Employee well-being. The effects of workplace ostracism and bullying and the buffering role
of social support

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Abstract

It has been suggested that ostracism will be experienced as more harmful for someone's well-being than bullying and that the effect of ostracism and bullying on well-being will be mitigated by social support (at home or at work). Support at work will mitigate the negative effect of bullying on well-being and support at home will mitigate the negative effect of ostracism on well-being. To evaluate these claims, 119 employees of a big international company in the Netherlands filled in a questionnaire measuring well-being, bullying and ostracism at work, and support at home and at work. A multiple regression analysis showed the opposite of what was expected. Bullying was experienced as more harming than ostracism, and social support only had an effect on the relationship between bullying and well-being when the support came from friends and/or family. This effect was negative.

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Workplace ostracism and bullying at work are two concepts that are hard to distinguish from each other. Being ostracized is similar to being ignored or unwanted. It is a passive form of social rejection (Hitlan, Kelly, Schepman, Schneider & Zárate, 2006). The individual or group that is being ostracized gets no attention at all. Bullying, on the other hand, is a more active form of social rejection. Being bullied is getting negative attention from the person or group that bullies you. It is a type of aggression which contains three main aspects. First, the behaviour that is shown is planned to harm or disturb. Second, it happens frequently/constantly. And last, in a bullying situation there is some imbalance of power. A more powerful individual or group attacks a less powerful individual or group (Nansel et al., 2001).

To obtain a good view of the difference between ostracism and bullying, earlier research has been addressed. For example, a study done by O'Reilly, Robinson, Berdahl and Banki (2014) shows the difference between ostracism and harassment. The results of this study show that ostracism is negatively related to a sense of belonging, employee well-being and work-related attitudes. It was even more strongly and negatively related with a sense of belonging, employee well-being and work-related attitudes than harassment did. This shows that people perceive workplace ostracism as more harming for their well-being than harassment. Harassment in this study is viewed as a behaviour that is active verbal and nonverbal, which is directed at a target and causes embarrassment to the one that is being targeted (O'Reilly et al., 2014). There is a distinction made between harassment and ostracism with regard to the fact that ostracism is more disengaging behaviour, and harassment is more engaging behaviour. Flashing back to the current study, which also makes a distinction on the field of the level of engagement namely in the difference between ostracism and bullying. Ostracism is more disengaging because there is no attention at all for the victim. Harassment

is engaging because there is social attention and treatment but in a negative way (Robinson, O'Reilly & Wang, 2012). Harassment is seen as similar to bullying. It is behaviour that upsets, is repetitive and is threatening (Einarsen, 2000). These characteristics are also applicable to bullying as was first mentioned (Nansel et al., 2001) Thus, this trend (ostracism being more harmful than harassment) should also be seen when ostracism and bullying are compared to each other. Ostracism being the passive form of rejection and bullying the active. This is the reason why ostracism and bullying in this research are seen as two different concepts.

Well-being

The main focus of this study is to see whether ostracism has a bigger impact on someone's well-being than bullying. Therefore, down below, the relationships between well-being and ostracism and well-being and bullying are explained by reviewing previous research on these subjects.

Relationship between bullying and well-being. In 1976, Cooper and Marshall already found that the absence of good relationships with colleagues leads to lower well-being among employees. Other strong associations had been found between bullying and lower psychological well-being (Quine, 1999). Earlier research (Vartia, 2001) used 949 respondents which were asked if they felt subjected to bullying behaviour or if they had seen someone else being subject to being bullied. Also stress and psychological health were measured. Results show that targets and observers of bullying behaviour at the workplace report more mental stress reactions and general stress than the one's not being victim or witness of bullying at work. Forty percent of the targets reported high levels of stress, with 25% of the observers and 14% of the non-bullied employees. The targets of bullying also reported feelings of low self-confidence. Participants who had not been subjected to bullying report those feelings to a much lesser extent. Lee and Brotheridge (2006) found that being bullied was related to self-doubt, which in turn is related to burnout and other symptoms of bad health. Furthermore, a

study done by Rigby (2000) states that bullying behaviour influences mental health in children. The children participating in this study were asked how often they had been bullied. Also, their overall well-being was measured. Results show that the mental health of young adolescents is influenced by the degree of bullying behaviour they experience at school. Thus, as was reported from earlier research, bullying has a great negative influence on well-being and people's health.

      Relationship between ostracism and well-being. Being ostracized is one of the most common ways for an employee to hurt his/her colleagues. It has, just as bullying, a negative impact on someone's well-being (Ferris, Brown, Berry & Lian, 2008). Research by Williams (2007) shows that being ostracized has direct aversive effects on psychological well-being. People report lower levels of control, self-esteem, belonging and meaningful existence after being ostracized (Nezlek, Wesselman, Wheeler & Williams, 2012). Ostracism has been linked to a lot of negative emotional reactions. Employees that are being ostracized feel sad, angry, hurt, ashamed, lonely, ill and even violent (Giacalone & Promislo, 2014). Furthermore, students that are ostracized also report lower levels of positive mood, sense of belonging and self-esteem. This was studied using a sample of 91 students (Ruggieri, Bendixen, Gabriel & Alsaker, 2013). These students were assigned to the ostracism or the inclusion condition in random order. The participants were told they were playing the game Cyberball with two same-sex students. This was not the case because in reality they were 'playing' the game with computer-generated teammates. They were told they had to imagine throwing a ball together with two other people and they could decide for themselves who they threw the ball to. The results of this study show ostracism leads to a significance decrease in well-being. Even if the periods of being ostracized are brief. A remarkable fact is that the social pain that is caused by being ostracized is perceived the same as the pain someone experiences having a physical injury, like breaking a leg (Eisenberger, Liebermann & Williams, 2003). This shows that

being ostracized also, just as being bullied, has a great negative impact on several factors that affect someone's overall well-being.

