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Suicide Risk Assessment in a Modern Asian Adolescent Community: A Cultural-relevant Perspective

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Abstract: Suicide is a serious social and psychological issue that has a devastating socio-economic impact globally. However, it remains elusive as mental health professionals grapple to formulate effective assessment and intervention strategies. Particularly, there is a dearth of cultural-relevant suicide risk assessment scales as most instruments were developed in Western culture. Even with translation and linguistic equivalence, present suicide risk assessment scales do not encompass culturally salient and relevant psychological constructs. This study adopted a socio-cultural approach to develop a suicide risk assessment with sound psychometric properties and also to capture the cultural-specific symptomatology of suicide as well as depressive Asians.

Keywords: Assessment, Culture, Collectivistic, Depression, Psychometric, Suicide

1. Introduction

Suicide is a significant global public health problem, with nearly one million suicide deaths reported worldwide annually (WHO, 2021), and is the second leading cause of death among adolescents and young adults aged between 15 and 29 years (Fleischmann & De Leo, 2014). A similar study noted that actual suicide attempts have become more prevalent among young people and are the main signals of further suicidal risk (Haynes et al., 2016). While suicide is also a national concern in China (Sun et al., 2017), there is a dearth of culturally-relevant research, particularly in assessment and intervention.

For years, suicide prevention programs have been difficult to formulate as no single risk factor could predict suicide with great accuracy (Franklin et al., 2014). It pertains even to common proposed risk factors such as suicidal ideation, which still could not consistently or independently predict suicide behaviour (Klonsky & May, 2014). Suicide behavior has been included in the classification systems of mental disorders, specifically the Diagnostic and statistical manual of mental disorders (DSM-5), as a psychiatric compilation that requires "further study." A diagnosis of Suicide Behaviour Disorder would require meeting all the following five diagnostic criteria:

(1) within the last 24 months, the individual has attempted suicide on at least one instance;

(2) the act does not meet criteria for non-suicidal self-injury (NSSI);

(3) the diagnosis does not apply to suicidal ideation or preparatory acts;

(4) the act was not carried out during a state of delirium or confusion; and

(5) The act was motivated by purely political or religious objective.

Notably, this proposed diagnosis entails the importance of the individual's intent in defining suicidal behaviour and the individual's expectation that the sequence or set of actions could potentially lead to their own death. Thus, it also differentiates from another "non-suicidal self-injury." Additionally, Kendler et al. (2009) highlighted potential antecedent risk factors or criteria (i.e., family dynamic, socio-demographic and cultural factors), concurrent criteria

or validators (i.e., cognitive, emotional, temperament, genetic make-up, and co-morbidity), and predictive validators (i.e., prognosis, diagnostic stability, and treatment response).

This study highlights the cultural-specific symptomatology of suicide as well as depressive Asians. To this, it adopted a socio-cultural approach to developing a suicide risk assessment with sound psychometric properties and cultural relevance constructs for better clinical diagnosis and intervention efficacy.

2. Suicide Risk Assessment

As part of the suicide risk assessment, suicidal ideation, and suicide attempts are two significant factors. Suicidal ideation refers to thoughts and desires to end one's life. This ranges from relatively passive ideation (e.g., contemplating death) to active ideation (e.g., planning and preparing for suicide). Past research in community settings showed that youth typically reported suicidal ideation at a moderate frequency, with intensity ranging between mild to moderate frequency (Miranda, Ortin, Scott, & Shaffer, 2014). A suicide attempt is an action motivated to end one's life (Franklin et al., 2016). A classical three-step theory of suicide asserts the role of pain (psychological or emotional) in understanding suicide (Klonsky & May, 2015). It theorizes that the combination of pain and hopelessness is vital for developing suicide ideation, which a lack of social connectedness would aggravate. This theory construes suicidal ideation and behavior as distinct. Research indicated that frequent, intense, and chronic suicidal ideation is related to subsequent suicide attempts (Miranda et al., 2014; Czyz & King, 2015; Wolff et al., 2018). Due to this intertwined relationship, suicidal intent and suicidal ideation are two main assessment areas in psychometric instruments for suicide risk assessment.

