The Characteristic of Schizophrenia’s Color Cognition

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Purpose:

People have various impressions from colors. For example, we feel something from the perception of colors, similar to the feeling of excitement and delight in red color. The emotional valence in colors is called color affection. These color affection and the image of colors are the cognitive aspects. In other words, it is the result when we processed our feeling, in addition to perceiving, memorizing, reasoning and judging. In color affection and the image of colors, there are many common aspects regardless of the difference of sex and generation. They are used as symbol of various concepts. Colors are associated with various things, we have various image from colors like "black-bad" and "red-flamboyance". However, in the previous study it shows that schizophrenia’s color cognition, such as colors affection and the image of colors, have different perception from a healthy person. To investigate the characteristic of schizophrenia’s color cognition is connected for the improvement of the quality of nursing specially for people who suffers from schizophrenia. The treatment and care using the color cognition exist, we can consider treatment and care with the characteristic of schizophrenia’s color cognition.

The aim of this study is to investigate the characteristic of schizophrenia’s color cognition.

Methods:

Participants

160 outpatients with schizophrenia at a psychiatric hospital in Japan. They were asked to participate in this observational study.

The exclusion criteria were dementia and intellectual disability.

Instruments

The image of colors were investigated using the Semantic Differential method (SD method). SD method is bipolar scale consisting of the adjective pairs of the words antonym. In the previous study, the adjective pairs of the antonym were 6 such as "good - bad", "beautiful - ugly", "moving-stopping", "hot - cold", "strong - weak", "heavy - light". The previous study shows that the image are color blue, black, red, yellow, green and white.

The color affection examined by choosing feelings to match the colors. Participants chose words that described how they feel like joy, anxiety, anger, depression, calm and pleasure.
In addition, participants’ sex, age, onset age and quantity of antipsychotic internal use were investigated from medical records. Furthermore, the outpatient section nurse evaluated the general rating using Global Assessment of Functioning Scale (GAF).

The study was conducted from October, 2018 to November 2018.

Ethical considerations

This study was approved by the ethics committee of the University of Tsukuba, Japan. All participants were asked and informed about the study. They were asked for their consent before the initiation of the research procedures. To ensure that they had enough information, the participants were informed about the possibility of opting out of the study and that their anonymity would be guaranteed during the data analysis and reporting.

Results:

There are 98 outpatients with schizophrenia who agreed to participate in this study. The participants’ backgrounds were: age (mean = 44.5, SD = 11.1), sex (men: 65, women: 33), GAF (mean = 60.8, SD = 6.8). In a meta-analysis, the mean of GAF is 49.8. The general rating of the function of this study’s participants are higher.

In the investigation of the image of yellow, about the adjective pairs of the antonym “hot-cold” the largest number of participants are “Neither” (25%). On the other hand, in previous study, there are many people who replied that it is hot in the investigation for students. This result suggests that schizophrenia have few hot image for yellow. In other colors, the same tendency were seen in comparison with the image of healthy person’s general color. In the investigation about feelings word for the color, the answers beyond more than 50% were blue - peace (70.2%), green - peace (57.5%) and white - peace (65.2%). In addition, the feelings word for black was calm (41.9%), anxiety (22.4%) and depression (21.5%) in number of the respondents order. But it reported that healthy person answered for same question that “anxiety” (43%), “calm” was only 4%. In addition, it reported that healthy person answered “anxiety” match to black, but “calm” doesn’t match. These results suggest that many schizophrenia have the image that black is calm, it is different characteristic from healthy people.

These results suggest that schizophrenia’s color cognition are different from healthy person’s general color cognition. So patient understanding deepens more by recognizing this characteristic, and it was thought that it helps examine nursing care.

Conclusion:

The aim of this study is to investigate the characteristic of schizophrenia’s color cognition. This study suggest that the characteristic of schizophrenia’s color cognition were different from general color cognition.

Title:
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Keywords:
color affection and the image of colors, color cognition and schizophrenia

References:
Abstract Summary:
The aim of this study is to investigate the characteristic of schizophrenia's color cognition. Learners attending this session will be able to understand the characteristic of schizophrenia's color cognition.

Content Outline:
I. Introduction

1. The treatment and care using the color cognition exist, but schizophrenia’s color cognition have different perception from a healthy person.
2. By investigating the characteristic of schizophrenia's color cognition is connected for the improvement of the quality of nursing specially for people who suffers from schizophrenia
3. The aim of this study is to investigate the characteristic of schizophrenia’s color cognition.

II. Body

1. Main point #1. Methods

1) Study design: an observational study
2) Participants: 98 outpatients with schizophrenia
3) Setting: a psychiatric hospital in Japan
4) Exclusion criteria.
   a) dementia
   b) intellectual disability
5) Instruments:
   a) The image of colors: the Semantic Differential method (SD method)
   b) The color affection: examined by choosing feelings to match the colors.
6) Statistical analysis: descriptive statistics
2. Main point #2. Results

1) In the image of yellow, about the adjective pairs of the antonym "hot-cold" the largest number of participants are "Neither"(25%).

2) The feelings word for black was calm (41.9%), anxiety (22.4%) and depression (21.5%) in number of the respondents order.

III. Conclusion

The characteristic of schizophrenia’s color cognition were different from general color cognition.

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