Do reading boredom and reading boredom coping strategies predict reading comprehension performance? An empirical investigation of Saudi EFL learners

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ABSTRACT

Boredom is a well-researched concept in various contexts; nonetheless, there is scarceness of research related to the relationship of boredom with reading comprehension performance in EFL context. Therefore, this study intends to determine the connection between reading boredom and reading comprehension performance by employing reading boredom coping strategies as a mediator. A quantitative research approach, and a cross-sectional and correlational research design was employed to conduct this study. Questionnaires and a reading comprehension test were used to collect data from 306 Saudi EFL students. Findings indicated that reading boredom showed a significant but negative relationship with reading comprehension performance. Also, reading boredom was positively and significantly related to reading boredom coping strategies. Moreover, reading boredom coping strategies showed a positive and significant relationship with reading comprehension performance. Lastly, findings indicated that reading boredom coping strategies mediated the association between reading boredom and reading comprehension performance. On the basis of aforementioned findings, numerous recommendations for EFL students, teachers, and policymakers were offered.

Keywords: Reading boredom, reading boredom coping strategies, reading comprehension performance, Saudi EFL students

INTRODUCTION

Students’ emotions play a significant role in their motivation and learning process (Graesser & D’Mello, 2012; Hökkä, Vähäsantanen, & Paloniemi, 2019; Pekrun et al., 2002; Trevors et al., 2017). Previous research involving students’ emotions have concentrated on their test-taking anxiety. However, there is dearth of studies concerning boredom experiences (Mann & Robinson, 2009; Mora, 2011). Lack of studies related to boredom as compared to other emotions including anxiety and anger could be attributed to the discreet nature of boredom (Nett, Goetz, & Daniels, 2010). Previous literature affirmed that there exists a negative association between boredom and students’ learning (Pekrun et al., 2002; Tze et al., 2016). In other words, previous research indicated that the feeling of being bored affects the learning process adversely. Previous literature revealed that learners get bored due to challenging tasks (Graesser & D’Mello, 2012), lack

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of interest in content, and dysfunctional motivation (Graesser, D’Mello, & Strain, 2014).

It has been observed that students use several boredom coping strategies (e.g., doing homework while taking lesson, talking to fellows etc.) to reduce boredom while performing learning activities (Eren & Coskun, 2016). Previous studies exhibited a significant and positive connection among boredom and boredom coping strategies (Eren, 2016; Finkelsztein, 2019; Nett, Goetz, & Hall, 2011). Moreover, in a recent study, boredom coping strategies was employed as a mediator in determining the connection between boredom and mathematics accomplishment (Eren & Coskun, 2016).

Rigorous review of the literature confirmed that various researchers conducted studies on the concept of boredom in numerous fields including education, educational psychology, and psychology (Mora, 2011; Sharp et al., 2017; van Tilburg & Igou, 2017); nevertheless, it needs attention in foreign language context. A recent study suggested that future research regarding the concept of boredom should be conducted in EFL context (Kruk & Zawodniak, 2018). Instructors have generally attributed the emotion of boredom to their students’ idleness and personality features (Macklem, 2015), nonetheless, it is considered as frequently experienced emotion by the students in academic settings (Tze, daniels, & Klassen, 2016).

To be more particular, in EFL context, there is paucity of past studies involving the association among boredom and four major language skills in general and reading skill in particular. The present study concentrates merely on reading skill for they are deemed central to academic accomplishment in comparison to other skills (Grabe, 1991). Furthermore, English reading comprehension is regarded as one of the crucial skills for it assists Saudi EFL students to deal with demanding programmes offered at universities (Meniado, 2016). Rahman and Alsaioumi (2013) confirmed that Saudi government spends a substantial amount of budget on English teachers’ training programs, curriculum designing, EFL labs, and recruitment of English teachers who are native speakers of the language. Additionally, one of the crucial aims defined by Saudi Ministry of Education is to inculcate all the English language skills in Saudi EFL students including reading skill.

