Research

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Adaptation of the Life Attachment Scale to Turkish Culture: Validity and Reliability Study

Yaşama Bağlılık Ölçeğinin Türk Kültürüne Uyarlanması: Geçerlik ve Güvenirlik Çalışması

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ABSTRACT

Objective: This study aimed to adapt the Life Attachment Scale (LAS-R) into Turkish and evaluate its psychometric properties within the Turkish cultural context.

Method: The research was conducted using two independent samples. Study 1 (N = 183) was utilized for exploratory factor analysis (EFA) to determine the factor structure. Study 2 (N = 247) was conducted with a young adult sample to perform confirmatory factor analysis (CFA) employing the Robust Maximum Likelihood (MLR) estimator, and to test criterion-related validity.

Results: EFA results initially indicated a cultural conceptual overlap, leading to a refined five-factor structure. Subsequent CFA confirmed a 14-item, five-factor model (Inclusiveness, Participation, Security, Coexistence, and Reliability) with excellent fit indices (CFI = .97, TLI = .96, RMSEA = .03, SRMR = .04). Criterion-related validity was established through significant moderate correlations with entrapment (r = .48) and psychological resilience (r = -.36). Furthermore, regularized partial correlation network analysis (EBICglasso) identified Reliability and Inclusiveness as the most central nodes within the psychological functioning of young adults.

Conclusion: The Turkish version of the LAS-R is a valid and reliable psychometric instrument for assessing systemic belonging, trust, and social connectedness.

Keywords: Life attachment, psychometric properties, scale adaptation, network analysis, entrapment, psychological resilience

ÖZ

Amaç: Bu çalışmada, Yaşama Bağlılık Ölçeğinin (LAS-R) Türkçeye uyarlanması ve psikometrik özelliklerinin Türk kültürü bağlamında incelenmesi amaçlanmıştır.

Yöntem: Araştırma iki bağımsız örneklem üzerinden yürütülmüştür. Faktör yapısını belirlemek amacıyla gerçekleştirilen açımlayıcı faktör analizi (AFA) için Çalışma 1 (N = 183) verileri kullanılmıştır. Genç yetişkin örneklemiyle yürütülen Çalışma 2'de (N = 247) ise Sağlam En Çok Olabilirlik (Robust Maximum Likelihood - MLR) kestiricisi kullanılarak doğrulayıcı faktör analizi (DFA) yapılmış ve ölçüt bağıntılı geçerlik test edilmiştir.

Bulgular: AFA sonuçları ilk aşamada kültürel bir kavramsal örtüşmeye işaret etmiş ve bunun sonucunda yapı beş faktörlü olacak şekilde düzenlenmiştir. Ardından yürütülen DFA; 14 madde ve beş faktörden (Kapsayıcılık, Katılım, Güvenlik, Birliktelik ve Güvenilirlik) oluşan modelin mükemmel uyum indekslerine (CFI = .97, TLI = .96, RMSEA = .03, SRMR = .04) sahip olduğunu doğrulamıştır. Ölçüt bağıntılı geçerlik; sıkışmışlık (r = .48) ve psikolojik sağlamlık (r = -.36) ile kurulan anlamlı ve orta düzeyli ilişkilerle ortaya konmuştur. Ayrıca, düzenlileştirilmiş kısmi korelasyon ağ analizi (EBICglasso), genç yetişkinlerin psikolojik işleyişi bağlamında "Güvenilirlik" ve "Kapsayıcılık" faktörlerinin en merkezi düğümler olduğunu göstermiştir.

Sonuç: Yaşama Bağlılık Ölçeği'nin Türkçe formunun sistemik aidiyet, güven ve sosyal bağlılığı değerlendirmede geçerli ve güvenilir bir psikometrik araç olduğu sonucuna varılmıştır.

Anahtar sözcükler: Yaşama bağllılık, psikometrik özellikler, ölçek uyarlama, ağ analizi, sıkışmışlık, psikolojik sağlamlık

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Introduction

Life attachment is a multidimensional psychological orientation reflecting the extent to which an individual experiences their life and the surrounding world as a secure, meaningful, predictable, and relational context (Bertelsen and Ozer 2024). This construct extends beyond mere internal meaning-making processes; it encompasses the individual's perceptions of trust, belonging, and engagement with their social environment, communal life, and the broader societal order (Bertelsen and Ozer 2024). Indeed, the dimensions of comprehensibility, manageability, and meaningfulness central to Antonovsky's salutogenic approach provide a crucial theoretical framework. They illuminate how individuals come to experience life not as a pervasive threat, but as a cohesive, manageable whole in which they can invest themselves (Antonovsky 1987). Similarly, Bertelsen and Ozer (2024) conceptualize life attachment as a construct deeply tied to whether an individual inherently perceives the world and life as a "good place," or conversely, as an insecure and threatening environment. Recent research further corroborates that social attachment and societal connectedness are consistently associated with psychological well-being and life satisfaction (Song et al. 2025). Within this framework, life attachment can be understood not merely as an individual system of meaning, but rather as an intricately woven relational and social experiential domain. While life attachment shares conceptual space with other well-being indicators, it is fundamentally distinct. Life satisfaction is primarily a cognitive, retrospective evaluation of one's life conditions (Diener et al. 1985), whereas meaning in life focuses on internal existential coherence and overarching purpose (Steger et al. 2006). Similarly, while social connectedness and belongingness traditionally capture interpersonal ties or group affiliations (Baumeister and Leary 1995), life attachment operates at a broader, macro-level. It reflects a systemic orientation how the individual positions themselves not just among peers, but within the phenomenon of life and societal structures as a secure, predictable, and reliable whole.

Attachment theory and the psychosocial developmental perspective provide a strong theoretical basis for understanding the specific dimensions assessed by the Life Attachment Scale (LAS-R). Rather than offering only a broad explanatory framework, these approaches can be meaningfully linked to the sub-dimensions of the scale. Specifically, Bowlby's (1969, 1982) central concepts of a "secure base" and "safe haven" conceptually align with the dimensions of security and reliability. From this perspective, early internal working models may shape the extent to which individuals perceive the broader world as predictable, dependable, and safe.

The dimensions of inclusiveness, participation, and coexistence map closely onto Erikson's (1968) stages of psychosocial development, from the foundational conflict of basic trust versus mistrust to later tasks of intimacy and generativity. A successfully developed sense of basic trust may foster the psychological openness required for individuals to participate actively in social life and to coexist with others in an inclusive manner.

Consequently, although traditional attachment theory primarily focuses on interpersonal dyads, such as infant caregiver relationships or adult romantic bonds, life attachment extends this mechanism to a broader, macro-level context (Bertelsen and Ozer 2024). In this sense, the functions of "secure base" and "safe haven" are not limited to specific human figures; rather, they are expanded to include the individual's systemic relationship with society, institutions, and life as a whole.

Furthermore, the positive psychology perspective offers an additional theoretical lens for interpreting life attachment, particularly through its structural correspondence with the PERMA model: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment (Seligman 2011). Within this framework, life attachment may be understood as operationalizing several of these foundational elements at a systemic level. Specifically, the participation dimension of the LAS-R captures the essence of engagement through an individual's active and sustained involvement in everyday life. Similarly, the Inclusiveness and Coexistence dimensions expand the relationships pillar beyond personal dyadic bonds, capturing a broader sense of social integration and collective well-being. Ultimately, the sense of predictability inherent in the Security and Reliability dimensions lays the groundwork for cultivating meaning and realizing accomplishment. Individuals are more likely to formulate long-term, meaningful goals and maintain a sustained connection with life when they perceive their broader environment as stable, dependable, and

non-threatening. Taken together, life attachment can be conceptualized as a form of macro-level systemic trust that contributes to the development and maintenance of long-term well-being (Donaldson et al. 2022).

