Development of an Islamic Temporal Focus Scale: Factorial Analysis, Validity, and Reliability

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Abstract
This study aimed to collect the largest possible number of items from the Islamic literature. The validity of these items was verified by a sample of experts and academics (N=21). Through in-depth interviews using Delphi procedures, 59 items were derived as an initial list for the scale. After several statistical analyses, including EFA and CFA, they were reduced to 32 items. The results of EFA (N=369) showed three main factors for Islamic Temporal Focus Scale (ITFS) extraction with a sum of squared loading of 64.51%. For the third sample (N=439), which was used for CFA, three factors confirmed the convergent validity of this scale, which is related to the Arab Scale of Happiness, the Measure of Reverence in Muslim Prayer, and the DASS-21, including the factors of depression, anxiety, and psychological stress. The results showed that the reliability values were stable. The values of Cronbach's alpha were 0.780 for the past factor, 0.920 for the present factor, and 0.810 for the future factor. With regard to the split-half reliability of each of the three factors, the results showed that the stability coefficient was 0.820 for the past factor, 0.890 for the present factor, and 0.750 for the future factor. Therefore, the ITFS provides suitable evaluation and integration with past, present, or future factors. It has health and psychological implications and scientific value for future studies that can link it to variables such as mindfulness as well as psychological and physical disorders.

INTRODUCTION
Many philosophers, religions, and traditional psychologists have been interested in the importance and quality of awareness of the present to improve people’s level of mental health and well-being. It is easy to understand the importance of the present in wellness and mental and physical health because it requires abilities in attention, awareness, and mindfulness (Wilber, 2000). There is little interest in this topic, even though the concept of mindfulness has gained the attention of many psychotherapists and has a strong relationship with the concepts of mental health and wellness (Brown & Ryan, 2003).

Gestalt theory focuses on people’s feelings and sensations and encourages people to trust them and help themselves to alleviate the pressures they suffer. The theory also helps people become more understanding of themselves by examining the reality in which they live and the present issues from which they suffer (Stewart, 1974). Perls stated that many people develop symptoms of mental illness because they are not aware of their feelings and sensations, they do not have full knowledge and awareness of what is happening in their bodies and their sensations, and they lack awareness of stimuli in their environment (Yontef & Fairfield, 2008).
According to Gestalt theory, the present is more important than the past and the future. Although the past is fundamentally linked to a person’s present, the idea of a person avoiding his past or wallowing in it and not caring about the future is a problem that must be addressed because it affects the reality of people’s lives (Cole, 2022). At the same time, we must encourage clients to discuss their experiences in a way that serves their present and helps them live and be happy with strength and confidence. When clients become aware of their present, they can confront the past and its conflicts and address unresolved problems (Fagin & Shepherd, 1970).

A focus on time is related to psychological health factors (Shipp & Aeon, 2019; Stolarski et al., 2020), which involve individuals’ ability to live in the reality of the past, present, or future (Shipp et al., 2009; Suddendorf & Corballis, 2007). Accordingly, both positive and negative events are indicators of the level of psychological health, well-being, life satisfaction, and anxiety (World Health Organization, 2022). The past is positively linked to dealing with unresolved issues and solving problems that affect an individual’s life in the present. Being immersed in a painful past involves a high degree of anxiety (Diaconu-Gherasim & Mardari, 2021; McKay et al., 2017) and a low degree of self-esteem (Mello et al., 2022).

When people think exaggeratedly about the past, they tend to ruminate about negative events and experiences and thus feel guilty about the past, especially in relation to traumatic situations. Accordingly, focusing on the past positively predicts anxiety and negatively predicts life satisfaction (Shipp & Aeon, 2019). In contrast, a focus on the present has been positively associated with life satisfaction and negatively associated with anxiety, including sincerity and loyalty, enjoying life, and exploiting the present moment with happiness and pleasure, which enhances people’s level of psychological health (Diaconu-Gherasim & Mardari, 2021; McKay et al., 2017). An exaggerated focus on the past limits the possibility of achieving goals in the future (Loose et al., 2022). Li and Lyu (2021) found that thinking that focuses on a positive future can strengthen hope and optimism and has benefits for reducing depression.

From an Islamic religious perspective, time is one of the most important blessings that God Almighty bestowed upon His servants. Because of the great importance of time in Islam, God Almighty swore by it in the Holy Qur’an in many places and in many words, including eternity, now, today, and other words. Time is a person’s lifespan, and the noble verses indicated the greatness of this blessing. God Almighty said in His Holy Book, “And He subjected for you the sun and the moon, continuous [in orbit], and subjected for you the night and the day” (Qur’an, 14:33). The Prophet Muhammad said, “Take advantage of five things before five: your youth before your old age, your health before your sickness, your wealth before your poverty, your free time before your work, and your life before your death” (Sahih Al Bukhari, 3355).

God Almighty swore by time in multiple places due to its greatness and importance and singled out this oath by swearing parts of it in the openings of many surahs. He swore by the era when the Almighty said, “By time, Indeed, mankind is in loss, Except for those who have believed and done righteous deeds and advised each other to truth and advised each other to patience.” (Qur’an, 103:1-3). The oath here was made by the afternoon, meaning time, and he swore by the dawn and said, “By the dawn. And the ten nights. And [by] the even [number] and the odd. And [by] the night when it passes” (Qur’an, 89: 1-4). He swore by the night and the day and said, “By the night when it covers. And [by] the day when it appears” (Qur’an, 92:1-2). In another place, God Almighty said, “And it is He who has made the night and the day in succession for whoever desires to remember or desires gratitude” (Qur’an, 25:62). This oath indicates the importance of time in Islam and its impact on individuals and society.

