



Adaptation and Validation of the Creativity Anxiety Scale in the Turkish Context

OktaY ERBAY
Hatay Mustafa Kemal
University, Turkey
oktayerbay@mku.edu.tr
0000-0002-2698-0129

Semahat İNCİKABI
Sinop University, Turkey,
sincikabi@gmail.com
0000-0002-7686-1996

Feyza ALİUSTAOĞLU
Kastamonu University
fdemirci@kastamonu.edu.tr
0000-0001-9262-5216

Lütfi İNCİKABI
Kastamonu University
lincikabi@kastamonu.edu.tr
0000-0002-7912-780X

Abstract

The Creativity Anxiety Scale (CAS; Daker et al., 2020) has been validated in several contexts, but no Turkish adaptation has yet been undertaken. This study aimed to adapt the CAS into Turkish and evaluate its psychometric properties among 344 middle school students. Following a rigorous translation–back translation procedure and expert review, confirmatory factor analysis (CFA) was conducted. The initial two-factor model, distinguishing creativity anxiety (CA) from non-creativity anxiety (NCA), showed poor fit. Sequentially freeing residual covariances between matched CA–NCA items substantially improved fit, yielding excellent indices (CFI = 0.987; TLI = 0.983; RMSEA = 0.042; SRMR = 0.023). Reliability analyses indicated strong internal consistency ($\alpha = .93$ for CA; $\alpha = .91$ for NCA). However, the near-unity correlation between CA and NCA suggests overlap with general evaluative anxiety and potential method effects. Despite these limitations, the Turkish CAS provides a valid and reliable instrument to investigate creativity-specific anxiety and its educational implications in the Turkish context.

Key words: Creative Anxiety, Creative Anxiety Scale, Turkish Adaptation.

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INTRODUCTION

Creativity is one of humans' most unique abilities, defined as the ability to produce new and functional outcomes (Runco & Jaeger, 2012). Creativity is vital for societal progress and enables us to develop new ideas that promote general well-being (Daker et al., 2020). Further, creativity is fundamental to the arts and the primary driving force behind progress in science, technology, engineering, and mathematics (STEM) fields. In an educational context, it is known that domain-specific anxieties such as math anxiety significantly impact achievement and participation. On the other hand, some studies aim to understand the relationships between general anxiety and creativity (Byron & Khazanchi, 2011). It has been stated that students with low and moderate levels of anxiety tend to be more creative, while high anxiety levels hinder the emergence of creativity (Paldi & Khuzaini, 2024). While there are studies on the relationship between anxiety and creativity, it appears that anxiety specific to creative thinking has not been directly investigated in the creativity literature (Daker et al., 2020).

To fill this gap, Daker et al. (2020) introduced the concept of creativity anxiety and demonstrated the structure's validity, reliability, and specificity with their creativity anxiety scale (CAS). The findings reveal that creative anxiety is a separate construct that predicts both creative success and attitudes toward creativity independently of general anxiety. When the Creativity Anxiety Scale developed by Daker et al. (2020) was applied, it was found that creativity anxiety extends across a wide range, from fields such as music and visual arts to many areas of science and mathematics. In a recent study, Daker et al. (2023) examined the link between creativity anxiety and low creative performance by focusing on the relationship between creativity subcomponents and creativity anxiety. They concluded that creativity anxiety is negatively correlated with the number of unique ideas individuals can generate (fluency) but not how creative these ideas are (originality). These results demonstrate complex links between creative anxiety and creative performance. Therefore, further studies examining creativity anxiety are considered important.

Findings from recent years indicate that the relationship between creative anxiety and creative cognitive performance is task-sensitive. A study conducted with multiple tasks found that creative anxiety negatively affected some performance measures (e.g., number of ideas/fluency), but this was not true for all tasks. Furthermore, it has been reported that it is also associated with increased state anxiety and effort during creative tasks (Daker et al., 2023). Interestingly, these state responses do not fully explain the relationship between creative

anxiety and performance. This finding suggests that performance can sometimes be compensated for in laboratory conditions but may be fragile in more demanding real-world contexts (Daker et al., 2023; Bullock Muir et al., 2024).

