Creating resilience against the influence of the online propaganda mass-machine Islamic State (IS)

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Creating resilience against online extremist propaganda

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Abstract

This study aims to gain more insights in how students can create resilience against the influence of online propaganda of extremist organizations, such as Islamic State (IS). By means of an experiment with four different conditions, the current work investigates the potential benefits of analysing and discussing propaganda material in a classroom setting. We conducted a survey to measure these effects among high school students \(N = 247\).

The authors predicted that a combination of critical analysis and group discussion would be most effective in creating resilience against the influence of propaganda.

Results show that the perceived symbolic threat of students after viewing the propaganda reduces more when the propaganda is discussed in a small group than when students reflect individual. In the case of reduced symbolic threat, students believe less in the truth of the propaganda, they experience less perceived injustice, less personal injustice and they identify less with IS. Supporting the TMT-theory, results revealed that when students perceived more symbolic threat after viewing the propaganda, they believed more in the truth of the propaganda of IS, experienced more perceived injustice, more personal injustice and identified more with IS.

This is the first paper in which students viewed very recent propaganda of IS. This prevention could work very well, when it is offered at different times and in different forms to reduce one or more threats from the propaganda of IS. But the current study demonstrates that the development of propaganda of modern, extremist organizations has possibly moved beyond the methods that try to create resilience against it.

**Keywords:** Propaganda, Islamic State, Terrorists, Symbolic threat, Online influence, In-group identification
Acknowledgements

Commissioned by Saxion Hogeschool, I was allowed to conduct research among the students. The purpose of the study was to map out how specific ways of discussion on and/or analysis can help to reduce the influence of online propaganda of a terrorist organization.

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Max van de Velde
Introduction

In October 2014, three teenage girls from Denver, Colorado, were noticed missing from their high school (Brumfield, 2014). German authorities intercepted them at the Frankfurt airport and sent them back to the United States where they were questioned by Federal Bureau of Investigation (FBI) agents. The girls were suspected of heading to Syria to join Islamic State (IS). In the Netherlands there were several similar incidents in a school setting over the recent years, it happened more than once that a student did not show up for class and it turned out that they had joined a radical group and left to Syria or Iraq (Vossekuil, 2002; Kleijwegt, 2015). For example, on a secondary school in The Hague, where young students in 2015 were actively approached online and recruited by IS supporters, or in Hengelo in 2015 where a 24-year-old woman from a secondary high-school radicalized and joined with the IS (Kleijwegt, 2015). Similarly, alarming stories of radicalization on schools are repeated regularly in the news media. Radicalization refers to the process of developing extreme beliefs and ideologies that challenge the status quo and reject compromise (Borum, 2011; Schmid, 2013). Research by Spee and Reitsma (2010) and the NCTV (2015) shows that radicalized youngsters nowadays are usually influenced by external persons online or ideas on the Internet.

There must be much more attention in fighting against the influence of online propaganda and recruiting from terrorists in our society (Kleijwegt, 2015). The AIVD (2014) explicitly mentions the important role education can play in creating resilience and offers dozens of general advices to 'promote the resilience of society, individuals and communities'. Education therefore has to make the discussion an important task, respond to and create resistance against manifestations or expressions of possible radicalization. But concrete suggestions are not made. According to Zannoni et al. (2008) and Catron (2008) the approach also differs from school to school in the Netherlands. It appears from several studies (Zannoni et al., 2008) that schools and their teachers face a major practical action embarrassment when it comes to discussing and addressing this problem. What is striking about the available courses and the available material is that in many cases they offer no advice for the teacher and the school about what to do when affected by online propaganda (Kleijwegt, 2015; Westenberg, 2008). However, a school can
contribute in creating resistance to radical influences. A school plays an important role in the life of a student. Changes occur in the normal behaviour of a student, this is also apparent in school (Frymer, 2009). It is imperative that schools better understand just how the online messages of indoctrination are delivered and hence what drives these individuals to waste their life in the name of IS’s violent Islamist fantasy (Spee & Reitsma, 2010), therefore it is important to consider what their propaganda entails and what schools can do in creating resilience against online, persuading propaganda. This leads to the following research question; **How can college students become more resilient against the influence of online, extremist propaganda**?

Youngsters are no longer recruited by persons with long beards, the former, traditional image of terrorists consists not any more (Kaminski, Koons-Witt, Thompson & Weiss, 2010; Kupchik & Bracy, 2009; Kellner, 2008a). Modern IS recruiters know where Western youth mainly settle in the online world, what they like, and they try to utilize this as much as possible (De Meyer, 2006; Anderson, 2004; Bahara, 2014; Matusitz, 2014). The jihadist agenda is action-oriented and it uses established techniques of propaganda, for example, the use of symbolism, rhetoric, and myth (O’Shaughnessy & Baines, 2009; Brown & Korff, 2004; Bird, 2006; Ryan, 2007). Propaganda is known as the process of persuasion of implanting the communicators’ ideas, norms and beliefs in the minds of the receivers (Tuly, 2002; Ulbert & Risse, 2005; Finnemore & Sikkink, 1998). Thus, propaganda or the psychological warfare is the intended processes of persuasion to urge students to think, perceive, and behave in a desired way to serve the intended goals of those behind the persuasive process. In that sense, words could be mightier and much stronger than bullets and bombs.

**Aim of IS**

Every form of propaganda IS uses has the purpose to create *in-group identification* (Doosje et al., 2016; Leonard et al., 2011). In-group identification is the biggest factor to engage in the radicalization process, social processes influence a person in becoming radical (Kruglanski et al., 2013). It is important to create a strong joint feeling, instead of an individual feeling of belonging to the in-group (Mazarr, 2004). IS wants you to think you have a lot in common with the Jihad way of life, while in fact, there is nothing you
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share with the IS-beliefs. Social identification needs to take place in order to experience collective emotions of fear and injustice (Goldenberg & van Zomeren, 2016), exactly the kind of emotions IS wants you to feel. The idea that emotions can be experienced as a result of one’s membership in a specific group is based on the integration of appraisal theories of emotions (IET) (Lazarus, 1991; Ellsworth & Smith, 1987) and self-categorization theories (Turner et al., 1987). Originally developed by Smith (1993) and Mackie et al. (2000), IET suggested that as a result of perceived membership in a group, individuals may react to situations relevant to this group, even if these situations have no influence (direct) on the individual’s goals. Therefore it is expected that perceived injustice is positive related to symbolic threat (H3e). When students perceive more injustice, they will also perceive more symbolic threat.

Another aim of IS is creating perceived injustice. The message from global jihad is aimed directly at the individual. It argues that the Islamic community faces assault from aggressive infidels and their apostate allies; it is threatened by military attack, cultural corruption, and social integration, in other words, they try to create a salient out-group. The antidote to these threats is jihad, not as a spiritual quest, but posed as an armed defence which is proposed to be obligatory for all true believers (Jenkins, 2007). IS wants to create a feeling of how unfair the ‘State’ is being threatened by the rest of the world (Bloom, 2004). They want to legitimize actions of IS against the western society and decry actions against IS (Bjørgo & Horgan, 2009; Frankl, 2000; Gambetta, 2005). Drawing on Albert Bandura’s theory of selective moral disengagement and social cognitive theory, Chen et al. (2008) argue that the rhetoric in radical websites seeks to distance themselves from their own use of violence and to shift the responsibility for their violence to their enemies. Join the IS, to do something about it (Edwards et al., 2015). In this way, the way of life in the Jihad becomes attractive and their own lives senseless. It is therefore expected that perceptions of perceived injustice felt with IS are positively related to personal injustice feelings (H2b). When students perceive more injustice, they also perceive more personal injustice. Several researchers (Treem & Leonardi, 2012) state that students try to make sense of issues by processing incoming political information in terms of who is responsible.

The Need For Orientation (NFO) of a person is hereby important, this is a personal characteristic.
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When someone has a high NFO, he or she uses new information or skills to deal with new situations and challenges of life (McGuire, 1974). Research by McGuire (1976) and by Chernov, Valenzuela & McCombs (2011) shows that the higher the NFO of someone on the topic, the more this person used the media to provide the NFO. The higher the NFO of a person is, the more the one foresees in its NFO by putting in the media, and when the person identifies more with the subject, the NFO even becomes higher (Chernov et al., 2011). Therefore it is expected that the score on NFO will be positively related to the level of in-group identification with IS (H5a). When students have a higher NFO, they also identify more with IS. The explanation for this is that only the media that students can get the required information because they cannot learn from the example of their own experience. It is therefore expected that, when students analyse incoming information, the need for information becomes bigger. It is therefore expected that there is a main effect on analysis-level. When students have a higher NFO, they also analyse more (H5b).