Umm Kulthum (2023) emphasized the importance of the present by saying,” Tomorrow we forget, so we do not grieve over a past that has taken over, tomorrow we will go out, we do not know the place of the unseen. And tomorrow we will live for the prosperous present. Not only the unseen may be sweet, but the present is sweeter”.\n
There are two other scales that have been widely used, and they are the oldest that address
the topic of time. The first consists of 56 items and five factors called the positive past, the
negative past, current fatalistic, current hedonistic, and the future (Zimbardo & Boyd, 1999).
The second scale consists of 28 items and includes three factors called past, present, and future
(Holman & Silver, 1998). Shipp et al. (2009) developed the Time Focus Scale, which has been
studied in many countries around the world, including the United States (Shipp et al., 2009),
Canada (Rush & Grouzet, 2012), Northern Ireland (McKay et al., 2012), Germany (Strobel et
al., 2013), Australia (Zacher, 2016), and Japan (Chishima et al., 2017). This scale focuses on
the degree to which people use time in their lives and how they perceive the events of the past,
present, and future. Shipp et al. (2009) found through the scale they developed for this purpose
that there are three factors to measure a focus on time: a focus on the past, present, and future.
However, results related to the stability of the scale are still unclear (Cronbach's alpha = 0.58).
Therefore, there is some skepticism about the psychometric properties of this scale, which calls
for further studies (Chishima et al., 2017). In Turkey, Arslan and Bayraktar (2021) conducted a
study entitled “Focusing on the Past, Present, and Future: Psychometric Properties of the
Temporal Focus Scale in Turkish Culture”. They concluded that the scale has appropriate
psychometric properties and that it consists of three factors, the past, present, and future.

The problem of the study and its importance

The focus on time can be divided into the categories of past, present, and future. The
challenge lies in how people integrate these three components to form their own perceptions of
life and mental health factors (Shipp & Aeon, 2019). Figure 1 represents the three categories of
time and the possibilities of interaction between them. Correction of the scale is carried out
according to the independence of each factor separately. There is no total score for the scale.
The letter A indicates the interaction of both the past and the present, or the degree and
percentage of time that a person focuses on the past in the present. The letter B also indicates
the interaction of the past and the future and thus the percentage of a person’s focus on the past
and the future, while area C refers to the interaction of both the present and the future and the
degree of a person’s focus on the future in the present. Finally, area D refers to the interaction
of the present, future, and past as well as the percentage of time that a person spends thinking
about these three areas and the extent of their influence on the present, mental health, life
satisfaction, and well-being and whether this influence is positive or negative. Note that the
greater the proportion of space in the present that allows past problems to be solved and the
future prepared for efficiently and effectively, the higher the level of psychological health (Nan
& Qin, 2018).

Increased focus on the past in the context of sadness, self-flagellation, and grief is
depression, while anxiety and discomfort lie in focusing on the future while neglecting the
present (Li et al., 2021). Figure 1 can be redrawn in different shapes, proportions or areas
according to a person’s degree of focus on the time he or she spends during his or her total daily
time over at least the past 10 days. All human beings have a special time perspective that forces
them to live in the past, the present, or the future. None of these perspectives is better than the
other, but life may become easier if we can live positively and in balance between the three
components of time. A focus on the present enables us to enjoy the richness of life around us, a
focus on the future enables us to look forward and plan ahead, and a focus on the past enables
us to learn from our mistakes.
This study aims to develop a scale derived from Islamic literature and the religious ideological thought of Muslims to measure the temporal focus. This is important because the Islamic religion urges Muslims to exploit the present, take advantage of time, and activate it in a way that serves the future and benefits from the positives and negatives of the past with optimism and effectiveness because Muslims are held accountable on the Day of Judgment, which has its own time. Muslims are not held accountable for a bad past that they have repented of, and they are not burdened with excessive worry about the future. Therefore, the importance of this study is its development of a measure that determines people’s lifestyle, their focus on the past, present, or future, and the extent of the relationship between this temporal focus and mental health factors.

**Rationale for developing the ITFS**

The future represents a transcendence of the past and present, and the past represents the sum of memories, situations, achievements and failures that we have experienced. It may be happy or unhappy. The present is the time in which we live and is the turning point between the past and the future; it gives to the former and creates hope for the latter. Is there awareness of this trinity in our thinking? Although many studies have focused on time, no single study thus far has considered time from a religious perspective, although the Islamic religion focuses on the importance of the temporal present in human life and regulated time. There are many references to time in the Qur’an. For example, generosity denotes time and its importance in human life. This study focuses primarily on religious content stemming from Islamic law and how Muslims spend their time in the past, present, or future.

Another justification for this study is that many Muslims are preoccupied, like others on this earth, with life’s problems and future or past concerns. This study may help them put an end to their painful past by activating a happy present and moving away from a depressing past and anxiety about the future. In short, the importance of this study lies in finding an honest measurement tool that is scientifically and statistically approved to identify Muslims’ focus on time and to which of the three components, the past, present, or future, they lean in their life, thinking, feelings, and sensations. This can determine the extent of this tool’s relationship to mental health factors. Note that the tool considers each factor individually, and there is no total score.

To develop the ITFS, three studies and three samples were used. The first study consisted of a sample of 21 experts and academics in the religious, psychological, and educational fields. The goal was to conduct initial in-depth interviews to extract the largest possible number of items from the pool of required items. To verify that the scale suited the study sample and that its items were clear, useful, and directly related to the definition of the scale, the second study consisted of a sample of 369 students from Jadara University with the goal of conducting EFA. The third study focused on procedures for extracting the psychometric properties of the scale.
The sample consisted of 419 students from the same study population with the aim of conducting CFA.