It is essential to review some risk factors pertaining to suicide. Such risk was found to be greater in males than females, similar to the general suicide cases (Hawton & van Heeringen, 2009). Another prominent finding was that the level of increased risk was related to the history of suicide attempts, and more so when there was a family's psychiatric history (Cooper et al., 2005). Further, clinical depression symptoms were salient risk factors, especially for more severe psychopathology, a sense of hopelessness, and suicidal ideation tendencies. Likewise, suicide with co-existing disorders was associated with higher risk, including substance misuse for specific alcohol and drugs, anxiety, and personality disorder (Bachmann, 2018; Holmstrand, Bogren, Mattisson, & Brådvik, 2015; Cavanagh, Carson, Sharpe, & Lawrie, 2003). Notably, suicidal ideation and prevalence increase sharply during the teenage years (Nock, Borges, & Ono, 2012; Nock et al., 2013). Such suicidal ideation persists even after youth's hospitalization (Czyz & King, 2015; Wolff et al., 2018). Over one-third of adolescents who reported suicidal ideation they eventually attempted suicide (Nock et al., 2013). Another research showed that young adults with suicidal ideation are estimated to be 12 times more likely to attempt suicide by the age of 30 (Reinherz, Tanner, Berger, Beardslee, & Fitzmaurice, 2006). It is notable that the majority of teenagers with suicidal ideation would eventually attempt suicide within 1-2 years of such suicidal ideation onset (Glenn et al., 2017), and they are commonly characterized by specific clinical issues, particularly depression or dysthymia (Nock et al., 2013). Other studies have also documented that suicides cases between 9-8 years (e.g., Bridge et al., 2015; Groholt, Ekeberg, Wichstrom, & Haldorsen, 1998) and have become more and more common by 15-19 years (Kolves & de Leo, 2017). These findings pointed out the role of social and emotional processing (i.e., emotional dysregulation) in the development of suicidal thoughts, which could lead to suicide behavior (Gratz et al., 2020). Indeed, the role of suicide intent on eventual suicide is more significant than previous attempts or a sense of hopelessness (Zhang & Norvilitis, 2002). Thus, it has been recommended for the measurement of suicide intent be included in clinical practices for suicide. At the same time, clinical depression appears to be a key precursor to suicide. It is, therefore, essential to elucidate the relationship between major depressive disorder and suicide. Further, such development warrants the urgency and pertinence of developing effective assessment, and intervention.

3. Asian culture and collectivism

A review of risk factors for young adults' suicidality highlighted that psychiatric or mental disorders coupled with a prognosis of suicidal behavior and suicide are significant predictors of suicide behavior and mortality by suicide (King & Merchant, 2008). It also further argued about the role of social and interpersonal factors in understanding and predicting suicidal behavior. Most research on suicide risk assessment adopts an individualistic and deterministic view of human psychology and behaviour. Nevertheless, Bronfenbrenner's ecological model posited the role of

multiple ecological contexts in shaping an individual's well-being, and indeed, evidence has suggested the importance of the biopsychological model in accounting and conceptualizing the dynamic nature of suicide behavior (Brofenbrenner, 1977; Heaney & Israel, 2008). Interpersonal Theory of Suicide (Joiner, 2005; Van Orden et al., 2008) outlined the suicidal risk as a combination of frustration or lack of social connection and a sense of low self-worth and perceived burdensome. This further suggested that suicide entails a relational and social element

In this paper, the focus would be on risk assessment in the context of Asian society, particularly in China. This is an area of interest as there has been a high suicide ideation rate and incidences among Chinese in recent years (Zhang et al., 2014). Recently, there is a sharp increase in report cases of depression and suicide in Asian population, particularly in overseas Chinese societies like Singapore, which have seen fast industrial and economic development (Arafat et al., 2022). The quest to assess and prevent suicide have not been effective, particularly among youth and children as they are not proactive or less vocal in reporting their suicidal risk, hence their parents and guardian often overlook the potential risk to their children. Thus, it is essential to adopt a culturally-informed and relevant approach in formulating assessment instruments and in understanding suicide.

Youth face the developmental task of developing their identity through individuation and independence from their family (Erikson, 1959). Such emotional autonomy was found to be related to depressive symptomatology (Chou, 2000). Unlike Westerners, Asians strive for integration instead of individuation. Therefore, social approval and concern over interpersonal relationships would be key areas in influencing depressive symptoms and suicidal risk. In Chinese societies influenced by Confucian Heritage Culture, students face societal pressure to excel academically. Cross-cultural research suggested that Western youth have more interest in pursuing individuation and romantic relationship as compared to Singaporean adolescents (Koh, Koh, & Chang, 2002). The high value in social-oriented achievement such as academic competence and cognitive skills related to academic achievement would be significant in shaping Chinese's mental well-being. Hence, the development of a culturally relevant instrument for mental welling and suicide would take into account the manifestation and phenomenological experiences which are shaped by adolescents' developmental and culture tasks (Kleinman & Good, 1985).

