



RESEARCH ARTICLE / ARAŞTIRMA MAKALESİ

# The Pleasure of Social Interactions: Turkish Adaptation and Validation of the Adult Social Reward Questionnaire

## Sosyal Etkileşimlerin Hazzı: Sosyal Ödül Ölçeği Yetişkin Formunun Türkçe Uyarlama ve Geçerlik Çalışması

Aliye Canan Taşlıoğlu Sayiner<sup>1</sup>, Ezgi Cenk<sup>2</sup>, Özenç Polat<sup>3</sup>

### Abstract:

Social interactions play a fundamental role in shaping human behavior and directly affect both physical and mental health. Individuals may experience varying levels of pleasure from social interactions depending on their personality patterns; however, in depression and related psychopathologies, this pleasure may diminish. Therefore, examining the extent to which individuals perceive social interactions as rewarding is critically important in both general and clinical contexts. Yet the literature lacks a psychometrically validated Turkish instrument to assess this construct. This study examined the psychometric properties of the Turkish version of the Social Reward Questionnaire (SRQ) in a sample of 382 adults. Structural validity was assessed using Confirmatory Factor Analysis (CFA), and reliability was evaluated using internal consistency and test-retest methods. Construct validity was assessed via correlations among SRQ subscales, the Big Five Inventory, the Dark Triad Dirty Dozen, and the Interpersonal Communication Style Scale. CFA confirmed that the Turkish SRQ preserved the original six-factor structure and demonstrated good model fit. Subscales showed internal consistency ranging from acceptable to excellent, and test-retest results indicated strong temporal stability over one month. Significant correlations between SRQ subscales, personality traits, dark triad characteristics, and interpersonal communication styles supported construct validity and reinforced the scale's utility in assessing individual differences in social reward sensitivity. As the first Turkish instrument designed to evaluate the perceived value of social interactions, the SRQ provides valuable opportunities for future research, enabling comprehensive exploration of psychopathology, personality patterns, and cultural influences in social reward processing across diverse populations. Ö

**Keywords:** Personality, Neuroticism, Narcissism, Machiavellianism, Social behavior, Reward.

<sup>1</sup>Bahçeşehir University, Faculty of Economics, Administrative and Social Sciences, Department of Psychology, Istanbul, Türkiye.

<sup>2</sup>University of Padua, Department of Philosophy, Sociology, Education, and Applied Psychology, Padua, Italy.

<sup>3</sup>Uppsala University, Faculty of Social Sciences, Department of Psychology, Uppsala, Sweden.

**Address of Correspondence/Yazışma Adresi:** Aliye Canan Taşlıoğlu Sayiner, Bahçeşehir University, Çırağan Avenue, Osmanpaşa Mektebi Street, No. 4-6, 34353 Beşiktaş, İstanbul, Türkiye.

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**Öz:**

Sosyal etkileşimler, insan davranışının şekillenmesinde temel bir rol oynamakta ve hem fiziksel hem de zihinsel sağlığı doğrudan etkilemektedir. Bireyler, kişilik örüntülerine bağlı olarak farklı sosyal etkileşimlerden çeşitli düzeylerde haz alabilmekte; ancak depresyon ve benzeri psikopatolojilerde haz kaybı ortaya çıkabilmektedir. Bu nedenle, bireylerin hangi sosyal etkileşimleri ne ölçüde ödüllendirici algıladıklarının incelenmesi hem genel popülasyon hem de klinik bağlam açısından kritik öneme sahiptir. Ancak literatürde bu yapıyı değerlendiren, psikometrik olarak doğrulanmış bir Türkçe ölçeği bulunmamaktadır. Bu çalışmada Sosyal Ödül Ölçeği'nin (SÖÖ) Türkçe formunun psikometrik özellikleri 382 yetişkin katılımcı üzerinde incelenmiştir. Ölçeğin yapısal geçerliği Doğrulamalı Faktör Analizi (DFA) ile test edilmiş; güvenirliği ise iç tutarlılık ve test-tekrar test yöntemleriyle değerlendirilmiştir. Yapı geçerliği, SÖÖ alt boyutları ile Beş Faktör Kişilik Envanteri, Karanlık Üçlü Ölçeği ve Kişilerarası İletişim Tarzı Ölçeği arasındaki korelasyonlar üzerinden araştırılmıştır. DFA sonuçları, Türkçe SÖÖ'nün orijinal altı faktörlü yapısını koruduğunu ve iyi uyum değerleri sağladığını göstermiştir. Alt boyutlar kabul edilebilir ile mükemmel düzeyde iç tutarlılık katsayıları sergilemiş; test-tekrar test bulguları da güçlü bir zamansal kararlılığa işaret etmiştir. SÖÖ alt boyutları ile kişilik özellikleri, karanlık üçlü kişilik özellikleri ve kişilerarası iletişim tarzları arasındaki anlamlı ilişkiler, ölçeğin yapı geçerliğini desteklemiş ve sosyal ödül duyarlılığındaki bireysel farklılıkları değerlendirmedeki etkinliğini pekiştirmiştir. Türkçe SÖÖ, sosyal etkileşimlerin algılanan değerini değerlendirmek amacıyla Türkçeye uyarlanan ilk ölçek olmasıyla, gelecekte yapılacak araştırmalara önemli katkılar sağlayacaktır. Bu sayede psikopatolojiler, kişilik örüntüleri ve kültürel etkilerin sosyal ödül işlenişindeki rolü farklı örneklemeler üzerinden daha kapsamlı biçimde incelenebilecektir.

