



All



ADVANCED SEARCH

Conferences > 2020 15th IEEE International ...

Impairments in decoding facial and vocal emotional expressions in high functioning autistic adults and adolescents

Publisher: IEEE

Cite This

PDF

Anna Esposito ; Italia Cirillo ; Antonietta M. Esposito ; Leopoldina Fortunati ; Gian Luca... All Authors



Alerts

Manage Content Alerts

Add to Citation Alerts

More Like This

Research on the application of new generation of Human-computer interaction education
2020 International Conference on Information Science and Education (ICISE-IE)
Published: 2020

Online Evaluation System of Students' Daily Emotional Intervention Effect Based on Human Computer Interaction Platform

2020 IEEE International Conference on Industrial Application of Artificial Intelligence (IAAI)
Published: 2020

Show More

37 Full Text Views

Abstract



Download PDF

Document Sections

- I. Introduction
- II. Related Work
- III. Materials and Procedures
- IV. Results
- V. Discussion

Show Full Outline

Authors

Figures

References

Keywords

Metrics

Abstract:The present investigation shows that gender of stimuli, age, and emotional categories affects the ability of adults and adolescent with Autistic Spectrum Conditions (ASC)... **View more**

Metadata

Abstract:

The present investigation shows that gender of stimuli, age, and emotional categories affects the ability of adults and adolescent with Autistic Spectrum Conditions (ASC) to decode facial and vocal emotional expressions. A total of 60 subjects participated to the research: 15 ASC and 15 control adolescents aged between 10-14 years; and 15 ASC and 15 control young adults aged between 20-24 years. Their tasks consisted in decoding: a) 24 adults and 24 children contemporary facial emotional expressions of happiness, sadness, anger, fear, surprise, and disgust; and b) 20 adult's vocal emotional expressions of the same abovementioned emotions (except disgust). Significant differences were observed between ASC and typically developed peers. The data suggest that gender, type (voices or faces) of stimuli, and participants' age affect the emotion recognition process making difficult the definition of a common and shared pattern of emotional expression's recognition compliance among autistic and control groups. These results suggest that efficient and effective e-health technologies should be designed to address the subjective needs to offer personalized assistance and support.

Accept & Close

Published in: 2020 15th IEEE International Conference on Automatic Face and Gesture Recognition (FG 2020)

Date of Conference: 16-20 Nov. 2020 **INSPEC Accession Number:**

20367501

Date Added to IEEE Xplore: 18
January 2021

DOI: 10.1109/FG47880.2020.00055

▼ **ISBN Information:**

Electronic

ISBN:978-1-7281-3079-8

Print on Demand(PoD)

ISBN:978-1-7281-3080-4

Publisher: IEEE

Conference Location: Buenos Aires,
Argentina

Anna Esposito
Università della Campania "L. Vanvitelli", IT

Italia Cirillo
Università della Campania "L. Vanvitelli", IT

Antonietta M. Esposito
INGV, Sez. di Napoli Osservatorio Vesuviano, Napoli, IT

Leopoldina Fortunati
University of Udine, IT

Gian Luca Foresti
University of Udine, IT

Sergio Escalera
CVC and University of Barcelona, ES

Nikolaos Bourbakis
Wright State University, OH, US

 **Contents**

I. Introduction

The implementation of socially and emotionally believable ICT (Information Communication Technologies) interfaces brought the promise to enhance quality of life in society, particularly for vulnerable people, i.e., people suffering of physical and social disorders. However, to achieve this promise it is necessary to inform the implementation on the analytics of these disorders, in order to develop effective algorithms, models and computational paradigms. Autism is among these disorders and the current investigation aims to provide such analytics. Autism spectrum conditions (ASC) manifest themselves mainly with disorders of social interaction, communication and understanding of ideas and feelings (DSM V, 2013). The symptoms are associated, in an extremely variable way, to disorders in language, motor skills, cognition (generally mental retardation) and emotions' labeling and coding. According to the current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM V, 2013), ASCs are neurodevelopmental disorders, whose seriousness can be severe, medium, or mild (high functioning ASCs). Each of these levels manifests different behavioral, social, and emotional impairments.

[Sign in to Continue Reading](#)

Anna Esposito
Università della Campania "L. Vanvitelli", IT

Italia Cirillo
Università della Campania "L. Vanvitelli", IT

Antonietta M. Esposito
INGV, Sez. di Napoli Osservatorio Vesuviano, Napoli, IT

Leopoldina Fortunati
University of Udine, IT

Gian Luca Foresti
University of Udine, IT

Sergio Escalera
CVC and University of Barcelona, ES

Nikolaos Bourbakis
Wright State University, OH, US

Figures	▼
References	▼
Keywords	▼
Metrics	▼

IEEE Personal Account

CHANGE
USERNAME/PASSWORD

Purchase Details

PAYMENT OPTIONS
VIEW PURCHASED
DOCUMENTS

Profile Information

COMMUNICATIONS
PREFERENCES
PROFESSION AND
EDUCATION
TECHNICAL INTERESTS

Need Help?

US & CANADA: +1 800 678
4333
WORLDWIDE: +1 732 981
0060
CONTACT & SUPPORT

Follow

f in

[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Accessibility](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [IEEE Ethics Reporting](#) | [Sitemap](#) | [Privacy & Opting Out of Cookies](#)

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2022 IEEE - All rights reserved.

IEEE Account

» Change Username/Password
» Update Address

Purchase Details

» Payment Options
» Order History
» View Purchased Documents

Profile Information

» Communications Preferences
» Profession and Education
» Technical Interests

Need Help?

» **US & Canada:** +1 800 678 4333
» **Worldwide:** +1 732 981 0060
» Contact & Support

[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Accessibility](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [Sitemap](#) | [Privacy & Opting Out of Cookies](#)

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2022 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.

IEEE websites place cookies on your device to give you the best user experience. By using our websites, you agree to the placement of these cookies. To learn more, read our [Privacy Policy](#).

Accept & Close