Furthermore, Williams and Nida (2009) have also suggested that being ostracized may be perceived as worse than bullying. With bullying, the bully at least acknowledges someone's existence. This in contrast to ostracism, which is totally excluding or ignoring someone. Also, previous research done by Van Beest and Williams (2006) shows that even if participants received money when being ostracized/giving no attention they felt worse than the participants that got no money when receiving negative attention. So, the absence of money and getting negative attention (bullying) was seen as less threatening than receiving money and being ignored. Even if people were sensitive to receiving money, they felt being ostracized was more painful.

By using these findings, it is easier to differentiate the concepts of ostracism and bullying. Similar to harassment, bullying is a more engaging form of social exclusion because there is some kind of social attention and treatment. Ostracism is seen as the more disengaging form of exclusion, the victim gets no attention at all. Thus, the main difference between ostracism and bullying would be the level of engagement.

This study will focus on the difference in perception between being bullied and being ostracized. It particularly focuses on someone's well-being after being ostracized and after being bullied. By doing this it is possible to differentiate between the levels of a person's well-being in the two different situations. From earlier research (Van Beest & Williams, 2006; Williams & Nida, 2009; O'Reilly et al., 2014) it can be hypothesized that someone's well-being will be more harmed when they do not receive attention at all (ostracism) in comparison to getting negative attention (bullying). That is why research question 1 is formulated as: Is being ostracized more harming for someone's well-being than being bullied?

Hypothesis 1: Receiving no attention at all (being ostracized) is more harming for

someone's well-being than receiving negative attention (being bullied).

Support

Previous research has shown that support acts as a buffer between being bullied or ostracized and someone's well-being. A study done by Flaspohler, Elfstrom, Vanderzee, Sink & Birchmeier (2009) shows that peer and teacher support can alleviate the impact that bullying has on the quality of life of the ones being bullied. Social support mitigates the impact of bullying on someone's quality of life level. Also, bullying behaviour has a negative influence on children's mental health, which will be worse when they do not get sufficient social support (Rigby, 2000). Besides, this study shows that students that report low levels of social support and experience bullying behaviour on a regular basis appear to be most at risk of poor mental health. Research question 2 therefore is: Can social support be a moderator for the relationship between ostracism and well-being and between bullying and well-being?

Hypothesis 2: Social support will act as a buffer and will mitigate the impact of bullying and ostracism on someone's well-being.

Social support at work acts more as a buffer for bullying. After some thinking and establishing connections between variables, it seems that the effect of both bullying and ostracism is influenced by different kinds of support. It is clear that social support, either at home or at work, predicts general well-being (LaRocco, House & French, 1980; Quine, 1999). Let us take a look at the difference between the effect of bullying and ostracism on well-being, and the extent to which this effect is mitigated by having support at home and support at work. That brings us to the third research question, which is: Is there a difference in moderation between receiving support at work or support at home on the relationship between bullying and ostracism, and well-being?

First, for being bullied. It is expected that bullying will be experienced as less threatening when there is some sort of social support at work. This social support can be for

example other colleagues that defend you from the ones bullying you or your supervisor asking the bullies to stop (Huitsing, Snijders, Van Duijn, & Veenstra, 2014). In earlier research it has been found that social support at the workplace acts as a buffer for the relationship between bullying and well-being (Quine, 1999). Support at work seems to protect someone's well-being from the damaging effects of being the victim of bullying behaviour. In contrast to support at work, support at home does not seem to be able to mitigate the effects of being bullied at work. This can be explained by the fact that when being bullied, just having social support at home is not sufficient enough to recover from the negative attention. In contract, there is no active negative behaviour in being ostracized, it is just the attachment that is not present, which victims of ostracism find at home. Thus social support at work is only expected to act as a buffer for the relationship between bullying and well-being.

Hypothesis 3: Social support at work will act as a stronger buffer between bullying and well-being (in comparison to the relationship between ostracism and well-being).

Social support at home acts more as a buffer for ostracism. Second, for being ostracized. It is quite impossible to receive support at work when someone is being ostracized. Being ostracized is getting no attention at all, which also does not include social support, thus this will be a scenario that is not possible to occur. When someone is being ostracized at work but in the meantime has great social support at home, from friends and/or family, it is expected that being ostracized does not have a negative impact on someone's well-being, or at least to a lesser extent. In this case, perceiving support at home buffers the relationship between well-being and being ostracized at work. A study done by Adams, King and King (1996) using a survey measuring work interfering with family, family interfering with work, emotional and instrumental social support from family, job and family involvement and job and life satisfaction, shows that participants that were excluded but accompanied by a relative were less threatened by being ostracized than those together with a stranger. This also shows

evidence for the fact that having someone close to you at home that provides support, which can be friends or family, acts as a buffer for the effect of being ostracized. Thus social support at home is only expected to act as a buffer for the relationship between ostracism and well-being

Hypothesis 4: Social support at home will act as a stronger buffer between ostracism and well-being (in comparison to the relationship between bullying and well-being).

