### Research Article / Araştırma Makalesi

The Validity and Reliability of Turkish Version of Awareness of Narrative Identity Questionnaire (ANIQ)

## Öyküsel Kimlik Farkındalığı Ölçeği' nin (ÖKFÖ) Türkçe Formunun Geçerlilik ve Güvenirlik Çalışması<sup>2</sup>

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**Keywords** 

## Abstract

1.identity development 2.narrative identity 3.confirmatory factor analyze

#### Anahtar Kelimeler

 1.kimlik gelişimi
 2.öyküsel kimlik
 3.doğrulayıcı faktör analizi

#### Received/Başvuru Tarihi 17.02.2021

Accepted / Kabul Tarihi 04.06.2021 Purpose The aim of this study was to adopt the Awareness of Narrative Identity Questionnaire (ANIQ) developed by Hallford & Mellor into Turkish and examine the validity and reliability of the questionnaire.

Design/Methodology/Approach: The study group consisted of 539 students from different universities, including Marmara University Faculty of Dentistry and various departments of Atatürk Education Faculty, Marmara University Formation, and Bilgi University Nursing Department students. Confirmatory factor analysis (CFA) was performed during the adaption of the questionnaire, and the data obtained were analyzed using SPSS 21 and AMOS 25 analysis programs.

*Findings:* As a result of the CFA for construct validity, the fit indices were found to be acceptable. The factor loadings of the scale items ranged from .65 to .91. The internal consistency reliability coefficients of the sub-dimensions of the scale ranged from .84 to .94, and test-retest coefficients ranged from .77 to .95. The meaningful relationship between life satisfaction, general competence, self-esteem, and the meaning of life showed the criterion-related validity of the scale.

*Highlights:* Inline, the results of the adaptation of the Awareness of Narrative Identity Questionnaire into Turkish indicated that the Turkish version of the scale could be used in researches as a valid and reliable measurement tool.

## Öz

*Çalışmanın amacı:* Bu çalışmanın amacı Hallford ve Mellor (2017) tarafından geliştirilen Öyküsel Kimlik Farkındalığı Ölçeği'ni (ÖKFÖ) Türkçeye uyarlamak ve ölçeğin geçerlik ve güvenirliğini incelemektir.

*Materyal ve Yöntem:* Çalışma grubu Marmara Üniversitesi Diş Hekimliği Fakültesi, Eğitim Fakültesi ve formasyon grubu öğrencileri ile Bilgi Üniversitesi Hemşirelik bölümünde öğrenim görmekte olan 539 üniversite öğrencisi oluşturmaktadır. Geçerlik ve güvenirlik analizleri SPSS.21 ve AMOS 25 programları aracılığı ile gerçekleştirilmiştir.

Bulgular: Ölçeğin yapı geçerliliği için yapılan Doğrulayıcı faktör analizi neticesinde ölçeğin kabul edilebilir uyum gösterdiği görülmektedir. Ölçek maddelerinin faktör yükleri .65 ile .91 arasında değişmektedir. Ölçeğin alt boyutlarının iç tutarlık katsayıları .84 ile .94 ve test tekrar test katsayıları .77 ile .95 arasında değişmektedir. ÖKFÖ ile yaşam doyumu, genel yeterlik, öz saygı ve yaşamın anlamı arasındaki anlamlı ilişki ölçeğin ölçüt bağıntılı geçerliğin sağlandığını göstermektedir.

Önemli Vurgular: Bu bulgular doğrultusunda ÖKFÖ'nün Türkçe formu Türkiye'de yürütülecek bilimsel araştırmalarda geçerli ve güvenilir bir ölçme aracı olarak kullanılabilmektedir.

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<sup>&</sup>lt;sup>2</sup> This research was carried out within the scope of the doctoral thesis titled "Examination of the effects of identity formation processes on well-being in emerging adulthood using the narrative identity approach: A mixed research