**METHODS**

**Participants**

To verify content validity, the items were evaluated and modified by a group of experts according to two rounds of Delphi procedures (McKenna, 1994). The sample consisted of 21 experts who held doctoral degrees, the same sample that participated in the in-depth interviews. In the first round, experts were contacted to judge the items and their content in terms of linguistic integrity and the relationship of the items to the scale definitions according to the three factors of the scale: past, present and future. The experts were provided with instructions regarding what was required of them during the Delphi procedure.

Table 1. Distribution of participants according to demographic variables (N=439)

<table>
<thead>
<tr>
<th>Variables</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>176 (40%)</td>
</tr>
<tr>
<td>Female</td>
<td>263 (60%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>221 (50%)</td>
</tr>
<tr>
<td>21-23</td>
<td>112 (26%)</td>
</tr>
<tr>
<td>Over 24</td>
<td>106 (24%)</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>321 (73%)</td>
</tr>
<tr>
<td>Post-graduate</td>
<td>118 (27%)</td>
</tr>
<tr>
<td><strong>College</strong></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>295 (67%)</td>
</tr>
<tr>
<td>Scientific</td>
<td>144 (33%)</td>
</tr>
<tr>
<td><strong>Cumulative average</strong></td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>51 (12%)</td>
</tr>
<tr>
<td>Good</td>
<td>118 (27%)</td>
</tr>
<tr>
<td>Very good</td>
<td>124 (28%)</td>
</tr>
<tr>
<td>Excellent</td>
<td>146 (33%)</td>
</tr>
</tbody>
</table>

In-depth interviews were conducted with 21 academics who held doctoral degrees in Islamic legal sciences (N=9), psychological sciences (N=8) and educational sciences (N=4). Twelve were from Mutah University, six were from Yarmouk University, and three were from Jordan University. Fifteen participants were women. The interviews focused on Islamic religious thought in relation to the importance of the temporal, past, present, and future. The Islamic literature related to these concepts was reviewed (Koenig & Al Zaben, 2020). The interviews also focused on the positive relationship between mental health factors and the present, the past, and the future. Through these interviews, a large number of items related to this topic were explored. During the analysis of the interviews, it became clear that most of the items were related to and derived from the hadiths of the Prophet and the Qur’an. These results mostly focused on three factors: the past, the future, and the present. The interviewees unanimously agreed that the present was most important, citing evidence from the Qur’an and the Sunnah of the Prophet, such as praying on time, fasting, Hajj, and zakat in its specific month and time. They noted that all acts of worship have specific times that one must not stray from, postpone, or perform in advance. This indicates that it is important to benefit from the present in our lives and worship as much as possible.

The second study aimed to explore further tests and verify the structure of the items of this scale through the validity of the items using an EFA method after two rounds of preliminary qualitative evaluation of the ITFS.
A total of 369 students from Jadara University (269 women, 234 men) completed the survey, which consisted of scale items and demographic variables represented by gender, age, study level, specialization, and cumulative average. Table 1 presents the demographic characteristics of the study sample.

The third study aimed to identify deeper explorations of the factorial structure of the items of the Islamic scale with a focus on time using a new sample with new psychometric properties. CFA was used to test the three-dimensional model of the Islamic scale with a focus on time. The validity and reliability of the scale of indicative statistical factors was also evaluated. Importantly, the ITFS reflects the degree of a person’s religiosity and psychological health (e.g., whether the person lives in a bleak past or an anxious future and that logic directs us to move toward benefiting from the present and living efficiently, effectively, happily, consciously, and with mindfulness.

A total of 439 participants completed the survey, which consisted of a version of the ITFS with 32 items, all of which were answered on a five-point Likert scale (1=never like this, 2=most of the time not like this, 3=half of the time like this, 4=most of the time like this, 5=always like this). The sample was obtained as in the previous study, which involved obtaining the emails of all students at the university through the Admissions and Registration Department. The tool included clarification of the objectives of the study, some demographic variables and the link to the questionnaire. The tool was created through Google Drive. The participants were distributed in the same proportions as the previous study and in parallel to the study population.

**Instruments**

The following scales were used as tools to verify discriminant validity and the extent to which these tools related to the ITFS study scale.

**Measure of reverence in Muslim prayer (MRMP) (Aldahadha, 2023).** This scale consists of 39 items divided into four domains, grooving, focused attention, contemplation, and praying behavior control, answered on a four-quadrant scale from 0 to 3. The score ranges from 0 to 117, with a higher score indicating a higher degree of reverence. The scale has good psychometric properties, as shown by exploratory factor analysis and confirmatory factor analysis. The results showed that the four domains of the scale predicted 67.27% of the variance. The results also showed that the value of Cronbach's alpha for the four factors ranged from 0.85 to 0.77, while the scale as a whole had a Cronbach’s alpha of 0.92. Finally, the results of the scale were statistically significant across its four domains. The original study recommended the importance of using this scale to enhance mental health factors among Muslim worshipers because it is statistically associated with wellness, mindfulness, mental health, and happiness.

**The Arab Scale of Happiness (ASH) (Abdel Khalek, 2013).** This scale is suitable for university students and adolescents and measures their happiness. The scale consists of 15 items in addition to five neutral items used for the purpose of camouflage. Each item is answered on a five-point scale, with scores on the total scale ranging from a minimum of 15 to a maximum of 75. A higher score indicates more happiness. The results of the factor analysis showed that there were two basic factors: general happiness and a successful life. The results also showed that the test-retest correlations ranged from 0.42 to 0.77. Cronbach’s alphas and test-retest reliability ranged from 0.80 to 0.94, which indicates internal consistency that was good and reliable over time. For construct validity, the scale ranged from 0.55 to 0.79 compared to other scales, such as the Fordyce Happiness Measure, the Subjective Happiness Scale, and the Oxford Happiness Inventory.