Method

Participants

The participants of this study were 119 employees of a big international company located in Veldhoven in the Netherlands. The sample consisted of workers from the department of Design and Engineering (D&E). Previous research done with comparable variables used 100 participants. The sample is convenient, but should be sufficient. The questionnaire participants had to fill in was sent out by using the research tool Qualtrics. This is an online tool for sending out surveys. Participants received a link to the questionnaire via e-mail. All the information that has been gathered by using this questionnaire is anonymously. It was voluntary to participate in this study and approval was asked. This was the first item of the questionnaire.

Materials

All the variables were measured using one questionnaire, consisting of several already existing questionnaires. The order of these scales has not been picked randomly. The first part of the questionnaire was designed to obtain demographic information. After that, overall well-being was measured. Third, social support at home and social support at work were dealt with and after that the bullying and ostracism scales were added. These scales were asked at the end of the survey because they were able to cause participants to develop a negative mood, which was not desired. To finish up the questionnaire, 8 random questions were asked about how the participants felt after they filled in the survey and if they thought it took a lot of their

time. The following scales were used to measure the independent and dependent variables that were needed to study the hypotheses that were set.

Ostracism at work. Ostracism at work has been measured by using the 10-item Workplace Ostracism Scale (Ferris, Brown, Berry & Lian, 2008). Items in the scale are for example: *In the last couple of months, others ignored you at work* and *In the last couple of months others at work treated you as if you weren't there*. The participants had to respond on a 7-point Likert scale from 1 being 'never' to 7 being 'always'. High scores on this scale meant a high level of workplace ostracism. Cronbach's alpha for this measure was .708.

Bullying. The Negative Acts Questionnaire (Einarsen, Hoel & Notelaers, 2009) was used to measure bullying at work. This scale consists of 22 items, which are coded on a 5-point Likert scale, with 1 being 'never' and 5 being 'always'. The scale is separated in three different kinds of bullying: work-related bullying, person-related bullying and physically intimidating bullying. The statements used in this study were the seven items that measure work-related bullying, because the ostracism scale is also only directed to measure ostracism at work. Because this study aims to make a distinction between ostracism and bullying, it was checked whether the bullying questionnaire contained statements about being ignored. One of the items seemed to have a lot of overlap with ostracism (*Having your opinions ignored*). This item was left out of the analysis, so only six statements were used in this study. Examples of the items are: *Being ordered to do work below your level of competence* and *Being given tasks with unreasonable deadlines*. Cronbach's alpha of the seven items used in this study is .646.

Social support. Social support has been measured on two levels, namely social support at work and social support at home. This was done by using two different scales. First, by using the multidimensional scale of perceived social support (MSPSS) by Zimet, Dahlem, Zimet and Farley (1988). This scale measures support at home and consists of 12 items, which are coded on a 7-point Likert scale with 1 being 'very strongly disagree' and 7 being 'very

strongly agree'. For a total score of the scale, scores of all the 12 items were added up and then were divided by 12. A score between 1 and 2.9 was considered low support and a score between 5.1 and 7 was considered high support. The Cronbach's alpha for this measure is .932. Examples of the items in this scale are: *My friends really try to help me* and *There is a special person who is around when I am in need*.

Social support from the company has been seen as support received from supervisor and colleagues. A short version of the Survey of Perceived Organisational Support (SPOS) (Eisenberger, Huntington, Hutchison & Sowa, 1986) was used to measure supervisor and colleague support. It consists of 8 items extracted from the original scale, which are items 1, 3, 7, 9, 17, 21, 23 and 27. This is also done by Rhoades and Eisenberger (2002). This scale measures organisational support, but by replacing 'organisation' by 'supervisor' and by 'colleagues' in all of the items, this scale can be used to measure perceived supervisor and colleague support. All of the 8 items have been asked twice, once for supervisor and once for colleague. Items will be for example: *My supervisor shows very little concern for me* and *My colleagues care about my general satisfaction at work.* Items are also on a 7-point Likert scale with 0 being 'strongly disagree' and 7 being 'strongly agree'. Because this questionnaire was asked twice in this study, for colleague and supervisor, scores were also doubled. Thus, a score between 2 and 5.8 was considered low levels of support and a score between 10.2 and 14 was considered high levels of support. This measure has a Cronbach's alpha of .901.

Work-related well-being. Overall well-being has been measured using the W-BQ12 questionnaire by Riazi, Bradley, Barendse and Ishii (2006), which is a short version of the well-being questionnaire developed by Bradley (1994). The questionnaire consists of 12 items and participants had to respond on a 4-point Likert scale with 1 being 'not at all' and 4 being 'all the time'. Examples of items are: *I feel downhearted and blue* or *I feel dull or sluggish*. The W-BQ12 measures four different sides of well-being which are negative well-being,

energy, positive well-being and general well-being. The first four items together show negative well-being with scores ranging from 0-12. A high score indicate a high level of negative well-being. For energy, items 6 and 7 are reversed and then added up with the scores on items 5 and 8. These four items indicate level of energy, with scores ranging from 0-12. Also, the higher the score, the higher the level of energy. Then, items 9 to 12 are summed up to give an indication of positive well-being. Scores lie between 0-12, with higher scores indicating higher levels of positive well-being. Using these three measures (positive and negative well-being and energy), general well-being can be measured. This has been done by reversing the negative well-being scale, then add that score up to the scores of the energy and positive well-being scales. This score can range from 0-36, with a high score indicating a high level of general well-being. The Cronbach's alpha of this measure was .846.

