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Social Sciences

## The effect of warmth and competence on the emotional state when committing social exclusion

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M.Sc. Thesis in Psychology of Conflict, Risk and Safety

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## Abstract

Everyone experienced social exclusion or committed social exclusion towards another individual. Although the effects of receiving social exclusion are well known, less is known about the effects of committing exclusion. This study, focuses on the effects of committing social exclusion and how it can be effected in the way individuals perceive the person who is receiving the exclusion. Thereby, the person who is receiving the exclusion can be clustered in four groups resulting from the two dimensions warmth and competence. Each of the four groups represents different stereotypes which help to identify in- and out-groups.

To get insight into perceived feelings a questionnaire was conducted to measure the guilt and shame. Furthermore, an online ball-tossing game, called Cyberball, was used to let the participant experience an exclusion situation. During the Cyberball game participants are instructed to exclude another person. The person receiving exclusion was manipulated on two dimensions: warmth and competence.

The results show that the perception of the person receiving exclusion has no direct effect on the perceived guilt and shame of the participant. Nevertheless, a mediation through blaming the victim shows that the perception of the person who is receiving exclusion, influences the perceived shame. Ascribing the blame to the person who is receiving exclusion decreases the experienced shame.

Categorizing persons with help of stereotypes does not fully influence the way participants feel about committing exclusion towards them. Results of this study let assume that warmth and competence in some way influence feelings of shame but more research has to be done to examine these influence.

## Contents

.....	i
Introduction .....	4
Introduction .....	4
Social identity.....	5
Social exclusion.....	6
Stereotype Content Model and Behaviors of intergroup affect and stereotype .....	8
Guilt and Shame .....	11
Current study .....	13
Methods.....	17
Participants and Design.....	17
Procedure.....	18
Measurements.....	19
Analyses .....	21
Results .....	22
Additional research .....	33
Discussion .....	38
Limitations .....	39
Recommendations .....	41
Conclusion.....	42
References .....	43

## **Introduction**

### **Introduction**

Every individual excluded or ignored another person once in a while. Excluding or ignoring someone contains simple acts as not talking or responding (Zadro & Gonsalkorale, 2014). Social exclusion can be seen as an effective form of punishment and leads to a decrease in physical and mental wellbeing in the receiving exclusion person (Gardner, Pickett & Brewer, 2000). Through social exclusion, individuals or groups are systematically blocked from certain events and activities (Williams, 2007a). Especially receiving social exclusion is associated with a high negative impact. It decreases the self-esteem, control, belonging, and meaningful existence of an individual and increases sadness and anger (Williams, 2007a and Williams, 2007b). On the other hand committing social exclusion afforded a sense of power to the individual. But committing social exclusion can also lead to distress, remorse, and guilt (Zadro & Gonsalkorale, 2014). How individuals experience committing exclusion is dependent on the person who receives the exclusion.

Through groups, individuals develop a sense of a self- and group identity. Individuals identify themselves in part of in-groups (groups we have a lot in common with) and out-groups (groups we do not have a lot in common with), in the process, the individual adopts certain norms and values of the group (Chen & Li, 2009). Individuals seek connections to groups to feel socially involved and being part of something (Baumeister & Leary, 1995). Belonging to a certain group also can lead to adopting behavioral patterns which are associated with the group identity. These behavioral patterns are consistent with stereotypes ascribed to the group's identity (Chen & Li, 2009). Stereotypes are images and ideas individuals have about certain groups or individuals. With the help of stereotypes also general conceptions about out-groups can be appraised (Ufkes, Otten, van der Zee, Giebels & Dovidio, 2012). Stereotypes are used to make quick and facile judgments about others and helping to categorize those (Kurzban & Leary, 2001).

The aim of the present study is to investigate the effects of committing exclusion and how the perception of the receiving exclusion person can influence the emotional state of the participant. The receiving exclusion person is described on basis of stereotypes labeled on two dimensions: warmth and competence (Cuddy, Fiske & Glick, 2008; Fiske, Cuddy, Glick & Xu, 2002 and Ufkes et al., 2012). According to various studies, warmth and competence are fundamental dimension on which stereotypes can be labeled (Cuddy et al., 2007 and Fiske et al., 2002). Committing exclusion towards individuals that are assumed to be likeable can evoke negative feelings. Especially feelings of guilt and shame will be examined during this study.

### **Social identity**

The social identity theory is a theory about an individual's identity explaining how they see themselves within groups and in interaction with other groups (Hogg & Terry, 2009). According to Hogg and Terry (2009) individuals seek groups they have a lot in common with and from whom they expect some emotional and value significance. This means that individuals seek groups that can represent the norms and values of the individual. When it comes to identifying with groups individuals seek to confirm and establish in-group-favoritism. In-group-favoritism contains that the own group is favored over other groups (Hogg & Terry, 2009).

Through group identification, people derive a sense of identity from group membership (Fisher & Wakefield, 1998). Identifying with a group implies that one will implement the norms and values of the group into their life (Leach et al., 2008). Individuals strive to promote a positive self-image of themselves. To achieve this positive self-image individuals tend to seek interaction with successful and attractive groups, which are seen as desirable. A strong identification with such groups increases the likelihood to attribute certain characteristics of these groups to the self (Fisher & Wakefield, 1998). Also, certain actions of these groups are considered as right. For example excluding other members because of inappropriate behavior (Fisher & Wakefield, 1998). Committing exclusion together with others can benefit the individual's belongingness and self-

esteem because of the increased experience of group's cohesion and commitment (Zadro & Gonsalkorale, 2014).

### **Social exclusion**

While social identity helps people to establish a bond with others social exclusion can be used to inflict harm to others. Social exclusion implies blocking or cutting individuals or groups off from involvement in society. The phenomenon of social exclusion can be described through many paraphrases like ostracism, social exclusion, and rejection (Williams, 2007). They all describe the effect that an individual or group will be ignored or excluded from certain events and activities.

To measure the effects of social exclusion one measurement is the Cyberball game. It is a virtual analog to a ball-tossing game, mostly used in studies from Williams. With the Cyberball game a short-term exclusion experience can be measured (Williams, 2007). Thereby the individual experiences the effects of exclusion without being directly affected by it.

Social exclusion can have different functions as hurting or harming others or to show disliked people that they are not welcome. According to Barner-Barry (1986) two factors can be examined why people are excluded. The first reason is that the receiving exclusion person has personal characteristics that are not liked by others. The second reason is that the individual receiving social exclusion has done something that is not accepted by the others (Barner-Barry, 1986). This individual might have crossed borders or broke rules of the group. Receiving social exclusion can have a great impact on the emotional state of the person. The fact that social exclusion can be psychologically damaging is shown by research by Williams (2007), Barner-Barry (1986) and Leary, Kowalski, Smith and Phillips (2003). Accordingly receiving exclusion individuals show an increase in aggressive behavior and a decrease in physical and psychological wellbeing. Individuals who receive social exclusion often show negative behavioral pattern and negative feelings towards others (Williams, 2007; Barner-Barry, 1986 & Leary et al., 2003). On the contrary research from Warburton, Williams and Cairns (2006) has found that receiving social

exclusion can also lead to prosocial behavior. These individuals are more empathic due to their experience. Receiving social exclusion can elicit ambivalent emotions and behaviors in individuals. But it is little known in how committing exclusion can influence the emotions and behaviors of the person.

Research from Wesselmann, Wirth, Pryor, Reeder and Williams (2015) on the effect of committing exclusion towards a burdensome member shows that participants feel less guilty when exclusion is for the purpose of a task. Committing exclusion in such a situation is attributed to the burdensome individual and is therefore not seen as a negative action. The research of Wesselmann et al. (2015) discovers also that participants experience less responsibility toward the receiving exclusion individual. Research from Menesini et al. (2003) concentrates on bullying and how bullies feel during their actions. According to this study, bullies have a higher level of aggression and experience pride when excluding someone. Menesini et al. (2003) assume that bullies experience an increase in emotional disengagement which leads to disengagement reasoning over their actions which derive from feelings of pride and indifference. Bullies also tend to blame the victim for their actions. Blaming the victim describes “the attribution for a violent offense to the victim” (Weber, Ziegele & Schnauber, 2013; p. 255). Certain actions toward individuals are based on personal characteristics and actions of the person and not on situational circumstances.

Responsibility and blaming the victim can increase or decrease the experienced levels of guilt and shame in individuals who commit exclusion. A two continuum model describes the variations of the emotional attributions (Olthof, Schouten, Kuiper, Stegge & Jennekens-Schinkel, 2000 & Menesini et al., 2003). One side of the continuum describes emotions of responsibility which can elicit feelings of guilt and shame. On the other side of the continuum are emotions of disengagement which can elicit feelings of pride and indifference (Figure 2). In the course of this study, the emotions of disengagement are represented through blaming the victim.

## **Stereotype Content Model and Behaviors of intergroup affect and stereotype**

Individuals do not have the time and luxury to assess the required cognitive resources to make broad judgments about others (Cuddy, Glick & Beninger, 2011). To make the process of judgment less complex stereotypes are used to categorize people. Stereotypes are beliefs and characteristics about certain people or groups. To understand the process behind stereotypes the Stereotype Content Model (SCM) and the Behavior from Intergroup Affect and Stereotype (BIAS) are paradigms that help. Both paradigms hypothesize that stereotypes can be clustered into two dimensions: warmth and competence (Cuddy, Fiske & Glick, 2008). According to Cuddy, Fiske and Glick (2008) social groups can be clustered into the four combinations of high and low warmth and competence.