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### INTRODUCTION

With emerging adulthood, identity exploration and commitment become one of the basic psychological tasks of individuals. Identity formation processes are studied together with different approaches such as identity exploration, identity styles, and identity status. In addition to such approaches, the narrative identity approach model has increasingly been used in identity-related studies in recent years (Habermas & Köber, 2015). Developed by McAdams (1996), the narrative identity approach model addresses the process of identity formation as a matter of constructing a life story that provides life with purpose, fulfillment, and unity by remembering the past and imagining the future. Narrative identity is an extensive and ideal integrating story that an individual creates about the self. With narrative identity, the individual makes sense of experiences to develop meaning, unity, and purpose in life (Vignoles et al., 2011). Habermas and Bluck (2000) stated that individuals cannot form a life story until middle and late adolescence. Children can tell about the singular events in their lives in a complete and understandable way, but they cannot form an integrated life story until adolescence. The primary indicator of the development of narrative identity is the development of autobiographical reasoning, which enables the overall consistency of life stories. The person is an actor in early childhood, an agent in middle childhood, and an author of her/his own life at the start of adolescence. This self-authoring process involves reconstructing life's important moments, milestones, and personal experiences through personal narratives (McLean et al., 2019).

The individual begins to build on her/his own story with the emerging adulthood and continues to build on this story for the rest of her/his life, constantly reconstructing this story. This life story reflects how the individual's Present Self is formed and where the Present Self will be in a particular world of work, love, and belief. In other words, according to the narrative identity approach, the self is psychological fiction. This construction reflects both the individual's own view and the implicit knowledge of the surrounding environment. Although the development of narrative identity continues throughout adult life, it is necessary to focus on the key moments and significant life events at any moment of self-development to understand the founding parts, nature, and tendency of the life story. Milestones, peak experiences, and negative situations can be seen as examples of such important moments (McAdams & Cox, 2010).

Narrative identity reconstructs the autobiographical past and imagines the future for the individual to achieve a purposeful and meaningful life. In this way, an individual's life story synthesizes important memories along with planned goals, and over time, a consistent identity is developed. A constructed and internalized life story may include answers to Erikson's basic identity questions "Who am I? How did I come to be? Where is my life going?" (McAdams & McLean, 2013). The narrative approach to identity cannot be reduced to self-report criteria, and this approach represents a different level of analysis that evaluates subjectivity in a unique way (Adler et al., 2017).

The process of constructing and maintaining life stories relies on the ability to consistently recall and organize autobiographical memories (Hallford & Mellor, 2017). Any attempt to narrate a life needs to be generally coherent in order to succeed in developing the narrative identity. General coherence is a fundamental aspect of life narratives as life events are expected to be related to one another, to their contexts, and the personality and development of the individual in a meaningful and consistent whole (Köber et al., 2015). In other saying, the coherence of our personal narratives about these events sets important criteria for our success in making sense of life events (Linde, 1993).

Habermas and Bluck (2000) suggested four general forms of coherences -temporal, causal, thematic, and cultural coherence for an integrated and meaningful life story. Temporal coherence is the ability to remember experiences throughout life in a correct temporal context. When a life event took place, its beginning and ending help to integrate various autobiographical memories into the life story consistently. Causal coherence means that experiences are meaningfully related to each other and that these experiences establish causal connections with the self. For example, the event of being promoted due to positive performance at work is also related to one's beliefs in self-competence. However, causal coherence in a life stories also provides an understanding of the process of personal development. Thematic coherence is the ability to identify similarities among life events and define inclusive themes that will function as an integrated interpretation of these events or situations. Finally, cultural coherence refers to what a meaningful event in one's story represents, what a story should contain about life, and cultural norms of life phases (Köber et al., 2015). These forms of coherence are considered to shaping the narrative identity, along with chronologically organized, causally, and logically interconnected sequences of actions (Waters et al., 2019).

Another point in assessing narrative identity is identifying clues about who they are and the level of awareness about the stories they develop about their lives. Rather than the details of personal memories, this basic metacognitive awareness refers to the understanding that one's experiences can be described as a story that provides insight into one's identity. Regardless of the content of these stories, basic awareness of life stories that gives consistency and meaning to events in one's life constitutes the basis for understanding what the life story tells about the person and the lessons it contains (Hallford & Mellor, 2017).

It is seen that qualitative methods have been predominantly used in studies assessing the narrative identity along with life stories. The literature showed that life story interviews -semi-structured interview protocol- are often used to collect comprehensive life story data (Adler et al., 2017; McAdams & McLean, 2013). As Hallford and Mellor (2017) emphasized the importance of qualitative research in this field, they developed the Awareness of Narrative Identity Questionnaire to measure narrative identity awareness and general consistency in order to perform quantitative research on narrative identity. The aim of this study was to adapt this measurement tool developed to evaluate the narrative identity awareness and general coherence into Turkish. There are no studies found in which identity formation processes are addressed together with the narrative approach

after reviewing the Turkish literature. It is thought that the adaptation of this measurement tool to Turkish will contribute to the field of quantitative research on narrative identity, identity development, and formation.

