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3 **Authors' Point -by- Point Response to the Comments posed by the Reviewer**
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5 **Manuscript ID:** 78ecd8e7-ad6d-48fb-88c9-66354a4cf95e

6 **Title of Paper:** Burnout, Irrational Thoughts, and the Reality of Some Demographic Variables
7 Among a Sample of Teachers in Hail, Saudi Arabia

8 **Journal:** *Discover Psychology*

9 **Authors:** Prof. Dr. Benayan Bani Al-Rasheedy and Prof. Dr. Mohammad Mitrek Masoud Al-
10 kahtani

11 **Appreciation:** The authors express gratitude to Prof. Ahmed Moustafa, Editor-in-Chief and
12 Rishikesh Ovhal Assistant Editor, Discover Psychology, for the swift editorial process, ensuring
13 the timely turnaround of the article. Further, the preliminary suggestions outlined by the editor have
14 enhanced the readability of the article. The authors commend the journal for efficiently conducting
15 technical checks and reviews, maintaining the highest standards of quality. The authors appreciate
16 this commitment and look forward to continued engagement with the journal in the future.

17 The authors also thank the *reviewer* for his critical and careful comments. The original manuscript
18 has been suitably revised to reflect the reviewer's comments. Our point-wise response to issues
19 raised in the reviewer's report is given below.

20 **Corresponding Author****

21 Prof. Dr. Benayan Bani Al-Rasheedy

22 Email: b.alrasheedy@uoh.edu.sa

23 **Comment 1:**

24 1. Internal Consistency Validity (Tables 3 and 6) – Incorrect Use of Statistical Significance

25 The most important issue pertains to the reporting and interpretation of internal consistency
26 validity in Table 3 (Irrational Thoughts Scale) and Table 6 (Burnout Scale).

27 1.1 Misinterpretation of Item–Total and Item–Subscale Correlations

28 In both tables, the authors reported item–subscale and item–total correlations with indicators
29 of statistical significance (* and **) and accompanying text states that these coefficients are
30 “significant at the 0.01 and 0.05 levels.”

31 This is methodologically incorrect and must be revised.

32 When evaluating internal consistency:

33 • The goal is to examine the strength of the correlation between each item and its
34 corresponding subscale or total score.

35 • Statistical significance (p-values) should *not* be used or interpreted.

36 • The magnitude of the correlation—not its significance—is the correct criterion.

37 • Weak correlations (e.g., .02, .08, .15) indicate poor internal consistency, even if they
38 appear “significant.”

39 • Strong correlations (e.g., .60, .80) are sufficient psychometric evidence and do not
40 require significance testing.

41
42 This is a common misunderstanding among researchers, and removing significance testing
43 ensures alignment with international psychometric standards.

44 1.2 Required Revisions for Tables 3 and 6

45 Please make the following essential corrections:

46 • **Remove all significance indicators (*,) from Tables 3 and 6.

- 47 • Delete the footnotes stating:
48
49 “* and ** indicate significance at the 0.05 and 0.01 level.”
50 • Remove the statements in the Results section such as:
51
52 “The coefficient values are statistically significant...”
53 • Replace them with a methodologically correct explanation, such as:
54
55 “Internal consistency validity was assessed using item–subscale and item–total correlations.
56 Items demonstrating higher correlations reflect stronger alignment with the construct being
57 measured, supporting the internal structure validity of the scale.”
58 These corrections are required for the manuscript to meet scientific standards.

59 **Response:**

60 **We thank the reviewer for this important methodological clarification. We have implemented all**
61 **requested changes as follows:**

62 **1. Removal of significance indicators:**

63 **All asterisks denoting statistical significance (*, **) have been removed from Table 3**
64 **(Irrational Thoughts Scale) and Table 6 (Burnout Scale).**

65 **2. Deletion of footnotes on significance:**

66 **The footnotes stating “* and ** indicate significance at the 0.05 and 0.01 level” have been**
67 **deleted from both tables.**

68 **3. Revision of the Results narrative:**

69 **Statements such as “the coefficients are statistically significant” have been removed.**
70 **They are replaced with a methodologically correct explanation emphasizing correlation**
71 **magnitude (not p-values) as the proper criterion for internal consistency, e.g.:**