Appallingly, the International English Language Testing System (IELTS) (2017) data uncovered exceptionally low bands acquired by Saudi EFL students in reading skill. The average reading bands acquired by them in academic category were 5.05/9 (i.e., third bottommost in the world). The condition was severer in general category in which they obtained 3.90/9 reading bands (i.e., bottommost in the world). Correspondingly, the past studies revealed that Saudi EFL students struggle in English reading skill predominantly at universities (Al-Qahtani, 2016; Meniado, 2016). With the intention of attaining insights pertinent to the alarming condition of Saudi students’ English reading, it appears unavoidable to conduct an inter-field research concerning constructs that have not been investigated in relation to EFL reading comprehension performance. Thus, this research aims to establish the connection between reading boredom and reading comprehension performance of Saudi EFL students by deploying reading boredom coping strategies as a mediator. More particularly, this research aims to achieve following four objectives:

1. To determine the extent of connection between reading boredom and reading comprehension performance.
2. To determine the extent of connection between reading boredom and reading boredom coping strategies.
3. To determine the extent of connection between reading boredom coping strategies and reading comprehension performance.
4. To determine the mediating role of reading boredom coping strategies between reading boredom and reading comprehension performance.

Reading comprehension performance
Several researchers managed to present definitions and concepts of reading. For instance, Lin (2011) attempted to explain the concept of reading by studying and blending the definitions proposed by several studies (Pressley & Afferbach, 2012; Snow, 2002), offering a further complete definition. He typified reading as a collaboration of three components, firstly, the reader who comprehends the text, secondly, the written material being read and lastly, the activity in which comprehension occurs. His definition laid great emphasis on reading purpose of the reader as a vital constituent of the entire process as stressed by Grabe (2009) who, in his definition, stressed on the need to adopt the process of reading to attain specified learning targets, and to accomplish entire comprehension as affirmed by Carroll (1971). Anderson (1999) included another element in reading definition which fits more appropriately to the context of English as a foreign/second language (EFL/ESL). He considered previous experience as well as the background knowledge of the reader which denotes noticeably to both L1 and L2 reading competence and habits.

In EFL context, reading comprehension performance is a hot topic; hence, it received a considerable attention of the researchers. Several studies were conducted involving numerous predictors that predict the reading comprehension of EFL students. For instance, several researchers
determined the association of reading instruction and reading performance (Aka, 2019; Jabri et al., 2020). Moreover, research was conducted on association between usage of reading strategies and reading achievement (Ajideh, 2019; Alshumaimeri, 2017; Mohid et al., 2020). Also, the influence of computer-assisted language learning on reading achievement was determined (Khezrlou, Ellis, & Sadeghi, 2017). In addition, few researchers considered the association between psychological variables and reading comprehension performance including anxiety (Chen et al., 2016; Tsai & Lee, 2018), motivation (Galgao, 2016), self-efficacy beliefs (Shelzad et al., 2019), multiple intelligence (Rostami Abu Saeedi & Jafarigohar, 2019; Zahedi & Moghaddam, 2016), critical thinking (Fahim & Barjesteh, 2018), and reading enjoyment (Tavscancil, Yildirim, & Bilican Demir, 2019). Despite the keen interest of researchers regarding the association of psychological variables with EFL reading comprehension performance, there is paucity of research involving a well-researched psychological variable in other fields, i.e., boredom. Thus, the current research intends to fill this literature gap. The next section alludes to the boredom and boredom coping strategies used by students in academic context.

Boredom and boredom coping strategies

The concept of boredom has been studied in several fields including education (Sharp et al., 2019), psychology (Westgate & Wilson, 2018), language learning (Zawodniak, Kruk, & Chumas, 2017), and thus been conceptualized as an academic boredom (Acee et al., 2010), relational boredom (Harasymchuk & Fehr, 2010), and workplace boredom (Fisher, 1993). Due to the keen interest in the concept of boredom, researchers presented various definitions. Majority of the definitions consider boredom as a negative emotion that influences negatively on the motivation and achievement of an individual. For example, Conrad (1997) defined boredom as an undesirable personal condition where the person undergoes little interest in what is presently occurring. Additionally, Eastwood et al. (2012) described the concept of boredom as the aversive condition of fancying, however, being incapable of engaging in a contenting activity.

Pekrun (2006) presented a theory named control-value theory related to individual’s feelings which considers boredom as a deactivating negative feeling. Contrary to positive activating feelings (e.g., pride, happiness, hopefulness), negative deactivating feeling (e.g., hopelessness), predominantly boredom, has a negative and significant effect on student’s achievement (Pekrun, 2006). For instance, Tze et al. (2016) conducted a meta-analysis of 29 studies and concluded that boredom had a negative and substantial influence on academic achievement. Interestingly, the past literature indicated that boredom had more vulnerable effects on students’ academic achievement than some of the negative activating feelings (e.g., anxiety, anger etc.) (Pekrun et al., 2002). However, only a few researchers found that boredom influenced positively on the achievement of the students (Harris, 2000). Likewise, in spite of few benefits of boredom including self-motivation to create an innovative work and augmenting individual’s introspection, Vodanovich’s (2003) systematic review of literature did not present any statistical data showing positive impact of boredom on achievement.

