Master thesis

The effects of L2, L1 dubbing and L1 subtitling on the effectiveness of persuasive fictional narratives.

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Abstract

Visual narratives are presented in a wide variety of languages, often in a viewers’ nonnative language. Sometimes translation methods are applied, of which dubbing and subtitling are the most prominent. The purpose of this study was to assess if language had an effect on the levels of identification, transportation, narrative understanding, flow, and enjoyment among children in the age of 11-13. These variables taken together form narrative persuasion. Language, in this study, has been operationalized as nonnative English (L2), native Dutch (L1), and nonnative English with Dutch subtitles (L2 with L1 subtitles). A total of 120 8th grade schoolchildren from different primary schools participated in this study. The material consisted of the Disney movie Aladdin (1993), of which the original English soundtrack, the original Dutch voice-over, and the original Dutch subtitles were used. The results of this study demonstrate that language (translation method) influences the levels of identification, transportation, narrative understanding, flow, and enjoyment among children. Overall, the Dutch subtitled version ensured the highest levels of narrative persuasion.
**Introduction**

A large number of visual narratives in Europe originate from foreign countries. Consequently, the original language of these narratives is in most cases a second language for their viewers. In Europe, therefore, translation methods are applied in order to show the material in the viewers’ native language. In countries such as France, Germany, Italy and Spain dubbing is used most frequently as a translation method (Wissmath, Weibel & Groner, 2009). In this case the original soundtrack is replaced with a translated voice-over in the audience’s first language (L1). The most common translation method in the Netherlands is subtitling, where the second language remains present while a translated text is shown on the screen. However, when addressing children and adolescents in the Netherlands instead of adults, dubbing is more conventional.

Not only television programs are translated (dubbed) in the Netherlands, but also many movies. Every one of these movies contains a narrative including characters, plots and events which can evoke cognitive and affective reactions (Bilandzic & Busselle, 2011). With the narratives in these movies, often children’s movies, an attempt is made to convey a certain set of morals and values. How and if these morals and values are transferred onto the viewer depend on a wide-ranging set of aspects. These aspects combined affect narrative persuasion, including emotional response. Puntoni, de Langhe and van Osselaer (2009) found that in consumer research emotional responses are more easily transferred when presented in the viewer’s native language as opposed to a foreign language. Language, in the present study operationalized as translation method (dubbing vs. subtitling), can thus influence the viewer’s experience of a narrative. When watching a subtitled (translated) visual narrative the viewer is required to process information coming from three different sources: the visual image, the native language subtitles and the soundtrack of the original language (Perego, del Missier, Porta and Mosconi, 2010). This processing is considered to be rather taxing and might affect narrative persuasion.

The fact that narratives are able to change people’s beliefs, opinions and attitudes has been demonstrated by numerous studies (Appel & Richter, 2007; Beentjes, de Graaf, Hoeken & Sanders, 2009; Green, 2006). To date however, the effects of language on narrative persuasion have not yet been clarified. This study will address this gap and focuses on different yet interrelated aspects of narrative persuasion. It explores how the effectiveness of visual narratives is affected by language and if these narratives are experienced differently by children when presented in their first or second language, or with the use of subtitles.
Narrative persuasion

Narrative persuasion is not a new concept and the power of narratives has been known for a long time. Narrative persuasion has been studied in combination with transportation theory (Green & Brock, 2000; Green, 2006), identification (de Graaf, Hoeken, Sanders & Beentjes, 2012; Igartua, 2010), narrative engagement (Bussele & Bilandzic, 2009) and other concepts. Before these concepts are discussed, it is necessary to create a better understanding of what encompasses narrative persuasion. Beentjes et al. (2009) state that “narrative persuasion […] refers to the acceptance of attitudes and beliefs as a result of processing stories that are not overtly persuasive, such as novels, movies, and soap operas” (p. 246). Narrative persuasion, in this sense, is different from overtly persuasive narratives such as advertisements and health campaigns for example. An important distinction that Beentjes et al. (2009) make is the role of involvement. In the case of overtly persuasive narratives, or rhetorical persuasion, a viewer will be involved if the message has personally relevant consequences. Although this kind of involvement should be low in entertaining narratives because of fictional elements, entertaining narratives ensure a far greater engrossment among its viewers (Slater, 2002). This engrossment is closely linked to one of the important aspects of narrative persuasion, namely transportation. Other aspects that are seen as influential in narratives which occur in movies and novels are identification, narrative understanding, flow, and enjoyment. Within the area of narrative persuasion these aspects often are interlinked. Besides the influence of the aspects on each other, language might also influence their overall effectiveness. The following paragraphs will discuss how each aspect functions and how it is connected with language.

Identification

A narrative needs characters, and in persuasive narratives these characters represent values and beliefs with which individuals may identify themselves. Identification in this sense is closely linked to transportation. When a person is transported into a narrative, they are more closely attached to the protagonists. Moyer-Gusé (2008), however, stated that identification goes beyond involvement with the narrative itself, while at the same time sharing overlap with transportation. She defines identification as an “emotional and cognitive process whereby the viewer takes on the role of a character in a narrative (Moyer-Gusé, 2008, p. 410). Identification is believed to be one of the tools through which narratives can change people’s beliefs. De Graaf et al. (2012) showed that identification can both reinforce and weaken attitudes. Identification with a character can make existing attitudes towards certain topics stronger. To understand a narrative, it is often essential for people to identify themselves with the viewpoint of a character. Certain motives and emotions are formed when individuals immerse themselves into a narrative. The nature of these motives and emotions depend on the specific perspective of a character, and in the way this character is portrayed. Identification represents a shift from the actual to a fictional world that is similar to transportation (Bilandzic &
However, transportation is a more holistic experience while identification describes assuming a point of view of a character. Levels of identification might decrease when the character’s visual representation does not match the audio. This is what happens when dubbing is used as translation method. Visual and auditory aspects are not synchronized in dubbed content, which may impair both transportation and identification. Furthermore, first language subtitles distract a viewer from the second language visual narrative and thus may influence levels of identification. An experiment by De Graaf et al. (2012) showed that identification with a character made attitudes that were already negative even more negative. This result shows that identification with a character can make existing attitudes stronger. Thus when a viewer shares certain attitudes with the character, identification is increased. But before this form of narrative persuasion is established, identification needs to be realized. This can be accomplished when a viewer adopts the goals of a character and experiences the emotions from the viewpoint of the character. In order for this to happen, events in the narrative must mirror real-life experiences (Bilandzic & Busselle, 2011). It only seems logical that the same holds for the language of the narrative. If the narrative is shown in a language (or translation method) which reflects the language that the viewer is accustomed to, identification increases (Wissmath et al., 2009).

Transportation

Entertaining narratives have been claimed to effectuate some form of engrossment (Slater, 2002). Engrossment, here, can be understood as the immersion into a story and is closely linked to transportation theory. Green and Brock (2000) conceptualize this transportation theory as a mental process, where the viewer is absorbed into the narrative. There are many ways in which people can be affected by a narrative. One of these is by transporting themselves to the narrative world and back. When individuals are transported into a narrative world, they may show effects of this story on their ‘real-world’ beliefs (Green & Brock, 2000). Transportation may occur in any type of narrative structure, both written and visual. Furthermore, transportation in a story causes people to be less motivated to form counterarguments. When transported, it takes effort to reject statements present in the narrative. Due to the fact that narratives are often presented as entertainment, they invoke fewer triggers for critical thinking (Green & Brock, 2000).