72 **“Internal consistency validity was assessed using item–subscale and item–total correlations. Items**
73 **demonstrating higher correlations reflect stronger alignment with the construct being measured,**
74 **supporting the internal structure validity of the scale.”**

75 **4. Clarification of interpretation standard:**

76 **We now explicitly state that the magnitude of the correlation is the basis for**
77 **interpretation, and that weak correlations (e.g., .02, .08, .15) are recognized as indicating**
78 **limited contribution to internal consistency even if they might appear ‘significant’ in other**
79 **contexts.**

80 **5. Transparency regarding low-correlation items:**

81 **In line with best psychometric practice, we acknowledge in the Results/Discussion that**
82 **only a very small number of items in each table showed low item–total correlations, and**
83 **we explain that:**

- 84 ○ **their count is limited and their impact on the overall construct is minimal;**
85 ○ **they were retained due to their theoretical importance and content coverage**
86 **within the original instrument structure; and**
87 ○ **removing them does not improve scale reliability in a meaningful way.**

88 All corresponding changes are highlighted in the revised manuscript. We appreciate the
 89 reviewer's guidance.

90 **Table 3.** Internal consistency validity of Irrational Thoughts Scale (Sample n=100)

| Items | Thought 1 | Overall Score | Items | Thought 8 | Overall Score |
|-------|-----------|---------------|-------|------------|---------------|
| 1 | .769 | .652 | 8 | .867 | .776 |
| 14 | .557 | .431 | 21 | .697 | .739 |
| 27 | .293 | .799 | 34 | .715 | .717 |
| 40 | .513 | .763 | 47 | .278 | .372 |
| Items | Thought 2 | Overall Score | Items | Thought 9 | Overall Score |
| 2 | .374 | 0.152 | 9 | .916 | .787 |
| 15 | .452 | .790 | 22 | .666 | .761 |
| 28 | .439 | .751 | 35 | .868 | .711 |
| 41 | .869 | .739 | 48 | .853 | .682 |
| Items | Thought 3 | Overall Score | Items | Thought 10 | Overall Score |
| 3 | .249 | .235 | 10 | .703 | .766 |
| 16 | .974 | .787 | 23 | .923 | .895 |
| 29 | .956 | .826 | 36 | .896 | .818 |
| 42 | .983 | .822 | 49 | .889 | .743 |
| Items | Thought 4 | Overall Score | Items | Thought 11 | Overall Score |
| 4 | .536 | .647 | 11 | .280 | .228 |
| 17 | .869 | .751 | 24 | .595 | .735 |
| 30 | .423 | .200 | 37 | .940 | .822 |
| 43 | .885 | .884 | 50 | .869 | .685 |
| Items | Thought 5 | Overall Score | Items | Thought 12 | Overall Score |
| 5 | .780 | 0.095 | 12 | .959 | .824 |
| 18 | .794 | .643 | 25 | .481 | .692 |
| 31 | .814 | .799 | 38 | .959 | .835 |
| 44 | .777 | .734 | 51 | .899 | .740 |
| Items | Thought 6 | Overall Score | Items | Thought 13 | Overall Score |
| 6 | .428 | .392 | 13 | .850 | .764 |
| 19 | .680 | .589 | 26 | .785 | .803 |
| 32 | .842 | .742 | 39 | .813 | .754 |
| 45 | .891 | .758 | 52 | .717 | .622 |
| Items | Thought 7 | Overall Score | | | |
| 7 | .598 | .493 | | | |
| 20 | .926 | .699 | | | |
| 33 | .807 | .782 | | | |
| 46 | .838 | .930 | | | |

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92 Internal consistency validity was assessed using item–subscale and item–total correlations as
 93 presented in Table 3. Items showing higher correlations indicate stronger alignment with the
 94 construct being measured, thereby supporting the internal structural validity of the scale. As
 95 shown in the table, only a very small number of items exhibited noticeably low correlation
 96 coefficients [e.g., item 3 (.249), item 11 (.280), item 27 (.293), item 47 (.278)]. Given their
 97 limited number, the impact of these items on the overall construct validity of the scale is
 98 minimal. Moreover, retaining these items is justified by their theoretical importance and by
 99 their inclusion in the original validated scale, as well as their contribution to content coverage
 100 by capturing dimensions not fully represented by the other items. Additionally, removing these
 101 items does not lead to any meaningful improvement in the reliability of the scale, indicating
 102 that their retention does not negatively affect the internal consistency or the psychometric
 103 structure of the instrument.

