

## Self-reports and peer-ratings of shyness and assertiveness

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High school students ( $N=336$ ; 67% females) were asked to assess themselves and their peers on questionnaire measuring shyness and assertiveness (Zarevski & Vukosav, 1997). Factor analysis clearly differentiates self-reports on these constructs. Peer-ratings show less clear differentiation between shyness and assertiveness and presence of a strong halo-effect. Namely, the ratio between 1<sup>st</sup> and 2<sup>nd</sup> Eigen value extracted from correlation matrix with items measuring shyness and assertiveness is much greater for peer-ratings than for self-reports (in female sample variances explained by first two principal components for peer reports were 23% : 6%; and for self-reports 14% : 10%; for males respective values were 27% : 7% and 14% : 7%). The strong halo-effect in peer-ratings is also reflected in high internal homogeneity. Correlations between self-ratings and peer-ratings are higher for shyness ( $r_{\text{female}}=.37$ ,  $r_{\text{male}}=.35$ ) than assertiveness ( $r_{\text{female}}=.31$ ,  $r_{\text{male}}=.20$ ). It remains unclear whether is this primarily the result of better psychometric qualities of shyness scale or the fact that it might be easier to observe shyness more accurately than assertiveness.

Leary (1983) defines shyness as a psychological syndrome characterized by social anxiety and stiffness in social interactions evolving because there is a potential possibility of social assessment. Assertiveness, on the other hand, is defined as standing for one's own rights without being scared or feeling guilty and without endangering the rights and needs of other people (Zarevski & Mamula, 1998). Some authors, mainly American, consider both constructs to represent two poles of the same continuum, whereas European researchers find these constructs to be correlated but, nevertheless, to represent two separate dimensions. In this case, opposite to shy is not shy and opposite to assertive is not assertive.

Since they are usually conceptualized through different levels of functioning, i.e. behavioral, physiological and cognitive, shyness and assertiveness can be assessed through behavioral measures, measures of various physiological reaction or, predominantly, by different questionnaire forms (self-reports, peer-reports).

Peer-ratings are thought to be reasonable criteria for the validation of personality questionnaires, yet rating scales are commonly believed to be sensitive to different forms of

bias, out of which perhaps the best known is halo rating error (Balzer & Sulsky, 1992). Halo-effect is an observable end-product of a cognitive process in which systematic distortions result from one's own implicit theories, beliefs, person schemata or prototypes (Jackson & Furnham, 2001). It basically describes the phenomenon of assessing someone's specified characteristic according to the general impression of that person and is considered to be one of the most common assessment errors.

In the process of psychometric evaluation of the revised Questionnaire of Shyness and Assertiveness (USA-97, Zarevski & Vukosav, 1997) we checked for the correlation of self- and peer-reports for both of these traits. We find the accordance of these two ratings to be an important indicator of scale reliability. We also wanted to check the psychometric characteristics of self- and peer-ratings and direction of possible differences between self- and peer-reports on these two constructs.

### METHOD

#### *Participants*

High school students ( $N_i=336$ , 67% females), aged from 17-19, from three different towns in Croatia participated in this study.

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### Procedure

In their classrooms participants were asked to sit next to the student of the same sex they are best acquainted with and to assess themselves and their friend by using the gender specific USA-97 form. These forms differ in content on some items, as well as in total number of items composing specific scale. Therefore, it is not justifiable to compare mean values in samples of different sex. The questionnaire incorporates cognitive, emotional and physiological reactions in various shyness- or assertiveness provoking situations. Each of these situations offers four possible answers, from the least shy/most assertive to the most shy/least assertive reaction. All participants were given the following instruction:

“In front of you, you will find a series of descriptions of various social situations and a set of different possible actions/answers considering these actions. Try to think of the answer most typical of you. If you have not been in a situation like the one described, try to imagine how would you behave or feel like.”

Once the participants filled in the questionnaire, they were given the instruction to assess their friend on the same questionnaire by choosing the reaction/answer they find to be most typical of their friend. Both ratings were done anonymously. Answer sheets were collected in pairs and self- and peer-reports were then coded together.