**Anahtar Kelimeler:** Kişilik, Nevrotizm, Narsisizm, Makyavelizm, Sosyal davranış, Ödül.

**Introduction**

Primary rewards, such as food and money, are fundamental drivers of human motivation and profoundly influence decision-making (Liu et al., 2011). However, humans do not merely seek material rewards; rather, their behaviors are deeply embedded in social dynamics, in which the pursuit and experience of rewards are linked to social interactions and relationships (Bhanji & Delgado, 2014). The literature demonstrates that engaging in prosocial behaviors, such as volunteering, elicits a strong sense of social fulfillment (Gray & Stevenson, 2020). Beyond altruistic acts, a range of social experiences can be inherently rewarding, including receiving a warm smile (Thomsen, 2015), gaining social recognition or an enhanced reputation (Izuma, 2012).

The ability to derive pleasure from social interactions is not merely a byproduct of human sociability but a crucial determinant of psychological well-being. Positive social functioning has been strongly associated with enhanced self-esteem (Ritsner et al., 2018), greater social connectedness, and overall improvements in well-being (Sun et al., 2019). However, the extent to which individuals seek and experience social rewards is not uniform; it is shaped by an interplay of personality traits, cultural frameworks, and psychopathological conditions (Barkus & Badcock, 2019; Foulkes et al., 2014a). Understanding these individual differences is essential for unraveling the mechanisms governing social motivation and its implications for mental health and adaptive behavior.

Understanding individual differences in social reward processing is important because alterations in social behavior may serve as key indicators of underlying mental health conditions (Barkus & Badcock, 2019). One such phenomenon, social anhedonia, means having less enjoyment from social interactions, and is observed in several mental health disorders, such as schizophrenia, schizoaffective disorder (Ritsner et al., 2018), and major depression (Pizzagalli, 2014). In contrast, individuals experiencing manic episodes may exhibit hypersensitivity to socially rewarding stimuli, resulting in increased social

engagement (Schwarz et al., 2020). Moreover, traumatic experiences can reshape social reward processing, as seen in post-traumatic stress disorder (PTSD), where individuals often exhibit reduced sensitivity to positive social interactions (Clausen et al., 2016). These distinct patterns highlight the role of social reward sensitivity in psychopathology and emphasize the need for a nuanced understanding of its mechanisms (Aldridge-Waddon et al., 2020).

Beyond psychopathology, personality traits influence how individuals experience social rewards (Foulkes et al., 2014a, 2014b). While most people derive pleasure from prosocial interactions, some find satisfaction in socially unacceptable behaviors. Kyranides et al. (2024) demonstrated that negative social potency, the gratification derived from exerting cruelty over others, is related to primary and secondary psychopathy across genders. Similarly, individuals high in narcissism, Machiavellianism, and psychopathy often thrive in relationships that allow manipulation for personal gain, whether through social approval, reputation enhancement, or financial success (Glenn et al., 2017).

Despite the availability of Turkish-language scales measuring general social motivation and pleasure (e.g., Cihan et al., 2015), no instrument has been specifically designed to capture the distinct types of pleasure associated with various social rewards. Research in Türkiye demonstrates that social behavior is shaped by cultural orientations emphasizing interpersonal connectedness, group cohesion, and sensitivity to relational contexts. Göregenli (1995) showed that Turkish samples display stronger collectivistic than individualistic tendencies, reflecting the importance of maintaining close in-group ties and navigating both horizontal (intimacy-oriented) and vertical (hierarchy-oriented) forms of collectivism. Complementing this, Kağıtçıbaşı (2005) argues that individuals in Türkiye often develop an "autonomous-related self" in which personal agency and relational closeness coexist rather than conflict. Consistently, the Balanced Integration-Differentiation

model provides empirical evidence that individuation and relatedness operate as distinct yet complementary orientations in Turkish cultural contexts; both contribute uniquely to psychological functioning, with relatedness linked to affective variables and individuation linked to intrinsic motivation (Imamoglu & Imamoglu, 2007). These culturally grounded patterns suggest that the types of social experiences considered rewarding, such as admiration or prosocial engagement, carry meanings shaped by local relational norms.