During adolescence, the individual is facing the challenge of developing his unique identity through individuation and becoming independent of his family (Erikson, 1959). Chou (2000) also found that depressive symptomatology was associated with 2 aspects of emotional autonomy, i.e., individuation and de-idealization of parents. In a collectivist Asian society where the emphasis is on integration rather than individuation, we questioned if identity formation would become a challenge to Asian adolescents and lead to depression. On the other hand, since others are of high importance in the self-construct of collectivist Asians, we speculated that concern over self-other relationships might be a critical concomitant of depression for Asian adolescents. Adolescents in Asia, especially in the Confucian Heritage Cultural communities such as Japan, Taiwan, Hong Kong, and Singapore, also face tremendous pressure for academic achievement. A study comparing stress and coping in Singaporean and American adolescents found that academic pressure was the most frequently experienced stressor for Singaporean adolescents, in contrast to American adolescents, who were more concerned over romantic relationships and individuation from parents (Koh, Koh, & Chang, 2002).We, therefore, proposed that concerns over academic competence and the cognitive skills related to academic success or failure might be significant for Singaporean adolescents. Depression is a condition whose manifestations and phenomenological experiences are intimately formed by the culture and the developmental tasks faced by adolescents (Kleinman & Good, 1985).

Having outlined the significance of a cultural-relevant perspective, it is essential to examine how socio-cultural influences the manifestation of depression symptoms, behavior, and potential suicidal development. Major depression is a psychological disorder with impairments in cognitive, emotional, and neurobiological domains. Several etiological models indicated that an amalgamation of developmental, psychosocial, neurobiological, and genetic factors leads to Major Depressive Disorder (MDD) (Kendler et al., 2006; Sjoholm et al., 2009). Across cultures, key symptoms of major depression are persistent low mood, a sharp reduction in energy, and interest, intense feelings of worthlessness, hopelessness, and some reported excessive guilt. These symptoms are observed cross-culturally (Sartorius et al., 1980). However, subjective experiences and symptom presentation can vary across cultures (Ying, et al., 2000) and this could pose a challenge in assessing depression in non-western cultural groups (e.g., Iwata, N., & Buka, 2002). It is postulated that the relationship between culture and depression is mediated by individual's self-construal (Markus & Kitayama, 1991). The collectivistic nature of Chinese communities entails relatively more

interdependent self-construal (Triandis, 1989) and their "idiom of distress" were found to contain more symptoms regarding social aspects of the self (Esau & Chang, 2009; Chang, 1985). In such culture, social contexts are deemed as an integrative part of self-construct (Triandis, 1989). Indeed, the values and belief systems of a culture influence individuals' goals and motivational efforts (Markus & Kitayama, 1991). Thus, their psychological state would be influenced by interpersonal and social processes. For instance, the perception of a lack of parental support and peer acceptance (i.e., interpersonal factors) are found to be predictive of depressive mood among Hong Kong Chinese adolescents ((Stewart et al., 1999). So, it is meaningful to incorporate interpersonal elements of depression as these are culturally sensitive and relevant to depressive symptomatology. However, these constructs are often absent in most assessments developed in the West.

Other socio-cultural research found that Asian tend to place less emphasis on affective symptoms; instead, they tend to present somatized complaints (Stein, 1990). Chang (1985) found that Asian Americans demonstrated higher salience for psychosomatic symptoms as compared to ethnic Americans. Likewise, East Asian and Asian American reported similar psychosomatic depressive symptoms but less affective or emotional symptoms. Other relevant sociocultural research suggested that guilt and shame appear to influence Chinese suicidal tendencies. Several scholars have begun to highlight the salience of shame among Asian Americans due to its presence in several Asian languages and parenting techniques (e.g., discussing children's transgressions in front of others to induce shame and socialize children to behave properly; Louie, 2014), and higher levels of shame experiences compared to Caucasians (as cited in Wong et al., 2014). The collectivistic nature of Asian also influences their high need for social approval and desire to fulfill socially prescribed duties, hence leading to a sense of shame when they are unable to meet social expectation (Lutwak, Razzino, & Ferrari, 1998). Wong et al. (2014) conceptualized shame as an interpersonal experience, which comprises two dimensions: (1) external shame (i.e., concerns about negative social perception toward self), and (2) family shame (i.e., concerns about bringing shame to one's family). Research showed that external and family shame was positively correlated with depression and suicidal ideation but negatively correlated with self-esteem (Wong et al., 2014). Self-conscious moral emotions such as guilt and shame (Tangney, 2002) have been found to be particularly salient during Major Depressive Disorder (Zahn et al., 2012). Meta-analysis studies showed that those who reported high levels of shame were less effective in communicating their suicidal intent and often could not be understood when they seek help through indirect means (Pompili et al., 2016). Studies in community settings and college students showed that shame was positively associated with suicide ideation (Zhao et al., 2020). Similarly, excessive, persistent, and inappropriate sense of guilt is considered as a clinical symptom of MDD, particularly for melancholic subtype (American Psychiatric Association, 2000). A recent meta-analysis showed that younger adults with current major depression reported higher levels of guilt as compared to older adults (Hegeman et al., 2012). Another research indicated that a sense of guilt was characterized by female MDD patients who had a history of suicide attempts (Bi et al., 2012). Past research also revealed that patients with current MDD reported significantly high levels of guilt (Berrios et al., 1992).

