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Bakr Hussein Fadhil
Lecturer in Psychology,
College of Education, Al-Iraqia
University, Baghdad, Iraq

Preparing a battery of scales to diagnose suicide risk among secondary school students in Iraq

Bakr Hussein Fadhil

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Abstract

The study aimed to Preparing a battery for assessing suicide risk (B-SRA) among secondary school students. A random sample of (500) secondary school students (300 males and 200 females) aged 15 to 19 years was drawn from the study. The battery included five reliable global and local scales: the Beck Suicidal Ideation Scale (BSS), the Suicidal Tendencies Scale (STS), the Evaluative Belief Scale (EBS), the Suicidal Ideation Scale (SIS), and the Depression Scale (DS). Statistical analysis results demonstrated the validity and reliability of the developed battery, with Cronbach's alpha coefficients ranging from 0.79 to 0.96, and high internal correlations between the battery scales. Exploratory factor analysis also confirmed the structure of the scales in assessing suicide risk among secondary school students. In a pilot setting, the battery demonstrated its ability to identify approximately (6) students as high-risk cases (1.2%), which is consistent with clinical and observational evidence of suicide risk. This result indicates the high diagnostic potential of the B-SRA test and its cultural relevance for early detection of suicide risk. The study recommends incorporating the B-SRA test into high school suicide prevention diagnostic and treatment programs.

Keywords: Risk of suicide, Assessment Battery, Secondary School Students

Introduction

Suicide is one of the most serious global health problems of the 21st century. According to the World Health Organization (WHO, 2017), suicide is the second leading cause of death among young people aged 15-29. Adolescents are particularly vulnerable, as this stage of life is marked by rapid social, psychological, and emotional transitions that may increase susceptibility to mental health difficulties. Consequently, the early identification of suicide risk is essential to inform timely interventions and to reduce the devastating consequences of self-harm on individuals, families, and societies.

Over the past four decades, several psychometric instruments have been developed to assess suicidal ideation and behavior. Among the most prominent are the Beck Scale for Suicide Ideation (Beck *et al.*, 1979) ^[13], the Suicide Probability Scale (Cull & Gill, 1982) ^[20], and the Suicidal Ideation Questionnaire (Osman *et al.*, 1994) ^[38]. These scales have demonstrated high validity across diverse cultural groups and have been widely used in clinical and research reports. Nevertheless, most of these scales were designed and validated in Western societies. Cultural and social norms strongly influence how suicidal ideation is experienced and reported, raising concerns about the cross-cultural applicability of such measures (Al-Habeeb, 2005; Lester, 2008; Okasha, 2004) ^[3, 33, 37]. This limitation has prompted calls for culturally adapted or locally validated diagnostic tools that can capture the unique contextual and cultural dimensions of suicide risk in non-Western populations.

In Arab societies, suicide remains a highly sensitive and stigmatized subject, often resulting in underreporting and limited empirical investigation (Okasha, 2004) ^[37]. In Iraq, decades of armed conflict, political instability, and displacement have deeply affected the mental health of adolescents. Despite this, systematic research on suicide risk among Iraqi youth remains scarce, and there is a critical lack of culturally validated assessment tools. National statistics indicate a concerning trend of suicide mortality, particularly among adolescents: Figure 1 presents the recorded suicide rates in Iraq across four consecutive years, illustrating the increasing relevance of this issue in the national context (Iraqi Ministry of Health, 2022).

Corresponding Author:
Bakr Hussein Fadhil
Lecturer in Psychology,
College of Education, Al-Iraqia
University, Baghdad, Iraq

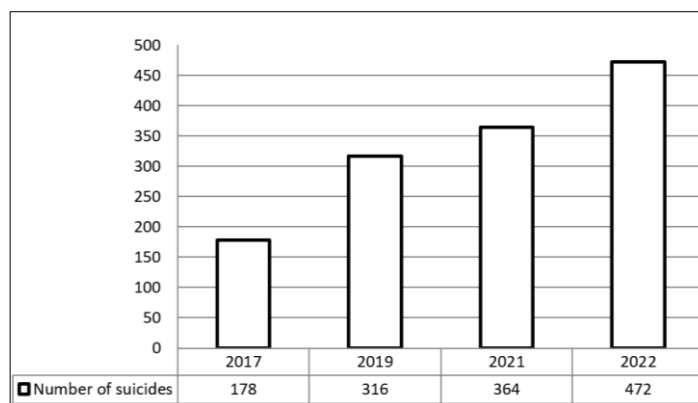


Fig 1: Suicide rates in Iraq across four Consecutive year Iraqi Ministry of Health (2022)

Recent studies have begun to shed light on the risk factors associated with adolescent suicide in Iraq. Hussein and Mohammed (2022) ^[28] identified trauma, family conflict, and feelings of worthlessness as significant predictors of suicidal behavior among secondary school students in Baghdad. In a separate study, 11.3% of female students in Baghdad reported suicidal ideation, with depression and hopelessness emerging as critical risk factors (Anonymous, 2024) ^[11]. Shrshabar and Mousa (2025) ^[43] highlighted the role of bullying as a significant contributor to suicidal ideation among adolescents in Dhi Qar. Similarly, Abdulrahman *et al.* (2020) ^[1] found that one-third of displaced students in Tikrit experienced depression, which was strongly correlated with suicide risk. Research beyond secondary school populations has also documented high prevalence rates of suicidal ideation: 37.1% among psychiatric outpatients (Al-Hilfi & Ali, 2025) ^[4] and 64.9% among Iraqi medical students (Al-Imam *et al.*, 2023) ^[5]. Complementary evidence from Jordan demonstrated the psychometric adequacy of Arabic versions of the Stigma of Suicide Scale (SOSS-SF) and the Literacy of Suicide Scale (LOSS), reinforcing the importance of culturally sensitive measures in Arab populations (Al-Shannaq & Aldalaykeh, 2020) ^[7].