Fiske, Cuddy, Glick and Xu (2002) examine two clusters for judging out-groups: favored groups are liked because they are high on warmth but disrespected because of low competence. On the other hand envied groups are respected because of high competence but disliked because of low warmth (Fiske et al., 2002; Cuddy et al., 2008). In line with research of Fiske et al. (2002) and Cuddy et al. (2008) can stereotypes be clustered into two dimensions: warmth and competence. Both models the SCM and the BIAS map indicate that individuals and also groups prejudice other individuals or groups on basis of these dimensions. According to Cuddy et al. (2008) the warmth dimension examines the intentions of others toward one. Warmth entails characteristics as morality, trustworthiness, and friendly. Clustering someone on this dimension can provide one with information's about the intentions of the other. Either the intention of someone will be harmful to one or not (Cuddy et al., 2008). On the other hand, the competence dimension examines how capable someone is to pursue their intentions. This dimension entails characteristics as skill, creativity, and intelligence (Cuddy et al., 2008). Clustering someone on this dimension can tell how capable the person appears to pursue their intention.

The SCM basically hypothesizes that stereotypes possess two dimensions: warmth and competence. These dimensions underlie and differentiate individual and group stereotypes. Stereotypes about groups or individuals can not be simplified as one stereotype. Stereotypes are ambivalent and can be distributed on the two dimensions. According to Cuddy et al. (2008) the distribution across out-groups can mostly be clustered as competent but not warm or warm but not competent. There are also groups that can be clustered as not competent and not warm. These are marginal groups like homeless and poor people. On the other hand, groups that are clustered both warmth and competent are societal prototype in-groups (Cuddy et al. 2008). Judging on basis of these dimensions can elicit in unique emotional responses: Admiration (high warmth and competence), contempt (low warmth and competence), envy (low warmth/ high competence), and pity (high warmth/ low competence) (Cuddy et al., 2008). This emotional responses can lead to particular behavioral patterns.

The BIAS map is an extension of the SCM and considers that behavioral tendencies are linked to group stereotypes and emotions (Cuddy, Fiske & Glick, 2007). According to the BIAS map, three components: cognitive (stereotypes), affective (emotional prejudices), and behavioral (discrimination) are conceptualized as bias. The BIAS map also proposes that social structural appraisals of groups predict different biases that the three components will coordinate in systematic and predictable ways. Also, behavioral tendencies can be stronger and directly be predicted through emotions (Cuddy et al., 2007). The four emotional responses named above can result in four different behavioral responses: active facilitation, active harm, passive facilitation, and passive harm. Admired groups elicit active and passive facilitation, contempt groups elicit active and passive harm. Pitied groups, on the other hand, elicit active facilitation and passive harm and envied groups elicit passive facilitation and active harm (Cuddy et al., 2007). Thus depending on the perception of the out-group, the response toward them can vary. Figure 1 is an illustration

of the four behavioral responses and emotional responses distributed on the two dimensions warmth and competence.

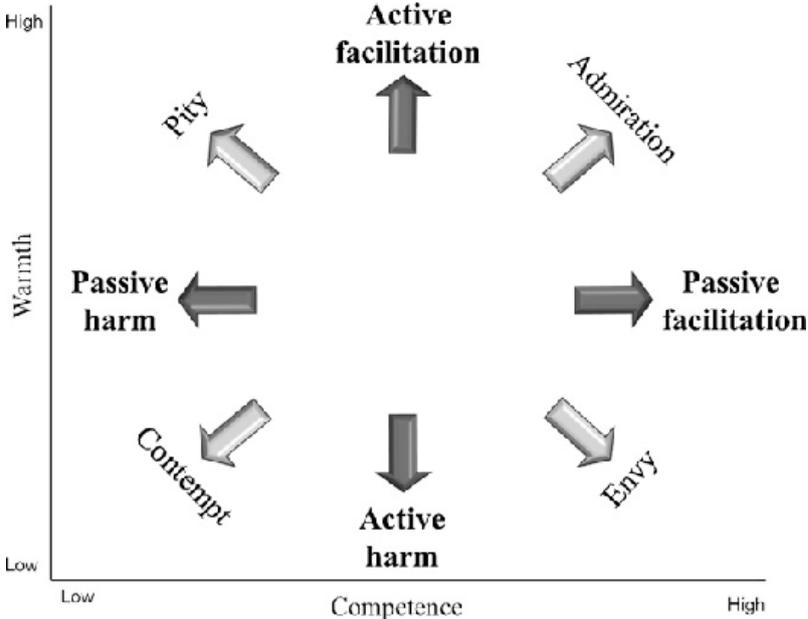


Figure 1. Stereotype content model predictions for emotions and BIAS map predictions for behaviors in the warmth and competence dimensions.

According to Cuddy et al. (2011) the warmth dimension is more influential than the competence dimension. Judgments on the warmth dimension are made quicker and have more impact on attitudes toward others. This results from the urgency to assess unfamiliar others' warmth (is the other a friend or an enemy) (Cuddy et al., 2011). Therefore individuals that are identified as highly warm are favorable because they are associated with characteristics as friendly, trustworthy and sociable (Cuddy et al., 2008). On the contrary, individuals that are identified as cold are disliked due to their lack of sociable characteristics (Cuddy et al., 2008). Ufkes, Otten, van der Zee, Giebels and Dovidio (2011) use the Emotional Quotient (EQ) and Intelligent Quotient (IQ) to manipulate the appearance of out-group members. EQ is thereby associated with characteristics of warmth and IQ with characteristics of competence.

## **Guilt and Shame**

Social exclusion has an impact on different feelings individuals experience during committing exclusion. In the course of this study, feelings of guilt and shame are in the main focus due to their impact on individual's behavior. Olthof et al. (2000) define guilt as a violation of moral rules in which the individual causes harm or disadvantages to someone. Thus guilt is a situational dependent feeling which results from interaction with others. Shame, on the other hand, is not depending on situational contexts but rather is a personal conflict with the identity (Olthof et al., 2000). Shame describes an unwanted identity which is explained as "one thinks about what important other persons might think about them" (Olthof et al., 2000; p. 53). Thus guilt results through interpersonal interactions and shame from intrapersonal conflicts of the identity. Menesini et al. (2003) also describe guilt as a result of bad actions toward other individuals. "Guilt involves a sense of tension, remorse, and regret over the bad actions." (Menesini et al., 2003; p. 517). Shame according to Menesini et al. (2003) describes a painful emotion which results from a sense of worthlessness and powerlessness. Thus shame is induced through internal conflicts about the identity. Furthermore, a study from Baumeister et al. (1994) examines that guilt also functions as a motivation for interpersonal interactions.

Experiencing feelings of guilt and shame are associated with the perceived responsibility towards others (Menesini et al., 2003). A high responsibility is associated with an increase in guilt and shame especially when committing exclusion toward liked ones (Zadro & Gonsalkorale, 2014). On the other hand repeatedly committing aggressive acts leads to dull emotional responses. These people have difficulties to differentiate feelings of guilt and shame from other feelings (Menesini et al. 2003). Baumeister, Stillwell and Heatherton (1994) also examine a relationship between the level of responsibility and feelings of guilt and shame. According to Baumeister et al. (1994) individuals experience empathic distress when seeing others suffering. Empathic distress is defined as perceiving someone's pain and suffering. Thus guilt results from feeling empathic

distress over someone’s suffering. Thereby the self-attribution of causal responsibility is an indicator (Olthof et al., 2000).

Another indicator for the level of guilt is blaming the victim. According to Weber et al. (2013) individuals who blame others for their actions ascribe the responsibility to the victim self. Thus people feel less responsible for victims because the cause of actions lies within the victim. Shifting the responsibility to victims themselves reduces the perception of guilt and shame (Weber et al., 2013). Menesini and Camodeca (2008) examine the effect of blaming the victim and the level of guilt and shame experienced by participants. During their research Menesini and Camodeca (2008) use situations in which children are exposed to victimization or prosocial behaviors. It seems that the level of guilt and shame is higher in victimization situations than neutral situations. The increase in guilt and shame can result from the infliction of harm to other. Ascribing the blame to the victim results in emotions of disengagement.

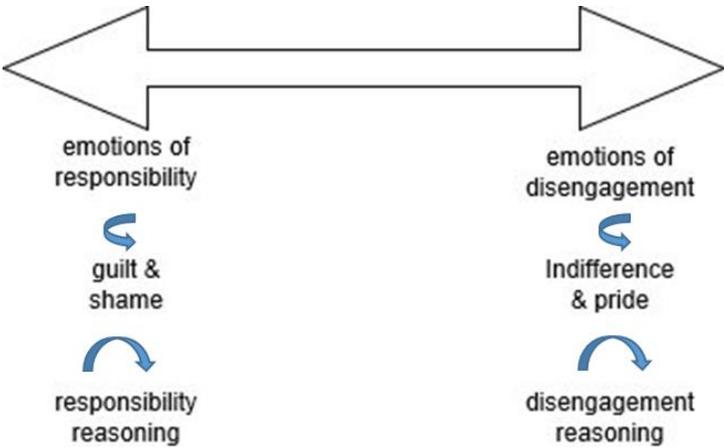


Figure 2: Model of moral emotions attribution and justification

According to Baumeitser et al. (1994) two sources for guilt are important: empathic arousal and anxiety over social exclusion. As already noted empathic distress leads to feeling guilty about bad actions. Thus feeling bad about certain situations is a basis for guilt. On the other hand, anxiety

is also an important indicator of guilt. Due to the fact that individuals long for belongingness and attachment a threat of social exclusion increases anxiety (Baumeister et al., 1994).

### **Current study**

The aim of the current study is to examine ‘*What effect has committing exclusion on the emotional state if the person receiving exclusion is stereotyped on the dimensions warmth and competence?*’

To answer the research question, several hypotheses have been put forward.