After rigorous review of the literature, it was revealed that previous research determined the negative and significant relationship between boredom and various kinds of academic achievements including general academic achievement, general studies achievement, mathematics achievement (Castens & Overbey, 2009; Cowan & Piepgrass, 1997; Eren & Coskun, 2016; Pekrun et al., 2014; Putwain et al., 2018); however, as compared to other settings, scant research was conducted in the context of EFL (Kruk & Zawodniak, 2018; Pawlak et al., 2020).

As stated earlier, students do not merely get bored, but also employ various boredom coping strategies to cope with the negative state of boredom (Eren, 2013). Interestingly, previous studies did not pay much attention to students’ boredom coping strategies (Eren & Coskun, 2016). This could be attributed to the unavailability of a thorough theoretical framework pertinent to students’ boredom coping strategies. Therefore, to cater the aforementioned gap, Nett et al. (2010) developed a theoretical framework related to students’ boredom coping strategies. They subdivided the boredom coping strategies into following four categories: cognitive-approach, behavioural-approach, cognitive-avoidance, and behavioural-avoidance. In cognitive-approach strategies, an individual alters his/her views pertinent to the uninteresting situation by, for instance, telling oneself to concentrate on the activity again; while behavioural-approach strategies necessitate a person to alter an uninteresting situation himself/herself by, for example, suggesting the teacher to add variety to the lessons (Nett et al., 2010).

Contrarywise, cognitive-avoidance strategies include cognitive activities that are irrelevant to the present situation (e.g., thinking about homework during a lesson); while behavioural-avoidance strategies include activities pertinent to one’s behaviour that are unrelated to the present scenario (e.g., chatting with peers during a lesson) (Nett et al., 2010). To put the aforementioned framework into practice, Nett et al. (2010) developed an instrument named coping with boredom scale which was later used in numerous studies in different
countries (Eren, 2013; Eren & Coskun, 2016; Nett et al., 2011; Tze et al., 2016). Abovementioned studies designate that Nett’s et al. (2010) four component boredom coping model could be employed in different contexts and countries. Therefore, the current study also employed this model related to boredom coping strategies. Furthermore, researchers found a significant relationship between boredom coping strategies and achievement (Eren & Coskun, 2016; Nett et al., 2010). Lastly, previous studies have used boredom coping strategies as a mediating variable (Eren & Coskun, 2016; Zhou & Kam, 2017).

Based on reviewed literature, following hypotheses were generated:

H1: There is a significant and negative connection between reading boredom and reading comprehension performance.

H2: There is a significant and positive connection between reading boredom coping strategies and reading boredom coping strategies.

H3: There is a significant and positive connection between reading boredom coping strategies and reading comprehension performance.

H4: Reading boredom coping strategies mediate the relationship between reading boredom and reading comprehension performance.

METHODOLOGY

Research Design

This study utilized a quantitative research approach. Furthermore, a cross-sectional and correlational research design was used. Creswell (2005) affirmed that correlational design involves establishing connection between variables using statistical methods. Therefore, this research established the connection between reading boredom and reading comprehension performance by employing reading boredom coping strategies as a mediating variable. The research design of this study is shown in Figure 1.

Figure 1

Research Design

Note. ‘a’= The connection between reading boredom and reading boredom coping strategies; ‘b’= The connection between reading boredom coping strategies and reading comprehension performance; ‘c’= The connection between reading boredom and reading comprehension performance.

Participants

The data gathered in this research was obtained from 306 EFL students studying in three Saudi universities. These students had opted English as their major course. Pertaining to the cultural limitations in Saudi Arabia, only male students took part in this study. In order to choose the required sample, proportion stratified random sampling technique was employed. As it has already been mentioned, participants were selected from three Saudi universities; therefore, according to the population of each of these universities, a particular proportion of participants were chosen. For example, university A had the highest number of students out of the three universities; thus, the sample of population chosen from this university was also the highest (see Table 1). A sampling determination table was employed in order to determine the sample size of the current study (Bartlet et al., 2001). As indicated by the table, the suitable sample for the population of 1420 ought to be 306. Table 1 gives the thorough statistics of the chosen sample. It is to be noted here that before administering the questionnaires, the participants were verbally asked whether they are willing to participate or not. Thus, the data collection was officially initiated once we sought their permission.