To address this gap and identify potential cultural differences in how individuals value social rewards, we aim to validate the Turkish adaptation of the Social Reward Questionnaire (Foulkes et al., 2014b), a comprehensive instrument capturing six distinct dimensions of social reward sensitivity. The SRQ assesses admiration, which refers to the enjoyment derived from receiving praise, recognition, or social approval; negative social potency, which reflects pleasure in exerting power over others, including manipulation or harm; and passivity, which describes satisfaction from allowing others to lead in social interactions. Additionally, it evaluates prosocial interactions, reflecting gratification from cooperative, altruistic, and supportive social behaviors; sexual reward, measuring pleasure from flirtation, romantic attention, and sexual interactions; and sociability, representing enjoyment of general social engagement, group interactions, and the formation of new connections. By enabling a more precise exploration of social reward preferences in Turkish-speaking populations, this adaptation will provide a valuable tool for future research on interpersonal dynamics and individual differences in social motivation.

In addition to confirming the structural validity of the Turkish SRQ, this study aims to establish construct validity by testing theoretically driven hypotheses. We anticipate positive correlations between the Negative Social Potency dimension and dark triad personality traits, as well as manipulative and demeaning communication styles. Conversely, the Prosocial Interactions subscale is expected to correlate negatively with dark triad traits. Moreover, the Admiration subscale is predicted to show positive associations with narcissism, extraversion, and openness to experience. Finally, by comparing the findings

with those of Foulkes et al. (2014a, 2014b), we aim to interpret potential cultural similarities and differences in perceptions and pursuit of social rewards.

## Method

### Translation Process

Permissions have been obtained from the corresponding author of the original scale (Foulkes et al., 2014a). Five bilingual psychologists independently translated the items. Following translation, all items were cross-checked and revised in a meeting. An independent professional translator back-translated the items into English, after which all translators controlled and revised them. Final adjustments were made to improve sentence structure in Turkish (Appendix A). All translation and cultural adaptation procedures followed the international guidelines for adapting psychological instruments (Hambleton, 2004).

### Participants

The Ethics Committee of MEF University, Türkiye, has approved all study procedures (Approval ID: E-47749665-050.01.04-1635, Date: 16/04/2021), and the study was conducted online between December 2022 and June 2023. A total of 382 participants ( $M_{age} = 29.9$ ,  $SD = 25.00$ ) completed the online study via SoSci Survey ([www.sosicisurvey.de](http://www.sosicisurvey.de)) and were recruited using convenience sampling via social media, e-mail lists, and university channels. Participation was voluntary, all participants were 18 years of age or older, and written informed consent was obtained. To minimize confounds, participants reporting a personal or family history of psychotic disorders, head trauma, or neurological disorders were excluded.

Participants created a unique anonymous code and provided their e-mail address, which was stored in a separate database to prevent linking identifying information to survey responses. Twenty days later, an email containing the second survey link was sent. In this retest session, participants reentered their anonymous code, allowing secure, confidential matching of Time 1 and Time 2 data. An overview of the sample's demographic details is provided in Table 1.

**Table 1.** Participant Characteristics

|                             | <i>n</i> | %    |
|-----------------------------|----------|------|
| Gender                      |          |      |
| Woman                       | 220      | 57.6 |
| Man                         | 161      | 42.2 |
| Non-Binary                  | 1        | 0.3  |
| Last Obtained Degree        |          |      |
| No formal education         | 9        | 2.4  |
| Primary/ Secondary school   | 25       | 6.5  |
| High school                 | 228      | 59.7 |
| Bachelor's degree           | 119      | 31.2 |
| Master's/ Doctoral degree   | 1        | .3   |
| Monthly Income (TL / Month) |          |      |
| No regular income           | 28       | 7.3  |
| 0-11,402 TL                 | 98       | 25.7 |
| 11.403 – 18.243 TL          | 47       | 12.3 |
| 18.244- 29.646 TL           | 108      | 28.2 |
| 29.647TL and above          | 101      | 26.4 |

**Note.** *N* = 382

### Measures

The demographic questionnaire collects the participants' sociodemographic information, including age, gender, marital status, and socioeconomic status.

The Social Reward Questionnaire (SRQ; Foulkes et al., 2014b) comprises 23 items that assess the reward value of six types of social interactions: Admiration, Negative Social Potency, Passivity, Prosocial Interactions, Sexual Reward, and Sociability. It has a 7-point Likert scale, and mean subscale scores are calculated to represent reward value. Cronbach's alpha values for the subscales ranged from .635 to .879.