The ASH has appropriate psychometric and statistical properties and is positively associated with psychological health, life satisfaction, optimism, love of life, and self-esteem. Therefore, the ASH has good characteristics, and the scale is equivalent to the English version.
Arabic version of the Depression Anxiety Stress Scale-21 (DASS-21) (Ali et al., 2017). The DASS-21 is an abbreviated version of the DASS-42. This self-report scale measures negative emotional states for depression, anxiety, and stress. This scale is considered appropriate in clinical situations to help clients diagnose and monitor their conditions and determine the progress of treatment along with nonclinical situations to determine the level of psychological health. This measure depends on the importance of the three factors and what the respondent remembers about the symptoms in relation to the three factors. This scale is suitable for all individuals aged 17 years and over and has been translated and applied in many languages, including Arabic. Each factor consists of seven items, and each item is answered on a scale from 0 to 3. The scores for each factor range from 0 to 21, and a score of 21 indicates a high degree of depression, anxiety, or stress. The scale achieved very high psychometric properties, with Cronbach’s internal consistency values reaching 0.77, 0.79, and 0.89 for depression, anxiety, and stress, respectively.

Procedures

The members of the sample were reached via email and mobile phone. The aim of the study and its procedures were explained to them in addition to what was expected of them and how their scientific and practical experience could benefit this study. They all agreed to conduct interviews through email responses within one to three days. Appointments and a schedule for their interviews were determined. The interview lasted from one to two hours for each person. The prepared questions were used as a protocol to conduct the interviews.

The following six questions were adopted for all interviewees. 1- Please describe in general the nature and characteristics of time from a religious perspective and how a Muslim responds to this topic. 2- What are the religious and intellectual positions and evidence derived from the Islamic religion, whether from the Qur’an or the Sunnah of the Prophet, that encourage Muslims to focus on the past, present, or future? 3- Is there a disparity in the focus on the past, present, or future? How does the Islamic religion view the past, present, and future? What is the evidence that the present is most important and is linked to mental health? 4- Is there other religious evidence that urges Muslims to focus on the present, the future, or the past? Is this focus directly or indirectly linked to mental or physical health, social relations, the level of religiosity, problem solving, and other topics? 5- What are the items that can be formulated to develop a scale to determine an individual’s focus on time based on your academic and religious experience? 6- Please provide us via email with a number of items to develop the ITFS.

In a later step, 23 experts participated and expressed their willingness to judge the instrument. The expert group consisted of 19 women and four men, all of whom worked in public universities. The meeting took place through Microsoft Teams, which is one of the approved programs in all Jordanian universities for distance learning and meetings. Sixteen of these experts held the rank of professor, four held the rank of associate professor, and three held the rank of assistant professor. Their specializations included the Islamic sciences (N=11), psychology (N=8), and education (N=4). In the second round, 20 professors participated from among these experts, while three did not participate for personal reasons. The participating professors included four men and 16 women in Islamic, psychological, and educational specializations.

The experts were asked to evaluate whether the items were related to the ITFS using a five-point Likert scale. The item-level content validity index (Lynn, 1986) was used to assess the degree to which the experts agreed that the items were related to the approved definition of the scale. When there was insufficient agreement on whether the item belonged to the scale, the item was deleted, and the arbitrators’ comments were considered in terms of the integrity of the language and linguistic formulation and the deletion or merging of duplicate items and other observations. In both rounds, these procedures were followed to evaluate and analyze the items.
With regard to the difference between the two rounds, the initial version of the scale was created in the first round, while the second round aimed to judge the changes and corrections that occurred during the previous round and whether they were in accordance with the scientific observations mentioned previously. After this stage, this scale was adapted to create a pilot scale to continue further psychometric validation.

Initially, a draft questionnaire was prepared that included questions about demographic variables. It was sent to all university students in cooperation with the Department of Admissions and Registration and the Deanship of Student Affairs. The questionnaire was sent with a simple explanation of its objectives via approved e-mails to each student at the university. The responses were collected and tabulated with the aim of subsequently analyzing their data.

Using the same procedures that were performed for EFA, we contacted the university presidency to approve the research application and provide us with students’ emails to send the study tool, including demographic variables. The procedures were conducted anonymously, and no indication of the participants’ name or any information relating to them was identifiable. The participants were also reassured that the research procedures and all data would be kept strictly confidential and that their purpose was only for research. All participants were given the freedom to answer or not answer and were told that the topic was voluntary. Finally, the participants were provided with instructions to fill out the survey and verify the submission.

Data Analysis

Data were collected through interviews that were recorded and analyzed using consensual qualitative research (CQR) (Hill et al., 2005), which was conducted by 5 doctoral students who functioned as research assistants for a nominal fee of approximately $150 for each researcher. CQR includes the following five processes: developing factors, building main ideas, conducting cross-sectional analysis, testing patterns in the data, and representing the results.

The representativeness of the categories was determined through the frequency of the categories among all sample members. A category that was repeated among all members of the sample was adopted as a general category, while a category that was repeated in more than half of the sample was adopted as typical. For a category that was repeated by less than half of the sample, the variant was adopted. Finally, a category that was repeated among 3 or fewer individuals was deleted and not approved. The results of the analysis were used to form the definition and construction of the ITFS. Categories labeled general, typical, or variant were chosen to be reformulated back into the initial master list of potential ITFS items, while other items were dropped.

