

# School climate and mental health issues in adolescences

## Background

Middle school is one of the most formative institutions for adolescents' development, but what kinds of school climate affects mental health more is uncertain. The dominant explanation for this trend is increased assortative mating. Previous research has primarily relied on cross-sectional data, and currently there is the trend of multilevel longitudinal study. The previous research provided rationale for our study, and we are filling the gap, such as lack of Chinese samples and the fitness of survey and education, etc.

### 1. Central research problem

We will investigate the association between multiple dimensions of school climate and mental health issues in adolescence. An important underlying mechanism is that a good school climate may foster positive mental health, which in turn may be a key predictor. The 3 dimensions of school climate are Individual' s experience, Interpersonal relationship, Teacher' s behavior. In order to be detailed, our research will focus on main factors in each dimension as shown below.

Aldridge, J. M. & Ala' i, K. (2013) Assessing students' views of school climate: Developing and validating the What' s Happening In This School? (WHITS) questionnaire, *Improving Schools*, 16 (1), 47–66.

## ☰ School climate

	🔒 ☰ Dimensions	☰ Factor 1	☰ Factor 2
1	Individual' s experience	Rules clarity -- Fairness	Bullying
2	Interpersonal relationship	Teacher connectedness	Peer connectedness
3	Teacher' s behavior	Teacher support	Teacher's preference

3 条记录

## ☰ Mental health

🔒 ⌘ Dimensions	⌘ Factor
1 Preventative behaviors	
2 Prosocial behaviors	Reporting & Seeking he..
3 Mental health issues	

3 条记录

### 2. Current study

Among the current studies of the relationship between school climate and mental health, many focus on these aspects.

The main topic is the definitions of school climate. Most reviews in this area include these domains: (1) academic climate, (2) community, (3) safety and discipline and (4) physical environment. Increasing evidence suggests that self-perceived positive characteristics of the climate of a school are associated with mental health. School climate (SC) was defined as the norms, values and expectations that help people to feel socially, emotionally and physically safe (Cohen et al., 2009).

Studies have argued that school climate may have the majority of causes of mental health. Factors related to school and to perceived requirements to enter the labour market were the strongest potential explanations for the increase in rates of poor mental health. E.g. the perceived support of the teachers. According to the associations between mental health issues and gender factors, the increase in poor mental health in youths has been particularly steep in an international perspective, has concerned primarily mood and psychosomatic disorders and suicide attempts, and has affected girls to a larger extent than boys.

Olli-Pekka Malinen, Hannu Savolainen, The effect of perceived school climate and teacher efficacy in behavior management on job satisfaction and burnout: A longitudinal study, Teaching and Teacher Education, Volume 60, 2016, Pages 144-152, ISSN 0742-051X.

Several pieces of information given to us are explicit. For example, the trends of teachers' behaviors is that, teachers, but not student-rated school climate was associated with an increased risk of poor mental health. These studies suggested a need of increased collaboration between the education and the health sectors to promote high educational achievement, while maintaining good mental health.

However, whether these associations are causal is not clear as most of the studies in this field were cross-sectional, did not use multilevel design to separate the effect of the school climate

from that of their student composition. Because of some limitations, in the process of research, it is inconvenient to go to the scene to meet adolescents and collect primary data in school many times. For the survey, the data relied on aggregation of self-reported exposure from the persons whose mental health was probably assessed.

## Significance

This paper is motivated by the importance of improving mental health, specifically, adolescent mental health, the essential role of school and education in adolescent mental health, and the significance of converting adolescent antisocial and delinquent behavior into prosocial behavior.

Kieling et al. (2011) and Knifton and Quinn (2013) identified improving people's mental health and wellbeing as one of the most important public health issues currently. The World Health Organisation (WHO) has also suggested that "there is no health without mental health" (World Health Organisation, 2013). However, the prevalence of adolescent mental health problems has increased significantly over the past few decades. Approximately 20% of adolescent around the world have mental health problems nowadays (World Health Organisation, 2005). Therefore, it is of current research interest to investigate strategies to improve adolescent mental health.

School and education are crucial for adolescent mental health and wellbeing situations due to the large proportion of time adolescents spend at school (Soutter, 2011). According to WHO, "among all the sectors that play critical roles in adolescent health, *education is key*" (World Health Organisation, 2014). Studies have also shown that modifications in school environments have significant impacts on adolescents' health and wellbeing (Currie et al., 2009).

Adolescent delinquent and antisocial behavior have multiple detrimental effects both individually and socially, such as poor school performance, unstable interpersonal relationships, and social order disturbances (Loeber & Farrington, 2000). Therefore, in order to develop strategies converting adolescent delinquent and antisocial behaviour into prosocial and preventative behaviour, it is highly significant to investigate factors that lead to adolescent prosocial and preventative behaviour.

