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Development and Validation of Butt & Qureshi Climate-Induced Psychosocial Adaptation Scale (BQCI-PAS 2025)

[1]Hina Rafique
[2]Dr. Mohammad Saifullah Qureshi
[3]Amna Butt
[1]PhD Psychology Scholar, Department of Social Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology University, Islamabad Campus, Pakistan
[2]Assistant Professor, Department of Social Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology University, Islamabad Campus, Pakistan
[3]M.Phil Statistics, Pir Mahar Ali Shah, Arid Agriculture University, Rawalpindi, Pakistan

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Corresponding Author*:
Dr. Mohammad Saifullah Qureshi

Abstract

The aim of this study was to establish and test the Butt and Qureshi Climate-Induced Psychosocial Adaptation Scale (BQCI-PAS 2025) in order to measure cognitive, emotional, and social adaptation in young adults in Pakistan. A mixed-methods design was used in Phase I, with a qualitative phenomenological approach in order to produce 64 items (based on lived disaster experiences), 39 of which were retained after expert review. During Phase II, 300 university students (M = 23.8, SD = 3.9) were sampled using convenience sampling. Exploratory factor analysis provided a three-factor model Cognitive Adaptation, Emotional Adaptation, and Social Adaptation with 15 items and 58.4% of the total variance. The subscales had acceptable internal consistency (alpha =.765-851). Convergent validity was supported by positive relations with life satisfaction, whereas conceptual specificity was supported by the differences in relations with climate change anxiety. BQCI-PAS 2025 is a valid and culturally based indicator of psychosocial adapting to the stressors caused by climate.

Keywords: climate change, psychosocial adaptation, scale development, disaster psychology, Pakistan

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Introduction

Climate change can be considered one of the most significant global problems of the 21st century that influences the workings of the environment and human psychology. Climate-related threats are experienced by people in many different ways, such as resilience, helplessness, and eco-anxiety (Clayton et al., 2017). Indicators of cognitive and emotional adjustment of people to changes in climate conditions have been created due to the increased necessity to understand these psychological mechanisms (Clayton et al., 2017).

Reser & Swim (2011) also identify how individuals perceive dangers, control their emotions, and change their behavior in reaction to environmental changes as all behavioral and psychological components of climate change adaptation. Although these variables are important, there are still inadequate psychometrically sound instruments that can measure psychological adaptation in a comprehensive way (Reser & Swim, 2011).

The 2025 monsoon season in Pakistan was unusually high with excessive rainfall, widespread flash floods, and a chain of infrastructure breakdown in several areas. The amount of rainfall in most regions of the country was far beyond what was expected at this time of the year, and flooding occurred suddenly in cities as well as the mountains. These occurrences resulted in the mass displacement, serious property destruction, and huge loss of life (Associated Press, 2025; UNOCHA, 2025).

National and international relief agencies said that millions of people were affected and hundreds of thousands displaced after several rounds of flooding. As a result, the crisis initiated massive, multi-agency emergency preparedness and the official statement of humanitarian requirement (Associated Press, 2025; UNOCHA, 2025). The policy and scientific literature about climate change has widely reported the physical causes and cascading socio-environmental effects of climate change, but also indicates significant gaps in the literature about psychological adaptation to climate-related disasters. Recent weather studies and national evaluations of disasters blame the rising prevalence and frequency of sudden extreme downpours to the convergence of factors, which include high levels of atmospheric moisture due to rising temperatures, glacial melting in high-altitude catchments, and intensified monsoon dynamics processes that are congruent with anthropogenic climate change (NDMA), 2025; Yale Environment 360, 2025).

In spite of this accumulating evidence most empirical studies have mainly concerned infrastructure vulnerability, hydrometeorological surveillance and emergency response procedures. Comparatively low levels of peer-reviewed literature, in contrast, have studied the psychosocial effects of climate change-induced disasters or created and confirmed measures to determine community-level psychological adaptation to acute, highly localized extreme events.

This gap brings out the theoretical and practical need to have a psychometrically sound, culturally based scale, including the BQCI-PAS 2025, to assess psychological adaptation following episodes of climate crisis. The objective of the present research is to develop and test a Butter & Qureshi Climate Change Psychological Adaptation Scale (BQCI-PAS 2025) to assess the behavioral, affective, and cognitive behaviors of psychological adaptation to climate change.

