



# Psychometric Validation of a Turkish Family Affluence Scale for Adolescents: An Item Response Theory Approach

Ergenler İçin Türkçe Aile Varlık Düzeyi Ölçeği'nin Psikometrik Doğrulanması: Bir Madde Tepki Kuramı Yaklaşımı

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ABSTRACT

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The Family Affluence Scale is widely used in adolescent health research, yet its most recent revision has not been examined in Turkish adolescents using modern measurement methods. This study evaluated a pool of 14 candidate affluence indicators in 397 Turkish adolescents (48.6% female; mean age 13.34 years, SD = 1.31) and derived a short unidimensional affluence scale. Items were screened on the basis of endorsement rates, item response theory discrimination, and local dependence. Four indicators (washing machine, own bed, dishwasher, and home Internet) were endorsed by more than 90% of respondents and carried little information, and car ownership did not discriminate among families. A six-item form was retained and showed good fit to a single-factor model estimated with robust weighted least squares, scaled CFI = .979, TLI = .965, RMSEA = .026, SRMR = .056. A graded response model indicated that test information was concentrated at the middle and upper range of affluence and was low at the lower range. The scale functioned equivalently across gender, although two items showed differential functioning across age groups. Internal consistency was modest (ordinal alpha = .63), consistent with prior FAS research. The findings support a usable short affluence measure for Turkish adolescents.

**Keywords:** family affluence scale, socioeconomic status, adolescents, item response theory, scale adaptation

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ÖZ

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Aile Varlık Düzeyi Ölçeği (FAS), ergen sağlığı araştırmalarında yaygın olarak kullanılmaktadır; ancak ölçeğin en son revizyonu, modern ölçme yöntemleri kullanılarak Türk ergenler üzerinde henüz incelenmemiştir. Bu çalışmada, 397 Türk ergen (%48.6 kız; yaş ortalaması = 13.34 yıl, SS = 1.31) üzerinde 14 aday varlık göstergesinden oluşan bir madde havuzu değerlendirilmiş ve kısa, tek boyutlu bir varlık düzeyi ölçeği elde edilmiştir. Maddeler; maddeleri onaylama (seçilme) oranları, madde tepki kuramı ayırt edicilik indeksleri ve yerel bağımlılık temelinde ayıklanmıştır. Dört gösterge (çamaşır makinesi, kendine ait yatak, bulaşık makinesi ve evde internet) katılımcıların %90'ından fazlası tarafından onaylanmış ve çok az bilgi taşımıştır; araba sahipliği ise aileleri ayırt etmede yetersiz kalmıştır. Geriye kalan altı maddelik form, gürbüz en küçük kareler yöntemiyle kestirilen tek faktörlü bir modele iyi uyum göstermiştir (ölçeklendirilmiş CFI = .979, TLI = .965, RMSEA = .026, SRMR = .056). Derecelendirilmiş tepki modeli, test bilgi fonksiyonunun varlık düzeyinin orta ve üst sınırlarında yoğunlaştığını, alt sınırında ise düşük olduğunu göstermiştir. Ölçek cinsiyete göre eş değer şekilde işlev görmüş, ancak iki madde yaş grupları arasında değişen madde fonksiyonu (DIF) sergilemiştir. İç tutarlılık, önceki FAS araştırmalarıyla tutarlı olacak şekilde mütevazı düzeydedir (ordinal alfa = .63). Bulgular, Türk ergenler için kullanışlı ve kısa bir varlık düzeyi ölçüm aracını desteklemektedir.