The Interpersonal Communication Style Scale (ICSS; Şahin et al., 2007, as cited in Şahin et al., 2011) comprises 60 items and categorizes communication styles into dominant, avoidant, angry, insensitive, manipulative, or belittling. Items are rated on a 5-point Likert scale, allowing assessment of the prevalence of these styles across individuals. The Cronbach's alpha for the total scale is .958.

The Dark Triad Dirty Dozen (DTDD-T; Jonason & Webster, 2010) has been adapted into Turkish by Özsoy et al. (2017). This 12-item scale aims to measure the personality traits of Machiavellianism, psychopathy, and narcissism, on a 9-point Likert scale. The Cronbach's alpha value for the total scale is .871.

Ten-Item Personality Inventory (TIPI; Gosling et al., 2003) assesses the Big Five Model Personality dimensions: emotional stability, extraversion, openness to new experiences, agreeableness, and conscientiousness, through 10 items. Responses are rated on a 7-point Likert scale. The Turkish adaptation was conducted by Atak (2013). The Cronbach's alpha for the total scale was .547, aligning with Thørrisen & Sadeghi's (2023) findings, which reported a similarly low average alpha of .53 across 23 TIPI versions.

**Table 2.** Standardized Factor Loadings

| Subscale                | Item Number | Factor Load |
|-------------------------|-------------|-------------|
| Admiration              | 1           | .680        |
| Admiration              | 7           | .618        |
| Admiration              | 11          | .787        |
| Admiration              | 18          | .588        |
| Negative Social Potency | 3           | .453        |
| Negative Social Potency | 5           | .634        |
| Negative Social Potency | 8           | .772        |
| Negative Social Potency | 14          | .803        |
| Negative Social Potency | 17          | .833        |
| Passivity               | 12          | .715        |
| Passivity               | 21          | .784        |
| Passivity               | 23          | .475        |
| Prosocial Interaction   | 2           | .586        |
| Prosocial Interaction   | 6           | .348        |
| Prosocial Interaction   | 16          | .602        |
| Prosocial Interaction   | 19          | .675        |
| Prosocial Interaction   | 22          | .692        |
| Sexual Relationships    | 9           | .866        |
| Sexual Relationships    | 13          | .873        |
| Sexual Relationships    | 20          | .789        |
| Sociability             | 4           | .524        |
| Sociability             | 10          | .565        |
| Sociability             | 15          | .774        |

### Analyses

The structural validity of the Turkish SRQ was tested using a confirmatory factor analysis (CFA) in R. Following the original SRQ framework, a six-factor model was evaluated using diagonally weighted least squares (DWLS) estimation. Following the recommendations of Hu and Bentler (1999), model fit was assessed using multiple criteria: a  $\chi^2/df$  ratio below 3, Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) values exceeding .90, a Root Mean Square Error of Approximation (RMSEA) below .06, and a Standardized Root Mean Square Residual (SRMSR) below .08.

According to established CFA sample size guidelines, a participant-to-item ratio of 5:1-10:1 is recommended, with a minimum of 100-200 participants depending on model complexity and communalities (Wolf et al., 2013). Following this recommendation, our study required approximately 230 participants to achieve robust, reliable results.

When assessing factor loadings in factor analysis, Williams et al. (2010) suggest a threshold of .30 for significance. Furthermore, Cronbach's alpha values will be interpreted as follows: values below .60 indicate poor reliability, values between .70 and .90 indicate good reliability, and values above .90 indicate excellent reliability (Tavakol & Dennick, 2011). To evaluate the construct validity of the Turkish SRQ, Pearson correlations were used to assess convergent and discriminant validity.

### Results

Using CFA, the original six-factor structure of the SRQ was tested. Model fit was evaluated using  $\chi^2$  (454.267,  $df = 215$ ,  $p < .001$ ;  $\chi^2/df = 2.11$ ), CFI = .934, TLI = .922, SRMR = .072, and RMSEA = .054 (90% CI [.047, .061]) indicated an adequate fit to the data. The factor loadings ( $M = .671$ ,  $SD = .140$ ) are presented in Table 2.

**Reliability**

indicating acceptable to excellent internal consistency.

**Internal Reliability**

The Turkish subscales show Cronbach's alpha values ranging from .635 to .879,

**Table 3.** Descriptive Information and Pearson Correlation Coefficients of SRQ Subscales

| Variable                   | M    | SD   | $\alpha$ | 1       | 2        | 3       | 4       | 5       | 6 |
|----------------------------|------|------|----------|---------|----------|---------|---------|---------|---|
| 1. Admiration              | 5.82 | .979 | .762     | —       |          |         |         |         |   |
| 2. Negative Social Potency | 1.91 | .979 | .794     | -.029   | —        |         |         |         |   |
| 3. Passivity               | 2.11 | 1.05 | .674     | -.009   | .356***  | —       |         |         |   |
| 4. Prosocial Interaction   | 5.95 | .760 | .635     | .540*** | -.244*** | -.051   | —       |         |   |
| 5. Sexual Reward           | 4.54 | 1.76 | .879     | .284*** | .202***  | .199*** | .226*** | —       |   |
| 6. Sociability             | 5.17 | 1.16 | .639     | .506*** | .020     | .027    | .383*** | .427*** | — |

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

Correlation tests among SRQ subscales were conducted to examine relationships among the different dimensions of social reward.