Experimental evidence on the effects of creative evaluation pressure on cognitive outputs is also noteworthy. For example, it has been found that the instruction to "be creative" generally increases associative distance, but this effect weakens at high levels of creative anxiety. In other words, "thinking creatively on demand" can be more disrupted, especially in highly anxious individuals (Bullock Muir et al., 2024). On the other hand, meta-analytic findings show that anxiety is generally negatively related to creative performance; however, this relationship varies depending on factors such as task complexity, task type, and anxiety type (Silvia & Kimbrel, 2010). Furthermore, longitudinal studies have revealed that creative anxiety can indirectly weaken idea generation and idea selection by reducing creative self-efficacy and novelty seeking. This indicates that the affective dimension captured by the scale may influence creative cognition through different mediators (Xiang et al., 2025).

This international body of evidence clearly demonstrates the need for a valid and reliable measurement tool in Turkish. An examination of previous studies reveals that the Creativity Anxiety Scale has not been adapted into Turkish. Adapting CAS to Turkish will (i) provide a theoretically sound tool capable of measuring anxiety specific to creative thinking by distinguishing it from non-creative task demands, (ii) enable the examination of relationships with measures of creative self-efficacy, tolerance for uncertainty, and creative performance, and (iii) provide critical diagnostic support for targeting teacher education and classroom interventions focused on creativity. Thus, the research will contribute to developing evidence-based policies and practices to reduce the affective barriers to creative potential by revealing the prevalence and effects of creative anxiety among students and teacher candidates in Turkey.

The primary objective of this study is to adapt the Creativity Anxiety Scale into Turkish and conduct validity and reliability studies. To this end, the linguistic and conceptual equivalence of the scale items will be ensured, the psychometric properties of the Turkish form will be examined, and the scale's applicability in the Turkish context will be evaluated. Thus, a reliable and valid tool for measuring anxiety experienced in creative situations will be added to the Turkish literature.

THEORETICAL BACKGROUND

Anxiety is a comprehensive concept generally defined as the phenomenological, physiological, or behavioral reactions that may accompany any event that an individual perceives as being unable to cope with easily (Sridevi, 2013). Anxiety is a concept encompassing many cognitive domains, and specific anxiety has been identified in many domains, such as reading anxiety, spatial reasoning anxiety, and mathematics (Dowker et al., 2016; Lyons et al., 2018; Ramirez et al., 2019). Anxiety has many negative effects, such as high math anxiety has been reported to lead to withdrawal from math and a negative attitude toward it (Ashcraft, 2002), as well as lower math performance (Barraso et al., 2021). It has been found that people with math anxiety may expend less effort on math-related tasks (Ashcraft & Faust, 1994; Choe et al., 2019). Examining anxiety is important for the reasons mentioned, but creativity anxiety needs to be addressed separately in the context of creativity.

Creativity Anxiety

Creative thinking is the fundamental driver of progress across various fields, including science, technology, engineering, mathematics, and the arts. Both cognitive and affective factors influence creativity. Most research has focused on the cognitive aspect of creativity, but affective factors such as beliefs, self-efficacy, anxiety, and attitudes have been less examined (Cai & Leikin, 2018). In this context, it is important to examine creativity anxiety, which influences creativity. Identifying the emotional barriers to creative thinking is critically important for educational and professional development. "Creativity anxiety" or "anxiety specific to creative thinking" is one of the potential obstacles to the realization of creative potential (Daker et al., 2020). Studies show that creativity anxiety affects creative achievement and can hinder the realization of creative potential (Daker et al., 2020; Ren et al., 2021).

The concept of creativity anxiety, which has gained prominence in recent years, is a distinct construct that can be reliably measured using the Creativity Anxiety Scale (CAS). Moreover, creative situations evoke more anxiety than similar non-creative situations; this difference is particularly pronounced in some samples, especially among women (Daker et al., 2020). Thus, identifying creativity-specific anxiety provides a specific and practical framework for explaining differences in creative success and attitudes toward creativity.