Table 1

Statistics of Sample

| No. | Name of University | Population | Percentage | Questionnaires Disseminated |
|-----|--------------------|------------|------------|-----------------------------|
| 1   | University A       | 750        | 52.81%     | 162                         |
| 2   | University B       | 357        | 25.14%     | 77                          |
| 3   | University C       | 313        | 22.04%     | 67                          |
| Total |                  | 1420       | 100.00%    | 306                         |
Instruments
Three instruments were used to collect the data including two questionnaires and a reading comprehension test. More particularly, Level of Boredom Scale consisting of 7 items with a five-point Likert scale ranging from 1 (not at all) to 5 (very much) was adapted from Eren and Coskun (2016) to collect the data related to independent variable of the current study, i.e., reading boredom. Eren and Coskun’s (2016) boredom scale was related to Mathematics discipline. Therefore, the researcher modified the items to make them fit into English reading context. In order to collect data related to mediating variable, i.e., reading boredom coping strategies, Coping with Boredom Scale comprising 20 items with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was adapted from Eren and Coskun (2016). Just like the previous scale, this scale was moulded into the English reading context. Lastly, reading comprehension performance was gauged by using a Reading Comprehension Test adopted from Shehzad et al. (2019). The rationale of adopting a reading comprehension is that Shehzad’s et al. (2019) study sample also consisted of Saudi university-level EFL students. The reading comprehension test comprised 4 passages on different topics and each passage consisted of 5 multiple-choice questions (MCQs). Therefore, all of the passages consisted of 20 MCQs. Furthermore, to convert the score of MCQs into Likert scale, the researcher adopted a rubric from Shehzad (2019) (refer to Table 2).

Table 2
Rubric to Assess the Reading Comprehension Level (Based on Shehzad, 2019, p.157)

| Reading Comprehension Level | Scores on MCQs Test | Five-point Likert Scale Score |
|-----------------------------|---------------------|-------------------------------|
| Good                        | 17-20               | 5                             |
| Above Average               | 13-16               | 4                             |
| Average                     | 9-12                | 3                             |
| Below Average               | 5-8                 | 2                             |
| Poor                        | 1-4                 | 1                             |

Research Procedures
The process of data collection lasted for almost three weeks (i.e., 3rd January 2020 to 22nd January 2020). Before collecting the data, the researcher asked for permission for data collection from the head of English departments of three Saudi public sector universities via email. Afterwards, the researcher visited each of the three universities to get lists of students enrolled in BS-English program. After analysing the lists, sample size was determined. Subsequently, questionnaires and a reading comprehension test was administered. It is worth mentioning that students were clearly told about the purpose of the study. Also, they were told that their identities would remain incognito. After data collection, questionnaires were rechecked to identify missing responses. Questionnaires with missing data were returned to respective respondents in order to gain maximum response. Eventually, the collected data was proceeded for data analysis.

Data Analysis
In order to analyse the collected data, the current study used a two-stage model presented by Hair et al. (2010). The primary stage is known as ‘measurement model evaluation’ and the secondary stage is called ‘structural model evaluation’. More precisely, the primary stage includes inspecting individual item reliability, establishing internal consistency reliability, convergent validity, and discriminant validity. Whereas, the secondary stage involves the evaluation of direct and indirect relationships between variables involved in the current study (Hair et al., 2010). The subsequent section alludes to the details of aforementioned model.

RESULTS AND DISCUSSION
First of all, missing values and outliers of the collected data were checked. Table 3 indicates that there were no missing values and outliers. Afterwards, data’s normality was checked by using the criteria of Skewness and Kurtosis. The values of Skewness ought to be less than 2 and the values of Kurtosis ought to be less than 7 (Curran, West, & Finch, 1996). Table 3 depicts that data was normal and ready for further analysis. Subsequently, data was proceeded to main analysis.

Main analysis comprised two models, i.e., measurement model and structural model.