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Theoretical Background

The Transactional Model of Stress and Coping

Transactional Model of Stress and Coping was originally introduced by Lazarus & Folkman in 1984 and it states that psychological adaptation occurs when stressors are evaluated and subsequent coping mechanisms are considered. This method provides a platform of understanding the manner in which individuals interpret and respond psychologically to the predicament of climate change (Lazarus & Folkman, 1984). Clayton & Karazsia (2020) also mention that it is essential to measure individual differences in emotional adaptability, as the environmental concern and eco anxiety have a quantifiable psychological impact. They developed the Climate Change Anxiety Scale, which is more distress instead of adaptive coping (Clayton & Karazsia, 2020). To assist individuals, manage perceived risks and uncertainty associated with climate-related risks, Reser, Bradley, & Ellul (2014) theorized psychological adaptation to climate change as a process that consisted of proactive coping, cognitive reframing, and emotional regulation. This conceptualization underscores the need to have a complex assessment tool that is capable of describing a number of psychological adaption mechanisms.

The Protective Action Decision Model

Protective Action Decision Model (PADM) is a model that was developed by Grothmann & Patt in 2005 and includes social, emotional, and cognitive factors of risk perception and adaptive behavior (Grothmann & Patt. 2005). This theoretical framework supports the BQCI-PAS 2025 behavioral goals and elements of self-efficacy. Fritze, Blashki, Burke, & Wiseman (2008) explain that psychological adaptability is contingent on the personal meaning-making, control perception, and communal resilience. Consequently, the psychological dimension of the person as well as that of the society, should be incorporated in the establishment of scales.

Objectives

1. To develop the Butt & Qureshi Climate-Induced Psychological Adaptation Scale (BQCI-PAS 2025).
2. To develop psychometric properties of the Butt & Qureshi Climate-Induced Psychological Adaptation Scale (BQCI-PAS 2025).
3. To determine the primary psychological factors that underlie each person's response to climate change adaptation.

Material and Methods

To explore the lived experiences of young adults affected by the climate change-related disasters, the qualitative phenomenological approach was employed in this study. Participants were chosen based on pre-defined inclusion criteria to ensure that their experiences were relevant to the study. They did not cover the rest who consented to take part. The participants with a diagnosis of serious mental disorder were not included in the study. Voluntary participation and informed consent was ensured among all participants. Confidentiality was maintained during the investigation. Phase 1 of the study entailed the identification of pertinent constructs, development of a pool of items, and the assessment of the items; phase 2 entailed data collection, determination of validity and reliability and scale development.

The semi-structured interviews took between forty-five and sixty minutes. Interviews were conducted in safe and distraction free environments and recorded on audio with consent. Transcription and English translation did not alter the meaning of the

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interviews. Thematic analysis was used to identify recurrent patterns and ideas related to psychological adaptation (Braun and Clarke, 2006). Themes developed depending on the production of items.

Phase I

Item Generation Pool

The qualitative findings were transformed into potential scale questions according to DeVellis (2017) and addressed all the mentioned domains behavioral coping techniques, emotional/psychological reactions, and social adaptation. The participants were required to have resided in areas that had been affected by the climate-related disasters and must have been aged between 18 and 35 years. A convenient sample was selected consisting of 20 young individuals (18-35 years) who had been directly affected by climatic disasters in Islamabad. Equal representation of both male and female ensured diversity of opinion.

Evaluation of Scale Items

Interviews were recorded accordingly upon following ethical principles. First, 64 items were developed, and they were reviewed by experts in the field of psychology and scale development to ensure the representativeness, relevance, and clarity of the constructs. All double barrel items, and those that did not measure psychosocial adaptation were discarded and only 39 items were included in the data collection as a response to expert criticism. A 5-point Likert scale was used to measure every item on the scale. The response categories of the scale include 1 strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree. The lowest score in the scale is 39 and the highest is 195. Every item has a good wording. There is no cutoff score in the scale.

Phase II

The study's second phase focusses on scale development, validity, and reliability. Factor analysis and convergent validity are used to establish the scale's psychometric qualities for the said purpose it was hypothesized that

1- There is a positive correlation between Climate-Induced Psychosocial Adaptation Scale and life satisfaction
2- There is a negative correlation between Climate Change Anxiety Scale, abbreviated version and Climate-Induced Psychosocial Adaptation Scale.