Committing exclusion towards a warm person can lead to empathic distress. A warm person is associated with characteristics as sociable, friendly and trustworthy (Cuddy et al., 2008). By seeing a person as warm, feelings of guilt and shame can be aroused during an exclusion situation. In contrast, committing exclusion towards a perceived cold person will arouse fewer feelings of guilt and shame. This is because intentions of warm people are perceived as non-harmful towards oneself. Inflicting harm through exclusion towards a warm person might make the participant feel bad about his action. Feeling bad about one’s actions elicit feelings of guilt and shame (Baumeister et al., 1994). Due to the increase of feeling guilt and shame, negative feelings increase too and positive feelings decrease.

*H1: Excluding a warm person increases perceived guilt, shame, and negative feelings but decreases positive feelings compared to excluding a cold person.*

On the other hand committing exclusion toward competent person might be experienced as less distressful. Competent persons are associated with characteristics as intelligence, creativeness, and confidence (Cuddy et al., 2008). By seeing a person as competent, positive feelings about the action might arouse. In contrast, committing exclusion towards an incompetent person might increase feelings of guilt and shame. This is because competent persons are seen as

capable of inflicting harm towards oneself. Due the capability of inflicting harm of a competent person, excluding the person might be a satisfaction for the participant.

*H2: Excluding a competent person decreases perceived guilt, shame, and negative feelings but increases positive feelings compared to excluding an incompetent person.*

As committing exclusion towards a warm person increases guilt and shame, a combination of warmth and competence might have more effect compared to the effect of warmth and competence alone. Warm and competent people are associated with a favorable in-group which are respected by individuals. Warm and incompetent people are liked because of their warmth. Committing exclusion towards one of them should make the participant feel bad about the exclusion. Thereby guilt and shame increase. On the other hand, a cold and competent or a cold and incompetent person is disliked or disrespected. Committing exclusion towards one of them should not make the participant feel bad (Cuddy et al., 2008).

*H3: An interaction of warmth and competence is expected. When competence is high, than the effect of warmth on guilt, shame, and negative feelings is higher compared to the effect of the main effects alone. When competence is low, than the effect of warmth on guilt, shame, and negative feelings is lower compared to the effect of the main effects alone.*

The effect of warmth, competence and the interaction of warmth and competence can be mediated through responsibility. The participant might feel more responsible towards a warm than a cold person. This feeling of responsibility can be associated with an increase in guilt and shame (Olthof et al., 2000). On the other hand, the participant might experience less responsibility towards a competent than an incompetent person. Also, responsibility might increase when the

receiving exclusion person is seen as warm and competent and warm and incompetent rather and cold and competent and cold and incompetent.

*H4: Responsibility mediates the effect of warmth, competence, and the interaction of warmth and competence on guilt, shame, positive, and negative feelings.*

Another mediator is blaming the victim. As the receiving exclusion person is perceived as warm rather than cold, the blame might be ascribed to external factors rather than the person self. On the other hand, a competent person might be more blamed for the exclusion rather than an incompetent person. Due to the possible capability of competent persons to inflict harm to the participant self, the participant might enjoy committing exclusion towards them. A warm and competent person and a warm and incompetent person will be less blamed for the exclusion thus the guilt and shame will increase. On the other hand, a cold and competent person and a cold and incompetent person will be blamed for receiving exclusion and thus the perceived guilt and shame will decrease.

*H5: Blaming the victim mediates the effect of warmth, competence, and the interaction of warmth and competence on guilt, shame, positive, and negative feelings.*

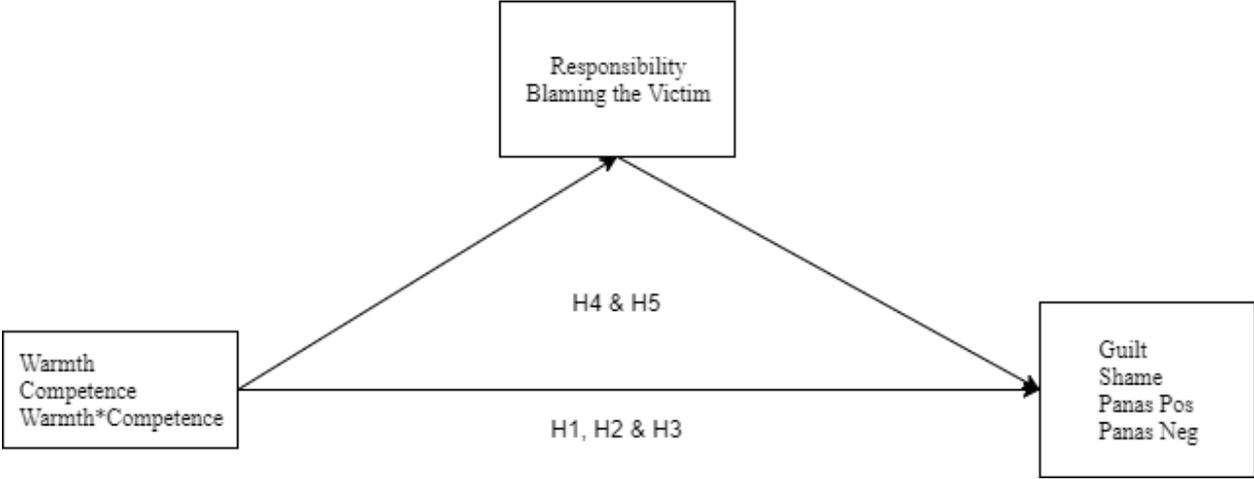


Figure 3: overall mediation model

## Methods

### Participants and Design

To promote participants for this study a snowball sampling was used. Through social media sites, people were asked to participate in the study and to fill in the survey. They also were asked to pass the link for the survey on to other people who might be willing to participate. In total 154 people participated from whom 124 finished the survey. The other 30 participants were omitted from the analysis. The age of the participants ranged from 18 years to 47 years with an average age of 25 (*SD* 4.36) years. From the 124 participants, 54 were female and 70 were male. There was a wide range of nationalities participating in this study. The nationalities were categorized in Dutch (57), German (41) and Others (26).

The independent variables in this study were the two dimensions: warmth and competence. A 2 (warm versus cold) x 2 (competent versus incompetent) in-between subject design was used. The online survey was created through an online platform called Qualtrics. The survey was programmed to assign the participants randomly to one of the four conditions. Through the Intelligent Quotient (IQ) and Emotional Quotient (EQ), the perception of the participant according to warmth and competence are manipulated. Thereby IQ is associated with the dimension competence and EQ is associated with the dimension warmth. It was chosen for IQ and EQ due to the stereotypes which are linked to these constructs.

To manipulate the appearance of the excluded person the IQ and EQ scores were modified. Therefore the first condition represented the excluded person with a high IQ and high EQ. This condition referred to in- and reference groups and should be associated with positive characteristics. 36 participants were assigned to this condition. The second condition showed an excluded person with a high IQ and low EQ. This condition is associated to the disliked out-group and should be associated with cold but competent characteristics. 33 participants were assigned to this condition. The third condition showed an excluded person with a low IQ and a high EQ which

should be associated with a liked out-group and therefore with warm but incompetent characteristics. 37 participants were assigned to this condition. The last condition represented an excluded person which low IQ and low EQ. This condition referred to the marginal group and should be associated with negative characteristics. 39 participants were assigned to this condition.

To create a situation in which participants could be part of social exclusion the Cyberball game was used. The Cyberball game is an online game programmed to examine the effect of social exclusion. With Cyberball the participant can experience exclusion in real time and without being moved from their comfort zone. The game was programmed so that the participant is playing with three other players. Further, it was programmed that one of the players would never receive a ball. After 30 tosses the game finished with a request to fill in an ID which should be the nickname the participant had chosen. With the nickname checking the fulfillment of the task was possible.

## **Procedure**

The participant received the link to the online survey via social media sites. The participant opened the link and was connected to the survey. The survey starts with an explanation and definition about IQ and EQ. The participant learned about the connection between IQ and the dimension competence and EQ and the dimension warmth. After the introduction to the study, the participant could start with the survey. The first questions were related to IQ and EQ. The IQ questions were measured with the raven matrix. The EQ question regarded situations that asked for the participants' opinion. There were also some questions added about the moral understanding of the participant. After answering these questions the participant received information about the further progress of the survey. The participant was informed about the Cyberball game and that he/ she would play with other players. The other players would be found through a calculation of the IQ and EQ scores. To link the participant to the Cyberball game he/ she was asked to choose a nickname. A purpose of this study was to create the impression that the other players were humans. Doing so some time delays and errors regarding the scores of two players were included. After

that, the participant was assigned to one of the four conditions and received information about the players. The given information included the Names of the player: Jim, Nick, and Sarah. Furthermore, the IQ and EQ score of Sarah were given illustrated in a graphic together with an IQ and EQ of the participant himself/ herself. Another information that was given to the participant was a task he/she had to do during the Cyberball game. The task was to exclude Sarah from the game because the researcher of this study wanted to examine the effect of exclusion on a person. To play the Cyberball game the participant had to copy a link in a new tap. The Cyberball game was programmed so that the participant played with 3 others players. The Cyberball game was ended after 30 tosses were done. Sarah did not receive any tosses from the other players. At the end of the game, the participant was asked to give his/ her chosen nickname again. After finishing the Cyberball game the participant returns to the survey. The following questions were referring to the situation of the Cyberball game. The questions were about the participant's state of guilt and shame, also about the responsibility and if the participant ascribed the blame to the victim. Furthermore, some questions about the identification of the participant with the players were asked. The last questions asked about positive and negative feelings of the participant. To the end of the survey, some demographic questions about age, nationality, and gender were asked. At the end, the participant was informed over the purpose of the study and thanked for the participation.