When students are afraid, the perceived symbolic threat they feel is high. This is the last ‘spear point’ of IS, creating a perceived, symbolic threat. Stephan et al. (2002) state in their Integrated Threat Theory (ITT) that symbolic threats are based on perceived group differences in values, norms, beliefs and it refers to the threat to the culture. Research has demonstrated the link between perceived group threat and negative out-group attitudes (Riek, Mania, & Gaertner, 2006). Kruglanski et al. (2009) and Buijs et al. (2006) argue that students are more likely to endorse violence and engage in violent action themselves in order to restore threatened significance. So, when students feel that their group (IS) is being threatened, they are more likely to endorse a radical belief system and protecting the status quo is justified (McCauley & Moskalenko, 2008; Holt et al., 2016). It is therefore expected that the effect of the level of perceived injustice on in-group identification with IS is moderated by an effect on symbolic threat. When symbolic threat is high, than the effect of perceived injustice on in-group identification would be higher than when symbolic threat is low (H3c). Symbolic threat seems to be a strong predictor of attitudes towards ethnic minorities (Sniderman & Hagendoorn, 2007; Tajfel & Turner, 1979; Ellemers, Van Knippenberg, Ellemers, Spears & Doosje, 2002). When symbolic threat is high, students have stronger
prejudice against other groups and feel less the need for a multicultural society (Sniderman & Hagendoorn, 2007; van London et al., 2007). Out-groups that have a different worldview can be seen as threatening for the cultural identity of the in-group. Therefore it is expected that the multicultural society tolerance will be negatively related to in-group identification with IS (H3d). When students perceive more tolerance feelings, they identify less with IS.

This corresponds with the Terror Management Theory (TMT), according to the TMT, youngsters in times of threat focus less on the information and are more concerned with their own mortality (Hofstede, 2001). In addition, it appears from this study that the need for more information becomes greater, but the search for other, more factual information less. So, information online that’s easy accessible and is scary has the best chance to get stored in memory. To overcome these respective problems, it is important to help students form a critical analysis of incoming information and divide the class during an experiment into small groups, in which one co-operates with each other (Dovidio & Gaertner, 2004). Therefore it is expected that there are main effects for discussion and analysing on symbolic threat (H1a). Specifically, students who analyse individually will score highly on measures of symbolic threat according to students who analyse in groups. Students who analyse critical are more aware than students who do not analyse on a critical manner.

**Critical thinking**

So, another way of looking at incoming information is through the critical, rational path. In this path you make also judgements about students, groups or political issues but you don’t follow the frame that is suggested by the messenger of the information (Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006; Stenstrom, Lickel, Denson, & Miller, 2008; Brown, Wohl & Exline, 2008). Hereby there is no search to satisfy hedonic goals, but a search to satisfy instrumental goals (Tamir, Mitchell and Gross, 2008). These are needs that you want to achieve in the long term, you really want to know about which person, political party or movement is responsible, despitess everything the mass media machine wants you to believe (Erber & Erber, 2000; Tamir et al., 2008). They don’t want immediate information satisfaction, but want to know what really is going on. Therefore it is expected that there is a main effect of level of analysing
on thinking about the truth of the propaganda (H4a), students who analyse critical give a lower grade when they judge about the truth of the propaganda. It is important not only to teach controversial issues because the learning will be valuable in its own right, but also to compensate for the one-sided and confusing ways in which some issues are presented in the media (Hew & Cheung, 2008). Lister et al. (2009) observe that the evolution of mass media has increasingly exposed children to sensitive issues, which requires demystification and discussion. The proliferation of media sources and outlets and the ease with which students can access them from a young age means that the argument from Lister et al. (2009) is even more pertinent. Not only would we learn how to be more creative, but interactive learning environments can also help students do critical thinking and form their own opinion about issues (Wang, 2008; Wang & Woo, 2007a). Therefore it is expected that there is an main effect of level of analysing on knowledge of the propaganda (H4b) Specifically, students who analyse in groups will score highly on measures of knowing which kind of material IS uses according to students who analyse in individual. Students who analyse critical know more about the material IS uses than students who do not analyse on a critical manner.

Contact
It is less threatening to discuss in small groups, a student is more likely to share his opinion in contrast to the situation where the student has to share his opinion with the whole class (Wu & Hiltz, 2004). A relevant theory is the activity theory, Jonassen and Rohrer-Murphy (1999) propose that the activity theory can be used as a powerful framework for designing constructivist learning environments. Activity theory has its focus on human interaction during activity and how the human consciousness works during this activity. Jonassen and Rohrer-Murphy (1999) describe an activity system that explains how activity is a conscious action, and that a conscious action can get practiced until it becomes an automatic process which requires less conscious effort, or what they call an ‘operation’ (Jonassen & Rohrer-Murphy, 1999). In short, activity theory says that interacting with each other promotes conscious learning, i.e., we are more aware of what we learn during activity, it give us a better understanding of the subject and we can more easily construct new knowledge. Therefore it is expected that there is a main effect on level of
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discussion on thinking about the truth of the propaganda (H4c). Students who discuss in groups think that the truth of the propaganda IS uses is lower than students who discuss individually. It is also expected that there is an main effect on level of discussion on knowledge of the propaganda. Students who discuss in groups understand the material IS uses in their propaganda better (H4d).

During a discussion, the students can talk about the propaganda they just saw. Small groups provide a safe way for students to engage with controversial issues. The students can discuss about the film they just saw. Every student discusses about their own conclusion, after that the other group members can react. They look at their own conclusion and the agreements and disagreements. Stephan and Finlay (2000) indicate that the effects of empathy biases are likely caused by decreased perceptions of mutual differences and consequent and better, decreased sense of injustice and harm and injustice done by the other. Prejudices against certain groups is often related to perceptions of certain differences and what threat and injustice these differences bring with it (Lerner, 1980). Cognitive empathy reduces this bias because students will realize that they are less ‘different’ than members of the other group than they initially thought. A better understanding of how the other person sees the world, makes the other less strange, less threatening and students think more objective. Therefore it is expected that there is a main effect of level of analysis on in-group identification (H3a). That is, when level of analyses is non-critical, the identification with IS is higher than when analysis is critical.

Empathy

Stephan and Finlay (2000) indicate on the basis of scientific knowledge a number of explanations why empathy plays an important role in improving intergroup relations. Empathy creates a different attitude because feelings of injustice are stimulated (Fiehn, 2005). Students who think the world is just and that others ‘get what they deserve’, tend to blame the suffering of other groups perceived negative attributes of those groups. However, by forming knowledge of the suffering and discrimination experienced by other groups, in which one feels at the same empathy for the victims, people are encouraged to adjust their assumptions. In that case, they do not want the ‘victims’ wronged (McGregor, Haji and Kang, 2008). Therefore it is expected that there is a main effect on level of discussion on in-group identification with IS
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Empathy creates a different attitude because feelings of injustice are stimulated (Fiehn, 2005). Students who think the world is just and that others ‘get what they deserve’, tend to blame the suffering of other groups perceived negative attributes of those groups. However, by forming knowledge of the suffering and discrimination experienced by other groups and individuals, in which one feels at the same empathy for the victims, people are encouraged to adjust their assumptions. An additional advantage is that it also demonstrates students that contrasting perspectives are a normal aspect of dealing with difficult issues (Stephan and Finlay, 2000). This leads to the expectation that there is a main effect of discussion-level on perceived injustice (h2a). Based on the above mentioned hypotheses, a model of these relationships is constructed. In figure 1 the hypotheses on Discussion-level can be consulted, in figure 2 on Analysis-level and the hypotheses on the correlations and regression can be seen in figure 3.