Sample

Male (n = 150) and female (n = 150) samples (N = 300) were chosen from various government academic institutions in the private sector of Islamabad and Lahore by considering the age, gender, socioeconomic status, and marital status as of demographic variables. The sample was chosen using the convenient sampling strategy .

Instruments

The following instruments were used to collect data.

1. Participant Consent Form
2. Demographic Sheet
3. Butt and Qureshi Climate-Induced Psychosocial Adaptation Scale (BQCI-PAS 2025)
4. Satisfaction with Life Scale
5. Climate Change Anxiety Scale, abbreviated version

Procedure

A number of local undergraduate and graduate students in a number of private academic institutions were approached to obtain the required data. The data was collected using three scales and a demographic data sheet. Purposive sampling methods were used to

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select the research participants. As all the data were collected in the classroom, it was strictly followed so that the study hours of the research participants would not be affected adversely. Data was collected with the help of the Butt and Qureshi Climate-Induced Psychosocial Adaptation Scale (BQCI-PAS 2025), Satisfaction with Life Scale and Climate Change Anxiety Scale, its abbreviated version.

Results

In the study 20 participants were included for Interview (table 1).

Table 1: ***Demographic data of the participants for the study (N=20)***

Characteristic	**Male (n=10)**	**Female (n=10)**	**Total (N=20)**
Gender	10	10	20
Directly Affected by Climate Disaster	10	10	20

N=20

Table 2: ***Description of the demographic variables of the research Participants***

	N	**Range**	**Mean**	**SD**	**Variance**	**Skewness**	**Kurtosis**
Age	300	13.00	23.80	3.933	15.472	.180	-1.669
Gender	300	1.00	1.50	.501	.251	.000	-2.013
Marital Status	300	1.00	1.37	. 484	.234	.541	-1.719
S.E.S	300	2.00	1.89	. 427	.183	-.612	1.903

(N=300), S.E.S = *Socioeconomic Status*

For Establishing Factorial Structure of Butt & Qureshi Climate-Induced Psychosocial Adaptation Scale (BQCI-PAS 2025)

Exploratory Factor Analysis

The appropriateness of the data was checked with Kaiser MeyerOlkin (KMO) measure of sampling adequacy and the Test of Sphericity before the factor analysis was conducted in terms of Exploratory Factor Analysis (EFA). The minimum recommended value of KMO is.60, and the value of (.69) is greater than this value, so the sample size was sufficient to use factor analysis, and the relationship between variables was compact enough to provide reliable factors (Kaiser, 1974). The fact that the Test of Sphericity provided by Bartlett was statistically significant, 2= 5523.17, p < .001, indicates that there are significant relations among the variables and justifies the fact that the further factor analysis should be conducted. The commonalities of all the items were considered to ascertain the percentage of variance that the extracted components explained. The loading of items less than.40 were dropped. The communalities that were extracted were between.42 and.81, which means that a high percentage of the variance in each item was accounted by the remaining elements. A majority of the items had moderate and high communalities (≥ .40), which indicated that they were adequately represented in the component solution. In particular, such items as CD35 (.802), CD38 (.741) and CD16 (.702) displayed especially high communalities, which points to the great representativeness of the extracted components. Nevertheless, CD 2 (.47), CD 03 (.44) and CD11 (.42) is low though significant. The threshold suggested by the authors as being .40, which justifies their inclusion in the analysis. The items with a loading less than.40 were dropped. The three items with 58.4% variance with fifteen retained items. The constructs are explained and elaborated below in table 3 and table 4 Fifteen items were retained and the remaining twenty three items such as Item No 1, 4,5, 6, 7, 8,9,10,12,13,14,15,19,20,24,25,26,28,29,30, 32, 36 and 37 were dropped in that they failed to meet various criteria such as loading less

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than .50. Based on three factors, it was identified:

Cognitive Adaptation

Factor I is composed of seven items. items 2,3,16,17,23,33,34 measure the how an individual think about their situation, including modifying beliefs and values. Loading on the items of factor 1 ranges from .800 to .51. Reliability coefficient (Cronbach's α) of the sub scale Cognitive Adaptation was 0.851

Emotional Adaptation

Factor II is composed of five items 11,18,22,35,39 measure individual's ability to recognize, regulate, and manage emotional responses (e.g., fear, anxiety, sadness, frustration) resulting from exposure to climate-related stressors. Loading on the items of factor 1 ranges from .902 to .513. Reliability coefficient (Cronbach's α) of the sub scale Cognitive Adaptation was 0.815

Social Adaptation

Factor III is composed of three items 21, 31 and 38 measure capacity to maintain social relationships, fulfill roles, and sustain daily functioning despite disruptions caused by climate-related stressors. Loading on the items of factor 1 ranges from .857 to .685. Reliability coefficient (Cronbach's α) of the sub scale Cognitive Adaptation was 0.765.