Procedure

The complete questionnaire has been imported into the online survey tool Qualtrics. All the different scales had their own page and before participants were able to go to the next page all the questions had to be answered. An e-mail was send out to the participants which contained the link to the questionnaire. After the first e-mail, three reminders were sent (all with a minimum of five days in between them). Qualtrics saved the filled in questionnaires and imported the ones that were filled out completely to an SPSS data file.

Questionnaire

The questionnaire is added in the Appendix. This research has not used all of the scales the questionnaire contains. Because of a collaboration with another student, the same questionnaire has been used to study different research questions. The SPOS (Eisenberger, Huntington, Hutchison & Sowa, 1986) has been addressed twice in the questionnaire with once supervisor and once colleagues being the subject of the statement. The other student using this questionnaire was interested in the difference between supervisor and colleague

support but this study uses all the items together to generate the overall support at work variable. Besides, the generic job satisfaction scale (Macdonald & MacIntyre, 1997) consists of 10 items, these statements have not been used in the current study. Furthermore, the scale in the Appendix about trust (Colquitt, Scot & LePine, 1985) has not been used for this research. Also, only the work-related items of the NAQ-R have been used. The scales not used are marked with an asterisk.

Analysis plan

All of the variables are measured on a scale level, because the data of these variables is obtained using Likert-scales. This makes it possible to perform a multiple regression analysis. One multiple regression analysis has been used to measure all of the hypotheses. For the variables ostracism, bullying support at home and support at work, Z-scores were conducted. By using these Z-scores it was possible to calculate the moderators in the model. Four moderators were calculated using the 'Compute Variable' function. These were ostracism * support at home, ostracism * support at work, bullying * support at home and bullying * support at work. The Z-scores of bullying, ostracism, support at work and support at home, and the moderators mentioned above were added to the model as independent variables and well-being being de dependent one.

Before running the analysis of the hypotheses, the dataset was checked for certain assumptions. The data was normally distributed and there was no need to be concerned for co linearity. The Cook's Distance had a high maximum which seemed to indicate that there was an outlier in this dataset. By running a scatter plot for ostracism participant number 71 showed up as an outlier. He was disregarded from the analysis. For all statistical tests, the significance level was set at $p < .05$.

Results

Descriptive statistics. One hundred and ninety participants returned the questionnaire. Eighty-nine (74,8%) of them completed the entire questionnaire, this will be our sample. Ninety-two point 1 percent (92.1%, $N = 82$) of the respondents were male. The mean age of the sample was 41,43 ($SD = 9.1$). The oldest participant was 60 years old and the youngest 21 years old. The average workweek of the participants consists of 38 hours, but most of the participants work 40 hours a week (71,9%, $N = 64$, $SD = 5.2$). Fifty-nine point 6 percent (59.6%) of the sample is design engineer ($N = 53$), 40,4% has a higher function (GL/TL/Architect) ($N = 36$). Most of the participants have a HBO Bachelor of WO Master's degree (82%, $N = 73$). The biggest part of the participants are from the Netherlands (77,5%, $N = 69$).

Level of reported bullying. A score higher than three on the NAQ-R was seen as a high score on bullying. As is shown in table 1, the amount of employees reporting being a victim of bullying on a high level is very low ($N = 3$, 3.4%). Most of the employees report low levels of bullying.

Table 1 *Numbers and percentages of employees reporting levels of bullying at work*

Level	Low levels of bullying N (%)	Moderate levels of bullying N (%)	High levels of bulling N (%)
Participants	60 (68.2)	25 (28.4)	3 (3.4)

Level of reported ostracism. Results (table 2) show that none of the participants faces with being ostracized on a regular basis. There was a participant in the data that had a high score on being ostracized but this is the person that is left out of the analysis. Three of the

participants report a moderate level of being ostracized in the last couple of months. All of the

other participants show low levels of being ostracized.

Table 2 *Numbers and percentages of employees reporting levels of ostracism at work*

Level	Low levels of ostracism N (%)	Moderate levels of ostracism N (%)	High levels of ostracism N (%)
Participants	85 (96.6)	3 (3.4)	0 (0)

The last eight questions of the questionnaire gave a good view of what the participants

thought after they filled in the questionnaire. Only 5 of them felt sad after completing the

questionnaire (6%, $N = 5$). More than 1 in 5 respondents felt good about themselves after

filling in the questionnaire (21%, $N = 19$). 1 in 20 participants thought the survey was too

personal (5%, $N = 5$). 21% ($N = 19$) of the participants found that the survey took too much of

their time. Almost half of the respondents stated that they liked to answer the questions from

the survey (48%, $N = 43$). These results showed that the survey had an effect on how most of

the respondents felt afterwards but that, in most of the cases, this effect was positive. Most of

the participants took several hours to complete the questionnaire but this is most likely

because they were interrupted by work they had to do. The participants that filled in the

questionnaire in one go, took around 15 minutes to complete all of the questions.