**Anahtar Kelimeler:** aile varlık düzeyi ölçeği, sosyoekonomik düzey, ergenler, madde tepki kuramı, ölçek uyarlama

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## INTRODUCTION

Adolescence constitutes a critical developmental period (Jaworska & MacQueen, 2015) however, youth from lower socioeconomic backgrounds are disproportionately prone to mental health challenges, which may in turn impair their future health and socioeconomic position (Reiss, 2013). Socioeconomic status is also one of the more consistent correlates of adolescent health, wellbeing, and development (Hobza et al., 2017; Prag et al., 2016). Since adolescents are rarely able to report household income accurately, researchers often rely on asset-based measures that ask young people about goods and services in the home and then combine these into an index of family wealth (Currie et al., 2008; Wardle et al., 2002). The Family Affluence Scale was developed within the Health Behaviour in School-aged Children study for exactly this purpose. Its first version included three items covering car ownership, holidays, and having one's own bedroom (Currie et al., 1997). A computer item was added to form the four-item second version (Boyce & Dallago, 2004), and a later revision produced a six-item version, FAS III, which retained computers, cars, and own bedroom, refined the holiday item, and added a dishwasher item and a bathroom item (Torsheim et al., 2016). Fundamentally, the overarching objective of the FAS framework throughout its iterative revisions has been to provide a reliable, non-intrusive, and adolescent-appropriate proxy for socio-economic status, bypassing the high non-response and inaccuracy rates typical of parental income or occupation reports. Rather than a routine linguistic adaptation, the target of the present study is rooted in this core objective: to evaluate how these evolving international asset indicators function within the contemporary macro-economic climate of Türkiye and to derive an optimized, psychometrically robust short form that aligns with the overarching goals of the FAS paradigm.

A recurring concern with asset-based measures is that the meaning of individual indicators changes as living standards rise. Computers were once a marker of relative wealth but are now close to universal in many settings, and parameter drift for the computer item has been documented across successive HBSC surveys (Schnohr et al., 2013). When an indicator is owned by almost everyone, it no longer separates more affluent families from less affluent ones, and ceiling effects of this kind have been reported in high-income contexts such as Norway (Torsheim et al., 2016). The implication is that the FAS requires periodic re-examination in each new context rather than direct transfer.

The conceptual network of adolescent socioeconomic position extends beyond structural or material outcomes, dynamically interacting with indicators of psychological well-being and interpersonal resources, such as self-esteem and perceived social support. Self-esteem, defined as an individual's overall subjective evaluation of their own worth (Brown et al., 2001), is heavily shaped by social comparisons and environmental feedback during the formative years of adolescence. According to the social stratification and psychological distress literature, family material wealth functions as a visible marker of status among peers, which directly influences an adolescent's self-

appraisal (Dittmar et al., 2017; Wiedermann, 2026). Disadvantaged socioeconomic background often restricts access to socially valued goods, activities, and potentially result in feelings of relative deprivation, social exclusion, and lower self-worth (Edet et al., 2023; Sheehy-Skeffington, & Rea, 2017). Conversely, higher family affluence fosters a secure developmental environment, reinforcing a sense of mastery, social competence, and elevated self-esteem (Botelho Guedes et al., 2022).

In addition to self-evaluative mechanisms, family material resources are intrinsically correlated with social support. Perceived social support represents an adolescent's cognitive appraisal of the availability and adequacy of assistance from key social domains, primarily family and friends (Brisson et al., 2024; Cohen & Wills, 1985; Malecki & Demary, 2002). While social support is fundamentally interpersonal, the cultivation and maintenance of these networks require latent economic underpinnings. Families with greater affluence are not only capable of reducing internal financial strain but are also better positioned to facilitate their children's participation in extracurricular activities (Zaborskis et al., 2022). On the other hand, material hardship can compress parental emotional bandwidth and limit adolescents' social mobility, thereby constraining their capacity to mobilize and perceive social support (Schültz et al., 2025). Consequently, mapping the nomological network of a newly adapted asset-based scale requires a systematic examination of its associations with these core psychological and interpersonal constructs.

In Turkey, the four-item FAS II was recently adapted in a sample of university students using exploratory factor analysis and Rasch modelling, with adequate validity and a single-factor structure (Kırcı et al., 2024). That work leaves two gaps. First, it examined the older four-item version rather than the revised FAS III item set. Second, it was conducted in young adults rather than in the school-aged adolescents for whom the scale was designed. The present study addresses both gaps by examining a contemporary affluence item pool in Turkish adolescents and by using item response theory, which is well suited to short ordinal scales and allows examination of where on the affluence continuum the scale provides information (Samejima, 1997; Torsheim et al., 2016). The aim of the current study was to derive and psychometrically validate a short, unidimensional affluence scale for Turkish adolescents based on the international FAS III framework and to test its structure, item functioning, reliability, and relations with conceptually related variables.