Table 3: ***Factorial structure of the Butt & Qureshi Climate Induced Psychosocial Adaptation Scale***

(BQCI-PAS 2025)

Item	Factor 1: Cognitive Adaptation	Loadings
CD2	I felt stressed and worried during and after the disaster.	.64
CD 3	I kept myself busy with daily tasks to cope with stress.	.50
CD 16	I became more responsible after the disaster.	.824
CD 17	My faith gave me strength during the disaster.	.734
CD 23	I tried to remain hopeful despite difficulties.	.600
CD 33	The disaster made me resilient.	.800
CD 34	I am now more careful about safety and health.	.749
	Factor II: Emotional Adaptation	
CD 11	The disaster affected my family's emotional well-being.	.513
CD 18	Physical work helped me release emotional pressure.	.902
CD 22	I feel emotionally stronger than before.	.595
CD 35	Doing daily household work gave me a sense of control.	.894
CD 39	I felt unsafe in my living environment after the disaster.	.619
	Factor III: Social Adaptation	
CD21	Talking to family members helped me feel better.	.835
CD 31	I shared my worries with friends or neighbors.	.685

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CD 38	Family and community support is needed during disasters.	.857

Table 4: ***Factor Reliability of the Butt & Qureshi Climate Induced Psychosocial Adaptation Scale***
(BQCI-PAS 2025)

Factor No	Subscale	Cronbach's alpha
1	Cognitive Adaptation	.851
2	Emotional Adaptation	.815
3	Social Adaptation	.765

Table No 4 indicates the value of Cronbach's alpha of all the extracted factors. All of values are in the acceptable range. All three subscales have good internal consistency.

Validity Analysis

The subscales of Butt & Qureshi Climate Induced Psychosocial Adaptation Scale (BQCI-PAS 2025) were found positively correlated with Satisfaction with Life Scale indicating convergent validity of the newly developed Scale.

Table 5: ***Correlation Matrix of subscales of Climate induced Psychosocial Adaptation (BQCI-PAS 2025) Satisfaction with Life Scale and Climate Change Anxiety Scale, abbreviated version***

	Factor I	Factor II	Factor III	Satisfaction with Life	Climate Change Anxiety
Factor I	-				
Factor II	.426**				
Factor III	.225**	.269**			
Satisfaction with Life	.436**	.343**	.359**		
Climate Change Anxiety	.505**	.377**	.389**	.612**	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

The Pearson correlation analysis was used to test the relationship between cognitive adaptation, emotional adaptation, social adaptation, life satisfaction, and climate change anxiety. It was found that all the correlations were positive and statistically significant at the.01 level. Emotional adaptation (r =.426, p <.001) and social adaptation (r =.225, p <.001) were positively correlated with cognitive adaptation moderately and positively (r =.426, p <.001 and r =.225, p <.001), and the vice versa.

There was also a positive relationship between cognitive adaptation and satisfaction with life (r =.436, p <.001) and climate change anxiety (r =.505, p <.001). Emotional adaptation was also positively correlated with social adaptation (r =. 269, p <.001), satisfaction with life (r =.343, p <.001) and climate change anxiety (r =.377, p <.001), indicating that positive emotional coping is also related to better-being and more awareness or concern on climate change. There was a positive correlation between social adaptation and satisfaction with life (r = .359, p < .001) and climate change anxiety (r = .389, p < .001), which showed that greater social functioning is related to satisfactory life and high climate-related anxiety. Climate change anxiety was positively correlated with

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satisfaction with life (r =.612, p <.001), indicating that more engaged and adaptive people in their lives might also report more climate change-related concern.