Recent findings indicate that the effect of creativity anxiety on creative cognitive performance is task-sensitive. In a study evaluating multiple measures, creativity anxiety predicted lower performance on some tasks (e.g., number of ideas/fluency); however, this

relationship was not observed with the same strength across all tasks. Furthermore, although it was associated with increased state anxiety and effort during creative tasks, these two responses did not fully explain the anxiety–performance link (Daker et al., 2023). This pattern suggests that performance can sometimes be compensated for in laboratory conditions; however, creative performance may become fragile in more demanding real-life contexts. Therefore, it is important to directly measure creativity anxiety using sensitive and valid tools (Daker et al., 2023).

Task context and evaluation pressure can also alter the intensity of the creativity anxiety–performance relationship. For example, while the instruction to "be creative" typically increases the semantic distance of word associations, this effect is weakened in individuals with high levels of creativity anxiety (Bullock Muir et al., 2024). Similarly, in studies conducted under stress, cognitive inhibition dynamics and trait anxiety levels can affect the components of divergent thinking (fluency, flexibility, originality) in different ways (Duan et al., 2019; Tjoe, 2019). It is also stated that situations that require creative thinking led to higher anxiety rates than situations that do not, and that adding the need to be creative to a task causes anxiety (Daker et al., 2023). In contrast, some classic findings indicate that creative problem-solving does not always increase state anxiety (Riedel et al., 1983). This mixed pattern supports the notion that general anxiety indicators explain only a small portion of the variance in creativity (Silvia & Kimbrel, 2010) and that creativity-specific anxiety should therefore be addressed separately and specifically (Byron & Khazanchi, 2011; Duan et al., 2019; Bullock Muir et al., 2024).

At the mechanistic level, it has been shown that creativity anxiety weakens creative self-efficacy; this decline, together with a decrease in novelty-seeking tendencies, can negatively affect idea generation and, to some extent, idea selection (Xiang et al., 2025). Indeed, domain-specific creative self-efficacy and creative beliefs have consistently been positively related to creative performance. For example, in mathematics, self-efficacy and creative beliefs can account for a significant portion of creative performance (Meier et al., 2024). Furthermore, meta-analytic data also report positive, meaningful, yet context-sensitive, relationships between self-efficacy and creativity, particularly in mathematics (Herianto et al., 2024). Taken together, these findings reinforce the need for valid measurement tools to uncover how creativity anxiety affects creative cognition through self-efficacy-based mediators (Xiang et al., 2025; Meier et al., 2024; Herianto et al., 2024; Silvia & Kimbrel, 2010).

In terms of application, reliably identifying concerns about creativity enables (i) determining in which tasks and contexts performance becomes fragile, (ii) mapping the pathways of influence that operate through mediators such as self-efficacy and creative self-beliefs, and (iii) developing targeted interventions in education. Problem-solving/creative problem-solving-focused practices, and the integration of creativity in teacher education, can enhance students' fluency, flexibility, and originality, while also increasing creative self-efficacy (Bicer et al., 2020; Voica et al., 2020; Paldi & Khuzaini, 2024). In this context, cultural adaptations of scales such as CAS provide evidence-based roadmaps for research and identifying and supporting at-risk students and teachers in classroom practices (Daker et al., 2020; Daker et al., 2023).

Creativity in the Context of Türkiye

The mathematics teaching program, updated within the Turkey Century Education Model framework, approaches creativity both as a cognitive process and a fundamental skill area. Creativity, addressed in the program within the scope of intellectual tendencies, refers to mental patterns related to the ability to view events from different angles, incorporating past experiences to adapt to new situations outside of conventional patterns, thereby generating original products and ideas and creating solutions to problems (Ministry of National Education [MoNE], 2024). In this regard, mathematics education aims not only to reach the correct answer but also to enable students to develop original solution strategies and discover different ways of thinking when faced with new situations. The classroom culture is structured as a learning environment that allows students to share their own solution approaches, evaluate their peers' ideas, and produce multiple solutions to the same problem. This emphasis supports creative thinking and flexible problem-solving processes, aiming to enrich students' mathematical thinking patterns (Levav-Waynberg & Leikin, 2012; Silver, 1997).

