USING KINETIC SCHOOL DRAWING (KSD) TO MAKE MEANING THROUGH DRAWING

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Abstract

Children' drawings reflect their thoughts, feelings and emotions, as well as means for non-verbal communication with their world. Drawings are employed as productive techniques in order to elicit their internal feelings. Many drawings techniques have been grounded and employed in researches since 1926. However, there are only limited number of researchers which used Kinetic School Drawings (KSD) technique to study school environment and its impact on children mental health. Thus, the study presented investigates children's perception towards their school environment, and the relationship between their school setting and mental health. This study uses a mixed methods approach, in which data has been collected from 36 children of age 5-7 years who studied in an international school in Kuala Lumpur. Data was collected through one drawing session, a short interview with the children about their drawings and school grades to measure their academic achievement. Kinetic School Drawings (KSD) Scoring and Rating System (SRS) by Andrews and Jenzen (1988) was used to analyses children's drawings qualitatively, and further data was analyzed quantitatively. Findings of the study sustained the accumulated knowledge on children's feelings and self-expression through drawings. Most of children portrayed themselves within school setting but in non-academic activities rather than academic activities, which indicated to their less interest in academic activities. A significant correlation was found between children's perception toward their school environment and mental health. Female drawings have more body details than male children. Omitting peers or teacher from their drawing, barriers, omission for body parts were used to reflect the ability to manipulate in school environment. No correlation indicted between children's school environment and academic achievement. Findings of the study also revealed that multicultural students' adjustment problems could be assessed and identified through drawings. These findings inveterate that KSD is an effective tool that can be used by school psychologist/counsellor and educators in diagnosing children's problems in both practical and academic aspects, as well as in developing hypotheses for further studies.

Keywords: School environment, mental health, Kinetic School Drawings (KSD), academic achievement.

1 INTRODUCTION

Since the nineteen century psychologists, educators and researchers have been fascinated, with drawings and paintings depicted by children. They based on the supposition that children's drawings reveal those emotions that children cannot verbally express such as their attitudes, conflicts and self-confidence (Cherney, Seiwert, Dickey, & Flichtbeil, 2006). Studies about children drawings are not limited to scientific

researcher only, it goes further as therapists and psychologist established various projective techniques to assess children's emotions, personality and their relation with others and environment.

1.1 Child and Environment

The type of relationship between the child, the home, and the school are essential for the child's development, especially in the areas of learning and socialization (Dalley, 1990). Therefore, children who have high quality relationship with family members, teachers, and peers, usually have positive social development outcomes Oguz, 2010; Whelley, Cash, & Bryson, 2003; Matthews, 2003; Dalley, 1990; Cohn, 1979). As they generally have better academic achievement, better mental health (Whelley et al., 2003).

School is a part of the child's ordinary experience, when the child enters school s/he brings a sole history of culture, values and relationship models (O'Donnell, et al., 2012). Children exchange their experiences and gain new values, attitude, and skills. According to (Eggen & Kauchak, 2010), peers influence exists in three forms; attitudes and values, social development, emotional support, and even school achievement, as well as it provides both emotional support and a sense of identity (Eggen & Kauchak, 2010).

Other major influence that may reshape a child's personality and affect his/her development is living abroad where the child is exposed to diverse cultures as he/she interacts with people with different values. That is noticeably seen in Malaysia, where many families are hunting for better opportunities. Children of immigrant parents are faced with many challenges from inside by their family and from outside in their environment; challenges with respect to the new lifestyle, new traditions, and attitudes (McCarthy, 1998). Children of immigrant parents may face external difficulties such as inability to acclimatize the new multi-cultural school's environment, language barrier, dissimilar attitudes, ethics, cultural conflicts, cultural bias, and bullying (McCarthy, 1998).

1.2 Mental Health

According to the World Health Organization (WHO): "mental health describes a range of variations in a child's ability to function successfully in his/her world" (WHO, 2003: 4). The constructive social and emotional well-being along with proper mental health has reflective impact upon children's physical, cognitive and spiritual development (Supporting Minds, 2013; Becky & Thompson, 2009; Whelley, et al., 2003).