## METHOD

### Research Model

A quantitative research design was used for this study. Quantitative designs facilitate data analysis through statistical methods and are widely preferred in scale development and adaptation studies (Creswell & Creswell, 2017). To clarify the methodological nature of this study, this research is primarily conceptualized as a psychometric optimization and validation study rather than a completely *de novo* scale development or a simple translation-based adaptation. While the study

design incorporates a scale development paradigm by compiling an expanded pool of 14 candidate asset indicators tailored to the contemporary Turkish socio-economic context, the underlying latent construct, core item structures, and scoring logic are fundamentally anchored in the international Family Affluence Scale (FAS III) framework. Thus, rather than developing a new construct, this study systematically screens, adapts, and validates an optimized, context-specific short form using modern psychometric techniques

### Study Group

The study group comprised 397 adolescents enrolled in various middle and high schools in Elazığ province during the 2025-2026 academic year. The mean age of the participants was 13.34 years (SD = 1.31, range = 10 to 18), consisting of 191 girls (48.6%) and 202 boys (51.4%). Although the grade levels ranged from 5th to 12th grade, the majority of the respondents were concentrated in grades 7 through 10. To ensure feasibility and accessibility, a convenience sampling method was employed to determine the study group (Büyüköztürk et al., 2018). Data were collected face-to-face during regular school hours. Prior to the administration, institutional ethics were strictly followed, ensuring voluntary participant compliance and obtaining parental informed consent.

### Data Collection Tools

**Family affluence.** Respondents completed a 14-item pool of candidate affluence indicators drawn from the FAS III development study (Torsheim et al., 2016). The pool covered the FAS II core items (number of computers, car ownership, family holidays, and own bedroom) together with additional indicators proposed during the FAS III revision, including holidays abroad, a garden or yard, own bed, holiday home, dishwasher, washing machine, tumble dryer, home Internet, paid domestic help, and own computer. The bathroom and personal music player items were not administered. These items were excluded because the bathroom item exhibits structural saturation and carries negligible socio-economic variance in contemporary Turkish urban housing contexts, while personal music players have become technologically obsolete due to the universal adoption of smartphones for media consumption. Binary items were scored so that higher values indicated greater affluence, and the count items were scored on their original ordinal metric.

**Self-esteem.** Ten items' RSE (Rosenberg, 1965; Turkish version: Çuhadaroğlu, 1989) assessed the global self-esteem levels of adolescents. The 10-item Rosenberg Self-Esteem Scale was administered on a four-point response format, with negatively worded items reverse scored so that higher totals indicate higher self-esteem.

**Perceived social support.** The Perceived Social Support Scale (Zimet et al., 1988) adapted for the Turkish culture by Eker et al. (2001) was used to measure adolescents' perception of social support. This scale consisted 12 items grouped into three support domains: family, teacher, and

friend. An eight-item short form of the Multidimensional Scale of Perceived Social Support was administered, covering the family and friends subscales on a seven-point response format.

### **Data Analysis**

Out-of-range values were recoded as missing, and the small amount of missing data (less than 1% of cells) was handled within each estimator. Item screening combined three sources of evidence: endorsement rates, item discrimination from a unidimensional graded response model, and local dependence assessed through residual correlations and exploratory graph analysis. Near-universal indicators and indicators that did not discriminate were removed, and for pairs of redundant indicators the item with the clearer link to the international FAS was retained.

The retained items were submitted to a single-factor confirmatory factor analysis estimated with robust weighted least squares for ordinal data. Model fit was judged against conventional benchmarks, with comparative fit index and Tucker-Lewis index at or above .95 and root mean square error of approximation at or below .06 taken as indicative of good fit (Hu & Bentler, 1999). A graded response model was then fitted to obtain item discrimination and threshold parameters and to plot item and test information (Samejima, 1997). Differential item functioning by gender and by age group was examined with ordinal logistic regression, comparing models with and without a grouping term while conditioning on the total score, and flagging items with a significant likelihood ratio test and a change in McFadden pseudo R-squared above .02 (Choi et al., 2011). Reliability was indexed with ordinal coefficient alpha and omega, with omega preferred because it does not assume equal loadings (McNeish, 2018), and with the marginal reliability from the graded response model. Nomological validity was examined through Spearman correlations with self-esteem and perceived social support. Analyses were conducted in R using the lavaan, mirt, semTools, and EGAnet packages.

