Linkov, Václav; Kečkešová, Ľubica

Personality perception accuracy based on paintings created in the art therapy

Personality perception accuracy based on paintings created in the art therapy

Václav Linkov

Department of Psychology, Faculty of Social Studies, Masaryk University, Brno, Czech Republic.

Ľubica Kečkešová

Department of Psychology, Faculty of Social Studies, Masaryk University, Brno, Czech Republic.

Korespondenční údaje: Václav Linkov, Zahradníkova 26, Brno 60200, Czech Republic. e-mail: vaclav.linkov@hotmail.com

Abstract

In this study, we assessed how accurate are people in perceiving personalities of 'painters' based on observing their paintings. First group of subjects have created sets of six paintings in the art therapy and completed Big Five inventory IPJ-R. Other group of subjects have observed the paintings, assessed the personality of their authors using IPJ-R and then completed reduced version of Child measure of aesthetic judgment. Subjects were able to judge accurately only conscientiousness. Only accuracy of judgment of conscientiousness was higher for judges with higher ability of aesthetic judgment.

Keywords:
Person perception accuracy, paintings, art therapy, aesthetic judgment.

Abstrakt

V této studii jsme sledoval přesnost percepce osobnosti "malířů" na základě sledování obrazů, které namalovali. První skupina zkoumaných osob vytvořila kolekci šesti obrazů v arteterapeutickém stylu a vyplnila dotazník Big Five IPJ-R. Druhá skupina pomocí IPJ-R odhadovala osobnost autorů na základě sledování těchto obrazů a poté vyplnila Childův test vyspělosti estetického vnímání. Zkoumané osoby byly schopny odhadnout pouze svědomitost "malíře". Pouze schopnost odhadnout svědomitost rostla s rostoucí vyspělostí estetického vnímání.

Klíčová slova:
Přesnost percepce osobnosti, obrazy, arteterapie, estetické vnímání.

When we perceive a painting, we may imagine what kind of a person was the painter. Was he or she an extraverted person or a kind of introverted human? Was he or she a chaotic and disorganized person or someone planning every moment of his or her life? These and other questions may arise and we might create some opinion about the painter. But is this opinion correct? Are we able to know something about personality of a painter after seeing his or her work? We try to answer this question in this article.

Personality perception accuracy in zero-acquaintance situation is a popular theme among personality psychologists. Various situations are being investigated and people's ability to correctly deduce stranger's personality assessed. These situations include deducing personality of someone according to his/her photography (Penton-Voak, Pound, Little, & Perrett, 2006), bedrooms or offices (Gosling, Ko, Mannarelli, & Morris, 2002), or webpages created by this person (Vazire & Gosling, 2004). In this text, we use term person perception accuracy as the self-other agreement between target-rating and perceiver-rating of target's personality (Funder, 1995). An average personality perception accuracy (measured as a correlation between self and stranger's rating) across different studies is .10 for neuroticism, .27 for extraversion, .16 for openness, .12 for agreeableness, and .18 for conscientiousness (Connelly & Ones, 2010). The accuracy of personality perception increases with quality of information provided (Letzring, Wells & Funder, 2006) and time available (Blackman & Funder, 1998).

In this study, we chose as our medium for assessing person perception accuracy paintings created by common people (not professional artists). Muri (2007) thinks that paintings in art therapy – more concretely self-portraits – could be an important tool to provide knowledge about a person both to the person himself or herself and the therapist. Paintings also reflect neurological changes, which happened to their painters (van Buren, Bromberger, Potts, Miller, & Chatterjee, 2013). Isaksson, Norlén, Englund and Lidqvist (2009) report that changes in self-images are reflected in tree paintings produced by people, who had experienced the self-image change. People also reflect in paintings their relationships with other people (Snir & Hazut, 2012). However, despite the evidence that people put a lot of cues about themselves into paintings they create, little seems to be known about how accurately their personality could be perceived by others, who watch these paintings. We check this accuracy in this study. We assume that people with better aesthetical evaluation skills might be better also in judging personality of people when watching their paintings. Therefore we check also for connection between aesthetical skills and ability to accurately perceive personality through paintings.

