### Self-Objectification Questionnaire-2 (SOQ-2)

Laura Vandenbosch, U of Leuven

Femke Konings, U of Leuven

Keywords: self-objectification, objectification theory, trait, state, adults, adolescents

#### Introduction

The 12-item Self-Objectification Scale-2 (SOQ-2; Vandenbosch & Eggermont, 2012) is an adapted measure of the original Self-Objectification Questionnaire of Noll and Fredrickson (1998) that measures the extent to which individuals self-objectify. Self-objectification occurs when we "internalize an observer's perspective on self" (Fredrickson & Roberts, 1997, p.179). Self-objectification has been conceptualized as the cognitive component of an objectified self-concept (Vandenbosch & Eggermont, 2012) and has been linked to a more behaviorally oriented component of an objectified self-concept, i.e., body surveillance, and to other body image components, such as internalization of appearance ideals (Vandenbosch & Eggermont, 2012) and mental ill-being (Noll & Fredrickson, 1998). The SOQ-2 has been applied with male and female adolescents aged 12 to 18 (Karsay, Trekels, Eggermont, & Vandenbosch, 2021; Vandenbosch & Eggermont, 2013) and male and female young adults (Vandenbosch, Muise, Eggermont, & Impett, 2015).

#### **Development**

In 1998, Noll and Fredrickson first introduced a self-objectification measurement instrument (i.e., the SOQ) to capture self-objectification in women. This measure included six appearance-based (i.e., physical attractiveness, coloring, weight, sex appeal, measurements, and muscle tone) and six competence-based body attributes (i.e., muscular strength, physical coordination, stamina, health, physical fitness, and physical energy), which had to be rank ordered according to importance.

Accordingly, a score that reflects the relative importance attached to appearance-based traits compared to competence-based traits could be calculated and used to reflect individuals' self-objectification

tendency. This measure was used in ample research associating it positively with negative body image and other ill-being outcomes (e.g., Noll & Fredrickson, 1998). The measure was originally developed as a trait-based measure (Noll & Fredrickson, 1998), but has also been used to assess a state of self-objectification in daily diary (experience sampling) studies.

Although the original SOQ played a pivotal role in the research on self-objectification, scholars (e.g., Calogero, 2010) noticed that the rank ordering of body attributes is sometimes misinterpreted by individuals. Moreover, the rank ordering did not allow researchers to estimate a factor structure or calculate a reliability score to understand whether the appearance-based components and competencebased components cluster in a reliable way around their latent concept. The measure was also developed for women taking exclusively into account the female appearance ideal (i.e., thin body) when determining which items belong to the appearance vs. competence-based components. The adapted Self-Objectification Questionnaire (SOQ-2) requires individuals to evaluate each listed body attribute on a 10-point scale ranging from 1 = totally not important to 10 = totally important. By changing the rank ordering task to an item-by-item evaluation task, the scale also became more suited to be used in adolescent populations. The scale further takes into account that a different male appearance ideal (i.e., muscular body) exists, as the appearance-and competence-based components are differently calculated for male and female individuals. The SOQ-2 has been used in different countries (Karsay et al., 2021) and shown reliability in several studies (e.g., Karsay et al., 2021; Vandenbosch & Eggermont, 2012). By changing the instruction from evaluating the appearance-/competence-based components' importance "in general" to "this day" the measure has also been used successfully in daily diary research (Vandenbosch et al., 2015).

One important limitation of the application of a Likert-scale in comparison to the application of a rank order instruction is that components are no longer mutually exclusive, and accordingly individuals can indicate to equally value appearance-and competence-based components. Social desirability may

potentially bias individuals to equally value these components. Such bias is likely lowered when working with a rank order format.

# **Administration and Timing**

The SOQ-2 can be completed online or offline with adolescent and adult samples. Completion time is between 1- 2 minutes.

#### **Factor Structure and Invariance**

The SOQ-2 (the English version and its translations, see Table 1) was proven to have a twodimensional factor structure within principal components and confirmatory factor analyses in a first sample of male and female adolescents (Vandenbosch & Eggermont, 2012). The components linked to each factor differed between male and female samples. For girls, the competence-based factor includes muscle tone, muscular strength, physical coordination, stamina, health, physical fitness, and physical energy, and the appearance-based factor includes physical attractiveness, coloring, weight, sex appeal, and measurements (Vandenbosch & Eggermont, 2012). For boys, the competence-based factor includes stamina, health, physical fitness, and physical energy, and the appearance-based factor includes physical attractiveness, coloring, weight, sex appeal, measurements, muscular strength, and muscle tone (Vandenbosch & Eggermont, 2013). These factors were further proven to be reliable, though the study in adolescent girls did note the measurement model required the error terms of muscle tone and muscular strength to correlate. Other research has found similar factor structures in adult women as the ones reported within the original research with adolescent girls (Vandenbosch et al., 2015). Two recent studies among adolescents noted slightly different items clustered to the male/female appearancebased and competence-based components (see Karsay et al., 2021: e.g., no loading of health for boys on competence-factor; see Vangeel et al., 2022: e.g., no loading for measurements among boys on the appearance-based factor). Karsay et al. (2021) further showed the components had metric but not scalar invariance in boys and girls when performing CFAs, following their EFA, across 4 different countries. In

future studies including the SOQ, it is recommended that researchers re-evaluate its factor structure via EFA and CFA. Differences have further been reported on the mean scores of SOQ-2 according to individual's gender (Vandenbosch & Eggermont, 2015) and age (Vangeel et al., 2022).

# **Evidence of Reliability**

Studies including various samples have shown that the Cronbach's alpha values for the appearance-based component range from .82 to .86 and the competence-based component range from .62 to .85 (Vandenbosch & Eggermont, 2012, 2013, 2015; Vangeel et al., 2022).