Correlations were used to analyze the items ($r < 0.40$), and this value was adopted to delete any correlation with a lower value. The Kaiser–Meyer–Olkin (KMO) test was used in addition to Bartlett’s test of sphericity to verify the validity and efficiency of the factor analysis. EFA was used with SPSS-23. The Promax rotation method was chosen due to the nature of the items (Fabrigar et al., 1999). For the criterion to determine the number of factors, eigenvalues greater than 1 were used, and each factor contained three or more items. The criterion for deleting items was adopted if the percentage of satisfaction was high ($> 0.40$) and the item did not intersect with any other factor.

Additionally, we conducted CFA using AMOS 7.0 on the 33-item ITFS. The criteria that were used to test the fit of the model were as follows: the Satorra-Bentler chi square divided by the degrees of freedom, comparative fit index (CFI), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), Tucker–Lewis index (TLI), normed fit index (NFI), incremental fit index (IFI), root mean square residual (RMSR), and root mean square error of approximation (RMSEA). The analysis of correlation was conducted using SPSS 23 to evaluate convergent validity. Finally, Cronbach’s alpha coefficient was calculated to analyze the reliability of the scale.
Figure 2. Stages of scale development and evaluation

Note: ITFS=Islamic temporal focus scale; EFA= Exploratory factor analysis; CFA= Confirmatory factor analysis

RESULTS AND DISCUSSION

Results

Item generation. The items of the ITFS were developed to focus on time. A total of 78 items were received from the judges, most of which were derived from the religious, historical and social context and all of which focused on the past, future or present. Some items were rephrased without losing meaning. These items were reviewed and verified linguistically, scientifically, and religiously. Repetitive and similar items were also eliminated, and some items were modified. Ultimately, 59 items remained.

In the in-depth interviews, the participants agreed on the importance of focusing on time in the Islamic religious context and its three categories, the past, the future, and the present. The participants agreed to distribute the items under these three categories and factors. They also
agreed that every person has thoughts and psychological states that force him or her to think about the past, the future, or the present and that some people are more attracted to the past, while others are more attracted to the present or the future. They agreed that it is not possible for a person to separate from the past or the future and live entirely in the present; in other words, there must be an integration and interaction between the present, the future, and the past, and people think about these categories in different proportions (see Figure 1). The experts concluded that there is an area that controls people’s thinking and takes over most of their thoughts, feelings, and interactions as well as their behavior with others. That is, people may think more about the past, the present, or the future. All of the experts agreed that the present is most important in both the scientific and religious aspects because it is linked to the performance of religious duties and to psychological health, especially the happy present that will be the past.

All of the experts agreed that building the scale consisted of three factors: the past, present, and future. They agreed on 48 approved items for the ITFS that were expressive and representative of Islamic religious principles. These items were distributed to measure the past, present, and future. Some items were cancelled (e.g., “I believe in the saying, ‘We care about tomorrow’s stagnant and turbid water’; “I long with all interest and passion for tomorrow’s awaited bread”; “The day whose sun shades us and whose day we realize is our day”; “I believe in the saying, ‘I will only live this day’”).

Item reduction. All experts invited to participate in the evaluation of this measure completed two Delphi rounds. The I-CVI value of 0.80 was calculated as a cut off point for accepting or rejecting each item of the scale. In the first round, seven items were deleted because they did not achieve the required value and their representation was weak (e.g., “Yesterday is gone with its good and bad, and we are the children of today and the moment”; “The bright tomorrow has not yet arrived, and we must anticipate it at every moment”). Two items were also modified (“We can restart the wheel of history” and "We must remember the past and live its events because the winds push us backwards"). Two items were added (“I live my day to feed the hungry and relieve the distressed” and “I think about past events most of the day”). Accordingly, the new version of the scale consisted of 41 items that were constructed to be evaluated in the second round. In the second round, two items were deleted because their representation was weak. Therefore, the Islamic scale focusing on time was shortened to consist of 36 items. See Figure 2.

Item analysis. Based on the analysis of correlations between the items and factors, an item (“I spend most of my time thinking about past events and under the umbrella of the past”) was deleted from the past factor because the correlation was weak ($r = 0.31$). Two items were also deleted from the future factor for the same reason (“I will wait for the congratulations and suggestions of my family and friends on my birthday” and “When planning a family gathering, I am very busy and only think about the occasion itself”, $r = 0.28$ and $r = 0.37$, respectively), while one item was deleted (“For today, I am polite in my words and do not utter obscene words, slander, backbiting, or gossip”) ($r = 0.24$). Thus, the scale included 34 items that were statistically significant and positively related to the factors. These results allowed us to proceed to further analysis and verification of the validity of the psychometrics for this scale (see Table 2).

Exploratory Factor analysis. The results of the Kaiser–Meyer–Olkin test ($KMO = 0.795 > 0.01$) and Bartlett’s test ($\chi^2 = 1476.44, p < 0.001$) showed that the data were suitable for performing EFA using the Promax rotation method and an eigenvalue of more than 1. The EFA results showed that there were three main factors for the Islamic scale of time with a squared loading of 64.51%.

These three factors were adopted to complete CFA. Two items from the past factor (“We must plan to do good to help orphans, the poor, and wayfarers”) and the future factor (“Conditions have always been bad at my birthday parties”) were removed because the loading...
level was less than 0.4. This process was repeated several times to explore the best model and the strongest structure for the scale. Ultimately, the same result was produced because there were no other new results. The final version of the ITFS is presented in Table 2 with 32 items.

Table 2. EFA of three factors (N=369).