![Conceptual model](image)

*Figure 1. Conceptual model; hypotheses on Discussion-level*
Figure 2. Conceptual model; hypotheses on Analysis-level

Figure 3. Conceptual model; hypotheses on correlations and regression

Method

Students

The sample total size for the survey consisted of 289 students. Eventually, data are analysed of 247 respondents (155 (62.75%) men, 93 (37.65%) women), divided over 12 classes. The excluded students contained to much missing data, a respondent with missing or incomplete answers was completely removed, results and conclusions of this thesis are more reliable to interpret in this way (Luiten, 2009). The students were all in the age of 17 through 30 ($M = 19.66; SD = 2.54$). Completing the questionnaire took an average of 37.87 minutes (2271.95 seconds) to complete ($M = 2271.95; SD = 1038.01$). Of the students 57 students followed the Management, Economics and Rights education, 26 students followed
the Public Administration education, 89 followed Safety Science, 25 students followed the Media Information and Communication education and 41 students the Social legal science education, they studied in between the first and the third schoolyear ($M = 1.14; SD = .53$). Of the students, 96.8% was born in the Netherlands ($N = 237$), .4% in Turkey, Democratic Republic Congo, Dominican Republic, Iraq, Surinam, Chechen Republic, Switzerland (all $N = 1$), .8% in Russia and Syria (both $N = 2$). The students were also asked to indicate their nationality. This showed that, 62.90% had the Dutch nationality ($N = 156$), 6.05% had besides the Dutch nationality another nationality ($N = 15$) and the other 31.05% had a different nationality than Dutch ($N = 77$). 88.71% of the parents had the Dutch nationality ($N = 220$), 7.66% a double nationality ($N = 19$) and 2.82% another nationality than the Dutch nationality ($N = 7$). Of the 247 students, 53.23% said they had no religion ($N = 132$), 3.23% are Atheist ($N = 8$), 21.77% Christian ($N = 54$), 6.45% Islamic ($N = 16$), 9.68% Catholic ($N = 24$) and 5.65% ($N = 14$) beliefs in another religion.

Design

The prevention was tested in a classroom setting by means of an experiment. An experimental design was used, namely the post-test-only control group design. To test all the hypotheses, four conditions were created. This research consisted of a $2 \times 2$ (type of discussion: group discussion vs. individual discussion) x $2$ (type of analysis: critical analysis vs. non-critical analysis) design, with Perceived Injustice, Symbolic Threat, Personal Injustice, NFO, In-group Identification, Multicultural Tolerance, thinking about the Truth of the Propaganda and Knowledge of the Propaganda as dependent variables. Students were randomly allocated on class-level to one of the four conditions. To measure the influence of IS material on the different constructs, condition A was applied. This condition, like the other three conditions, involved watching the footage, but contained no special assignment, in contrast to the other conditions. So, in this condition, there was no combination of critical thinking and discussion at group level. See Table 2 (Appendix 1) for a brief description of the four different conditions.

Procedure

A mail was sent to the directors of all academies of the college, requesting permission for participation in
the research, this mail can be found in Appendix 2. In consultation with the teachers using condition C and D, the students were divided into groups of three or four students, dependent on the number of students in the class. Two weeks prior to the start of the experiment, a permission state was sent to all participating classes. Some students were under eighteen at the start of the experiment, so needed permission of their parents. This happened in a passive way; when there was no absent from one student, he or she could participate in the research.

First, the students were welcomed, the researcher shortly introduced himself and briefly explained some background about his education. After that, the meaning of the experiment was explained. The students could either sign the informed consent (Appendix 3) or decide not to take part in the research, all the students took part. During the experiment the students viewed IS propaganda. The footage took nearly ten minutes. The propaganda focused on creating perceived in-group identification, perceived symbolic threat and perceived injustice. After the footage, the students received, depending on which condition they were classified, a critical instruction or an non-critical instruction. In the critical condition, they were asked whether they could briefly analyse the propaganda for themselves based on the critical steps they could see on the slide. In the non-critical condition, the participant was asked to write a short summary about the footage. They were allowed ten minutes. After five minutes the students were asked if they were ready, if this was not the case, they were allowed another five minutes. After the analysis, the students participated in a discussion about the footage, this was again dependent on the condition in which they were classified. The main aim was to search for similarities and contradictions in their analysis. The discussion took place according to a number of rules to ensure that everyone felt safe and comfortable during the discussion. The discussion lasted for approximately a quarter of an hour. The script of the experiment can be consulted in Appendix 4. It contains information about the specific tasks and associated rules. Following the discussions, the students were asked to complete the questionnaire.

The survey

After the experiment, the respondents could access to the online survey through a link at Qualtrics. To complete the survey, they had to conform to certain criteria; namely, they had to be a student of the
college, and must have sufficient knowledge of the Dutch language. All respondents were obliged to read an introduction before the start of the survey. This introduction contained all the necessary information in accordance with the requirements of the Ethical Committee (2010). The participants were informed that the obtained information would remain anonymous and was to be used for statistical purposes only.

Completing the questionnaire took approximately 10 minutes. In the first section of the survey, demographic variables were measured. The second part of the questionnaire was intended to test whether the effect of the IS propaganda on students would decrease. This was measured using several constructs. These constructs are now described individually, with the constructs IS uses first.

**Constructs**

Besides some demographic measurements several constructs were measured. The items are taken from previous research. Most constructs are measured by using the same 7-point Likert scale (1 = totally disagree, 4 = neutral and 7 = strongly agree). The construct personal identification is also measured with a 7-point Likert scale, only this was scored otherwise (1 = not important at all for my sense of who I am, 4 = neutral and 7 = very important to my sense of who I am). Also, a number of constructs assessed by a rating between 1 and 10, was 1 = not good and 10 = very well.

There is much inconsistency between conceptual and operationalised definitions of social identity (Jackson & Smith, 1999). In this study the social identification keys to the extent to which students see themselves as part of, and feel connected with IS, or: in-group identification (Leach et al., 2004). Data were collected with the 10-item Identification with a Psychological Group Scale. A ten-item scale, the Identification with a Psychological Group scale (Mael, 1988), this scale was devised to measure identification (with a psychological group). An example item was: ‘When someone criticises IS this feels as a personal insult’. This scale was measured with 9 items, α = .91. An explorative factor analysis on these 9 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 56.85 % of the variance. A higher score meant more identification with the group IS, a lower score meant less in-group identification with the group IS.

Symbolic threat was queried with theses on how youngsters feel threatened in respect of the
organization IS. These propositions were originally developed by Stephan and colleagues (2000, 2002), the scale originally contained eleven objectives. The symbolic threat was measured using items that are similar to previously used scales (Velasco González et al., 2008). A higher score on this scale meant more experienced symbolic threat from IS, a lower score meant the opposite. The students received among other items the following objective: ‘The Dutch identity is threatened by the IS that in Netherlands live’. This scale was measured with 4 items, $\alpha = .86$. An explorative factor analysis on these 4 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 41.75% of the variance. Perceived injustice with IS was measured by asking respondents to the injustice they feel when they think about how their group (IS) is been threatened. A number of 14 items were conducted to measure the construct, these are based on items from research of Leach et al. (2004). A higher score on this construct meant a greater degree of injustice feelings, a lower score meant the opposite. A question was: ‘IS is been threatened unfair by the Western society’. This scale was measured with 10 items, $\alpha = .85$. An explorative factor analysis on these 10 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 34.01% of the variance.

The construct personal perceived injustice was measured by asking respondents to their general sense of injustice and their sense of with regard to the disadvantaged position of. A number of 14 items were conducted to measure the construct, these are based on items from the research of Saguy, Dovidio & Pratto, 2009). An explorative factor analysis on these 14 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed two underlying factors, one measured personal injustice, and the other one measured personal justice. 6 items measured personal injustice, $\alpha = .85$, explaining 58.25% of the variance. A higher score on this construct meant a greater degree of injustice feelings, a lower score meant the opposite. A question that measured personal injustice was, ‘It makes me angry when I think of how I am treated compared with others in Netherlands’.

Chernov, Valenzuela and McCombs (2011) validated NFO by showing that, the subject itself measures NFO. In the current study, this scale intents to measure to what extent students had a need for
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information about the IS. This list consisted of three questions and a high score on the scale involved a high NFO, a low score concerned a low NFO with regard to the search for information on IS. An example of a question was ‘It is important to me that I follow the situation around IS’. This scale was measured with 3 items, $\alpha = .84$. An explorative factor analysis on these 3 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 74.94 % of the variance.