Method

Participants

Sample consisted from two groups. First group – the „painters" – were 20 students (16 women, 4 men, average age 27 years) of art therapy course at middle-size Czech university. Second group – the „perceivers" – were 20 volunteers (13 women, 7 men, average age 36 years).

Measures

Inventory of adjectives – revised (IPJ-R). IPJ-R (Hřebíčková, Urbánek, & Čermák, 2000) is a Czech questionnaire for measuring Big Five personality traits. IPJ-R contains 60 pairs of adjectives. We reduced this questionnaire to 30 pairs of adjectives, six for each Big Five dimension. Three judges chose six pairs for adjectives for each dimension, adjectives selected by two or more judges were included in questionnaire. Subjects answered on a 6-point Likert type scale. Cronbach alpha was 0.79 for extraversion, 0.83 for agreeableness, 0.88 for conscientiousness, 0.86 for emotional stability and 0.81 for openness/intellect.

Child measure of aesthetic judgment (Child, 1965). This test originally contains 120 pairs of artworks, there is a good quality work and similar less quality work in each pair. Subject should answer, which of these two artworks „is better aesthetically – that is, is the better work of art". We reduced this test to 40 pairs of artworks, which were randomly selected.

Procedure

Each of twenty „painters" created six paintings showing themes common in art therapy. These themes were: my family; self-portrait; me, one of my parents, and my romantic partner; fairy tale; mother and child; land of my childhood. Paintings were created as realistic, with rough brush and water colors used on paper of equal size for all „painters". Subjects created paintings at home, so time for painting was not limited. Finally subjects filled IPJ-R about themselves.

   Each of twenty „perceivers" received randomly selected three sets of paintings produced by three „painters", so that each „painter" was assessed by three „perceivers". All three sets of paintings were presented at the same time. Subjects filled IPJ-R about „painter's" personality for each set of paintings. This way we received 60 assessments of painters' personalities. Finally they filled the Child measure of aesthetic judgment, which was presented on computer screen.

Results

We first computed Pearson's correlation between self-rating and „perceiver" rating of painter's personality. Then we computed distance between self-rating and „perceiver" rating of Big Five dimensions (measured as a sum of absolute values of rating differences for six items belonging to an IPJ-R dimension) and correlated this distance with „perceiver's" score in the Child measure of aesthetic judgment. The distance between self-rating and perceiver-rating means error in personality perception accuracy: the larger the distance between painter's and perceiver's opinion, the more the perceiver missed painter's opinion about his or her personality. Negative correlation between aesthetic judgment skill and distance in personality ratings means that the person with better aesthetic judgment perceives the painter's personality more accurately. Results are in Table 1.

Personality perception was accurate only for conscientiousness (r=.30, p < .05), howe-ver accuracy for extraversion (r=.22, p < .09) was also close to significance. (If we used Bonferroni's correction, which would suggest 0.01 as a level for statistical significance for five comparisons, the person perception accuracy for conscientiousness would be-come non-significant.) For correlations between distance in personality rating and per-ceiver's aesthetical skills, only correlation for conscientiousness was significant (r=-.36, p < .01). This means that the higher perceiver's aesthetical skill is, the lesser is error in judgment of painter's conscientiousness.

Table 1:
Pearson correlation between self- and perceiver- rating of IPJ-R and between distance between self- and perceiver- rating and perceiver's score in the Child measure of aesthetic judgment

	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness
Self-rating correlated with perceiver- rating	.22	.03	**.30***	-.01	-.04
Child test corre-lated with distance between self- and perceiver-rating	-.10	-.10	**-.36****	-.11	-.06

* p<0.05, ** p<.01

Discussion and Conclusion

We have found that perceivers of paintings are able to accurately judge conscientious-ness of its creators (and possibly also extraversion). Painters were judged through their work, so conscientious effort on creating this work was easily perceivable from watching it and therefore conscientiousness easily judged as well. Extraversion is a Big Five dimen-sion, which is easy to judge by strangers (Vazire, 2010) and needs the shortest time to form an opinion about.

