

# FACTORS INFLUENCING THE SCHOOL CLIMATE AT INDONESIA SCHOOL OF KUALA LUMPUR (SIK), MALAYSIA

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**Abstract.** This study attempts to examine the factors influencing the school climate (Interaction, Facilities of school, and Feeling of Trust). The study used sample of 212 students of Indonesian School of Kuala Lumpur (SIK). The Confirmatory Factor Analysis (CFA) was conducted to investigate the correlation among the factors. The result of this study found the interrelated between the dimensions of school climate.

Keywords: School Climate, CFA, TCSQ

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## I. INTRODUCTION

School climate has been identified as key element in effective schools that have strong implication for young people's cognitive and social growth (Gallay, & Suit-ling Pong, 2004). Cotton, (1996) identifies a relationship between school sizes and some aspects of schooling (student performance, attitude, schools facilities and behavior measures), he believes the schools facilities have direct correlation to the higher achievement of students. However, there are some schools that do not really emphasize the factors in school climate. They are more concerned with the physical aspects. Although physical aspects. Although physical aspects are important in enhancing students' performance in schools.

School climate is multi-dimensional and influences many individuals, including students, school personnel and the community (Hoy & Miskel, 2001). According to Freiber (1998), the school climate should be positive, respectful, and

supportive, resulting in a sense of pride and ownership when students are valued and encouraged to learn and to achieve their highest potential. The school has to put many mechanisms into place to ensure the well-being and personal growth of students by providing many opportunities for extracurricular activities gives students a chance to cultivate their unique talents and develop their personal interests.

The purpose of this study is to examine students' perceptions of the school climate at Indonesian School of Kuala Lumpur (SIK). That is, it investigates the influence factors of school climate (Interaction, facilities of school, and feeling of trust). The researcher hopes that the findings will supplement the efforts of the principal's administrators and also policy-makers in the assessment of their organizational needs and accordingly recommend appropriate action.

## II. THEORETICAL FRAMEWORK

School climate is a complex phenomenon (Freiberg, 1998), it is difficult to define and measure with various dominant factors. It's includes the quality of interaction among principals, teachers, and students (Skocy, 2004; John & Taylor, 2005). The characteristics of schools such as the physical structure of a school building and the interactions between students and teachers, are two diverse factors that both affect and help to define the broad concept of school climate (Owens, 1991). Webb & Norton (1999) noted that the "interaction" is important to the school system and to the human resources function because it impacts on the entire important role in determining what the school system is and what it might become. In order to have a positive influence, the teachers and principals must understand why "organizational climate" is important to school effectiveness, how it can be determined, and how to foster a positive environment within the system.

Moreover, facilities of school are one of factors that may influence to school climate. The effect of facilities of school on student achievement as noted by Murphy, (2003). Holt and Smith (2002), found that there is a significant relationship between upgraded facilities and students' achievement. As the result, if students are comfortable, then learning process becomes easier and affects teachers' morale and effectiveness.

A feeling of trust is one of the factors in school climate. According to Maxwell & Thomas (1991) the feeling of trust and respect for students and teachers are important factors in creating positive school climate. He concludes that trust "respect, mutual obligation and concern for other's welfare van have powerful effects on

educator's and learners' interpersonal relationships as well as learners' academic achievement". Skocy (2004). Feeling of trust makes students feel that they are valuable members of the school community and have a significant role in creating school climate that fosters a student's aspirations and achievements.

## III. INSTRUMENT

In this study, the researcher used questionnaires as a means of gathering data by involving students at SIK. The questionnaire is the most familiar tool used by researchers for data collection in the survey research, especially in the social sciences. The Teacher Corps School Climate Questionnaire (TCSQ) measured the research questions that will be used in this study. The TCSQ was originally developed in 1978 but was refined later in 1996. The instrument of this study consists of 15-items, and three variables.

## IV. SAMPLE SIZE & VALIDITY

A total of 452 students at SIK constituted the population for this study. It consists of three level programme of study: (i) elementary school, (ii) secondary school, and (iii) high school. Based on the suggestion by Sugiono (2003), this study was used half of population as the sample. The Reliability analysis tests using the alpha scales were conducted on the male students' was 0.83, while the result for female was 0.75.