4. Development of a Cultural-Relevant Assessment

It is important to review the current suicide risk assessment scales in past research. Baek et al. (2021) noted that self-reporting is the common method to identify symptoms related to suicide risk. This is a common approach to screening suicide risk groups, and interviews would be carried out to assess the severity of suicidal ideation. Such structured interview tool aims to minimize the subjectivity of experts' judgment. Other researchers have investigated the factors predictive of suicidal behavior and found that major depression, impulsiveness, life events, and socio-demographic factors (Twenge et al., 2019). Thus, it is essential to include major depressive disorder, particularly culturally relevant factors, in the development of suicide assessment instruments. Indeed, there is a lack of consensus over diagnostic criteria, an absence of culturally appropriate norms, and a dearth of cultural validity in the assessment (Chang & Koh, 2012). Recent research examined the validity and reliability of a Chinese language suicide screening questionnaire-observer rating (CL-SSQ-OR) assessment for children and youth (Yu et al., 2023). However, this research largely considered the linguistic equivalence of assessment scale items in Chinese culture and did not integrate socio-cultural relevant constructs such as major depressive symptoms, interpersonal and psychosomatic constructs which had been found to be a precursor to suicide, and predictive of suicide. Perhaps such inclusion would bolster the diagnostic capacity and improve the preventative effort as it reflects a shared Asian cultural emphasis.

The aim of this theoretical paper is to develop a cultural-relevant suicide assessment scale with sound psychometric properties and incremental validity over previous instruments developed in the West. Incremental validity refers to the extent a scale confers predictive validity over existing scales (Haynes & Lench, 2003). Kate et al. (2000) and other research typically included Beck's inventory of depression and hopelessness with suicide risk assessment. We argue that this might not be appropriate as these did not sufficiently consider the cultural experience and values of Asians, such as concern over interpersonal relationships, psychosomatic manifestation, emphasis on socially approved success such as achievement, and developmental concern for social integration instead of individuation. Other research which attempted to adopt Western Scales in the past was mainly concerned with linguistic equivalence and translational issues but failed to take into account salient cultural-sensitive and relevant nuances, which would no doubt affect the effectiveness of the assessment.

5. Measures

The first part of the questionnaire would encompass the Chinese Suicide Intent Scale (SIS), which has been validated in Chinese society (Gau et al., 2009). The study adapted and extracted 7 statement groups each assessing various aspects of suicidal ideation. Each statement group consists of three sentences that describe different intensities of suicidal ideation, representing a three-point scale (0 to 2). The prospects are instructed to select the specific statement of each group that is most applicable to them with higher values indicating a greater risk of suicide. We do not distinguish different degrees of suicidal risk nor set a cut-off criterion as even very low total scores can be associated with significant risks of suicide. These items would serve as a screening instrument for suicidal ideation. This scale would cover three factors: (1) precautions (four items; e.g., isolation, timing and precautions against discovery); (2) planning (three items; e.g., degree of planning, writing a note and final acts); and (3) seriousness (eight items; e.g., the purpose of attempt, seriousness, expectation regarding fatality) for high variance, and such high construct validity would provide the support that C-SIS has sound psychometric properties. Thus, it is a qualified and appropriate measure for assessing suicidal behavior in the Chinese population. Unlike the previous studies done by Gau et al. (2009) and Zhang and Jia (2007), this study did not draw depressive symptoms items from Beck Depression Inventory. Instead, the study would include salient cultural factors from Singapore Depression Scale (Chang & Koh, 2012) and the Asian Adolescent Depression Scale (Woo et al., 2007).

For the Asian Depression Scale, this author has drawn two socio-psychological constructs as follows:

(1) Loss of Meaning of Life (five items; e.g., “I feel hopeless and I feel that my life is empty”); and

(2) Affective-Somatic Symptoms (seven items; e.g., “My heart beats faster than normal and I have crying spells”).

From the Asian Adolescent Depression scale, this author has also drawn the following:

(1) Cognitive Inefficiency (four items: e.g., “I cannot think well and I cannot concentrate on my studies as much as I used to”);

(2) Negative Self-evaluation (twenty items; e.g., “I feel that I am not as good as others and I feel that I am not wanted”).

Chang and Koh (2007)'s assessment of the psychometric properties showed that these constructs provide a more accurate assessment and more effectively capture the cultural experience of Asians (Koh et al., 2002). Participants are asked to rate each item on the extent to which they generally feel on a five-point scale (1=very slightly or not at all; 5=extremely), with higher values indicating a higher level of depressive symptoms.

In this study, the Asian Suicide Risk Assessment comprises items from the Chinese Suicide Intent Scale and Asian Depression Scale, which fulfill the author's quest to develop a cultural-relevant questionnaire for his suicide risk assessment. Both scale items have been validated within the Asian and Chinese cultural settings and showed sound psychometric properties for assessment purposes. As reiterated, suicide and depression are socio-psychological phenomena that manifest within a culture. Beyond only striving for translation accuracy and linguistic equivalence, this study bolsters the clinical utility by incorporating culturally-specific and relevant constructs, particularly:

(1) interpersonal and social perception toward self and life purpose;

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(2) psycho-somatization; and

(3) cognitive efficiency. Indeed, such a scale is vital and relevant in capturing the socio-cultural suicidal and depressive experience.