Test-retest reliability also was shown, with one study reporting intra-class correlation estimates ranging from .71 to .76 over a 6-month time interval and having a score of .69 over a 12-month time interval (Vandenbosch & Eggermont, 2016).

# **Evidence of Validity**

The SOQ-2 is positively associated with other indices of objectified body indicators such as internalization of appearance ideals and body surveillance (e.g., Vandenbosch & Eggermont, 2012).

# **Scale Instructions and Items**

Instructions: "Please evaluate on a scale from 1 (= totally not important) to 10 (= totally important) how important to you the following items are."

- 1. muscle tone
- 2. muscular strength
- 3. physical coordination
- 4. stamina
- 5. health
- 6. physical fitness
- 7. physical energy
- 8. physical attractiveness

- 9. coloring
- 10. weight
- 11. sex appeal
- 12. measurements

# **Response Scale**

A 10-point Likert scale is used ranging from Totally not important = 1 to Totally important = 10.

Only the end poles are given a label, next to their numeric value (1-2-3-4-5-6-7-8-10).

### Scoring

After establishing the components, self-objectification is calculated as the difference between the mean scores of individuals' appearance vs. competence factors. The self-objectification or valuing appearance over competence score ranges from -9 to 9, with higher scores indicating higher levels of self-objectification.

# **Abbreviations**

There are no abbreviated versions of the SOQ-2.

#### Cost

The SOQ-2 is free to use for scientific and/or clinical purposes.

#### **Permissions**

Given that the SOQ-2 is an adapted version of the original SOQ, scholars (e.g., researchers, faculty, students, clinicians), scholars who wish to modify the individual scale items are advised to follow the guidelines in the original publication of the SOQ (Noll & Fredrickson, 1998). Scholars are free to use the adapted evaluation format of items (Vandenbosch & Eggermont, 2012).

# Copyright

SAGE Publishing owns the copyright for the SOQ article in which the original items were published (Noll & Fredrickson, 1998). Authors wishing to display the SOQ items in their entirety should

seek permission via <a href="https://doi.org/10.1111/j.1471-6402.1998.tb00181.x">https://doi.org/10.1111/j.1471-6402.1998.tb00181.x</a> (see "Information, rights, and permissions"). Oxford University Press own the copyright for the SOQ-2 article (Vandenbosch & Eggermont, 2012). Authors wishing to display the items of the SOQ-2 in their entirety should click the "Permissions" link within the article (<a href="https://doi.org/10.1111/j.1460-2466.2012.01667.x">https://doi.org/10.1111/j.1460-2466.2012.01667.x</a>).

#### **Additional Information for Users**

If you have questions about the SOQ-2, contact <a href="mailto:laura.vandenbosch@kuleuven.be">laura.vandenbosch@kuleuven.be</a>. When reporting on the SOQ-2, please use the Vandenbosch & Eggermont (2012) reference and the Noll and Fredrickson (1998) reference.

### **Translations Available**

Language	Authors	Article Link
Dutch	Vandenbosch & Eggermont (2012)	https://doi.org/10.1111/j.1460-2466.2012.01667.x
German	Karsay et al. (2021)	https://doi.org/10.1080/15205436.2020.1827432
Spanish	Karsay et al. (2021)	https://doi.org/10.1080/15205436.2020.1827432
Korean	Karsay et al. (2021)	https://doi.org/10.1080/15205436.2020.1827432

#### References

- Calogero, R. M. (2011). Operationalizing self-objectification: Assessment and related methodological issues. In *Self-objectification in women: Causes, consequences, and counteractions* (pp. 23–49).

  American Psychological Association. https://doi.org/10.1037/12304-002
- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, *21*(2), 173–206. https://doi.org/10.1111/j.1471-6402.1997.tb00108.x
- Karsay, K., Trekels, J., Eggermont, S., & Vandenbosch, L. (2021). "I (don't) respect my body":

  Investigating the role of mass media use and self-objectification on adolescents' positive body image in a cross-national study. *Mass Communication & Society*, 24(1), 57–84.

- https://doi.org/10.1080/15205436.2020.1827432
- Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, *22*(4), 623–636. https://doi.org/10.1111/j.1471-6402.1998.tb00181.x
- Vandenbosch, L., & Eggermont, S. (2016). The interrelated roles of mass media and social media in adolescents' development of an objectified self-concept: A longitudinal study. *Communication Research*, *43*(8), 1116–1140. https://doi.org/10.1177/0093650215600488
- Vandenbosch, L., Muise, A., Eggermont, S., & Impett, E. A. (2015). Sexualizing reality television:

  Associations with trait and state self-objectification. *Body Image*, *13*, 62–66.

  https://doi.org/10.1016/j.bodyim.2015.01.003
- Vandenbosch, L., & Eggermont, S. (2013). Sexualization of adolescent boys: Media exposure and boys' internalization of appearance ideals, self-objectification, and body surveillance. *Men and Masculinities*, *16*(3), 283–306. https://doi.org/10.1177/1097184X13477866
- Vandenbosch, L., & Eggermont, S. (2012). Understanding sexual objectification: A comprehensive approach toward media exposure and girls' internalization of beauty ideals, self-objectification, and body surveillance. *Journal of Communication*, *62*(5), 869-887. https://doi.org/10.1111/j.1460-2466.2012.01667.x
- Vangeel, L., Trekels, J., Eggermont, S., & Vandenbosch, L. (2022). Adolescents' objectification of their same-sex friends: Indirect relationships with media use through self-objectification, rewarded appearance ideals, and online appearance conversations. *Journalism & Mass Communication Quarterly*, 99(2), 538–562. https://doi.org/10.1177/1077699020959723