**Retest Reliability**

Test-retest reliability was evaluated by inviting participants to complete the SRQ in two online sessions. A total of 118 individuals completed both administrations within a 20-32-day interval ( $M_{days} = 27.44$  days,  $SD = 3.72$ ). High correlations between the two time points for each subscale (.953–.997) showed strong temporal stability. Furthermore, test-retest reliability was examined using two-way random-effects intraclass correlation coefficients with absolute agreement for single measurements (ICC [2,1]). All subscales demonstrated excellent stability, with ICC (2,1) values of .994 for Admiration, .997 for Negative Social Potency, .953 for Passivity, .977 for Prosocial Interaction, .956 for Sexual Reward, and .987 for Sociability.

**Construct Validity**

Correlations were tested to examine the hypothesized relationships between the SRQ subscales and a range of psychological traits (Table 4).

Admiration was significantly positively correlated with Extraversion ( $r = .10$ ,  $p = .049$ ), Agreeableness ( $r = .16$ ,  $p = .001$ ), Machiavellianism ( $r = .22$ ,  $p < .001$ ), Narcissism ( $r = .64$ ,  $p < .001$ ), Dominant ( $r = .13$ ,  $p = .010$ ), Manipulative ( $r = .19$ ,  $p < .001$ ), Belittling ( $r = .15$ ,  $p = .003$ ), and Avoidant Communication Styles ( $r = .13$ ,  $p = .012$ ).

Negative Social Potency was negatively correlated with Machiavellianism ( $r = .52$ ,  $p < .001$ ), Psychopathy ( $r = .51$ ,  $p < .001$ ), Narcissism ( $r = .19$ ,  $p < .001$ ); Dominant ( $r = .60$ ,  $p < .001$ ), Insensitive ( $r = .42$ ,  $p < .001$ ), Manipulative ( $r = .43$ ,  $p < .001$ ), Angry ( $r = .43$ ,  $p < .001$ ), Belittling ( $r = .46$ ,  $p < .001$ ), and Avoidant Communication Styles ( $r = .45$ ,  $p < .001$ ).

Prosocial Interaction was positively correlated with Extraversion ( $r = .12$ ,  $p = .019$ ), and Agreeableness ( $r = .15$ ,  $p = .004$ ). However, it was negatively correlated with Psychopathy ( $r = -.12$ ,  $p = .018$ ); Dominant ( $r = -.15$ ,  $p = .004$ ), Insensitive ( $r = -.25$ ,  $p < .001$ ), Manipulative ( $r = -.11$ ,  $p = .040$ ), and Avoidant Communication Styles ( $r = -.12$ ,  $p = .017$ ).

On the other hand, Sexual Reward was positively correlated with Agreeableness ( $r = .27$ ,  $p < .001$ ), Machiavellianism ( $r = .29$ ,  $p < .001$ ), Psychopathy ( $r = .19$ ,  $p < .001$ ), Narcissism ( $r = .34$ ,  $p < .001$ ), as well as Dominant ( $r = .25$ ,  $p < .001$ ), Manipulative ( $r = .22$ ,  $p < .001$ ), Angry ( $r = .20$ ,  $p < .001$ ), Belittling ( $r = .18$ ,  $p < .001$ ), and Avoidant Communication Styles ( $r = .22$ ,  $p < .001$ ).

Lastly, Sociability has been found to be positively correlated with Extraversion ( $r = .15$ ,  $p = .003$ ), Agreeableness ( $r = .20$ ,  $p < .001$ ), Machiavellianism ( $r = .19$ ,  $p < .001$ ), and Narcissism ( $r = .39$ ,  $p < .001$ ). It was also negatively correlated with Avoidant Communication Style ( $r = -.11$ ,  $p = .041$ ).