Integrating cultural-relevant depression assessment constructs, it would bolster the predictive power of the instrument in capturing episodes of depressive thoughts, which would inevitably lead to a sense of despair and hopelessness, and eventually suicide in most instances. Thus, it also confers further clinical utility in the aspect of earlier suicide detection and prevention.

6. Asian Suicide Risk Assessment Scale

Instruction: Participants are to choose a particular statement out of 3 choices in each group that is most applicable to them.

Scoring Scheme: For items 1 to 7, each item consists of three sentences that describe different intensities of suicidal ideation, representing a 3-point Likert rating scale (0 to 2). The higher the score (especially, above the average total score of 7 and the closer to the maximum total score of 14) the higher likelihood of suicidal tendency.

I. Objective Circumstances Related to Suicide Attempt

Item	Tick the box of your choice
(1) Isolation	x
0. Somebody present	
1. Somebody nearby or in visual or vocal contact	
2. No one nearby or in visual or vocal contact	
(2) Timing	x
0. Intervention is probable	
1. Intervention is not likely	
2. Intervention is highly unlikely	
(3) Precautions against Discovery/Intervention	x
0. No precautions	
1. Passive precautions (e.g., avoiding others but doing nothing to prevent intervention; alone in a room with an unlocked door)	
2. Active precautions (locked door)	
(4) Suicide Note	x
0. Absence of note	
1. Note written but torn up; note thought about	
2. Presence of note	
(5) Alleged Purpose of Attempt	x
0. To manipulate the environment, get attention, revenge	
1. Components of "0" and "2"	
2. To escape, surcease, solve problems	
(6) Expectations of Fatality	x
0. Thought that death was unlikely	
1. Thought that death was possible but not probable	
2. Thought that death was probable or certain	
(7) Seriousness of Attempt	x
0. Did not seriously attempt to end life	
1. Uncertain about the seriousness of ending life	
2. Seriously attempted to end life	

II. Asian Depression Symptoms

Instruction: This section assesses depressive symptoms in adolescents, and higher scores in respective depressive categories indicate the severity of the depressive-suicidal risk.

Scoring Scheme: Participants are asked to rate each item on the extent to which they generally feel on a 5-point Likert rating scale (1=very slightly or not at all; 5=extremely). The maximum score is 90 with a cutoff score at 45. The higher the score the more depressive a person is with a higher indication of depressive-suicidal risk.

No.	Depressive Categories	Depressive-Suicidal Risk				
		1 Very slightly/or not at all	2	3	4	5 Extremely
1.	Loss of Meaning of Life					
	1.1 I feel powerless and/or vulnerable.					
	1.2 I feel hopeless.					
	1.3 I feel that I am not wanted.					
	1.4 I feel that my life is empty.					
2.	Affective-Somatic					
	2.1 I have crying spells or feel like it.					
	2.2 I feel sad most of the time.					
	2.3 My heart feels heavy.					
	2.4 I often feel like crying.					
	2.5 I have trouble sleeping at night.					
3.	Cognitive Inefficiency					
	3.1 I cannot concentrate on my studies as much as I used to.					
	3.2 I take a long time to make decisions.					
	3.3 I take a long time to get things done.					
	3.4 I cannot think well.					
4.	Negative Self-Evaluation					
	4.1 I feel that others would be better off if I were dead.					
	4.2 I do not like going out with friends or meeting people.					
	4.3 I have thought about dying.					
	4.4 I feel that I am not as good as others.					
	4.5 Nothing works out right for me.					

7. Conclusion

The study adopted a cultural-relevant approach to developing an Asian Suicide Risk Assessment instrument. It considers the role of socio-cultural influence in shaping the manifestation and development of suicidal and depressive symptoms. By drawing from instruments that have been validated within Asian culture, this study aims to formulate a culturally relevant scale that appropriately captures the cultural nuances, thereby exhibiting greater clinical utility and incremental validity over present instruments. Generally speaking, Asians are less expressive and often take a more collectivistic stand, this author proposed and included culturally salient factors such as affective-somatic symptoms, and interpersonal and social-oriented evaluation, which were previously lacking in previous suicide risk assessment items. In addition, it included a developmentally salient factor (i.e., cognitive efficacy) that aptly characterizes young Asians' industrious nature and emphasis on achievement in career and academics. With these, the authors believe that it would be a versatile instrument to test for suicidal-depressive risks within Asian culture.

