

## Health-in-Mind: Effectiveness of a School-based Mental Health Awareness Programme in Hong Kong

Silvia S W Lee T L Lo

Clara W L Ma Raymond W S Chan

Kwai Chung Hospital

### Abstract

*Objectives:* This study aimed to measure the effectiveness of a local school-based mental health awareness programme in improving participants' mental health knowledge and stigmatizing attitude towards individuals suffering from mental illnesses. *Method:* Students were recruited from 10 local secondary schools to participate in a 2-year programme which included educational workshops on various mental health issues and interactive activities with psychiatric institutes' service users. Questionnaires containing measures on mental health knowledge and attitude towards mental illnesses were distributed to students pre and post programme. 147 valid questionnaires were collected, with students aged between 14 to 18. *Results:* Data analyses showed significant improvement in both mental health knowledge and attitude post programme. *Conclusion:* The study provided evidence to the effectiveness of the school-based programme in promoting mental health awareness and counteracting psychiatric stigma among adolescents.

*Keywords:* school-based, mental health awareness programme, psychiatric stigma

### Introduction

Mental disorders often first emerge among youths or young adults. A national epidemiological survey initiated by NIMH found that approximately half of all lifetime mental health disorders start by mid-teens (Kessler et al, 2005). Yet, despite effective treatment, mental health service utilization among adolescents is unsatisfactory. Only approximately one third of youths diagnosed with mental illnesses received mental health services (Merikangas et al, 2011). Even among those who received treatments, there are often long delays between first symptom

onset and treatment contact, with the median delay across disorders being 10 years (Wang et al, 2005). Early onset mental disorders left untreated are associated with poorer prognosis including more frequent and severe episodes, higher treatment resistance, as well as negative life outcomes including school failure, unstable employment and violence (Wang et al, 2005).

Across the world, low level of mental health literacy and mental illness stigma have been recognized as major public health concern (WHO, 2001). Survey found that young people's ability to identify mental illnesses was rather

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low; their attitude towards psychiatric treatment was negative and that they tended to prefer informal sources of help over professional help (Kelly, Jorm & Wright, 2007). Adolescents with emotional and behavioral disorders reported significant perceived stigmatization from peers, families and school once diagnoses were revealed and hence some concealed their problems from these support networks (Moses, 2010). In 2001, the WHO called for countries to launch anti-stigma campaign on mental illnesses. School-based interventions which target adolescents have become one of the central approaches in raising mental health awareness and reducing stigma. Purposes of these mental health awareness programmes for youths are of twofold: for one, providing young people with the basic knowledge about mental illnesses might facilitate early detection and intervention which improved prognosis of severe mental illness; for another, adolescence is a critical period when concepts of stereotypes begin to emerge but are yet entrenched; they are expectedly more open for attitude-change programme to alleviate the debilitating effect of mental illness stigma and the associating social exclusion (Pinfold et al, 2005). Evidence has been rapidly growing documenting the positive effects of various school-based programmes in improving young people's knowledge about mental illnesses, stigmatizing attitudes (for example, Ng & Chan, 2002; Pinfold et al., 2003; Pinfold et al, 2005; Kelly, Jorm & Wright, 2007; Watson et al., 2004, Yamaguchi, Mino & Uddin, 2011), as well as facilitating help-seeking behavior (Barney et al., 2006; Sheffield, Fiorenza, & Sofronoff, 2004).

In light of the mounting concerns over promoting adolescents mental health and combating psychiatric stigma, Kwai Chung Hospital and Mindset, a registered charity of the Jardine Matheson Group, jointly launched the "Health-in-Mind: Youth Mental Health Promotion Programme" (Hereinafter "HIM") starting 2002, with the aim to extend youth mental health promotion and anti-stigma campaign to various local secondary schools in

Hong Kong.

### Programme design

HIM programme was designed pulling together evidence-based components developed from effective mental health promotion programmes worldwide. Knowledge-contact approach is a commonly used method in school-based mental health promotion programmes, which involves providing education about mental health together with direct contact with people suffering from mental illnesses (Pinto-Foltz, Logsdon & Myers, 2011). In the same vein, stigma researchers also consider education and contact two important key factors in combating mental illness stigma (Corrigan & Shapiro, 2010).