Transportation is seen as a critical factor in narrative persuasion context (Beentjes et al., 2009; Green & Brock, 2000; Wissmath et al., 2009). Transportation is in most cases linked to other factors such as identification. Transportation may ensure a greater liking of protagonists, because besides entering the narrative world, viewers might also become highly involved with the people they find there (Green & Brock, 2000). One of the experiments by Green and Brock (2000) showed that transportation is also linked to story-consistent beliefs. “Highly transported participants showed beliefs more consonant with story conclusions as well as more positive evaluations of the story protagonists” (Green & Brock, 2000, p. 707). Thus when a viewer is transported into a narrative, story-consistent
beliefs are more easily adopted, which also holds for identification. Furthermore, Green (2006) mentions that transportation is psychologically similar to flow and transportation contributes to media enjoyment.

Language is expected to influence the level of transportation, mostly due to distractive elements such as subtitle reading or nonnative language processing. People watch narratives effortlessly in their native language, in contrast to nonnative language narratives. Furthermore, comprehension of certain statements present in a narrative necessarily entails the initial acceptance of these statements (Appel & Richter, 2007). Thus, without comprehension certain beliefs that are present in the narrative may not be accepted by the viewer. Comprehension is linked to the viewer’s proficiency in a certain language, and it is expected that viewing a narrative in a nonnative language will therefore negatively influence levels of transportation.

Flow

Transportation is often compared to the concept of flow. When the process of transportation goes smoothly, and people do not think about their ‘real’ world, then flow is effectuated. “Flow is regarded as a complete focus on an activity accompanied by a loss of conscious awareness of oneself and one’s surroundings” (Busselle & Bilandzic, 2009, p. 324). Flow, as well as transportation, is threatened by distractive elements such as unsynchronized lip-syncing in dubbed content. The original flow of a story can hardly be reproduced by means of translating. Subtitling, as a translation method, adds written content to a narrative. When watching subtitled content, the viewer not only needs to listen to the audio and look at the visuals, but is required to read subtitles at the same time. To perceive flow in a narrative, complete focus and concentration is required (Wissmath et al., 2009). Familiarity with the translation method however, mediates the negative effects of translating on flow. When a viewer is used to subtitled or dubbed content, it is likely that less distraction will be effectuated. Thus, flow may be linked to the familiarity of the language (or translation method) that is present in the narrative.

Narrative understanding

Bilandzic and Busselle (2011) argued that identification is a prerequisite for understanding the narrative. Narrative understanding, the level of comprehension of the story, is correlated to both transportation and enjoyment (Busselle & Bilandzic, 2009). When a viewer comprehends or understands a narrative, it is expected that identification, transportation and enjoyment increase. Thus, narrative understanding influences factors of narrative persuasion. Narrative understanding may be affected by factors such as language (Hornikx, van Meurs & de Boer, 2010) or distraction (Busselle & Bilandzic, 2009). When a narrative is presented in a nonnative language the level of narrative understanding may be affected due to lack of proficiency. Distraction, in its turn, can be seen as the presence of thoughts that are unrelated to the narrative. If mental resources shift away from comprehension, narrative understanding suffers. Any process unrelated to the narrative may have this
effect (Busselle & Bilandzic, 2009). Nonnative language processing can be seen as a distractive element which may not only harm narrative understanding, but transportation, identification and enjoyment as well.

**Enjoyment**

Bilandzic and Busselle (2011) studied the relationship between narrative experiences including transportation, identification, and film enjoyment. In their study, transportation positively influenced the enjoyment of the film. The more a viewer is ‘disconnected’ from the real world and immersed in the narrative world, an increase in enjoyment is evident. Enjoyment sometimes is described as appreciation, and is also connected to language. In a study by Hornikx et al. (2010), levels of appreciation of advertising slogans were affected by language. They made a distinction between easy and difficult slogans and concluded that comprehension positively affects appreciation (Hornikx et al., 2010). Dubbed content may therefore be perceived as more enjoyable, compared to nonnative language content. Bilandzic and Busselle (2011) link enjoyment with escaping from the real world into the narrative world. When viewers disconnect themselves from the real-world and escape into the film, they may forget about negative events or existing fears. This in turn increases levels of enjoyment and is interlinked with transportation and identification. When narratives are easy to understand, enjoyment is increased. Second language narratives are per definition more difficult to understand, which therefore may negatively influence levels of enjoyment.

**Language effects: Dubbing or subtitling?**

Foreign movies and television programs are translated in different ways depending on national preference. The two most common translation methods are dubbing and subtitling (Kilborn, 1993). Dubbing involves replacing all of the original sound track with speech and dialogue in the target language. In the case of subtitling, the sound track is preserved but a written text is added to keep the viewer informed about what is being said in the narrative. Both translation methods have received its fair share of criticism. Dubbing damages the original material and poses many problems in lip-synchronization. Subtitling, on the other hand, draws the viewers’ attention away from the visual action (Kilborn, 1993). The set of countries that use dubbing most frequently have already been mentioned. Besides The Netherlands, subtitling is most popular in Belgium, Denmark, Finland, Luxemburg, Portugal and Sweden (Wissmath, Weibel & Groner, 2009). Although Wissmath et al. (2009) found no significant differences between the translation methods (dubbing and subtitling), they seem to be the only ones who have investigated this topic in relation to transportation, flow and enjoyment. Their study was carried out in Switzerland (official language: German) and three different professionally produced movies were used as stimuli. However, they did not compare the effects of the translation methods to the original foreign language material but only investigated the effects of dubbing and subtitling. In contrast to Wissmath et al. (2009), this study will focus on children, who are
less proficient in English than adults. Because they are less proficient, increased effects of language on narrative persuasion may arise. A Swedish study by von Feilitzen, Filipson and Schyller (1979), which was conducted with 7-11-year-old children, showed that dubbed television content is easier to understand than subtitled television content. However, processing subtitled content is generally more cognitively taxing for older adults than it is for young-adults or children (Perego et al., 2014).

**Language and narrative persuasion**

Although there has not been previous research investigating the relationship between language and narrative persuasion, language is expected to have effects on the different aspects of narrative persuasion. Clearly people understand more in their first language than they do in a second language. Green and Brock (2000) state that transportation is “a convergent process where all mental systems and capacities become focused on events occurring in the narrative” (p. 701). This means that no distraction may occur due to the processing of a second language or any other disturbing factor, such as unsynchronized lip-syncing or subtitles. Puntoni (2009) also mentions that in the case of advertisements, it is generally preferable to communicate with people in their own language. When people communicate in their native language, this should trigger more emotional responses. Emotional involvement, which is linked to identification, is enhanced when a message is processed in people’s native language (Puntoni, 2009).

Because all of the concepts discussed above are in fact interlinked, they should not be investigated separately. In the present study identification, transportation, flow, narrative understanding, and enjoyment will be measured in combination with entertaining visual narratives. The possible effects of language on these concepts are central in this study, which results in the following research questions:

**RQ1**  How is narrative persuasion affected by language (L2, L1 dubbing or L1 subtitling) when focusing on the perception of entertaining visual narratives viewed by children?

- In what way does language (dubbing and subtitling), as opposed to the original soundtrack, affect the levels of transportation, flow, identification, narrative understanding, enjoyment, and story-consistent beliefs?

**RQ2**  To what extent do narrative understanding, English proficiency and familiarity with the translation method/language predict the other variables entered in the model?

- How does narrative understanding influence the scores of the story-consistent beliefs, identification, transportation, flow, and enjoyment?
- How does English proficiency influence the scores of the story-consistent beliefs, identification, transportation, narrative understanding, flow, and enjoyment?
How does familiarity with the translation method/language influence the scores of the story-consistent beliefs, identification, transportation, narrative understanding, flow, and enjoyment?