Measurement Model
In order to observe the validity and reliability, measurement model was assessed. A statistical software, i.e., SmartPLS 3.0 was employed to test the measurement model. Thus, average variance extracted (AVE), factor loading, discriminant validity, composite reliability, and convergent validity were tested. Hair et al. (2010) affirmed that values of both AVE and factor loading should be higher than prescribed benchmark of 0.5 (refer to Figure 2, Table 4, and Table 5). Furthermore, Fornell and Larcker (1981) confirmed that the prescribed benchmark of CR should be higher than 0.7 (refer to Table 5).
### Table 3
Data Screening

| No. | Missing | Mean  | Median | Min | Max | SD     | Kurtosis | Skewness |
|-----|---------|-------|--------|-----|-----|--------|----------|----------|
| RB1 | 1       | 3.283 | 3      | 1   | 5   | 1.874  | -0.899   | 0.426    |
| RB2 | 2       | 3.312 | 3      | 1   | 5   | 1.903  | -0.867   | 0.389    |
| RB3 | 3       | 3.254 | 3      | 1   | 5   | 2.016  | -1.062   | 0.427    |
| RB4 | 4       | 3.346 | 3      | 1   | 5   | 2.034  | -1.036   | 0.404    |
| RB5 | 5       | 3.249 | 3      | 1   | 5   | 1.893  | -0.993   | 0.399    |
| RB6 | 6       | 3.317 | 3      | 1   | 5   | 1.875  | -0.812   | 0.414    |
| RB7 | 7       | 3.098 | 3      | 1   | 5   | 1.848  | -0.842   | 0.407    |
| RBCS1 | 8   | 3.293 | 3      | 1   | 5   | 2.005  | -1.051   | 0.345    |
| RBCS2 | 9   | 3.215 | 3      | 1   | 5   | 1.864  | -0.996   | 0.33     |
| RBCS3 | 10  | 2.966 | 2      | 1   | 5   | 2.218  | -0.758   | 0.843    |
| RBCS4 | 11  | 2.849 | 2      | 1   | 5   | 2.24   | -0.728   | 0.878    |
| RBCS5 | 12  | 2.99  | 2      | 1   | 5   | 2.184  | -0.756   | 0.819    |
| RBCS6 | 13  | 2.917 | 2      | 1   | 5   | 2.116  | -0.597   | 0.863    |
| RBCS7 | 14  | 2.898 | 2      | 1   | 5   | 2.305  | -0.818   | 0.88     |
| RBCS8 | 15  | 2.81  | 2      | 1   | 5   | 2.127  | -0.406   | 1.002    |
| RBCS9 | 16  | 2.902 | 2      | 1   | 5   | 1.951  | -0.382   | 0.857    |
| RBCS10 | 17 | 2.795 | 2      | 1   | 5   | 1.937  | -0.166   | 0.953    |
| RBCS11 | 18 | 2.868 | 2      | 1   | 5   | 2.188  | -0.628   | 0.904    |
| RBCS12 | 19 | 2.917 | 2      | 1   | 5   | 2.076  | -0.545   | 0.863    |
| RBCS13 | 20 | 2.941 | 2      | 1   | 5   | 2.217  | -0.734   | 0.846    |
| RBCS14 | 21 | 2.863 | 2      | 1   | 5   | 2.373  | -0.876   | 0.881    |
| RBCS15 | 22 | 2.771 | 2      | 1   | 5   | 2.084  | -0.324   | 1.066    |
| RBCS16 | 23 | 2.961 | 2      | 1   | 5   | 2.197  | -0.67    | 0.926    |
| RBCS17 | 24 | 3.4   | 4      | 1   | 5   | 1.497  | -1.071   | 0.129    |
| RBCS18 | 25 | 3.312 | 3      | 1   | 5   | 1.683  | -1.405   | 0.038    |
| RBCS19 | 26 | 3.346 | 3      | 1   | 5   | 1.559  | -1.296   | 0.024    |
| RBCS20 | 27 | 3.317 | 3      | 1   | 5   | 1.572  | -1.39    | 0.072    |
| RCP1 | 28 | 3.288 | 3      | 1   | 5   | 1.611  | -1.5     | -0.095   |