## Psychometric Properties of the Original Version of the Awareness of Narrative Identity Questionnaire

Hallford and Mellor (2017) first created an item pool in the process of developing the Awareness of Narrative Identity Questionnaire and applied the first version of the scale to 441 people whose age ranged from 18-84 with 33.5 average age for Exploratory Factor Analysis. The analysis found that the correlation coefficients of the items except for reverse items were greater than .30. After removing the reverse items, re-analysis was performed, and a five-factor structure emerged. While the four sub-dimensions clearly corresponded to the theoretical framework, the fifth-factor with four-item was observed to be affected by the awareness sub-dimension, and after the item with the highest factor loading (.79) was removed, factor analysis was performed again, and a 20-item four-factor structure was reached with 78.51% total variance. Awareness, temporal coherence, causal coherence, thematic coherence are sub-dimensions of the scale, and the internal consistency coefficients were found as .91, .96, .90, and .93, respectively.

A CFA performed for the construct validity of the scale revealed that the goodness of fit indices ( $\chi 2/df = 2.46$ , RMSEA= .068, CFI= .95, SRMR= .036) are at a good level. For test-retest reliability, the scale was applied to 117 people for a week, and awareness sub-dimension was found r = .79, temporal coherence r= .78, causal coherence .72, and thematic coherence sub- dimension r= .74. The analysis made for criterion validity found that total scores of the sub-dimension of the scale had a positively significant relationship with the variables of the meaning of life, identity recall, thinking about life, talking about life, self-esteem, and self-efficacy. When evaluating the scale, the total score of the sub-dimension was taken into account, not the total score, and the high score obtained from the sub-dimensions indicated that narrative identity awareness was high and personal memories were generally perceived inconsistency (Hallford & Mellor, 2017).

## METHOD

This is a validity and reliability study for the adaption of the Awareness of Narrative Identity Questionnaire (ANIQ) developed by Hallford and Mellor (2017) into Turkish.

## **Study Group**

As outlined in Table1, the study group consisted of 539 students from different universities, including Marmara University Faculty of Dentistry and various departments (Turkish Teaching, Psychological Counseling, and Guidance, Geography Teaching, Art Teaching, Mathematics Teaching) of Atatürk Education Faculty, Marmara University Formation Group (English, Psychology, Child Development, Accounting and Finance, Graphics and Design groups) and Bilgi University Nursing Department. After evaluating the scales, the incomplete and incorrectly filled ones were eliminated, and a CFA was performed with the data from a total of 534 students, 387 girls (72.5%), 116 boys (21.7%), and 31 others who did not specify their gender.

Department	Female	Male	Unspecified	Total
Turkish Teaching	32	8	2	42
Psychological Counseling and G.	53	18	9	80
Geography Teaching	33	5	2	40
Art Teaching	33	12	0	45
Mathematics Teaching	27	10	0	37
Formation-English	26	3	0	29
Formation-Psychology	26	5	5	36
Formation-Child Development	28	15	1	44
Formation-Accounting and Finance	14	10	4	28
Formation-Graphics and Design	17	7	1	25
Dentistry	61	19	4	84
Nursing Department	37	4	3	44
Total	387	116	31	534

## Table 1. Descriptive information of the study group

The age range of the study group varied between 18-29, and the average age of the group was 23.5 years. English and Turkish versions of the scale were applied to 38 students from the English Department of Marmara University Formation Group with regards to the linguistic equivalence study. For the criterion validity, a total of 87 students from the departments of Psychological Counseling and Guidance and Pre-School Teaching of Marmara University were reached. As part of the test-retest study for reliability (stability), the scale was applied to 34 people at three-weeks intervals.