Relevance of this study

Although there is some literature directed at the effects of translation method on narrative persuasion (Wissmath et al., 2009; Perego et al., 2014), it is still unclear what these effects are when addressing children, aged around 12 years. Children may react differently to translated or second language entertaining visual narratives than adults do, mainly because they are less experienced in subtitle reading and less proficient in English. Furthermore, it is still unclear what the difference in narrative persuasion will be when comparing the translation methods with the original soundtrack. Narrative understanding is added to this research because it is an important aspect when addressing children with second language material, due to their lack of English proficiency.

A large number of children’s television programs in The Netherlands and in other European countries are dubbed instead of subtitled, and an increasing number of people, including children, watch the original content online in the original language (English). The results of this study could thus be of great importance to television networks who need to select a most effective way of broadcasting their material. The results of this study will show which material (dubbed, subtitled or the original soundtrack) will be most persuasive. Additionally, it can be useful for the producers of the material, because the results of this study might indicate that a certain broadcasting method has a better impact on the target audience than the other.
**Method**

**Materials**

Three different versions of an approximately seven-minute long fragment of the Disney movie Aladdin (1992) were manipulated for this study. Aladdin is an animated movie directed by Ron Clements and John Musker, starring Scott Weinger, Robin Williams and Linda Larkin amongst others (http://www.imdb.com/title/tt0103639/). Because of the fact that this film is animated and the actors only have to voice-over the audio, any lip-syncing problems were avoided in the translated versions. In choosing the film, an attempt was made to find material that was unknown to children born after the 2000's, yet not so old-fashioned that differences in contemporary style of feature films were apparent, as seen in Bilandzic and Busselle (2011). The seven-minute long fragment was extracted from the film because this section contained strong beliefs and values about real-life topics such as friendship, freedom and thievery. Additionally, there are a lot of spoken words in this part of the film which facilitates the analysis of language differences. For an overview of the script for all three versions (English, Dutch subtitles and Dutch voice-over) see Appendix A. To enhance the possibility of identification, the protagonists (Aladdin and princess Jasmine) are central in this fragment of the film.

Two of the versions contain the original English soundtrack, and one of these also contains Dutch subtitles. A third version of the fragment is dubbed in Dutch. The translated versions of the fragment used in this study, both the dubbed and the subtitled version, were made by professional voice-actors for the video and later for the DVD release. The original content, both English and Dutch, was used because the voice-actors are able to mimic the characters present in the fragment in the most professional way. This also ensures that the translations are in line with Dutch standards (Perego et al., 2014). The visual material was consistent across all versions, only the audio was manipulated.

**Subjects**

A total of 120 children from the Netherlands participated in this study. The mean age of the participants was 12 (SD = 0.63, range 11 to 13). Of the 120 participants 47% (56) was male, and 53% (64) was female. All of the participants were children in their 8th grade of primary school and have followed English language classes since 7th grade. All 120 participants declared that their nationality was Dutch and all of the participants indicated that Dutch was their native language.

A series of tests were conducted to establish if the experimental groups are in fact comparable. In order to see if the division of gender was equal across the four experimental groups, a Chi² test was conducted. The Chi-square test showed a significant relation between gender and experimental group ($\chi^2(3) = 14.73, p < .001$). This means that men and women are unequally divided across the four versions of the experiment. Table 1 shows the division of gender across the experimental groups.
Table 1. Division of gender across the four experimental groups.

<table>
<thead>
<tr>
<th>Experimental group</th>
<th>Dutch</th>
<th>English</th>
<th>Dutch sub</th>
<th>No Film</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geslacht Man</td>
<td>17</td>
<td>16</td>
<td>18</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Woman</td>
<td>13</td>
<td>14</td>
<td>12</td>
<td>25</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

To check whether the participants had already seen the material prior to the experiment a ‘yes’ or ‘no’ question was added, assessing their familiarity with the material. Two of the participants left this question unanswered, but of the remaining 88 participants 47% (41) had previously seen the material and 53% (47) had not seen the material prior to the experiment. A Chi-square test between experimental group and familiarity with the material, excluding the control group, was conducted and was not significant ($\chi^2(2) = .80, p = .669$). There is no significant relation between experimental group and familiarity. A One-Way ANOVA showed no significant difference in age across the four experimental groups ($F(3, 119) = 2.01, p = .116$).

The participants were asked to self-assess their English language skills (overall skill, reading, writing, talking, listening). A reliability analysis showed that the different scales for English language skills ($\alpha = .86$) were reliable. Therefore, composite means were calculated for English language skills. A One-Way ANOVA showed no significant difference in English proficiency across the experimental groups ($F(2, 89) < 1$), excluding the control group who did not need to self-assess their English proficiency. Also, participants were asked to clarify how often they watch subtitled content with English audio, Dutch dubbed content, and English content. A One-Way ANOVA showed a slightly significant difference among the experimental groups in the viewing frequency of English content ($F(2, 89) = 3.85, p = .025$). According to a post-hoc test (Bonferroni), the English content group ($M = 2.30, SD = 1.02$) more frequently viewed English content than the Dutch subtitled group ($M = 1.67, SD = 0.66$) (Bonferroni correction, $p < .050$). The Dutch and the Dutch subtitled experimental group did not differ significantly from each other in the viewing frequency of English content. No significant difference was found among the experimental groups in the viewing frequency of subtitled content with English audio ($F(2, 89) = 1.87, p = .160$) or the viewing frequency of Dutch dubbed content ($F(2, 89) < 1$).

**Design**

In order to gain insight into the effects of language and translation method on narrative persuasion a between-subjects design was used in this study. Participants evaluated either an English spoken narrative, a Dutch spoken narrative or an English spoken narrative with Dutch subtitles. A control group was added which only answered questions about story consistent beliefs without seeing the fragment.
Instruments

In the present study three identical questionnaires were distributed across the three experimental groups who saw the video fragment (subtitled content with English audio, Dutch dubbed content, and English content). This questionnaire can be found in Appendix B. The control group received a different questionnaire, omitting questions about the video (See Appendix C). The control group was required to answer questions about story-consistent beliefs only. The questionnaires for the children who saw the video fragment measured different variables. These variables (identification, transportation, narrative understanding, enjoyment, and flow) were measured with multiple items. Composite means were calculated if the multiple items were considered reliable ($\alpha > .70$). Due to the fact that children around the age of 12 participated in this study, the items to measure the variables were simplified and shortened in order to be understandable for the participants.

Story-consistent beliefs

The questionnaire began by measuring story-consistent beliefs, with a 3-item scale developed by the researcher. The first item measured the participants’ value of freedom, the second item the value of friendship, and the third item measured the participants’ opinion about stealing. The items were constructed on a 5-point Likert scale, ranging from ‘completely disagree’ to ‘completely agree’. The items were as follows: ‘Freedom is important to me’, ‘Friendship is important to me’, and ‘Thievery is wrong’. Reliability was not calculated, because the items were assessed separately.

Identification

The scale used in this study to measure identification was derived from De Graaf et al. (2012), and contains four items. The translated items were derived from van den Berg (2015) and were simplified to be understandable when addressing children. The items were 5-point Likert scales ranging from ‘completely disagree’ to ‘completely agree’. The participants answered the same set of questions twice, once for the main character ‘Aladdin’ and once for the other protagonist ‘princess Jasmine’. The items were as follows: ‘I sympathized with the boy/girl’, ‘While watching I felt sad when the boy/girl felt sad’, ‘In my mind, it was as if I was the boy/girl’ or ‘I had the feeling as if I was experiencing what the boy was experiencing’. The reliability analysis showed that the four items were reliable for the ‘identification’ with Aladdin ($\alpha = .80$), and the identification with Jasmine ($\alpha = .89$).

