Male and Female Introverts and Extroverts Detecting Emotion

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Abstract

Research has shown that females are better at reading people's emotional cues compared to men, and introverts are better at reading other people's facial cues for emotions compared to extroverts. We used data from psychology students using the NEO-FF Inventory and the Ekman MicroExpressions Training Test (METT) to test these claims. Our results showed that females, especially introverts, were better at correctly identifying more micro expressions compared to males and extroverted females. The results also showed the introverts of either gender were more likely to identify an expression than extroverts.

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Numerous studies have been done which all point to the same result: facial emotions are universal. No matter the cultural background, people generally have an easy time recognizing the seven core emotions; these are happiness, sadness, anger, surprise, fear, disgust, and contempt. Eibl-Eibesfeldt (1971) also noted that even blind children who have never seen a face can consistently recognize emotions.

Despite this universality, Hall (1984) found that women are much better than men at reading people's emotional cues. They are also better at spotting lies (DePaulo, 1994) and knowing if a male-female couple is genuine or a phony couple (Barnes and Sternberg, 1989). Our APA study dealt with gender differences and introversion-extraversion differences. Ambady et al. (1995) found that extroverts are easier to read, but introverts are better at reading other people's facial cues for emotions.

Since our data dealt with males and females, introverts and extroverts, we used the NEO-FF Inventory and the Ekman MicroExpressions Training Test (METT). We hypothesized that females would correctly detect more micro expressions compared to males and that introverts, especially female ones, would correctly identify more micro expressions than extroverts. Not only that, but we hypothesized that introverts would correctly identify more contempt and disgust facial expressions than extroverts.

Method

Participants

The first data set consisted of 22 male and 22 female psychology students, making the total number of participants 44. Half of the participants scored high on the extrovert scale of the NEO-FF Inventory and half of them scored low on the extrovert scale. The second data set also consisted of psychology students, 22 of these students were introverts and 22 of them are extroverts.

Procedure

The first part of the study was conducted by asking male and female college psychology students to complete the NEO-FF Inventory and the Ekman MicroExpressions Training Test (METT). From the data collected on the NEO-FF Inventory, males and females were divided into introverts and extroverts and placed on a table based off the correct number of micro expressions identified out of 49. The second part of the study was conducted similarly by asking the same sample to complete the two tests mentioned above. The students were divided into introverts and extroverts provided the NEO-FF Inventory scores and placed on a table based off this and the correct number of contempt and disgust micro expressions identified out of 7. Finally, we entered our data from the first part of the study in SPSS using a 2-Way ANOVA test and data from the second half using independent samples T-Test.

Results

[][image1]The mean micro expressions in Table 1 indicate that for the first half of our study, females are better at correctly identifying these better than males, especially those females who are introverts. On the other hand, male introverts correctly identify the same amount of micro expressions compared to male extroverts.

Table 1:

Mean Number of Correctly Identified Micro Expressions out of 49

N Extroverts Introverts

Females 22 36.8 45.0

Males 22 35.6 36.5

[][image1]

There was a difference in correct number of micro expressions identified. Females, especially those who were classified as being introverts by the NEO-FF Inventory tended to identify the most expressions out of 49, compared to extroverts of the same gender and both groups of males. Extroverts of both genders and male introverts identified almost the same number of these expressions; $F (1, 40, MSe = 10.773) = 13.502, p < .05$.

[][image2][][image3]
Figure 1. Micro Expressions Identified by Males and Females Using the METT

Personality Type

The data from the second half of our study showed that introverts correctly identify more contempt and disgust micro expressions compared to extroverts, as indicated by Table 2.

[][image1]
Table 2:

M[][image1]ean Number of Correctly Identified Contempt and Disgust Micro Expressions out of 7

N Extroverts Introverts

Contempt 22 3.0 6.0

D[][image1]isgust 22 3.6 6.2

There was a difference in the correct number of contempt and disgust micro expressions identified. Introverts tended to identify the most contempt and disgust expressions out of 7 compared to extroverts; $t(42) = -11.063$ $p < .05$ (contempt) and $t(42) = -9.469$, $p < .05$ (disgust).
[][image4]
Figure 2. Means for micro expressions identified by introverts and extroverts for contempt.

[][image5]
Figure 3. Means for micro expressions identified by extroverts and introverts for disgust.

Discussion

Both of our hypotheses were confirmed. Females did in fact score higher at the METT test compared to males, and female introverts correctly identified the most expressions. Not only that, but introverts also did better at recognizing contempt and disgust facial cues compared to extroverts. Our data showed a significant difference between males and females, extroverted males and females versus introverted males and females, extroverts and introverts. The most notable difference was seen between introverts and extroverts when they looked at their results for looking at contempt images.

References

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