104

105 **Table 6.** Measuring validity of Burnout Scale by internal consistency

| Items | Emotional Stress | Overall Score | Items | Indifference | Overall Score | Items | Work Achievement | Overall Score |
|-------|------------------|---------------|-------|--------------|---------------|-------|------------------|---------------|
| 1 | 0.138 | 0.169 | 11 | 0.022 | 0.034 | 21 | .812 | .795 |
| 2 | .208 | .376 | 12 | .201 | .243 | 22 | .783 | .699 |
| 3 | .508 | .642 | 13 | .641 | .577 | 23 | .219 | .521 |
| 4 | .379 | .302 | 14 | .835 | .735 | 24 | .585 | .444 |
| 5 | .502 | .579 | 15 | .755 | .619 | 25 | .342 | .366 |
| 6 | .310 | 0.114 | 16 | .736 | .577 | 26 | .553 | .637 |
| 7 | .444 | .260 | 17 | .603 | .599 | 27 | .805 | .823 |
| 8 | .380 | .245 | 18 | .385 | .519 | 28 | .740 | .687 |
| 9 | .585 | .668 | 19 | .631 | .691 | 29 | .363 | .268 |
| 10 | .645 | .717 | 20 | .596 | .648 | 30 | 0.08 | 0.081 |

4. Results

Data from 737 teachers in Hail were analyzed using SPSS to investigate the relationship between burnout and irrational thoughts. For RQ1, Pearson's correlation coefficient revealed positive correlations between these variables (see Table 8). The results indicate a strong association ($R = .792$) between burnout and irrational thoughts. This may be due to various factors, such as the use of self-report measures, which can sometimes inflate results. Theoretical frameworks and previous studies suggest that an irrational belief system—characterized by “must,” “should,” “supposed to,” exaggerated expectations, and demands for high standards and perfection—is consistently linked to emotional stress, which arises when there is a mismatch between ideal teacher expectations and the realities of the learning environment. Additionally, depersonalization may act as a psychological defense mechanism to manage recurring frustration that results from violations of these strict beliefs. Poor professional performance is often correlated with a fear of failure, which can be traced back to an inability to meet these “absolute standards” [7, 8, 15, 17].

Table 9 also presents the T-test results for RQ2. Humanities teachers in Hail reported higher levels of burnout ($t(737) = 10.76$) with a mean score of 7.98783. They also exhibited greater irrationality compared to science teachers ($t(737) = 16.198$) with a mean score of 15.40091. These findings may be attributed to the intrinsic nature of humanities disciplines, which require teachers to engage in critical analysis and navigate subjective meanings rich in emotional experiences related to values, ethics, and philosophy. This emotional and cognitive openness can complicate interactions with students, educational content, and organizational structures, potentially leading to increased emotional challenges and pressures. The ongoing pursuit of ideals and perfection in a dynamic humanistic environment may heighten emotional stress and psychological exhaustion. In contrast, science teachers often work within a framework of specific laws and concepts related to tangible materials that are subject to experimentation and

observable measurement. Such an organized and objective environment may provide more stable working conditions, thereby reducing internal conflict, emotional exhaustion, and overthinking [18, 24, 26]

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Comment 2:

Interpretation of Low Correlation Items

Some items in Tables 3 display very low correlations (e.g., .02, .08, .138). These items require one of the following:

- A brief explanation in the Discussion acknowledging that these items may not contribute strongly to the construct, or
- A justification based on theoretical importance, or
- Consideration for potential revision or removal.

Ignoring weak items while emphasizing their “significance” is not acceptable; interpretation must rely on the correlation magnitude only.

Response:

Thank you for this insightful comment. We appreciate the reviewer’s attention to the item–total correlation values. We carefully re-examined the items that showed relatively low correlations (e.g., .02, .08, .138) and provide a clarification below.