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Factor 1 Present</th>
<th>Factor 2 Future</th>
<th>Factor 3 Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I spend most of my time every day thinking about the present and feeling positive feelings</td>
<td>0.572</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I live the present in all its details</td>
<td>0.710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>We must live in the present and carry out the duties and behaviors that prepare us for the future</td>
<td>0.443</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I live my day without sadness, annoyance, or discontent and enjoy my present</td>
<td>0.683</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I pray with humility, meditate, give alms, and recite the Qur’an with contemplation and contemplation</td>
<td>0.506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I perform my prayers daily and on time</td>
<td>0.663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>On this day, I read, research, and keep up with everything new and useful</td>
<td>0.482</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I live my day to instill virtue in my heart and plant the tree of goodness in it</td>
<td>0.543</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Our duty toward the day we live is to benefit others and give back to them</td>
<td>0.620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>For this day, I live to visit every sick person</td>
<td>0.633</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I live my day to feed the hungry and relieve the distressed</td>
<td>0.463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I live my day to have mercy on the young, respect the old, and make things easy for them as much as I can</td>
<td>0.632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I am always prepared for every emergency related to the cleanliness of my room or house, and I never ignore it</td>
<td></td>
<td>0.701</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>When I stand up to pray, I think about the future a lot and feel annoying and worrying feelings</td>
<td></td>
<td>0.615</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I feel anxious and upset if I am late in performing the prayer and prepare for it before its time</td>
<td></td>
<td>0.550</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I plan to prevent disturbing and dangerous events for a safer future</td>
<td></td>
<td>0.529</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I spend most of my time every day thinking about the future and feeling anxious</td>
<td></td>
<td>0.590</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Past events are a means of planning for the future and benefiting from its results and lessons</td>
<td></td>
<td>0.713</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>The future is the most important to me, and I plan daily for the future</td>
<td></td>
<td>0.786</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Our affliction lies in ignoring our future</td>
<td></td>
<td>0.501</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>We must live the future because the water moves forward, and the caravan moves forward</td>
<td></td>
<td>0.622</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>I live my day prepared with all my strength, behavior, actions, and feelings for the future</td>
<td></td>
<td>0.605</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I constantly remember the terrible and painful situations that happened to me</td>
<td></td>
<td>0.483</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>When I stand up to pray, I remember painful past events and feel uncomfortable</td>
<td></td>
<td>0.632</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I am often late in performing my religious duties and do not perform my prayers on time</td>
<td></td>
<td>0.632</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I spend most of my time every day thinking about the past and feeling negative feelings</td>
<td></td>
<td>0.790</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>I recall the past with feelings of sadness and regret</td>
<td></td>
<td>0.573</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>We can restart the wheel of history</td>
<td></td>
<td>0.713</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>We must remember the past and live its events because the winds push us backwards</td>
<td></td>
<td>0.493</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>The happiest day in my life is the day in which I recall the events of the past with all its tragedies and joys</td>
<td></td>
<td>0.712</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I think about past events most of the day</td>
<td></td>
<td>0.612</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>I still remember the dry bread that we ate in the past</td>
<td></td>
<td>0.630</td>
<td></td>
</tr>
</tbody>
</table>

**Descriptive analysis.** Descriptive analysis revealed that the distribution for all the items was normal, acceptable and reasonable, with skewness values ranging from -0.88 to 0.92 and kurtosis values ranging from -0.59 to 0.67. The three factors were also distributed normally for the past, present, and future (See Table 3).

Table 3. The descriptive statistics for the three factors

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The past</td>
<td>10</td>
<td>28.21</td>
<td>0.27</td>
<td>7-50</td>
<td>0.07</td>
<td>0.33</td>
</tr>
<tr>
<td>The present</td>
<td>12</td>
<td>35.39</td>
<td>0.29</td>
<td>8-60</td>
<td>0.30</td>
<td>0.37</td>
</tr>
<tr>
<td>The future</td>
<td>10</td>
<td>26.47</td>
<td>0.38</td>
<td>6-50</td>
<td>-0.19</td>
<td>0.31</td>
</tr>
</tbody>
</table>
Confirmatory factor analysis. In parallel with the results of Study 1, the results of the CFA for the second sample showed that there were three basic factors for the ITFS, as stated in the results of the second study and the EFA. The model fit was acceptable (See Table 4).

Table 4. The goodness indicators of fit for the ITFS model

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
<th>Cut of point criteria</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>χ²</td>
<td>321.13</td>
<td>p &lt; 0.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>χ²/df</td>
<td>3.258</td>
<td>p &lt; 0.01</td>
<td>Accepted</td>
</tr>
<tr>
<td>CFI</td>
<td>0.938</td>
<td>CFI = ≥ 0.90</td>
<td>Accepted</td>
</tr>
<tr>
<td>GFI</td>
<td>0.940</td>
<td>GFI = ≥ 0.90</td>
<td>Accepted</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.927</td>
<td>AGFI = ≥ 0.90</td>
<td>Accepted</td>
</tr>
<tr>
<td>TLI</td>
<td>0.930</td>
<td>TLI = ≥ 0.90</td>
<td>Accepted</td>
</tr>
<tr>
<td>NFI</td>
<td>0.919</td>
<td>NFI = ≥ 0.90</td>
<td>Accepted</td>
</tr>
<tr>
<td>IFI</td>
<td>0.962</td>
<td>IFI = ≥ 0.90</td>
<td>Accepted</td>
</tr>
<tr>
<td>RMR</td>
<td>0.076</td>
<td>RMR = ≤ 0.08</td>
<td>Accepted</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.069</td>
<td>RMSEA = ≤ 0.08</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

The Pearson test was used to identify the relationship between the factors of the ITFS and the AHS, the DASS-21 scale, and the MRMP. The results indicated that there were statistically significant correlations at the level of p < 0.01 or p < 0.05, and the values of the correlations ranged from 0.42 to 0.870 (see Table 5).