### **Ethics**

Before the data collection process, Ethical approval and permission were obtained from the Institutional Review Board of Siirt University (Reference number: 1525). All research procedures were performed in compliance with the Declaration of Helsinki guidelines for research involving human participants.

## **RESULTS**

### **Item Screening**

Endorsement rates and discrimination indices for the 14-item pool are shown in Table 1. Four indicators were endorsed by more than 90% of respondents (washing machine, own bed, dishwasher, and home Internet). In a unidimensional model these near-constant items dominated the latent dimension and produced unstable estimates, which is the expected consequence of including indicators with almost no variance. Once they were removed, all remaining discriminations

were positive and interpretable. Car ownership did not discriminate among families (standardized loading = .09,  $p = .49$ ), indicating that in this sample car ownership no longer marks relative affluence. The number of computers and own computer showed the strongest local dependence (residual  $r = .17$ ), and the number of computers was retained for comparability with the international scale. On the basis of this evidence a six-item form was retained.

**Table 1**

*Endorsement, Discrimination, and Screening Outcome for the 14-Item Affluence Pool*

Indicator	% endorsing / M (SD)	IRT a (pool)	Outcome
Paid domestic help	13%	1.64	Retained
Holidays abroad	0.22 (0.57)	1.31	Retained
Holiday home	31%	1.30	Retained
Tumble dryer	39%	1.08	Retained
Own computer	58%	0.84	Removed (LD with computers)
Own bedroom	83%	0.64	Retained
Garden or yard	61%	0.51	Removed (weak, redundant)
Number of computers	1.66 (0.76)	0.47	Retained
Car ownership	87%	0.21	Removed (non-discriminating)
Home Internet	91%	1.02*	Removed (ceiling)
Dishwasher	95%	3.00*	Removed (ceiling)
Own bed	95%	2.28*	Removed (ceiling)
Washing machine	96%	8.32*	Removed (ceiling)
Family holidays	ambiguous coding	n/a	Removed (FAS III deprecated)

*Note.* LD = local dependence. Asterisks mark discriminations inflated by near-constant items; these values are artifacts of ceiling effects rather than genuine measurement precision. The family holidays item was excluded a priori because it is not part of FAS III and was ambiguously coded.

### Dimensionality and Structure

The six-item form fitted a single-factor model well, scaled chi-square (9) = 11.30,  $p = .26$ , CFI = .979, TLI = .965, RMSEA = .026 with 90% confidence interval [.000, .067], SRMR = .056. Standardized loadings and graded response parameters are reported in Table 2. Exploratory graph analysis initially suggested two communities, but these tracked endorsement rate rather than content and are best understood as a difficulty artifact, so essential unidimensionality was retained, consistent with the bifactor evidence reported for the international scale (Reise et al., 2007; Torsheim et al., 2016). The graded response model fitted adequately,  $M2 = 12.39$ ,  $df = 9$ ,  $p = .19$ , RMSEA = .031, CFI = .975.

**Table 2**  
Standardized Loadings and Graded Response Parameters for the Six-Item Form

Item	$\lambda$	a	b thresholds
Paid domestic help	.74	1.77	1.56
Holidays abroad	.64	1.60	1.44, 2.74, 3.16
Holiday home	.57	1.19	0.88
Tumble dryer	.52	1.07	0.52
Number of computers	.25	0.35	-15.21, 0.07, 4.68
Own bedroom	.19	0.45	-3.72

Note.  $\lambda$  = standardized factor loading from the ordinal confirmatory model; a and b are graded response discrimination and threshold parameters. Extreme thresholds for the computer item reflect a near-empty lowest category.

### Item and Test Information

Figure 1 presents item and test information. Paid domestic help and holidays abroad provided the most information and peaked at the upper range of affluence, whereas the number of computers and own bedroom contributed little across the continuum. Test information peaked near one and a half standard deviations above the mean and was low at the lower range, so the scale measures more precisely among more affluent families and less precisely among the least affluent. This pattern mirrors the information profile reported for FAS III internationally (Torsheim et al., 2016).