### Figure 2
Confirmatory Factor Analysis (CFA)
Table 4

|          | Reading Boredom | Reading Boredom Coping Strategies | Reading Comprehension Performance |
|----------|-----------------|----------------------------------|----------------------------------|
| RB1      | 0.936           |                                  |                                  |
| RB2      | 0.916           |                                  |                                  |
| RB3      | 0.927           |                                  |                                  |
| RB4      | 0.929           |                                  |                                  |
| RB5      | 0.928           |                                  |                                  |
| RB6      | 0.908           |                                  |                                  |
| RB7      | 0.934           |                                  |                                  |
| RBCS1    |                 | 0.69                             |                                  |
| RBCS10   |                 | 0.812                            |                                  |
| RBCS11   |                 | 0.842                            |                                  |
| RBCS12   |                 | 0.806                            |                                  |
| RBCS13   |                 | 0.848                            |                                  |
| RBCS14   |                 | 0.844                            |                                  |
| RBCS15   |                 | 0.823                            |                                  |
| RBCS16   |                 | 0.806                            |                                  |
| RBCS17   |                 | 0.766                            |                                  |
| RBCS18   |                 | 0.769                            |                                  |
| RBCS19   |                 | 0.793                            |                                  |
| RBCS2    |                 | 0.637                            |                                  |
| RBCS20   |                 | 0.829                            |                                  |
| RBCS3    |                 | 0.813                            |                                  |
| RBCS4    |                 | 0.844                            |                                  |
| RBCS5    |                 | 0.839                            |                                  |
| RBCS6    |                 | 0.824                            |                                  |
| RBCS7    |                 | 0.826                            |                                  |
| RBCS8    |                 | 0.784                            |                                  |
| RBCS9    |                 | 0.806                            |                                  |
| RCP1     |                 |                                  | 1                                |

Table 5

|                          | Cronbach’s Alpha | rho_A | Composite Reliability | AVE  |
|--------------------------|------------------|-------|------------------------|------|
| Reading Boredom          | 0.972            | 0.973 | 0.977                  | 0.857|
| Reading Boredom Coping Strategies | 0.972 | 0.979 | 0.973 | 0.643 |
| Reading Comprehension Performance | 1 | 1 | 1 | 1 |

Table 4 and Table 5 showed that every single value of AVE, factor loading, and CR for all variables lies in a prescribed range. Moreover, external consistency of the model was established via discriminant validity as depicted in Table 6 by employing AVE square root.

Table 6

|                          | Reading Boredom | Reading Boredom Coping Strategies | Reading Comprehension Performance |
|--------------------------|-----------------|----------------------------------|----------------------------------|
| Reading Boredom          | 0.925           |                                  |                                  |
| Reading Boredom Coping Strategies | 0.687 | 0.802 |                                  |
| Reading Comprehension Performance | 0.714 | 0.801 | 1                                |

Structural Model

In order to analyse the structural model, bootstrapping function was employed. With the aim of determining the mediation effect, bootstrapping function is deemed as one of the important steps (Hayes, 2009; Zhao, Lynch, & Chen, 2010). In addition, as recommended by Hair et al. (2014), PLS-SEM bootstrapping function for mediation analysis is appropriate to use in quantitative research.

The bootstrapping results are depicted in Figure 3. To be more particular, Figure 3 depicts the p-value, path coefficients, and t-value of all the constructs. Moreover, the approval and disapproval of hypotheses related to direct relationships is shown in Table 7.
As evident from Table 7, hypotheses related to direct relationships (i.e., H$_1$, H$_2$, H$_3$) are accepted. To be more particular, reading boredom is negatively and significantly associated to reading comprehension performance ($\beta = -0.309$; p-value $= 0.00$). Moreover, reading boredom is positively and significantly associated to reading boredom coping strategies ($\beta = 0.687$; p-value $= 0.00$). Lastly, reading boredom coping strategies is positively and significantly associated to reading comprehension performance ($\beta = 0.589$; p-value $= 0.00$).

Table 8 and Figure 4 show the findings pertinent to mediation effect. As evident from the $\beta$-value and p-value, reading boredom coping strategies mediated the relationship between reading boredom and reading comprehension performance ($\beta = 0.405$; p-value $= 0.00$).