The **multicultural ideology scale** of Berry and Kalin (1995) was used to measure the extent to which the youngsters support multiculturalism in Netherlands. Responses to negative goals are converted, whereby a higher score on this scale meant more support for multiculturalism in Netherlands. The multicultural ideology scale was divided into three subscales, tolerance, support and equal rights/participation for immigrants. An example of a question was: ‘I feel at ease when I’m in a neighbourhood living with many immigrants’. Other questions were: ‘I rather live next to a Dutch family than next to an immigrant family’ and ‘I don't like it, when an immigrant helps me in a shop’. The tolerance scale was measured with 6 items, $\alpha = .84$. An explorative factor analysis on these 6 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 56.41 % of the variance. The equal rights/participation scale was measured with 4 items, $\alpha = .71$. An explorative factor analysis on these 4 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 53.65 % of the variance.

There were also two questions about propaganda to which the respondents on a scale of one to ten can give a review. First was asked what rating the respondent gives que **credibility** of the propaganda. The second question was asked to indicate how well respondents think that they have considered the propaganda. In addition, two questions are used to assess the **material** that IS uses. This scale was measured with 2 items, $\alpha = .92$. An explorative factor analysis on these 2 items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 70.62 % of the variance. An example question was: ‘I know more about the propaganda IS uses in their propaganda’.

There were three questions to measure the **identification with the members during the research** ($\alpha$}
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= .61) by using The Member Identity Scale (Fombelle et al., 2011). An explorative factor analysis on these three items (method: maximum likelihood, based on Eigenvalues greater than 1) revealed one underlying factor, explaining 36.10% of the variance. The Cronbach test is a test to determine whether different items (questions) may be merged to a scale. The minimum value of the test is .7 (Baarda & De Goede, 2014). Besides the scale that measures the identification with the members during the research, all the scales meet this minimum value.

At the end the respondents could briefly discuss their thoughts and remarks about the questionnaire. After the questionnaire was completed, the respondent was asked if he/she wished to receive further information relating to the investigation. After the prevention there was a short group talk conducted for the student to evaluate the prevention.

Results

Correlations

Firstly, an answer is giving on the correlational hypothesis. Discussion-level (1 = individual discussion, 2 = group discussion), Analysis-level (1 = non-critical analysis, 2 = critical analysis) do not have a mean or standard deviation. An overview of all correlations is given on the next page (Table 1).
Table 1.
*Correlations between the constructs*

<table>
<thead>
<tr>
<th></th>
<th>M(SD)</th>
<th>DL</th>
<th>AL</th>
<th>ST</th>
<th>IGI</th>
<th>PI1</th>
<th>PI2</th>
<th>KP</th>
<th>NFO</th>
<th>TP</th>
<th>MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL</td>
<td>-</td>
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<tr>
<td>AL</td>
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<td></td>
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<tr>
<td>ST</td>
<td>2.58</td>
<td>-15(0.02)</td>
<td>18(0.01)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IGI</td>
<td>3.32</td>
<td>-04(0.50)</td>
<td>07(0.26)</td>
<td>29(0.00)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PI1</td>
<td>3.29</td>
<td>01(0.84)</td>
<td>10(0.13)</td>
<td>28(0.00)</td>
<td>26(0.00)</td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td>PI2</td>
<td>2.17</td>
<td>-03(0.64)</td>
<td>08(0.21)</td>
<td>29(0.00)</td>
<td>22(0.00)</td>
<td>24(0.00)</td>
<td>-</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>KP</td>
<td>5.56</td>
<td>13(0.04)</td>
<td>-17(0.01)</td>
<td>03(0.69)</td>
<td>06(0.33)</td>
<td>02(0.78)</td>
<td>-04(0.55)</td>
<td>-</td>
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<tr>
<td>NFO</td>
<td>3.36</td>
<td>-07(0.29)</td>
<td>-04(0.58)</td>
<td>04(0.57)</td>
<td>10(0.12)</td>
<td>07(0.29)</td>
<td>12(0.06)</td>
<td>23(0.00)</td>
<td>-</td>
<td></td>
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<tr>
<td>TP</td>
<td>4.22</td>
<td>-11(0.09)</td>
<td>14(0.03)</td>
<td>33(0.00)</td>
<td>16(0.01)</td>
<td>19(0.00)</td>
<td>14(0.03)</td>
<td>-07(0.30)</td>
<td>02(0.73)</td>
<td>-</td>
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<tr>
<td>MT</td>
<td>3.67</td>
<td>05(0.47)</td>
<td>05(0.44)</td>
<td>-05(0.46)</td>
<td>-23(0.00)</td>
<td>04(0.49)</td>
<td>-16(0.01)</td>
<td>-13(0.04)</td>
<td>-07(0.29)</td>
<td>02(0.81)</td>
<td>-</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level.
*. Correlation is significant at the 0.05 level.

The mean is shown in the first section with the standard deviation in parentheses. The correlations with matching significance-level (in parentheses) are shown from the second row. Abbreviations are explained as: Analysing-level (AL), Discussion-level (DL), Perceived Injustice (PI1), Symbolic Threat (ST), Personal Injustice (PI2), NFO, In-Group Identification (IGI), Multicultural Tolerance (MT), thinking about the Truth of the Propaganda (TP) and Knowledge of the Propaganda (KP).
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It was expected from the literature that perceptions of Perceived Injustice are positively related to Personal Injustice feelings (H2b). There appears to be a significant, weak positive correlation, between the Perceived Injustice of the respondents and the degree of Personal Injustice ($r(245) = .24; p < .001$). This means that, when people experience more perceived injustice, they also perceive more personal injustice. The hypothesis that people who experience more Perceived Injustice also experience more Personal Injustice, is therefore confirmed. It was expected that Perceived Injustice was positively related to Symbolic Threat (H3e). There appears to be a significant weak, positive correlation between Perceived Injustice and the perceived Symbolic Threat ($r(245) = .28, p < .001$). The hypothesis that people who experience more Perceived Injustice also experience more Symbolic Threat, is therefore confirmed. This means that when people perceive more injustice feelings, they also experience more symbolic threat from IS. It was also expected that Multicultural Tolerance will be negatively related to In-group Identification with IS (H3d). This means that the more identification people feel with the group IS, the less tolerant they feel with immigrants. When people perceive more multicultural tolerance, they feel less identification with the group IS. There is a significant, moderate negative correlation between the In-group Identification with IS of respondents and the degree of Multicultural Tolerance ($r(245) = -.23, p < .001$). The hypothesis that people who feel more In-group Identification with IS feel less tolerance for immigrants is therefore confirmed. At last it was expected that NFO would be positively related to In-group Identification with IS (H5b). There appears to be no significant positive correlation between the In-group Identification with IS of the respondents and the NFO ($r(245) = .01, p = .12$). The hypothesis that people who experience more In-group Identification with IS will have feel more NFO is therefore not confirmed. The other hypothesis are discussed below, starting with Symbolic Threat. The hypothesis are adopted or rejected.

Symbolic threat

In order to test H1a, an analysis of variance (ANOVA) was performed with Discussion-level and Analysis-level as between subjects independent variables. The dependent variable is Symbolic Threat. It is noted that there is a significant difference between group-individual discussion on Discussion-level in
Symbolic Threat; $F(1, 243) = 7.62, p < .001)$. The Symbolic Threat perceived in a group was lower ($M = 2.40; SD = 1.16; N = 129$) than the Symbolic Threat perceived when the discussion was individual ($M = 2.78; SD = 1.34; N = 118$). This means for discussion-level, that the perceived symbolic threat was lower after group discussion than after individual-discussion. There was also a significant difference between analytical and non-analytical analysis in Analytical level on symbolic threat; $F(1, 243) = 9.71, p = .002)$. The Symbolic Threat perceived after an non-critical analysis ($M = 2.37; SD = 1.21; N = 128$) was lower than the perceived symbolic threat after critical analysis ($M = 2.82; SD = 1.29; N = 119$). For analysis-level, it appeared that the symbolic threat perceived after non-critical analysis, independently of discussion-level, was lower than after an critical analysis. Therefore, hypothesis H1a is adopted. No interaction effect was found between Discussion-level and Analysis-level $F(1, 243) = .40, p = .53$).