All of the hypotheses were measured using the model mentioned above in the analysis

plan.

The results for the correlations between well-being, bullying, ostracism, support at

home and support at work are given in table 3. By examining these correlations, it can be

concluded that bullying and ostracism both have a significant negative correlation with well-

being. Higher levels of bullying and ostracism cause lower levels of well-being. Support,

either at home or at work, both have a significant positive influence on well-being. Higher

levels of social support (at work or at home) cause higher levels of well-being. From these

correlations it can also be concluded that there is overlap between the variables bullying and

ostracism. The correlations is .395 and significant. This shows that even by checking for

overlap in the questionnaire, ostracism and bullying still have a lot in common and are hard to

measure as two independent variables.

Table 3 *Correlations and significance levels between well-being, bullying, ostracism, support at home and support at work.*

	Well-being	Bullying	Ostracism	Support home	Support work
Well-being	-	-.389 (.000*)	-.295 (.003*)	.321 (.001*)	.332 (.001*)
Bullying	-.389 (.000*)	-	.395 (.000*)	.036 (.370*)	-.107 (.161*)
Ostracism	-.295 (.003*)	.395 (.000*)	-	-.188 (.040*)	-.334 (.001*)
Support home	.321 (.001*)	.036 (.370*)	-.188 (.040*)	-	.300 (.002*)
Support work	.332 (.001*)	-.107 (.161*)	-.334 (.001*)	.300 (.002*)	-

* $p < 0.05$

Hypothesis 1: Receiving no attention at all (being ostracized) is more harming for

someone's well-being than receiving negative attention (being bullied).

The regression analysis showed a significant main effect of bullying (β = -.314, p =

.004). This effect was negative, which indicated lower levels of well-being among people that

are being bullied. The outcomes showed no significant main effect of ostracism on well-being

(β = -.058 p = .653). Being ostracized did not have a significant effect on someone's well-

being. Therefore, hypothesis 1 can be rejected. From the data obtained in this study it shows

that bullying has a more harming effect on someone's well-being than ostracism.

Hypothesis 2: Social support will act as a buffer and will mitigate the impact of bullying/ostracism on someone's well-being.

Hypothesis 3: Social support at work will act as a stronger buffer between bullying and well-being (in comparison to the relationship between ostracism and well-being).

Hypothesis 4: Social support at home will act as a stronger buffer between ostracism and well-being (in comparison to the relationship between bullying and well-being).

The effect of social support (at work and at home) on the relationship between bullying and ostracism, and well-being has been measured using a backwards regression analysis. Step-by-step, three of the moderating variables were excluded from the model because they were not significant. First, the moderator between ostracism and support at work ($\beta = .068$, $p = .66$), then the moderator between bullying and support at work ($\beta = -.101$, $p = .336$) and last between ostracism and support at home ($\beta = .113$, $p = .230$). This shows that support at work does not act as a buffer for someone's well-being. The effect of both ostracism and bullying is not mitigated by social support at work. Also, support at home did not have a significant effect on the relationship between ostracism and well-being. These results show that hypothesis 2, 3 and 4 can be rejected.

The moderator that was left in the model was not significant with a significance level of .05 ($\beta = -.162$, $p = .094$), but was almost significant and was able to have an effect on well-being. The model showed that the level of well-being of participants that had an average level of support at work were influenced by being bullied ($\beta = -.306$, $p = .005$). By using a simple slope analysis the influence of bullying could be measured with people that have a higher and lower support level. By shifting the variables with 1 SD lower and higher (which is 1 in this regression analysis with Z scores) it was shown that bullying has a more negative effect on participants that have higher levels of support at home ($\beta = -.538$, $p = .000$). For participants

that received lower levels of support at home, bullying did not have a significant effect (β = -.091, p = .632). Thus, support at home had an almost significant effect on the relationship between bullying and well-being. The effect was negative, which means that bullying had a more negative influence on the level of well-being of participants with a higher level of support at home. Thus, bullying behaviour had an even more negative effect on the well-being of participants that received support from family and/or friends.

Discussion

This thesis focuses on the relationships between well-being, ostracism, bullying, social support at home and social support at work. It was hypothesized that ostracism has a more harming effect on well-being than bullying. It was also hypothesized that social support at home will act as a buffer for the relationship between ostracism and well-being. And that social support at work will act as a buffer for the relationship between bullying and well-being. Some interesting patterns derive from this study. The results of this study show that ostracism is less threatening for someone's well-being than bullying. Also, the results show no significant buffer effect for support at work and support at home for the relationship between ostracism and well-being. Thus, social support, either at home or at work, does not have an effect on the relationship between ostracism and well-being. Furthermore, social support at work does not have a significant effect on the relationship between bullying and well-being. The interesting fact that came from this study is that social support at home does have an effect on the relationship between bullying and well-being. This effect is negative. Thus, the already negative effect of bullying on someone's well-being will be even more negative when they receive social support at home.