Over the past twenty years, international organizations such as WHO, UNICEF, UNESCO has given more attention to improve children's education, wellness and health. The importance of healthy psycho-social environment in schools was counted as the 'common characteristic' among these programs. The World Health Organization (Bor, Dean, Najman, & Hayatbakhsh, 2014; Santor, Short, & Ferguson, 2009; NIfHCE, 2008; WHO, 2003) confirmed that school environment can improve the children's mental health and well-being by preventing physical punishment, bullying, harassment, and violence.

Several studies about school climate and its influence on youngster mental health reveal that schools with a climate of confidence and respect among principals, staff, students and parents have the least number of negative characteristics (Cappella et al., 2012; Hamilton, Marshall, Rummens, Fenta, & Simich, 2011; Whelley, et al., 2003). Besides, children who enjoy this kind of relationships display more resilience with respect to meeting life's challenges (Cushman, Clelland, & Hornby, 2011).

Multi-cultural students are at risk of different psychological and mental health problems (Yeh, 2003). The Commonwealth of Australia (2005: 1) stated that, "People from diverse cultural backgrounds have a range of protective and risk factors in regard to their mental health and wellbeing". Moreover, according to Yeh (2003) Study of Chinese, Japanese, and Korean immigrant students, variables such as age, acculturation, and cultural adjustment difficulties have been significantly predictive consequences on mental health problems especially when related to developmental issues among immigrant students. Many studies have showed that children from non-English speaking background can face social isolation problem; due to language barriers, cultural differences; they may found some obstacles in building and maintaining friendship (Yeh, 2003); or may be bullied by their schoolmates. As a result, this might cause withdrawing from contact with others or being afraid to go to school. Consequently, these can affect or increase the risk of poor academic performance and may create mental health problems such as depression, anxiety, insecurity, etc.

1.3 An Overview of Children' Drawings

Children's drawings have played an important role in various child studies. These drawings are seen as a method to document educational phenomena and to produce visions to children's outlooks of lives in schools and classrooms (Einarsdottir, Dockett, & Perry, 2009). Researches reveal that there are five common features represented in children's drawings as stated by McGregor (1990) are: 1) Colors, 2) Depiction of

proportion, 3) Size represent dimension by adding more lines to a particular shape, exaggerate a certain feature in the drawing to show the importance, 4) Occlusion, and 5) Omission and Spacing. Youngest used colours purposively to portray their feelings, for example researchers found abused and traumatized children used red and black excessively (Burkitt, Barrett, & Davis, 2009; Cherney et al, 2006). These features are employed in different ways to project their perceptions, feelings, and relationship about the child-self and others. For instance, children used barriers between his or her figure and other figures to depict the bad feelings or problematic relationship.

1.4 Projective techniques

Di Leo (1983) clarified that projective technique is popular among counsellors and psychologists because it helps them to acquire quick and easy information about the child; it enables them to establish good relationship with children. Projective theories assumed that people project their personal and subconscious feelings into pictures they draw. According to Koppitz (1984; 1968) the projective drawing technique is well known and acceptable with psychologists who assess children. It has been purposely established and designed to analyse sensitive and subconscious aspects of behaviours. Moreover, projective techniques were commonly utilized to evaluate mental maturity, learning difficulties, personality, emotional disorders as well as family and school problems. According to McGregor (1990), the first attempts to develop projective theory was done by Luquet in 1913; his assumption was child's art is a primitive attempt to achieve the realism of adult drawing. However, the successful and well-known projective test 'Draw-a-Man Test' was formulated by Goodenough in 1926. Latterly, several other projective techniques were originated in the last fifty years of the twentieth century.

1.5 The Kinetic School Drawing (KSD)

The Kinetic School Drawing (KSD) was developed in 1974 by Prout and Phillips to investigate the influence of school environment on child (Knoff & Prout, 2007). Its considered as the first successful projective tool which dealt with the school setting (Knoff & Prout, 2007; Knoff & Prout, 1985). KSD is used to obtain children's internal feelings towards their teachers, peers and school environment generally. KSD it requires the child to draw a picture of him/herself, a teacher, and one or more classmates.