**Table 4.** Pearson correlations between SRQ subscales and external measures

|                                          | SRQ Subscales |                         |           |                        |               |             |
|------------------------------------------|---------------|-------------------------|-----------|------------------------|---------------|-------------|
|                                          | Admiration    | Negative Social Potency | Passivity | Prosocial Interactions | Sexual Reward | Sociability |
| <i>Dark Triad</i>                        |               |                         |           |                        |               |             |
| Machiavellianism                         | .219***       | .523***                 | .249***   | -.101                  | .288***       | .186***     |
| Psychopathy                              | .096          | .509***                 | .145**    | -.122*                 | .188***       | .040        |
| Narcissism                               | .638***       | .191***                 | .061      | .213***                | .337***       | .385***     |
| <i>Interpersonal Communication Style</i> |               |                         |           |                        |               |             |
| Dominant                                 | .132*         | .599***                 | .299***   | -.149**                | .249***       | .095        |
| Avoidant                                 | .051          | .453***                 | .159**    | -.123*                 | .215***       | .048        |
| Manipulative                             | .191***       | .426***                 | .259***   | -.106*                 | .216***       | .095        |
| Insensitive                              | -.113*        | .423***                 | .251***   | -.252***               | .021          | -.105*      |
| Belittling                               | .153**        | .455***                 | .116*     | .010                   | .176***       | .100        |
| Angry                                    | .087          | .427***                 | .104*     | -.067                  | .202***       | .041        |
| <i>Ten Item Personality Inventory</i>    |               |                         |           |                        |               |             |
| Emotional Stability                      | .045          | -.205***                | .094      | .152**                 | -.051         | .035        |
| Extraversion                             | .101*         | -.057                   | .075      | .120*                  | .007          | .151**      |
| Openness                                 | .021          | .056                    | .144**    | .036                   | .089          | .083        |
| Agreeableness                            | .164**        | .203***                 | .054      | .146**                 | .273***       | .199***     |
| Conscientiousness                        | .065          | -.069                   | .049      | .148**                 | -.013         | .071        |

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

## Discussion

The primary objective of this study was to adapt the SRQ (Foulkes et al., 2014b) into Turkish and to evaluate its factorial structure, validity, and reliability. In a sample of Turkish speakers, CFA supported the hypothesized six-factor structure of the SRQ. Model adequacy was evaluated using multiple fit indices, with the chi-square-to-degrees-of-freedom ratio indicating excellent fit. The RMSEA, TLI, and CFI fell within acceptable limits, confirming the model's adequacy.

The CFA revealed substantial standardized factor loadings across subscales, demonstrating strong item-to-factor associations, particularly for the Sexual Relationships and Negative Social Potency subscales. Loadings across all subscales met recommended thresholds for interpretative and practical significance (Williams et al., 2010), supporting the questionnaire's validity. Although the overall factor structure was supported, a few items showed lower loadings, and the content of these items provides plausible explanations for these deviations. For example, the item “*I enjoy feeling emotionally connected to someone*” showed a modest loading. This may reflect

collectivistic dynamics of Türkiye, where emotional closeness is expressed in context-dependent ways: warmth and intimacy are typically reserved for specific in-group relationships, whereas norm-guided behavior is expected in out-group contexts (Fischer & Smith, 2003; Göregenli, 1995). Broadly phrased items that do not specify the relational target may therefore evoke different frames across respondents, reducing shared variance with the latent construct. Similarly, the item “*I enjoy following someone else’s rules*” showed a loading consistent with cultural patterns of high-power distance (Hofstede, 1980). In such contexts, rule-following may be a form of social adaptation rather than dispositional passivity, reflecting respect, maturity, or strategic alignment with higher-status individuals. Because this item can be interpreted as submission, respect, strategic deference, or cooperative politeness, respondents are unlikely to view it as a stable trait, weakening its coherence with the underlying factor. Similar mechanisms may explain lower loadings in other items. Explicitly antagonistic statements, such as “*I enjoy making others angry*,” are socially undesirable and may elicit defensive responding, thereby reducing their correlation with the Negative Social Potency factor.

Internal consistency ranged from acceptable to excellent, and test-retest reliability over one month showed strong concordance, supporting the measures’ reliability. Cronbach’s alpha values for some subscales in these adaptations fell below the standard .70 threshold, a trend commonly observed in cross-cultural psychometric studies. For example, the Dutch adaptation found alpha values below .70 for Negative Social Potency and Sociability, reflecting variability in internal consistency across cultural contexts (Smeijers et al., 2022). These findings underscore the need to contextualize reliability metrics and to apply additional psychometric measures to ensure thorough reliability assessments (Schmitt, 1996).

Moreover, correlations among subscale scores in our Turkish-speaking sample largely aligned with those reported by Foulkes et al. (2014b), though some discrepancies emerged. For instance, Sexual Reward was positively correlated with all SRQ subscales. This differs from Foulkes et al. (2014b), who found no significant relationship between Sexual Reward and Negative Social Potency or Passivity. Cultural context may help explain these differences (Fischer & Smith, 2003). Power distance and collectivism shape perceptions of social rewards, and the original study by Foulkes et al. (2014b) was conducted in the US and UK, cultures characterized by low power distance and high individualism, where equity-based, performance-focused reward systems are common (Hofstede, 1980). In contrast, Türkiye’s higher power distance and collectivist orientation promote a context-sensitive approach to reward allocation, emphasizing social status and group harmony (Fischer & Smith, 2003; Hofstede, 1980).