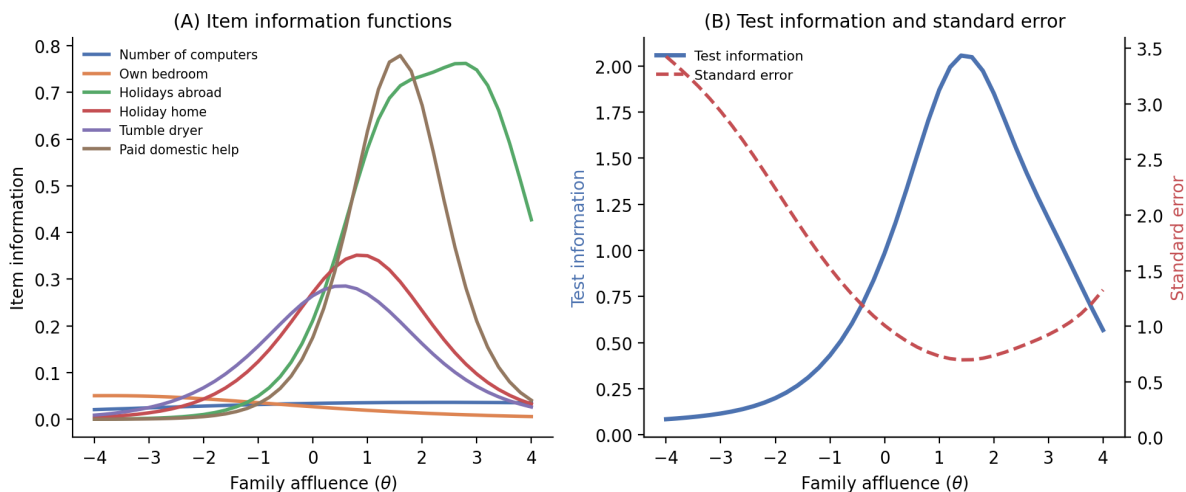


Figure 1. Item and Test Information Functions for the Six-Item Turkish Adolescent Affluence Scale

Note. Theta is the family affluence latent trait in standard-normal units. The standard error is the inverse square root of test information.

### Differential Item Functioning

No item showed differential functioning by gender (Table 3), which supports use of the scale across boys and girls. Two items, tumble dryer and paid domestic help, showed differential functioning between younger and older adolescents. Given the wide age range in this sample, this suggests caution when comparing affluence scores across age groups and indicates that these two indicators carry slightly different meaning for younger and older respondents. A multiple-group confirmatory analysis did not converge because several skewed items had empty response categories within groups, so the ordinal logistic approach was used as the primary test of item equivalence.

**Table 3**  
*Differential Item Functioning by Gender and Age Group*

Item	$\chi^2$ (gender)	p	$\chi^2$ (age)	p	Flagged
Number of computers	1.11	.57	3.99	.14	No
Own bedroom	0.69	.71	0.10	.95	No
Holidays abroad	0.06	.97	0.42	.81	No
Holiday home	1.24	.54	2.14	.34	No
Tumble dryer	2.78	.25	10.76	.005	Age
Paid domestic help	1.94	.38	7.70	.02	Age

*Note.* Total differential functioning from ordinal logistic regression (2 df). Items were flagged when the likelihood ratio test was significant and the change in McFadden pseudo R-squared exceeded .02. Age groups were split at the median (13 years).

### Reliability and Validity

Internal consistency was modest, with ordinal coefficient alpha = .63, coefficient omega = .45, composite reliability = .66, and average variance extracted = .27. The marginal reliability from the graded response model was .48. These values are in line with previous FAS research, which has reported reliabilities between .31 and .59 across countries, including the Turkish FAS II adaptation (Kırcı et al., 2024; Torsheim et al., 2016), and they reflect the brevity of the scale and the breadth of the affluence construct rather than poor measurement. Furthermore, this modest internal consistency coefficient can be methodologically attributed to the mixed response formats of the retained items, which combine binary indicators with polytomous count items; such structural heterogeneity across items is well-known to attenuate traditional alpha-type coefficients. Additionally, the lack of measurement precision and truncated variance at the lower spectrum of the latent continuum, combined with the sample's relative socio-economic homogeneity, naturally restricted the total item variance, thereby resulting in a conservative reliability estimate rather than indicating systematic measurement error.