This tool measure the interpersonal relationship indicated by distance between and among the students and peers, and size of student represent the type of the relation to his/her peers. According to (Knoff & Prout, 1985), the interpersonal relationship indicated by distance between and among the students and peers, and the size of student related to his/her peers; present, absent or "clear items" show the kind of relationship between his pears, and the child's emotion is shown through the behavior of the person in the drawing, the style of instrument, and places. In 1988, Andrews and Janzen created a new rating scale for the KSD that known as 'quick scoring sheet, reference guide, and rating scale' (SRS).

Several studies were generally validated the KSD technique and considered it as an affective art therapy assessment that can be used when perception of/or feelings towards school and school adaption are of interest (Ko, 2013; Tanaka, 2009; Prout & Celmer, 1984; Andrews & Janzen, 1988a;b; Lifson, 1995). Additionally, many studies were conducted to investigate the relationship between KSD and academic performance (Kim, 2010; Xi-Shan, Lin, Xiao-Hui, and Dong-Mei, 2013; Lifson; 1995; Andrews and Janzen, 1988a & b; Prout & calmer, 1984). They found that there are significant correlations between school academic achievements. According to their findings, low-achieving, special education students, and Learning Disabled (LD) students tended to draw smaller teacher and self-figures, also they separated themselves from both teacher and peers, they also portrayed significantly less or negative interaction with their peers and teacher. Moreover, studies that focused on mental health and counselling or diagnosis, viewed the importance of the KSD instrument from different aspects in attempt to find other valuable objectives of the tool. Lee (2010) and Won and Sook (2010) investigated the tool to find out the relationship between adolescents' mental health and response features of KSD.

Moreover, researchers have employed the KSD to investigated adaptation and Difficulties at School from different aspects. The results have supported the KSD as an effective assessment technique to be used to assess students' adjustment in school (Chang, 2016; Goshin, 2011; Tanaka, 2009). Furthermore, both Soo-Jung and Choeyeonsil (2010) and Mi-Yong and Sang-Kwon (2011) examined the effectiveness of the KSD in Group Art Therapy Program to improve school life adaptation of children in multi-cultural families. Both studies, clarified that the using KSD was effective in Group Art Therapy Program to improve the school adaptation of children from multi-cultures, and the children's global and social self-esteem were significantly improved after the program

In conclusion, most of the previous studies found that KSD is a precious diagnostic tool to be used in schools to assess students' psychological status of child adaptation to school for elementary and high schools' counsellor (Chang, 2016; Lee, 2010); however, it's advised that the KSD could be more effective if used combined with other tools of assessment (2010; Won & Sook, 2010; Vass, 2010; Mi-Yong & Sang-Kwon, 2011). Even though, majority of the twentieth century studies about KSD were conducted in Western countries such the USA and Canada, yet the most recent researches bout KSD have been performed in Eastern countries such as Japan, China, and Korea.

2. OBJECTIVES OF THE STUDY

According to the literature, despite the amount of researches addressing KSD, handful study grants KSD to find out students' perceptions towards their school environment, and the relationship between their perception of school setting and their mental health (Lee, 2010; Won & Sook, 2010; Sungwon, 2009). Therefore, the current study attempts to fill that existing gap in the researches of the KSD and provides a support for KSD as an assessment tool that can be beneficial in diagnoses of student's problems and their adjustment in schools. The aim of this study it to find out the child's understanding of self and the influence of peers and school environment on the child; to understand the effect of school's peer and school environment on the child; this study overlooks through the possible influence of the child's school relationships and achievement.

3. RESEARCH METHODOLOGY

This study utilized the Embedded mixed methods design, as it employed during data collection and data analysis procedure.

3.1 Participant Selection

The sample for this study were first year in the elementary school. They are chosen for many reasons among which, they started new social life and at this stage child enjoy making relationship with others in order to be accepted from their teachers and peers. Sample of the study is composed of 36 students of age 5-7 years old attending an international school which located in the District of Kuala Lumpur, Malaysia. The school encompassed around 20 nationalities.