Beyond theoretical conceptualizations, empirical research has further clarified the nature of life attachment by demonstrating its close associations with well-being, interpersonal bonds, and self-perception. The fundamental human motivation to form and maintain meaningful social bonds contributes to psychological stability through sustained relational connectedness (Baumeister and Leary 1995). In this regard, perceived social isolation is associated with adverse psychological outcomes, whereas active and meaningful participation in one's social environment may enhance well-being and strengthen an individual's sense of connection to life (Cacioppo and Hawkley 2009, Haim-Litevsky et al. 2023). Life attachment is also closely related to social identity processes, as individuals who perceive themselves as meaningfully embedded within social groups, or who possess strong personal and collective identities, tend to report higher levels of life attachment and psychological well-being (Haslam et al. 2009, Ozer et al. 2023). Moreover, contemporary societal transformations and biological mechanisms, including the role of oxytocin in interpersonal trust, add further complexity to these relational processes (Schore 2003, Thoits 2011, Shahnaz and Karim 2014). Taken together, these findings suggest that life attachment extends beyond an isolated psychological attitude and should be understood as a multidimensional construct grounded in social integration, identity formation, and the neurobiological foundations of human connection.

Under typical circumstances, individuals navigate their daily lives relying on established routines. However, individual decision-making processes, life transitions, and broader societal events can disrupt these routines and may lead individuals to reconsider their relationship with life. Educational and career choices, residential changes, experiences of loss, or economic and societal crises could be associated with changes in an individual's perceptions about how reliable and meaningful their social world is (Bertelsen and Ozer 2024). Fundamentally, life attachment involves identifying meaningful goals, perceiving the societal order as a secure environment for participation, and evaluating one's overall relationship with life through a lens of sustainable coherence.

Although previous research has extensively documented the role of individual attachment styles in well-being (Chopik et al. 2024, Song et al. 2025), there remains a significant gap in understanding how systemic and societal forms of attachment, namely life attachment, function within non-Western contexts marked by collectivistic dynamics and rapid socio-cultural change (Kağıtçıbaşı 2005). Turkey offers a particularly relevant socio-cultural context in this regard, as it reflects an ongoing transition between traditional collectivistic values and increasingly individualistic orientations. This context has been described as one in which relatedness and autonomous pursuits coexist (Ayçiçeği-Dinn and Caldwell-Harris 2011, Kağıtçıbaşı 2017). In societies undergoing such transitions, macro-level systemic bonds, trust in institutions, and perceptions of societal reliability may operate differently than they do in predominantly individualistic Western populations. Therefore, adapting the LAS-R to Turkish culture addresses an important conceptual and methodological gap by providing a validated instrument for assessing these complex systemic bonds and examining how individuals maintain a secure attachment to life during periods of socio-cultural transformation. Thus, the main objective of this paper is Turkish cultural adaptation of the Life Attachment Scale (LAS-R) proposed by Bertelsen and Ozer (2024) followed by testing its psychometric properties (validity & reliability).

Based on this theoretical framework, the current study sets out to test the following hypotheses:

H1: The Turkish version of the LAS-R will demonstrate a valid and reliable multidimensional factor structure.

H2: Life attachment insecurity (indicated by higher LAS-R scores) will be positively correlated with the sense of entrapment.

H3: Life attachment insecurity will be negatively correlated with psychological resilience.

Method

This research is a methodological study that aims to adapt the Life Attachment Scale (LAS-R) to Turkish culture and analyze its psychometric properties, particularly focusing on validity and reliability. Methodological studies primarily assess the applicability and structural fit of evaluation tools originally designed to measure specific psychological constructs, beliefs, or behaviors in another sample population (DeVellis and Thorpe 2021). This study was based on the quantitative research paradigm with an overall cross-sectional survey design that allowed data collection from participants at one separate point in time (Creswell and Creswell 2018, Karasar 2018). This design allowed for an objective cross-sectional description of the participants' current circumstances and their structural perceptions of life attachment. Consequently, it provided the requisite statistical foundation namely, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) essential for verifying the factor structure of the scale.

Translation and Adaptation Process

Prior to initiating the adaptation of the Life Attachment Scale (LAS-R) into Turkish culture, the original scale developers (Bertelsen and Ozer 2024) were contacted via email, and the requisite formal permissions were obtained to develop the Turkish version and investigate its psychometric properties.

The linguistic equivalence process of the instrument was conducted following the translation-back translation method, a standard and widely preferred procedure in cross-cultural adaptation studies (Brislin 1970, Beaton et al. 2000). In the initial phase, the original English form was translated into Turkish by three independent field experts working in psychology and psychological counseling, all of whom were highly proficient in both languages. The resulting draft translations were evaluated by the researchers to resolve any conceptual and semantic discrepancies, culminating in a single, unified Turkish draft. Subsequently, this draft was translated back into English (back-translation) by two independent English language professionals who were entirely blind to the original text.

The original items and the back-translated items were carefully compared to identify any shifts in meaning or expressions that were incongruent with the cultural context. To support the construct validity of the items within the target culture, the translated form was reviewed by an expert panel comprising two PhD-level psychological counselors and one specialist in measurement and evaluation. The panel examined the translated items in terms of semantic equivalence and cultural appropriateness for the Turkish context. Based on the consensus reached by the experts, the necessary revisions were made to the scale (Hambleton 2005).

Sample

Sample size requirements were based on standard participant-to-item ratios for structural equation modeling, targeting 5 to 20 participants per item (Nunnally 1978, Kyriazos 2018). An RMSEA-based post-hoc power analysis (MacCallum et al. 1996) indicated a statistical power of .92 for the collected data, easily exceeding the .80 threshold. To verify the factor structure and establish the cross-validation of the developed Turkish form, the current research was conducted with two distinct sample groups (Study 1 and Study 2).

Eligibility for participation required individuals to be over 18 years old, reside in Turkey, and provide voluntary informed consent. Responses were excluded from the analysis if participants declined the consent form, fell outside the target age range, or demonstrated unengaged answering patterns (e.g., continuously selecting the same option).

For Study 1, 217 individuals initially accessed the survey. We excluded 14 people who did not provide consent, 10 who did not meet the age requirement, and 10 who showed uniform response patterns, leaving a final sample of 183. For Study 2, 280 individuals started the survey. Following the same criteria, 7 participants were removed for lacking consent, 8 for falling outside the age range, and 18 for unengaged responding. This resulted in a final sample of 247 valid responses.

Study 1: EFA Sample

The sample for Study 1, conducted to explore the factor structure of the scale, comprised the general adult population. In this phase, data were collected from a total of 183 participants, consisting of 117 females (63.90%) and 66 males (36.10%). The ages of the participants ranged from 18 to 53 years, with a mean age of 33.27 years (SD = 8.77). The factor analysis literature emphasizes that the participant-to-item ratio should ideally range between 5:1 and 10:1 (Nunnally, 1978). The 183 responses collected for the initial 21-item draft form corresponded to approximately 8.7 participants per item, thereby meeting the recommended sample size criterion of 5 to 10 participants per item for the analysis.

Study 2: CFA and Criterion Validity Sample

To confirm the 16-item structure derived from the EFA and to assess criterion validity, Study 2 was conducted with an independent, novel sample group. This sample consisted of young adults, a demographic often characterized by intense experiences of social integration and belonging crises. A total of 247 individuals participated in this phase. The group comprised 170 females (68.80%) and 77 males (31.20%). The participants' ages ranged from 17 to 48 years (M = 21.59, SD = 2.36); the notably low standard deviation indicates that the group was homogeneously composed of young adults. In structural equation modeling (SEM), it is recommended that the sample size be at least 10 to 20 times the number of items (Kyriazos, 2018). In this context, the sample size of 247 participants was deemed to possess adequate statistical power to test the final 14-item model via CFA. Using a younger cohort (M = 21.59) following the general adult sample from Study 1 (M = 33.27) was a deliberate methodological choice. Confirming the factor structure in young adults helps verify the stability of the scale during a developmental period marked by significant social transitions. Furthermore, demonstrating structural consistency across two different age groups indicates that life attachment is a stable psychological orientation, reducing the possibility that the factor structure is specific to a particular age group or generation.