However, problem-solving and problem-posing skills are seen as natural components of creative thinking in the program. Problem-posing activities, as part of problem-solving processes, encourage students to solve given problems and generate new problem situations (MoNE, 2024). This approach is essential in developing creative mathematical thinking (Yuan & Sriraman, 2011). However, it has been noted that most of the problem-posing activities in textbooks are still structured and limited; they do not fully reflect students' ability to generate original and creative problems (Turhan & Güven, 2014). Therefore, Turkey's current mathematics teaching program emphasizes creativity as an important skill and aims to

incorporate it into teaching processes; however, the systematic and in-depth implementation of this skill is still in the development stage.

Scales measuring teachers' competence in guiding creative thinking have been developed in Turkey, and validity and reliability studies have been conducted; these scales successfully assess how often teachers use creative thinking techniques and how they encourage students to engage in creative thinking (Sayı & Akgul, 2021). Furthermore, valid and reliable Turkish scales exist for creative mindset and creative thinking tendencies (Karakelle & Saraç, 2022). However, these scales do not directly measure the anxiety and worry experienced in the creative thinking process. General scales related to anxiety and stress in Turkey (e.g., DASS-21, STAI) have been adapted into Turkish and shown to be valid (Zanon et al., 2020; Döner et al., 2024). However, these scales are not specific to the context of creative thinking and are insufficient for assessing the anxieties that may hinder students from utilizing their creative potential. The international literature emphasizes the importance of developing culturally and contextually specific scales for assessing creative thinking skills (Rosen et al., 2020). Consequently, developing a valid and reliable scale that measures creative thinking anxiety in Turkey is an important and current need for meeting curriculum requirements and understanding the barriers to students' creative potential.

METHODOLOGY

Instrument

The study utilized the Creativity Anxiety Scale (CAS). The CAS is a 16-item instrument designed to measure two distinct factors: Creativity Anxiety (CA) and Non-Creativity Anxiety (NCA). Each factor is measured by eight items. The items for the NCA factor were constructed by modifying the creativity-requiring situations in the CA items to reflect situations that do not require creativity. For instance, a CA item reads, "Having to come up with a creative solution to a problem," while its corresponding NCA item is, "Having to solve a problem in the exact way you were taught to do so".

Translation and Adaptation

To adapt the CAS for a Turkish-speaking population, a rigorous translation and adaptation process was followed. Initially, two independent language experts translated the scale from English to Turkish. Subsequently, this Turkish version was back-translated into English by two different language experts to ensure linguistic equivalence. A comparison

between the original and back-translated English versions revealed only minor discrepancies, which primarily involved alternative word choices conveying the same meaning.

To ensure cultural appropriateness and content validity, the translated Turkish version was reviewed by experts in psychological measurement. Following their approval, a pilot study was conducted with 30 students to identify any potential issues with item clarity or administration. The pilot test did not reveal any problems, confirming the suitability of the instrument for the main study.

Validation

The factor structure of the CAS has been shown to be stable in previous research (Daker, 2020). Therefore, Confirmatory Factor Analysis (CFA) was selected as the primary analytical method to validate the scale's structure in the Turkish context. The analysis was performed using AMOS 20 software (Byrne, 2016).

The default two-factor model, as depicted in Figure 1, was tested first. Model fit was evaluated using several indices and cutoff criteria for good fit: the ratio of chi-square to degrees of freedom (χ^2/df) between 1 and 2, the Comparative Fit Index (CFI), Normed Fit Index (NFI), and Tucker-Lewis Index (TLI) above 0.95, a Root Mean Square Error of Approximation (RMSEA) below 0.05, and a Standardized Root Mean Square Residual (SRMR) below 0.08 (Hu & Bentler, 1999; Kline, 2016; Brown, 2015).