3.2 Instrumentation

3.2.1 Kinetic School Drawing (KSD)

It is utilized as assessment method to evaluate the students' understanding of school setting and to assess their mental health. Andrews and Janzen (1988a) Quick Scoring Sheet, Reference Guide, and Rating Scale (SRS) was used to score participants drawings. The Scoring and Rating System (SRS) is divided into two; the first section measures children's perception about their school environment. It consists of 6 variables with 16 dimensions. The second section provides information about children's psychological status; it consists of 14 variables. The scores are summed up to numerical values to obtain the total KSD score. High score is classified as negative school perception, while low score means positive school perception.

3.2.2 Social, Academic, and Emotional Behavior Risk Screener (SAEBRS)

SAEBRS utilized to assess participants' mental health. SAEBRS is grounded by Kilgus, Chafouleas, Riley-Tillman and Von der- Embse in 2013. It assessed children of age 5-18 years old. SAEBRS consists of 19 items; Social Behavior (6 items), Academic Behavior (6 items), and Emotional Behavior (7 items). SAEBRS must completed by teacher in the classroom. It takes from 1-3 minutes per student.

3.2.3 Students grades

The students' grades were obtained by the researcher from the school administration after their final examination results were issued. Academic achievement is the cumulative or overall grade that students achieved throughout the semester and it is given in a percentage.

3.3 Data Collection Procedure

The KSD assessment was conducted first and then short interviews with the children after the drawing session was carried out. Each child was provided with white blank sheet of paper, pencil, an eraser and pencil and crayon colours. clear instruction was given to the students the following: 'On this piece of paper, I'd like you to draw a school picture. Put yourself, your teacher, and two or more of your friends. Make everyone doing something. Try to draw whole people not cartoon or stick people and make the best drawing

you can. There was no time limit. Later, each child who completed his/her drawing was asked to identify each figure in the picture and describe the action or the movement of her/his figures. Questions have been carried individually with each child: 'Who are in the picture?'; What is the teacher doing?'; 'What is each friend doing?'; 'Who is your friend?'; 'Do you have other friends?'; and 'how do you feel?' The examiner labelled the figures and actions as was described by the child.

All children's drawings were gathered, in compliance with the sample criteria, only the complete drawings were selected. Finally, drawings were coded by numbers; student's names, school name, labels, and any identifying figure were erased from the drawing sheets for privacy assurance.

3.4 Data Analysis

The qualitative data was used through the KSD Scoring and Rating System (SRS) by Andrews and Janzen (1988a), all the qualified drawings were scored. Then inter-raters evaluation by two experts in the field were obtained to confirm the researcher's KSD rating and the emerged themes. The inter-rater reliability is utilized to verify the proportion of agreement among the raters. The inter - rater reliability showed reliability within the range of .81 ~ 1.00, with mean of 84.15 %, which is considered adequate. Following, the scoring of KSD, the data were processed to SPSS and analysed. Content analysis were used to analysis students' school setting perception. Descriptive, inferential statistics and correlation were adapted for this study using 'SPSS 22.

4. FINDINGS

4.1 Demographic Data

The total participates were 36 youngest students, 19 (52.8%) males and 17 (47.2%) females of age 5-7 years. The majority of the participants 25 (69.4%) are non-Malaysian (international student), while Malaysians are 11 (30.6%) students. Moreover, the sample doesn't comprise exceptional individuals, all of the participants are identified as 'nonclinical' children (i.e. they attend the usual school classes).

4.2 Students' Perceptions Towards School Environment

To investigate the students' perceptions towards their school environment, content analysis through the using of frequency. Children's drawings were scored according to Andrew and Janzen (1988a) Scoring and Rating System (SRS). Six variables; Positive activity (effect) of student/teacher and peers, Problems in student/teacher and peers' relationships, Student's placement and type of behaviour were involved, Positive self-concept, Psychological integrity, and Emphasizes on structure.