To assess construct validity, interrelations between SRQ subscales and other measures, the Big Five Personality Inventory, Dark Triad Inventory, and Interpersonal Communication Scale, were examined. Consistent with the literature and our hypotheses, Negative Social Potency was positively associated with all dark triad traits and maladaptive interpersonal communication styles, highlighting links between antisocial tendencies and these characteristics (Foulkes et al., 2014a; Moore et al., 2024). However, unlike Foulkes et al. (2014b), Negative Social

Potency in our sample was positively correlated with agreeableness and negatively with emotional stability. These unexpected relationships may reflect culturally embedded norms of social influence. As Göregenli (1995) notes, Turkish collectivism includes both horizontal orientations that emphasize intimacy and harmony and vertical orientations that involve hierarchy and status regulation. Within this structure, agreeable individuals may display warmth in horizontal in-group contexts while engaging in socially potent or provocative behaviors during vertical status negotiation. Additionally, the Balanced Integration–Differentiation model (Imamoglu & Imamoglu, 2007) highlights that, in Turkish contexts, relatedness is accompanied by affective sensitivity, thereby increasing reactivity to relational cues. Such reactivity can manifest as status-protective or boundary-setting behaviors, which may help explain the negative association with emotional stability. Beyond Negative Social Potency, Sexual Reward also showed positive correlations with dark triad traits and maladaptive interpersonal communication subscales, except insensitivity. Literature shows that individuals high in Machiavellianism engage in sexual behaviors for diverse motives, including stress reduction, status enhancement, and revenge (Brewer & Abell, 2015), consistent with the strategic use of sexuality for personal gains within social interactions (Brewer & Abell, 2015).

Expectedly, Prosocial Interaction negatively correlated with psychopathy but positively with narcissism, aligning with existing research (Ding et al., 2016). Although narcissism is associated with superiority, entitlement, and self-capability (Carroll, 1987), which appear contrary to prosocial behavior (Brief & Weiss, 2002), the positive correlation suggests that narcissists might engage in prosocial acts for self-esteem enhancement, social acceptance, and improved social standing (Liu et al., 2022). Such activities may also help them derive a sense of purpose and meaning (Ding et al., 2016).

The Sociability subscale showed positive correlations with Machiavellianism and narcissism, in contrast to Foulkes et al. (2014a, 2014b), who found no such correlations. Within the framework of schema theory (Keulen-de Vos et al., 2017), Sociability in individuals with Machiavellian or narcissistic tendencies may represent an overcompensation strategy rooted in cognitive schemas, such as grandiosity or entitlement. For these individuals, grandiosity schemas likely stem from an inflated need to feel special, important, or superior to others. Sociability, in this context, may act as a self-enhancement mechanism, maintaining the illusion of status or power within social groups. Rather than reflecting authentic prosocial engagement, it might be aimed at securing social approval and reinforcing a sense of perceived superiority.

### Limitations

Our findings indicate that the Turkish adaptation of the SRQ demonstrates reliable psychometric properties and aligns well with previous research. However, the sample, composed mainly of young adults from metropolitan areas, may limit generalizability to broader populations. Furthermore, using a non-clinical sample provides a solid baseline for general applications but does not capture clinical utility, in which social reward dynamics might differ.

## Conclusion and Recommendations

The study translated and validated the SRQ for Turkish-speaking populations, demonstrating strong psychometric performance and consistent, stable results. The SRQ assesses rewarding values of various social interactions, providing insights into how individuals experience and prioritize these rewards.

Future research with clinical samples could reveal distinct patterns of social reward valuation in conditions such as social anxiety, depression, and personality disorders (e.g., Cook & Black, 2012; Taylor et al., 2024), offering critical insights into how these populations experience and prioritize social rewards. This knowledge could be invaluable for tailoring therapeutic interventions to address social motivation deficits or maladaptive behaviors. Additionally, understanding variations in social reward processing can refine therapeutic strategies by aligning them with clients.

## Declarations

### Ethics Approval and Consent to Participate

Ethical approval was obtained from the Ethics Committee of MEF University (Approval ID: E-47749665-050.01.04-1635; Date: 16 April 2021).

## Consent for Publication

Not applicable.

## Availability of Data and Materials

Not applicable.

## Conflicts of Interest

The author declares that no competing interests exist in this manuscript.

## Funding

Not applicable.