Discriminant validity was examined by assessing the relationships between climate change anxiety and the three items of the recently developed psychosocial adaptation scale (cognitive, emotional, and social adaptation). The positive correlates of climate change anxiety with cognitive adaptation (r =.505, p <.001), emotional adaptation (r =.377, p <.001), and social adaptation (r =.389, p <.001) were moderate to high, as opposed to predicting weak or negative effects. Importantly, all the adaptive variables were not correlated with climate change anxiety in any modest way.

Discussion

To fill the gaps of culturally-relevant and psychometrically-powerful measures of assessing adaptive psychological responses to climate-related disasters, the present study was performed to develop and test the Climate-Induced Psychosocial Adaptation Scale (BQCI-PAS 2025). Consistent with the existing theoretical frameworks of stress, coping, and climate adaptation, the findings provide a significant amount of empirical data to a complex conceptualization of psychosocial adaptation. An exploratory factor analysis identified a stable three-factor structure which comprised cognitive-behavioral, affective, and social-functional adaptation.

The data was found to be suitable in terms of factor analysis because acceptable KMO values and a large Bartletts Test of Sphericity indicated that there was sufficient intercorrelations between items to extract factors. There were good communalities in the items that were retained and this means that there is a lot of item variance that is captured by the extracted factors. The conceptual clarity and parsimony of the final scale was enhanced with the systematic removal of poorly loading items.

The conceptual consistency between establishing cognitive adaptation as a determinant and conceptualizing psychological adaptation as a product of cognitive evaluation and coping in reaction to environmental stresses, is the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984). Individuals are actively reinterpreting the hardship caused by climate and engage in problem-oriented and meaning-oriented coping, which is proven by items that articulate responsibility, meaning-making based on faith, hopefulness, and preventive actions. The outcome is also consistent with the Protective Action Decision Model (Grothmann & Patt, 2005), which emphasizes self-efficacy and cognitive evaluation as the conditions to adaptive behavioral reactions in the condition of environmental threat.

The emotional adaptation factor measured all the attributes of affective recovery following climate disasters, emotional control, and perceived emotional strength. This feature is in line with the studies of climate psychology highlighting emotional control as an important process in responding to climate related risks and demonstrating adaptive emotional processes instead of psychopathology (Reser et al., 2014). The BQCI-PAS 2025 builds upon this study operationalizing emotional adaptation as a process of regulation and recovery, following adaptive coping theories, as opposed to the existing tools that mostly measure climate-related distress or anxiety (Clayton & Karazsia, 2020).

The social adaptation factor highlights the significance of social support, role continuity and interpersonal contacts to psychosocial adjustment. This finding is consistent with ecological and community-based theories of adaptation, which emphasize

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the impact of social systems on psychological responses to climate change (Fritze et al., 2008; Reser & Swim, 2011).

The significance of this factor can be attributed to the collectivistic sociocultural environment in Pakistan, in which the ability to overcome the major changes in the environment relies on the support of the family and the community. This feature is added to enhance the BQCI-PAS 2025 cultural relevance and contextual sensitivity. Internal consistency reliability was evident in all three subscales and the values of Cronbachs alpha were beyond acceptable levels. There were also substantial positive correlations between life satisfaction and psychological adaptability variables, which also reflected convergent validity. These findings are theoretically consistent with models of stress and adaptation, according to which better wellbeing is correlated with effective coping and adaptation.

The weak intercorrelsation between subscales support a multidimensional and not a unidimensional structure since they indicate that despite the fact that the dimensions are related, they still remain empirically different. Although these findings seem to disagree with other past studies, discriminant validity does not demand zero or negative correlations, but rather evidence that constructs are both connected and differentiated.

The correlations that were observed were lower than the level of construct redundancy even though they were statistically significant meaning that psychological adaptability and anxiety as a result of climate change are not gauging the same underlying construct. Clayton & Karazsia (2020) theorize climate change anxiety as an appropriate emotional reaction that can prompt engagement and adaptive behaviors, which might be the cause of the positive relationships that are presented with psychosocial adaptation. In theory, awareness, concern, and emotional commitment to climate issues can be accompanied by adaptive cognitive, emotional, and social reactions, particularly in a climate-prone environment (Clayton and Karazsia, 2020; Lazarus & Folkman, 1984; Reser, Bradley, & Ellul, 2014).