Taken together, these findings point to two major issues: first, suicide risk among Iraqi adolescents represents a pressing and under-researched mental health concern; second, the absence of comprehensive, psychometrically validated assessment tools tailored to this population severely limits both prevention and intervention efforts. This study attempts to provide a validated and reliable set of tools for diagnosing suicide risk among high school students, by integrating internationally and locally recognized tools with modifications to suit cultural needs, thus contributing to the prevention and treatment of the scourge of suicide in the modern era.

Definition of Terms

The study addressed two basic terms: "battery of scales," which means a set of scales combined to measure a single concept and a specific set of traits in individuals. These scales aim to determine the overall level of the phenomenon and assess it comprehensively, reflecting all its constituent aspects. The research also addresses the term "Suicidal Risk," which refers to any behavioral practices, whether apparent or hidden (internal intention or imaginary thoughts), exhibited by an individual that reflect a certain level, regardless of the magnitude, of risk of causing self-harm and ending one's life (Fadel, 2025, p. 11) ^[22]. The

World Health Organization (WHO, 2021) also defines it as any likelihood of an individual intentionally harming themselves with the intent of ending their life. The American Psychiatric Association (APA, 2013) defined it as a process resulting from complex interactions between psychological, social, and biological factors that lead to the development of the drive to intentionally end one's life.

Method

Sample

The researcher drew a sample of (500) adults aged (15-19) years, including (300) males and (200) females, and presented the scales to them in a randomly assigned form using repeated measures.

Measurement Battery Tools

The researcher collected several global and local measures for battery preparation, as follows:

1. The Beck Suicidal Ideation Scale (BSS), which simulates the completeness of suicidal ideation in those with a clear suicide risk. It consists of (21) items answered on a three-point scale from (0 to 2). If the examinee receives a score of (30) or more, they are at high risk of suicide and have a suicidal urge that increases with the higher the score. A score of (0) indicates a high desire to live. Items (18-19) are two inverted items. They indicate the desire to live.
2. The Suicidal Tendencies Scale (STS), developed by Al-Shahat (2021) ^[8] to measure suicidal tendencies among young people aged 15-19 years, consists of (33) items in the form of situational statements. The examinee answers these items using a three-point scale, with scores ranging from (0 to 2), reaching the highest score for those with a high tendency (66) and those with no tendency at all (0).
3. Evaluative Belief Scale (EBS) The scale was developed by (Chadwick, Birchwood & Trower, 1996) ^[18] and measures negative beliefs surrounded by despair and delusions associated with emotional disturbances towards life and others. It covers the category of lack of love and desire for life, feelings of personal failure and social desirability. The scale consists of (18) items that the examinee answers on a five-point scale from (1 to 5), with the highest score on the scale being (90), which indicates the highest degree of negative self-evaluation, and the lowest being (18), which indicates the absence of negative self-evaluation.
4. The Suicidal Ideation Scale (SIS) was developed by (Visvanathan & Mariyammal, 2017) ^[44]. The scale

consists of (64) items measuring suicidal ideation in high school adults. Responses are based on a four-point scale, weighted from (0 to 3), with the highest score being (192) for a subject suffering from suicidal ideation, and the lowest (0), indicating no suicidal ideation.

5. The Depression Scale (DS) was developed by (Ali *et al.*, 2013)^[6]. It measures depression in adolescents and consists of (36) items distributed across three dimensions: psychological, social, and physical. Responses are based on a three-point scale, weighted from (1 to 3), with the highest score being (108), representing high depression, and the lowest score being (36), indicating no depression.

Battery Preparation

After collecting the scales under the name of the Suicide Risk Assessment Battery (B-SRA), the battery became composed of (5) standard scales with a total of (172) items, with each scale maintaining its original structure and answer method without change, which makes the battery a comprehensive and multidimensional tool in diagnosing the risk of suicide.

Logical Analysis by Experts

The battery was presented to a group of (10) experts specializing in mental health, psychological, and educational measurement. The experts were asked to determine the suitability of the scales for diagnosing and assessing the risk of suicide among adults in Iraqi schools, and to modify the form of the items if necessary. The expert reviewers agreed on the suitability of the scales for measuring and diagnosing the risk of suicide among adults in schools, as well as the suitability of the scale items for diagnosing and measuring the purpose for which they were designed. However, some modifications were made to the form of some items to better align with the Iraqi environment and society.