**Perceived injustice**

In order to test H2a, an analysis of variance (ANOVA) was performed with Discussion-level and Analysis-level as between subjects independent variables. The dependent variable is Perceived Injustice. It is noted that there is no significant effect on Discussion-level in Perceived Injustice; $F(1, 243) = .011, p = .92)$. It is also noted that there is no main effect on Analysis-level in Perceived Injustice; $F(1, 243) = 2.00, p = .16)$. This means that analysing and discussion does not reduce the effect of perceived injustice IS tries to create with their propaganda. There appeared to be no interaction effect between Discussion-level and Analysis-level; $F(1, 243) = 2.22, p = .14)$. This hypothesis is rejected.

**In-group Identification with IS**

In order to test H3a and H3b, an analysis of variance (ANOVA) was performed with Analysis-level and Discussion-level as between subjects independent variables. The dependent variable is In-group Identification. On Analysis-level; $F(1, 243) = 1.63, p = .20)$, no significant effect was found in In-group Identification with IS, this means that hypothesis H3a is rejected. At Discussion level; $F(1, 243) = .76, p = .38)$, no significant effect has been found in In-group Identification, hypothesis H3b is therefore also rejected, no significant interaction effect has been found between Discussion-level and Analysis-level; $F(1, 243) = 1.69, p = .20)$. This means that analysing and discussion does not reduce the effect of in-group
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It was assumed that the effect of the level of Perceived Injustice on In-group Identification with IS was moderated by an positive effect on Symbolic Threat (H3c). The regression model with the In-group Identification with IS as dependent variable and Symbolic Threat and Perceived Injustice as independent variables is significant; $F(2, 244) = 16.75, p < .001$. Results indicate significant main effects on Symbolic Threat ($\beta = .35, t = 3.80, p < .001$) and Perceived Injustice ($\beta = .28, t = 3.07, p = .002$), no interaction effect has been found between Symbolic Threat and Perceived Injustice on In-Group Identification ($\beta = .003, t = .03, p = .97$). This means that the regression model is only usable to predict separate effects of Symbolic Threat and Perceived Injustice on the In-group Identification with IS, and not a moderation effect. Hypothesis H3c is therefore rejected.

The perceived truth of the propaganda

In order to test H4c and H4a, an analysis of variance (ANOVA) was performed with Discussion-level and Analysis-level as between subjects independent variables. The dependent variable is judging about the Truth of the Propaganda. It is noted that there is a significant difference in judging about the Truth of the Propaganda on Discussion-level. On Discussion-level, an significant main effect has been found between group- and individual-discussion; $F(1, 243) = 4.23, p = .04)$. Judging about the Truth of the Propaganda in a group was lower ($M = 4.00; SD = 2.01; N = 129$) than judging about the Truth of the Propaganda when the discussion was individual ($M = 4.47; SD = 2.26; N = 118$). It is noteworthy that the average grade that people give on discussion-level, independent of the analysis-level, is higher for the individual group than those who have discussed in a group. On discussion-level the hypothesis is therefore confirmed.

On Analytical-level there was also an significant difference between critical- and non-critical analysis; $F(1, 243) = 6.17, p < .001).$ Judging about the Truth of the propaganda after an non-critical analysis ($M = 3.94; SD = 1.92; N = 128$) was lower than judging about the Truth of the Propaganda after critical analysis ($M = 4.53; SD = 2.32; N = 119$). The average grade that people give on analysis-level, independent of discussion level, is actually significantly higher after the non-critical analysis than after
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the critical analysis. This part of the hypothesis is therefore rejected. No interaction effect has been found between level Discussion- and Analysis-level; $F(1, 243) = 1.77, p = .19$. Hypothesis H4c is therefore adopted, hypothesis H4a is rejected because the opposite of the forecast turns out to be true.

Knowledge of the propaganda

In order to test H4d and H4b, an analysis of variance (ANOVA) was performed with Discussion-level and Analysis-level as between subjects independent variables. The dependent variable is Knowledge of the Propaganda. It is noted that there is a significant difference between groups and individuals on Discussion-level in Knowledge of the Propaganda, an significant main effect has been found; $F(1, 243) = 6.98, p = .01$. The grade on the Knowledge of the Propaganda after group discussion was higher ($M = 5.78; SD = 1.83; N = 129$) than after individual discussion ($M = 5.32; SD = 1.77; N = 118$). This means that students who discuss in a group, independent of the analysis, gain more knowledge about the propaganda than students who discuss on an individual level. On Discussion-level the hypothesis is therefore adopted.

It is noted that there is a significant difference between analytical and non-analytical analysis on Analysing-level, an significant main effect has been found; $F(1, 243) = 10.46, p < .001$. The grade on analysing the Knowledge of the Propaganda was higher in the critical condition ($M = 5.85; SD = 1.77; N = 128$) than in the non-critical condition ($M = 5.25; SD = 1.82; N = 119$). This means that students analyse on a critical manner, independent of the discussion, gain more knowledge about the propaganda than student who analyse on a non-critical manner. On Discussion-level the hypothesis is therefore assumed. It is noted that there is a significant interaction effect between Discussion-level and Analysing-level in Knowledge of the Propaganda; $F(2, 243) = 17.80, p < .001$) between individual/non-critical ($M = 6.01; SD = 1.82$), individual/critical ($M = 4.37; SD = 1.17$), group/non-critical ($M = 5.76; SD = 1.71$) and the group/critical condition ($M = 5.88; SD = 1.94$). It is noteworthy that the average grade of the assessment of the understanding of the propaganda that students give to discussion-level, independent of the analysis, is higher for the group ($M = 5.78$) than for those who have discussed individual ($M = 5.19$). Is analysing the discussion on an individual level, then it is better to analyse not critical. It matters whether material is
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critical or non-critical analysed in a group, one can better analyse critical. Is the discussion level
individual, then it is better to analyse non-critical. Is the discussion in a group, then it matters on which
way the material is analysed, analysing on a critical manner gives the highest scores.

NFO
In order to test H5a and H5b, an analysis of variance (ANOVA) was performed with Discussion-level and
Analysis-level as between subjects independent variables. The dependent variable is NFO. It is noted that
there is no significant difference on Discussion-level in NFO; \( F(1, 243) = .93, p = .34 \). On Analysis-
level, no significant effect was found; \( F(1, 243) = .22, p = .64 \), there also appeared to be no significant
interaction-effect between Discussion-level and Analysis-level; \( F(1, 243) = .58, p = .45 \). Unfortunately,
both hypotheses are therefore rejected. It seems that the ways of discussion and analysing in the
experiment cannot increase the level of NFO of students. Some interesting unexpected correlations are
interpreted below.

Additional analysis
There appeared to be a significant, weak negative correlation, between the perceived Personal Justice
feelings of the respondents and the degree of in-group identification with IS \( (r(245) = -.20, p = .002) \).
This means that when people experience more personal justice according to the actions against IS, they
identify less with IS. There is a significant, moderate positive correlation between Symbolic Threat and
the degree of In-group Identification with IS \( (r(245) = .29, p < .001) \). There appears to be a significant,
weak positive correlation, between the Perceived Injustice of the respondents and the degree of In-group
Identification with IS \( (r(245) = .26, p < .001) \). A variance analysis (ANOVA) was performed with
Discussion-level and Analysis-level as between subjects independent variables. The dependent variable is
Personal Identification. It is noted that there is no significant difference on Discussion-level in Personal
Identification; \( F(1, 243) = .33, p = .57 \). On Analysis-level, a significant difference was found between
critical analysis and non-critical analysis in Personal Identification; \( F(1, 243) = 10.56, p < .001 \). No
significant interaction-effect was found between Discussion-level and Analysis-level in Personal
Identification; \( F(1, 243) = 1.08, p = .30 \). Personal Identification was stronger after a non-critical analysis
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(M = 5.68, SD = .56, N = 128), than after a critical analysis (M = 5.32, SD = 1.19, N = 119). Personal Identification was stronger after a non-critical analysis, than after a critical analysis. This means that people feel less Personal Identification after an non-critical analysis. There were also several interesting correlations between Personal Identification and other constructs. Between Personal Identification and Perceived Injustice (r(245) = -.27; p < .001) an negative, weak correlation, on Personal Injustice (r(245) = -.31, p < .001) an weak, negative correlation and with Personal Justice (r(245) = .48, p < .001) an moderate, positive correlation. This means that when people experience more Personal Identification, they experience less Perceived Injustice and less Personal Injustice, but they experience more Personal Justice. There was only one interesting correlation on Group Identification with the Class, an weak, positive correlation on Personal Justice (r(245) = .22, p < .001). This means that when people identify more with the group they belonged to during the experience, they also perceive more Personal Justice. Between Perceived Injustice and several other constructs interesting correlations occurred, on Personal Identification an weak, negative correlation (r(245) = -.27, p < .001). This means that, when people experience more perceived injustice, they experience less personal justice. There is a positive, weak correlation between Symbolic Threat and judging about the Truth of the Propaganda (r(245) = .33, p < .001). This means that, when people feel more Symbolic Threat, they believe more in the propaganda of IS. On Personal Injustice there was an weak, positive correlation with Symbolic Threat (r(245) = .29, p < .001). So, when people experience more Symbolic Threat, they also experience more Perceived Injustice, more Personal Injustice and they identify more with IS.

