

Bullying vs. Ostracism: A social developmental neuroscience perspective on rejection.

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Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON42244

Source

ToetsingOnline

Brief title

Bullying vs. Ostracism

Condition

- Other condition

Synonym

N/A

Health condition

gezonde mensen

Research involving

Human

Sponsors and support

Primary sponsor: Universiteit Leiden

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Bullying, fMRI, Ostracism, Social Neuroscience

Outcome measures

Primary outcome

The primary objective of this study is to examine the neural correlates of the experience and act of two different forms of rejection: ostracism and bullying. For the experience of ostracism and bullying, we are specifically interested in the role of emotional networks related to the experience of social pain at different stages of development. For the act of ostracism and bullying (i.e., whether people are willing to ostracize/bully others), we are specifically interested in the role of mentalizing networks related to empathy and perspective taking, also at different stages of development. To this end, we will acquire fMRI data and behavioral responses of participants aged 8-25 years.

Secondary outcome

An additional objective of these studies is to relate individual differences in the experience and act of rejection to various psychosocial adjustment measures. This latter objective will be achieved by correlating brain activity with self-report questionnaires.

Study description

Background summary

The social and material costs of rejection are high for children, adolescents, and adults. It has been linked to the infamous school shootings, absenteeism and poor school performance. But what do we mean when we talk about rejection? The goal of the current research program is to show that it is important to distinguish between two types of rejection: rejection based on the presence of negative attention (i.e., bullying) and rejection based on the absence of attention (i.e., ostracism).

These different rejection types will be studied from a social developmental neuroscience perspective. It has been consistently shown in the neuroscience literature that there is an upsurge of emotional regions at the onset of adolescence, whereas cognitive and mentalizing regions mature later during adolescence and early adulthood. This suggests that whereas young adolescents may experience rejection with negative affect, they may not yet realize the harmful effects the act of rejection has on others. I further argue that this mismatch between the experience and the act of rejection during early adolescence is greater for ostracism than for bullying.

Study objective

In three projects using behavioral and neuroimaging techniques, I will investigate whether the experience of ostracism is more painful than the experience of bullying (project 1), whether younger, compared to older, children ostracize others more than bully others (project 2) and whether after the act younger, compared to older, children empathize less with the victim when they ostracize than when they bully others (project 3).

This innovative program will highlight the role of brain development in negative peer relationships across adolescence. Moreover, the results will contribute to the development of intervention programs aimed at preventing rejection, by emphasizing the important distinction between the act and the experience of different types of rejection (bullying vs. ostracism).

Study design

This study uses an experimental design. Participants will perform computerized decision-making tasks and we will measure brain activation using functional Magnetic Resonance Imaging (fMRI) while they are performing the tasks.

Intervention

We will not use medication, just MRI scans.

To study the effects of bullying and ostracism (on victims and actors) and their underlying neural mechanisms, we will use the Cyberball paradigm (Williams, Chung, & Chow, 2000; Williams & Jarvis, 2006). In Cyberball, participants play a computer ballgame with two other participants, in which they can throw a ball at each other. The paradigm enables you to receive or give excessive negative attention (i.e., bullying) or no attention at all (i.e., ostracism). The original version of Cyberball aimed to manipulate ostracism. The game was programmed such that after a while, the other two players would no longer throw the ball to the participant. Other research has used the game to study bullying, by adding a negative value to receiving the ball (Lelieveld et al., 2013; Van Beest et al., 2011; Van Beest, & Williams, 2006). With each received ball toss participants lost a certain amount of money. Players can thus give negative attention to other players by throwing the ball to them.

Cyberball is a well-validated paradigm that has been applied in numerous studies to study different types of rejection in fields such as social, clinical, developmental and biological psychology (Scheithauer, Alsaker, Wölfer, & Ruggieri, 2013). This elegant paradigm allows researchers to experimentally initiate ostracism and bullying, in adults and children (Zadro et al., 2013). Moreover, because it is one of the few rejection paradigms that is suitable for use in the MRI scanner, it has been used often to study the neural correlates of rejection.

Study burden and risks

There are no known risks associated with participating in an fMRI study. This is a noninvasive technique involving no catheterizations or introduction of exogenous tracers. Numerous children and adults have undergone magnetic resonance studies without apparent harmful consequences. Some people become claustrophobic while inside the magnet and in these cases the study will be terminated immediately at the subject's request. The only absolute contraindications to MRI studies are the presence of intracranial or intraocular metal, or a pacemaker. Relative contraindications include pregnancy and claustrophobia. Subjects who may be pregnant, who may have metallic foreign bodies in the eyes or head, or who have cardiac pacemakers will be excluded because of potential contraindications of MRI in such subjects. Although there is no direct benefit to the participants from this proposed research, there are greater benefits to society from the potential knowledge gained from this study. This knowledge about normal development is critical to aid in the understanding of cases of abnormal development, as seen in children with autism, schizophrenia, Attention Deficit Hyperactivity Disorder, Obsessive-Compulsive Disorder, Tourette's syndrome, or traumatic brain injury.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adolescents (12-15 years)

Adolescents (16-17 years)

Adults (18-64 years)

Children (2-11 years)

Elderly (65 years and older)

Inclusion criteria

Children and adults of 8-25 years with no history of neurological disorder/disease and no counter-indications to MRI will be included in this study. All participants will be right-handed native Dutch speakers with normal vision or contact lenses. Female participants will only be invited within 7 days of the first day of their menstrual cycle.

Exclusion criteria

Potential participants will be prescreened for contraindications for fMRI, which include metal

implants, heart arrhythmia, claustrophobia, and possible pregnancy (in females). They will additionally be prescreened for head trauma, premature birth, learning disabilities, and history of neurological or psychiatric illness and/or use of psychotropic medications. Because of the difficulties in interpreting cognitive studies in subjects with Dutch as a second language, only native-Dutch speakers will be asked to participate in the study. Finally, left-handed individuals will be excluded from the study because some left-handers have substantially different brain organization relative to right-handers.

Study design

Design

Study type: Interventional

Masking: Single blinded (masking used)

Control: Uncontrolled

Primary purpose: Other

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 13-05-2016

Enrollment: 252

Type: Actual

Ethics review

Approved WMO

Date: 27-10-2015

Application type: First submission

Review commission: CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL51496.000.15