Most existing literature on school climate and mental health studied adolescents in well-developed cities of Western countries. This has led to substantial gaps in scientific knowledge about virtually all aspects of this topic in resource-poor settings (Razzouk et al). Students in resource-poor areas with mental health difficulties and concerns may not be willing to seek

help due to mental health stigma. Therefore, modifying school climates may be a more effective way of increasing students' mental health than direct diagnosing and treating individual cases of mental illness. The effect of modifying school climates may also have wider effect to all students in longer term than direct mental health interventions. Therefore, there is an urgent call for research to evaluate the associations between school climate and mental health in the context of low and middle income regions in Eastern countries.

A large proportion of past research in this area studied health in general, with limited research on the relationship between school climate and mental health specifically. Moreover, there is so far no consensus as to the key aspects of school climate that influence students' mental health. Thus, it is of current research interest to narrow down the broad concepts of school climate and mental health, and to study interactions between the sub-constructs. Here, we narrow the concept of school climate down to individual's experience, interpersonal relationship, and teacher's behavior. Aspects of mental health include mental illness symptoms, preventative behaviour, and prosocial behaviour.

## Research Method & Design

### School Climate Measures

#### I. Individual's Experience

Fairness of Rules. Delaware School Climate Survey–Student (DSCS–S) developed by [Bear et al. \(2011\)](#); Fairness of Rules subscale with 4 items on a 4-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3=Agree, and 4=Strongly Agree)

#### Bullying.

Multidimensional Peer Victimization Scale-Revised (MPVS-R) developed by [Betts et al. \(2015\)](#); 20 items in total with 5 subscales (physical, social, verbal, attack on property, electronic) on a 3-point Likert scale (1 = Not at all, 2 = Once, 3 = More than once)

The Gatehouse Bullying Scale (GBS) - [Bond et al \(2007\)](#): 12 items with 3/4-point Likert scale depending on the specific question

#### II. Interpersonal Relationship

Student-Teacher Relationship. DSCS–S by [Bear et al. \(2011\)](#); Teacher-Student Relations subscale with 8 items on a 4-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3=Agree, and 4=Strongly Agree)

Student-Student Relationship. DSCS–S by [Bear et al. \(2011\)](#); Student-Student Relations subscale with 4 items on a 4-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3=Agree, and 4=Strongly Agree)

### III. Teacher's Behaviour

Teacher Support. What's Happening In This School (WHITS) developed by Aldridge and Ala'i (2013); Teacher Support subscale with 8 items on a 5-point scale (1 = Almost never, 2 = Not often, 3 = Sometimes, 4 = Often, 5 = Almost always) **OR** Inventory of School Climate (ISC-S) developed by Brand et al. (2003); Teacher Support subscale with 6 items on a 5-point scale (1 = Never, 2 = Hardly ever, 3 = Sometimes, 4 = Most of the times, 5 = Always)

#### Favouritism.

Usman (2019): TFQ contains section A and B, Section 'A' covered gender, qualification and years of experience while section 'B' has 20 item statements designed to bring out teachers' understanding, opinion, feelings and conducts on matters related to teacher favouritism- **(but TFQ is for teachers to complete - can we modify/rephrase the items so that we can apply the scale/questions to students);**

Aydogan (2008): Favoritism in the classroom: a study on Turkish schools - a questionnaire of 32 items with a 5-item Likert scale (1=disagree totally and 5=agree totally), scale没有被放在 literature里面..但是questionnaire由4个factor (instruction, discipline, assessment, communication)组成, 每个factor有8个items.

## Mental Health Measures

### I. Preventative/Prosocial Behaviour

#### Resilience.

Resilience Scale (RS) modified by Neill & Dias (2001); 15 items in total on a 7-point Likert scale (1 = Agree, 7 = Disagree)

Resilience Scale for Adolescents (READ) by Hjmedal et al. (2007) , 28 items using a 5-point Likert scale - can modify and make it more suitable for chinese students and decrease the items

Resilience Scale for Chinese Adolescents developed by Hu and Gan (2008), 27 items on a 5-point scale

Moral Identity. Moral Identity Scale developed by Aquino and Reed (2002); 10 items in total on a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree)

### II. Mental Health Issues

Depression, Anxiety, and Stress Scale - 21 (DASS-21) originally developed by S. H. Lovibond & P. F. Lovibond (1995), Wang et al. (2016) validates the use of the DASS-21 Chinese Version in China; 21 items in total with 3 subscales (depression, anxiety, stress) on a 4-point Likert scale (0 = Did not apply to me at all, 3 = Applied to me very much or most of the time)

## Data Analysis Plan

- Correlations to explore the relationship between the three school climate dimensions and two mental health dimensions
- Multiple regressions to test whether each dimension of school climate predicts each measure of mental health
- SPSS & R

## References

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