The first two variables reflected the type of student's relationship with peers and teachers weather its positive or negative. They are measured according to how the child projects self, teacher, and peers in drawing. Positive activity (effect) of student/teacher and peers is assessed by three indicating features; (1) child activity, (2) the similarity between child and peers' activity, and (3) teacher activity. Size, closeness, and interaction between figures have been considered as reliable indicator of interpersonal relationship when children's drawings are analysed. Moreover, spacing in drawing has been linked to the degree of emotional closeness with peers and teachers (Fury, Carlson & Sroufe, 1997). On the other hand, problems in Students/Teacher and Peers Relationship, is also measured by three indicators/features which are: (1) problems indicated in student/teacher relationship; (2) problems indicated in peers' relationship; and (3) self and peers engaged in activities (affect) of child/teacher and peers' both are reflecting student's social and interpersonal relationship. In contrast, exclusion of teacher or peers from the drawing could be an indication of a negative relationship because "omission of significant others such as teacher was referred to as inability to express direct hostility with the missing person" (Knoff & Prout, 2007: 11).

In this study, majority of 26 (72.2%) of students' activities were positive, 25 (69.3%) drew themselves similar or equal to their peer's sizes with small distance between self and peers, and engaged in similar activities like their peers. On the contrast, 6 (16.7%) drew a tiny self-figure compared with their peers, or they are looking unpleasant. These findings coincide with a study done by Andrew & Janzen (1988b) on objectifying the Kinetic School Drawing (KSD), which revealed that majority of children (around 60%) portrayed themselves and others in friendly manner or very friendly. On contrary, 11 (30.6%) students didn't portray peers in their drawings, drew peers doing dissimilar or uncertain activities, or they drew uncertain peers or actions. This can reflect child-peers conflict or child isolation in the school. According to Prout and Phillips, (1974: 304) "the drawing can be used as a sociometric peer nomination technique when some children consistently are included or excluded as friends". From the findings of this study around one third of students

their drawings showed problematic relationship with their peers which could be referred to many reasons. Cultural diversity, socializing or isolation could be the many reasons.

Referring to child teachers' relationship, more than half students 20(55.6%) portrayed their teachers in positive approaches and drew themselves standing closely to their teachers. Contradictory, 16 (44.4%) students rejected to draw their teacher, they drew their teachers with unpleasant reactions such as sad or anger facial expression, without any action or doing uncertain movement. Similarly, 16 (44.4%) students' drawings indicated problems in child/teacher relationship or teacher figure was uncertain.

With regard to Student's placement and type of behaviour variable, which is measured student's behaviour and interest towards academic activities. Three aspect are involved; (1) where does the child draw him/herself inside or outside the school?; (2) What was the type of behavior he/she was engaged in (desirable/ undesirable)? and (3) academic/non-academic behavior. In the current study, almost two third 38 (60.3%) students pictured themselves within school setting, and 30 (83.3%) portrayed themselves with a desirable behavior. The above finding agrees with the study performed by Prout and Celmer (1984) which revealed that around 58% of students draw themselves within the school, and the vast majority drew themselves in a desirable behavior. While it contrary with Prout and Celmer (1984), surprisingly two third 28 (77.8%) of students in this study were portray themselves engaged in non-academic behaviour but within school siting such as playing in the school yard.

The other three variables are related to student's self-concept, emotion, and psychological integrity. Referring to 'positive self-concept', the majority of students 23 (63.9%) projected themselves in positive action such as smiling. In other words, their drawings predicted positive self-concept. This matches with other researches that showed that children are projecting positive self-concept more significantly in their drawings (Burns, 1982; Andrews & Janzen, 1988a; 1988b; Burns, 1982; Zians, 1997). While, only 11 (30.6%) students depicted themselves in negative states such as sadness and negative facial expression.

With regard to emphasis on structure variable 20 (55.6 %) students stressed on the physical features. Many clinical and empirical researches support this indicator. Psychological integrity variable consists of three items of the scoring sheet, they are: (1) visible action agree with verbal description, (2) visible action and/or verbal description appears strange or unexpected, (3) self or other figure are highly distorted so it wouldn't be recognized without verbal description. Scoring of this variable is based on both child's drawing and his/her description of the action. Vast majority of students' actions 33 (91.7%) do agree with their verbal description and their figures were clearly depicted. Only three (8.3%) students' pictures showed strange and/or unexpected actions, such as drawing children sleeping in the school. Dissimilarly, the majority 26 (72.2%) of students' figures showed normal actions such as setting inside the classroom or playing in the school yard.