## **Data Collection Tools**

## Awareness of Narrative Identity Questionnaire

The ANIQ was developed by Hallford and Mellor (2017) to measure the level of general consistency of personal memories with narrative identity awareness. The scale is a 10-point Likert type and consists of a total of 20 items with four sub-dimensions and 5

items in each sub-dimension. The scale has no reverse item. The sub-dimensions of the scale are awareness, temporal coherence, causal coherence, and thematic coherence. While the awareness sub-dimension (for example, when I look back on my life, I can see the story that tells me who I am) measures narrative identity awareness, the other three sub-dimensions -temporal coherence (for example, I can sort my life events according to the time of occurrence), causal coherence (e.g., I understand how life experiences relate with each other), thematic coherence (e.g., when I talk or think about my past experiences, I can see the themes/characteristics of the person I am now)- measure the general consistency of one's perception of her/his personal memories. The evaluation of the scale is based on the total scores obtained from the sub-dimensions (Hallford & Mellor, 2017).

## The Satisfaction with Life Scale

It was developed by Diener et al. (1985). This scale aims to measure life satisfaction. The seven-point Likert type, the unidimensional scale, consists of five items. It was adapted into Turkish by Durak et al. (2010). The internal consistency of the scale was found to be .81. Item total test correlations vary between .55 and .63.

#### The Meaning in Life Questionnaire

Developed by Steger et al. (2006) and adapted to Turkish by Akın and Taş (2010), the Meaning in Life Questionnaire is a 7-point Likert-type scale that consists of two sub-dimensions and ten items. Items 1, 4, 5, 6, and 9 create the presence of meaning sub-dimension, while items 2, 3, 7, 8, and 10 create the search for meaning sub-dimension. Item 9 of the scale is reverse coded. High scores obtained from the sub-dimensions of the scale mean that the individual has a high level of chance of having characteristics belonging to that sub-dimension. The internal consistency coefficients of the scale were found .82 for the presence of meaning sub-dimension and .87 for the search for meaning sub-dimension.

#### The General Self-Efficacy Scale

The General Self-Efficacy Scale was developed by Jerusalem and Schwarzer as a 20-item scale in 1979 and was revised to a four-point Likert-type scale with 10 items by those who developed the scale in 1981. In the following years, validity and reliability studies of this scale have been carried out in many languages (Scholz et al., 2002). Adapted into Turkish by Aypay (2010), the scale consists of two sub-dimensions in which 47% of the total variance is explained. The factor loadings of the items vary between .33 and .63 except for one item (.24). The first factor consisted of six items -3,4,5,7,8,10- (making an effort to cope with challenges, being resistant), while the second factor consisted of four items -1,2,6,9- (ability and confidence). The internal consistency coefficient was .79 for the first factor and .63 for the second factor; the general consistency coefficient of the scale was found to be .83. Scoring was kept positive for all items, and a high score means a high level of general self-efficacy.

## Rosenberg's Self-Esteem Scale (RSES)

The scale is intended to measure general self-esteem. This unidimensional and four-point Likert-type scale can be applied to adults and adolescents. It consists of a total of 10 items; a low score on the scale indicates low self-esteem, and a high score indicates high self-esteem. It was adapted into Turkish by Çuhadaroğlu (1986). Psychiatric interviews were used for criterion validity. Correlation coefficient between the scores obtained from these interviews and RSES scores was found to be .71. Test-retest reliability coefficient of RSES was found to be .75. Items 3, 5, 8, 9, and 10 of the scale are reverse coded.

#### Permission and translation process

David John Hallford, who developed the scale, was contacted by email for the adaptation of the Awareness of Narrative Identity Questionnaire to Turkish, and the necessary permissions were obtained. At the stage of translation of the scale into Turkish, the translation – retranslation method and the linguistic equivalence method were used. It is important that the translation of the scale from the original language into Turkish should be done by an expert who has knowledge of the measured structure and mastered both languagesbecause incorrect translation of some terms can lead to errors in determining the feature that is aimed to be measured. After the translation process, it is aimed to review and finalize the scale together with experts in the field to minimize the errors that may occur due to translation (Karakoç & Dönmez, 2014). As such, 6 academicians specialized in the field of Psychological Counseling and Guidance and have a good command of both languages (Turkish and English) translated the scale into Turkish during the translation – retranslation phase; the Turkish form of the scale was obtained after discussing the Turkish and English version with three experts to make the necessary improvements for coherence and grammar.