## **Measurements**

During this study, a variety of measurements methods were used to measure different aspects of the participant. The questions were taken from previous studies in this field. For each used measurement the corresponding items were summed into one variable.

*Guilt Inventory:* To measure the experience of guilt in the participant the Guilt Inventory from Jonas, Schratte and Kruger (2000) was used. The dispositional guilt included 6 questions which were not included in the analysis. The situational guilt questions are called in the Guilt Inventory (Jonas, 2000) state guilt. These questions were designed to measure feelings of guilt and

remorse that might change depending on the situation. For these questions also a five-point Likert-Scale from 1 – not at all to 5 – very much was used. A higher score reflects greater state guilt or moral standard. (e.g., ‘I did something that I deeply regret.’) (Cronbach’s  $\alpha = 0.71$ ).

*Shame scale:* To measure shame this study made use of the Experience of Shame Scale (Andrews, Qian & Valentine, 2002). The Experience of Shame Scale assesses categorical shame, behavioral shame, and body shame. The questions used in this study were adapted to the situation of the Cyberball game and were taken from the behavioral shame items. The responses to these questions were measured with a five-point Likert-Scale ranging from 1 – not at all to 5 – very much. An example question for the Shame Scale was ‘Do you felt ashamed of any of your actions?’ (Cronbach’s  $\alpha = 0.85$ ).

*Blaming the victim:* To measure blaming the victim three questions were made up. These three questions were measured with a five-point Likert-Scale ranging from 1 – strongly agree to 5 – strongly disagree. These questions examine to what extent the participant blamed the excluded person. The construct of blaming the victim included three questions (e.g. ‘The person had it coming.’, ‘The person is to blame himself for the situation.’ and ‘The person deserves what happened.’) (Cronbach’s  $\alpha = 0.87$ ).

*Responsibility:* To measure the responsibility two questions these questions were measured with a five-point Likert-Scale ranging from 1 – strongly agree to 5 – strongly disagree. Responsibility included two questions to examine to what extent the participant felt responsible for the situation and person (e.g. ‘I don’t feel responsible for what happened.’ and ‘I don’t feel responsible for the other person.’) (Cronbach’s  $\alpha = 0.84$ ).

*In-Group Identification:* The questions regarding the in-group identification were taken from Leach et al. (2008). The measure contains several questions about the solidarity, satisfaction, centrality, individual self-stereotyping, and in-group homogeneity. These questions were measured with a five-point Likert-Scale ranging from 1 – strongly agree to 5 – strongly disagree.

Questions included 'I had a lot in common with the other people from the game.' and 'I felt a bond with the people from the game' (Cronbach's  $\alpha = 0.87$ ).

*The Positive and Negative Affect Schedule:* The positive and negative affect schedule is used to describe feelings and emotions. It's a list of different negative and positive words describing feelings and emotions. The questions were measured on a five-point Likert-Scale ranging from 1 – not at all to 5 – extremely. The positive and negative affect scale was divided into two clusters. Positive feelings and emotions like 'Interested', 'Excited', 'Strong' and so on were one cluster (Cronbach's  $\alpha = 0.88$ ). Negative feelings and emotions like 'Distressed', 'Upset', 'Guilt' and so on were the other cluster (Cronbach's  $\alpha = 0.90$ ).

*Manipulation check:* The manipulation check consist of two questions regarding the IQ and EQ score of the excluded person. The questions were measured on a five-point Likert-Scale ranging from 'between 0-2' to 'between 8-10'. With these questions, it was checked if the given information was read carefully.

## **Analyses**

Preacher and Hayes (2004) programmed an analysis to simplify the calculation and analysis of a mediation analysis. The used analysis is an ad on for SPSS and is called PROCESS. Process makes use of 76 different models to describe and analyze moderations or mediations. In the course of this study, the basic mediation (Model 4) was used. To establish a mediation the following four steps should be followed. want to confirm (a) a significant relationship between the independent and dependent variable, (b) a significant relationship between the independent variable and the mediators, (c) a significant relationship between the mediators and the dependent variable, and (d) an insignificant relationship between the independent variable and the dependent variable including the mediators (Preacher & Hayes, 2004).

## Results

In the course of this study, EQ and IQ scores, ascribed to a virtual Cyberball player, were used to manipulate the warmth and competence of the person who is receiving exclusion. At the end of the survey the participant had to report the EQ and IQ scores of the person who is receiving exclusion. Via two regression analysis, the effect of warmth, competence and their interaction on these EQ and IQ scores were investigated. Neither warmth, nor competence, nor an interaction of warmth and competence has a statistically significant effect on either the EQ or IQ score (Table 1). This indicates that the manipulation did not work as assumed.

*Table 1: Manipulation check*

	Score EQ				Score IQ			
	B	SEB	t	p	B	SEB	t	p
Warmth	-0.15	0.33	-0.46	.649	-0.07	0.30	-0.23	.817
Competence	0.02	0.33	0.05	.958	-0.43	0.30	-1.45	.149
Warmth*Competence	0.48	0.47	1.03	.307	0.59	0.422	1.41	.162
	F	df1	df2	p	F	df1	df2	p
	0.80	3	120	.495	1.191	3	120	.316

Note: N = 124, \* =  $p < 0.05$ (two sided) \*\* =  $p < 0.01$ (two sided)

Before starting with the main analysis bivariate correlations are calculated to gain insight in the relationships between the variables (Table 2). As can be seen warmth has no statistically significant correlations with any of the variables. Competence, on the other hand, has statistically significant, positive correlations with shame,  $r(122) = .18, p = .042$ , and negative feelings,  $r(122) = .20, p = .027$ . An increase in competence is associated with an increase in shame and negative feelings. An interaction of warmth and competence has statistically significant positive correlations with warmth,  $r(122) = .60, p < .001$  and competence,  $r(122) = .58, p < .001$ . Also a positive correlation between the interaction of warmth and competence and negative feelings,

$r(122) = .22, p = .016$ , can be found. An increase in the interaction of warmth and competence is associated with an increase in warmth, competence, and negative feelings.

Guilt has statistically significant, positive correlations with shame,  $r(122) = .57, p < .001$ , negative feelings,  $r(122) = .42, p < .001$ , and responsibility,  $r(122) = .24, p = .007$ . An increase in guilt is associated with an increase in shame, negative feelings, and responsibility.

A positive correlation of shame with responsibility,  $r(122) = .38, p < .001$ , positive feelings,  $r(122) = .22, p = .014$ , and negative feelings,  $r(122) = .63, p < .001$  can also be found. An increase in shame is associated with an increase in responsibility, positive feelings, and negative feelings. A statistically significant, negative correlation between shame and identification,  $r(122) = -.26, p = .004$  is also found. This indicates that with an increase in shame the identification with others decreases during committing exclusion.

Positive feelings and identification are negatively correlated with each other,  $r(122) = -.34, p = .018$ . This indicates that, an increase in identification decreases the positive feelings during committing exclusion. A positive correlation between positive feelings and negative feelings,  $r(122) = .37, p < .001$  is found.

Responsibility has a positive correlation with negative feelings,  $r(122) = .18, p = .047$ . This indicates that, an increase in responsibility also increases negative feelings during committing exclusion. Further a positive correlation between blaming the victim and identification can be identified,  $r(122) = .24, p = .008$ . An increase in blaming the victim is related to an increase in identification and the other way around.

Table 2: Bivariate correlations of the used constructs

	1	2	3	4	5	6	7	8	9	10
1 Warmth	1	.03	.60**	-.11	-.02	.07	.04	-.05	-.01	-.01
2 Competence		1	.58**	.01	.18*	.17	.20*	.09	-.04	-.12
3 Warmth*Competence			1	-.05	.14	.17	.22*	-.01	-.12	-.08
4 Guilt				1	.57**	-.09	.42**	.24**	-.04	-.16
5 Shame					1	.22*	.63**	.38**	.13	-.26**
6 Positive feelings						1	.37**	-.01	-.08	-.34**
7 Negative feelings							1	.18*	-.09	-.21*
8 Responsibility								1	.09	-.14
9 Blaming Victim									1	.24**
10 Identification										1

Note: N = 124, \* =  $p < 0.05$ (two sided) \*\* =  $p < 0.01$ (two sided)

It was hypothesized that ‘*Excluding a warm person increases perceived guilt, shame, and negative feelings but decreases positive feelings compared to excluding a cold person.*’ No statistically significant effects of warmth on the variable guilt, shame, positive, or negative feelings can be found (Table 3).

It was also hypothesized that ‘*Excluding a competent person decreases perceived guilt, shame, and negative feelings but increases positive feelings compared to excluding an incompetent person.*’ No statistically significant effect of competence on one of the variables was found (Table 3). But a trend can be seen in the effect of competence on shame,  $b = -3.13$ ,  $t(74) = -.85$ ,  $p = .068$ , 95% CI [-5.95, -0.31] (Table 3). Committing exclusion towards a person who is perceived to be competent leads to less shame in the participant compared to a person who is perceived to be incompetent.