4.3 The Relationship Between Children's Perception Towards School Environment Mental Health and Academic Achievement

To examine the relationship between the indicators of the two variables; students' perceptions of their school setting mental health and student's academic achievement variables, correlation analysis using the Pearson Correlation Coefficient was performed. This is to justify the inclusion of the KSD to measure students' perceptions towards school environment and SAEBRS to measure students' mental health.

| | Mean | Std. Deviation | N |
|--------------------|-------|----------------|----|
| Grades | 1.97 | .904 | 36 |
| School environment | 22.19 | 3.512 | 36 |
| Mental health | 38.06 | 6.812 | 36 |

Table 2 Correlations between Students' perceptions of school environment, mental health and academic achievement

| | | Grades | School environment | Mental health | | |
|--------------------------------------------------------------|---------------------|--------|--------------------|---------------|--|--|
| Grades | Pearson Correlation | 1 | .252 | .165 | | |
| | Sig. (2-tailed) | | .150 | .351 | | |
| | Ν | 34 | 34 | 34 | | |
| School environment | Pearson Correlation | .252 | 1 | .776** | | |
| | Sig. (2-tailed) | .150 | | .000 | | |
| | Ν | 34 | 36 | 36 | | |
| Mental health | Pearson Correlation | .165 | .776** | 1 | | |
| | Sig. (2-tailed) | .351 | .000 | | | |
| | Ν | 34 | 36 | 36 | | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | |

Table 1 and 2, above shows the descriptive statistics and correlation between students' perceptions of their school setting, mental health and academic achievement (grades). The result indicated that students' perceptions of school setting (M = 22.19 SD = 3.512) is correlated positively with students' mental health (M = 38.06 SD = 6.812), p = .000 < .5 (Pearson test). This correction was statistically significant at the .05 alpha level (2-tailed). Nonetheless, scrutinized the relationship between children's perception of their school setting, mental health and their academic achievement showed that no significant relationship between children's academic achievement and both school environment and mental health as seen in table 2. This result may somewhat disagree with the other studies due to many reasons such as the age difference, cultural diversity, and school system. In fact, almost all of studies have been conducted to examine the relationship between student's academic achievement and children or adolescent's KSD were applied on high elementary grades and high school students whose ages are between 9-18 years old. The present study tested grade I students whose ages are 5-7 years old.

5. DISCUSSIONS

The result of the current study shows that children's drawings can give ample and significant information about them. For instant, using various facial expressions, exaggeration, and exclusion of people may indicate the kind of the relationship between the students, peers, teachers, and things (Prout & Celmer, 1984). Eliminations and shading parts of their body, and the way of using spaces indicates how the child perceives the school surrounding. Therefore, utilizing the KSD technique can be considered as one of the precious tools that can be used by the school counsellors and by psychologists to figure out how the child perceive the school environment and his interpersonal relationship, also to ascertain child's problems in school.

However, psychologists who have no experience with the KSD technique can face some difficulties with some of the indicators and features of Andrews and Janzen's (1988a) SRS, especially when they need to select among the scale 'positive, neutral, or negative'. Additionally, rating like neutral or uncertain can be considered as mystifying terms. For example, if the child did not draw his/her peers in the picture this means that there is a problem in his/her interpersonal relationship. How the rater can score the indicator; child action is similar/dissimilar/uncertain to peers actions. According to Zians (1997), the quality of data about the drawing that are given by non-experts is not as rich as that given by experts.

Referring to KSD variables, drawing suggested positive self-concept, the majority of students projected themselves in positive self-concept. Besides, researchers showed that both low/high achieving students (Prout & Celmer, 1984) and Learning Disabled (LD)/Non Learning Disabled (NLD) children's (Andrew & Janzen, 1988a; 1988b) portrayed themselves noticeably in positive self-concept. Consequently, self-concept variable may not be considered as one of the strong variables of KSD. Moreover, previous studies showed

that self-concept, did not achieve inter-rater reliability (Zians, 1997; Andrew & Janzen, 1988a). However, it can be a good indicator for problems in school, anxiety, or depression (Koppitz, 1968).