Well-being was expected to be more threatened by being ostracized than by being bullied because of earlier studies that find ostracism to be more harming. The differing pattern found in this study can be due to the sample that was used. Ninety-two point one percent

(92.1%) of the participants were male. This may have had an influence on the results. Social ostracism seems to be less threatening for men than for women. From earlier research (Williams & Sommer, 1997) certain speculations came forth about the difference in coping mechanisms between men and women. Women tend to blame their own poor character or skills when being ostracized. Men, in contrast, tend to pretend the ostracism was not directed to them, but that they choose for it themselves. Men are afraid of opening up too much when they admit being ostracized, so instead of blaming themselves for being ostracized they cope with being ignored by changing their interest to something else in the environment.

Another explanation for the unexpected outcome of the study is the amount of people in the sample being ostracized and bullied. The results show that 29 of the participants had been bullied in the last couple of months (32.6%). This in contrast to only 4 of them reported being excluded/ostracized in the last couple of months (4.5%). Also, in the eventual analysis, the respondent with the highest ostracism score was excluded from the data because the participant was considered to be an outlier. In the end, only three people in the sample scored 'high' on the ostracism scale, which can cause the data to be insufficient to make certain statements about the effect that ostracism has on well-being.

The one thing that is notable from the results of being ostracized is that 3 out of 4 ostracized participants are from a foreign country (Poland, Mexico and Portugal). Although the main language at ASML is English, it seems obvious that the Dutch employees speak in their own language which causes the ones that do not speak Dutch to be excluded in terms of language. This could be a good explanation for the people with the high ostracism score.

Also, as was mentioned earlier, ostracism and bullying are two concepts that are hard to distinguish from each other. They hold a lot of overlap. In the bullying questionnaire there are also questions about being excluded. In this study these overlapping statements have been left out, but the different questionnaires still hold some partial overlap, which could be seen

from the correlations table (table 3).

The results show that support at work and support at home both do not have a significant effect on the relationship between ostracism and well-being. This can be explained by the fact that the current study did not find a significant effect of ostracism on well-being. As was first mentioned, only a very small part of the participants had been ostracized in the last couple of months. This makes it hard to set statements about the effect of ostracism.

Support at work also did not have an effect on the relationship between bullying and well-being. It can be concluded that the participants in this study do not find the support they need at work, or they do not want to be supported by their colleagues. This can be for example because they are afraid of being too open and called weak. Support at home did have an effect on the relationship between being bullied and well-being. What seems quiet odd, is that this relationship is negative. This means that when participants got more support at home, their well-being was more negatively influenced by being bullied. They felt the bullying behaviour was more harming when they got support from their friends and/or family.

One way of explaining this odd relationship is by the phenomenon self-regulatory capacity. A study done with children shows that people that are being bullied can react in two different ways, which are in a passive and an active manner. The passive ones try to solve the conflict and surrender themselves to the bully. The active ones get aggressive and will resist the bully (Mahady Wilton, Craig & Pepler, 2000). When a bully victim wants to cope with being bullied, it is very important that they can manage negative emotions (Lazarus & Folkman, 1984). Being able to cope with bullying behaviour is evidence that a person possesses emotional regulation processes (Eisenberg et al., 1995). Victims of bullying most of the time, are not able to regulate these processes because they cannot cope with the negative emotions. Without these emotional regulations skills the situation can escalate and the person being bullied will be a more frequent target of bullying (Mahady Wilton, Craig & Pepler,

2000).

Thus, victims of bullying in general are less able to cope with the negative emotions of being bullied. They have low self-regulatory skills. This leads to negative behaviour from the person being ostracized. People with low self-regulatory skills have the tendency to act aggressive after being insulted, which is also being bullied (DeWall, Baumeister, Stillman, & Gailliot, 2007). This can explain the negative effect support has on the relationship between bullying and well-being. Showing negative behaviour will make it harder to receive social support at home. For example, when a certain person in the sample has been bullied at work, that person is not able to cope with these negative feelings and feels aggressive. After work, friends and/or family at home notice there is something wrong and offer support. The victim will react repellent and turns off the support. This person will end up in a vicious circle. This negative behaviour will provoke being ostracized at work even more, and support will not be able to make a positive difference.

There is something else that can be the cause of this negative relationship. From this analysis it cannot be seen which variables have a causal status. It is possible that low levels of well-being elicit low levels of support and higher levels of bullying. Also, people that are being bullied have more support and also need that support much more. This shows that it is possible that support is not the cause of lower levels of well-being but these participants already have lower levels of well-being because they are being bullied. They therefore need more social support to cope with the bullying behaviour. This could be an explanation for the fact that support seems to have a negative effect on the relationship between bullying and well-being.

Limitations

The biggest limitation of this study is the content of the sample. O of the participants have experience in being bullied and even less have experience in being ostracized. This

makes it difficult to set statements about the effect these kinds of behaviour have. Also, more than 90 percent of the participants was male. This most certainly had an effect on the outcomes of this study because men experience ostracism as less threatening than women do (Williams & Sommer, 1997). Furthermore, even though this study checked for overlap between the ostracism and bullying scale, correlations still show overlap between the two, which made it difficult to measure them independently.

Suggestions for future studies

As was concluded from this study, social support increases the negative effect of bullying on someone's well-being. This is an interesting pattern, which needs some explanations. Future studies should measure the level of self-regulatory capacity of the participants. By doing this it can be checked whether there is a difference in the effect of social support between people that can regulate their feelings and the ones that cannot. Also, this study did not check for causality between the variables, which made it difficult to see in which directions the causal links lay. This should also be taken into account in future research.