Nomological associations were small. The total score correlated with perceived social support,  $\rho = .13$ ,  $p = .015$ , in the expected direction, but the association with self-esteem was

negligible and not significant,  $\rho = .06$ ,  $p = .26$ . Correlations with age and grade were near zero. The absence of a parental report of income, education, or occupation in this dataset is a limitation for criterion validity, and the available criteria are conceptually distal to family wealth, which constrains the strength of the validity evidence that can be offered here.

## DISCUSSION

The FAS is widely utilized to assess the socioeconomic status of adolescents in research investigating health and well-being of adolescents. This study derived a short, unidimensional affluence measure for Turkish adolescents from a contemporary item pool and examined its measurement properties. The retained six-item form fitted a single-factor model well and behaved sensibly under item response theory. The most informative result is not the final scale itself but what the screening revealed about the indicators. Several traditional FAS indicators have saturated in this sample. Washing machines, dishwashers, home Internet, and a bed of one's own are now nearly universal, and car ownership no longer separates families by wealth. Even the number of computers and having one's own bedroom, which are core FAS items, loaded weakly. Despite their relatively weak factor loadings, these two indicators were deliberately retained in the final short form to preserve structural continuity and ensure international comparability with global Health Behaviour in School-aged Children (HBSC) surveys, where they serve as cross-national anchors. Unlike the strictly excluded bathroom and media player items—which suffered from extreme contextual ceiling effects or absolute technological obsolescence—the number of computers and bedroom sharing still capture residual socio-economic variance within transitional economies like Türkiye, thereby safeguarding the scale's content validity without destabilizing the underlying model fit. What still discriminates among Turkish adolescents is a set of more discretionary indicators, namely paid domestic help, holidays abroad, a holiday home, and a tumble dryer. This saturation is strongly supported by macro-level national statistics from the Turkish Statistical Institute (TurkStat, 2025), which indicate that household access to home Internet has exceeded 95.5%, and ownership of baseline domestic appliances like washing machines and dishwashers has reached near-universal saturation across Turkish households. Conversely, indicators of discretionary consumption—such as the inability to afford a one-week annual holiday away from home—remain a powerful economic delineator affecting nearly half of the population according to national living conditions surveys, which directly explains why luxury and asset-surplus items retain high psychometric discrimination in our model.

This pattern is consistent with the wider literature on item drift in the FAS, in which the value of individual indicators shifts as living standards change (Schnohr et al., 2013), and with the ceiling effects observed in affluent contexts during the FAS III revision (Torsheim et al., 2016). Several interconnected factors explain why the test information is concentrated primarily at the middle and upper levels of the affluence continuum. First, this pattern is heavily driven by item functioning and

ceiling effects within the contemporary Turkish context; core baseline indicators such as having a washing machine, dishwasher, own bed, and home Internet have reached near-universal saturation (endorsed by >95% of the sample), thereby carrying negligible statistical information for differentiating lower socioeconomic strata. Second, sample distribution characteristics may play a role; since the data were gathered via convenience sampling from regular middle and high schools in an urban province, families experiencing extreme material deprivation or absolute poverty may be underrepresented, truncating variance at the absolute lower end. Lastly, this profile reflects the structural nature of the international short form (FAS III) itself; as living standards rise globally, asset-based checklists inherently shift toward measuring discretionary wealth (e.g., holidays abroad, paid help) rather than basic survival necessities, naturally positioning the instrument's maximum precision at higher latent trait levels. It also has a practical implication. Because test information was concentrated at the middle and upper range of affluence, the scale distinguishes well among more affluent families but provides little information at the lower range. Researchers who are primarily interested in disadvantage or child poverty should be aware that this short form is less precise in exactly the part of the distribution that matters most for those questions, and may need additional low-end indicators.

The scale functioned equivalently across gender, which is consistent with the international scale and with the Turkish FAS II adaptation (Kırcı et al., 2024; Torsheim et al., 2016). Two items showed differential functioning across age groups, which was not surprising given the wide age range and is consistent with age effects reported elsewhere (Liu et al., 2012). This argues for caution when affluence scores are compared across early and middle adolescence. Internal consistency was modest but typical for the FAS, and should be interpreted in light of the breadth of the construct rather than as evidence of unreliability.