### Table 7

**Direct Effect Results**

|                                | B     | M     | SD    | T Statistics | P Values |
|--------------------------------|-------|-------|-------|--------------|----------|
| Reading Boredom -> Reading Boredom Coping Strategies | 0.687 | 0.69  | 0.031 | 22.263       | 0.00     |
| Reading Boredom -> Reading Comprehension Performance | -0.309| -0.306| 0.05  | 6.165        | 0.00     |
| Reading Boredom Coping Strategies -> Reading Comprehension Performance | 0.589 | 0.589 | 0.046 | 12.82        | 0.00     |

**Indirect Effect Results**

|                                | $\beta$ | M     | SD    | T Statistics | P Values |
|--------------------------------|---------|-------|-------|--------------|----------|
| Reading Boredom -> Reading Boredom Coping Strategies -> Reading Comprehension Performance | 0.405   | 0.405 | 0.027 | 14.716       | 0.00     |
The current study intended to achieve four major objectives as mentioned previously. Consequently, four hypotheses have been generated based on previously reviewed literature. The research findings of the first research objective indicated that there is a significant and negative connection among reading boredom and reading comprehension performance among Saudi EFL students. Thus, the first hypothesis (i.e., H₁) is supported. In simple terms, findings designated that when Saudi EFL students feel bored during reading lessons, their reading comprehension performance is decreased. This finding is in accordance with the past studies conducted majorly in mathematics domain (Castens & Overbey, 2009; Cowan & Piepgrass, 1997; Eren & Coskun, 2016; Pekrun et al., 2014; Putwain et al., 2018). Apart from previous studies, this finding is also in line with control-value theory which states that boredom is a negative deactivating feeling which adversely affects academic performance of the students (Pekrun, 2006).

In addition, the findings of the second research objective showed a positive and significant connection among reading boredom and reading boredom coping strategies. Therefore, the second hypothesis (i.e., H₂) is supported. This finding is consistent with several past studies (Eren & Coskun, 2016; Nett et al., 2010). Nett et al. (2010) developed a theoretical framework of boredom coping strategies involving four categories and recommended that future research ought to employ it in various domains. Majority of the researchers applied this framework in mathematics domain; however, there is paucity of studies involving this framework in other domains. Therefore, the current study adopted this framework and conducted a study in EFL reading domain as recommended by Nett et al. (2010).

Moreover, in accordance with the third research hypothesis (i.e., H₃), the results of third research objective indicated a positive and significant connection among reading boredom coping strategies and reading comprehension performance. In simple terms, findings indicated that reading performance of the learners increased when they employed reading boredom coping strategies. This finding echoes the findings of the past studies (Eren & Coskun, 2016; Nett et al., 2011). Nett et al. (2011) affirmed that boredom coping strategies not only help learners to eliminate boredom but also assist them to regulate their motivation and emotions, which in turn boost their performance.

Lastly, findings of fourth research objective showed that reading boredom coping strategies mediated the association between reading boredom and reading comprehension performance. Thus, fourth research hypothesis (i.e., H₄) is supported. This particular finding is in line with Zhou and Kam (2017); however, it is opposite to Eren and Coskun’s (2016) findings. Eren and Coskun (2016) conducted a study on Turkish students and found that mathematics boredom coping strategies did not mediate the association between mathematics boredom and mathematics performance.

CONCLUSION

The findings that we have obtained from this study can prove to be beneficial for EFL reading teachers, students, and policymakers. What EFL instructors can do to enhance reading performance of their students is to come up with innovative boredom coping strategies. This would keep the lessons interesting meanwhile ensuring maximum learning. Syllabus designers ought to be considerate of the fact that the contents that are to be taught to the students are attention-grabbing. This would consequently improve the learners’ reading performance.

Although our study contributes significantly in numerous ways; however, there are a few limitations to it. Firstly, research approach that was employed is quantitative. If qualitative or mixed-methods approach had been employed, the study could have yielded more in-depth observations. Secondly, cross-sectional research design was used.
in order to collect data for the current study due to time constraints. Nonetheless, the use of longitudinal design would have been an even more reliable way due to data collection over multiple time periods. The third limitation to the current study is pertinent to the gender of sample i.e., the researcher only collected data from male students as for the cultural constraints in Saudi Arabia. Lastly, findings of our study are generalizable only to university students and not to school or college students.

The current study offers several recommendations for potential future research. Firstly, researchers could conduct studies on rest of the major language skills including listening, speaking, and writing by following the framework used in the current study. Secondly, as pointed out by Kruk and Zawodniak (2018), there is a scarcity of boredom-related research conducted in EFL settings; thus, future research should target other EFL countries. Lastly, future studies should consider including both genders while conducting a study on reading boredom.