The second variable 'emphasized on structure' is the one of the variables that measures students' perceptions of the school setting. Andrews & Janzen (1988a) asserted that both LD and NLD are significantly emphasized on structure, while in the current study only half of the sample is emphasized on structure, most of them are females. However, Cherney, el at.'s (2006) findings did not show gender-related differences in the way in which the school was portrayed, there is no differences in their productions, but girls tend to draw more desks and windows than boys. Moreover, many researches showed that children's motor skills are developed rapidly between 5 and 9 years old (Cherney, el at., 2006) and girls are more advanced when their drawings are compared with boys' counterparts. In fact, children aged 7-9 (The Schematic Stage) generally stress more on buildings, rooms and desks (Sarbaugh, 1982) which means that they are emphasizing on structure. Moreover, Zians (1997) indicated that when children stress on structures instead of human figures this may indicate difficulty in interpersonal relationships. In addition, Knoff and Prout (2007) declared that children's emphasizing on building, classroom, and walls may reflect their need for structure, dependency on others, and/or avoidances of social interaction. Furthermore, other researchers clarified that children's drawings manifest in differ in terms of type and degree; it is also influenced by their culture and the way drawing is taught in school, "children drawings are greatly influenced by the art of their society and by schooling (Cherney, el at., 2006: 129). Therefore, the variable emphasis on structure may not be considered as a good indicator in the KSD's Scoring and Rating System. Additionally, this variable did not attain interrater reliability (Lifson, 1995). Therefore, more investigations are needed to find out which dimension or indicator can be added to the KSD's Scoring and Rating System to measure this variable in a better way.

For the remaining four variables of KSD psychological integrity, positive activity (effect) of student/teacher and peers, problems in student/teacher and peers' relationships, and student's placement and type of behaviour that measure students' perceptions towards their school environment our findings concurred with the findings of the study conducted by Andrews and Janzen (1988a; 1988b; Prout & Celmer, 1984). In more details, each one of the four variables is measured through three dimensions, for the current study out of the 12 dimensions; the findings of six of them are congruous with the other studies findings. On the contrast, two dimensions; problem in child/teacher relationship and problems in child/peers are contradicted the findings of previous studies such as (Andrews & Janzen, 1988a; 1988b; Prout & Celmer, 1984). However, the other four dimensions are moderately agreed with their studies.

It is important to mention that these four variables are concerned with children interpersonal relationship in school, and their way of interacting with their peers and teachers. In fact, they reflect their feelings of belonging and acceptance towards their school, classroom, and academic activities. Cohn (1979: 277) affirmed that "through interaction with their peers, children develop intellectually, socially, and personally. Children's success or failure in peer group identification is reflected significantly on their mental health, self-concept, and future relations to society". Therefore, these variables are substantial in regard to children's perception towards their school environment. Since, school experience can become a tremendously vital factor in a child's life (Cohn, 1979), thus projective techniques such as the KSD can deemed as precious technique to assess students' problems in schools.

As mentioned previously, these participants are coming from diverse background and multi-cultural families. The findings of this study showed high correlation between students' perceptions of their school setting and students' mental health. Therefore, these findings can be indicators for school problem among multi-cultural students, or it can be a sign of mental health problems among them. However, further investigation is required to verify these findings

On the contrary, the findings of the relationship between school siting and academic achievement contradicted with the findings of Prout and Celmer, (1984), Andrew and Janzen (1988a; 1988b) and Yildiz (2012). Their studies found a strong relationship between student's academic achievement and children's drawings in their school setting (KSD), while in the current study there is no significant correlation between children's school drawings and their academic achievement. A possible reason for that disagreement is the limited number of low achiever in the sample of the current study (only 5 students), other factors such as student age, developmental stage, and cultural background may pose an effect and lead to the divergence with the other studies. For example, most of the previous studies tested high grade elementary and high school students, those whose ages are between 9-18 years, whereas the sample of our study is students of grade I and II whose who are seven years old.