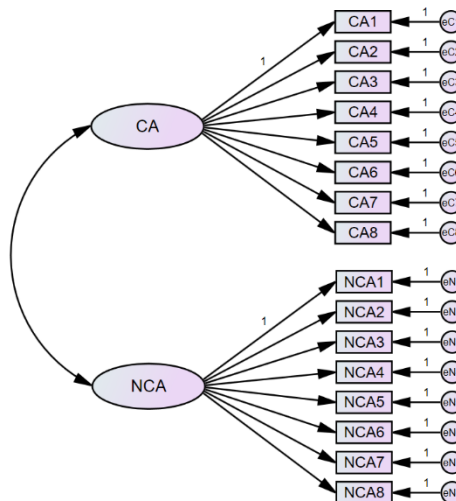


Figure 1. Default factor model for CFA

Participants and Procedure

The sample size was determined based on established guidelines for Confirmatory Factor Analysis (CFA), which recommend a participant-to-item ratio of at least 20:1 (Kline, 2016; Tabachnick & Fidell, 2019). Given the CAS has 16 items, a target sample of at least 320

participants was set. A total of 350 volunteers were recruited via an online survey platform. After data screening, six forms were excluded for being incomplete. The final sample used for the main analysis consisted of 344 middle school students (153 males, 191 females), which was deemed adequate for conducting CFA.

FINDINGS

Since this number is adequate to conduct CFA, collinearity assumption of this analysis was checked. To check this assumption, Pearson correlation coefficients calculated using SPSS 23 software, then the matrix of coefficients color coded for visual inspection (see Figure 2).

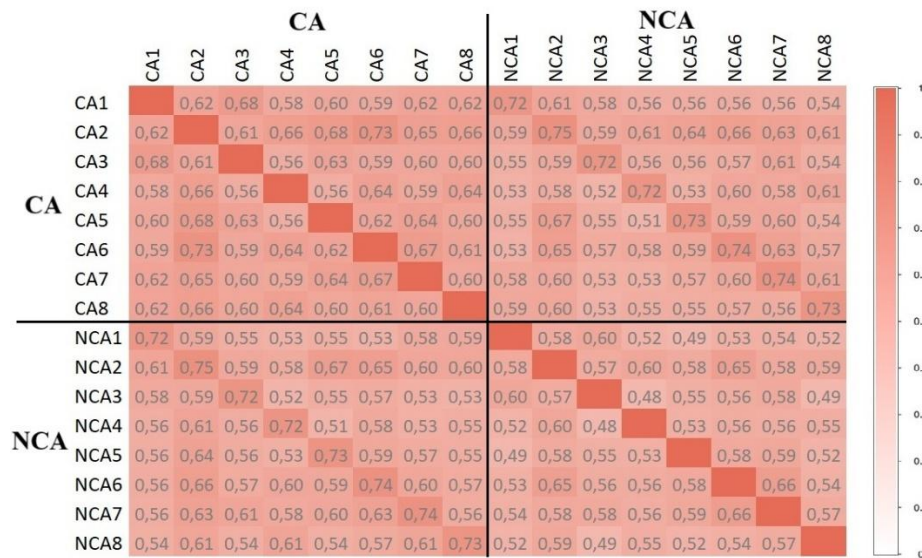


Figure 2. Pearson correlation coefficients in color gradient form

When we inspect correlation matrix presented in Figure 2, we see that correlation coefficients are between 0.56 and 0.73 for CA items, and between 0.48 and 0.66 for NCA items. High correlation coefficients were also observed between corresponding CA and NCA items. Correlation coefficients for corresponding items (CA1 and NCA1; CA2 and NCA2; ...) were between 0.72 and 0.75. Even though these correlations were higher than expected, it is assumed to be normal since corresponding items seek to measure anxiety levels for similar situations.

Initial Model Fit

The initial CFA of the default two-factor model demonstrated a poor fit to the data ($\chi^2(103)=513.62, p<0.001, \chi^2/df=4.987$). The ratio of χ^2/df 4.987 was well above the recommended threshold. While some indices approached acceptability (e.g., CFI = 0.905; SRMR

= 0.042), and high standardized factor loadings (see Figure 3) suggested the model can be improved through modification.