Furthermore, it was hypothesized that ‘*An interaction of warmth and competence is expected. When the person to be excluded is perceived high in competence, than the effect of warmth on guilt, shame, and negative feelings is higher compared to the effect of the main effects alone. When the person to be excluded is perceived low in competence, than the effect of warmth on guilt, shame, and negative feelings is lower compared to the effect of the main effects alone.*’ An interaction of warmth and competence has statistically significant effect on shame,  $b = 4.90$ ,

$t(74) = 2.22, p = .030, 95\% \text{ CI } [1.22, 8.58]$  (Table 3). Warmth and competence separately show a negative trend on shame. Therefore committing exclusion towards a person who is perceived to be warm or competent leads to experiencing less shame. A combination of both effects results into a less negative effect than the summation of both effects might indicate. An interaction of warmth and competence does not lead to such negative effects as the summations of the effects would let one expect. When the person who receives exclusion is perceived as warm and competent the person committing exclusion experience more shame than when the person who receives exclusion is perceived as warm and incompetent. The person committing exclusion experienced less shame when the person who receives exclusion is perceived as incompetent (Figure 4).

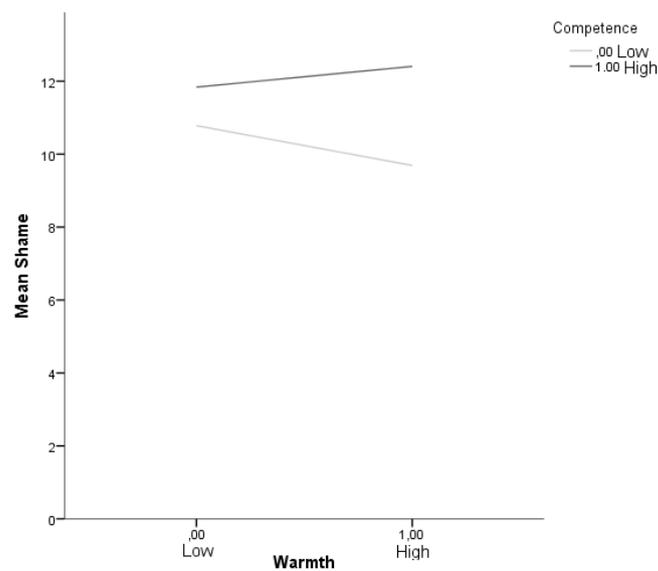


Figure 4: Interaction of warmth and competence on shame

A similar effect can be seen between the interaction of warmth and competence on negative feelings,  $b = 8.28, t(74) = 2.46, p = .016, 95\% \text{ CI } [2.67, 13.89]$  (Table 3). As with shame, the dimensions warmth and competence show a negative trend on negative feelings. Since both coefficients are negative, a simple summation of both negative coefficients let one expect that combining warmth and competence would lead to a stronger negative effect. An interaction of warmth and competence does not lead to such negative effects as the summations of the effects

would let one expect. When the person who receives exclusion is perceived as warm and competent, the person committing exclusion experience more negative feelings than when the person who receives exclusion is perceived as warm and incompetent. The person committing exclusion experienced less negative feelings when the person who receives exclusion is perceived as incompetent (Figure 5).

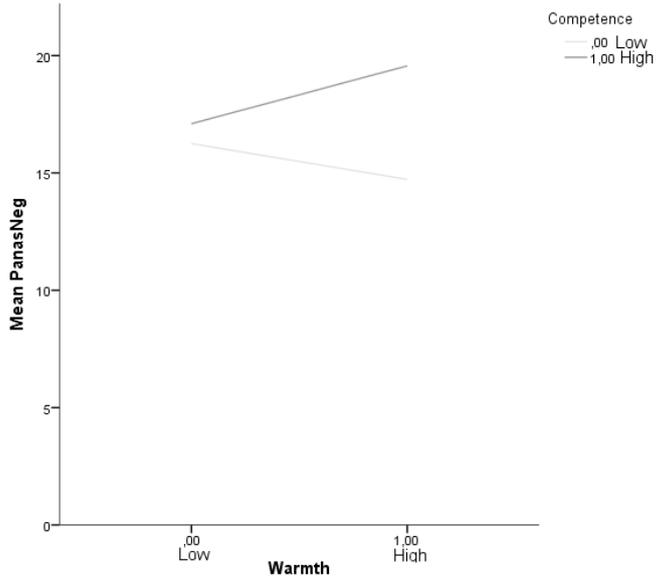


Figure 5: Interaction of warmth and competence on negative feelings

*Table 3: Direct effect of independent variables on dependent variables*

	Guilt						Shame						Positive						Negative					
	B	SEB	t	p	min	max	B	SEB	t	p	min	max	B	SEB	t	p	min	max	B	SEB	t	p	min	max
W	0.04	1.76	0.02	.981	-2.89	2.97	-2.00	1.67	-1.19	.236	-4.79	0.79	-1.63	2.85	-0.57	.569	-6.38	3.11	-2.99	2.55	-1.17	.245	-7.25	1.26
C	-1.11	1.78	-0.62	.536	-4.06	1.85	-3.12	1.69	-1.84	.068	-5.94	-0.31	-1.41	2.87	-0.49	.625	-6.20	3.38	-3.28	2.57	-1.27	.207	-7.57	1.01
W*C	-0.28	2.32	-0.12	.903	-4.15	3.58	4.89	2.20	2.21	.029*	1.22	8.57	4.85	3.75	1.29	.200	-1.40	11.10	8.27	3.36	2.45	.016*	2.66	13.88

Note: N = 124, \* =  $p < 0.05$ (two sided) \*\* =  $p < 0.01$ (two sided)

It was hypothesized that '*Responsibility mediates the effect of warmth, competence, and warmth and competence on guilt, shame, positive, and negative feelings.*' No statistically significant effect of warmth, competence, or the interaction of warmth and competence on responsibility can be found. Responsibility has statistically significant effect on guilt,  $b = 0.70$ ,  $t(74) = 2.64$ ,  $p = .010$ , 95% CI [0.26, 1.14] and shame,  $b = 0.89$ ,  $t(74) = 3.55$ ,  $p = .001$ , 95% CI [0.47, 1.31] (Table 4). The effect of responsibility on guilt and shame indicate positive effects. As responsibility increases the perceived guilt and shame also increases. No indirect effect of warmth, competence or their interaction through responsibility on guilt, shame, positive, or negative feelings can be found (Table 5 & 6).

Further, it was hypothesized that '*Blaming the victim mediates the effect of warmth, competence, and warmth and competence on guilt, shame, positive, and negative feelings.*' A trend in the effect of warmth,  $b = 1.70$ ,  $t(77) = 1.87$ ,  $p < .100$ , 95% CI [0.19, 3.21], and competence,  $b = 1.73$ ,  $t(77) = 1.89$ ,  $p < .100$ , 95% CI [0.21, 3.25], on blaming the victim can be found (Table 5). Both variables have a positive trend on blaming the victim. Since both coefficients are positive, a simple summation of them would let one expect that combining warmth and competence would lead to a stronger positive effect. But a combination of both effects results into a less positive effect than the summation suggests,  $b = -2.88$ ,  $t(77) = -2.45$ ,  $p = .017$ , 95% CI [-4.84, -0.92] (Table 5). When the person who receives exclusion is perceived as warm and competent, the person committing exclusion blames less the victim than when the person who receives exclusion is perceived as warm and incompetent. The person committing exclusion blames more the victim when the person who receives exclusion is perceived as incompetent (Figure 6).

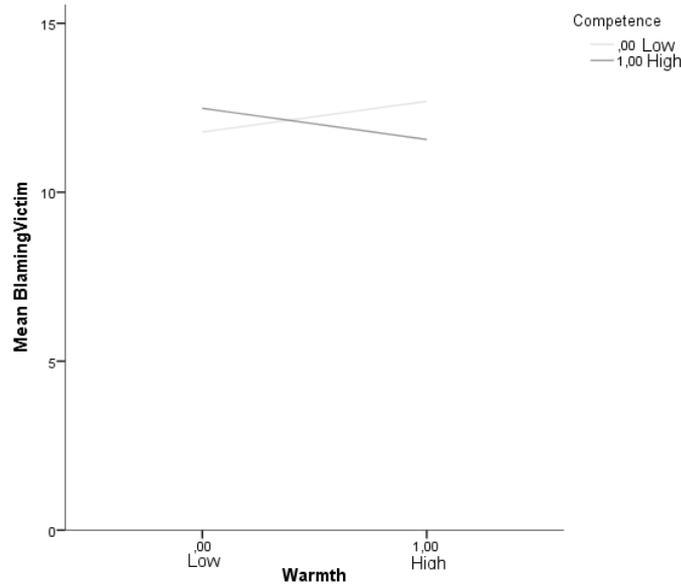


Figure 6: Interaction of warmth and competence on blaming victim

An indirect effect of warmth, competence, and their interaction through blaming the victim on shame can be found,  $b = -0.93$ , 95% CI [-2.90, -0.04] (Table 6). This indirect effect is smaller than zero, which indicates a negative effect. Through splitting over thirds of blaming the victim, three groups can be categorized: low, average, and high blaming the victim (Figure 7). In all three conditions of blaming the victim, an interaction of warmth and competence results in less experienced shame, when the person who receives exclusion is perceived as warm and incompetent. On the other hand, in all three conditions the person committing exclusion experiences more shame, when the person who receives exclusion is perceived as warm and competent. Ascribing the blame to the victim lessens the experienced shame during committing exclusion when the person who receives exclusion is perceived as warm but incompetent (Figure 7).