## Authors' Contributions

ACTS conceptualized the study, obtained the necessary permissions, and coordinated the translation and back-translation of the research instruments. ACTS and EC jointly designed the study methodology. Data collection was carried out by ACTS, EC, and ÖP. All authors contributed to data analysis and interpretation. The literature review and manuscript preparation were conducted collaboratively by ACTS, EC, and ÖP. All authors read and approved the final manuscript.

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**Appendix A- Turkish Version of the Social Reward Questionnaire (SRQ)- Adult Version****Sosyal Ödül Ölçeği (SÖÖ)- Yetişkin Versiyonu (in Turkish)**

Yönerge (TR): Aşağıda, başka insanlarla olan etkileşimlerinizde keyif alabileceğiniz konular hakkında ifadeler yer almaktadır. Bu ifadeler yaşamınızdaki tüm insanlara (örn., arkadaşlar, partnerler, aile, meslektaşlar ya da yeni tanıştığınız insanlar) olan etkileşimlerinize yöneliktir. Lütfen her bir ifadenin sizin için uygunluğunu değerlendirerek sizin için en uygun yanıtı seçiniz.

Not: İfadelerde daha önce hiç yaşamadığınız bir deneyim varsa, o durumu yaşıyordunuz ne kadar keyif alacağınızı zihninizde canlandırarak yanıtlayınız.

Instructions (in ENG): Below, you will find statements regarding potential sources of enjoyment in your interactions with others. These apply to interactions with all individuals in your life, including friends, partners, family members, colleagues, or newly acquainted persons. Please assess the appropriateness of each statement in relation to your experiences and choose the most suitable response.

Note: If a statement refers to an experience you have not encountered, please estimate how enjoyable you might find it by imagining that scenario, and answer accordingly.

| İtem | Statement                                                                                   |
|------|---------------------------------------------------------------------------------------------|
| 1    | Önemli ve heyecan verici bir insan olduğumu düşünen kişilerin yanında olmaktan zevk alırım. |
| 2    | Başkalarına adil davranmaktan zevk alırım.                                                  |
| 3    | Başkalarını kızdırmaktan zevk alırım.                                                       |
| 4    | Partilere katılmaktan zevk alırım.                                                          |
| 5    | Yalnızca bir çıkarım olduğu zamanlarda başkalarına iyi davranmaktan zevk alırım.            |
| 6    | Başkalarına duygusal bağlılık hissetmekten zevk alırım.                                     |
| 7    | Başkalarının bana hayranlık duymasından zevk alırım.                                        |
| 8    | Başkalarına ait şeyleri hile ile ele geçirmekten zevk alırım.                               |
| 9    | Erotik ilişkiler yaşamaktan zevk alırım.                                                    |
| 10   | Bir grubun/kulübün üyesi olmaktan zevk alırım.                                              |
| 11   | Kimliğimden ve yaptıklarımın etkilenen insanların yanında olmaktan zevk alırım.             |
| 12   | Başkalarının bana ne yapacağımı söylemesine izin vermekten zevk alırım.                     |
| 13   | Cinsel açıdan birçok deneyim yaşamaktan zevk alırım.                                        |
| 14   | Başkalarını utanç verici durumlara düşürmekten zevk alırım.                                 |
| 15   | Birçok kişinin beni sosyal etkinliklerine davet etmek istemesinden zevk alırım.             |
| 16   | Başkalarına verdiğim sözleri tutmaktan zevk alırım.                                         |
| 17   | Başkalarının incindiğini görmekten zevk alırım.                                             |
| 18   | Başkalarının takdirini kazanmaktan zevk alırım.                                             |
| 19   | Biri beni her koşulda olduğum gibi kabul ederse bundan zevk alırım.                         |
| 20   | Aktif bir cinsel yaşamım olmasından zevk alırım.                                            |

|    |                                                            |
|----|------------------------------------------------------------|
| 21 | Başka birinin benim adıma kararlar almasından zevk alırım. |
| 22 | Bir başkasını mutlu etmekten zevk alırım.                  |
| 23 | Bir başkasının kurallarına uymaktan zevk alırım.           |

**Likert-Type Rating: (Strongly Disagree = 1 to Strongly Agree = 7)**

The total score of the scale is not calculated; all analyses are conducted using subscale scores. There are no reverse-scored items on the scale.

Calculate each subscale score by taking the average of the items specified below:

- **Liking:** 1, 7, 11, 18
- **Negative Social Power:** 3, 5, 8, 14, 17
- **Passivity:** 12, 21, 23
- **Positive Social Interactions:** 2, 6, 16, 19, 22
- **Sexual Relationships:** 9, 13, 20
- **Sociability-Assertiveness:** 4, 10, 15

*You do not need to seek permission from the authors of the adaptation study for non-commercial use of the scale.*