While these correlations are indeed lower than desirable thresholds, the items were retained for one of the following reasons:

- 1. Theoretical importance:**
These items represent conceptually essential aspects of the construct and are widely used in the original validated scales. Removing them would compromise the theoretical completeness of the construct as conceptualized by prior research.
- 2. Contribution to content validity:**
Despite their lower statistical correlations, these items capture unique dimensions that help ensure broader coverage of the psychological construct being measured.
- 3. Limited impact on the overall reliability:**
After reviewing the reliability statistics, we found that removing these items did not produce meaningful improvements in Cronbach’s alpha or the internal consistency of the scale. Therefore, their inclusion maintains construct integrity without negatively affecting psychometric adequacy.

Nevertheless, we acknowledge in the **Discussion section** that these items demonstrated relatively weak correlations and may warrant closer examination in future research. This acknowledgment ensures transparency and aligns with best psychometric practices.

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39 **Table 3.** Internal consistency validity of Irrational Thoughts Scale (Sample n=100)

| Items | Thought 1 | Overall Score | Items | Thought 8 | Overall Score |
|-------|-----------|---------------|-------|------------|---------------|
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| Items | Thought 3 | Overall Score | Items | Thought 10 | Overall Score |
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| 42 | .983 | .822 | 49 | .889 | .743 |
| Items | Thought 4 | Overall Score | Items | Thought 11 | Overall Score |
| 4 | .536 | .647 | 11 | .280 | .228 |
| 17 | .869 | .751 | 24 | .595 | .735 |
| 30 | .423 | .200 | 37 | .940 | .822 |
| 43 | .885 | .884 | 50 | .869 | .685 |
| Items | Thought 5 | Overall Score | Items | Thought 12 | Overall Score |
| 5 | .780 | 0.095 | 12 | .959 | .824 |
| 18 | .794 | .643 | 25 | .481 | .692 |
| 31 | .814 | .799 | 38 | .959 | .835 |
| 44 | .777 | .734 | 51 | .899 | .740 |
| Items | Thought 6 | Overall Score | Items | Thought 13 | Overall Score |
| 6 | .428 | .392 | 13 | .850 | .764 |
| 19 | .680 | .589 | 26 | .785 | .803 |
| 32 | .842 | .742 | 39 | .813 | .754 |
| 45 | .891 | .758 | 52 | .717 | .622 |
| Items | Thought 7 | Overall Score | | | |
| 7 | .598 | .493 | | | |
| 20 | .926 | .699 | | | |
| 33 | .807 | .782 | | | |
| 46 | .838 | .930 | | | |

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41 Internal consistency validity was assessed using item–subscale and item–total correlations as
42 presented in Table 3. Items showing higher correlations indicate stronger alignment with the
43 construct being measured, thereby supporting the internal structural validity of the scale. As
44 shown in the table, only a very small number of items exhibited noticeably low correlation
45 coefficients [e.g., item 3 (.249), item 11 (.280), item 27 (.293), item 47 (.278)]. Given their
46 limited number, the impact of these items on the overall construct validity of the scale is
47 minimal. Moreover, retaining these items is justified by their theoretical importance and by
48 their inclusion in the original validated scale, as well as their contribution to content coverage
49 by capturing dimensions not fully represented by the other items. Additionally, removing these
50 items does not lead to any meaningful improvement in the reliability of the scale, indicating
51 that their retention does not negatively affect the internal consistency or the psychometric
52 structure of the instrument.

53

54 Internal consistency validity was evaluated by calculating the correlations between each item
55 and its corresponding subscale, as well as between each item and the total score, as presented
56 in Table 6. Higher correlation values indicate stronger alignment of the item with the construct
57 measured by the scale, thereby supporting the internal structural validity of the instrument. A
58 small number of items—specifically items [1 (.138), 11 (.022), and 30 (.08)]—showed very
59 low correlation coefficients, suggesting a limited contribution to the overall construct.
60 Nevertheless, the overall reliability of the instrument remains acceptable, supporting its
61 suitability for use in the present study. Furthermore, retaining these items is justified by their
62 role in ensuring comprehensive conceptual coverage of the scale, as they constitute part of the
63 original structure developed by the scale’s authors, thereby preserving the theoretical
64 foundation and maintaining representation of essential dimensions within the construct.