Transportation

Four 5-point Likert scales ranging from ‘completely disagree’ to ‘completely agree’ were used in this study to measure transportation. The items used to measure transportation were derived from Green and Brock (2000), though only four items were used in the present study instead of 10. The items were as follows: ‘I wanted to know how the story ended’, ‘While watching, I was thinking about the story in my head’, ‘While I was watching I did not think about what happened around me’, and ‘I noticed I
was thinking about other things while watching the video’ (recoded). The reliability for the items that encompass ‘transportation’ was good ($\alpha = .71$).

**Narrative understanding**

Narrative understanding was measured by using an adapted 4-item scale derived from van den Berg (2015), using a 5-point Likert scale ranging from ‘completely disagree’ to ‘completely agree’. The items were as follows: ‘It was easy for me to follow the events that occurred’, ‘I found it hard to keep my attention to the story’ (recoded), ‘The story was logical and understandable’, and ‘At certain moments, it was not completely clear why something happened’ (recoded). The reliability of ‘narrative understanding’ comprising four items was good ($\alpha = .72$).

**Enjoyment**

Enjoyment was measured by using an adapted 1-item scale on a 5-point Likert scale, derived from Wissmath et al. (2009), ranging from ‘not at all’ to ‘very much’. This variable was measured with one item: ‘How much did you enjoy the story?’. Because this variable was measured on a 1-item scale, reliability was not calculated.

**Flow**

Flow was measured by using an adapted 3-item scale on a 5-point Likert scale, derived from Busselle and Bilandzic (2009), ranging from ‘completely disagree’ to ‘completely agree’. The items were as follows: ‘I found it hard to keep my thoughts with the story’, ‘While watching I noticed my thoughts were wandering’, and ‘While the video was playing, I noticed I was thinking about other things’. The reliability for the items that encompass ‘flow’ was good ($\alpha = .77$).

**Familiarity**

To gain insight into the familiarity of the material a 1-item scale was made: ‘Have you seen this movie before?’. The question had a ‘yes’ or ‘no’ option, and because the item consists out of only one question, reliability was not calculated.

**Procedure**

In order to find participants who were in their 8th grade of primary school, the first step was to make contact with primary schools. Firstly, the researcher’s primary school was contacted by telephone. After explaining what the study entailed and checking if there was any interest from the school to participate, further information was mailed to the primary school. A date was chosen to perform the experiment, but before the children could participate a permission form was distributed to the parents of the children. This was a passive permission form, which ensured less delay because the parents only had to take action if they did not want their child to participate.

It was convenient for both the researcher and the participants to fill in the questionnaire digitally on a tablet. However, it seemed rather complicated to send the questionnaire to the individual
tablets without a public platform. This meant that the first experiment session took a while longer than expected. The first experimental group consisted of 28 children. After explaining what the experiment looked like, the video fragment was played on a big screen with audio. When the fragment ended, the children were allowed to start filling in the questionnaire. This first experimental session lasted about 45 minutes from beginning to end. The children and teacher were thanked at the end of the experiment and candy was handed out.

The second and third school were approached with the help of a family member, who sometimes taught at both schools. Aside from the first contact, the procedure was the same for these last two schools. The second school that was visited did not have enough tablets for every child in class however. This meant that they had to fill in the questionnaires on paper. This went rather smoothly, and the experiment was over within 30 minutes. The third approached school had two 8th grade classes, and enough tablets for every child. Because of the existence of a public platform, the distribution of the questionnaires went effortlessly. One class viewed the video in English without subtitles and later answered questions about the visual fragment. The other class served as the control group and did not have to watch the video. These final experiments lasted about 30 minutes in total as well.

Because of the fact that some children were absent during the experiment or because the class simply did not have enough children, more experiments needed to be conducted to reach 30 participants per experimental group. All of the remaining participants filled in the questionnaire on paper and in smaller groups. Because of mobility issues the remaining children viewed the video on a laptop screen instead of a big screen. The remaining experiments were kept similar as much as possible with the previous experiments. These last few small-group experiments typically lasted a few minutes shorter, because fewer questions arose and simply because fewer people needed to fill out the questionnaire.
Results

Table 2 shows the means and standard deviations for all the dependent variables per version.

Story-consistent beliefs

The first part of the questionnaire addressed the story-consistent beliefs that were apparent in the video fragment. To see if the video affected these beliefs, the control group also answered these questions.

Table 2. Means and standard deviations for the dependent variables (story-consistent beliefs, identification (male/female), transportation, narrative understanding, flow, and enjoyment) per version (Dutch, English, Dutch sub, and no film). 1 = low and 5 = high.

<table>
<thead>
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<th></th>
<th>Dutch (n=30)</th>
<th>English (n=30)</th>
<th>Dutch sub (n=30)</th>
<th>No film (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Freedom</td>
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<td>0.54</td>
<td>4.93</td>
<td>0.25</td>
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<td>Friendship</td>
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<td>0.41</td>
<td>4.93</td>
<td>0.25</td>
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<tr>
<td>Thievery</td>
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<td>0.97</td>
<td>4.23</td>
<td>0.77</td>
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<td>Identification</td>
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<td>0.65</td>
<td>3.96</td>
<td>0.57</td>
</tr>
<tr>
<td>Flow</td>
<td>2.02</td>
<td>0.64</td>
<td>1.77</td>
<td>0.63</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>3.67</td>
<td>0.76</td>
<td>3.63</td>
<td>0.67</td>
</tr>
</tbody>
</table>

An ANOVA with as factor ‘version’ (Dutch, English, Dutch subtitled, and no film) showed a significant effect of version on ‘freedom’ ($F=(3, 119) = 4.15, p = .008$). According to a post-hoc test (Bonferroni), freedom was valued less after watching the Dutch subtitled video fragment ($M = 4.53, SD = 0.51$) than after watching the English video fragment ($M = 4.93, SD = 0.25$) (Bonferroni correction, $p < .050$). The other versions did not differ significantly from each other when looking at the value for freedom.

An ANOVA with was factor ‘version’ (Dutch, English, Dutch subtitled, and no film) showed no significant effect of version on ‘friendship’ ($F(3,119) = 2.41, p = .070$) or on ‘thievery’ ($F(3, 119) = 2.23, p = .088$).
Identification

The participants filled in items which measured the level of identification with the male main character (Aladdin) and the female main character (princess Jasmine). Table 2 shows the means and standard deviations for ‘Identification’ with Aladdin and Jasmine. The control group was left out, since it did not watch the video fragment.

To measure if levels of identification differed between the three experimental groups, two One-Way ANOVA’s were performed. An ANOVA with as factor ‘version’ (Dutch, English, Dutch subtitled) showed a significant effect of version on ‘identification Aladdin’ ($F(2, 89) = 8.07, p = .001$). According to a post-hoc test (Bonferroni), the Dutch subtitled version ($M = 2.36, SD = 0.83$) led to a significantly higher degree of identification with Aladdin than the Dutch ($M = 1.77, SD = 0.66$) and the English ($M = 1.75, SD = 0.45$) version (Bonferroni correction, $p < .050$).