#### **Data Analysis**

As part of the adaptation process of the ANIQ to Turkish, CFA was used for the construct validity. CFA is an analysis that tests whether a previously defined and restricted structure is validated as a model. In this direction, CFA is used to evaluate the construct validity (Çokluk et al., 2016). The Chi-Square Goodness of Fit Test, Comparative Fit Index (CFI), Goodness of Fit (GFI), Tucker-Lewis index (TLI-also known as Moles-Bonnet Non-Normed Fit Index-NNFI), Standardized Root Mean Square Error (SRMR), and Root Mean Square Error of Approximation (RMSEA) were used to determine the goodness of fit of the model tested in CFA. In addition, the internal consistency coefficient (Cronbach's alpha) for the reliability of the scale and the correlation coefficients for the stability reliability were calculated by test-retest. The analysis of the data obtained within the scope of the scale adaptation was carried out using SPSS 21 and AMOS 25 analysis programs.

#### **FINDINGS**

#### **Linguistic Equivalence**

Within the scope of the linguistic equivalence of the ANIQ, Turkish and English forms of the scale were applied to 38 students with an average age of 25.48 in the English department of Marmara University Formation Group at three-week intervals.

<b>Sector</b>		t	-test	
Scores	n	x	SS	t
TR Awareness	38	35.61	11.14	-1.03
ING Awareness	38	37.34	9.50	
TR Casual	38	38.45	10.04	1.55
ING Casual	38	36.08	10.51	
TR Temporal	38	37.97	9.18	1.46
ING Temporal	38	35.97	10.84	
TR Thematic	38	37.82	8.73	.00
ING Thematic	38	37.82	8.80	.00

As can be seen in Table 2, according to the results of the paired groups t-test performed to determine whether there is a significant difference between the Turkish and English forms of the scale and between the sub-dimension scores, no significant difference was found between the item mean score and the subscale mean scores (*p*>. 05).

#### **Construct Validity**

CFA was performed to evaluate the structure of the scale in its original four-dimensional 20-item form. Fit indices (first model  $\chi^2/df= 4.74$ , RMSEA= .084, CFI= .918, GFI=.908, TLI= .904, SRMR= .051) were found to be acceptable except for RMSEA and chisquare values. For this reason, adjustments were made according to the proposed modification indexes to improve the model. With these adjustments, the error variances of the 6th and 7th items in the temporal coherence sub-dimension and the 13th and 14th items in the causal coherence sub-dimension were modified. Fit indices of the second model, i.e. adjusted model (adjusted model  $\chi^2/df= 3.72$ , RMSEA= .071; CFI= .941, GFI=.916, TLI= .931, SRMR=.047) are observed to be adequate and acceptable (Çokluk et al., 2016).

## Table 3. Model fit indices

Fit index	First model value	Adjusted model value	Good fit	Acceptable fit
x2	4.74	3.72	$0 \le \chi 2/df \le 2$	$2 \le \chi 2/df \le 5$
CFI	.918	.941	0.95 ≤ CFI ≤ 1.00	0.90 ≤ CFI ≤ 0.95
RMSEA	.084	.071	$0 \le \text{RMSEA} \le 0.05$	$0.05 \le \text{RMSEA} \le 0.08$
GFI	.908	.916	$0.95 \le CFI \le 1.00$	0.90 ≤ CFI ≤ 0,95
TLI	.904	.931	0.95 ≤ TLI ≤ 1.00	0.90 ≤ TLI ≤ 0.95
SRMR	.051	.047	0 ≤ SRMR ≤ 0.05	0.05 < SRMR ≤ 0.10

Following the adjustments, the four-factor structure of the scale and the relationship between the factors are shown in Figure 1. The factor loadings of the scale items ranged from .69 to.73 for the awareness sub-dimension; from .80 to .91 for the temporal coherence sub-dimension; from .67 and .80 for the causal coherence sub-dimension, and from .65 to .88 for the thematic coherence sub-dimension. When we examined the fit indices of the last model adjusted, it is seen that the four-factor structure of the ANIQ showed an acceptable fitness level.