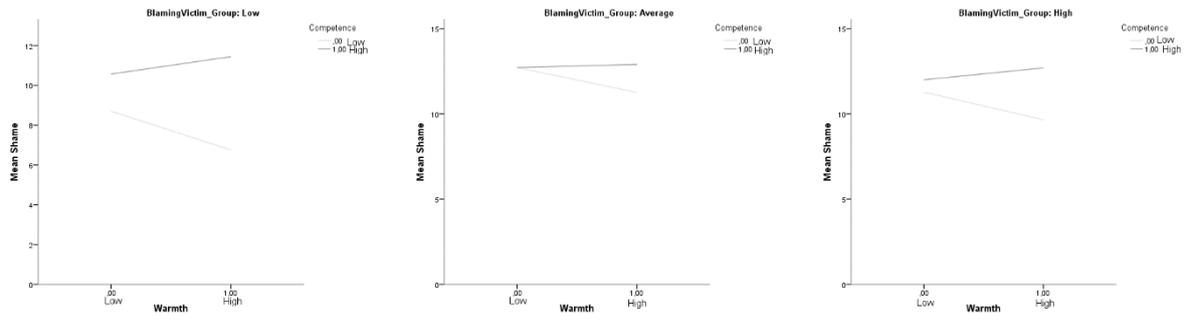


Figure 7: Indirect effect of interaction warmth and competence on shame through blaming victim

Table 4: Direct effect of mediators on dependent variables

	Guilt						Shame						Positive						Negative					
	B	SEB	t	p	min	max	B	SEB	t	p	min	max	B	SEB	t	p	min	max	B	SEB	t	p	min	max
Res	0.70	0.26	2.64	.010*	0.26	1.14	0.89	0.25	3.54	.001**	0.47	1.31	-0.08	0.42	-0.19	.848	-0.79	0.63	0.62	0.38	1.63	.106	-0.01	1.26
Bla	-0.22	0.22	-0.99	.328	-0.59	0.15	0.32	0.21	1.50	.135	-0.03	0.67	0.08	0.36	0.22	.824	-0.52	0.68	0.01	0.32	0.03	.969	-0.52	0.55

Note: N = 124, \* = p < 0.05(two sided) \*\* = p < 0.01(two sided)

Table 5: Direct effect on mediator

	Responsibility						Blaming Victim					
	B	SEB	t	p	min	max	B	SEB	t	p	min	max
Warmth	0.75	0.76	0.99	.327	-0.51	2.01	1.70	0.91	1.87	.065	0.19	3.21
Competence	-0.17	0.76	-0.22	.828	-1.44	1.10	1.72	0.91	1.87	.065	0.19	3.21
Warm*Comp	-0.33	0.98	-0.34	.738	-1.97	1.31	-2.88	1.18	-2.45	.016*	-4.84	-0.92

Note: N = 124, \* = p < 0.05(two sided) \*\* = p < 0.01(two sided)

Table 6: Indirect effect on dependent variables including mediator

Dependent	Independent	Mediator							
		Responsibility				Blaming Victim			
		B	SEB	min	max	B	SEB	min	max
Guilt	Warmth	0.52	0.52	-0.15	1.62	-0.37	0.40	-1.34	0.06
	Competence	-0.12	0.55	-1.17	0.60	-0.38	0.41	-1.41	0.05
	Warmth*Competence	-0.23	0.70	-1.72	0.68	0.64	0.63	-0.12	1.98
Shame	Warmth	0.67	0.60	-0.219	1.75	0.55	0.58	-0.01	1.93
	Competence	-0.15	0.67	-1.37	0.91	0.56	0.57	-0.05	1.82
	Warmth*Competence	-0.29	0.87	-1.65	1.19	-0.93	0.83	-2.90	-0.04
Positive	Warmth	-0.06	0.42	-1.10	0.35	0.14	0.73	-1.02	1.36
	Competence	0.01	0.37	-0.41	0.83	0.14	0.72	-0.87	1.51
	Warmth*Competence	0.03	0.48	-0.55	1.04	-0.23	1.14	-2.28	1.45
Negative	Warmth	0.47	0.54	-0.03	1.88	0.02	0.64	-0.98	1.07
	Competence	-0.10	0.50	-1.18	0.45	0.02	0.66	-1.04	1.05
	Warmth*Competence	-0.21	0.71	-1.58	0.62	-0.04	1.05	-1.70	1.78

Note: N = 124, \* =  $p < 0.05$ (two sided) \*\* =  $p < 0.01$ (two sided)

## **Additional research**

In the course of this study identification was not considered in the analysis, but as research felicitated, identification is important for dealing with social exclusion. Research indicate that identification is important for the perceived level of guilt and shame during certain situations. A high identification with others implies an increase in the perceived guilt, shame and negative feelings, during exclusion situations (Roccas, Klar & Liviatan, 2006). Individuals identify with others on basis of the dimensions warmth and competence. Due to the facts, it was considered to use identification as a mediator for warmth, competence, and their interaction on guilt, shame, positive, and negative feelings.

Therefore additionally was hypothesized that '*Identification mediates the effect of warmth, competence, and warmth and competence on guilt, shame, positive, and negative feelings.*' Warmth, competence or the interaction of warmth and competence have no statistically significant effect on identification. But a statistically significant, negative effects of identification on shame,  $b = -0.16$ ,  $t(74) = -2.11$ ,  $p = .039$ , 95% CI [-0.28, 0.03] and positive feelings,  $b = -0.45$ ,  $t(74) = -3.58$ ,  $p = .001$ , 95% CI [-0.66, -0.24] was found (Table 9). These negative effects indicate that identifying with the person who receives exclusion weakens the perceived shame and positive feelings. As results show no indirect effect of identification on the dependent variables can be established (Table 8).

Table 7: Direct effect on mediator

	Identification					
	B	SEB	t	p	min	max
Warmth	.77	2.60	0.30	.767	-3.56	5.10
Competence	2.61	2.62	0.30	.322	-1.75	6.97
Warm*Comp	-3.39	3.38	-1.00	.319	-9.01	2.23

Note: N = 124, \* = p < 0.05(two sided) \*\* = p < 0.01(two sided)

Table 8: Indirect effect on dependent variables including mediator

Dependent	Independent	Mediator			
		Identification			
		B	SEB	min	max
Guilt	Warmth	-0.11	0.36	-0.83	0.36
	Competence	-0.36	0.43	-1.38	0.07
	Warmth*Competence	0.47	0.56	-0.08	1.95
Shame	Warmth	-0.12	0.38	-0.83	0.39
	Competence	-0.41	0.46	-1.66	0.03
	Warmth*Competence	0.53	0.64	-0.10	2.09
Positive	Warmth	-0.35	0.96	-1.77	1.42
	Competence	-1.17	1.16	-3.43	0.37
	Warmth*Competence	1.52	1.47	-0.88	4.02
Negative	Warmth	-0.11	0.38	-1.23	0.18
	Competence	-0.38	0.54	-1.76	0.11
	Warmth*Competence	0.49	0.72	-0.15	2.42

Note: N = 124, \* = p < 0.05(two sided) \*\* = p < 0.01(two sided)

*Table 9: Direct effect on dependent variables*

	Guilt						Shame						Positive						Negative					
	B	SEB	t	p	min	max	B	SEB	t	p	min	max	B	SEB	t	p	min	max	B	SEB	t	p	min	max
Ident	-0.14	0.08	-1.77	.081	-0.27	-0.01	-0.15	0.07	-2.10	.038*	-0.27	-0.03	-0.44	0.12	-3.57	.001**	-0.65	-0.24	-0.14	0.11	-1.28	.202	-0.33	0.04