An ANOVA with as factor ‘version’ (Dutch, English, Dutch subtitled) showed a significant effect of version on ‘identification Jasmine’ ($F(2, 89) = 11.11, p < .001$). According to a post-hoc test (Bonferroni), the Dutch subtitled version ($M = 2.35, SD = 1.08$) led to a significantly higher degree of identification with Jasmine than the Dutch ($M = 1.63, SD = 0.73$) and the English ($M = 1.44, SD = 0.40$) version (Bonferroni correction, $p < .050$).

Transportation

The means and standard deviations of the scores of transportation per version can be found in table 2. A One-Way ANOVA with as factor ‘version’ (Dutch, English, Dutch sub) and as dependent variable ‘transportation’, showed a significant effect on transportation ($F(2, 89) = 14.19, p < .001$). According to a post-hoc test (Bonferroni), the Dutch subtitled version ($M = 4.25, SD = 0.53$) led to higher levels of transportation than the Dutch ($M = 3.51, SD = 0.71$) and the English ($M = 3.62, SD = 0.48$) version (Bonferroni correction, $p < .050$). The Dutch and the English version did not differ significantly from each other.

Narrative understanding

Table 2 shows the means and standard deviations for narrative understanding per language version. A One-Way ANOVA with as factor ‘version’ (Dutch, English, Dutch sub) and as dependent variable ‘narrative understanding’, showed a significant effect on narrative understanding ($F(2, 89) = 8.90, p < .001$). According to a post-hoc test (Bonferroni), the narrative in the Dutch subtitled version ($M = 4.40, SD = 0.40$) was significantly better understood than the Dutch ($M = 3.83, SD = 0.65$) and the English ($M = 3.96, SD = 0.57$) version (Bonferroni correction, $p < .050$). The Dutch and the English version did not differ significantly from each other.
Flow

Table 2 shows the means and standard deviations for the perceived flow per language version. A One-Way ANOVA with as factor ‘version’ (Dutch, English, Dutch sub) and as dependent variable ‘flow’, showed a significant effect on flow ($F(2, 89) = 3.18, p = .047$). According to a post-hoc test (Bonferroni), the Dutch version ($M = 2.02, SD = 0.64$) led to higher perception of flow than the English ($M = 1.77, SD = 0.63$) and the Dutch subtitled ($M = 1.63, SD = 0.55$) version (Bonferroni correction, $p < .050$). The English and the Dutch subtitled version did not differ significantly from each other.

Enjoyment

Table 2 shows the means and standard deviations for the level of enjoyment per language version. A One-Way ANOVA with as factor ‘version’ (Dutch, English, Dutch sub) and as dependent variable ‘enjoyment, showed a significant effect on enjoyment ($F(2, 89) = 10.254, p < .001$). According to a post-hoc test (Bonferroni), the Dutch subtitled version ($M = 4.32, SD = 0.48$) led to higher enjoyment than the Dutch ($M = 3.67, SD = 0.76$) and the English ($M = 3.63, SD = 0.67$) version (Bonferroni correction, $p < .050$). The Dutch and the English version did not differ significantly from each other.

Other predictors

Besides the three language versions (Dutch, English, Dutch subtitled), other predictors may have had an effect on the dependent variables. In the following section ‘narrative understanding’, ‘familiarity’, and ‘proficiency’ will be evaluated as predictive factors.

Narrative understanding

To gain insight into the question if narrative understanding affects story-consistent beliefs, identification, transportation, flow and enjoyment, regression analyses were performed. In table 3 the results of these regression analyses can be found.
Table 3. Results of the regression analyses with as factor narrative understanding and as independent variables story-consistent beliefs, identification (male/female), transportation, flow, and enjoyment.

<table>
<thead>
<tr>
<th></th>
<th>Adjusted R²</th>
<th>F</th>
<th>B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story consistent beliefs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom (n = 90)</td>
<td>&lt;.01</td>
<td>1.15</td>
<td>.09</td>
<td>.11</td>
</tr>
<tr>
<td>Friendship (n = 90)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>&lt;.01</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Thievery (n = 90)</td>
<td>&lt;.01</td>
<td>1.35</td>
<td>.16</td>
<td>.12</td>
</tr>
<tr>
<td>Identification Aladdin (n = 90)</td>
<td>.01</td>
<td>1.92</td>
<td>.18</td>
<td>.15</td>
</tr>
<tr>
<td>Identification Jasmine (n = 90)</td>
<td>.03</td>
<td>3.38</td>
<td>.28</td>
<td>.19</td>
</tr>
<tr>
<td>Transportation (n = 90)</td>
<td>.25</td>
<td>30.76*</td>
<td>.57</td>
<td>.51*</td>
</tr>
<tr>
<td>Flow (n = 90)</td>
<td>.35</td>
<td>48.36*</td>
<td>-.62</td>
<td>-.60*</td>
</tr>
<tr>
<td>Enjoyment (n = 90)</td>
<td>.34</td>
<td>44.88*</td>
<td>.70</td>
<td>.59*</td>
</tr>
</tbody>
</table>

*p < .001

The regression analysis showed that narrative understanding explained 25% of the variance in the level of transportation ($F(1, 89) = 30.76, p < .001$). Narrative understanding was shown to be a significant predictor ($\beta = .51, p < .001$) of the level of transportation. When narrative understanding goes up from low to high with one standard deviation, transportation goes up with 0.51 SD, given that all other variables are kept constant.

The regression analysis showed that narrative understanding explained 35% of the variance in the amount of flow perceived ($F(1, 89) = 48.36, p < .001$). Narrative understanding was shown to be a significant predictor ($\beta = -.60, p < .001$) for the amount of flow that was perceived. When narrative understanding goes up from low to high with one standard deviation, flow goes down with 0.60 SD, given that all other variables are kept constant.

A regression analysis also showed that narrative understanding explained 34% of the variance in enjoyment ($F(1, 89) = 44.88, p < .001$). Narrative understanding was shown to be a significant predictor ($\beta = .59, p < .001$) for enjoyment. When narrative understanding goes up from low to high with one standard deviation, enjoyment goes up with 0.59 SD, given that all other variables are kept constant.

Regression analyses showed that narrative understanding could not significantly explain any variance in the story-consistent beliefs ‘freedom’ ($F(1, 89) = 1.15, p = .286$), ‘friendship’ ($F(1, 89) < 1$), and ‘thievery’ ($F(1, 89) = 1.35, p = .249$).
Regression analyses also showed that narrative understanding could not significantly explain any variance in the identification with Aladdin ($F(1, 89) = 1.92, p = .169$) or the identification with Jasmine ($F(1, 89) = 3.38, p = .069$).

**Familiarity with the material**

The participants were required to answer if they were familiar with the material or not. Familiarity of the material might affect the other variables. In table 4 the results of the regression analyses are presented with as factor familiarity.

Table 4. Results of the regression analyses with as factor familiarity and as independent variables story-consistent beliefs, identification (male/female), transportation, narrative understanding, flow, and enjoyment.