### Education

There are two major targets for educational intervention: to improve mental health literacy and to challenge common misconceptions of mental illnesses. Mental health literacy is a term coined by Jorm et al (1997) which refers to the knowledge that facilitate an individual to recognize, manage and prevent mental illnesses. Content typically includes understanding of specific mental disorders, risks factors and causes as well as knowledge about access to mental health information, availability of self-help and professional help (Jorm, 2000). Evidence has been established that this approach can help increase participant's ability to recognize the signs of mental illness and their willingness to seek out professional services (Kelly, Jorm & Wright, 2007). Apart from providing basic information about mental illnesses, educational approaches which challenge common stereotypes of mental illnesses with factual information also yielded promising results. RCT studies have shown that addressing common misconceptions, for example perceived dangerousness of people with mental illnesses,

successfully reduced stigmatization (Corrigan et al, 2001b; Corrigan et al; 2002). Systematic review of education programmes to reduce young people's stigmatizing attitudes reiterated the significance of altering stereotypical beliefs as important component in such programmes (Yamaguchi, Mino & Uddin, 2011).

### Contact

Although education is an important step to increase knowledge and facilitate attitude change, effect of education alone was regarded as short-lived. Studies showed that the improvement brought about by education programmes was maintained only up to 12 to 14 weeks (Chan, Mak & Law, 2009 c.f. Morrison & Teta, 1977; Morrison & Teta, 1980). Whereas, the overarching influences of direct contact with people suffering from mental illness have been repeatedly discussed by various studies and reviews (for example Angermeyer & Macthinger, 1996; Corrigan et al, 2001a; Read & Law, 1999; Yamaguchi, Mino & Uddin, 2011). As early as in the 1950s, social psychologist Allport (1954 c.f. Pinto-Foltz, Logsdon, Myers, 2011) had already postulated, with the intergroup contact theory, that contact reduced intergroup prejudice. In the context of mental illness, ample evidences showed the relationship between familiarity and individuals' desire for social distance with people suffering mental illnesses. Out of 30 population studies reviewed, 26 discovered an inverse association between these two factors, that is, the more experiences one has with mental illnesses the less social distance one would desire when interacting with mental illness sufferers (Angermeyer, Holzinger & Matschinger, 2010). Path analyses further demonstrated that emotional reactions such as fear, anger and positive feelings were significant mediators in these associations (Angermeyer, Holzinger & Matschinger, 2010). Thus, researchers and programme evaluators consistently suggest that pairing

volunteers with individuals suffering from mental illnesses provides opportunities for stimulating and changing negative affective responses and developing empathy (Schachter et al, 2008). Nonetheless, not all contact is effective. Personal contact which ensures equity of status between groups, involves a common goal and potentially cultivate friendship, are important moderator to challenge negative stereotypes (Corrigan & Shapiro, 2010). Pinfold and colleagues (2005) also added that, contact was particularly powerful to arouse interest and engagement in lessons for adolescents.

### HIM programme

HIM recruits 150 students from 10 local secondary school each year through self-referral or Education Bureau's referral. Programme spans over 2 academic years. Content, based on a knowledge-contact approach, includes:

1. *Orientation day-camp* Students participate in a day-camp for team building and understanding of program content.
2. *Mental health workshops* Five interactive workshops are held for equipping students with knowledge on various mental health issues. Topics cover understanding mental illnesses and stigma cum visit to psychiatric hospital, substance abuse, eating disorders, emotion management and positive psychology. Each workshop lasts 3.5 hours; format includes lectures, interactive games and discussions.
3. *Volunteer services* Students participate in a total of 6 volunteer services to various mental health institutes including psychiatric hospitals, half-way houses or rehabilitation centers, in which they interact with service users through recreational activities.

4. *Student-initiated school activities* Students organize 4 in-school mental health promotional activities such as seminars, school radio, web broadcasts, exhibition panels for school students.

5. *Closing ceremony* Students' participation is recognized through certificate presentation and exhibition of activities.

### The present study

The current study measured the effectiveness of the HIM Programme 2010-2012 in improving participants' mental health knowledge and stigmatizing attitude towards individuals suffering from mental illnesses.

### Method

#### Participants

In 2010-2012, 150 students from 10 local secondary schools joined HIM. A total of 147 valid questionnaires were collected for analysis. There were 22 males (15 %) and 125 females (85%). Students were aged between 14 to 18.

#### Measures

To measure the effect of HIM on knowledge gain and attitude change. Two measurement tools were used.

#### Mental health knowledge scale

A 28-items self-constructed scale, pertinent to workshops content, was used to measure change in mental health knowledge with topics covering understanding of mental disorders (10 items), substance abuse (6 items), eating disorders (7 items) and emotion management (5 items). Another measure on positive psychology (7 items) was also developed to capture knowledge gain. Composite score was obtained by summing the number of correct

items in the scale.