Battery pilot

The researcher applied the B-SRA to a sample of individuals previously diagnosed with a risk of suicide or suffering from severe depression. Due to the difficulty of communication and obtaining consent for the application, the researcher recruited only (5) patients from the Mental and Psychological Health Department of Baqubah General Hospital to test the battery's ability to measure its intended purpose. The battery application took (2) consecutive days, and the results of the pilot sample of patients were consistent with their periodic diagnoses performed by the department. However, the researcher identified the necessary tools for the battery application and essential needs, such as a computer to display the battery more quickly for those unable to concentrate on reading and following the paragraphs. The battery's scales were also randomly arranged to ensure equal boredom levels when answering the paragraphs.

Statistical Analysis of the Suicide Risk Assessment Battery (B-SRA)

The researcher applied the battery to a research sample of (500) male and female students from the intermediate stage who had reached the age of 15, up to the sixth grade of middle school who had reached the age of 19. The sample consisted of (500) male and female students. The battery was presented in five orderings to ensure equal boredom in

the responses. Each order was presented to (100) male and female students, and any order, whether horizontal or vertical, was chosen to be the order presented to the students, as shown in the table:

Table 1: Arrangement of the B-SRA battery scales across the statistical analysis subsamples.

N= 500	N ₁ = 100	N ₂ = 100	N ₃ = 100	N ₄ = 100	N ₅ = 100
N ₁ = 100	BSS	STS	EBS	SIS	DS
N ₂ = 100	STS	BSS	SIS	DS	EBS
N ₃ = 100	EBS	SIS	DS	STS	BSS
N ₄ = 100	SIS	DS	BSS	EBS	STS
N ₅ = 100	DS	EBS	STS	BSS	SIS

Note. Each arrangement was administered to a subsample of 100 students (N = 500 in total). The order of scales was randomized to reduce fatigue and potential response bias.

Battery Scale Correlation Matrix

The researcher extracted the correlation coefficients for the five scales comprising the battery using Pearson's correlation coefficient (product of moments). All calculated correlation coefficients between the scales were statistically significant at a significance level of (0.01), and all were positive, i.e., they consistently measured the risk of suicide among students. The highest correlation was found between EBS and STS, where the correlation value reached (0.708), and SIS, where the correlation value reached (0.793), as shown in Table (2):

Table 2: Correlation matrix of the B-SRA battery scales.

Scales	BSS	STS	EBS	SIS	DS
BSS					
STS	0.382**				
EBS	0.582**	0.708**			
SIS	0.590**	0.598**	0.793**		
DS	0.405**	0.514**	0.659**	0.527**	

Note. ** $p < 0.01$ (2- tailed)

Exploratory Factor Analysis (EFA)

The researcher analyzed the scale items using exploratory factor analysis to filter out similar items and group them into a single factor. The researcher relied on the Guilford criterion to judge the saturation of the items with the factor they measured, which amounted to (0.30). All items in the scales were saturated with the factors they measured. The BSS scale explained approximately (58%) of explicit suicidal ideation, the STS scale explained (72%) of suicidal tendencies, the EBS scale explained (68%) of negative evaluative belief, and the SIS scale explained (44%) of suicidal ideation, which is the lowest percentage of explainable variance obtained by a scale in the battery. Finally, the DS scale explained (70%) of the depression it measures, as shown in Table (3):

Table 3: Explained variance for the factors extracted from the B-SRA scales.

Scales	Total	% of Variance
BSS	11.65	58%
STS	10.75	72%
EBS	7.82	68%
SIS	28.43	44%
DS	7.98	70%

Note: Factor loadings exceeded the minimum threshold of 0.30 based on Guilford's criterion. Percentages represent the proportion of variance explained by each factor.

Confirmatory Factor Analysis (CFA)

To confirm the factorial structure explored for the battery scales in EFA, a confirmatory factor analysis (CFA) was conducted using Amos 25 software. A five-factor model was assumed consistent with the theoretical structure of the battery (BSS, STS, EBS, SIS, DS). The following results were extracted:

- Typical fit indices, all of which were highly acceptable (see table 4).
- Factor loadings for each item of the scale on the condition it measures were high and statistically significant, as they were all above 0.50, which is significant at the $P < 0.001$ level, with all loadings ranging between 0.62 and 0.86.

Table 4: Battery Model fit indices.

Fit Indices	Value	Acceptable value
χ^2/df	2.15	< 3
CFI	0.95	> 0.90
TLI	0.94	> 0.90
RMSEA	0.048	< 0.05
SRMR	0.039	< 0.05

Note: All fit indices support the acceptance of the five-factor model, indicating the appropriateness of the theoretical battery structure to the experimental data.

The average shared variance (AVE) for each scale was above 0.50, and when comparing the \sqrt{AVE} , it was greater than any correlations between the other factors in the other cases. Composite Reliability (CR): All composite reliability values were above 0.80, confirming the internal consistency of the battery (Table 5).

Table 5: AVE, CR coefficients for battery meters.

Scale	AVE	CR
BSS	0.54	0.88
STS	0.61	0.91
EBS	0.58	0.89
SIS	0.52	0.86
DS	0.56	0.87

Note; AVE values greater than 0.50 and CR values greater than 0.80 indicate excellent validity and reliability of the scales.