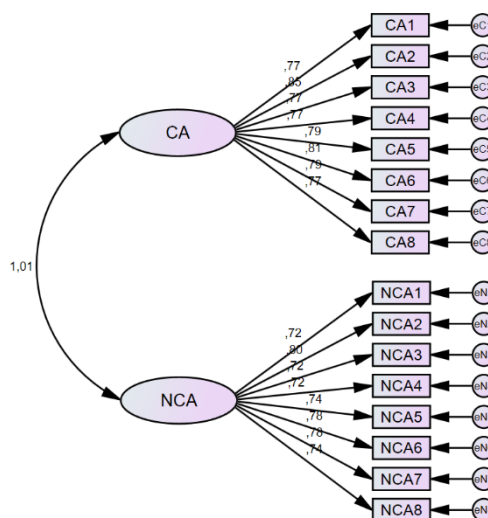


Figure 3. Factor loadings for default model

Model Modification

An examination of the modification indices revealed that the most significant sources of model misfit were the error covariances between the corresponding items of the CA and NCA factors (e.g., eC1-eN1, eC2-eN2). Given that these corresponding items share a similar linguistic and situational structure, allowing their error terms to covary is theoretically justifiable.

Therefore, a series of nested models were tested by sequentially freeing the error covariances between corresponding items, starting with the pair indicated by the largest modification index. As shown in Table 1, each modification resulted in a substantial improvement in model fit.

Table 1. Fit indices for modified models

Model	Freed Errors*	χ^2	df	χ^2/df	NFI	TLI	CFI	RMSEA	SRMR
Default	-	513.62	103	4.987	0.884	0.889	0.905	0.108	0.042
Model 1	eC4-eN4	458.27	102	4.493	0.896	0.903	0.917	0.101	0.040
Model 2	eC3-eN3	402.98	101	3.99	0.909	0.917	0.93	0.093	0.037
Model 3	eC1-eN1	346.71	100	3.467	0.922	0.931	0.943	0.085	0.034
Model 4	eC8-eN8	290.80	99	2.937	0.934	0.946	0.955	0.075	0.031
Model 5	eC5-eN5	243.29	98	2.483	0.945	0.959	0.966	0.066	0.029
Model 6	eC7-eN7	202.52	97	2.088	0.954	0.97	0.975	0.056	0.027
Model 7	eC6-eN6	170.93	96	1.781	0.961	0.978	0.983	0.048	0.025
Final Model	eC2-eN2	151.35	95	1.593	0.966	0.983	0.987	0.042	0.023

* Each constraint added to the previous model

Final Model Fit

After correlating the error terms for all eight corresponding item pairs, the final modified model demonstrated an excellent fit to the data. All fit indices met the criteria for a good-fitting model: $\chi^2(95)=151.35$ ($p<0.001$); $\chi^2/df=1.593$; NFI = 0.966; TLI = 0.983; CFI = 0.987; RMSEA = 0.042; and SRMR = 0.023. The standardized factor loadings for this final model, presented in Figure 4, were all high and statistically significant, indicating strong relationships between the items and their respective latent factors.

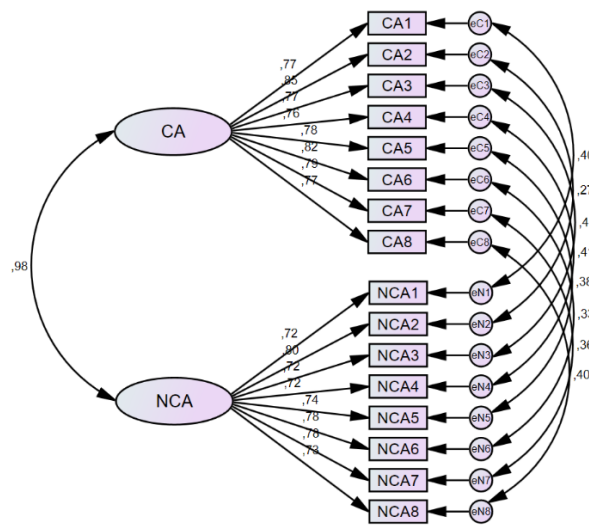


Figure 4. Factor loadings for final model.

Figure 4 shows there is a strong factorial correlation ($r=0,98$) between CA and NCA factors. While the model modification process significantly improved data fit, this high correlation raises questions about the discriminant validity of the two factors.