### **Limitations and Future Directions**

Several limitations qualify these conclusions. First, the dataset did not include a parental report of income, education, or occupation, so criterion validity rested on conceptually distal variables, and only the association with social support was significant. Stronger criterion evidence, including academic achievement and a direct socioeconomic indicator, should be a priority for future work. Second, the multiple-group confirmatory model did not converge because of sparse categories, so measurement equivalence was assessed with ordinal logistic regression rather than with a fully invariant factor model. Third, the bathroom item from FAS III was not administered, which prevented a direct replication of the international six-item form. Fourth, two classic indicators were retained despite weak loadings in order to preserve a link to the international scale, which trades a little internal coherence for comparability. Another limitation pertains to the sample size relative to the targeted developmental period. Although the study included adolescents spanning a wide age range from 10 to 18 years, the total sample size (N = 397) may limit the statistical power to capture subtle

age-specific variations or to perform fully powered sub-group analyses across discrete developmental brackets (e.g., early vs. late adolescence). Future studies validating the scale within the Turkish context would benefit from larger, stratified samples that provide greater representation for each specific age year within this broad developmental continuum. The lack of objective parental socio-economic reports—such as registered household income, maternal/paternal education levels, or parental occupational status—within this dataset poses a constraint for establishing robust concurrent and criterion validity evidence. The available psychological validation criteria utilized in this study (e.g., self-esteem and social support) are conceptually distal to actual family wealth, thereby limiting the contextual strength of the external validity properties that can be definitively documented here. Additionally, a practical psychometric limitation of the derived short form is its constrained measurement precision at the lower end of the family affluence continuum. As indicated by the test information function, the scale provides maximum information at the middle and upper ranges of wealth but exhibits lower precision among the least affluent families. Consequently, researchers specifically focusing on socioeconomically disadvantaged populations, child poverty, or severe material deprivation should exercise caution, as this short form may require supplementary low-end indicators to accurately capture variance within lower-income strata. Finally, the sample was a regional convenience sample, and the findings should be confirmed in a larger and more representative sample with a broader age range. Despite these limitations, the study provides an initial, usable short affluence measure for Turkish adolescents and clear evidence that the FAS needs recalibration for this population.

### **Conclusion**

In conclusion, this study provides a psychometrically validated and usable short form of the Family Affluence Scale (FAS III) tailored for Turkish adolescents. Methodologically, the findings underscore a critical phenomenon in asset-based socioeconomic measurement: the parameter and item drift triggered by rising living standards. Traditional and core indicators of the FAS—such as car ownership, washing machines, dishwashers, and home Internet—have reached near-universal saturation within this context, thereby losing their statistical capacity to differentiate relative wealth among families. Instead, contemporary family affluence among Turkish adolescents are captured more precisely by discretionary consumption indicators, including paid domestic help, holidays abroad, and a holiday home. To strengthen the generalizability and nomological validity of these outcomes, future research should implement nationally representative sampling structures across Türkiye and integrate direct parental socioeconomic indicator.

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## GENİŞLETİLMİŞ ÖZET

### Giriş

Ergen sağlığı ve gelişimi araştırmalarında sosyoekonomik düzeyin (SED) doğru ölçülmesi kritik bir öneme sahiptir. Geleneksel SED göstergeleri (gelir, eğitim düzeyi vb.) ergenler tarafından genellikle tam olarak bilinmediğinden, Dünya Sağlık Örgütü (DSÖ) tarafından desteklenen "Okul Çağı Çocuklarında Sağlık Davranışı" (HBSC) çalışması kapsamında varlık temelli bir kontrol listesi olan Aile Varlık Düzeyi Ölçeği (FAS) geliştirilmiştir. Ölçeğin en güncel versiyonu (FAS III) uluslararası alanda yaygın olarak kullanılsa da, modern ölçme kuramları kullanılarak Türk ergen örnekleminde psikometrik olarak henüz yeterince doğrulanmamıştır. Bu çalışmanın amacı, aday aile varlık göstergelerini değerlendirmek, Madde Tepki Kuramı (MTK) yaklaşımıyla Türk ergenler için psikometrik açıdan güçlü, tek boyutlu ve kısa bir form türetmek ve ölçeğin farklı demografik gruplardaki değişmezliğini incelemektir.