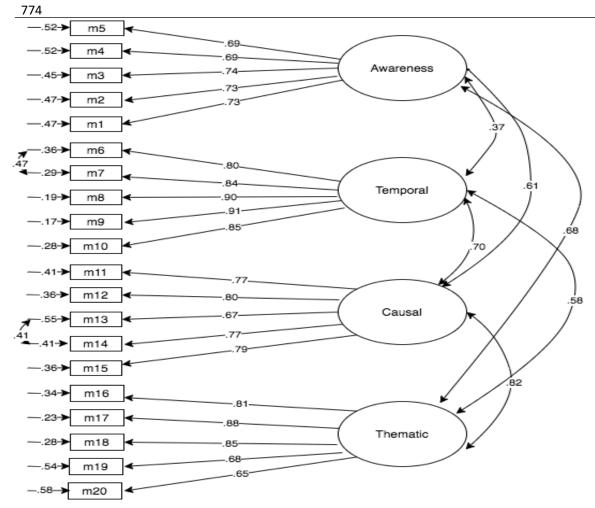


Figure 1. Results of Confirmatory Factor Analysis

### **Criterion-Related Validity**

For the criterion-related validity of the ANIQ, the relationship between life satisfaction, the meaning of life, general efficacy, and self-esteem was examined, and the correlation coefficients between them are given in Table 4.

Var	riable	1	2	3	4	5	6	7	8	9
1.	Awareness	1								
2.	Temporal	.49**	1							
3.	Casual	.52**	.55**	1						
4.	Thematic	.60**	.65**	.71**	1					
5.	Life Satisf.	.11	.21*	.16	.21*	1				
6.	General Effi.	.23*	.32**	.20	.26*	.41**	1			
7.	Self-Esteem	.28*	.29**	.23*	.29**	.59**	.61**	1		
8.	Existing M.	.25*	.36**	.30**	.39**	.48**	.40**	.47**	1	
9.	Pursuit of M.	.29**	08	.19	.04	17	.03	18	03	1

Table 4. Correlation coefficients for the relationships between the variables

\*p<.05; \*\*p<.01

As shown in the table, it was found that there was positive correlation between awareness sub-dimension and general selfefficacy (r=.23), self-esteem (r=.28), existing meaning (r=.25) and pursuit of meaning (r=.29); between temporal coherence subdimension and satisfaction with life (r=.21), general self-efficacy (r=.32), self-esteem (r=.29), existing meaning (r=36); between causal coherence sub-dimension and self-esteem (r=.23) and existing meaning (r=.30) only; between thematic coherence subdimension and satisfaction with life (r=.21), general self-efficacy (r=.26), self-esteem (r=.29) and existing meaning (r=.39)

#### Item Analysis and Reliability Analysis

Item analysis was performed to determine the predictive power and distinctiveness of the items of the ANIQ on the subdimension total scores. As shown in Table 5, the correlation between items and sub-dimension total scores varied between .60 and .66 in awareness sub-dimension; .81 and .83 in temporal coherence sub-dimension; .65 and .72 in causal coherence subdimension; .63 and .71 in thematic coherence sub-dimension.

Sub-dimensions	Item No	Min.	Max.	x	Ss	CI-TC
	1	0.00	10.00	7.39	1.94	.66
	2	0.00	10.00	6.86	2.02	.66
Awareness	3	0.00	10.00	7.32	1.98	.66
	4	0.00	10.00	6.92	1.90	.63
	5	2.00	10.00	6.84	1.95	.60
	6	0.00	10.00	7.62	2.11	.83
	7	0.00	10.00	7.45	2.14	.85
Temporal	8	1.00	10.00	7.55	1.95	.85
	9	2.00	10.00	7.42	1.91	.85
	10	2.00	10.00	7.35	1.91	.81
	11	0.00	10.00	7.31	1.84	.65
	12	2.00	10.00	7.48	1.75	.75
Casual	13	0.00	10.00	7.63	1.81	.68
	14	2.00	10.00	7.57	1.68	.77
	15	2.00	10.00	7.48	1.65	.72
	16	0.00	10.00	7.59	1.67	.71
	17	0.00	10.00	7.46	1.67	.79
Thematic	18	2.00	10.00	7.52	1.62	.77
	19	0.00	10.00	7.36	1.78	.67
	20	0.00	10.00	7.42	1.80	.63

Table 5. Adjusted total item test correlations of the scale and descrip	tive statistics
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## **CI-TC: Corrected item-total correlations**

The reliability findings of the scale are given in Table 6. As can be seen in the Table, the internal consistency (Cronbach's alpha) coefficient of the scale was found to be  $\alpha$ =.84 for the awareness sub-dimension;  $\alpha$ =.94 for the temporal sub-dimension;  $\alpha$ =.88 for the causal sub-dimension, and  $\alpha$ =.88 for the thematic sub-dimension. In the first and second applications of the scale, the test-retest reliability (stability) coefficient was  $r_{1-2}$ =.78 for the awareness sub-dimension;  $r_{1-2}$ =.84 for the temporal sub-dimension;  $r_{1-2}$ =.95 for the causal sub-dimension and  $r_{1-2}$ =.77 for the thematic sub-dimension.