Comparison of Factor Scores

Before computing factor scores for CA and NCA, Cronbach's alpha reliability coefficients were computed for both factors. The alpha coefficients were found to be 0.93 for the CA factor and 0.91 for the NCA factor. These high reliability scores show that total scores can be computed for CA and NCA using their item scores. To further investigate the relationship between the two factors, total scores for CA and NCA were calculated and visualized in a scatterplot (see Figure 5). The plot shows a clear and strong positive linear relationship between the two scores. A reference line representing $CA=NCA$ was added to the plot. Most data points fall above this line, indicating that participants' scores on the Creativity Anxiety factor were generally higher than their scores on the Non-Creativity Anxiety factor.

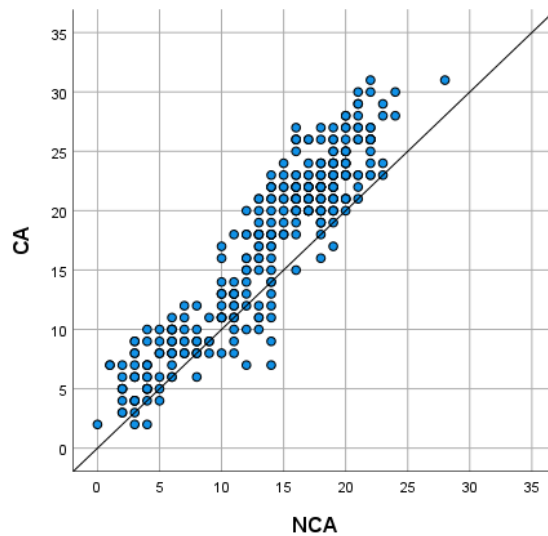


Figure 5. Scatterplot for CA and NCA scores

DISCUSSION

This study set out to adapt the Creativity Anxiety Scale (CAS) to Turkish and examine its psychometric properties with a large sample of middle-school students. Overall, the results provide strong evidence of reliability and excellent global fit for a two-factor solution distinguishing anxiety in creativity-requiring situations (CA) from otherwise similar, non-creative situations (NCA). Sequentially freeing the residual covariances between matched CA–NCA item pairs yielded a final model surpassing conventional benchmarks for good fit and supporting the structural validity of the adapted instrument. At the same time, the very high latent correlation between CA and NCA and the clear tendency for respondents to score higher on CA than NCA raise important substantive and measurement questions that merit careful interpretation and further work (Daker et al., 2020).

The pattern that CA exceeds NCA at the observed-score level coheres with prior evidence that situations explicitly framed as “creative” systematically evoke more anxiety than closely matched non-creative situations (Daker et al., 2020). The Turkish form’s excellent fit after accounting for correlated uniqueness among matched items mirrors the original CAS logic—namely, that parallel creative vs. non-creative stems share wording and situational content that naturally induce residual dependencies (Daker et al., 2020). The scale’s ability to discriminate higher anxiety under creative demands also aligns with newer task-based work showing that creativity-specific anxiety relates to poorer performance on *some* creativity measures (e.g., fluency, semantic distance) but not others, and that it covaries with *state* anxiety

and exerted effort during creative performance (Daker et al., 2023; Bullock Muir et al., 2024). At the same time, meta-analytic and latent-variable evidence indicates that generic anxiety sometimes shows small or inconsistent links with creativity, underscoring the value of a domain-specific measure such as CAS (Byron & Khazanchi, 2011; Silvia & Kimbrel, 2010).

A near-unity correlation challenges strict discriminant validity between CA and NCA factors. Two non-exclusive explanations are plausible: (a) a *strong general anxiety/evaluative threat* trait saturates responses in this age group, inflating overlap; and (b) *method effects* introduced by the parallel item wording (creative vs. non-creative phrasing) produce correlated uniqueness and factor blending (Daker et al., 2020). Methodologically, these results invite alternative representations in future studies: a bifactor (S-1) model with a dominant *general evaluative anxiety* factor and a creativity-specific residual factor; a multitrait-multimethod or correlated traits-correlated methods model to explicitly capture “paired-stem” method variance; or exploratory structural equation modeling to probe cross-loadings without overfitting via residual covariances (Silvia & Kimbrel, 2010). Substantively, a very high trait overlap does not negate the construct of creativity anxiety; rather, it indicates that in this cohort the creativity-specific signal is small relative to a large underlying evaluative affect, even as mean scores reliably climb when the creative frame is invoked (Daker et al., 2020, 2023).