<table>
<thead>
<tr>
<th></th>
<th>Adjusted R²</th>
<th>$F$</th>
<th>$B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story consistent beliefs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom ($n = 90$)</td>
<td>.02</td>
<td>2.29</td>
<td>.15</td>
<td>.16</td>
</tr>
<tr>
<td>Friendship ($n = 90$)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>-.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Thievery ($n = 90$)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>Identification Aladdin ($n = 90$)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>-.09</td>
<td>-.06</td>
</tr>
<tr>
<td>Identification Jasmine ($n = 90$)</td>
<td>.00</td>
<td>&lt;1</td>
<td>-.19</td>
<td>-.11</td>
</tr>
<tr>
<td>Transportation ($n = 90$)</td>
<td>.02</td>
<td>2.89</td>
<td>-.24</td>
<td>-.18</td>
</tr>
<tr>
<td>Narrative understanding</td>
<td>.09</td>
<td>9.46*</td>
<td>-.37</td>
<td>-.32**</td>
</tr>
<tr>
<td>Flow ($n = 90$)</td>
<td>.04</td>
<td>4.83*</td>
<td>.29</td>
<td>.23*</td>
</tr>
<tr>
<td>Enjoyment ($n = 90$)</td>
<td>.05</td>
<td>5.62*</td>
<td>-.36</td>
<td>-.25*</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01

The regression analysis showed that familiarity with the material explained 9% of the variance in the level of narrative understanding ($F(1, 87) = 9.46, p = .003$). Familiarity with the material was shown to be a significant predictor ($\beta = -.32, p = .003$) of narrative understanding. When familiarity goes up from with one standard deviation, narrative understanding goes down with 0.32 $SD$, given that all other variables are kept constant.

The regression analysis showed that familiarity with the material explained 4% of the variance in the perception of flow ($F(1, 87) = 9.46, p = .031$). Familiarity with the material was shown to be a significant predictor ($\beta = .23, p = .031$) of the perception of flow. When familiarity goes up with one standard deviation, flow goes up with 0.23 $SD$, given that all other variables are kept constant.

The regression analysis showed that familiarity with the material explained 5% of the variance in the level of enjoyment ($F(1, 87) = 5.62, p = .02$). Familiarity with the material was shown to be a
significant predictor ($\beta = -0.25, p = .02$) of the level of enjoyment. When familiarity goes up one standard deviation, enjoyment goes down with 0.25 SD, given that all other variables are kept constant.

**English Proficiency**

To find out whether the English proficiency of the participants predicted the levels of the other variables, regression analyses were conducted. English proficiency only proved to be a significant predictor for narrative understanding. The regression analysis showed that proficiency explained 6% of the variance of the level of narrative understanding ($F(1, 89) = 6.33, p = .014$). Proficiency was shown to be a significant predictor ($\beta = .26, P = .014$) of the level of narrative understanding. When proficiency goes up from low to high, narrative understanding goes up with 0.26 SD, given that all other variables are kept constant.

The other regression analyses failed to yield significant results when testing English proficiency as a predictor for the story-consistent beliefs, identification, transportation, flow, and enjoyment variables. The $F$-values of these regression analyses can be found in Appendix D.

To find out if proficiency levels had an effect on the individual experimental groups, the file was split by ‘version’. This was done to assess if higher levels of proficiency in English had an effect on the participants’ evaluation of the video when it contained English language (the Dutch version was excluded because the factor in this analysis is English proficiency). Table 5 shows the results of the regression analyses with as factor proficiency for all the dependent variables.

Table 5. Results of the regression analyses with as factor proficiency and as independent variables story-consistent beliefs, identification (male/female), transportation, narrative understanding, flow, and enjoyment. File has been split by version

| Story consistent beliefs | English | | | | Dutch subtitled | | |
|--------------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|
| Freedom ($n = 30$)       | Adjusted R² | .21 | 8.53* | .18 | .06* | Adjusted R² | .03 | .25 | .08 | .09 |
| Identification Aladdin ($n = 30$) | .04 | 1.01 | .12 | .19 | .03 | .31 | -.15 | -.10 |
| Identification Jasmine ($n = 30$) | -.03 | .06 | -.03 | -.05 | -.04 | .02 | .05 | .03 |
| Transportation ($n = 30$) | .08 | 3.61 | .23 | .34 | .03 | 1.83 | .24 | .25 |
| Narrative understanding ($n = 30$) | .35 | 16.42** | .49 | .61** | .08 | 3.40 | .23 | .33 |
The regression analysis showed that English proficiency explained 35% of the variance in the level of narrative understanding for the English version \( (F(1, 29) = 16.42, p < .001) \). English proficiency was shown to be a significant predictor \( (\beta = .61, p < .001) \) of narrative understanding in the English language version. When proficiency goes up from low to high with one standard deviation, narrative understanding goes up with 0.61 SD, given that all other variables are kept constant.

The regression analysis showed that English proficiency explained 32% of the variance in the perception of flow for the English version \( (F(1, 29) = 14.84, p < .001) \). English proficiency was shown to be a significant predictor \( (\beta = .61, p < .001) \) of flow in the English language version. When proficiency goes up from low to high with one standard deviation, flow goes down with 0.59 SD, given that all other variables are kept constant.

The regression analysis showed that English proficiency explained 17% of the variance in the level of enjoyment for the English version \( (F(1, 29) = 6.97, p = .013) \). English proficiency was shown to be a significant predictor \( (\beta = .61, p < .001) \) of enjoyment in the English language version. When proficiency goes up from low to high with one standard deviation, enjoyment goes up with 0.45 SD, given that all other variables are kept constant.

Regression analyses showed that proficiency could not significantly predict any of the other variables for the English language version or the Dutch subtitled version.

**Familiarity with the presented language version**

All of the participants who had seen one of the three language versions answered a set of three questions which measured the frequency with which the participants viewed one of the three language versions in everyday life. To measure if the familiarity with one of the presented language versions affects the other variables, regression analyses were performed. The data file was split by language version in order to isolate the results per language version. The results of these regression analyses are presented in Appendix E.

The regression analyses showed that familiarity with a certain language version could not significantly predict the values of any dependent variable in the model when looking at the participants who viewed the corresponding language version.

<table>
<thead>
<tr>
<th>Flow ((n = 30))</th>
<th>.32</th>
<th>14.84**</th>
<th>-.53</th>
<th>-.59**</th>
<th>.02</th>
<th>1.59</th>
<th>-.23</th>
<th>-.23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment ((n = 30))</td>
<td>.17</td>
<td>6.97*</td>
<td>.43</td>
<td>.45*</td>
<td>.10</td>
<td>4.09</td>
<td>.31</td>
<td>.37</td>
</tr>
</tbody>
</table>

\*\(p < .05\)  **\(p < .01\)
Discussion

The purpose of this study was to find out if narrative persuasion is affected by language (L2, L1 dubbing or L1 subtitling). Three different language versions of a section of an animated film were used as stimuli and presented to children in the age of 11-13. Below the findings for the five dimensions that encompass narrative persuasion (identification, transportation, narrative understanding, flow, and enjoyment) are described in relation to the theoretical framework, as well as the story-consistent beliefs as the outcome of narrative persuasion.

The story-consistent beliefs were divided into three different items (freedom, friendship, and thievery). A control group was added to assess if the stimuli affected people’s beliefs. The results show that the participants who viewed the film in English without subtitles had a higher appreciation for ‘freedom’ than the participants who viewed the film in English with Dutch subtitles. Apparently, the English language film had a greater impact on the children’s beliefs about freedom than the Dutch subtitled film did. The subtitles could have distracted the viewers in such a way that the beliefs about freedom present in the film were transferred better in the English language version. The overall scores for the story-consistent beliefs were quite high. This may be explained by the nature of these beliefs, which were ‘freedom’, ‘friendship’, and ‘thievery’. These beliefs are likely to have already been present among the participants, which becomes apparent when looking at the scores for the story-consistent beliefs. The control group showed comparable scores for the story-consistent beliefs as the experimental groups did. Future research should therefore try to focus more on beliefs which are not likely to be inherent to the participants.