## V. DATA ANALYSIS

CFA was conducted to confirm the strength of three-factor structure model using the AMOS model-fitting programme to determine the extent to which the model is measured. The programme adopted maximum likelihood estimation to generate estimate in the full-fledged measurement model.

To evaluate the goodness of fit model of the 15-item measurement, there are several commonly used fit indices in this study, as follow: (i) the discrepancy divided by the degrees of freedom (CMIN/df), (ii) the goodness-of-fit index (GFI) and the adjusted values (AGFI), (iii) the Tucker-Lewis coefficient (TLI), and (iv) the Roof Mean Square Error of Approximation (RMSEA). The value of CMIN/df with a value of between 2 and 5 is considered acceptable. The possible values of GFI, AGFI and TLI range from 0 to 1. The value of RMSEA of 0.08 or less shows a reasonable error of estimation.

## VI. RESULTS (HYPOTHESIZED MODEL)

Figure 1 shows the estimated three-factor model using the data of the students of SIK (n = 212). Items for each scale are assumed to load only on their respective latent variables. While some of the overall fit indicators and parameter values are shown in the figure. For analyzing the results of CFA were used AMOS data fitting programme supported the hypothesized relationship

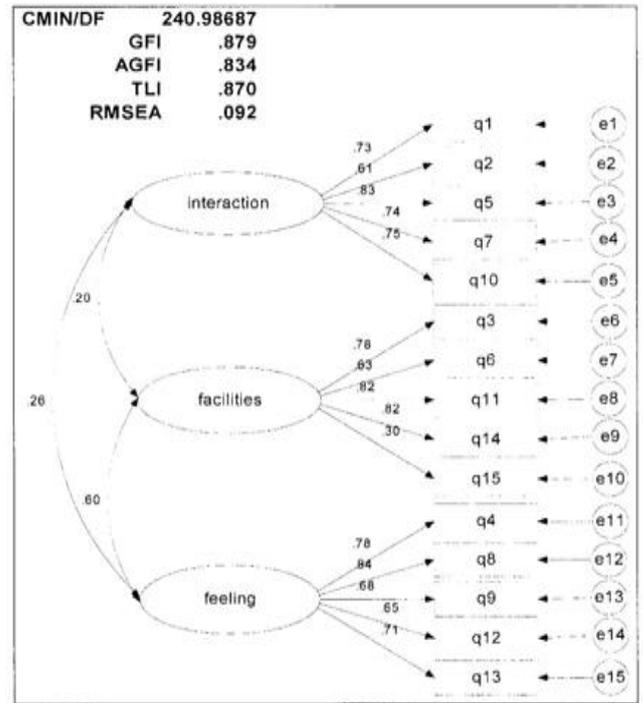


Figure 1: Factors Influencing the School Climate. The hypothesized model (q1-q15) represent observed variable; e1-e15 represent error variances; double headed arrows depict correlations among factors; single headed arrows from factors depict factor loading)

The result indicated that the parameters were free from offending estimates. Ranging from .30 to .84, with  $t$ -value of the factor loading were than  $|2.0|$ , it means that all items indicated statistically significant. While the internal consistency estimate for interaction (teacher-student) was (0.81) the other reliability indices were 0.73 (facilities of school), and 0.83 (feelings of trust). Moreover, the inter-factors correlation between each factor in this study were indicated as follows:

- 1) Interaction factor is positively correlated with facilities of school ( $r = 0.20$ ),
- 2) Facilities of school factor is positively correlated with feeling of trust ( $r = 0.60$ ), and
- 3) Feeling of trust factor is positively correlated with interaction factor ( $r = 0.26$ ).

However, the results of the analysis on the overall fit of the model are not as encouraging. With the exception of the ratio of minimum discrepancy to its degree of freedom (CMIN/df = 2.40), the above data revealed that the fit statistics for the measurement model fall short of the conventional standards. None of the fit indicators (the GFI, AGFI, and TLI) exceeded the threshold of 0.90, the standard deemed important for model fit. The RMSEA = 0.092,  $p = 0.001$ , indicated a non-trivial misfit of the hypothesized model; thereby reflecting a possible fit problem.