Emerging longitudinal and cross-lagged evidence suggests that creativity anxiety undermines idea generation (and, more modestly, selection) partly by dampening creative self-efficacy and novelty seeking (Xiang et al., 2025). Task-level findings also point to boundary conditions: evaluative pressure (“be creative”) can amplify associative distance in general, yet this “be creative” boost shrinks among those high in creativity anxiety (Bullock Muir et al., 2024). Under externally imposed pressure, broader trait anxiety likewise impairs creative discovery by increasing conflict monitoring without corresponding control recruitment (Zheng et al., 2024). Acute stress interacts with trait anxiety to differentially shift divergent-thinking components (e.g., fluency/flexibility/originality), consistent with attentional-control accounts of anxiety’s cognitive costs (Duan et al., 2019).

Implications

A valid Turkish CAS scale for teacher training and secondary school classrooms can contribute to developing early identification and targeted support. First, to reduce assessment pressure, low-risk, private, or small-group activities should be organized at the initial stage of idea generation; students should be allowed to think freely before sharing their ideas publicly,

and direct instructions such as "be creative" should be avoided (Bullock Muir et al., 2024). Second, creative self-efficacy and novelty-seeking skills should be supported through problem formulation, multi-strategy development, and reflective portfolio work. Such activities increase students' levels of creative self-efficacy and the components of creativity (Fetterly, 2020; Xiang et al., 2025). Third, regulation skills and attention control can be trained through short-term routines (e.g., cognitive reappraisal, controlled breathing exercises) to reduce the burden of anxiety on executive functions during idea generation (Duan et al., 2019; Byron & Khazanchi, 2011). Furthermore, given findings that women report higher levels of creativity-specific anxiety, monitoring measurement invariance and designing gender-sensitive supports are also important (Daker et al., 2020).

Limitations

This study is based on self-reports and is limited to a school-based sample at a single developmental level. The theoretically justified modeling strategy has improved fit by correlating their covariances rather than explicitly modeling a method factor; therefore, the generalizability of the findings to other age groups or different contexts should be tested (Daker et al., 2020). Finally, the current data do not relate CAS scores to measures of behavioral creativity (e.g., AUT, semantic distance); this leaves criterion validity as an open target for future research (Daker et al., 2023; Bullock Muir et al., 2024).

Future directions

Several step-by-step measures can be taken to strengthen the Turkish CAS scale. Considering findings that women report higher anxiety in creative situations, the scale should be tested for cross-gender measurement invariance (Daker et al., 2020). Predictive validity should be examined with task performance under different levels of evaluation pressure and discriminative/overlapping thinking tasks (Daker et al., 2023; Bullock Muir et al., 2024). Alternative SEM (Structural Equation Modeling) forms should be tested to distinguish general anxiety and method effects from creativity-specific factors (Silvia & Kimbrel, 2010). Self-efficacy and novelty-seeking as mediating variables, along with measures of state anxiety and effort, should be integrated into a comprehensive model (Xiang et al., 2025). Moreover, longitudinal designs should be used to track whether CAS predicts in-class creativity, preference behaviors, and real-world creative outputs outside the laboratory (Zheng et al., 2024).

Conclusion

The Turkish adaptation of CAS is psychometrically reliable and promising in application. The scale consistently captures the increase in anxiety that arises when tasks are framed as "creative." The high overlap between the CA and NCA factors indicates that claims of construct validity should be viewed cautiously and highlights the importance of examining general evaluation anxiety and method effects using more sophisticated models. Considering these limitations, the scale offers a usable tool for research and practice: it is possible to map when and in whom creativity anxiety negatively affects cognitive performance and, at the same time, to design learning environments that enhance creative self-efficacy while minimizing unnecessary evaluation pressure (Daker et al., 2020, 2023; Bullock Muir et al., 2024; Xiang et al., 2025; Zheng et al., 2024; Duan et al., 2019).

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Conflict of Interest Statement

The authors of the article declare that there is no conflict of interest between them.

Summary of Contribution Rate Declaration of Researchers

The authors declare that they have contributed equally to the article.

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