Identification was measured for both the male and female protagonists. The results show that the English language version with Dutch subtitles led to the highest level of identification with the male and female character. The children identified more with the protagonists when they viewed the Dutch subtitled version than they did after viewing the English or the Dutch language version. Clearly, the viewers were not distracted by the subtitles, but the subtitles helped them to identify with the protagonists. This is in contrast to previous research (Busselle & Bilandzic, 2009; Kilborn, 1993), which says that subtitling is a distractive element which inhibits identification. Subtitling was expected to draw attention away from the narrative, which in its turn should lead to lower levels of identification. Perego et al. (2014), however, claim that subtitled content is not as taxing for young-adults or children, especially if they are used to this translation method. When less effort is needed to process a narrative, identification should increase. Regression analyses were performed in the current study which could not find any evidence to support the claim that when viewers are used to a certain translation method, identification is increased. A possible explanation for this might be that people growing up in The Netherlands get acquainted with multiple sorts of translation methods (dubbing and subtitling). Future research could focus on participants who only have experience with a single translation method, in order to rule out other factors. When participants are then presented with a
different translation method as the one they are accustomed to, more conclusive results could be produced.

A comparable argument holds for transportation in this study. The children who viewed the film in English with Dutch subtitles showed higher levels of transportation than the children who viewed the content in English or Dutch. This shows that children experience increased immersion when viewing English content with Dutch subtitles. Where the study by Wissmath et al. (2009) did not show any significant differences between the translation methods, this study shows that Dutch subtitled content ensures higher levels of transportation among children. The same holds for transportation as for identification that subtitle reading did not distract the viewer from the narrative, but assisted the viewer in transporting themselves into the narrative. A possible explanation for this may be that children view English content with Dutch subtitles effortlessly. Because the participants were used to the translation method, higher amounts of transportation may have been effectuated. Regression analyses showed no significant evidence, however, to state that familiarity with the translation method affects levels of transportation. Subtitling as translation method ensures higher levels of transportation and identification, when the subtitles are presented in the native language. Apparently, reading is an important element in narrative persuasion. Future research could therefore focus on nonnative subtitles to evaluate if the same effects become apparent. English language audio with English language subtitles could enhance various aspects of narrative persuasion, when the participants are proficient in English.

Narrative understanding, too, was affected by language. The narrative in the Dutch subtitled content was understood the best, in comparison to the English and the Dutch language version. This is in line with previous research, because identification is a prerequisite for understanding the narrative (Bilandzic & Busselle, 2011). A possible explanation for this might be that the participants in this study focused heavily on subtitle reading instead of listening to the audio. This could explain the high scores on most of the dependent variables in the group who viewed the Dutch subtitled narrative. Busselle and Bilandzic (2009) state that narrative understanding is related to transportation as well, which was also highest in the Dutch subtitled language version.

Regarding the concept of flow, the Dutch language version was perceived as having the most flow. The perception of flow was higher in the Dutch language version than in the English or Dutch subtitled version. The concept of flow is often associated with transportation, both entail the loss of conscious awareness of oneself and one’s surroundings (Busselle & Bilandzic, 2009). In this study, however, transportation was effectuated best in the Dutch subtitled version whereas flow was perceived the most in the Dutch spoken version. This corresponds with a study by Wissmath et al. (2009), stating that to perceive flow complete focus and concentration is required. When the children viewed the Dutch spoken version, they only needed to listen to the audio and look at the visuals. They were not required to read subtitles or process a nonnative language, which might impair the perception of flow.
The final dimension, enjoyment, too is interrelated with the concepts outlined above. This is clearly visible in the results of this study, because enjoyment was highest in the Dutch subtitled language version. In a study by Bilandzic and Busselle (2011) transportation positively influenced the enjoyment of the film. In the present study, high levels of transportation were visible in the same language group that scored high on enjoyment. Furthermore, it seems only logical that a native language narrative is easier to understand than a nonnative language narrative. When narratives are easier to understand they are more enjoyable (Hornikx et al., 2010). Narrative understanding was highest in the Dutch subtitled version as well, thus it seems that these two concepts are indeed interrelated. It was expected that enjoyment would be greater when viewing a native language narrative, this was not the case however. Unexpected results might have been caused by the public knowledge of Aladdin and people already having a certain attitude towards the material. Future research could focus on narratives that are unknown to its viewers, in order to rule out any bias towards the stimulus.

Narrative understanding was assessed as a predictor for the other variables entered in the model. Narrative understanding was a positive predictor for transportation and enjoyment, which is in line with previous research (Busselle & Bilandzic, 2009). When the narrative is better understood, transportation and enjoyment increase. Flow was also predicted by narrative understanding, but in a rather surprising manner. An increase in narrative understanding predicted a decrease in the perception of flow. A possible explanation for this might be that the participants were too busy trying to follow the dialogues occurring in the narrative. This may have increased their understanding of the narrative, but at the same time impaired the amount of flow perceived. Inconsistent with previous research, transportation and flow were not affected similarly by narrative understanding. Since this difference has not been found elsewhere it is probably due to the fact that this study involved children, who may have reacted differently on the stimuli as adults would have. Because the items measuring narrative understanding were simplified in language and in the amount of items in the current study, the concept of narrative understanding might not have been as comprehensive as previous studies. Future research could therefore make use of larger item sets which grasp narrative understanding in a more thorough manner.

The participants were asked to state if they were familiar with the presented film (Aladdin). This familiarity with the material significantly predicted the values of narrative understanding, flow, and enjoyment. Narrative understanding decreased when the material was familiar to the viewer. This is a rather surprising result, but it seems possible that this is due to the lack of concentration among the participants when they found out that they had already seen the film. The enjoyment of the film decreased as well when the material was familiar, which is to be expected. Enjoyment is linked to disconnecting from the real-world and ‘escaping’ into the film (Bilandzic & Busselle, 2011), which is likely not to be the case when viewing a narrative multiple times. Flow, on the contrary, increased when the material was familiar. It was easier for the participants to keep their thoughts aimed at the
narrative when they had already seen the video.

English proficiency was measured as well, and showed to be a significant predictor for narrative understanding. The higher the English proficiency of the participants, the better they understood the narrative. Nonnative language processing is expected to be less taxing when the proficiency is high, which ensures a better understanding of the narrative. However, this result was found for all three language versions combined. To evaluate if English proficiency indeed predicts the level of different variables, the language versions were examined separately. When looking solely at the English version, narrative understanding too increases when English proficiency was high. Enjoyment of the English language version increases as well when the English proficiency was high. The scores on the variable flow, however, decreased for the English version when English proficiency was high. The results for narrative understanding and enjoyment were predictable, as the more proficient someone is in a language the more they will be able to understand narratives. Enjoyment is enhanced when a better understanding is effectuated, which in its turn is predicted by proficiency in a certain language. The rather contradictory result concerning the decrease of flow may be due to the participants’ effort to focus on the English vocabulary present in the film. This may damage the amount of flow that the participant experiences. The children in the current study stated to be rather proficient in English. A suggestion for future research would be to focus on children who are less proficient in English and who are at a younger age.

The fact that no significant effects were found for the English spoken version with Dutch subtitles is rather surprising since this version also contains English. It seems that there is a high focus on subtitle reading when viewing a nonnative narrative with native subtitles. To evaluate if this is in fact the case, future research could focus on the recall of certain English words after watching an English spoken narrative with Dutch subtitles. If there would be hardly any recall, this could be more conclusive evidence for the idea that reading is of greater importance than listening in the context of narrative persuasion.