#### Attitude towards the mentally ill scale

A 22-items scale measuring attitude towards mental illness and psychiatric patients adapted by Song and colleagues (2005) in a Taiwan Chinese sample, from Community Attitudes towards the Mentally Ill by Taylor, Dear and Hall (1979), was used. Composite score was the mean score of all items in the scale. Higher score indicating more positive attitude towards the mentally ill. Cronbach's alpha of the scale is .78 in pre-test and .85 in post-test, showing satisfactory reliability.

#### Procedure

Questionnaires containing the measurement tools were distributed to students pre and post programme in October 2010 and December 2011 respectively. Scale measuring effectiveness of positive psychology workshop was distributed immediately before and after the workshop.

#### Results

Mean number of correct items in Mental Health Knowledge scale measured pre-programme was 21.88 out of 28. Significant increase to 23.37 post-programme ( $t = -7.14, p = .00$ ) was observed. Knowledge from positive psychology workshop also improved from 3.42 pre-workshop to 5.11 post-workshop.

For attitude towards people with mental illnesses, significant positive change in attitude score from 3.07 pre-programme to 3.17 post-programme was also noted ( $t = -3.66, p = .00$ ). Descriptive statistics of the 2 measures pre and post programme were presented in Table 1.

#### Discussion

The current study attempted to measure

**Table 1**

Descriptive statistics of knowledge and attitude scales

	Mean Score (standard deviation)	Range	Maximum Score of Scale	<i>t</i>	<i>p</i>
<b>Mental Health Knowledge</b>					
Pre-programme	21.88 (2.17)	14-26	28	-7.14	.00
Post-programme	23.37 (1.97)	18-27			
<b>Positive Psy Knowledge</b>					
Pre-talk	3.42 (1.19)	1-6	7	-10.57	.00
Post-talk	5.11 (1.27)	2-7			
<b>Attitude</b>					
Pre-programme	3.07 (.27)	2.00-3.86	5	-3.66	.00
Post-programme	3.17 (.28)	2.66-3.95			

the effectiveness of a school-based mental health promotion programme in improving adolescents' mental health knowledge and attitude towards individuals with mental illnesses. In line with previous research, current results support the initiative of using a school-based approach in mental health promotion and anti-stigma campaign (Ng & Chan, 2002; Pinfold et al., 2003; Pinfold et al, 2005; Kelly, Jorm & Wright, 2007; Watson et al., 2004, Yamaguchi, Mino & Uddin, 2011). Results indicated that a knowledge-contact approach is applicable in a local context in bringing positive impact on students' view about mental health problems.

As in most programme evaluation studies (Schachter et al, 2008), the current analysis faced several limitations. Working within practical constraints, the programme was evaluated using a brief self-report survey with no control group. As part of a school-level project, a control group without intervention was difficult to set up as most schools would be more inclined to participate in programme

with the potential to improve students' learning. Interpretation of intervention effect would be weakened when a measure of spontaneous change was lacking. A closer look at the pre-programme data showed that this group of students was rather knowledgeable about mental health issues to begin with. It was likely that a selection bias had been operating as schools and students signed up to the programme on their own will instead of being randomly recruited. Thus, students with higher interest in the topics might harbor more open and responsive attitude to the programme. In the face of these limitations, the current study had utilized a longitudinal design in a community-based, naturalistic school setting and despite the ceiling effect, a small positive impact could still be found. Looking forward, HIM programme is conducting a 10th anniversary study which compares knowledge gain and attitude change of participants with a matched-sample of general public, in the hope to understand the programme effectiveness using a controlled design.

**Conclusion**

Health-in-Mind is one of the few systematic school-based youth mental health promotion and anti-stigma programmes in Hong Kong. It is evident that the programme possesses elements that have shown to be effective in arousing mental health awareness and improving attitude, such as interactive educational workshops, personal contact with service users and visits to mental health facilities. Results supported the notion of targeting young people in mental health promotion and anti-stigma intervention and provided data that inform and guide future development of mental health awareness programmes.

**Acknowledgement**

The evaluation study is funded by Mindset, a charity of the Jardine Matheson Group, as part of the Health-in-Mind project.

**摘要**

「Teen使行動」-- 校本精神健康推廣計劃之成效研究

目的：研究校本精神健康推廣計劃為提升青少年的精神健康知識及改善歧視態度之成效。

方法：本地10間中學的學生受邀參與為期2年的精神健康推廣計劃，內容包括教育講座及與精神病服務機構使用者之互動活動。問卷分別於計劃進行前及完成後分發予學生。研究成功收取147份有效問卷，參與學生年齡介乎14至18歲。

結論：數據分析顯示學生參與計劃後，其精神健康知識及對精神病之態度都有明顯進步。結果證明本計劃對推動青少年精神健康及改善歧視態度有正面成效。

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