Measures

Data were collected using a Personal Information Form, the Life Attachment Scale (LAS-R), the Entrapment Scale, and the Brief Resilience Scale.

Personal Information Form

Developed by the researchers in alignment with the study's objectives, this form included basic questions designed to ascertain the demographic characteristics of the participants (e.g., age and gender).

Life Attachment Scale (LAS-R)

The Turkish adaptation of this scale, originally developed by Bertelsen and Ozer (2024) to measure individuals' levels of trust and belonging concerning social and systemic bonds, was carried out within the scope of this study. While the original instrument features a comprehensive item pool, the EFA and CFA conducted in the current research yielded a final structure for Turkish culture comprising 14 items and five sub-dimensions (Inclusiveness, Participation, Security, Coexistence, and Reliability). The scale employs a 5-point Likert-type format (ranging from 1 = Strongly Disagree to 5 = Strongly Agree). Higher scores indicate elevated insecurity in life attachment and systemic belonging issues (i.e., an attachment crisis). It should be noted that, because the scale items are phrased to reflect these negative states, reverse-coding was not required for any item to maintain the intended overall scoring direction. In the present study, the internal consistency (overall reliability) coefficient for the final 14-item form was calculated using both McDonald's Omega and Cronbach's Alpha formulas, with both values determined to be .78. These values indicate that the scale provides reliable measurements within the Turkish sample.

Entrapment Scale

To determine the extent to which participants felt trapped and confined within their current life circumstances, the Entrapment Scale, developed by De Beurs et al. (2020) and adapted into Turkish by Türk et al. (2024), was utilized. The scale is a short form with a unidimensional structure, comprising four items.

Participant responses were recorded on a 5-point Likert-type scale. Higher scores obtained from the scale indicate a more intense experience of entrapment and a sense of having no way out. To verify the structural validity of the scale within the current research sample, a CFA was performed. The analysis results revealed that the unidimensional model demonstrated excellent fit with the data (Robust X2 = 0.99, df = 2, p > .05; Robust CFI = 1.00; Robust TLI = 1.00; Robust RMSEA = .000; SRMR = .009). These findings confirm the single-factor structure of the scale within the present sample. Furthermore, the internal consistency coefficients calculated to evaluate the scale's reliability were adequate. Specifically, Cronbach's Alpha was calculated as .85, and McDonald's Omega (ω) was .86. These values denote that the scale produced reliable measurements within the scope of the study.

Brief Resilience Scale

To assess individuals' capacity to bounce back following adversities and stressful life events, the Brief Resilience Scale, developed by Smith et al. (2008) and adapted into Turkish by Doğan (2015), was administered. The scale exhibits a unidimensional structure and consists of six items in total. Items are rated on a 5-point Likert-type scale (1 = Does Not Describe Me At All, 5 = Describes Me Very Well). Because items 2, 4, and 6 contain negative phrasing, reverse coding was applied prior to the analyses (Smith et al. 2008). Higher scores from the scale denote a greater level of psychological resilience. A CFA was conducted to evaluate the structural validity of the scale within the current research sample. The findings indicated that the unidimensional structure generally demonstrated an acceptable fit with the data (Robust X2 = 28.57, df = 9, p < .01; Robust CFI = .94; Robust TLI = .90; Robust RMSEA = .106; SRMR = .044). When the fit indices are considered collectively, it is observed that the CFI, TLI, and SRMR values fall within acceptable ranges; conversely, the RMSEA value remains relatively high. While this does not imply that the model is entirely inadequate, it suggests that the unidimensional structure should be interpreted with caution within the current sample. Nevertheless, given its strong internal consistency coefficients and acceptable incremental fit indices, the scale can still be considered suitable for examining criterion-related validity. The internal consistency coefficients calculated to establish the scale's reliability were found to be sufficient. As a result, Cronbach's Alpha was .81 and McDonald's Omega (ω) was .81. These values mean that the scale gave reliable measurements for this research.

Procedure

Prior to the commencement of data collection, the study's compliance with the ethical standards for human research outlined in the Declaration of Helsinki and broader scientific principles was evaluated by the Social and Human Sciences Research Ethics Committee of Tokat Gaziosmanpasa University. Ethical approval was granted via document dated December 10, 2024, and numbered Session 20, Decision 01-52.

All data collection procedures were conducted by the researcher at Tokat Gaziosmanpaşa University. To ensure strict adherence to the institution's ethical guidelines and data security protocols, the researcher personally administered all study materials, thereby maintaining procedural standardization. No personally identifiable information was collected, ensuring both data integrity and participant confidentiality. Furthermore, all digital files containing raw research data were encrypted and securely stored on password-protected computers accessible exclusively to the researcher.

The online surveys were developed using Google Forms. Before distributing the link to the actual sample, a pilot test was conducted with five students to evaluate the clarity and usability of the interface. The researcher also technically tested the form on both desktop and mobile devices to confirm proper display formatting and to verify that the forced-response settings successfully prevented the submission of incomplete forms. To prevent multiple submissions from the same individual, the "limit to 1 response" feature was enabled in Google Forms, which required participants to sign in with a Google account. Following these checks, the data collection process for both study groups (EFA and CFA) was initiated. A combination of convenience and snowball sampling methods was used to obtain the target population. No paid advertisements or sponsored posts were used for participant recruitment. The survey link was distributed exclusively via WhatsApp direct messages and the WhatsApp Status feature. Potential respondents were invited using a standardized brief message stating: "Hello, I need participants over the

age of 18 for a research study I am conducting at Tokat Gaziosmanpaşa University. I would appreciate it if you could spare 5 minutes to support it. Participation was voluntary. After clicking on the survey link, respondents first saw an information sheet about the study's purpose and scope, including an assurance of anonymity and confidentiality stating that the data collected would be used only for scientific publication. To get to the scale items, respondents had to read and accept a digital "Informed Consent Form." Those who did not consent were automatically barred by the system from further access. Respondents were also clearly informed that they could withdraw from participation at any time in the study without giving any reason and without any consequences.

Participants received no financial compensation or rewards for their involvement. The estimated time to complete the assessment was approximately 5 to 7 minutes. The survey was structured across two screens, presenting a total of 25 questions for Study 1 and 29 questions for Study 2. Navigation settings allowed respondents to return to the previous screen to review or modify their answers before final submission. Additionally, to prevent missing data, all items were designated as mandatory fields, ensuring that the forms were fully completed before being recorded in the database.

Statistical Analysis

Before conducting the statistical analyses, the dataset was screened for missing values and outliers. Because the online survey required responses for all items, there were no missing data. Multivariate normality and outliers were checked using Mahalanobis distances, skewness, and kurtosis, confirming that the data met the assumptions for structural equation modeling (Tabachnick and Fidell 2013).

The overall statistical procedure was organized into two stages: Study 1 and Study 2. EFA and CFA were performed exclusively on the Life Attachment Scale items to determine and verify its factor structure. To assess criterion validity, Pearson correlations were calculated between the total scores of the Life Attachment, Entrapment, and Brief Resilience scales. Finally, a Regularized Partial Correlation Network analysis was conducted to examine the specific relationships among the five LAS-R sub-dimensions (Inclusiveness, Participation, Security, Coexistence, and Reliability), entrapment, and psychological resilience.