## VII. REVISED MODEL

A closer examination of the results revealed one possible reason for the model's lack of fit. The Squared Multiple Correlation (SMC) for indicator, which significantly loaded less than (0.6), considered as the 'noise' was eliminated. In this model, the researcher was eliminated only 1 item (facilities of school = Q15). To deal with the noises the hypothesized model was revised.

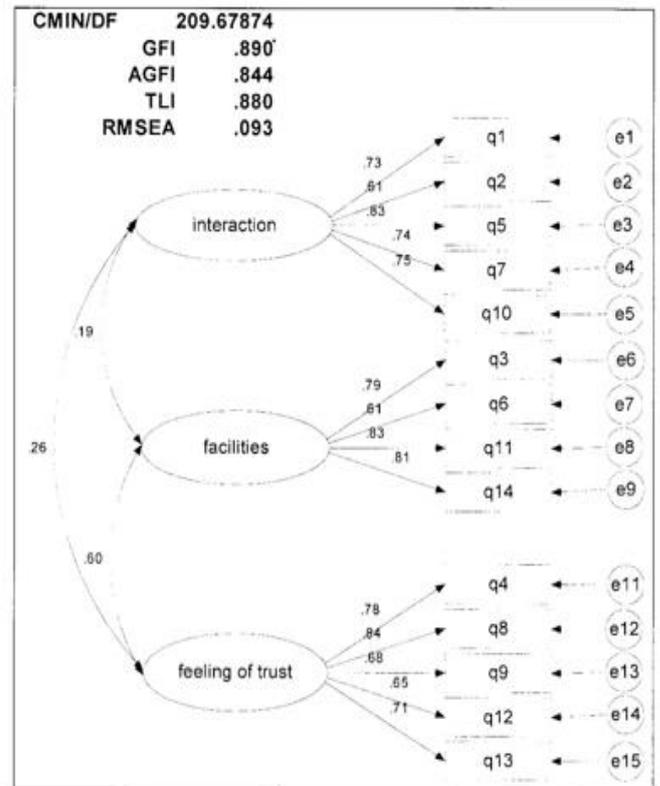


Figure 2: Factors Influencing the School Climate. The revised model (q1-q15) represent observed variable; e1-e15 represent error variances; double headed arrows depict correlations among factors; single headed arrows from factors depict factor loading)

Figure 2 presents the maximum likelihood estimation of revised three-school climate factor; the CFA was applied for analyzing the pervious data with AMOS. For overall fit of the 14-item measurement model is summarized in this figure. The goodness-of-fit results indicate that the revised model did generate the observed covariance matrix, accounting for 92% of the proportion of variance explained.

The direction and magnitude of the factor loadings were substantial and statistically significant. The parameters were free from offending estimates. Ranging from 0.61 to 0.84, with  $t$ -value of the factor loading were greater than  $|2.0|$ , it means the indicating all the items (interaction, facilities of school and feeling of trust) were statistically significant. While the internal consistency estimate after revised model, the

estimate for interaction (teacher-student) was 0.81, the other reliability indices were 0.76 (facilities of school), and 0.83 (feeling of trust). Therefore, the revised model is represented and reasonable close approximation in the population of study.

## VIII. DISCUSSION

School climate has been identified as important factor in creating the effectiveness of the school. It has strong implication for student's cognitive development and social growth (Gallay, 2004). This study consents to assess the factors influencing school climate. The results of the Confirmatory Factor Analysis (CFA) support the assertion that the school climate is a multifactor construct, it's in line with the study. The result of this study found that, there are interrelated among the factors (interaction, facilities of school and feeling of trust). There is positive correlation between the interaction and feeling of trust. It's was

insubstantial correlation, while the moderate correlation is between facilities of school and feeling of trust. This findings supported by previous studies (Murphy, 2003 & Cotton, 1996), and was contradicted by Sims(1999) found that the facilities of school have negative correlation with feeling of trust.

Moreover, in this study was used 14-item with three-factor structure yields a valid and reliable measurement model of school climate. Finally, the theoretical implication of this study are offered some interesting to educationists in formulating the factors of school climate in their field. For further researcher is required to conduct on teachers' and parents' perception regarding school climate. This will provide more information from different group.

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