These indices and the battery's reliability and validity coefficients and scales confirm that the battery's five-scale structure is consistent with empirical data, supporting the research hypothesis that the battery measures aspects of

suicide risk among high school students consistently and comprehensively.

Battery Reliability

The researcher verified the reliability of the B-SRA battery using Cronbach's alpha equation. All reliability coefficients were high and acceptable. The reliability of the BSS scale reached (0.838) the reliability of the STS scale reached (0.846), and the reliability of the EBS scale reached (0.853) The reliability of the SIS scale reached (0.96) and the reliability of the DS scale reached (0.795).

Battery Experimental Statistics

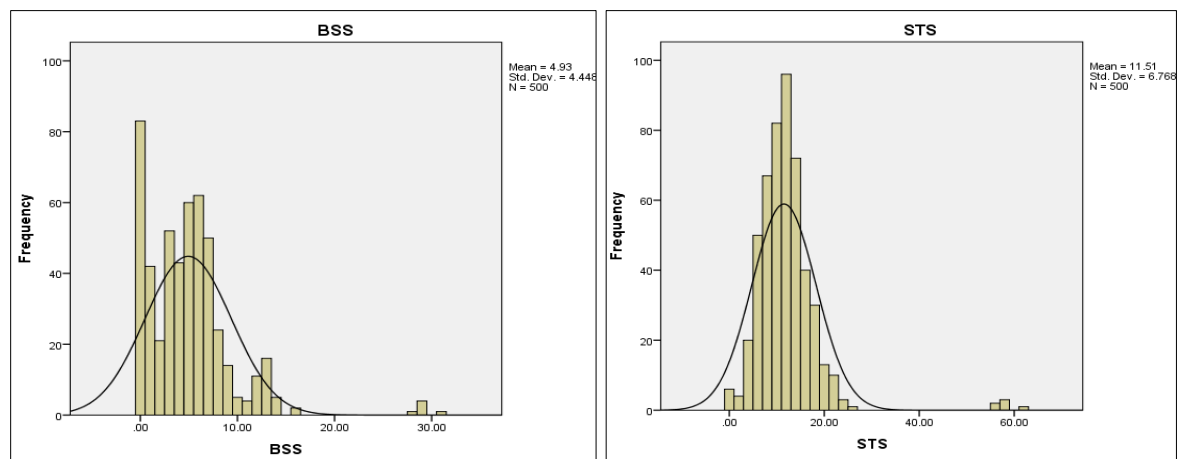
The scales used in the battery showed a decrease in the levels of the conditions measured in the B-SRA battery scales. Low levels of BSS were observed, with the sample mean reaching (4.926) the STS mean reaching (11.512) the EBS mean reaching (28.116) the SIS mean reaching (26.636) and the DS mean reaching (54.108) These are below the thresholds indicating the presence of the condition measured by the scale, as the minimum threshold for diagnosing suicidal ideation is (30) or above, for a patient to be diagnosed with suicidal ideation, as shown in Table (6):

Table 6: Descriptive statistics of the B-SRA battery scales.

Scale	Mean	Std. Error of Mean	Median	Mode	Std. Deviation
BSS	4.926	0.198	5.00	5.00	4.448
STS	11.512	0.302	11.00	11.00	6.767
EBS	28.116	0.309	27.00	27.00	6.774
SIS	26.636	0.887	26.00	27.00	19.851
DS	54.108	0.310	54.00	53.00	6.967

Note: SD = Standard Deviation. Observed mean scores fell below diagnostic thresholds, indicating low levels of suicidal risk in the overall sample.

The observed statistics for the B-SRA Suicide Battery scales also showed a tendency for their scores to be positively skewed, given the low levels of measured phenomena, which were much higher than the scales diagnose, as noted in the graphs below: However, the battery was able to consistently and consistently diagnose (6) cases of students whose scores were high and consistent with the observations recorded by teachers at school, as well as through general questions directed to them such as: "Do you have a greater desire for death than for life?" or "You suffer from everything today?" The battery was able to provide preliminary diagnostic data that helped identify and assess their dangerous and suicidal cases.