Study 1 (EFA)

Although the original structure of the scale was developed based on Danish and US sample The data collection process for boths, yielding a seven-factor model, the developers' (Bertelsen and Ozer, 2024) attainment of a five-factor structure in their initial study (Study 1) indicated that the construct might exhibit variability across different samples. Moreover, given cultural and linguistic differences, it was anticipated that the target culture's conceptualization of the items might diverge from the original structure. Therefore, rather than directly imposing a pre-specified model (CFA), an EFA was initially preferred to discover the clustering tendencies of the items within the Turkish sample. Principal Axis Factoring was utilized as the factor extraction method. To verify the statistical power (sample power) of the 16-item structure derived from this method, an RMSEA-based post-hoc power analysis proposed by MacCallum et al. (1996) was conducted. The calculation yielded an analysis power of .92, which is substantially above the widely accepted statistical power threshold of .80.

Study 2 (CFA and Validity/Reliability)

To test the adequacy of the structure obtained from the EFA within the 18–25 young adult sample, a CFA was applied. The CFA computations were performed using JASP software. In order to improve the model's performance against possible deviations from multivariate normality that are typical in social science data and to get more reliable parameter estimates, the Robust Maximum Likelihood (MLR) algorithm was chosen as the estimator instead of the standard Maximum Likelihood (ML). Widely accepted standard fit indices were used in assessing how well the model fits the data: Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). For CFI and TLI, values greater than .90 were considered acceptable, whereas values above .95

indicated an excellent fit; RMSEA and SRMR should be below .08 for acceptability and less than .05 for excellence (Hu and Bentler 1999).

Within the scope of the scale's construct validity, evidence for convergent and discriminant validity was examined via JASP. For convergent validity, Average Variance Extracted (AVE) and Composite Reliability (CR) values were calculated. In instances where the AVE value fell below the .50 threshold for certain dimensions, a CR value above .60 was accepted as sufficient evidence to establish convergent validity, in accordance with Fornell and Larcker's (1981) criteria. In social sciences, particularly when measuring complex, multidimensional constructs such as societal trust and systemic belonging, items naturally exhibit broader variance. Consistent with Fornell and Larcker (1981) and corroborated by Hair et al. (2014), an AVE value slightly below the strict .50 threshold is methodologically acceptable and does not compromise convergent validity, provided that the Composite Reliability (CR) or McDonald's Omega consistently exceeds the .60 threshold, confirming robust internal consistency. Discriminant validity was assessed using the modern Heterotrait-Monotrait (HTMT) ratio, a method that yields more sensitive results compared to traditional approaches, verifying whether the values remained below the established .85 threshold (Henseler et al. 2015).

Finally, to establish the criterion (predictive) validity of the scale, the relationships between the Life Attachment total score and the Entrapment and Brief Resilience Scale scores were evaluated using the Pearson Product-Moment Correlation coefficient. Internal consistency (reliability) analyses for the overall scale and its sub-dimensions were computed in JASP utilizing both the traditional Cronbach's Alpha coefficient and McDonald's Omega coefficient, the latter of which produces more robust estimates by accounting for variations in item loadings.

To examine the complex structural and relational patterns among the variables, a Regularized Partial Correlation Network analysis was conducted in JASP, in addition to conventional correlation analyses. The analysis was performed using the EBICglasso algorithm. Subsequently, centrality indices were calculated to determine the relative importance of the variables within the network structure.

Results

EFA Findings

The suitability of the data obtained from 183 participants for factor analysis was examined utilizing the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity. The KMO measure of sampling adequacy was calculated as .81, a value indicating that the data were "very good" for factor analysis (Hair et al. 2019). Simultaneously, the statistically significant result of Bartlett's Test of Sphericity ($p < .001$) confirmed that the correlation matrix among the variables was factorable.

During the initial phase of the EFA process, the original theoretical seven-factor structure was tested. However, an examination of the resulting rotated pattern matrix revealed that the factor loadings of certain items exceeded 1.0, generating 'Heywood cases.' Furthermore, two factors failed to meet the minimum three-item rule (Costello and Osborne 2005), thereby violating the principle of parsimony. Considering that the original developers (Bertelsen and Ozer 2024) also arrived at a 15-item, five-factor structure in their initial study due to the lack of clear divergence between the Security and Participation dimensions, a similar cultural conceptual overlap was detected within the Turkish sample. To enhance psychometric robustness and establish a conceptual foundation congruent with the EFA findings of the original study, subsequent analyses proceeded based on a five-factor structure.

In the iterative analyses of the five-factor model, it was determined that items M4, M11, M18, M19, and M20 failed to reach the widely accepted minimum factor loading threshold of .32 (Tabachnick and Fidell 2013) and did not load significantly onto any factor. In accordance with the dynamics of cross-cultural adaptation, these five items which did not fully align with the experiential framework of individuals in the target culture were excluded from the dataset to preserve overall model fit and the principle of parsimony.

The analyses were re-run with the remaining 16 items, yielding the final factor structure presented in Table 1.

To determine the factor structure of the items, Principal Axis Factoring was employed as the extraction method, accompanied by an Oblique (Promax) rotation technique, predicated on the theoretical assumption that the dimensions might be intercorrelated. To determine the appropriate number of factors to retain more robustly, and to reduce the risk of over-extraction associated with the Kaiser criterion (eigenvalues > 1), a Principal Axis Factoring-based Parallel Analysis was conducted. The findings supported the retention of a five-factor structure, as the eigenvalues obtained from the empirical data for the first five factors (.73, .40, .48, .41, and .24) were consistently higher than the corresponding mean eigenvalues generated from the simulated random data. The EFA produced a five-factor structure with eigenvalues greater than 1, accounting for 48% of the total variance. The pattern matrix for the factors and the communality values of the items are presented in Table 1..

Table 1 Factor loadings and communalities for the Revised Form of the Life Attachment Scale (LAS-R)

Item	Factor 1 (Inclusiveness)	Factor 2 (Participation)	Factor 3 (Security)	Factor 4 (Coexistence)	Factor 5 (Reliability)	Communality (h2)
I14	.89					.80
I13	.84					.67
I15	.68					.60
I12	.43					.25
I16		.91				.91
I17		.50				.52
I8			.88			.70
I7			.63			.40
I3				.66		.45
I2				.60		.32
I1				.56		.36
I6					.84	.54
I5					.64	.40
I21					.43	.20
I9					.38	.31
I10					.37	.29

Extraction method: Principal Axis Factoring. Rotation method: Promax. Factor loadings below .32 are suppressed to facilitate interpretation. I = Item

An examination of Table 1 reveals that the revised 16-item form generally distributed successfully across the five-factor structure. According to the results of the rotated pattern matrix, the factor loadings of the items ranged from .37 to .91, while the communalities (h^2), indicating the proportion of variance in each item explained by the model, varied between .20 and .91. These findings indicate that the factor structure of the revised form exhibits a generally acceptable and robust pattern.

The items loading onto the first four factors—corresponding to the Inclusiveness, Participation, Security, and Coexistence dimensions—clustered largely in congruence with the theoretical structure of the original scale, strongly representing their respective dimensions with high factor loadings. Conversely, within the fifth factor, "Reliability," it was observed that items M9, M10, and M21 which were theoretically expected to fall under different dimensions—statistically loaded onto the same factor alongside items M5 and M6, which originally belonged to this dimension.

This structural convergence is considered to reflect the interaction between the socio-cultural characteristics of the target population and the conceptual equivalents of the item contents within the target culture. Therefore, this emergent dimensional shift is planned to be further examined in the subsequent CFA phase of the study, utilizing the original theoretical model as a baseline. Consequently, the most appropriate dimensional placement for the respective items will be conclusively evaluated based on the construct validity findings.

Given the application of an oblique rotation, the factor correlation matrix illustrating the relationships among the dimensions is presented in Table 2. The analysis results demonstrate significant, positive correlations among the scale's dimensions, thereby indicating that the construct operates cohesively.