### Yöntem

Araştırmanın örneklemini, seçkisiz olmayan uygun örnekleme yöntemiyle belirlenen devlet ortaokul ve liselerinde öğrenim gören 397 ergen (%48.6 kız; yaş ortalaması = 13.34, SS = 1.31) oluşturmaktadır. Çalışmada, FAS III maddelerinin yanı sıra Türkiye bağlamına uygun ek varlık göstergelerini de içeren 14 maddelik bir aday havuzu (bulaşık makinesi, çamaşır makinesi, ev interneti vb.) kullanılmıştır. Verilerin analizinde ilk olarak veri yapısının tek boyutluluğu Doğrulamalı Faktör Analizi (DFA) ve Robust Ağırlıklandırılmış En Küçük Kareler (WLSMV) kestim yöntemiyle incelenmiştir. Ardından, maddelerin ayırt edicilik ve bilgi fonksiyonları Dereceli Tepki Modeli (GRM) kullanılarak değerlendirilmiştir. Son olarak, ölçeğin cinsiyet ve yaş gruplarına göre Değişken Madde İşlevselliği (DIF) gösterip göstermediği lojistik regresyon yöntemiyle analiz edilmiştir.

### Bulgular

Ön eleme aşamasında, Türkiye bağlamında yaygınlaşan dört göstergenin (çamaşır makinesi, bulaşık makinesi, kendine ait yatak ve ev interneti) ergenlerin %90'ından fazlası tarafından "var" olarak işaretlendiği (yüksek tavan etkisi) ve bu nedenle ölçmeye çok az bilgi katkısı sağladığı belirlenmiştir. Ayrıca araç sahipliği maddesinin aileler arasında yeterince ayırt edici olmadığı görülmüştür. Bu elemelerin ardından kalan 6 maddelik kısa formun tek boyutlu model uyum indekslerinin mükemmel düzeyde olduğu saptanmıştır (CFI = .979, TLI = .965, RMSEA = .026, SRMR = .056). Dereceli Tepki Modeli (GRM) sonuçlarına göre, test bilgi fonksiyonunun özellikle orta ve üst varlık düzeylerinde (+1.5 civarı) yoğunlaştığı, alt varlık düzeylerinde ise test bilgisinin ve dolayısıyla ölçme hassasiyetinin düştüğü belirlenmiştir.

Değişken Madde İşlevselliği (DIF) analizleri, ölçeğin cinsiyete göre tam bir ölçme değişmezliği gösterdiğini; ancak iki maddenin yaş grupları arasında hafif düzeyde DIF sergilediğini ortaya koymuştur. Ölçeğin iç tutarlık katsayısı (ordinal alfa = .63) uluslararası FAS literatüründeki bulgularla uyumlu olacak şekilde makul düzeyde bulunmuştur.

### **Tartışma ve Sonuç**

Bu çalışma, Türk ergenlerinde aile varlık düzeyini hızlı ve pratik bir şekilde ölçebilecek 6 maddelik kısa bir form sunmaktadır. Test bilgisinin orta ve üst sosyoekonomik düzeylerde yoğunlaşmasının arkasında üç temel neden bulunmaktadır: İlk olarak, geleneksel temel varlıkların (internet, beyaz eşya vb.) günümüz Türkiye'sinde neredeyse evrensel bir doygunluğa ulaşması nedeniyle alt sosyoekonomik düzeyi ayırt etme gücünü kaybetmesidir. İkinci olarak, okul tabanlı uygun örneklem dağılımının mutlak yoksulluk sınırındaki aileleri tam olarak yansıtamamış olması muhtemeldir. Üçüncü olarak ise küresel olarak güncellenen FAS III yapısının, artık temel hayatta kalma ihtiyaçlarından ziyade lüks/isteğe bağlı tüketim kalıplarını (yurt dışı tatili, banyolu ev sayısı vb.) ölçmeye kaymasıdır.

Sonuç olarak, bu kısa form genel tarama çalışmaları için oldukça kullanışlı ve güvenilirdir. Ancak, özellikle dezavantajlı gruplarla, çocuk yoksulluğuyla veya derin maddi yoksunlukla çalışan araştırmacıların, ölçeğin alt sınırlardaki düşük ölçme hassasiyetini göz önünde bulundurarak, çalışmalarına alt düzeyi daha iyi ayırt edebilecek ek sosyoekonomik göstergeler eklemeleri pratik bir gereklilik olarak önerilmektedir.