#### Table 6. Reliability findings of the scale

Sub-dimensions	Application	<b>x</b> <sub>n(34)</sub>	Ss <sub>n(34)</sub>	r <sub>n(34)</sub>	α <sub>n(534)</sub>
	Test	33.00	6.86	70	
Awareness	Retest	33.50	9.19	.78	.84
Temporal	Test	36.52	10.13		0.4
	Retest	34.58	10.43	.84	.94
	Test	36.82	16.84	05	00
Casual	Retest	38.70	30.03	.95	.88
Thematic	Test	33.20	6.92		
	Retest	33.82	9.82	.77	.88

## **DISCUSSION and CONCLUSION**

The aim of this research was to adapt the "Awareness of Narrative Identity Questionnaire" developed by Hallford and Mellor (2017) to Turkish in order to measure the general consistency of narrative identity awareness and autobiographical memories. For this purpose, the necessary permissions were obtained from the relevant authors at first, and the translation process was carried out by academicians experts in their field, and the Turkish form was finalized for application.

CFA was performed during the construct validity process to verify the original 20-item and four-factor structure of the scale. CFA is used to verify a predetermined or constructed structure and to evaluate whether the structure is compatible with the data. Improvements were made in accordance with the recommended modifications in the model, considering the results of fit indices used to determine compliance adequacy. It was found that the fit indices of the adjusted model were acceptable, and the original structure of the scale was applicable in this study group.

For criterion validity, the relationship between narrative identity awareness and life satisfaction, meaning in life, general efficacy, and self-esteem was examined. It was found that the sub-dimensions of the ANIQ showed a generally positive significant relationship with life satisfaction, meaning in life, general efficacy, and self-esteem. It was found that similar results were obtained during the development phase of the original form of the scale. The analysis made for the criterion validity of Hallford and Mellor (2017) scale examined the relationship between narrative identity awareness and the meaning of life, identity recall, thinking about life, self-esteem, and self-efficacy variables, and it was observed that there was a positive significant relationship between these variables and sub-dimensions of the narrative identity awareness.

In the reliability analysis of the scale, the test-retest reliability coefficient and Cronbach's alpha internal consistency coefficient were calculated. In the application of test-retest reliability, the scale was applied to the same group at three weeks intervals, and the relationship among the sub-dimension scores obtained from the two applications was examined. It was observed that there was a relationship of .77 and above between the results of the two applications. Furthermore, similar to the values of the original form of the scale, Cronbach's alpha internal consistency coefficient was found to be .84 and above in all sub-dimensions. In the literature, the acceptable level of Cronbach's alpha value is specified as .70 and above. These results showed that the scale is a reliable measurement tool (Çokluk et al., 2016).

Item analysis of the scale was examined with corrected item-total correlations. The aim of item analysis is to determine the predictive power and distinctiveness of the sub-dimension total scores of the items. In general, the correlation coefficients between the items and sub-dimension total scores were found to range from .60 to .83. In the literature, these values, that is, item-total correlations being above .30, were considered acceptable (Çokluk et al., 2016).

The Turkish form of the scale, as in its original form, is a 10-point Likert type and consists of a total of 20 items with four subdimensions and 5 items in each sub-dimension. Total score can not be obtained from the scale. The results indicated that the Turkish adaptation of the ANIQ can be used as a valid and reliable measurement instrument. It is considered that this measurement instrument will help better understand the role of narrative identity in various fields such as developmental, cognitive, and clinical research and address identity formation processes in a broader and more detailed manner. Considering the dynamic nature of the narrative identity, it is recommended to evaluate the construct validity of the scale in different sample groups such as adults and older adults.

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The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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## Statements of publication ethics

We hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

# **Researchers' contribution rate**

The study was conducted and reported with equal collaboration of the researchers.

# **Ethics Committee Approval Information**

All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional research committee at Marmara University. It has the Ethics Committee Certificate with the Decision of Marmara University Institute of Education Sciences Publication Ethics Committee Dated 20.01.2021 and Numbered 2100042435.

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