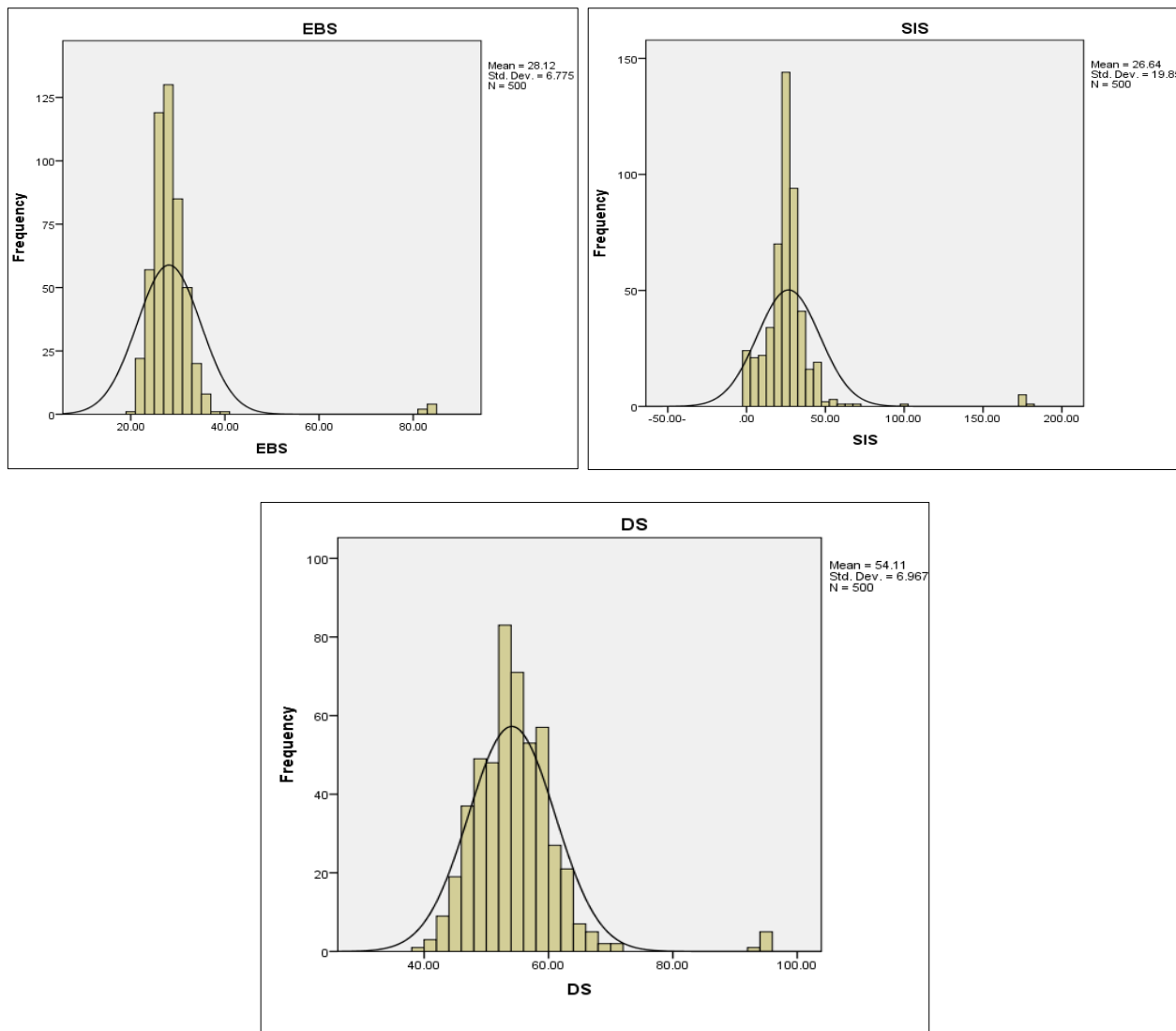


Fig 2: Distributions of battery scale grades.

B-SRA Instructions for Teacher/Counselor

To make the battery easy and effective to use in schools without complications, a simple mechanism has been developed that any trainee can implement according to the following steps:

Step 1: Initial observations. There are initial observations of the student that were rated as abnormal by more than one teacher, specialist, or parent.

Step 2: Create a scoring model, where points are assigned to each scale according to the category:

- Low = 0
- Medium = 1
- High = 2

Step 3: Apply the (EBS) and (DS). Calculate the percentage for each of them by dividing the observed score/maximum score of the scale. If the percentage is less than 50%, score (0) is given. If the percentage is between 50-75%, score (1) is given. If it is above (75%), score (2). Numerical example: If we assume that a student received score (55) on the (EBS) scale, his percentage is $55/90 * 100 = 61\% > 50\%$. This gives him score (1), meaning that he has a noticeable negative level about himself/life. We present the (DS) scale. If it is also classified within category (1), this is a clear

indication of the beginning of the danger stage. We complete the application. If only one of them is (1), then we keep the student under observation and periodic follow-up.

Step 4: If both (EBS) and (DS) scales are average, we apply the (SIS) and (STS) scales, and the percentage for each scale is calculated. If it is low, i.e. (0), this means that the student needs care, counseling sessions, or simple therapeutic interventions. If the student is average (1), with follow-up and treatment, he will be under conscious observation. If it is high (2) in one or both of them, he enters the stage of actual risk of suicide and psychological emergency. He is evaluated every week using the (BSS) scale. If the score on the (EBS) and (DS) scales is high, we apply the (BSS) scale directly, and it is excluded from the percentage. If his score is ≥ 30 , it is a stage of actual risk of suicide, and he is referred to the competent authorities to deal with his case in coordination with the parents.

Results

The study reached several important results regarding the preparation and mechanism of applying the battery for suicide risk assessment (B-SRA) among Secondary school students, which can be summarized as follows:

Construct Validity of the Battery

The results of the exploratory factor analysis (EFA) showed a high structural correlation between the items of the scales that make up the (B-SRA) and their measurement of what they were designed for. All of these correlations were statistically significant according to the Guilford criterion (0.30). All of the scales were able to explain a high variance of the variables they measure, with the lowest explained variance being (44%) for the (SIS) scale and the highest explained variance being for the (72%) scale. This result confirms that (STS) has reliable and strong structural validity. This construct was confirmed by confirmatory factor analysis (CFA) where all fit indices were excellent ($\chi^2/df = 2.15$, CFI = 0.95, TLI = 0.94, RMSEA = 0.048, SRMR = 0.039) which is consistent with previous evidence that emphasizes the need to use valid and accurately prepared psychological measurement tools to measure and assess suicide risk (Quinlivan, 2016; Large, 2014)^[40, 32].