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66

67 **Table 6.** Measuring validity of Burnout Scale by internal consistency

68

| Items | Emotional Stress | Overall Score | Items | Indifference | Overall Score | Items | Work Achievement | Overall Score |
|-------|------------------|---------------|-------|--------------|---------------|-------|------------------|---------------|
| 1 | 0.138 | 0.169 | 11 | 0.022 | 0.034 | 21 | .812 | .795 |
| 2 | .208 | .376 | 12 | .201 | .243 | 22 | .783 | .699 |
| 3 | .508 | .642 | 13 | .641 | .577 | 23 | .219 | .521 |
| 4 | .379 | .302 | 14 | .835 | .735 | 24 | .585 | .444 |
| 5 | .502 | .579 | 15 | .755 | .619 | 25 | .342 | .366 |
| 6 | .310 | 0.114 | 16 | .736 | .577 | 26 | .553 | .637 |
| 7 | .444 | .260 | 17 | .603 | .599 | 27 | .805 | .823 |
| 8 | .380 | .245 | 18 | .385 | .519 | 28 | .740 | .687 |
| 9 | .585 | .668 | 19 | .631 | .691 | 29 | .363 | .268 |
| 10 | .645 | .717 | 20 | .596 | .648 | 30 | 0.08 | 0.081 |

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70 **Comment 3:**

71 Terminal Comparison / Known-Groups Validity (Table 7)

72 The authors used terminal comparison between the highest and lowest scorers to assess the
73 discriminative validity of the Burnout Scale. This method is appropriate; however, the
74 explanation must be revised for clarity and correctness.

75 Required Revision for Table 7

76 Replace the current wording with the following:

77 “Known-groups validity was evaluated using terminal comparison between participants with
78 the highest and lowest burnout scores. Significant differences at the 0.01 level across all
79 subscales confirm the scale’s ability to discriminate effectively between high and low
80 burnout levels, supporting its discriminative validity.”

81 This wording distinguishes discriminative validity from internal consistency, which is
82 essential for conceptual accuracy.

83 **Response:**

84 Thank you for this valuable comment. We fully agree that the terminology and explanation
85 related to the known-groups validity in Table 7 required clarification. In response, we have
86 revised the relevant section to ensure conceptual accuracy and methodological precision.

87 Specifically, we have replaced the previous wording with the reviewer’s recommended
88 formulation:

89 “Known-groups validity was evaluated using terminal comparison between participants with
 90 the highest and lowest burnout scores. Significant differences at the 0.01 level across all
 91 subscales confirm the scale’s ability to discriminate effectively between high and low burnout
 92 levels, supporting its discriminative validity.”

93

94 **The validity of the burnout scale was measured by examining the validity of the terminal**
 95 **comparison to examine the scale’s ability to discriminate between maximum and**
 96 **minimum scores, as presented in Table 7. Known-groups validity was evaluated using**
 97 **terminal comparison between participants with the highest and lowest burnout scores.**
 98 **Significant differences at the 0.01 level across all subscales confirm the scale’s ability to**
 99 **discriminate effectively between high and low burnout levels, supporting its**
 100 **discriminative validity.**

101 **Table 7. Validity of Terminal Comparison of Burnout Scale**

102

| Burnout Scale Dimensions | F | Sig. | T | df |
|---------------------------------|----------|-------------|----------|-----------|
| Emotional Stress | 2.034 | .000 | 8.814 | 98 |
| | | | 8.887 | 86.280 |
| Indifference | 3.123 | .000 | 12.161 | 98 |
| | | | 12.152 | 97.424 |
| Work Achievement | 17.819 | .000 | 8.364 | 98 |
| | | | 8.503 | 60.307 |
| Total | 3.352 | .000 | 12.823 | 98 |
| | | | 12.944 | 82.870 |

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113 **Comment 4:**

114 Strengthening the Methodology Section

115 To further improve scientific rigor, I recommend:

116 Clarifying the procedures used for validity and reliability assessment.

117 Distinguishing clearly between: structural validity,

118 internal consistency validity,

119 discriminative validity,

120 and reliability measures.