Table 5. Convergent validity of ITFS factors with happiness, MRMP, and DASS-21.

<table>
<thead>
<tr>
<th></th>
<th>MRMP</th>
<th>ASH</th>
<th>DASS-21 Depression</th>
<th>DASS-21 Anxiety</th>
<th>DASS-21 Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past</td>
<td>-0.44</td>
<td>-0.62</td>
<td>0.77</td>
<td>0.43</td>
<td>0.60</td>
</tr>
<tr>
<td>Present</td>
<td>0.87</td>
<td>0.45</td>
<td>-0.74</td>
<td>-0.42</td>
<td>-0.55</td>
</tr>
<tr>
<td>Future</td>
<td>-0.59</td>
<td>-0.78</td>
<td>0.43</td>
<td>0.69</td>
<td>0.51</td>
</tr>
</tbody>
</table>

There was a clear positive relationship between the DASS-21 scale and past and future factors, and there was a positive relationship between the MRMP and ASH scales and the present factor. There was a negative relationship between the DASS-21 scale and the present factor, and there was a negative relationship between the MRMP and ASH scales and both past and future factors.

To verify the stability of the scale, Cronbach’s alpha coefficient was calculated for the three factors of the ITFS using the test-retest coefficient method. The results showed that the reliability values were stable; the results were 0.78 for the past factor, 0.92 for the present factor, and 0.81 for the future factor. With regard to the value of Cronbach's alpha using the split-half reliability method, the results showed that the stability coefficient was 0.82 for the past factor, 0.89 for the present factor, and 0.75 for the future factor. These values can be considered appropriate, good, and statistically significant for the use of the scale in future studies. McDonald's omega factor value showed that the reliability values were 0.84 for the past factor, 0.91 for the present factor, and 0.75 for the future factor (Koenig & Al Zaben, 2020).

Discussion

This study aimed to develop the ITFS and determine whether Muslims live most of their time in the past, present, or future. It began by conducting a qualitative study that included in-depth interviews with experts and academics specializing in the Islamic, psychological, and educational sciences. Several interviews and meetings were conducted, which resulted in the following conclusions. A total of 78 items were used to measure the ITFS. These items were later reduced to 32 items using the EFA and CFA procedures. Many statistical tests were conducted in relation to the extent of the items’ representation and validity to eliminate ambiguous, unrepresentative, and repetitive items. In the second sample, the scale was...
distributed among a sample of Jadara University students with the aim of testing the EFA. In the third and final study, a different sample was taken from the same population to verify the validity of the CFA. The result confirmed that 32 items measured the three factors of the past (10 items), the present (12 items), and the future (10 items).

The results showed that the stability coefficient was good, the construct validity was also good, and the psychometric properties of this study were suitable for conducting further studies. The results of convergent validity showed that there was a statistically significant relationship between the three scale factors and the AHIS DASS-21 and MRMP. The results of the scale’s reliability using split-half reliability and McDonald's omega factor showed that this measure was appropriate. The statistical significances indicated that the reliability factor was appropriate and reliable for generalizing this measure to members of the study population. The results of this study were consistent with all previous studies (Chishima et al., 2017; Holman & Silver, 1998; McKay et al., 2012; Rush & Grouzet, 2012; Shipp et al., 2009; Strobel et al., 2013; Zacher, 2016; Zimbardo & Boyd, 1999).

There are many clinical explanations for the results of this measure, and it is possible to explain and discuss the results at length. There are many aspects of the Islamic religion that encourage Muslims to seize the present, exploit time, and not waste it. Returning to the past, recalling it, and grieving over its tragedies is neither desirable nor advisable because it is a waste of time, a killing of the will, and a waste of the present. The file of the past, according to wise people, is folded up and locked, and it will never see the light because it has passed and ended. Sadness cannot bring it back, and worry, grief, and distress cannot correct it because it is nonexistent. Do not live in the nightmare of the past and under the umbrella of the past. Save yourself from the ghost of the past. Do you want to return the river to its source, the sun to its rising, and the child to its beginning? His mother’s womb, milk to the breast, and tear to the eye. Your interaction with the past, your worry about it, and your burning in its fire is harm and loss, and reading in the notebook of the past is a loss of the present, a tearing apart of the grandfather, and annihilation of the present hour. God Almighty reminded the nations of what they had done, then said, “That is a nation that has passed away” (Qur’an, 2:141). The matter is over and decreed. It is futile, and there is no repeating wheel of history. The one who returns to the past is like the one who grinds flour when it was already ground and is completed.

Our affliction is that we are incapable of our present, so we preoccupy ourselves with our past, neglect our beautiful palaces, and mourn the decrepit ruins. If mankind and the jinn came together to restore what was past, they would not be able to because this is impossible. Therefore, we must not live in the past because the wind is moving forward, and the water is descending forward. The caravan is moving forward, and this is the year of life. We must turn tragedies, sorrows, and negatives into positives without stopping, wasting time and effort, and crying. At the same time, we must increase positives and benefit from them. Do not just wait for the evening; the evening is not guaranteed because in the knowledge of God Almighty, there is no yesterday, which has gone with its good and bad, nor tomorrow, which has not yet come. The day whose sunshades us and whose day we have realized is our day when our lives do not stumble between the past’s obsession, delusion, and grief and the expectation of the future, its frightening specter, and its terrifying advance. Focus your attention, creativity, toil, and diligence. For this day, you must offer humble progress and prayer. It is recited with contemplation, slowness, remembrance, despair, supplication, balance in all matters, good manners, contentment with what God has apportioned, concern for appearance, care for the body, altruism, preference and benefit to others.