Table 2. Factor correlation matrix

Factors	1	2	3	4	5
Factor 1	1.00				
Factor 2	.45	1.00			
Factor 3	.50	.40	1.00		
Factor 4	.28	.31	.31	1.00	
Factor 5	.17	.38	.37	.50	1.00

The numbering in the table was arranged by extracting data from the matrix according to the factor order in Table 1 (PA1, PA5, PA3, PA4, PA2).
PA = Principal Axis

Table 2 presents the correlation coefficients among the five factors derived from the EFA. The findings indicate that the correlations among the scale's sub-dimensions range from .17 to .52, with all dimensions exhibiting positive associations. These significant low-to-moderate correlation coefficients suggest that the sub-dimensions theoretically converge to support the same higher-order construct, namely life attachment. Furthermore, the fact that these correlations are not high enough to pose a multicollinearity issue demonstrates that the sub-dimensions are statistically distinguishable and relatively independent constructs.

The detection of significant and distinct relationships among the factors corroborates that opting for an oblique rotation method (Promax) which allows for inter-factor correlations rather than orthogonal rotation techniques that assume complete dimensional independence, was a methodologically sound and appropriate decision (Fabrigar et al. 1999, Costello and Osborne 2005).

An examination of the pattern matrix obtained from the EFA revealed that the Participation (M16, M17) and Security (M7, M8) factors were each represented by only two items. In the factor analysis literature, it is generally accepted that a factor should comprise at least three items to be considered a stable construct (Costello and Osborne 2005). However, it is also noted that two-item factors can be retained within an analysis provided there is a significant correlation between the items, the factor loadings are sufficiently high, and they do not exhibit cross-loadings with other factors (Worthington and Whittaker 2006; Yong and Pearce 2013).

In the current study, it was determined that the items belonging to both factors possessed high factor loadings (ranging from .50 to .91) and did not present any cross-loading issues. Additionally, supportive findings were obtained from reliability analyses conducted using the Spearman-Brown formula, which is considered to yield more appropriate and accurate results than Cronbach's Alpha for two-item constructs (Eisinga et al. 2013). Accordingly, for the Participation dimension, the inter-item correlation was .65 and the Spearman-Brown reliability coefficient was .79; for the Security dimension, the inter-item correlation was .52 and the Spearman-Brown coefficient was calculated as .69. These values indicate an acceptable level of internal consistency for both dimensions.

Taking all these findings into consideration, along with the necessity to preserve the scale's original theoretical structure, a decision was made to test these two factors in their current form during the CFA phase.

CFA Findings

CFA Process and Rationale for Item Removal

The model-data fit of the five-factor structure derived from the EFA was tested via CFA on a second sample group consisting of 247 participants. The Robust Maximum Likelihood (MLR) estimator, which produces more reliable results by adjusting standard errors against potential deviations from the multivariate normality assumption, was utilized.

In the initially tested model, it was observed that items M10 ("I might have equal access to society's opportunities on paper, but in reality, this is not true") and M17 from the original scale had notably low explained variance (R^2) values (.13 and .12, respectively), with approximately 87% of the variance in these items originating from error variance. Specifically, while item M10 measures equal opportunity as a structural "Inclusiveness/Integration" issue in the Northern European sample where the original scale was developed, it demonstrated a tendency to shift toward the "Reliability" factor within the target Turkish sample. This situation can be elucidated by the fact that young adults in Turkey perceive inequality of opportunity and the phenomenon of rules remaining merely "on paper" directly as systemic unpredictability and unreliability. Item M10 was re-tested theoretically and culturally under the "Reliability" dimension; however, the high error variance of the item dragged the AVE value of the corresponding factor well below acceptable limits (.23). To enhance the psychometric robustness, as well as the construct and convergent validity of the scale, these two items (M10 and M17), which failed to adequately represent the relevant constructs within the target culture, were excluded from the analysis. The CFA was subsequently re-run using the remaining 14 items.

Fit Indices and Convergent Validity of the Final CFA Model

Upon examining the fit indices of the final CFA model, which was updated to 14 items and five factors following the removal of M10 and M17, an excellent fit was observed between the data and the model (Robust $\chi^2 = 88.08$, df = 67, $p < .05$, $\chi^2/df = 1.31$). The other goodness-of-fit values for the model were calculated as Robust CFI = .97, Robust TLI = .96, Robust RMSEA = .03 (90% CI [.000, .058]), and SRMR = .04. In the relevant literature, CFI and TLI values above .95, alongside RMSEA and SRMR values below .05, are regarded as indicating an "excellent fit" (Kline, 2015). These obtained findings substantiate that the revised five-factor structure is supported within the Turkish sample (see Figure 1).

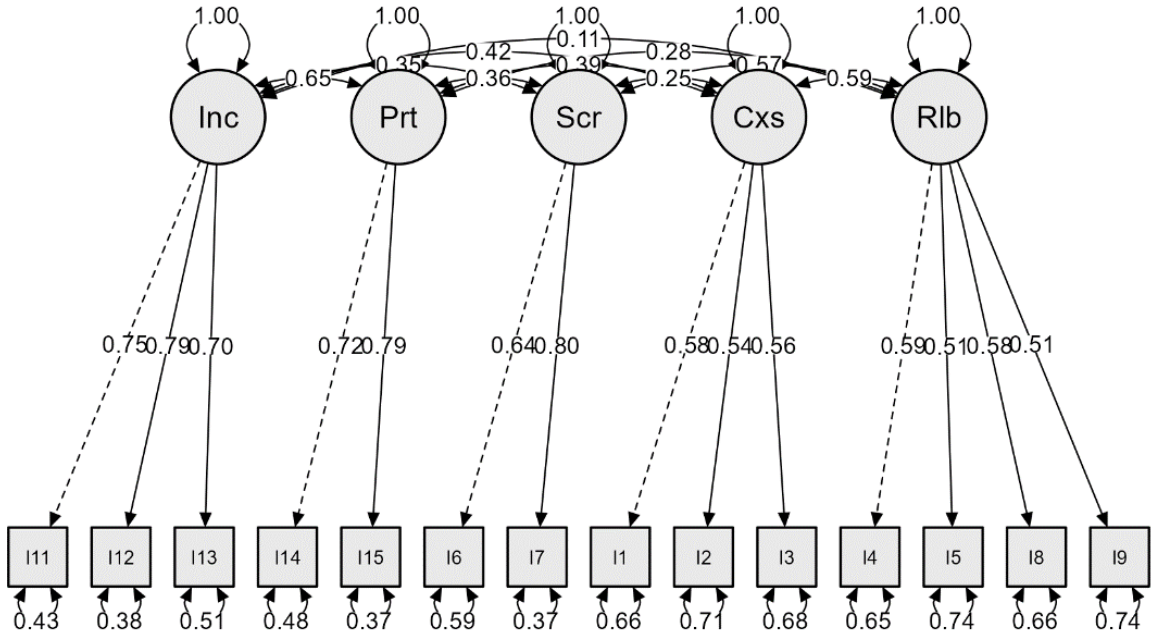


Figure 1. Confirmatory factor analysis path diagram of the 14-item LAS-R (standardized estimates)

Inc: Inclusiveness, Prt: Participation, Scr: Security, Cxs: Coexistence, Rlb: Reliability. I = Item

Furthermore, a multigroup CFA was conducted to examine measurement invariance across the age cohorts represented in Study 1 and Study 2. The findings supported metric invariance (ΔCFI = 0.008; ΔRMSEA = 0.000), suggesting that the factor structure and item loadings of the LAS-R were comparable across age groups. This result indicates that the core construct measured by the scale remains stable across different age cohorts and is not meaningfully influenced by age-related variation.