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# Appendix A
## Level of Boredom Scale

| No. | Statement                                                                 | Not at all | Little | Average | Much | Very much |
|-----|---------------------------------------------------------------------------|------------|--------|---------|------|-----------|
| 1.  | When you focus on your feelings during English reading lessons, how much does the feeling make you feel restless and unchallenged at the same time? | 1          | 2      | 3       | 4    | 5         |
| 2.  | When you focus on your feelings during English reading lessons, how much does the feeling make you think that the lesson served no important purpose? | 1          | 2      | 3       | 4    | 5         |
| 3.  | When you focus on your feelings during English reading lessons, how much does the feeling make you feel like doing something completely different? | 1          | 2      | 3       | 4    | 5         |
| 4.  | When you focus on your feelings during English reading lessons, how much does the feeling make you feel like doing something more purposeful? | 1          | 2      | 3       | 4    | 5         |
| 5.  | When you focus on your feelings during English reading lessons, how much does the feeling make you turn to a more meaningful activity? | 1          | 2      | 3       | 4    | 5         |
| 6.  | When you focus on your feelings during English reading lessons, how much does the feeling make you want to do something more meaningful? | 1          | 2      | 3       | 4    | 5         |
| 7.  | When you focus on your feelings during English reading lessons, how much does the feeling make you want to be challenged? | 1          | 2      | 3       | 4    | 5         |

# Appendix B
## Coping with Boredom Scale

| No. | Statement                                                                 | Not at all | Little | Average | Much | Very much |
|-----|---------------------------------------------------------------------------|------------|--------|---------|------|-----------|
|     | Cognitive-approach                                                         |            |        |         |      |           |
| 1.  | When I am bored in English reading class, I try to pay attention to the lesson more. | 1          | 2      | 3       | 4    | 5         |
| 2.  | When I am bored in English reading class, I tell myself to concentrate again. | 1          | 2      | 3       | 4    | 5         |
| 3.  | When I am bored in English reading class, I make myself aware of the importance of the issue. | 1          | 2      | 3       | 4    | 5         |
| 4.  | When I am bored in English reading class, I try to make myself aware that this class is important. | 1          | 2      | 3       | 4    | 5         |
| 5.  | When I am bored in English reading class, I make myself focus again because the issue is important. | 1          | 2      | 3       | 4    | 5         |
|     | Behavioural-approach                                                        |            |        |         |      |           |
| 6.  | When I am bored in English reading class, I ask my instructor if we can do something else. | 1          | 2      | 3       | 4    | 5         |
| 7.  | When I am bored in English reading class, I ask my instructor for more interesting tasks. | 1          | 2      | 3       | 4    | 5         |
| 8.  | When I am bored in English reading class, I suggest that the instructor add variety to the lessons. | 1          | 2      | 3       | 4    | 5         |
| 9.  | When I am bored in English reading class, I try to get the instructor off topic so that we discuss an issue that interests me. | 1          | 2      | 3       | 4    | 5         |
| 10. | When I am bored in English reading class, I bring up an issue that I think the class is more interested in. | 1          | 2      | 3       | 4    | 5         |
| Cognitive-avoidance                                                                 | 1 | 2 | 3 | 4 | 5 |
|-----------------------------------------------------------------------------------|---|---|---|---|---|
| 11. When I am bored in English reading class, I prepare for my next class.          | 1 | 2 | 3 | 4 | 5 |
| 12. When I am bored in English reading class, I do my homework.                    | 1 | 2 | 3 | 4 | 5 |
| 13. When I am bored in English reading class, I study for another subject.          | 1 | 2 | 3 | 4 | 5 |
| 14. When I am bored in English reading class, I think about my homework or something I have to study. | 1 | 2 | 3 | 4 | 5 |
| 15. When I am bored in English reading class, I copy the homework for my next class. | 1 | 2 | 3 | 4 | 5 |

| Behavioural-avoidance                                                              | 1 | 2 | 3 | 4 | 5 |
|-----------------------------------------------------------------------------------|---|---|---|---|---|
| 16. When I am bored in English reading class, I talk to the person sitting next to me. | 1 | 2 | 3 | 4 | 5 |
| 17. When I am bored in English reading class, I start talking to my classmate sitting next to me. | 1 | 2 | 3 | 4 | 5 |
| 18. When I am bored in English reading class, I distract myself by interacting with my classmate. | 1 | 2 | 3 | 4 | 5 |
| 19. When I am bored in English reading class, I try to contact other classmates who are feeling also bored. | 1 | 2 | 3 | 4 | 5 |
| 20. When I am bored in English reading class, I occupy myself with my classroom neighbor ore someone who is sitting close to me. | 1 | 2 | 3 | 4 | 5 |