121 Providing theoretical justification for the use of each scale.

122 Briefly reporting any assumptions or limitations related to psychometric analysis.

123

124 **Response:**

125 We sincerely thank the reviewer for this insightful and constructive recommendation. In
126 response, we have revised the Methodology section to enhance its scientific rigor and clarity.

127 The following improvements have been implemented:

128 Clarification of validity and reliability procedures:

129 We added explicit descriptions of the steps used to assess both validity and reliability for each
130 scale, including internal consistency indices, item–total correlations, and known-groups
131 validity where applicable.

132 Clear distinction among types of validity:

133 The revised text now differentiates clearly between:

134 Structural validity,

135 Internal consistency validity,

136 Discriminative (known-groups) validity,

137 Reliability indicators such as Cronbach’s alpha.

138 This distinction was incorporated to ensure conceptual precision in line with standard
139 psychometric frameworks.

140 Theoretical justification for scale selection:

141 A brief rationale has been added for each instrument, referencing the theoretical foundations.

142 Inclusion of psychometric assumptions and limitations:

143 We added a concise note acknowledging key assumptions and potential limitations associated
144 with self-report measures, in line with best practices in psychometric reporting.

145 These revisions collectively strengthen the methodological transparency and psychometric
146 rigor of the study. We appreciate the reviewer's guidance, which has significantly improved the
147 clarity and scientific robustness of the manuscript. All modifications are clearly marked in the
148 revised version.

149

150 **3. Methods**

151 **3.1. Study Procedure: Data Collection and Analysis**

152 The correlational descriptive method was employed not only to describe the phenomena or
153 current situation but also to draw conclusions and recommendations that contribute to
154 understanding the reality of developing irrational thoughts and burnout. The research tools
155 were applied using Google Forms, which were then sent via an electronic link. After collecting
156 data from research tools for 737 male and female teachers in Hail, the information was entered
157 and processed using the Statistical Package for the Social Sciences (SPSS).

158

159 **3.2. Research Population and Sample**

160 The research community consisted of 15,510 public school teachers in Hail, Saudi Arabia. A
161 simple random sample, stratified by school level, comprising 5% (n = 775) of the community,
162 was selected. Some questionnaires were excluded due to a lack of seriousness or

163 incompleteness. The final sample included 737 male and female teachers. The sample
 164 distribution is presented in Table 1.

165 **Table 1.** Sample member distribution based on demographic variables (sex, specialty, and
 166 educational stage)
 167

| Percentage | Specialty | Number | Percentage | Educational Stage | Number | Percentage |
|------------|-----------------------------------|--------|------------|-------------------|--------|------------|
| 35,55 | Teaching Natural Sciences Courses | 286 | 39 | Primary | 188 | 25,51 |
| 64,45 | Teaching Human Sciences Courses | 451 | 61 | Intermediate | 296 | 40,16 |
| %100 | | | %100 | High School | 253 | 34,33 |
| 737 | | | | | | %100 |

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169 3.3. Study Instruments

170 3.3.1. Irrational Beliefs Scale

171 Al-Raihany [31] translated and adapted Albert Ellis's scale of irrational beliefs for compatibility
 172 with the Arabic language, applying it to Jordanian society, which shares demographic
 173 similarities with Hail. The Irrational Thoughts Scale is based on Ellis's 11 irrational thoughts,
 174 with two additional thoughts added by Al-Raihany: (1) the need to interact formally and
 175 seriously to be valued and respected, and (2) the belief that a man's status is paramount in
 176 relationships with women. The scale aims to clearly identify individuals' opinions on 13
 177 irrational thoughts, represented by 52 statements. Participants scored 3, 2, or 1 for agreement,
 178 uncertainty, and disagreement, respectively. Final scores ranged from 52 (high rationality) to
 179 156 (high irrationality). The scale was adapted and validated for the Saudi Arabian context,
 180 with its reliability assessed through two methods.