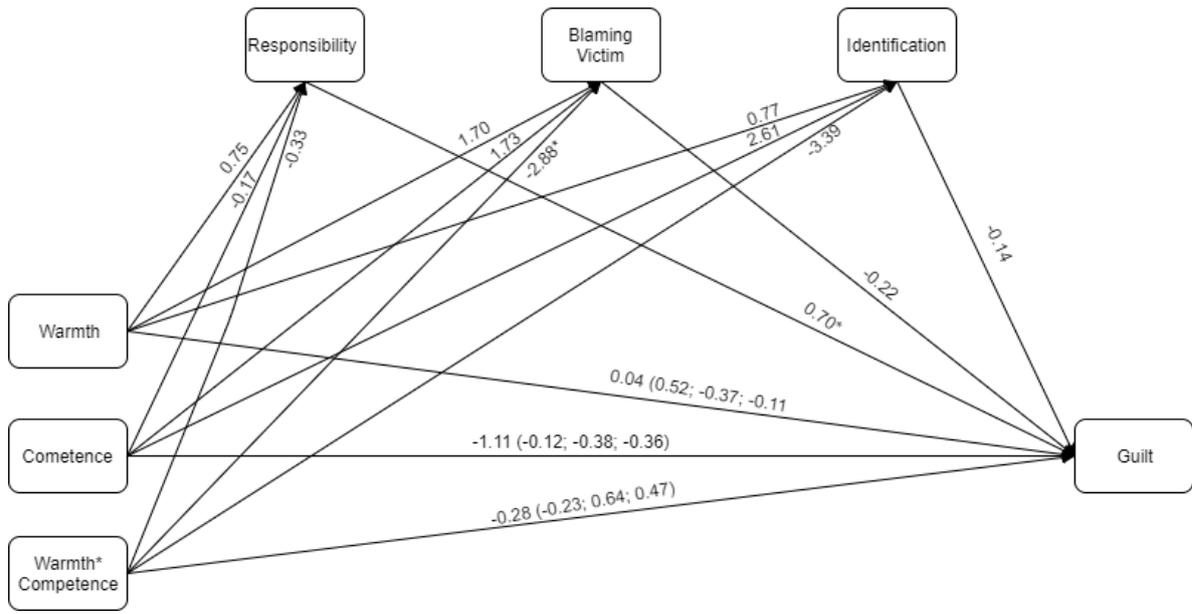


Figure 7: Mediation model on Guilt

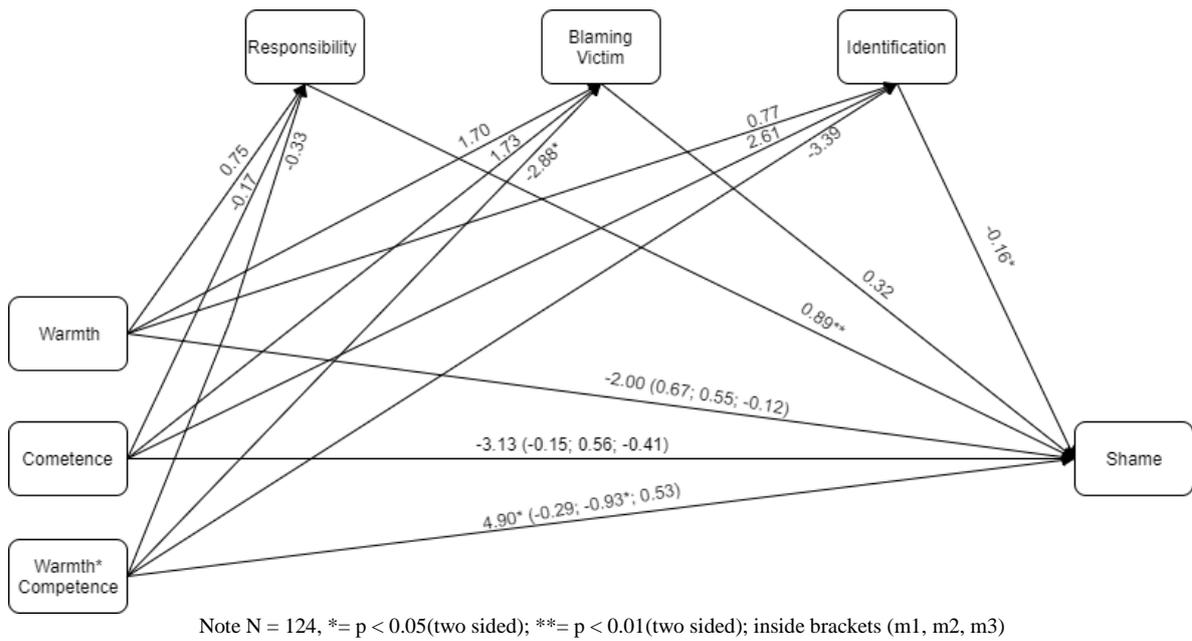


Figure 8: Mediation model on Shame

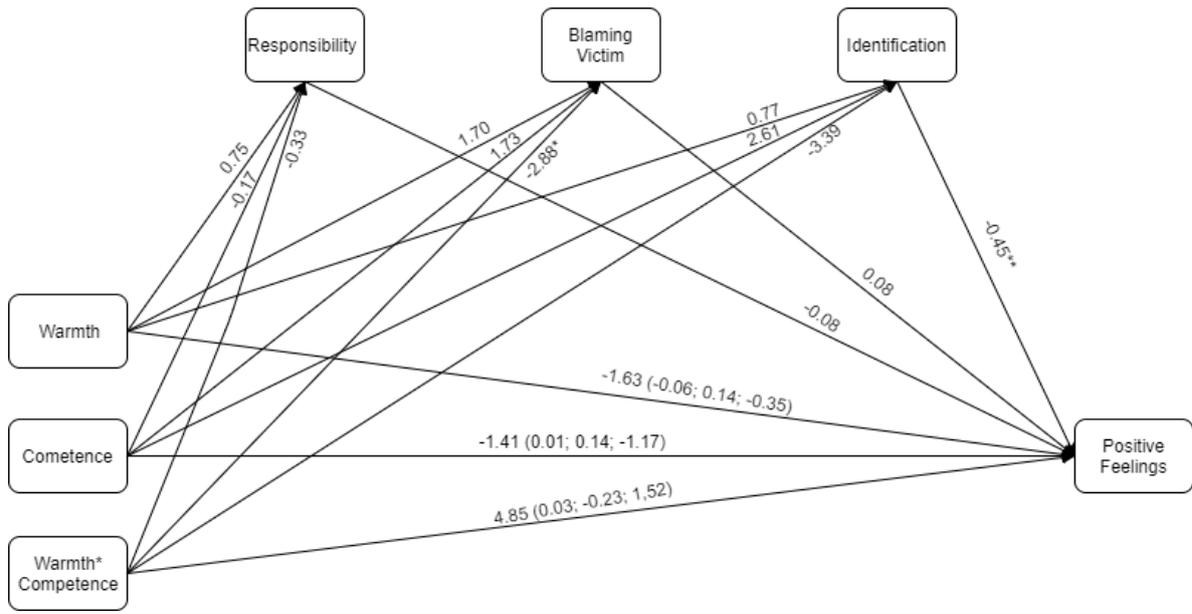


Figure 9: Mediation model on Positive Feelings

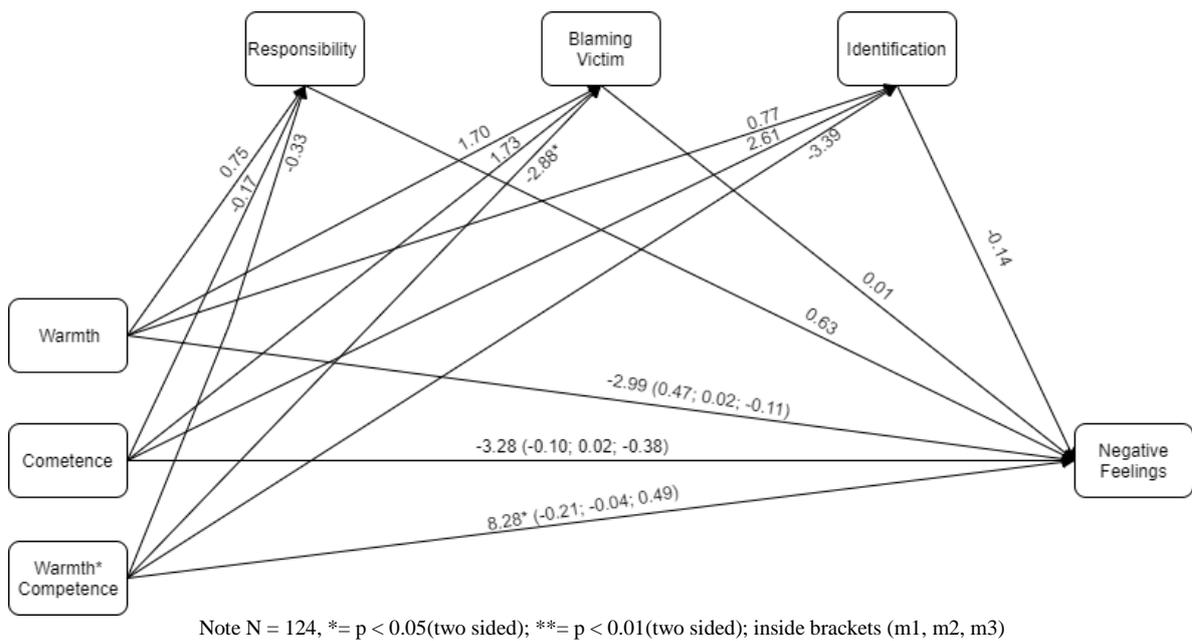


Figure 10: Mediation model on Negative Feelings

## Discussion

The involvement of social exclusion in certain acts of violent behavior is well known in the field of research. To prevent violent acts, reasons for committing exclusion and also the emotional state of the person committing exclusion are important to investigate (Leary, Kowalski, Smith & Phillips, 2003). The last decades research investigated mostly the effect of social exclusion on people, but it is also important to understand why certain people are socially excluded. People who commit social exclusion reveal two different path of emotions. On the one hand, committing exclusion can provide the person with a feeling of power and pride. On the other hand, committing exclusion can provide the person with feelings of guilt and shame (Zadro & Gonsalkorale, 2014). In the course of this research, the main purpose was to see *‘What effect has committing exclusion on the emotional state if the person receiving exclusion is stereotyped on the dimensions warmth and competence?’*

Warmth and competence help individuals not only to identify in- and out-groups, but also to label other individuals into groups. On the basic of this knowledge, it was considered that warmth and competence can be used to gather insight into how the perception of a person can influence the perceived emotions, during committing exclusion. As this study reveals, looking at the dimensions separately, perceiving someone as warm or competent has no influence on perceived feelings of guilt, shame, positive, or negative feelings. A combination of warmth and competence, on the other hand, shows that an interaction of the dimensions influences in some way perceived feelings of shame. Also this study did not reveal any main effects of warmth and competence on the emotional state of the participant, it can be seen that the dimensions in some way do have influence.

Consistent with other research, an effects of responsibility and identification on guilt, shame, and positive feelings can be found. The effects found with responsibility indicate an increase in guilt and shame with an increase in responsibility. These findings are consistent with

the findings of Olthof et al. (2000). The findings on identification, on the other hand, indicate that more identification with the person receiving exclusion less shame and positive feelings are experienced. A decrease in positive feelings is consistent with other findings (De Cremer & van Dijk, 2002 and Roccas, Klar, & Liviatan, 2006). An increase in the perceived shame is inconsistent with research. Excluding someone the individual identifies with should lead to an increase in shame due to the emotional distress (Olthof et al., 2000).

Through blaming the victim, an indirect effect of the interaction of warmth and competence on shame was revealed. This indirect effect indicates that, using blaming the victim as a mediator the effect of the interaction of warmth and competence is stronger on shame than without the mediator. Blaming the victim influences the perceived shame (Menesini et al., 2003; Baumeister et al., 1994). Ascribing the blame to the victim, participants experience less shame for the exclusion act compared to participants who did not ascribe the blame to the victim.