References

Arafat, S., Saleem, T., Menon, V., Ali, S., Baminiwatta, A., Kar, S., Hasina A., Singh, R. (2022). Depression and suicidal behavior in South Asia: A systematic review and meta-analysis. *Global Mental Health*, 9, 181-192. https://doi.org/10.1017/gmh.2022.20

American Psychiatric Association. (2013) Diagnostic and Statistical Manual of Mental Disorders, *American Psychiatric Publishing*, Arlington. https://doi.org/10.1176/appi.books.9780890425596

Amelia M. Arria, Kevin E. O'Grady, Kimberly M. Caldeira, Kathryn B. Vincent, Holly C. Wilcox & Eric D. Wish (2009) Suicide Ideation among College Students: A Multivariate Analysis, *Archives of Suicide Research*, 13(2) 230-246. https://doi.org/10.1080/13811110903044351

Bachmann, S. (2018). Epidemiology of suicide and the psychiatric perspective. *International journal of environmental research and public health*, 15(7), 1425. https://doi.org/10.3390/ijerph15071425

Berrios, G.E., Bulbena, A., Bakshi, N., Dening, T.R., Jenaway, A., Markar, H., R. Martin s., Mitchell, S.L. (1992). Feelings of guilt in major depression: Conceptual and psychometric aspects. *The British Journal of Psychiatry*, 160(6), 781-787. https://doi.org/10.1192/bjp.160.6.781

Bi, B., Xiao X., Zhang H., Gao J., Tao M., Niu H., Wang, Y., Wang, Q., Chen, C., Sun, N., Li, K., Fu, J., Gan, Z., Sang, W., Zhang, G., Yang, L., Tian, T., Li, Q., Yang, Q., Sun, L., Ying Li, Rong, H., Guan, C., Zhao, X., Ye, D., Zhang, Y., Ma, Z., Li, H., He, K., Chen, J., Cai, Y., Zhou, C., Luo, Y., Wang, S., Gao, S., Liu, J., Guo, L., Guan, J., Kang, Z., Di, D., Yajuan Li, Shi, S., Yihan Li, Chen, Y., Flint, J., Kendler, K., Liu Y. (2012). A comparison of the clinical characteristics of women with recurrent major depression with and without suicidal symptomatology. *Psychological medicine,* 42(12), 2591-2598. https://doi.org/10.1017/S003329171200058X

Bridge, J. A., Asti, L., Horowitz, L. M., Greenhouse, J. B., Fontanella, C. A., Sheftall, A. H., Kelly J.K., Campo, J. V. (2015). Suicide trends among elementary school–aged children in the United States from 1993 to 2012. *JAMA pediatrics*, 169(7), 673-677. https://doi.org/10.1001/jamapediatrics.2015.0465

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*(7), 513–531. https://psycnet.apa.org/doi/10.1037/0003-066X.32.7.513

Cavanagh, J.T., Carson, A.J., Sharpe, M.C., & Lawrie, S.M. (2003). Psychological autopsy studies of suicide: a systematic review. *Psychological Medicine*, 33, 395 - 405. https://doi.org/10.1017/S0033291702006943

Chang, W.C. (1985). A cross-cultural study of depressive symptomology. *Culture, Medicine and Psychiatry*, 9(3), 295–317. https://doi.org/10.1007/BF00048503

Chang, W.C., & Koh, J.B. (2012). A measure of depression in a modern asian community: singapore. *Depression research and treatment*, *2012*, 691945. https://doi.org/10.1155/2012/691945

Cooper, J., Kapur, N., Webb, R., Lawlor, M., Guthrie, E., Mackway-Jones, K., & Appleby, L. (2005). Suicide after deliberate self-harm: A 4-year cohort study. *The American journal of psychiatry*, 162(2), 297-303. https://doi.org/10.1176/appi.ajp.162.2.297

Czyz, E. K., Berona, J., & King, C. A. (2015). A prospective examination of the interpersonal-psychological theory of suicidal behavior among psychiatric adolescent inpatients. *Suicide and Life-Threatening Behavior*, 45(2), 243–259. http://dx.doi.org/10.1111/sltb.12125

Essau, C.A., & Chang, W.C. (2009). Epidemiology, comorbidity and course of adolescent depression. In C. A. Essau (Ed.), Treatments for Adolescent Depression. Oxford: Oxford University Press, England. https://doi.org/10.1093/med:psych/9780199226504.001.0001

Fleischmann, A., & De Leo, D. (2014). The World Health Organization's report on suicide: a fundamental step in worldwide suicide prevention, *Hogrefe*. https://doi.org/10.1027/0227-5910/a000293

Franklin, J.C., Ribeiro, J.D., Fox, K.R., Bentley, K.H., Kleiman, E.M., Huang, X., Musacchio, K.M., Jaroszewski, A.C., Chang, B.P., & Nock, M.K. Nock, M.K. (2017). Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research. *Psychological bulletin*, 143(2), 187–232. https://psycnet.apa.org/doi/10.1037/bul0000084