Discussion

This study attempted to gain more insights in how to create resilience against the influence of the online propaganda of IS. An experiment with four conditions was conducted were students analysed and discussed in different ways propaganda. It was expected that trough the combination of critical analysis and group discussion the negative effects of the propaganda on the students would reduce more than with a combination of non-critical analysis and individual-discussion.
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Reducing the influence of online propaganda

Results show that the students’ perceived symbolic threat after viewing the propaganda reduces more when the propaganda is discussed in a small group, than when students reflect individual. Unfortunately, feelings of perceived injustice, and in-group identification, are not reduced following some form of discussion. Results in this study show that there is no reason to panic, when the symbolic threat of the students is reduced, the specific effects of creating feelings of perceived injustice and in-group identification with IS on students also reduce.

When it is important to gain more knowledge about the material of the propaganda, and more knowledge about the truth of the propaganda, it is better for students to discuss the issues in a small group without a form of analysis, or analyse on a critical manner without a form of discussion respectively. These facts demonstrate that the experiment worked; students saw, following the critical analysis, that many ‘facts’ are not correctly represented, and they obtained more knowledge about the propaganda. The same applies to the group discussion. This means that, following group discussion, students knew more about the propaganda and understood that most of the propaganda does not represent an accurate picture of the reality.

When it is important to create more resilience against the ‘spear points’ of IS, it is effective to reduce the perceived symbolic threat by the use of group discussion, because in that case students believe less in the truth of the propaganda, experience less perceived injustice, less personal injustice, more perceived justice and identify less with IS. Therefore, there could be a connection between reduced symbolic threat, more knowledge about the propaganda and a better comprehension of the facts and lies of the propaganda. These results correspond with the Terror Management Theory of Hofstede (2001) and the Integrated Threat Theory of Stephan et al. (2002), when there is more factual knowledge and greater focus on the available information, the symbolic threat is reduced. And when students perceive less threat, they identify less with IS and do not feel the need to use violence to counter any perceived injustice. There is, unfortunately, little evidence for this relationship. In future research, it would be interesting to find more evidence for this conjecture.
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A contrasting finding was the interaction between analysis and discussion regarding gaining more knowledge of the propaganda. To obtain only more knowledge about the propaganda only, results show that discussion in a small group, following analysis on a critical manner, worked best. Boundaries to speak and share become vaguer and level of shared and included information becomes higher. It is possible that, after a critical analysis, in which students go through several stages of processing (Mason, 2007; MacKnight, 2000), one cannot discuss the results of the analysis individually. There is a need to discuss with other students to learn their opinions and insights. In this way, group members carry the pedagogic role of modelling, coaching, questioning, reflection and task structuring (Paul, 1990; Barab & Duffy, 2000). In future research, it would be interesting to find more evidence for this expected relationship.

Outdated propaganda technique

From the literature, it was not expected that symbolic threat would be most reduced following non-critical analysis, and no positive effects were found for reducing in-group identification nor perceived injustice via forms of analysis. Furthermore, critical analysis had no effect on increasing the NFO of students. This means that the analysing technique used in this experiment did not work.

One possible explanation is that the technique used to analyse the incoming propaganda was too old to create resilience against the modern, online propaganda (Severin & Tanker, 2001). The analysing method was originally developed by the Institute for Propaganda Analysis (IPA) , to analyse propaganda in the Second World War. The method had to contain understandable and recognisable aspects of all propaganda techniques. This makes the list very simplistic, and using it could lead to subjective analysis according to Jowett and O'Donnell (2006). However, there is still no alternative to this list, and, to this day, the model is still widely used in propaganda research (Fox, 2004; Jowett, Garth & O'Donnell, 2006). Therefore, it is possible that the development of the propaganda of IS has moved beyond the IPA model. An estimation of Roth, Greenburg and Wille (2004) shows that the income of IS is approximately $3B per annum. And it is estimated that between $15M and $30M are spent every year on propaganda, according to McCormick and Giodano (2007).
When students experienced more perceived injustice after viewing the propaganda, they identified more with IS, perceived greater personal injustice and less personal justice feelings. It seems that the younger generation cannot understand the world in all its complexity, and do not feel the urge to do so. And as elaborated by Taylor’s speech (2003), this type of persuasive material is a disease that somehow afflicts our individual and collective capacity to make up our own minds about what is happening in the world around us. After watching the documentary, needs are fulfilled, and the students do not explore further (Siekelinck, 2009; Blenker, 2008), their NFO is fulfilled at that moment. They have an answer, and their ‘quick goals’ are already satisfied (Ford & Tamir, 2012; Tamir, 2009; Tamir et al., 2008). Along with the researcher, Payne (2001) and Finnemore (1996) think that this view is true because the expectation of students with more in-group identification with IS having more need for information is not confirmed. Concluding, it could be that the method of analysis is outdated and does not encourage the search for further information from multiple angels. This leads to the expectation that with a more modern method of analysis, better results could be achieved.

**In-group identification**

When students identified more with IS, they associated less with a multicultural society. Bearing this in mind, a weak, positive relationship between in-group identification with IS and the degree of equality/participation of foreigners was not expected. The first effect was not very surprising, considering the views of IS. In that case, students prefer an environment with a single nationality only, and want to be surrounded by people with the same vision as themselves. But, when students identify more with IS, they are more positive about the participation of foreigners in society. It is hard to explain this effect; all the literature expects the opposite (Goldenberg & van Zomeren, 2016). It could be that foreigners are regarded as part of the in-group, and not as multicultural and therefore part of the out-group. Participation could be a very strong factor in reducing racial prejudice against members of an out-group. During possible follow-up research, more emphasis on this fact could achieve positive effects in the changing attitudes of supporters of IS about the negative effects of a multicultural society.
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Limitations of the current study

This study had a few limitations. Not everyone understood the critical instruction, there were multiple questions of students about it. The instruction was, as much as possible, adapted to the level of the students. The students could ask questions at any time during the experiment, but it still transpired that this was a difficult instruction. It is possible that the way in which questions were asked, or the instruction itself, make a difference. All the questions in the questionnaire were all closed questions. It could, therefore, be effective to ask more open questions. In that case, the student has great freedom in answering the questions, and could answer creatively (Bender, 2003). It could also help, therefore, to offer students more substantive information about the context of the questions, but this is at the expense of external validity (Baarda & De Goede, 2014).

Another limitation is the limited number of items that we used to measure feelings regarding the truth of the propaganda. As often the case with field research, we were restricted in the number of questions we could put in our questionnaire. Students from the first grade, on average, are not used to filling in lengthy questionnaires with psychological questions. Nonetheless, we found theoretically consistent and meaningful results irrespective of the limitation.