Table 3. Standardized CFA factor loadings, AVE, and reliability values for the 14-item Revised Form of the Life Attachment Scale (LAS-R)				
Factor and Item	**Standardized Loading (β)**	**R2**	**AVE**	**Omega (ω)**
Factor 1: Inclusiveness			.56	.79
I11	.75	.56		
I12	.78	.62		
I13	.70	.49		
Factor 2: Participation			.58	.73
I14	.72	.52		
I15	.79	.63		
Factor 3: Security			.52	.68
I6	.63	.40		
I7	.79	.63		
Factor 4: Coexistence			.32	.58
I1	.58	.33		
I2	.54	.29		
I3	.56	.31		
Factor 5: Reliability			.30	.63
I4	.58	.34		
I5	.51	.26		
I8	.58	.33		
I9	.51	.26		

All standardized factor loadings are statistically significant ($p < .001$). AVE = Average Variance Extracted; ω = McDonald's Omega Composite Reliability Coefficient; R2 = Explained Variance of the Item. The item numbers in the table reflect the sequencing of the final 14-item dataset. I = Item.

The convergent validity and reliability of the scale were evaluated using AVE and Composite Reliability (McDonald's Omega – ω) coefficients. According to the analysis results (see Figure 1 and Table 3), the AVE values for the Inclusiveness (.56), Participation (.58), and Security (.52) dimensions exceeded the recommended threshold of .50. Conversely, the AVE values for the Coexistence (.32) and Reliability (.30) dimensions remained below the .50 cut-off. However, Fornell and Larcker (1981) posit that in the social sciences, even if the AVE value of a construct falls below .50, its convergent validity can still be deemed adequate provided that the composite reliability (CR/ω) exceeds .60. The ω value for the Reliability dimension was calculated as .63, whereas the ω value for the Coexistence dimension was .58, placing it at a marginally acceptable level (> .50; Hair et al. 2019). For a psychological construct comprising merely three items, these values were evaluated as providing sufficient statistical and theoretical evidence.

Discriminant Validity

To assess whether the dimensions of the scale were sufficiently distinct from one another, the traditional Fornell-Larcker (1981) criterion and a modern approach, the Heterotrait-Monotrait (HTMT) ratio, were examined concurrently.

Table 4. Inter-factor correlations and square roots of AVE according to the Fornell-Larcker criterion					
Constructs	**1**	**2**	**3**	**4**	**5**
1. Inclusiveness	.75				
2. Participation	.65	.76			
3. Security	.35	.36	.72		
4. Coexistence	.42	.39	.25	.57	
5. Reliability	.11	.28	.57	.59	.55

Values on the diagonal represent the square roots of the Average Variance Extracted (AVE) for each construct. Values below the diagonal are inter-factor standardized correlation coefficients.

According to the Fornell-Larcker matrix presented in Table 4, the square roots of the AVE values for the Inclusiveness, Participation, and Security dimensions (indicated by the bold values on the diagonal) are greater than their correlation coefficients with the other factors. Although the Fornell–Larcker criterion was generally met across the dimensions, a marginal deviation was observed in the correlation between the Coexistence and Reliability factors, largely due to their borderline AVE values.Nevertheless, recent

methodological literature highlights that the traditional Fornell-Larcker criterion may not consistently yield reliable results in establishing discriminant validity within SEM frameworks; therefore, the HTMT ratio should be utilized as the primary metric (Henseler et al. 2015).

Table 5. Heterotrait-Monotrait (HTMT) ratio matrix for discriminant validity

Constructs	1	2	3	4	5
1. Inclusiveness	-				
2. Participation	.65	-			
3. Security	.33	.35	-		
4. Coexistence	.38	.38	.23	-	
5. Reliability	.09	.26	.56	.58	-

All HTMT values in the table are below the .85 threshold, indicating that discriminant validity has been established.

Examined as the ultimate evidence of discriminant validity, the HTMT matrix (see Table 5) indicates that the highest ratio among the factors is .65 (observed between the Inclusiveness and Participation dimensions). All derived values fall substantially below the stringent .85 threshold widely recognized in the literature. These robust findings definitively corroborate that while the five sub-dimensions of the scale are conceptually complementary, they constitute completely independent constructs both empirically and statistically.

Criterion-Related Validity Findings

To assess the criterion-related validity of the Turkish form of the Life Attachment Scale (LAS-R), the relationships between the scale's total score and the total scores derived from the Entrapment Scale and the Brief Resilience Scale were examined utilizing Pearson Product-Moment Correlation analysis. The theoretical expectation underlying this research posits that deteriorations in life attachment (i.e., systemic belonging and trust) will be positively associated with an individual's sense of entrapment and inversely related to their psychological resilience.

Table 6. Correlation matrix among variables within the scope of criterion-related validity

Variables	1	2	3
1. Life Attachment (LAS-R)	1.00		
2. Entrapment	.48**	1.00	
3. Psychological Resilience	-.36**	-.43**	1.00

** $p < .001$. $N = 247$. High scores on the Life Attachment Scale represent an attachment crisis (insecurity/unbelonging).

The results of the correlation analysis (Table 6) indicate a moderate, positive, and statistically significant relationship between the Life Attachment Scale total score and the Entrapment Scale scores ($r = .48$, $p < .001$). Conversely, a moderate, negative, and significant correlation was observed between the Life Attachment Scale and the Brief Resilience Scale ($r = -.36$, $p < .001$). Similarly, congruent with theoretical expectations, a significant negative relationship was identified between Entrapment and Psychological Resilience ($r = -.43$, $p < .001$).

Network Analysis

The partial correlation weights (edge weights) derived from the EBICglasso network analysis—conducted to investigate the complex and multiplex relationships among the variables while simultaneously controlling for the effects of all other connections—are presented in Figure 2. An overall evaluation of the network structure reveals that the sub-dimensions of the Life Attachment Scale (LAS-R) form positive and relatively robust associations with one another. Notably, the relationship between Inclusiveness (INC) and Participation (PAR) (.38), alongside the association between Security (SEC) and Reliability (REL) (.28), emerge as the most prominent edges within the network.

When evaluated from the perspective of criterion validity, the network model presents a pattern highly consistent with theoretical expectations. The presence of a negative partial correlation between entrapment (ENT) and psychological resilience (RES) (-.29) indicates that these two constructs are inversely related within the network. Furthermore, the Entrapment (ENT) node demonstrates positive

direct edges with the sub-dimensions of Life Attachment, particularly with Inclusiveness and Reliability. This finding suggests that an attenuation in individuals' perceptions of systemic inclusiveness and reliability may be positively associated with a heightened sense of entrapment. Similarly, the negative direct edge (-.20) between the Reliability (REL) dimension and psychological resilience (RES) further substantiates the meaningful position of this dimension within the nomological network.

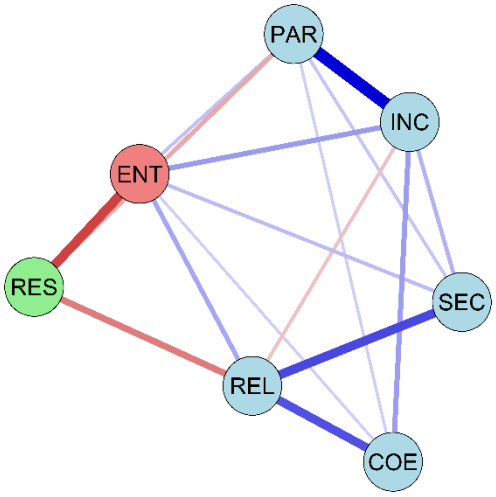


Figure 2. Network plot

Regularized partial correlation weights calculated using the EBICglasso algorithm. INC: Inclusiveness, PAR: Participation, SEC: Security, COE: Coexistence, REL: Reliability, ENT: Entrapment, RES: Psychological Resilience. The absolute magnitude of the values indicates the strength of the relationship..