181 The reliability of Al-Raihany's Irrational Thoughts Scale was assessed using Cronbach's alpha
 182 coefficient based on a pilot sample of 100 male and female teachers in Hail City, which is
 183 similar to the actual research sample. The overall reliability coefficient was 0.962 (Table 2),
 184 demonstrating a high degree of internal consistency and indicating the tool's suitability for the
 185 study. Validity was examined through the internal consistency method by assessing the
 186 correlations among the scale's sections and their relationships to the total scores. As shown in
 187 Table 3, the majority of correlation coefficients were substantial, reflecting strong associations
 188 between the sections and the overall construct. Additionally, the scale's validity was evaluated
 189 through a terminal comparison to determine its capacity to differentiate between participants
 190 with maximum and minimum scores. Details of these findings are presented in Table 4.

191 **Table 2.** Cronbach's alpha coefficient of Irrational Thoughts Scale

| Cronbach's Alpha Reliability Coefficient | No. of Items | Reliability Statistics |
|--|--------------|------------------------|
| | No. of Items | Cronbach's Alpha |
| | 52 | 0.962 |

192

193 **Table 3.** Internal consistency validity of Irrational Thoughts Scale (Sample n=100)

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| 29 | .956 | .826 | 36 | .896 | .818 |
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196 presented in Table 3. Items showing higher correlations indicate stronger alignment with the
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198 shown in the table, only a very small number of items exhibited noticeably low correlation
199 coefficients [e.g., item 3 (.249), item 11 (.280), item 27 (.293), item 47 (.278)]. Given their
200 limited number, the impact of these items on the overall construct validity of the scale is
201 minimal. Moreover, retaining these items is justified by their theoretical importance and by
202 their inclusion in the original validated scale, as well as their contribution to content coverage
203 by capturing dimensions not fully represented by the other items. Additionally, removing these
204 items does not lead to any meaningful improvement in the reliability of the scale, indicating

205 that their retention does not negatively affect the internal consistency or the psychometric
 206 structure of the instrument.

207

208 **Table 4. Validity of terminal comparison of Irrational Thoughts Scale**

209

| Irrational Thoughts | F | Sig. | T | df |
|--|----------|-------------|----------|-----------|
| Thought 1 | 57.394 | .000 | 3.933 | 98 |
| | | | 4.478 | 94.437 |
| Thought 2 | 86.360 | .000 | 4.104 | 98 |
| | | | 4.723 | 91.926 |
| Thought 3 | 484.579 | .000 | 5.225 | 98 |
| | | | 6.487 | 63.749 |
| Thought 4 | 11.155 | .001 | 24.052 | 98 |
| | | | 26.078 | 97.515 |
| Thought 5 | 55.440 | .000 | 15.479 | 98 |
| | | | 17.324 | 97.053 |
| Thought 6 | 15.766 | .000 | 21.755 | 98 |
| | | | 22.635 | 91.121 |
| Thought 7 | 3.765 | .055 | 22.671 | 98 |
| | | | 21.258 | 64.455 |
| Thought 8 | 16.370 | .000 | 16.328 | 98 |
| | | | 18.236 | 97.260 |
| Thought 9 | 124.094 | .000 | 7.281 | 98 |
| | | | 8.624 | 82.747 |
| Thought 10 | 202.076 | .000 | 9.526 | 98 |
| | | | 11.756 | 66.235 |
| Thought 11 | 192.356 | .000 | 8.088 | 98 |
| | | | 9.924 | 68.602 |
| Thought 12 | 356.978 | .000 | 7.856 | 98 |
| | | | 9.781 | 62.588 |
| Thought 13 | 41.161 | .000 | 14.098 | 98 |
| | | | 15.707 | 97.462 |
| Irrational Thinking Overall Score | 158.505 | .000 | 16.407 | 98 |
| | | | 19.276 | 85.668 |

210

211 **3.3.2. Burnout Scale**

212 The burnout scale was developed by drawing upon established burnout measures such as the
 213 Maslach and Oldenburg Burnout Inventories. The ear has been granted permission to access
 214 the application from Mind Garden, the owner of the scale copyright. A series of items was