There was a high drop-out rate of students after the questionnaire, 31 did not fully completed the questionnaire. The researcher tried several things to prevent this, an announcement letter and informed consent were sent to the students before the experiment, and the students could ask questions during the whole experiment. Becks (2008) says that when the researcher uses multiple ways of informing the respondent before and during the experiment, there is a higher response rate compared with offering no possibility to gain information. An incentive (reward) was not used, this can lead to a lower response rate (Groves et al., 2004). The questionnaire took about a quarter of an hour to complete. For some students, however, it lasted twenty minutes or more. There is, surprisingly, no significantly strong evidence for more dropouts as the questionnaire gets longer (de Leeuw et al., 2007; Galešic, 2005), although this would be a logical conclusion because that had been observed in other investigations (Becks, 2008).

Some questions were indirectly asked. For example, when the students had to think about the
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identification they felt with IS. This technique allows reduced social desirable answers (Cohen et al., 2001; Davis et al., 2001). The students were also asked how well they could imagine another person would identify with IS. This was done to avoid questions that would upset students (Chung & Monroe, 2003; Fukukawa, 2002). It may yet be that, for some questions, the difference between the social norm and the current situation in a subgroup or in the world is too large. The issues could threaten the respondents, meaning they have less tendency to cooperate. Thus, the possible disruptive influence of socially desirable answers on the results. It may, therefore, be a good idea to add a construct that measures the strength of the social desirability of the students (Nyaw & Ng, 1994). A commonly used scale is the Marlowe Crowne Social Desirability Scale (Erffmeyer et al., 1999). In many investigations, this type of scale has not been used, but its use is crucial to prevent the validity of the research being compromised (Vitell et al., 2001).

Suggestions for future research

Online propaganda of modern, extremist organisations focuses on the entire population of the world. Therefore, the approach in this experiment focusses on all nationalities and other demographic characteristics. No exceptions are made, because modern propaganda of IS does not discriminate when recruiting new members. It would be innovative, however, to discover if there are any major differences between the demographic characteristics of students and the strength of the influence of online propaganda (Nagata, 2014). There is much research on the influence of former recruiting methods used by terrorists, on demographic characteristics, but not on the (possible) influence of the new method on demographic characteristics, nor the additional risks (Galloway, 2016; Muller, Rosenthal & de Wijk, 2008). Moreover, in studies on influence of propaganda regarding threat there is often a difference between high and low educated respondents. It is suspected that students with a lower level of education are more receptive to the influence of propaganda (Hoek, 2007; IVO, 2008). But there are also studies that indicate that the demonstrated differences are very small when one looks at educational level or other personal characteristics (CBS, 2013; Kaplan and Haenlein, 2010). It would be interesting, therefore, to conduct the same research with a less educated group of students and not just with students at a college.
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It was assumed that a combination of critical analysis and group discussion would decrease the perceived injustice felt, this was not what happened, unfortunately. No hypothesis was formulated on this manner, but it appears that there is a negative relation between personal justice and perceived injustice. This means that, when students felt more personal justice, they felt less perceived injustice. According to Kleijwegt (2015) and Bahara (2014), happier and more confident students tend to be less receptive for the influence of propaganda. It could be, that, with more focus on increasing personal justice, an intervention with a combination of critical analyses and group discussion can be effectively used to decrease the perceived injustice felt. More research is needed to give a better, well substantiated answer on this suggestion.

Critical- or non-critical analysis did not reduce feelings of in-group identification with IS. It could be that reducing the influence of the propaganda by means of creating increased perceptions of mutual differences works, and it results in a better sense of what IS tries to accomplish, but it is also possible that this is an invalid statement of Stephan and Finlay (2000). The method of analysis needs to be critically discussed in (eventual) follow-up research, and it is still possible that the method of analysing is simply too old to have any effects. These allegations need to be examined in a larger experiment in order to be able to draw conclusions.

Conclusion

In some conditions, students gained more resilience against the propaganda of IS. In other conditions there were no effects, or the expected effects were not positive but negative in creating resilience against the propaganda. Separate applications of both discussion- and analysing forms are ideally suited for reducing separate objectives of IS, but sometimes a combination is suited. Students were most resilient against the online influence of propaganda, when the perceived, symbolic threat was reduced. Although the strategy of IS is too complex to reduce all its negative influences, the intervention could work very well when it is offered at different times and in different forms to reduce one or more threats of the propaganda of IS.
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Appendix 1: Conditions experiment

Table 3.

The four conditions

<table>
<thead>
<tr>
<th>Moment</th>
<th>Condition A (N = 68)</th>
<th>Condition B (N = 60)</th>
<th>Condition C (N = 69)</th>
<th>Condition D (N = 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Propaganda</td>
<td>Propaganda</td>
<td>Propaganda</td>
<td>Propaganda</td>
</tr>
<tr>
<td>2</td>
<td>Summary</td>
<td>Critical instruction</td>
<td>Critical instruction</td>
<td>Summary</td>
</tr>
<tr>
<td>3</td>
<td>Individual discussion</td>
<td>Individual discussion</td>
<td>Group discussion</td>
<td>Group discussion</td>
</tr>
<tr>
<td>4</td>
<td>Questionnaire</td>
<td>Questionnaire</td>
<td>Questionnaire</td>
<td>Questionnaire</td>
</tr>
</tbody>
</table>
Appendix 2: Request for participation

Creating resilience against the influence of the online propaganda mass-machine Islamic State (IS).

Abstract

By means of this research, I would like to firstly investigate the influence of online propaganda material of Islamic State research with students, once this has been mapped an intervention is converted to create more resistance against this influence. I think this research is relevant for all students of the Saxion.

Many teachers find it difficult to discuss controversial subjects in the classroom, according to research. That does not have to be the case, of course, for all teachers. In addition, it appears that many young adults, including me, think online news should be truthfully and that we do not verify this to other sources. Participation in this study may open the eyes and provide a more critical look at incoming news and propaganda material. The students also get more understanding of the situation, described from the point of view of Islamic State itself. In addition, the students work together with classmates in a positive way where they normally have little contact with it, this is good for the group cohesion. In totality, the survey takes approximately 50 minutes and 30 minutes are reserved for the classroom experiment. The questionnaire can be filled in online, on the laptop but also on their mobile.

During the experiment:

The students from a certain class are random divided into groups of three, a class of thirty students consists of ten groups. It is expected that this experiment will last about half an hour. The first group of students just makes the selection test and the test at the end of the experiment, this is the so-called control group. The second group was set up to test whether the constructs measured at the end of the experiment also change after an neutral, descriptive text of the situation. The exercise consists of a short summary of what critical thinking is and how to apply it. In the third group is touting material of IS discussed in a critical, analytical way. There is also a strong emphasis on empathising with each other's opinions and respect for each other's ideas. During our appointment I would like to tell you more about the exact procedure.
CREATING RESILIENCE AGAINST THE INFLUENCE OF THE ONLINE PROPAGANDA MASS-MACHINE IS

Questionnaire:
Immediately after the end of the experiment all groups are filling out the same questionnaire, this questionnaire will take between five and ten minutes. Part 1; short, demographic questionnaire. This part will take a minute or two. Part 2; In this questionnaire is among other things the information need, the threat level, the perceived injustice and the opinion about working in a multicultural cooperation tested. The researcher hopes that the scores on these constructs change in a positive manner by the experiment.

Hopefully you become interested after reading the above presentation. You can always email me for further questions or information on maxvelde@msn.com or call on 06-15950963.

Best regards,
Max van de Velde

(The original version (NL) can be obtained from the author).
Appendix 3: Informed consent

Dear student,

Thank you for your participation in this research and to the questionnaire. Within the Department of psychology of Conflict, Risk and Security at the University of Twente (PCRS) we are working on a study of the impact of the strategies of Islamic State (IS). After drawing the declaration you will first see a short video, there is not any shocking material processed in it. After that, you will analyse the images and texts in the video. To get more insight in the effect of the online method of Islamic State (IS), a questionnaire is developed. The questionnaire begins with some brief demographic questions, in the second part a number of constructs are queried. Before the experiment begins, we ask you to carefully read the following text and agree with participating in this research.

I hereby declare that I am clearly informed about the nature and method of research, as outlined in the introduction of the experiment. My questions are answered satisfactorily. I participate completely voluntary in this study. I reserve the right to withdraw this consent with the fact that I don’t have a reason to give up and I realize that I may stop the study at any time. The data obtained from this survey will be processed anonymously and therefore cannot be published on an individually identifiable way.