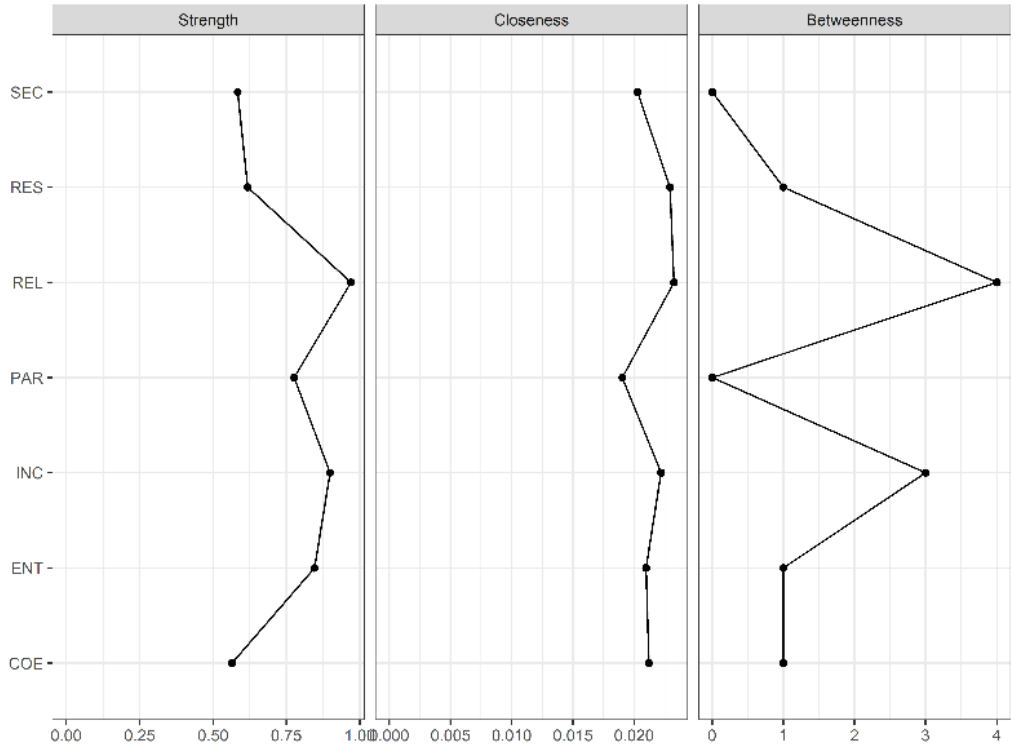


Figure 3. Centrality plot

Values reflect standardized (Z) scores. INC: Inclusiveness, PAR: Participation, SEC: Security, COE: Coexistence, REL: Reliability, ENT: Entrapment, RES: Psychological Resilience. The absolute magnitude of the values indicates the strength of the relationship

To assess the robustness and replicability of the estimated network, stability analyses were conducted using JASP software, which incorporates the bootnet package (Epskamp et al. 2018). In this process, non-parametric bootstrapping was applied to evaluate edge-weight accuracy, while case-dropping bootstrapping was used to examine the stability of centrality indices, with 1,000 iterations performed for each procedure. The Correlation Stability (CS) coefficients for both edge weight and node strength were .36. These values are above the commonly recommended minimum threshold of .25 for acceptable stability. Accordingly, the estimated network structure and the relative importance of the nodes may be regarded as sufficiently stable and reliable against sampling variability.

The centrality indices, calculated to examine the relative position of each variable within the network and its connective significance with other psychological constructs, are presented in Figure 3. The findings indicate that the Reliability (REL) sub-dimension occupies a relatively central position within the network. The Reliability node exhibits the highest standardized values across metrics: Node Strength (= 1.34), reflecting the total strength of its direct connections with other variables; Betweenness (= 1.70), indicating its tendency to act as an intermediary among nodes; and Closeness (= 1.22), denoting its structural proximity to other nodes.

The Inclusiveness (INC) dimension also emerges as another prominent construct within the network. Taken together, these findings suggest that the reliability and inclusiveness dimensions may constitute the most salient and connectively significant nodes within this network structure concerning the psychological functioning of young adults. Specifically, the associations these two dimensions form with both the other sub-dimensions of life attachment and variables such as entrapment and psychological resilience indicate that these constructs hold a meaningful position within the nomological network. Nevertheless, it must be acknowledged that these findings are derived from a cross-sectional network structure; centrality values should be interpreted not as causal mechanisms, but as indicators reflecting the relative positions and relationality of the variables within the network.

Discussion

The current research was conducted to adapt the Life Attachment Scale (LAS-R; Bertelsen and Ozer, 2024) which measures the extent to which an individual experiences the surrounding world and societal order as a secure, meaningful, and predictable context into Turkish culture and to investigate its psychometric properties. As a result of the EFA and CFA conducted across two diverse sample groups (general adults and young adults), it was confirmed that the Turkish version, comprising 14 items and five sub-dimensions (Inclusiveness, Participation, Security, Coexistence, and Reliability), constitutes a highly valid and reliable measurement instrument. The obtained findings demonstrate that while life attachment is preserved as a multidimensional construct within Turkish culture, it exhibits a unique conceptual pattern contingent upon the socio-psychological dynamics of the target culture.

In the context of the scale's construct validity, the most notable finding is the transformation of the structure—originally conceptualized as seven factors in the Northern European (Danish) and US samples—into a parsimonious five-factor model within the Turkish sample. First, the fact that the original developers (Bertelsen and Ozer 2024) also arrived at a five-factor structure in their initial studies (Study 1) suggests that this psychological construct is sensitive to cross-cultural variations. In the EFA findings derived from the Turkish sample, the observation that the "Security" and "Participation" themes exhibited a more intertwined pattern rather than diverging into completely independent constructs can be elucidated by the perception of social relationality in Turkish culture, where collectivistic traits and interdependence are more pronounced (Kağıtçıbaşı 2005). Furthermore, the exclusion of several items during the EFA phase was not solely a statistical reduction but a necessary cultural distillation. Items that originally measured highly individualized boundaries of institutional trust in Western samples exhibited conceptual overlap within the Turkish sample, which is characterized by a dynamic transition between collectivistic relatedness and individual autonomy (Kağıtçıbaşı 2017). Removing these items ensured that the scale culturally resonated with the target population rather than forcing misaligned items into the model. Furthermore, during the CFA phase, the exclusion of item M10 which emphasizes "equal opportunity on

paper" due to its statistical clustering directly under the "Reliability" dimension rather than the "Inclusiveness" dimension as in the original, should be interpreted as a cultural finding rather than a methodological limitation. This circumstance indicates that young adults in Turkey perceive inequality of opportunity not as a structural integration issue, but directly as a "reliability" crisis stemming from systemic unpredictability and the phenomenon of "rules failing to function." In this regard, it can be stated that the adapted 14-item, five-factor final structure both proves its construct validity through excellent statistical fit indices (CFI = .97, RMSEA = .03) and aligns cohesively with the sociological reality of the target culture.

Regarding convergent validity, while certain AVE values fell slightly below the traditional .50 threshold, the multidimensional and complex nature of societal trust naturally yields broader item-level variance. Consistent with methodological standards in the social sciences (Fornell and Larcker 1981, Hair et al. 2014), the convergent validity of these dimensions was deemed theoretically and statistically robust, as the Composite Reliability (McDonald's Omega) values consistently exceeded the acceptable .60 threshold. Moreover, findings pertaining to the convergent and discriminant validity of the scale verified that the five sub-dimensions (HTMT < .85), while conceptually complementary, are empirically and statistically independent constructs. The criterion-related validity findings strongly substantiate the theoretical framework of the research. The analysis results revealed that deteriorations in life attachment (reflected by high scores indicating systemic unbelonging and attachment crises) are positively associated with an individual's sense of entrapment (r = .48), while inversely related to their level of psychological resilience (r = -.36). This finding aligns with the fundamental premise emphasized in Antonovsky's (1987) salutogenic approach: when the capacity to perceive the world as a "comprehensible and manageable place" is lost, the individual's ability to bounce back in the face of stressors (psychological resilience) is compromised. Evaluated through the theoretical lenses of Erikson (1968) and Bowlby (1969), it is observed that the impairment of the basic sense of trust toward the social world and the system poses a risk to mental health by potentially triggering an "entrapment" perception among young adults.