Gau, S.S., Chen, C.H., Lee, C.T., Chang, J.C., & Cheng, A.T. (2009). Development of a Chinese version of the Suicide Intent Scale. *Suicide & life-threatening behavior*, *39*(3), 332–342. https://doi.org/10.1521/suli.2009.39.3.332

Gratz, K.L., Tull, M.T., Richmond, J.R., Edmonds, K.A., Scamaldo, K.M., & Rose, J. P. (2020). Thwarted belongingness and perceived burdensomeness explain the associations of COVID-19 social and economic consequences to suicide risk. *Suicide and Life Threatening Behavior*, *50*(6), 1140-1148. https://doi.org/10.1111/sltb.12654

Groholt, B., Ekeberg, O., Wichstrom, L., & Haldorsen, T. (1998). Suicide among children and younger and older adolescents in Norway: A comparative study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(5), 473-481. https://doi.org/10.1097/00004583-199805000-00008

Hawton, K., van Heeringen, K., (2009). Suicide. Lancet 373(9672), 1372–1381. https://doi.org/10.1016/S0140-6736(09)60372-X

Hawton, K., Witt, K.G., Salisbury, T.L.T., Arensman, E., Gunnell, D., Hazell, P., Ellem, T., & van Heeringen, K. (2016). Psychosocial interventions following self-harm in adults: a systematic review and meta-analysis. *The Lancet Psychiatry*, 3(8), 740-750. https://doi.org/10.1016/S2215-0366(16)30070-0

Haynes, S.N., & Lench, H.C. (2003). Incremental validity of new clinical assessment measures. *Psychological assessment*, 15(4), 456–466. https://psycnet.apa.org/doi/10.1037/1040-3590.15.4.456

Heaney, C.A., & Israel, B.A. (2008). Social networks and social support. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* , *Jossey-Bass*, 189–210

Holmstrand, C., Bogren, M., Mattisson, C., & Bradvik, L. (2015). Long term suicide risk in no, one or more mental disorders: The Lundby Study 1947–1997. *Acta Psychiatrica Scandinavica*, 132(6), 459–469. https://psycnet.apa.org/doi/10.1037/1040-3590.15.4.456

Iwata, N., & Buka, S. (2002). Race/ethnicity and depressive symptoms: a cross-cultural/ethnic comparison among university students in East Asia, North and South America*. Social science & medicine* (1982), 55(12), 2243–2252. https://doi.org/10.1016/S0277-9536(02)00003-5

Kendler, K., Kupfer, D., Narrow, W., Phillips, K., Fawcett, J*.,* (2009). Guidelines for Making Changes to DSM-V Revised 10/21/09. *American Psychiatric Association*, Washington.

King, C.A., & Merchant, C.R. (2008). Social and interpersonal factors relating to adolescent suicidality: a review of the literature. *Archives of suicide research*, 12(3), 181–196. https://doi.org/10.1016/S0277-9536(02)00003-5

Koh, J.B.K., Chang, W.C., Fung, D.S.S., & Kee, C.H.Y. (2001). Preliminary development of a culturally appropriate measure for Asian children's depression. International perspectives on child and adolescent mental health, 2, 275–295. https://doi.org/10.1016/S1874-5911(02)80012-4

Klonsky, E.D., & May, A.M. (2014). Differentiating suicide attempters from suicide ideators: a critical frontier for suicidology research. *Suicide & life-threatening behavior*, 44(1), 1–5. https://doi.org/10.1111/sltb.12068

Kolves, K., & De Leo, D. (2017). Suicide methods in children and adolescents. *European child & adolescent psychiatry*, 26, 155-164. https://doi.org/10.1007/s00787-016-0865-y

Lutwak, N., Razzino, B.E., & Ferrari, J.R. (1998). Self-perceptions and moral affect: An exploratory analysis of subcultural diversity in guilt and shame emotions. *Journal of Social Behavior & Personality, 13*(2), 333–348.

Markus, H.R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224–253. https://doi.org/10.1037/0033-295X.98.2.224

Miranda, R., Ortin, A., Scott, M., & Shaffer, D. (2014). Characteristics of suicidal ideation that predict the transition to future suicide attempts in adolescents. *Journal of child psychology and psychiatry, and allied disciplines*, *55*(11), 1288–1296. https://doi.org/10.1111/jcpp.12245

Nock, M.K., Borges, G., & Ono, Y. (2012)*. Suicide: Global perspectives from the WHO World Mental Health Surveys.Cambridge University Press*, United Kingdom.