Reliability of the Scales

Internal consistency estimates, estimated by Cronbach's alpha, indicated high levels of reliability across all battery items: BSS ($\alpha = 0.838$), STS ($\alpha = 0.846$), EBS ($\alpha = 0.853$), SIS ($\alpha = 0.960$), and DS ($\alpha = 0.795$). These values confirm that the scales are stable and replicable over the long term. This is what studies (Posner *et al.*, 2008; Jad Al-Karim, 2022)^[30] have confirmed, stating that scales for diagnosing and assessing suicide risk must be highly reliable in clinical and educational contexts.

Intercorrelations Between Scales

The results of the measured internal correlations showed positive and statistically significant ($P < 0.01$) across all scales, with the highest correlation between scales being that observed between the evaluative belief scale (EBS) and suicidal tendencies (STS) where ($r = 0.708$) and suicidal ideation (SIS) ($r = 0.793$). These correlations demonstrate that negative self-evaluation and cognitive distortions associated with an individual's belief are closely related to suicidal ideation and tendencies, which is consistent with previous research on the cognitive and belief bases of suicidal behavior (Chadwick, Birchwood & Trower, 1996; Buus *et al.*, 2014)^[18].

Levels of Suicide Risk in the Sample

While the mean overall scores of the sample ($n = 500$) were found to be below the critical thresholds for suicide risk, the B-SRA successfully identified six students (1.2% of the sample) as high-risk cases. The high scores of these students were consistent with teacher observations and student self-reports. This finding is particularly significant in light of WHO reports (2014) that estimate that for every completed suicide, approximately twenty suicide attempts occur globally. This finding also reflects local trends reported by the Iraqi Ministry of Health, which has documented an increase in suicide rates in recent years.

Practical Utility of the Battery

In addition to the effectiveness of the battery (B-SRA), the Suicide Risk Assessment (SRA) has proven to be a practical and culturally appropriate tool for the Iraqi school context. It has enabled the detection of high-risk cases in settings where direct disclosure of suicidal thoughts is often hindered by social stigma. This is in line with the recommendations of the New South Wales Department of

Health (2004), which calls for systematic and standardized procedures for assessing suicide risk in both health and educational institutions and in all countries of the world..

Synthesis of Results

All combined results confirm that the B-SRA is a valid and reliable diagnostic tool that can be effectively used in Iraqi schools to detect suicide risk among adolescents. The results are consistent with international studies that highlight the critical role of depression and suicidal ideation as key predictors of suicide (Wilcox *et al.*, 2004; Houghton *et al.*, 2012)^[45]. Furthermore, the identification of high-risk cases within the study sample demonstrates the potential of the B-SRA to be a key tool in early suicide detection strategies, contributing to national suicide prevention efforts.

Discussion

These study results confirmed the necessary reliability and validity of the Battery for Suicide Risk Assessment (B-SRA) for Secondary school students. Reliability coefficients were high across all scales, and factor analysis indicated that each instrument contributed significantly to the overall structure of suicide risk. These findings are consistent with studies (Beck *et al.*, 1979; Osman *et al.*, 1994)^[13, 38] that demonstrated the predictive validity of measures of suicidal ideation and depression in adolescents. However, the relatively low prevalence of high-risk cases (1.2%) in this study is consistent with data and rates reported by the World Health Organization (2017), indicating that although suicide risk exists among Iraqi adolescents, it is still relatively lower than in Western countries. This finding underscores the importance of considering cultural factors when assessing suicide risk. Furthermore, integrating multiple scales into a single battery enhances diagnostic accuracy, a contribution that expands previous standard psychological work by providing a culturally sensitive tool for Iraqi schools. This is not to say that the study is without objective limitations. It may have been affected by its reliance on self-reported measures (response bias), particularly the sensitivity of questions related to direct suicide. Furthermore, the study was limited to a sample of high school students in Iraq, which may limit the generalizability of the findings to other cultural or educational contexts. Finally, the cross-sectional design did not allow for examining the validity of long-term predictors or changes in suicide risk over time. Therefore, future research should employ longitudinal designs, include diverse cultural samples, and complement self-reported instruments with clinical interviews.

Conclusion

The study results confirm that developing a standardized set of psychometric measures is an essential step toward early detection of suicide risk among secondary school students in Iraq. The Suicide Risk Assessment Battery (B-SRA), consisting of five validated instruments—the Beck Suicidal Ideation Scale (BSS), the Suicidal Tendencies Scale (STS), the Evaluative Belief Scale (EBS), the Suicidal Ideation Scale (SIS), and the Depression Scale (DS), demonstrated strong psychometric properties and predictive validity. When administered to a sample of 500 students, the B-SRA successfully identified approximately 1.2% of participants as high-risk cases requiring urgent psychological intervention (Fadel, 2025)^[22].