As a result, instead of the absence of discriminant validity, the positive correlations in this research are likely to represent concomitant activation of anxiety and adaptation. In general, the trend in results indicates the complex and dynamic interconnection between adaptation and climate anxiety-related anxiety as well as the validity of the conceptual distinctiveness of the elements of adaptation. The duration of time elapsed since the event of climate change is a considerable factor that could explain the pattern of connections that is observed.

The information employed in this research was collected over half a year following the climate-related disaster, and it is probable that it may have diluted the emotional effect of the incident. Previous research has revealed that the effects of acute anxiety responses tend to reach their peak soon after exposure and diminish slowly as victims settle down and continue with their normal lives (Bonanno et al., 2010; Galea et al., 2005; Norris et al., 2002). Thus, instead of acute pain directly associated with the incident, the amount of climate change anxiety in the present group might signify a lingering or extensive concern. Individuals tend to engage in social adjustment, emotional control and cognitive reappraisal more in this post-acute period all of which are critical components of psychosocial adaptation. Consequently, the anxiety can be now present along with the adaptive processes instead of a totally maladaptive response.

The absence of weak or negative relationships between climate change worry and adaptation could perhaps be attributed to this temporal distance. Instead, the ones who

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had time to understand the event could have developed coping mechanisms as they were on guard or feared the eventual climatic risk in future. Thus, instead of an immediate anxiety response occurring after the disaster, the observed positive correlations in the present study are likely to be a period of healing and adaptation.

In general, the findings confirm the theoretical difference between anxiety and psychosocial adaptation as they suggest that climate change anxiety can be less acute and more highly correlated with adaptive awareness and long-term adjustment when the tests are conducted a few months after a climate event. By analyzing the results together, the findings suggest that psychosocial adaptation to climate-related disasters should be considered a dynamic, multifaceted process comprising of social functioning, emotional control, and cognitive assessments. The BQCI-PAS 2025 is an experimental tool that is used to capture these adaptive mechanisms within a climate-vulnerable environment.

Conclusion

The BQCI-PAS 2025 was developed and tested as a successful and valid instrument of assessing the psychological adaptability of the youth to climate-related disasters. The scale possesses a sound theoretically based three-factor structure, demonstrated sufficient internal consistency, and high correlations with life satisfaction, which is strong evidence regarding the construct validity of the scale.

The BQCI-PAS 2025 offers a comprehensive and strengths-based assessment of adaptation incorporating the ideas of the Protective Action Decision Model, the Transactional Model of Stress and Coping, and the recent achievements in climate psychology. The scale provides an important methodological value, with high research, intervention design, and policy-based implications of disaster response, because it emphasizes adaptive psychological functioning, as opposed to climate-related suffering. The ongoing study successfully developed and tested the BQCI-PAS 2025 which can be used by the Researchers, clinicians, and policymakers to assess the effectiveness of climate-oriented mental health activities, assess psychosocial needs, and quantify adaptive skills. Its culturally based development also makes its application to individuals at risk by climate change even better.

Limitations

Although it has made its contributions, there are some few things to be considered. To begin with, the findings might not be as relevant to older adults, rural populations, or individuals with lower educational access due to the sample being predominantly composed of young adults who were students at academic institutions.

Future research ought to examine the effectiveness of the BQCI-PAS 2025 in a diverse range of sociocultural and demographic groups. Second, the cross-sectional design limited the possibility to study the cause-effect relationships or the change in psychosocial adaptation across time. Third, the use of self-report measures could have caused bias in responses such as social desirability and recall bias. Lastly, the confirmatory factor analysis is required to further test the three-factor model and test other models, including higher-order or bifactor models, although the exploratory factor analysis provided good preliminary evidence on the structure of the scale. The theoretical and empirical soundness of the scale would be enhanced further by further validation with other related dimensions such as post-traumatic growth and climate anxiety.

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Competing Interests:

Authors have no conflict of interest.

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Ethics Statement:

All participants of the study were informed about the aim of the Study. It was informed that there is no risk involved in this study, and their information will be kept private and used only for research purposes. Their name and personal information will remain confidential and will not be included in any report. Participation in this study involves no financial cost or burden.

Data Availability:

The data analyzed in the current study is available from the corresponding author on reasonable request.