For this day that we live and experience, we divide its hours and make its minutes into years and its seconds into months. We sow goodness in it, we do favors in it, we ask forgiveness for our sins, and we remember the Lord of the worlds, the Creator of this universe. We prepare to leave. We live this day with joy, happiness, security, and tranquility. We are satisfied with
our livelihood, our spouses, our children, the souls of our souls, our jobs, and our homes. God Almighty said, “So take what we have given you and be among those who are thankful. We live our day without sorrows, annoyance, anger, or envy, just as we must write on the tablet of our hearts, on our desk, and in front of our eyes a phrase that says today, if we eat hot, delicious bread, will yesterday’s dry bread harm us, or tomorrow’s absent and awaited bread?” So why do we feel sad about yesterday’s hot, salty water or worry about what has become hot and cold? If we were to be friends with ourselves with a strong, steely will, we would subject it to the theory that we will only live this day in building our entity, developing it and our talents, and approving our work. Therefore, we say for this day, “I will refine my words, so I will not utter recklessness, obscenity, insults, or backbiting or gossip for today.” I will arrange my home and library so there is no confusion or disarray but rather order and arrangement. For this day, I will live by taking care of the cleanliness of my body, beautifying my appearance, taking care of my attire, and maintaining balance in my walk, speech, movements, and dealings with others.

Just for today, I will live. I will strive to obey my Lord, Lord of the worlds, Creator of the heavens and the earth, the ruler of this universe and its course. The one who has command is God, who says to the thing, “Be,” and it is. For this day, I will perform my prayers and rituals to the fullest extent, provide myself with voluntary prayers, and recite the Qur’an with reverence and contemplation day and night until He intercedes for us on the Day of Resurrection, the Day of Judgment. The scale is a day when neither wealth nor children will benefit except those who come to God with a sound heart and do what was intended for it, the face of God Almighty.

On this day, I read, research, and keep up with everything new and useful so that I can keep up with, benefit from, and drink from the scientific revolution and technological progress that has no limit. For this day, I will live to instill virtue in my heart. In addition, I plant in it the tree of goodness and uproot from it the tree of evil with its thorny branches of arrogance, hypocrisy, envy, and hatred. Our duty is toward the day we live in. For this day, I will live and be of benefit, help, share with others and give favor to others. I will return to every sick person. I will take the hand of the bewildered and feed the hungry and relieve the distressed. I will stand by the oppressed and intercede for the guest, console the afflicted, have mercy on the young, respect the old, help them, and relieve them as much as I can. For this day, we must not rush the future until it comes, and we must not anticipate events that want to harvest the fruit before it ripens.

The future is in the knowledge of the unseen, in the knowledge of God Almighty. Tomorrow is lost, has no reality, and has no existence. So why do we preoccupy ourselves with it, worry about its misfortunes, care about its events, and expect its disasters, when we do not know whether it will come between us, or we will meet it? Therefore, it is joy and happiness. What is important is that it is in the world of the unseen that we do not realize. We do not know anything about it yet. We have to cross a bridge in order to reach it, and perhaps we will stop
before the bridge arrives, perhaps the bridge will collapse before we arrive, or perhaps we will reach the bridge and cross it safely, securely, and successfully. We are in dire need of optimism, giving the mind a wider space to think about the future and opening the book of the unseen. Being content with the expected and avoiding annoyances is undesirable because it is a struggle with the shadow.

Many people in this vast world expect hunger, poverty and disasters in their future, and all of these are among the teachings of Satan’s schools. God Almighty said, “Satan threatens you with poverty and orders you to immorality, while Allah promises you forgiveness from Him and bounty. And Allah is all-Encompassing and Knowing” (Al-Qur’an, 2:267). God promises you forgiveness from Him. Many people cry because they will be hungry tomorrow, they will be sick in a year, and the world will end in 100 years. Life is in the hands of God Almighty. The servant should not bet on nothingness. He who does not know when his time will come should not be busy with something that is lost and has no reality. Therefore, we must rely on God Almighty. Glory be to Him, wisdom and trust. Then we work and strive and do our best, but the obligation not to look at the future with pessimism, fear and dread does not mean that we should be lazy and inactive. Rather, we must work for the day that is in our hands, strive, take the means and rely on God Almighty to rebuild the universe and prepare for the future.

Limitations and strengths

Every study has limitations and difficulties. One of the most important and prominent of these limitations is that the results of this study can be generalized only to the members of the study sample, students at Jadara University, and that specific numbers were used in the different samples. The results of this study are determined by the veracity of the answers of the participants to the study tool and the veracity of the opinions of the arbitrators and experts who evaluated the content validity. Accordingly, we recommend that this scale be reused and applied to other samples inside or outside Jordan to increase the possibility of generalization to other studies in the future.

CONCLUSION

The ITFS consists of 32 items divided into three factors: past, present, and future. The results for validity and reliability showed that this scale is suitable for the Jordanian environment and can be used in other studies. It can also be used with many variables to detect other diagnostic or therapeutic aspects of health among inpatients or outpatients. It can be used in conjunction with mindfulness variables and among groups of different ages to discover new relationships that ultimately lead to the development of counseling, psychotherapy, vocational and marital counseling programs, which can be used efficiently and effectively to deal with past experiences and to control and treat symptoms of depression, anxiety, stress and negative thoughts.

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AUTHOR CONTRIBUTION STATEMENT

BA acted as the main researcher who conceptualized, formal analysis, methodology, supervisor, analyzing research results, and conducted the research. MD acted as the Co-author who supported the funding acquisition, software, administration, editing, reviewing, and resources.
REFERENCES


Umm Kulthum (2023, August 31). I will meet you tomorrow. https://www.youtube.com/watch?v=HOn8vkJewsg