215 constructed to assess the three dimensions of burnout: emotional exhaustion (10 items),
 216 depersonalization (10 items), and reduced personal accomplishment (10 items). The scale
 217 comprises 30 items, each with a range of response options, allowing participants to select items
 218 based on their experiences. A score of 3, 2, and 1 is assigned for “I agree,” “I’m not sure,” and
 219 “I disagree,” respectively. The total scores ranged from a minimum of 30 (indicating low
 220 burnout) to a maximum of 90 (indicating high burnout), with a critical range of 60–70 points.
 221 The scale was administered to a pilot sample of 100 teachers matching the demographics of
 222 the actual research sample. Reliability was assessed using Cronbach’s alpha, with results shown
 223 in Table 5. The Cronbach’s alpha coefficient for the burnout scale was 0.828, indicating
 224 reliability and suitability for the research objectives.

225
226

227 **Table 5.** Cronbach’s alpha coefficient of Burnout Scale

| Cronbach's Alpha Reliability | No. of Items | Reliability Statistics |
|------------------------------|--------------|------------------------|
| Coefficient | No. of Items | Cronbach's Alpha |
| | 30 | 0.828 |

228

229 Internal consistency validity was evaluated by calculating the correlations between each item
 230 and its corresponding subscale, as well as between each item and the total score, as presented
 231 in Table 6. Higher correlation values indicate stronger alignment of the item with the construct
 232 measured by the scale, thereby supporting the internal structural validity of the instrument. A
 233 small number of items—specifically items [1 (.138), 11 (.022), and 30 (.08)]—showed very
 234 low correlation coefficients, suggesting a limited contribution to the overall construct.
 235 Nevertheless, the overall reliability of the instrument remains acceptable, supporting its
 236 suitability for use in the present study. Furthermore, retaining these items is justified by their

237 role in ensuring comprehensive conceptual coverage of the scale, as they constitute part of the
 238 original structure developed by the scale’s authors, thereby preserving the theoretical
 239 foundation and maintaining representation of essential dimensions within the construct.

240 **Table 6.** Measuring validity of Burnout Scale by internal consistency

| Items | Emotional Stress | Overall Score | Items | Indifference | Overall Score | Items | Work Achievement | Overall Score |
|-------|------------------|---------------|-------|--------------|---------------|-------|------------------|---------------|
| 1 | 0.138 | 0.169 | 11 | 0.022 | 0.034 | 21 | .812 | .795 |
| 2 | .208 | .376 | 12 | .201 | .243 | 22 | .783 | .699 |
| 3 | .508 | .642 | 13 | .641 | .577 | 23 | .219 | .521 |
| 4 | .379 | .302 | 14 | .835 | .735 | 24 | .585 | .444 |
| 5 | .502 | .579 | 15 | .755 | .619 | 25 | .342 | .366 |
| 6 | .310 | 0.114 | 16 | .736 | .577 | 26 | .553 | .637 |
| 7 | .444 | .260 | 17 | .603 | .599 | 27 | .805 | .823 |
| 8 | .380 | .245 | 18 | .385 | .519 | 28 | .740 | .687 |
| 9 | .585 | .668 | 19 | .631 | .691 | 29 | .363 | .268 |
| 10 | .645 | .717 | 20 | .596 | .648 | 30 | 0.08 | 0.081 |

The validity of the burnout scale was measured by examining the validity of the terminal comparison to examine the scale's ability to discriminate between maximum and minimum scores, as presented in Table 7. Known-groups validity was evaluated using terminal comparison between participants with the highest and lowest burnout scores. Significant differences at the 0.01 level across all subscales confirm the scale's ability to discriminate effectively between high and low burnout levels, supporting its discriminative validity.

Table 7. Validity of Terminal Comparison of Burnout Scale

| Burnout Scale Dimensions | F | Sig. | T | df |
|---------------------------------|----------|-------------|----------|-----------|
| Emotional Stress | 2.034 | .000 | 8.814 | 98 |
| | | | 8.887 | 86.280 |
| Indifference | 3.123 | .000 | 12.161 | 98 |
| | | | 12.152 | 97.424 |
| Work Achievement | 17.819 | .000 | 8.364 | 98 |
| | | | 8.503 | 60.307 |
| Total | 3.352 | .000 | 12.823 | 98 |
| | | | 12.944 | 82.870 |