The study findings are consistent with previous evidence suggesting that depression and suicidal ideation are major

risk factors for suicide, with more than 80% of suicide victims worldwide experiencing severe depressive symptoms prior to their death (Wilcox *et al.*, 2004; Houghton *et al.*, 2012)^[45]. In addition, environmental and social stressors, including academic pressure, lack of parental support, and exposure to trauma, exacerbate suicidal tendencies (Bos *et al.*, 2014; Roberge *et al.*, 2019)^[41]. This is consistent with the World Health Organization's World Health Reports (WHO, 2014), which highlight suicide as a leading cause of preventable death worldwide.

The study also highlights the significant role of schools as community institutions for prevention and intervention. They provide direct access to adolescents during their most vulnerable developmental stages and thus represent the most effective environment for implementing mental health assessments and preventive strategies (Breux *et al.*, 2017)^[15]. These findings are consistent with the New South Wales Health Framework (2004)^[36], which emphasizes the need for structured suicide risk assessment protocols in both the health and education sectors.

Ultimately, the current study contributes to both the scientific and applied fields by offering an integrated diagnostic tool specifically designed for the Iraqi context, capable of accurately identifying individuals at risk, as well as providing an evidence-based diagnostic approach. This research lays the foundation for a national strategy for early detection of suicide risk, which contributes scientifically and practically to reducing suicide rates and improving mental health outcomes among Iraqi youth. Accordingly, the researcher recommends:

1. Train school staff and counselors in the administration and interpretation of suicide risk assessment scales to ensure accurate screening and timely intervention.
2. Develop comprehensive awareness programs addressing suicide prevention, in collaboration with international organizations and local health authorities, while drawing on global best practices (Gvion & Apter, 2012; Schwartz, 2006).
3. Implement continuous monitoring systems within schools to identify stressors such as exam pressure, peer difficulties, and environmental challenges that may contribute to increased suicidal tendencies.
4. Encourage further academic research by psychologists and educators in Iraq to expand and refine suicide prevention strategies, ensuring culturally relevant and evidence-based approaches.

Limitations

Despite the strength and validity of the Suicide Risk Assessment Battery (SRAB), the study is not without limitations. First, all measures are self-reported, which may introduce response bias. Second, the study is cross-sectional, meaning it did not provide an opportunity to explore the long-term stability of its findings. Furthermore, the pilot study was conducted on five relatively small clinical cases diagnosed.

Declarations

1. Funding

The researcher did not receive any funding for his study from any source.

2. Conflict of Interest

The researcher declares that there is no conflict of interest in publishing the manuscript.

3. Ethical Approval

The study was reviewed and audited by the relevant committees at the Iraqi University. The study was conducted in accordance with the ethical standards of the Declaration of Helsinki. Formal consent was obtained from students and parents for voluntary participation in the research.

4. IA

I acknowledge that I used AI (Artificial Intelligence) in the research to rephrase some sentences and check spelling.

References

1. Abdulrahman SH, Jasim AM, Khalaf RA. Epidemiology of suicide and depression among internally displaced secondary school students in Tikrit. *Indian Journal of Public Health Research & Development*. 2020;11(3):432-439.
2. Ahmed MMFS. Constructing and grading a battery to measure academic readiness for university admission using criterion-referenced tests (CRT) and item response theory (IRT). *Journal of the Faculty of Education, Al-Azhar University*. 2010;144:557-641.
3. Al-Habeeb A. Suicide in Saudi Arabia: A review. Unpublished manuscript; 2005.
4. Al-Hilfi HA, Ali SR. Suicidal ideation among psychiatric outpatients in Iraq: A cross-sectional study. *Asian Journal of Psychiatry*. 2025;98:104573.
5. Al-Imam A, Abdulrahman A, Al-Husseini A, Al-Rawi R. Prevalence and correlates of suicidal ideation among Iraqi medical students: A cross-sectional study. *Middle East Current Psychiatry*. 2023;30(1):5.
6. Ali MM, Khalil MH, El-Sayed AM. *Depression Scale for Adolescents*. Cairo: Anglo Egyptian Bookshop; 2013.
7. Al-Shannaq Y, Aldalaykeh M. Psychometric properties of Arabic versions of the Stigma of Suicide Scale (SOSS-SF) and Literacy of Suicide Scale (LOSS). *International Journal of Environmental Research and Public Health*. 2020;17(8):2827.
8. Al-Shahat MF. Construction and standardization of a suicidal tendencies scale for adolescents. Cairo: Dar Al-Kutub; 2021.
9. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. Washington (DC): American Psychiatric Publishing; 2013.
10. Anderson RN, Smith BL. Deaths: Leading causes for 2002. *National Vital Statistics Reports*. 2005;53(17):1-89.
11. Anonymous. Rates of suicidal ideation among female secondary school students in Baghdad. *Psychiatry Research*. 2024;333:115711.
12. Atallah MIM. The Dark Triad in personality and its relationship to self-deception and suicidal tendency among university students. *Journal of Psychological Counseling*. 2021;68(2):285-338.
13. Beck AT, Kovacs M, Weissman A. Assessment of suicidal intention: The Scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*. 1979;47(2):343-352.
14. Brent D. What family studies teach us about suicidal behavior: Implications for research, treatment and prevention. *European Psychiatry*. 2010;25(5):260-263.