### **Limitations**

A limitation in this study was the used manipulation. To make people aware of the two dimensions warmth and competence, EQ and IQ scores were used to illustrate characteristics of these dimensions. Participants received, in the beginning of the study, information about EQ and IQ scores to get an idea about the concepts of EQ and IQ. The given information about the connection between EQ and IQ and characteristics associated with warmth and competence was not strong enough to manipulate the perception of the participant. Talking to a few participants after the experiment, it came forward that most participants did not see this connection or were not aware of it. Moreover, during the survey the illustration of the EQ and IQ scores went wrong, which might lead to a confusion in participants. EQ and IQ scores were illustrated in a graph and as numbers, because in some conditions the graph and the numbers did not represent the same scores, participants might neglect the scores and did not pay attention to them. The confusion about the scores and the short information about the connection of EQ/ IQ and warmth/ competence might lead to ignoring the

EQ and IQ scores and their meaning. To prevent this, questions about the connection between the EQ and IQ scores and warmth and competence could be asked. Also an improvement could be to use profiles as in the study of Ufkes et al. (2012) to demonstrate the other players, instead of using graphs as illustrations.

Furthermore, during the survey participants were instructed to exclude another player from the game. Instructing participants to exclude someone is a direct induction. Participants did not have a choice than to exclude the player and obey the instructions of the researcher (Zadro & Gonsalkorale, 2014). Milgram's obedience study shows that participants who obeyed the instructions of the researcher still experienced guilt (Legate, DeHaan, Weinstein & Ryan, 2013; Milgram, 1963). Obeying instructions can, on the other hand, diminish the experience of social exclusion. As the diffusion of responsibility process indicates, the perceived feelings and responsibility is divided and diminished through co-players which also commit exclusion (Whyte, 1991). Direct inductions are easy to accomplish in a laboratory setting and give insight in the consequences of social exclusion for both sides, but they are difficult to integrate in real-world settings. This process can be used to examine the influence of social exclusion in situations where people are pressured to commit exclusion, but not in situations where people choose to exclude (Zadro & Gonsalkorale, 2014).

Furthermore, this study made use of the Cyberball game to let the participant experience the act of committing exclusion. Research facilitates the use of the Cyberball game to examine the effects of social exclusion (Williams & Jarvis, 2006). Thereby the Cyberball game can be supported with surveys to investigate the four fundamental needs: belonging, self-esteem, control, and meaningful existence (Williams, 2007a; Becker, 2011). During this research, the collected data from the game shows that not all participants played the Cyberball game. It is not known if participants used recall paradigms of exclusion situations, the direct source inductions, or just ignored the game and went on with the questions. Reasons for not playing the game are not known.

It is difficult to control if participants played the game or not. During the analysis it was assumed that all participants who finished the survey also played the game. For further research it might be helpful when the Cyberball game can be included in Qualtrics so participants have to play it. Also a better collection of the data might help to better analyze the effects of social exclusion.

### **Recommendations**

For further research it might be interesting to investigate the effect of dimensions warmth and competence on social exclusion, taking in consideration the four basic needs pointed out by Williams (Williams, 2007a; Becker, 2011). This four needs are threaten during committing social exclusion as well as during receiving social exclusion. It is important to understand the influence of these needs and why certain people are excluded and others not, might help to prevent violent acts as mass shootings (Leary et al., 2003).

In general it is more insight needed in the connection between warmth and competence and social exclusion. This study made a step in the direction to connect the two research fields of stereotypes and social exclusion. Stereotypes are important resources to make judgments about others and social exclusion reflects a behavior individuals towards others. During this study participants were instructed to exclude another player from the ball-tossing game. The direct source induction just gives insight in situations in which individuals are forced to exclude others. Further research might be look into the induced source induction or the contagion source inductions (Zodra & Gonsalkorale, 2014; Wesselmann et al., 2013). Thereby participants have more or less a choice to exclude the other or not. All laboratory settings do not cover the whole range of consequences of social exclusion, but they give an insight in behavioral patterns and emotional responses to social exclusion.

## **Conclusion**

Further research has to be conducted in the effect of warmth and competence on feelings during an act of committing exclusion. It might be interesting to further examine the interaction of warmth and competence on perceived feelings. Also this study did not reveal much about the effects of warmth and competence and their interaction on guilt and shame, but it is a step in understanding more about the consequences of committing social exclusion. By understanding how individuals decide whom to exclude preventions and interventions can be adapted to reduce social exclusion.

## References

- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: an interpersonal approach. *Psychological bulletin*, *115*(2), 243.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, *117*(3), 497.
- Barner-Barry, C. (1986). Rob: Children's tacit use of peer ostracism to control aggressive behavior. *Ethology and Sociobiology*, *7*(3-4), 281-293.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Becker, N. (2011). *Effects of continuous inclusion in a virtually played ball tossing game called Cyberball on the P300 event-related-potential*. Munich, GRIN Verlag,  
<http://www.grin.com/en/e-book/183747/effects-of-continuous-inclusion-in-a-virtually-played-ball-tossing-game>
- Chen, Y., & Li, S. X. (2009). Group identity and social preferences. *The American Economic Review*, *99*(1), 431-457.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: behaviors from intergroup affect and stereotypes. *Journal of personality and social psychology*, *92*(4), 631.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in experimental social psychology*, *40*, 61-149.
- Cuddy, A.J., Glick, P. & Beninger, A. (2011). The dynamics of warmth and competence judgments, and their outcomes in organizations. *Research in Organizational Behavior*, *31*, 73-98.
- De Cremer, D., & van Dijk, E. (2002). Perceived criticality and contributions in public good

- dilemmas: A matter of feeling responsible to all?. *Group Processes & Intergroup Relations*, 5(4), 319-332.
- Fisher, R. J., & Wakefield, K. (1998). Factors leading to group identification: A field study of winners and losers. *Psychology & Marketing*.
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of personality and social psychology*, 82(6), 878.
- Gardner, W. L., Pickett, C. L., & Brewer, M. B. (2000). Social exclusion and selective memory: How the need to belong influences memory for social events. *Personality and Social Psychology Bulletin*, 26(4), 486-496.
- Hoffman, C., & Hurst, N. (1990). Gender stereotypes: Perception or rationalization?. *Journal of personality and social psychology*, 58(2), 197.
- Hogg, M. A., & Terry, D. I. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of management review*, 25(1), 121-140.
- Killen, M., Pisacane, K., Lee-Kim, J., & Ardila-Rey, A. (2001). Fairness or stereotypes? Young children's priorities when evaluating group exclusion and inclusion. *Developmental psychology*, 37(5), 587.
- Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: the functions of social exclusion. *Psychological bulletin*, 127(2), 187.
- Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive behavior*, 29(3), 202-214.
- Legate, N., DeHaan, C. R., Weinstein, N., & Ryan, R. M. (2013). Hurting you hurts me too: The psychological costs of complying with ostracism. *Psychological science*, 24(4), 583-588.
- Menesini, E., Sanchez, V., Fonzi, A., Ortega, R., Costabile, A., & Lo Feudo, G. (2003). Moral emotions and bullying: A cross-national comparison of differences between bullies,

- victims and outsiders. *Aggressive behavior*, 29(6), 515-530.
- Menesini, E., & Camodeca, M. (2008). Shame and guilt as behaviour regulators: Relationships with bullying, victimization and prosocial behaviour. *British Journal of Developmental Psychology*, 26(2), 183-196.
- Milgram, S. (1963). Behavioral Study of obedience. *The Journal of abnormal and social psychology*, 67(4), 371.
- Olthof, T., Schouten, A., Kuiper, H., Stegge, H., & Jennekens-Schinkel, A. (2000). Shame and guilt in children: Differential situational antecedents and experiential correlates. *British Journal of Developmental Psychology*, 18(1), 51-64.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods*, 36(4), 717-731.
- Roccas, S., Klar, Y., & Liviatan, I. (2006). The paradox of group-based guilt: Modes of national identification, conflict vehemence, and reactions to the in-group's moral violations. *Journal of personality and social psychology*, 91(4), 698.
- Ufkes, E. G., Otten, S., van der Zee, K. I., Giebels, E., & Dovidio, J. F. (2012). The effect of stereotype content on anger versus contempt in “day-to-day” conflicts. *Group Processes & Intergroup Relations*, 15(1), 57-74.
- Warburton, W.A., Williams, K.D. & Cairns D.R. (2006). When ostracism leads to aggression: the moderating effects of control deprivation. *Journal of Experimental Social Psychology*. 42:213– 20
- Weber, M., Ziegele, M., & Schnauber, A. (2013). Blaming the victim: the effects of extraversion and information disclosure on guilt attributions in cyberbullying. *Cyberpsychology, Behavior, and Social Networking*, 16(4), 254-259.
- Wesselmann, E. D., Wirth, J. H., Pryor, J. B., Reeder, G. D., & Williams, K. D. (2015). The role of burden and deviation in ostracizing others. *The Journal of social*

- psychology*, 155(5), 483-496.
- Whyte, G. (1991). Diffusion of responsibility: Effects on the escalation tendency. *Journal of Applied Psychology*, 76(3), 408.
- Williams, K. D., & Jarvis, B. (2006). Cyberball: A program for use in research on interpersonal ostracism and acceptance. *Behavior research methods*, 38(1), 174-180.
- Williams, K. D. (2007a). Ostracism. *Annual review of psychology*, 58.
- Williams, K. D. (2007b). Ostracism: The kiss of social death. *Social and Personality Psychology Compass*, 1(1), 236-247.
- Zadro, L., & Gonsalkorale, K. (2014). Sources of ostracism: the nature and consequences of excluding and ignoring others. *Current Directions in Psychological Science*, 23(2), 93-97.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197-206