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Appendix

Demographic questions

1. What is your gender?	○ Male	○ Female

2. What is your age? (in years) [ ]

3. In which country are you born?

The Netherlands - ○

India - ○

Belgium - ○

Spain - ○

Other, please specify - ○
- -

4. What is the highest level of education you have completed?

Upper secondary education (MBO) or lower - ○

University of professional education (HBO Bachelor) - ○

University education (WO Bachelor) - ○

University master's degree - ○

PhD - ○

5. How many hours is your workweek?	……..	Hours		
6. How long do you work for ASML at this location?	……..	Year(s)	……..	Month(s)

7. What is your function?

GL/TL/Architect ○

Design Engineer ○

Other, please specify …………………………………………… ○

Part 1: Your job and your colleagues

In the first part of the questionnaire, some basic questions about your job and your relation with colleagues can be answered.

About your job

The following statements are about your job. Indicate to what extend you agree or disagree with these statements

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I receive recognition for a job well done*	O	O	O	O	O
2.	I feel close to the people at work*	O	O	O	O	O
3.	I feel good about working at this company*	O	O	O	O	O
4.	I feel secure about my job*	O	O	O	O	O
5.	I believe management is concerned about me*	O	O	O	O	O
6.	On the whole, I believe work is good for my physical health*	O	O	O	O	O
7.	My wages are good*	O	O	O	O	O
8.	All my talents and skills are used at work*	O	O	O	O	O
9.	I get along with my supervisors*	O	O	O	O	O
10.	I feel good about my job*	O	O	O	O	O

About you and your colleagues

The following statements are about your relationship with your colleagues. Indicate to what extend you agree or disagree with these statements.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
11	My colleagues are very concerned with my welfare*	O	O	O	O	O
12.	My needs and desires are very important to my colleagues*	O	O	O	O	O
13.	My colleagues would not knowingly do anything to hurt me*	O	O	O	O	O
14.	My colleagues really look out for what is important to me*	O	O	O	O	O

| 15. My colleagues will go out of their way to help me* | ○ | ○ | ○ | ○ | ○ |

About support from your colleagues and supervisor(s)

Listed below are statements listed that represent possible opinions that you may have about working at ASML. Indicate to what extend you agree or disagree with these statements

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
16. My colleagues value my contribution to their well-being.	○	○	○	○	○	○	○
17. My colleagues fail to appreciate any extra effort from me	○	○	○	○	○	○	○
18. My colleagues would ignore any complaint from me	○	○	○	○	○	○	○
19. My colleagues really care about my well-being	○	○	○	○	○	○	○
20. Even if I did the best job possible, my colleagues would fail to notice	○	○	○	○	○	○	○
21. My colleagues show very little concern for me	○	○	○	○	○	○	○
22. My colleagues take pride in my accomplishments at work	○	○	○	○	○	○	○
23. My colleagues care about my general satisfaction at work	○	○	○	○	○	○	○

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
24. My supervisor values my contribution to their well-being.	○	○	○	○	○	○	○
25. My supervisor fails to appreciate any extra effort from me	○	○	○	○	○	○	○
26. My supervisor would ignore any complaint from me	○	○	○	○	○	○	○
27. My supervisor really cares about my well-being	○	○	○	○	○	○	○
28. Even if I did the best job possible, my supervisor would fail to notice	○	○	○	○	○	○	○

29. My supervisor shows very little concern for me   ○   ○   ○   ○   ○   ○   ○

30. My supervisor takes pride in my accomplishments at work   ○   ○   ○   ○   ○   ○   ○

31. My supervisor cares about my general satisfaction at work   ○   ○   ○   ○   ○   ○   ○

Part 2: Your feelings

In this part of the questionnaire, we present statements about your feelings in the last few of weeks.

About your feelings

Below is a list of statements dealing with how you feel about yourself and your life. Indicate to what extend you've experienced the statements in the last few weeks.

		Not at all			All the time
1.	I feel energetic, active or vigorous	○	○	○	○
2.	I feel dull or sluggish	○	○	○	○
3.	I feel tired, worn out, used up, or exhausted	○	○	○	○
4.	I have been waking up feeling fresh and rested	○	○	○	○
5.	I have been happy, satisfied, or pleased with my personal life	○	○	○	○
6.	I have crying spells or feel like it	○	○	○	○
7.	I feel downhearted and blue	○	○	○	○
8.	I feel afraid for no reason at all	○	○	○	○
9.	I get upset easily or feel panicky	○	○	○	○
10.	I have lived the kind of live I wanted to	○	○	○	○
11.	I have felt eager to tackle my daily tasks or make new decisions	○	○	○	○
12.	I have felt I could easily handle or cope with any serious problem or major change in my life	○	○	○	○

General feelings about yourself

Below is a list of statements dealing with your general feelings about yourself. Indicate to what extend you agree or disagree with these statements.