15. Breux P, Boccio DE, Brods BS. Creating Suicide Safety: A public health suicide program in New York State. *Suicidologi*. 2017;22(2):14-24.
16. Buus N, Caspersen J, Hansen R, Stenager E, Fleischer E. Experiences of parents whose sons or daughters have attempted suicide. *Journal of Advanced Nursing*. 2014;70(4):823-832.
17. Cerel J, Jordan JR, Duberstein PR. The impact of suicide on the family. *Crisis*. 2008;29(1):38-44.
18. Chadwick P, Birchwood M, Trower P. Cognitive therapy for delusions, voices and paranoia. Chichester: John Wiley & Sons; 1996.
19. Costa PT, Terracciano A, McCrae RR. Gender differences in personality traits across cultures. *Journal of Personality and Social Psychology*. 2001;81(2):322-331.
20. Cull JG, Gill WS. Suicide Probability Scale (SPS) manual. Los Angeles: Western Psychological Services; 1982.
21. Dragisic T, Dickov A, Dickov V, Mijatovic V. Drug addiction as risk for suicide attempts. *Materia Socio-Medica*. 2015;27(3):188-191.
22. Fadel BH. The psychology of suicide: A guide to understanding, treatment, and prevention. Amman: Dar Amjad; 2025.
23. Feingold A. Gender differences in personality: A meta-analysis. *Psychological Bulletin*. 1994;116(3):429-456.
24. Gase KN, *et al*. Psychometric evaluation of a battery of psychopathology measures for assessment of young adult college students. *College Student Mental Health*. 2020;15(2):112-125.
25. Gvion Y, Apter A. Suicide and suicidal behavior. *Public Health Reviews*. 2012;34(2):1-12.
26. Halim S. Constructing a test battery to measure psychological variables in young soccer players in Algeria. Master's thesis. University of Algiers; 2018.
27. Hawton K, Saunders KE, O'Connor RC. Self-harm and suicide in adolescents. *The Lancet*. 2012;379(9834):2373-2382.
28. Hussein AA, Mohammed AH. Psychosocial risk factors for suicidal behavior among adolescents in Baghdad. *Turkish Journal of Medical Sciences*. 2022;52(3):765-774.
29. Iraqi Ministry of Health. Annual health statistical report. Baghdad; 2022.
30. Jad Al-Karim M. Psychometric properties of suicide risk scales. Amman: Dar Al-Fikr; 2022.
31. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. *The Lancet*. 2002;360(9339):1083-1088.
32. Large M. The role of prediction in suicide prevention. *Dialogues in Clinical Neuroscience*. 2014;16(4):569-570.
33. Lester D. Suicide from a psychological perspective. Springfield (IL): Charles C Thomas Publisher; 2008.
34. Lippa RA. Gender differences in personality and interests: When, where, and why? *Social and Personality Psychology Compass*. 2010;4(11):1098-1110.
35. Moringo JD, *et al*. Risk assessment and suicide by patients with schizophrenia in secondary mental healthcare: A case-control study. *BMJ Open*. 2016;6(5):e009855.
36. NSW Health. Framework for suicide risk assessment and management. Sydney; 2004.
37. Okasha A. Focus on psychiatry in Egypt. *The British Journal of Psychiatry*. 2004;185(3):266-272.
38. Osman A, Downs WR, Kopper BA, Barrios FX, Baker MT, Osman JR, Besett TM, Linehan MM. The Suicidal Ideation Questionnaire: Psychometric properties with adolescent psychiatric inpatients. *Journal of Clinical Psychology*. 1994;50(6):895-905.
39. Posner K, Oquendo MA, Gould M, Stanley B, Davies M. Columbia Classification Algorithm of Suicide Assessment (C-CASA). *The American Journal of Psychiatry*. 2008;164(7):1035-1043.
40. Quinlivan L. Psychometric evaluation of a risk assessment scale for suicide and self-harm. *Journal of Affective Disorders*. 2016;190:632-638.
41. Roberge MA, *et al*. The role of social support in the prevention of suicide: A systematic review. *Journal of Mental Health*. 2019;28(3):247-256.
42. Schwartz RC. Concurrent validity of the Suicide Risk Assessment Scale in a college counseling center. *Journal of College Counseling*. 2006;9(1):17-25.
43. Shreshabar MK, Mousa AA. Bullying victimization and suicidal ideation among adolescents in Dhi Qar, Iraq. *Journal of Interpersonal Violence*. 2025;40(1-2):NP1-NP22.
44. Visvanathan TR, Mariyammal S. Suicidal Ideation Scale. Agra: National Psychological Corporation; 2017.
45. Wilcox HC, Conner KR, Caine ED. Association of alcohol and drug use disorders and completed suicide. *Drug and Alcohol Dependence*. 2004;76(Suppl):S11-S19.
46. World Health Organization. Preventing suicide: A global imperative. Geneva: WHO; 2014.
47. World Health Organization. Suicide data. Geneva: WHO; 2017.
48. World Health Organization. Suicide worldwide in 2019: Global health estimates. Geneva: WHO; 2021.