Despite the insignificant correlation result, it can be concluded from the current study; low-achieving students tended to draw themselves outside the school and engaged in non-academic activities. Therefore, the KSD

can be used to discriminate between low/high-achieving students (Prout & Celmer, 1984). However, sample size poses limitation on generalizing of the findings; more evidences are required to support these findings through more research with larger sample size.

Moreover, most of the children's drawings depict their cultural background. "Children's drawings are significantly influenced by the Art of their society and schooling; also it reflects their diverse cultural backgrounds" (Cherney, al. et. 2006: 129). For example, they portrayed their female teachers wearing Hejjab (Muslim women custom dressing), males wearing hats, and they pictured their classroom with Islamic signs or prayers.

6. CONCLUSION

The overall result supports the importance of the KSD technique as a tool for assessment that can be used by school counsellors and psychologists to diagnose children's problems in school. Even though Andrews and Jenzen (1988) confirm that Scoring and Sating System is time-consuming, however it is helpful in identifying children's school problems in particular if used by well-trained clinicians and psychologists. Furthermore, some indicators and features of this Scoring and Sating System need more investigations.

KSD technique could be considered as a valuable technique that can identify student's school perception, emotions, feelings, and problems within school environment. Moreover, simultaneously, it can be a helpful instrument to pinpoint students, those with or without main school problems or issues.

Children's drawings can help adults to visualize the world from the children perspectives. Besides, the analysis of their drawings provides valuable information about their feelings, emotions and hidden problems. Moreover, it may not be reasonable to judge students just from their drawing's indicators; more investigation is required to support such observations.

Additionally, the KSD technique can be used with children from various cultures and background, because it does not show cultural bias. However, the findings of this study show that drawings of children of multicultural environment are facing problems in their school such as adjustment with teachers and peers.



Fig 1 A six-year student, she drew herself playing with her friends in the school playground during the break. She used barriers to separate between herself and other peers. She didn't draw any teachers.



Fig 2 A seven-year student drew himself with one friend and no teachers outside the school. He is one of the low achiever students. He eliminated teachers and peers from his drawing. He described his picture as "I am playing with my friend near to the school, and I didn't draw the teacher and other friends because they are inside the school"





Fig 4 A five-year student, "My dad and me coming out from the Mosque and going to the school. My friends at school that is why I didn't draw them"

7. LIMITATION AND FUTURE RESEARCH

This study is limited to a sample of 36 students from only one school in the district of Kuala Lumpur. Therefore, the findings obtained may not be generalized to students of other districts, states, and other schools. The current study is limited to participants of 5-7 years old. Thus, the result cannot be generalized children of other ages. There is a need for extensive empirical studies in this area to ascertain the full potential of KSD as an assessment technique that can help school's counsellors and psychologists to figure out children problems in school. The study attempts to measure the psychological impact of school environment only. Yet, it does not measure other relation that influence children, such as, family members. In fact, school and family are the most influential factors of child' life, therefore KSD and KFD will be more precious if study about children are carried out through the use of the two instruments in combination to yield valuable information about children.

The study relies on Andrews and Jenzen (1988) Scoring System, while qualitative description for children picture can give better understanding of young children drawings. The sensitive and subjective nature of projective tools, it will be valuable to use triangular method or mixed method research to conduct researches in this area. For example, Interviews and reports from significant others are needed, experts clarified that KSD data should be checked with the child's significant others such as parents and teacher. Besides, combine KSD with other instrument give more evidence about children and to reach better understanding about how they perceive their school environment. Moreover, It will be interesting to explore the KSD of children from cross-cultural and different intellectual levels such as normal and gifted students. Cherney, el at. (2006: 129) stated that "children's drawings not only reflect representational development but a child's understanding of self and culture as well". The KSD techniques were created in the Western society with children who developed in that culture. Future studies will be essential to assess and find out the validity of using this instrument in the Eastern society and to investigate the differences and similarities in drawings features between the two cultures, for better utilization of these techniques in schools of the Eastern culture.

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