pedagogical skills. Nega (2012) found the educational inputs and processes for quality student learning are constrained by many problems. These problems include inadequate preparation of incoming students; poor qualification and competence of teaching staff; poor quality of teaching, learning and assessment; inadequacy and poor quality and utilization of facilities and support services. These problems will have their own effect on quality of education in general and student learning in particular.

Tadesse et al. (2013) also found that high teaching load, large class size and in adequate insight of teachers regarding continuous assessment and student centered instruction are major factors affecting the implementation of student-centered instruction and continuous assessment. Therefore, the government should give due

emphasis in improving teachers knowledge and skill of teaching.

Conclusions

The result of this study clearly indicates that, there is directional and strong relationship between the environment in which students are learning and the approach they employ. All the learning activities students engage in are related with the requirements that instructors have created in their teaching. From this it can be concluded that, the approach students are employing in their learning is a reaction they have towards the context created. The context that instructors create in the classroom should focus on facilitating and enhancing students learning. In order to engage students in their learning in a desirable fashion, the classroom situation instructors create should be supportive of learning for understanding.

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CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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