		Strongly disagree	disagree	Agree	Strongly agree
13.	On the whole, I am satisfied with myself *	O	O	O	O
14.	At time I think I am no good at all *	O	O	O	O
15.	I feel I have a number of good qualities *	O	O	O	O
16.	I am able to do things as well as most other people *	O	O	O	O
17.	I feel I do not have much to be proud of *	O	O	O	O
18.	I certainly feel useless at times *	O	O	O	O
19.	I feel I am a person of worth*	O	O	O	O
20.	I wish I could have more respect for myself*	O	O	O	O
21.	All in all, I am inclined to think that I'm a failure *	O	O	O	O
22.	I take a positive attitude toward myself *	O	O	O	O

Part 3: Support from others

In this part of the questionnaire, there are 12 questions about support you may receive from others.

Social support

We are interested in how you feel about the following statements. Indicate to what extend you agree or disagree   with   these   statements

		Very strongly disagree	Strongly disagree	Mildly diasgree	Neutral	Mildly agree	Strongly agree	Very strongly agree
1.	There is a special person who is around when I am in need	O	O	O	O	O	O	O
2.	There is a special person with whom I can share my joys and sorrows	O	O	O	O	O	O	O
3.	My family really tries to help	O	O	O	O	O	O	O

me

4.	I get the emotional help and support I need from my family	O	O	O	O	O	O	O
5.	I have a special person who is a real source of comfort to me	O	O	O	O	O	O	O
6.	My friends really try to help me	O	O	O	O	O	O	O
7.	I can count on my friends when things go wrong	O	O	O	O	O	O	O
8.	I can talk about my problems with my family	O	O	O	O	O	O	O
9.	I have friends with whom I can share my joys and sorrows	O	O	O	O	O	O	O
10.	There is a special person in my life who cares about my feelings	O	O	O	O	O	O	O
11.	My family is willing to help me make decisions	O	O	O	O	O	O	O
12.	I can talk about my problems with my friends	O	O	O	O	O	O	O

Part 4: Problematic relations with colleagues

In this final part of the questionnaire, there are some questions about possible problematic relations you may have with colleagues.

Problematic relations at work

The following statements are about problematic relationships between colleagues. In each team of workers it may occur that people may not work well with each other. The following statements are about situations you could have been up. Please indicate how often this happened to you in the past 6 months.

		Never	A few times	Only once or twice a month	About once a week	Always
1.	Someone withholding information which affects your performance	O	O	O	O	O
2.	Being ordered to do work below your level of competence*	O	O	O	O	O
3.	Having your opinions ignored*	O	O	O	O	O

4.	Being ignored or excluded*	○	○	○	○	○
5.	Being given tasks with unreasonable deadlines*	○	○	○	○	○
6.	Excessive monitoring of your work*	○	○	○	○	○
7.	Pressure not to claim something to which by right you are entitled (e.g. sick leave, holiday entitlement, travel expenses)*	○	○	○	○	○
8.	Being exposed to an unmanageable workload*	○	○	○	○	○
9.	Being humiliated or ridiculed in connection with your work*	○	○	○	○	○
10.	Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks*	○	○	○	○	○
11.	Spreading of gossip and rumours about you*	○	○	○	○	○
12.	Having insulting or offensive remarks made about your personality, attitudes or your private life*	○	○	○	○	○
13.	Hints or signals from others that you should quit your job*	○	○	○	○	○
14.	Repeated reminders of your errors or mistakes	○	○	○	○	○
15.	Being ignored or facing a hostile reaction when you approach*	○	○	○	○	○
16.	Practical jokes carried out by people you don't get along with	○	○	○	○	○
17.	Having allegations made against you*	○	○	○	○	○
18.	Persistent criticism of your errors or mistakes	○	○	○	○	○
19.	Being the subject of excessive teasing and sarcasm	○	○	○	○	○

Ostracism

The following statements are about situations you could have gone trough. Please indicate how often this happened to you in the past 6 months.

		Never	Once in a while	Some-times	Fairly often	Constantly	Always
20.	Others ignored you at work	○	○	○	○	○	○
21.	Others left the area when you entered	○	○	○	○	○	○
22.	Your greeting have gone unanswered at work	○	○	○	○	○	○
23.	You involuntary sat alone in a crowded lunchroom at work	○	○	○	○	○	○

24.	Others avoided you at work	○	○	○	○	○	○
25.	You noticed others would not look at you at work	○	○	○	○	○	○
26.	Others at work shut you out of the conversation	○	○	○	○	○	○
27.	Others refused to talk to you at work	○	○	○	○	○	○
28.	Others at work treated you as if you weren't there	○	○	○	○	○	○
29.	Others at work did not invite you or ask you if you wanted anything when they went out for a coffee break	○	○	○	○	○	○

Thank you!

You have finished the questionnaire. We finally would like to ask you to indicate how you experienced the questionnaire. Please check whether the following applies to you:

The questions in the questionnaire:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. were nice to answer	○	○	○	○	○
2. generate a lot of feelings	○	○	○	○	○
3. make me feel uncomfortable	○	○	○	○	○
4. have little effect on how I feel	○	○	○	○	○
5. were too much on the personal level	○	○	○	○	○
6. make me sad	○	○	○	○	○
7. give me a good feeling about myself	○	○	○	○	○
8. took a lot of my time	○	○	○	○	○

You have finished the questionnaire. Is there anything you want to inform us about? You may use the space below to give comments or suggestions:

Thank you for completing the questionnaire. We appreciate your participation. The data will be used exclusively for our theses. If you have any questions or comments, you can always contact us.