Nock, M.K., Green, J.G., Hwang, I., McLaughlin, K.A., Sampson, N.A., Zaslavsky, A.M., & Kessler, R.C. (2013). Prevalence, correlates and treatment of lifetime suicidal behavior among adolescents: Results from the National Comorbidity Survey Replication – Adolescent Supplement (NCS-A*). JAMA Psychiatry*, 70, 300-310. https://doi.org/10.1001/2013.jamapsychiatry.55

Pompili, M., Belvederi Murri, M., Patti, S., Innamorati, M., Lester, D., Girardi, P., & Amore, M. (2016). The communication of suicidal intentions: a meta-analysis. *Psychological medicine,* 46(11), 2239–2253. https://doi.org/10.1017/S0033291716000696

Reinherz, H.Z., Tanner, J.L., Berger, S.R., Beardslee, W.R., & Fitzmaurice, G.M. (2006). Adolescent suicidal ideation is predictive of psychopathology, suicidal behavior, and compromised functioning at age 30. *American Journal of Psychiatry*, 163(7), 1226-1232. https://doi.org/10.1176/ajp.2006.163.7.1226

Stein, H.F. (1990). The story behind the clinical story: An inquiry into biomedical narrative. *Family Systems Medicine*, 8(2), 213–227. https://psycnet.apa.org/doi/10.1037/h0089309

Sun, L., Zhou, C., Xu, L., Li, S., Kong, F., & Chu, J. (2017). Suicidal ideation, plans and attempts among medical college students in China: The effect of their parental characteristics. *Psychiatry Research*, 247, 139–143. https://doi.org/10.1016/j.psychres.2016.11.024

Tangney, J.P. (2002). Self-conscious emotions: The self as a moral guide. In A. Tesser, D. A. Stapel, & J. V. Wood (Eds.), *Self and motivation: Emerging psychological perspectives* American Psychological Association. 97–117. https://psycnet.apa.org/doi/10.1037/10448-004

Triandis, H.C. (1989). The self and social behavior in differing cultural contexts. Psychological Review, 96(3), 506–520. https://doi.org/10.1037/0033-295X.96.3.506

Twenge, J.M., Cooper, A.B., Joiner, T.E., Duffy, M.E., & Binau, S.G. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. *Journal of Abnormal Psychology*, 128(3), 185–199. https://psycnet.apa.org/doi/10.1037/abn0000410

van Spijker, B.A., Batterham, P.J., Calear, A.L., Farrer, L., Christensen, H., Reynolds, J., Kerkhof J.F.M., (2014). The suicidal ideation attributes scale (SIDAS): a community-based validation study of a new scale for the measurement of suicidal ideation. *Suicide Life Threat Behaviour*, 44:408–19. https://doi.org/10.1111/sltb.12084

Wong, Y.J., Kim, B.S., Nguyen, C.P., Cheng, J.K., & Saw, A. (2014). The interpersonal shame inventory for Asian Americans: scale development and psychometric properties. *Journal of counseling psychology*, 61(1), 119–132. https://psycnet.apa.org/doi/10.1037/a0034681

Wolff, J.C., Davis, S., Liu, R.T., Cha, C.B., Cheek, S.M., Nestor, B.A., Elisabeth A. Frazier, Schaffer, M.M., Spirito, A. (2018). Trajectories of suicidal ideation among adolescents following psychiatric hospitalization. *Journal of Abnormal Child Psychology*, 46, 355-363. https://doi.org/10.1007/s10802-017-0293-6

World Health Organization Live Life: An Implementation Guide for Suicide Prevention in Countries 2021. Available online: https://apps.who.int/iris/handle/10665/341726

Ying, Y.W., Lee, P.A., Tsai, J.L., Yeh, Y.Y., Huang, J.S. (2000). The conception of depression in Chinese American college students. *Cultur Divers Ethnic Minor Psychol*, 6(2), 183-95. https://psycnet.apa.org/doi/10.1037/1099-9809.6.2.183

Yu, H., Tian, H., Fang, T., Zhang, Q., Wang, L., Ma, X., Li, R., Cheng, L., & Zhuo, C. (2023). Validity and reliability of a Chinese language suicide screening questionnaire-observer rating (CL-SSQ-OR) assessment for children/adolescents. *Frontiers in Psychiatry*, 14. https://doi.org/10.3389/fpsyt.2023.1147161

Zahn, R., Lythe, K. E., Gethin, J. A., Green, S., Deakin, J. F., Young, A. H., & Moll, J. (2015). The role of self-blame and worthlessness in the psychopathology of major depressive disorder. *Journal of affective disorders*, 186, 337–341. https://doi.org/10.1016/j.jad.2015.08.001

Zhang, J., & Norvilitis, J.M. (2002). Measuring Chinese psychological well-being with Western-developed instruments. *Journal of Personality Assessment*, 79(3), 492–511. https://doi.org/10.1207/S15327752JPA7903_06

Zhang, J., Sun, L., Liu, Y., & Zhang, J. (2014). *The change in suicide rates between 2002 and 2011 in China. Suicide and Life-Threatening Behavior*, 44(5), 560-568. https://doi.org/10.1111/sltb.12090

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