## RESULTS AND DISCUSSION

Descriptive statistics for female and male subjects is shown in Table 1. Male subjects rate their peers' shyness and non-assertiveness somewhat higher compared to their self-reports, but only the difference in shyness is statistically significant. Female subjects tend to give lower rates

on both dimensions, i.e. females find their friends to be less shy (statistically significant difference) and more assertive (marginally significant difference, i.e.  $p < .10$ ) than their friends themselves think. It is, however, unclear whether these sex differences between self- and peer-reports are maybe caused by lower readiness of males to report shyness and non-assertiveness, even in an anonymous survey (Zarevski, Kuterovac & Matić, 1994).

Reliability coefficients are shown in Table 2. These reliability coefficients are corroborative with the results of the previous administrations of the questionnaire when shyness scale showed higher reliability than assertiveness scale. It is interesting to note that peer-reports also show higher reliability for shyness scale. It is hard to say whether this means that it is easier to assess shyness or that the content of shyness scale is more homogeneous. It is, of course, possible to have an interaction of these two factors. Concordant rating values in peer-reports on both scales (Table 1) and higher -coefficients for peer-ratings (Table 2) can be considered a consequence of halo-effect present in the process of peer-rating. This effect is clearly reflected in high internal consistency of peer-ratings. As stated before, halo has traditionally been seen as a type of rater error that occurs when a rater appraises others according to a global, overall impression or, in case of multiple traits rating, when the observed correlation between various rating scales is higher than could be expected (Lance, C.E., Lapointe, J.A. & Stewart, A.M., 1994). The results in Table 2 show a trend of somewhat stronger halo-effect in male subjects.

The presence of halo-effect is also indicated in the results of principal components analysis of peer-ratings which show a less clear differentiation between shyness and assertiveness. The ratio between variances (Eigen value) explained by the 1<sup>st</sup> and 2<sup>nd</sup> component extracted from correlation matrix with items measuring shyness and assertiveness is much greater for peer-ratings than for self-reports (Table 3).

Table 1

Means, standard deviations and t-tests of differences in self- and peer-reports of shyness and assertiveness for male ( $n=111$ ) and female subjects ( $n=225$ )

|                           | male        |           |             |           | <i>t</i> | female      |           |             |           | <i>t</i> |
|---------------------------|-------------|-----------|-------------|-----------|----------|-------------|-----------|-------------|-----------|----------|
|                           | self-report |           | peer-report |           |          | self-report |           | peer-report |           |          |
|                           | <i>M</i>    | <i>SD</i> | <i>M</i>    | <i>SD</i> |          | <i>M</i>    | <i>SD</i> | <i>M</i>    | <i>SD</i> |          |
| shyness                   | 58.94       | 8.80      | 65.45       | 15.75     | 3.70**   | 58.16       | 9.52      | 56.25       | 12.22     | 1.75     |
| assertivness <sup>1</sup> | 35.97       | 6.85      | 36.41       | 8.83      | 0.43     | 42.06       | 7.55      | 40.11       | 8.93      | 2.38*    |

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

<sup>1</sup>higher score in assertiveness scale indicates non-assertiveness

Table 2

Cronbach alpha-coefficients of self- and peer-reports for shyness and assertiveness in male ( $n=111$ ) and female ( $n=225$ ) subjects

|               | male        |             | female      |             |
|---------------|-------------|-------------|-------------|-------------|
|               | self-report | peer-report | self-report | peer-report |
| shyness       | .82         | .93         | .81         | .89         |
| assertiveness | .70         | .82         | .73         | .80         |

Table 3

Percentage of variance explained by first two principal components in self- and peer-reports for shyness and assertiveness in male ( $n=111$ ) and female ( $n=225$ ) subjects

|      |             | % of variance explained by 1 <sup>st</sup> principal component | % of variance explained by 2 <sup>nd</sup> principal component |
|------|-------------|--|--|
|      |             | female   | self-report  |
|      | peer-report | 23   | 6  |
| male | self-report | 14   | 7  |
|      | peer-report | 27   | 7  |

Finally, halo-effect is shown in higher mean inter-item correlations of peer-reports compared to self-reports (Table 4). Since halo is seen as a rating error, the need to have highly accurate ratings suggests the need to keep halo at a minimum. However, a positive relationship between accuracy and invalid halo has been reported in the literature, suggesting that an increase in invalid halo rating error is associated with an increase in rating accuracy (Kozlowski & Kirsch, 1987). This finding has been called the "halo-accuracy paradox" and it is explained by means of a model in which maximum achievable accuracy is not necessarily at the point where rating error is at its smallest level (Jackson, 1996).