The findings from the regularized partial correlation network analysis (EBICglasso) demonstrated the structural associations among the variables. Centrality indices indicated that the "Reliability" and "Inclusiveness" dimensions emerged as the most central nodes within the psychological functioning of young adults. Notably, the Entrapment (ENT) node exhibited direct positive associations with both the Inclusiveness and Reliability dimensions. This suggests that perceiving the system as unfair, non-inclusive, and unreliable potentially due to factors such as social isolation or economic uncertainties is closely linked to an individual's sense of psychological entrapment (Holt-Lunstad 2024). Furthermore, the direct negative edge observed between psychological resilience and Reliability indicates that trust in the societal system may serve as a protective factor for individual resilience capacity.

From a clinical perspective, the present network findings suggest that therapeutic interventions for young adults experiencing anomie or entrapment may benefit from focusing particularly on perceptions of Reliability and Inclusiveness. Strengthening individuals' trust in societal systems and supporting a sense of systemic inclusion may constitute important clinical pathways for reducing feelings of entrapment and enhancing psychological resilience.

When interpreting the findings of the present study, researchers and practitioners should consider several methodological limitations. The cross-sectional nature of our survey model inherent in this study restricts our ability to draw definitive causal inferences regarding the relationships between the sub-dimensions of the Life Attachment Scale (LAS-R), the sense of entrapment, and psychological resilience variables. Specifically, the centrality and edge weight findings derived from the Regularized Partial Correlation Network analysis, conducted using the EBICglasso algorithm, reflect a concurrent associative pattern rather than a causal mechanism. Another methodological limitation concerns the AVE and McDonald's Omega values obtained for the Coexistence and Reliability sub-dimensions, both of which remained slightly below the ideal threshold values. Although a certain degree of item-level variance may be expected when assessing complex social science constructs such as societal trust, the relatively lower internal consistency observed in these two dimensions suggests that their psychometric robustness is somewhat limited. Therefore, future cross-cultural research may benefit from revisiting the items within these

dimensions or developing new culture-sensitive items in order to strengthen their internal consistency. Second, the data used in the present study were collected through an online format, using convenience sampling and self-report measures. Although several precautions were taken during the research process, this non-probability sampling approach may limit the representativeness of the sample. In addition, the use of an online self-report design may introduce certain methodological risks, particularly common method variance and social desirability bias. A third limitation concerns the sample composition; the confirmatory factor analysis (CFA) and criterion validity analyses were conducted on a young adult group (aged 18–25), representing a largely homogeneous developmental stage. While the obtained psychometric evidence is highly strong for this specific age group, the direct generalizability of the model to other developmental periods is limited.

Although standard translation-back translation protocols, expert panel reviews, and pilot studies were conducted to ensure the linguistic and semantic equivalence of the scale (Brislin, 1970), a quantitative linguistic equivalence test utilizing a bilingual sample was not performed. Future cross-cultural validation studies could incorporate bilingual samples to statistically verify the translational equivalency of the LAS-R forms.

Conclusion

This study demonstrated that the Turkish version of the Life Attachment Scale-Revised (LAS-R), with its 14-item and five-dimensional structure, is a valid and reliable assessment instrument. Psychological counselors, mental health professionals, and researchers may use this scale to evaluate processes related to social isolation, belonging difficulties, anomie, and overall psychological well-being. By reflecting the multidimensional nature of systemic trust and societal connectedness within the Turkish cultural context, the LAS-R provides a useful framework for both empirical research and clinical practice.

In light of these limitations, various theoretical and methodological recommendations can be proposed for future research. To more clearly examine the developmental trajectory of life attachment and the directionality of relationships among variables, the employment of longitudinal research designs—particularly encompassing periods such as adolescence, where the construction of identity and societal belonging is critical—will provide significant contributions to the literature. Furthermore, to provide a more comprehensive assessment of the instrument's psychometric stability, future studies should examine measurement invariance across different developmental periods, such as early adolescence and late adulthood, as well as across diverse socioeconomic groups.

To map the nomological network of the construct more comprehensively, testing life attachment alongside closely related psychosocial constructs in young adults, such as loneliness and solitude, will yield additional evidence for discriminant and convergent validity. Finally, to elucidate the complex interactions among variables, it is recommended that researchers design serial mediation analyses based on SEM to investigate the bridging role of life attachment sub-dimensions (particularly the Inclusiveness and Reliability dimensions, which emerged as central in the network analysis) between psychological exclusion and well-being.

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Addendum 1. Life Attachment Scale-Revised (LAS-R) Turkish version

Instructions

Below are statements regarding various life situations and societal structures.

Please read each statement carefully and indicate how much it applies to you using the scale on the right.

There are no right or wrong answers

	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyrum	Kesinlikle katılıyorum
1. Çoğu insan yalnızca kendi gibi olanların ve yakın ilişki içinde olduğu kişilerin iyilik halini ve ihtiyaçlarını önemser, diğerlerini kendi kaderlerine terk eder.	1	2	3	4	5
2. Çoğu insan, sahip olduğu olanakları toplumu geliştirmek için kullanma eğiliminde değildir.	1	2	3	4	5
3. İnsanlar yalnızca ya mecbur kaldığı için ya da kişisel çıkarları için işbirliği yapar.	1	2	3	4	5
4. Gerçek dünyada her şey belirsizdir ve geleceğe dair kesin planlar yapmak genellikle zordur.	1	2	3	4	5
5. Kişi şimdiki hayatından memnun olsa bile, gelecekte bunu sürdürebileceğinin garantisi yoktur.	1	2	3	4	5
6. İklim felaketi, doğal afet veya salgın hastalıkların yaşam kalitemi düşüreceğinden sürekli endişe duyuyorum.	1	2	3	4	5
7. Suç veya şiddet mağduru olma riski beni sürekli strese sokuyor.	1	2	3	4	5
8. Günlük hayatta bile adaletsizliğe, baskıya veya ayrımcılığa karşı güvende ve korunmuş hissetmek mümkün değil.	1	2	3	4	5
9. Herkesin eşit fırsata sahip olduğu söyleniyor ama ben öyle düşünmüyorum, gerçekte bazı insanlar diğerlerinden daha avantajlı konumda.	1	2	3	4	5
11. Genel olarak kendimi içinde bulunduğum topluma ve sosyal çevreme karşı yalnız ve kabul görmemiş hissediyorum.	1	2	3	4	5
12. Genel olarak, içinde olmak istediğim topluluklar tarafından değerli görülmüyorum.	1	2	3	4	5
13. Genel olarak, benim için önemli olan konular söz konusu olduğunda toplumda veya kendi çevremde söz sahibi değilim.	1	2	3	4	5
14. Yaşadığım çevrede ya da toplumda katılabileceğim herhangi bir ortak proje ya da faaliyet görmüyorum.	1	2	3	4	5
15. Yaşadığım çevrede ya da toplumdaki mevcut projelere veya faaliyetlere katkıda bulunmak için kendi başıma herhangi bir yol bulamıyorum.	1	2	3	4	5

Scoring

The LAS-R consists of 14 items rated on a 5-point Likert scale.

Reverse-scored items: None. Because the scale items are phrased to reflect negative states (insecurity and unbelonging), reverse-coding is not required for any item.

Sub-dimensions: The scale comprises five sub-dimensions. The items belonging to each sub-dimension (based on the 14-item final structure) are as follows:

1. Coexistence (Birliktelik): Items 1, 2, and 3.
2. Reliability (Güvenilirlik): Items 4, 5, 8, and 9.
3. Security (Güvenlik): Items 6 and 7.
4. Inclusiveness (Kapsayıcılık): Items 10, 11, and 12.
5. Participation (Katılım): Items 13 and 14.

Total Score: Higher scores obtained from the scale indicate elevated insecurity in life attachment, systemic unbelonging issues, and a pronounced attachment crisis.