Conscientiousness is also the only personality trait, which is better judged by people with higher aesthetical skills. Our expectation that better aesthetically educated people are better in judging painter's personalities was supported only partially (personality perception accuracy of other Big Five dimensions doesn't depend on aesthetic judgment skills). People with better aesthetical skills are better in judging quality of an artwork and amount of work necessary to create such artwork. Quality and amount of work are con-nected with conscientiousness, people able to recognize quality are therefore better in judging conscientiousness.

We showed that human ability to judge someone according to paintings he or she created is not great and that this ability doesn't rise with better aesthetic judgment skills. Targets were not professional painters and quality of their works was limited. If they were professionals, they might produce paintings which might not mirror their

ǀǀ studie

personality that much, because they would be more skilled in separating their self from their products. Perceivers were not people professionally involved in art or art therapy. If they were professional artists/therapists, they might be able to notice more cues from observing paintings, so they judgment might be more accurate. Perhaps the result would be different if we had professional artists as creators of our target material and people involved with art/art therapy professionally as judges of their personalities. We therefore recommend repeating this scenario with professional painters or art therapists.

References

Blackman, M. C., Funder, D. C. (1998). The effect of information on consensus and accuracy in personality judgment. *Journal of Experimental Social Psychology, 34*, 164–181.

van Buren, B., Bromberger, B., Potts, D., Miller, B., & Chatterjee, A. (2013). Changes in painting styles of two artists with Alzheimer's disease. *Psychology of Aesthetics, Creativity, and the Arts*, 7, 89–94.

Child, I. L. (1965). Personality correlates of esthetic judgment in college students. *Journal of Personality, 33*, 476–511.

Connelly, B. S., & Ones, D. S., (2010). Another perspective on personality: Meta-analytic integration of observers' accuracy and predictive validity. *Psychological Bulletin*, 136, 1092–1122.

Funder, D. C. (1995). On the Accuracy of Personality Judgment: A Realistic Approach. *Psychological Review*, Vol. 102, No.4, 652–670.

Gosling, S. D., Ko, S. J., Mannarelli,T., Morris, M. E. (2002). A Room With a Cue: Personality Judgments Based on Offices and Bedrooms. *Journal of Personality and Social Psychology,* Vol. 82, No. 3, 379–398.

Hřebíčková, M., Urbánek, T., & Čermák, I., (2000). Inventář přídavných jmen pro posouzení pěti obecných dimenzí osobnosti. [Questionnaire of adjectives to judge Five wide personality factors] *Československá psychologie [Czechoslovakian psychology]*, 46, 318–330. [in Czech].

Isaksson, C., Norlén, A.-K., Englund, B., & Lindqvist, R. (2009). Changes in self-image as seen in tree paintings. *The Arts in Psychotherapy*, 36, 304–312.

Letzring, T. D., Wells, S. M., Funder, D. C. (2006). Information Quantity and Quality Affect the Realistic Accuracy of Personality Judgment. *Journal of Personality and Social Psychology,* Vol. 91, No. 1, 111–123.

Muri, S. A. (2007). Beyond the face: Art therapy and self-portraiture. *The Arts in Psychotherapy*, 34, 331–339.

Penton-Voak, I. S., Pound, N., Little, A.C., Perrett, D. I. (2006). Personality Judgments from Natural and Composite Facial Images: More Evidence for a „Kernel of Truth" in Social Perception. *Social Cognition*, Vol. 24, No. 5, 607–640.

Snir, S., & Hazut, T. (2012). Observing the relationship: Couple patterns reflected in joint paintings. *The Arts in Psychotherapy*, 39, 11–18.

Vazire, S. (2010). Who knows what about a person? The self-other knowledge assymetry (SOKA) model. *Journal of Personality and Social Psychology*, 98, 281–300.

Vazire, S., Gosling, S. D. (2004). e-Perceptions: Personality Impressions Based on Personal Websites. *Journal of Personality and Social Psychology,* Vol. 87, No.1, 123–132