However, mean inter-item correlations for self- and peer-reports of shyness and assertiveness are relatively low in males and in females (Table 4). Since the situations described in the Questionnaire of Shyness and Assertiveness were selected to cover various shyness and assertiveness provoking situations, high homogeneity of the scale was not expected.

The results on self- and peer-reports are in significant, positive correlation. These correlations are higher for shyness than for assertiveness (Table 5) but this difference is not significant ( $t_{(110)}=0.62$ ,  $p>.05$  in female sample;  $t_{(224)}=1.19$ ,  $p>.05$  in male sample). Previous research (e.g., Furnham, 1980) show that people give higher ratings to themselves on internal (invisible) traits than do their ac-

Table 4

Mean inter-item correlations for self- and peer-reports of shyness and assertiveness in male ( $n=111$ ) and female ( $n=225$ ) subjects

|        | shyness     |             | assertiveness |             |
|--------|-------------|-------------|---------------|-------------|
|        | self-report | peer-report | self-report   | peer-report |
| female | .127        | .220        | .125          | .175        |
| male   | .119        | .277        | .120          | .215        |

Table 5

Intercorrelations of self- and peer reports ( $r_{s-p}$ ) for shyness and assertiveness in male ( $n=111$ ) and female ( $n=225$ ) subjects

|        | $r_{s-p}$ |               |
|--------|-----------|---------------|
|        | shyness   | assertiveness |
| female | .37**     | .31**         |
| male   | .35**     | .20*          |

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

quaintances, whereas acquaintances tend to give higher ratings to people on external (visible) traits. Both, shyness and assertiveness, represent a form of behavior that is distinctive and can easily be observed and assessed by others. Van der Molen (1989), for example, finds behavior such as avoidance of social interactions, appearance of clear physiological reactions (redness, sweating, etc.) or generally unskilled social behavior to be a strong sign of shyness. In general, there is a high agreement in what people believe are the behavioral signs of shyness and assertiveness and these signs are relatively easy-to-identify. Significant correlations of self- and peer-ratings confirm this notion. As shown in Table 5 the intercorrelations of self- and peer reports for shyness and assertiveness in male and female subjects found in this study resemble this notion.

Self-ratings of a certain construct are often used as a measure of validity of some other measure of the same construct or as a kind of criterion-related validity. (Jones, Briggs and Smith (1986) found the mean correlation of results on shyness scales and self-rated shyness to be around .35. On the one hand, this confirms the criterion validity of the applied instrument. On the other hand, it raises the question of why the found correlation between self- and peer-reports is found to be higher for shyness than for assertiveness. It is unclear whether is this primarily the result of better psychometric qualities of shyness scale or the fact that it might be easier to observe shyness more accurately than assertiveness.

## CONCLUSION

Positive correlations of self- and peer-reports of shyness and assertiveness were confirmed as it was expected. Funder and Colvin (1997) consider the accordance of self/peer-agreement in personality assessments a fairly robust phenomenon and believe that the only possible reasons for lack of agreement appear to be weakness of acquaintanceship, low reliability of rating scales used, or presence of a strong self-representational pressure. It can, therefore, be concluded that the better the acquaintance with a person, as well as the more distinct behavioral signs of certain behavior, the greater is the concordance of self- and peer-ratings. In this study the aforementioned significant correlations are as much the result of the mutual friendship of the subjects as of the good perceptibility of the two measured characteristics.

In peer-reports different potential indicators of halo-effect consistently show the presence of this effect. This is primarily true for the artifact of high homogeneity of peer-reports. At the end, it seems that male subjects, even in an anonymous situation, are less likely to "admit" shyness and non-assertiveness. It is, however, also possible for males to be more "rigorous" in judging "non-masculine" traits (shyness) and behaviors (non-assertiveness) of their male peers.

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