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Title of the Study:

Subject: Development and Validation of Butt & Qureshi Climate Induced Psychosocial Adaptation Scale (BQCI-PAS 2025)

This study is being conducted solely to fulfill the requirements of the PhD. Psychology. The following enclosed Scale will be used to collect information from the participants.

- Participant Consent Form
- **Demographic Sheet**
- **Butt & Qureshi Climate Induced Psychosocial Adaptation Scale (BQCI-PAS 2025)**
- **Satisfaction with Life Scale**
- **Clyton and Karazsia (2020) Climate Change Anxiety Scale, abbreviated version**

Instructions for participants:

These scales do not have any concept of right or wrong answers. Please select the response for each statement that best reflects your true feelings and experiences.

Researcher:

Hina Rafique Butt_____

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PARTICIPANT CONSENT FORM

I agree to take part in the research study. I know that I will be asked to answer some questionnaires, and the process will take about 20 to 30 minutes.

I understand that my participation is voluntary and that I can skip any question or stop participating at any time. I also understand that there is no risk involved in this study, and my information will be kept private and used only for research purposes. My name and personal information will remain confidential and will not be included in any report. Participation in this study involves no financial cost or burden.

If I have any questions, I can ask the researcher at any time. By signing below, I confirm that I have read this information, understand it, and agree to participate in the study.

Signature of Participant:_____

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DEMOGRAPHIC SHEET

Instructions:

Please provide the following information. Your responses will remain confidential and used only for research purposes.

1. Age:
2. Gender: **Male** **Female**
3. Marital Status: **Single** **Married**
4. Socio-economic status: **lower Middle** **Middle** **Upper Middle**
5. Any chronic illness or disability **(optional):** **Yes** **No**
6. **Any other comments or information you would like to share:**

_____

_____

_____

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Butt & Qureshi Climate Induced Psychosocial Adaptation Scale (BQCI-PAS 2025)

Please indicate your response in front of every statement.

S.No	Item	Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
1	My house was damaged because of the climate disaster.					
2	I felt stressed and worried during and after the disaster.					
3	I kept myself busy with daily tasks to cope with stress.					
4	My daily routine changed a lot after the disaster.					
5	My family lost its main source of income due to the disaster.					
6	Prayer or religious practices helped me stay calm.					
7	We had problems getting clean water after the disaster.					
8	Medical care was difficult to access after the disaster.					
9	My family had to borrow money to survive.					
10	The disaster created long-term financial stress for my family.					
11	The disaster affected my family's emotional well-being.					
12	Small activities helped distract me from stress.					
13	We received food, water, or shelter from others.					
14	I was able to manage my emotions after the disaster.					
15	I feel more connected to my community.					
16	I became more responsible after the disaster.					
17.	My faith gave me strength during the disaster.					
18	Physical work helped me release emotional pressure.					
19	I changed how I think about the disaster to cope better.					
20	I felt stressed about having enough food after the disaster.					
21	Talking to family members helped me feel better.					
22	I feel emotionally stronger than before.					
23	I tried to remain hopeful despite difficulties.					
24	Neighbors or friends helped my family during the crisis.					
25	Government or NGOs provided useful help.					
26	Support from friends or neighbors helped me cope.					

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27	I encouraged my family members during hard times.					
28	I stayed calm even in stressful situations.					
29	Climate change directly affects people's lives.					
30	I changed my expectations after the disaster.					
31	I shared my worries with friends or neighbors.					
32	I have noticed unusual weather changes in my area.					
33	The disaster taught me patience and resilience.					
34	I am now more careful about safety and health.					
35	Doing daily household work gave me a sense of control.					
36	Climate change increases the risk of disasters.					
37	Climate change needs urgent attention.					
38	Family and community support is essential during disasters.					
39	I felt unsafe in my living environment after the disaster.					

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Satisfaction with Life Scale

S.No	Item	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
1	In most ways my life is close to my ideal.							
2	The conditions of my life are excellent							
3	I am satisfied with life.							
4	So far I have gotten the important things I want in life.							
5	If I could live my life over, I would change almost nothing							

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Climate Change Anxiety Scale, Abbreviated Version

S.No	Item	Never	Rarely	Sometimes	Often	Almost Always
1	Thinking about climate change makes it difficult for me to sleep					
2	My concerns about climate change interfere with my ability to get work or school assignments done					
3	I try to reduce my behaviors that contribute to climate change					
4	believe I can do something to help address the problem of climate change					