Also I can (within 24 hours after participation) withdraw my permission for using my answers and/or information for the assessment. My participation in this research brings no significant risks or discomforts, and there is no conscious deception. I know I will only be confronted with offensive material in the interest of this research. In addition I can, if I want to, purchase a research report in which the overall results of the research are explained (not later than 5 months after the end of the research. I do this by the end of the experiment by giving my email address to the researcher.

If I would like to get further information about the research, now or in the future, I can apply to Max van de Velde at m.j.h.vandevelde@student.utwente.nl. For any complaints about this survey I can apply to the Secretariat of the Committee on Ethics of the Faculty of behavioural sciences at the University of Twente, Alice Kale (Cubicus C-217, phone number 053-4893299), a.j.kragt@utwente.nl, PO box 217, 7500 AE Enschede).
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I am at least 18 years old and a student at Saxion University; I have read and understood the above described information and by continuing with this research I voluntarily agree with participation in this study. If I am not yet 18 years old than I disagree with participation, I leave the room and I am going to work on homework.

Have you read the statement and do you agree to participation in the research?

• Yes, I agree with participation in the research
• No, I do not agree with participation in the research

(The original version (NL) can be obtained from the author).
Appendix 4: Script experiment

Creating resilience against the online propaganda of Islamic State

Date/time: variable

Location: Saxion Hogeschool, Enschede

Materials:

- Whiteboard and markers
- Computer with Internet and the television screen
- Scratch paper
- Blank A-4
- Tables
- Chairs

Before starting with the experiment

Introduction experiment by teacher.

On (date), you have a slightly different interpretation of the les than usual. I would like to explicitly ask you to all be present for this lesson. The experiment takes about 45 minutes and consists of viewing propaganda (no shocking material), analysing the propaganda, a final questionnaire and a short conclusion. The first Power Point shows the parts that we go through during the training:

- 1. Introduction
- 2.1 Propaganda 1/2/3
- 2.2 Depending on condition summary writing/critical instruction
- 3. Depending on condition individual/group discussion
- 4. Final part questionnaire
- 5. Short closing
- 6. General feedback
1. Start/rules (5 minutes)

Welcome, my name is Max van de Velde and currently I am in the final stages of the Conflict, Risk and Safety master at the University of Twente. Today I want to look with you at the impact that propaganda of the radical group Islamic State could have on students. Before we begin, I would like to indicate that it is not my intention to offend anyone by showing these fragments. Islamic State focuses on all nationalities when recruiting students and not specifically on one. Please do not feel personally addressed, that is not the intention. The video material that is showed conducts no beheadings and no absolute violence. On the PowerPoint behind me can you watch today's program. After this brief introduction tell about today's program. Do you guys have any questions? Then I want to ask you to open the first link that was sent to you to and read. When you are agree, then you can sign the consent form. Thanks for signing the consent form. Now we can start with showing the propaganda.

2. Propaganda-movie (10 minutes)

I'm going to show you now three fragments of Islamic State. These fragments are stuck together, so that the individual clips form one video. Watch and listen carefully and then you may get started with the following command. Please pay attention, because the movie is shown only one time.

3. Critical analysis/summary writing (10 minutes)

Condition A and D:
You have just seen propaganda of Islamic State. What do you guys think that the shown material means? Details? And give examples. So write a short summary. Do this without consulting with each other. Do you understand what the command is?

Condition B and C:
As you can see behind me, propaganda is analysed according to a fixed points system. This system was conceived in the time of the Nazi propaganda and today still up to date. The list consists of seven propaganda techniques:

- Name Calling: indicating an idea or a person with a word that has a negative charge, without proof.
- Glittering Generality: indicating an idea or a person with a word that has a positive charge, without
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proof.

- Transfer: transferring the (dis)respect or authority of something or someone on something or someone else, so the last will be accepted or rejected in the same way.

- Testimonial: a respected or hated person says something good or evil about something or someone.

- Plain Folks: an idea is presented as ‘the idea of the students’, the concept of the ordinary person. This suggests that something is normal or just.

- Bandwagon: mentioning that everyone participates, assuming that students are ’herd animals’ and like to join the group.

- Card Stacking: a selective presentation of facts or falsehoods to give a false image of something or someone in a negative or positive way.

Are there questions about these points? It is important that you understand these points. Then I want to ask you now to read these points carefully and wonder at any point if you have recognized something during the propaganda. Then write for each point a summary in short key words:

6W's + 1 h

- Who is doing it?
- What is being done?
- Where has it been implemented?
- When it is executed?
- Which parts of their purpose are essential?
- Why is this done and why this way?
- How is it done?

And give examples from the movie please. This is more commonly used to unravel complex stories or items, it helps to get to the core of the problem. Good luck!

3.4 Discussion (15 minutes)

Group A and B:

Think about what you have just seen and what you have written down. Why can you imagine or cannot
CREATING RESILIENCE AGAINST THE INFLUENCE OF THE ONLINE PROPAGANDA MASS-MACHINE IS

imagine that this propaganda works? Please provide examples. Do this individually and please without consulting with each other. When you are ready please wait and do not disturb the other students.

**Condition C and D:**

it is important to create a climate in the classroom in which everyone feels free to give his/her opinion. This rules apply during the discussion (sheet).

**Rules**

- Only give statements about persons, themes and groups when the statement is given respectfully
- Think and re-think before you say something, so you avoid emotional or inflammable language
- Support the things you say with evidence. That evidence can be based on own experience or research.
- Make the distinction between personal experiences on the one hand and personal impressions, generalizations or prejudice on the other
- Do not interrupt each other
- Demonstrate your respect (in words and body language) for what the other person is saying and thinking
- Use normal language, no racist or sexist comments
- Other opinions is not condescending or joked about
- What is said in the group, stays in the group
- Make sure everyone can say what they want

**Time Out.** When a discussion seems to get out of hand, it is important to have a clear procedure to follow. Feels a member of the group the discussion no longer pleasant and is he/she not at ease than is it possible to have a Time Out, each group member has veto power. You can then take a minute to think and then each group member individually can reflect on the situation and think about why the discussion overheated. After this the group members pursue their ideas to the discussion and share these with each other. Does everyone understood this?

You discuss within the groups to which you are classified. You are to discuss the clips and then on what you guys have seen. Each student talks about his own conclusion and the other group members can
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respond to it. The members look at the similarities and contrasts between the different conclusions. Please ensure that you give examples. Do your separate analyses match or not? Which not and why not? Five minutes per student. After five minutes I ask you to finalize and then shares a member his conclusion, then again reactions of group members.

3.5 **Filling out the questionnaire (5-10 min)**

Short instruction in advance. In this questionnaire are questions that ask for your opinion. You cannot make mistakes, it is your own opinion or feeling. But it is important that you fill out the questions truthfully. Fill out the questions individually, because it is about what you think. It is important that you fill out all the questions. Thank you very much in advance and good luck with the questionnaire!

3.6 **Short debriefing (< 5 min)**

Today we viewed and discussed some material that can evoke strong opinions and feelings, I am wondering how you have experienced it. What did you thought of the research? What did you find pleasant and what less pleasant? Did you understood everything in the propaganda fragment? Thanks for your presence and commitment. The persons who have indicated that they would like to receive the research, I will send it to you after it is completed.

(The original version (NL) can be obtained from the author).
Appendix 5: Information about the constructs

Table 2.

Characteristics constructs

<table>
<thead>
<tr>
<th>Number</th>
<th>Construct</th>
<th>M</th>
<th>SD</th>
<th>Cronbach’s α</th>
<th>Items</th>
<th>Items excluded</th>
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<td>NFO</td>
<td>3.36</td>
<td>1.32</td>
<td>.84</td>
<td>3</td>
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<td>2</td>
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<td>1.17</td>
<td>.85</td>
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<td>3</td>
<td>Personal Identification</td>
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<td>.94</td>
<td>.90</td>
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<td>4</td>
<td>Symbolic Threat</td>
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<td>1.26</td>
<td>.86</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Group ID during test</td>
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<td>.61</td>
<td>3</td>
<td>2</td>
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<td>6</td>
<td>Personal Justice</td>
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<tr>
<td>7</td>
<td>Personal Injustice</td>
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<td>1.00</td>
<td>.85</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>In-group Identification with IS</td>
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<td>.91</td>
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<td>Opinion Handling</td>
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