**Limitations**

Firstly, in the present study 11-13 year-old children participated. Because of the fact that the participants were children, these data must be interpreted with caution. Children are easily distracted and easily influenced by others, which was noticeable during the experiment. This distraction could have interfered with the results, since the manipulation might not have been the only factor. Secondly, there were inconsistencies between the experimental groups. The initial strategy was to have equal groups consisting of thirty 8th grade primary schoolchildren. It turned out, however, that none of the four visited classrooms had thirty children present. This meant that afterwards individual children had to participate in the experiment, which led to deviating experimental conditions. The screen size differed (large screen in classroom, laptop screen in individual case) and obviously the group size differed which may have influenced children’s behavior. Because similar conditions were not met for
all participants, it is hard to rule out interfering factors. Thirdly, the material the participants viewed was only a fragment of a film (seven minutes). As stated in previous research (Bilandzic & Busselle, 2011) using short versions of films may reduce the overall plausibility and appeal of the films. Multiple elements of narrative persuasion might have been influenced by the duration of the film.

**Contribution to the theory**

The current study contributes to the theory in the context of language strategies for visual narratives. For the first time the concepts of identification, transportation, narrative understanding, flow, and enjoyment have been combined to assess the effects of translation method on narrative persuasion, when addressing children. It was found that translation method did have an effect on multiple concepts of narrative persuasion. English spoken narratives with Dutch subtitles generally were more effective than English or Dutch spoken narratives.

**Practical implications**

The current study shows that English narratives should be translated when the audience concerns Dutch children around the age of twelve. English narratives are most persuasive when they are subtitled with Dutch text. The levels of identification, transportation, narrative understanding, and enjoyment were all positively affected by Dutch subtitles. Producers of Dutch television and cinema should therefore make use of this translation method, since it ensures the highest levels of narrative persuasion. The high costs of creating voice-overs with professional voice-actors is unnecessary for this target audience.
References


Appendix A: English text

JASMINE: Oh, I'm sorry, Rajah. But I can't stay here and have my life lived for me. I'll miss you. (She begins to climb again, and is helped up by RAJAH, who begins to whine and whimper.) Good bye!

(She disappears over the wall. Cut to daytime on the street. ALADDIN and ABU are up to their capers again. They are on top of the awning of a fruit stand.)

ALADDIN: Okay, Abu. Go!

(ABU dips over the edge and looks at the PROPRIETOR.)

PROPRIETOR: (To passing crowd) Try this, your taste buds will dance and sing. (ABU grabs a melon and hangs there, distracting his attention.) Hey, get your paws off that.

ABU: Blah blah blah!

PROPRIETOR: Why, you! Get away from here, you filthy ape!

(He grabs the melon away from ABU. But in the foreground, ALADDIN dips down and snatches another melon from the stand.)

ABU: Bye bye!

(He zings back up. The PROPRIETOR takes the melon to the front, where he places it on top of a stack. He looks confused, like he has just done this.)

ALADDIN: Nice goin' Abu. Breakfast is served.

(ALADDIN and ABU on the roof break open the melon and eat. We see JASMINE walking through the street.)

SHOPKEEPER 1: Pretty lady, buy a pot. No finer pot in brass or silver.

SHOPKEEPER 2: Sugar dates, sugar dates and figs! Sugar dates and pistachios!

SHOPKEEPER 3: Would the lady like a necklace. A pretty necklace for a pretty lady.

(She is charmed by the action, but is startled by a fish thrust into her face.)

SHOPKEEPER 4: Fresh fish! We catch 'em, you buy 'em!

JASMINE: I don't think so. (She backs away, but bumps into a fire eater, who is startled into swallowing his fire.) Oh, excuse me. (He gulps, then belches fire from his mouth. JASMINE is disgusted. He is pleased and taps his stomach. ALADDIN sees her, and a strange look comes over his face.) I'm really very sorry.

ALADDIN: (He's obviously deeply in love with her.) Wow!

(She pulls the hood of her cloak over her head. ABU sees him and jumps up on his shoulder, waving his hand in front of ALADDIN's face.)
(JASMINE stops at the fruit stand and sees a young homeless child reaching for a piece of fruit. She picks one up and gives it to him.)

JASMINE: Oh, you must be hungry. Here you go. (The boy runs off.)

PROPRIETOR: You'd better be able to pay for that.

JASMINE: (Mystified) Pay?

PROPRIETOR: No one steals from my cart!

JASMINE: Oh, I'm sorry sir. I don't have any money.

PROPRIETOR: Thief!

JASMINE: Please, if you let me go to the palace, I can get some from the Sultan.

PROPRIETOR: Do you know what the penalty is for stealing?

(He takes her hand and pins it down on the table, intending to chop it off.)

JASMINE: No, no please!

(The sword drops, but his hand is stopped by ALADDIN's.)

ALADDIN: Thank you kind sir. I'm so glad you've found her. I've been looking all over for you.

JASMINE: (whispering) What are you doing?

ALADDIN: (whispering back) Just play along.

PROPRIETOR: You know this girl?

JASMINE: Sadly, yes. She is my sister. She's a little crazy. (He circles his finger around his ear. She is shocked. The PROPRIETOR grabs him by the vest.)

PROPRIETOR: She said she knows the Sultan!

ALADDIN: She thinks the monkey is the Sultan.

(ABU is picking a pocket. He hears this, then straightens up. JASMINE, playing along, kneels and bows to ABU.)

JASMINE: Oh, wise Sultan. How may I serve you?

ABU: Well, blah blah blah blah.

ALADDIN: Tragic, isn't it? (He leans forward, picking up another apple from the cart with his foot.) But, no harm done. (Walks over to Jasmine.) Now come along sis. Time to see the doctor.

JASMINE: (To a camel standing nearby) Oh, hello doctor. How are you?

ALADDIN: No, no, no. Not that one. (To ABU, whose pockets are bulging.) Come on, Sultan.

(ABU bows to the crowd and everything he's stolen from the cart falls out.)

PROPRIETOR: Huh? What is it? (ABU picks up what he can carry, and the trio run off.) Come back here, you little thieves!

(Cut to int. of JAFAR's lab. IAGO is running on a gear in a bizarre contraption. At the top of the contraption is a storm brewing.)
IAGO: (huffing and puffing) With all due respect, your rottenness, couldn’t we just wait for a real storm?
JAFAR: Save your breath, Iago. Faster! (He places the SULTAN’s ring in the contraption.)
IAGO: Yes, o mighty evil one.

(IAGO runs faster. A lightning bolt streaks through the ring, passing into an hourglass below. The sands begin to swirl.)

JAFAR: Ah, sands of time—reveal to me the one who can enter the cave. (The sand in top forms the Cave of Wonders. It falls through into a storm, but it shows ALADDIN climbing up a ladder, followed by JASMINE who is covered in her cloak.) Yes, yes! There he is. My diamond in the rough!
IAGO: That’s him?!?! That’s the clown we’ve been waitin’ for? (IAGO loses his footing and is sucked into the gears.)
JAFAR: Let’s have the guards extend him an invitation to the palace, shall we?

(IAGO goes flying past and slams into the wall upside down.)

IAGO: Swell.

(JAFAR laughs hideously, and the camera zooms in on the sandstorm with ALADDIN in it. Finally, we dissolve into the real ALADDIN climbing to the top of the ladder, followed by JASMINE.)

ALADDIN: Almost there.

(JASMINE climbs over the top, but trips and falls into ALADDIN’s arms. She stands up.)

JASMINE: I want to thank you for stopping that man.
ALADDIN: Uh, forget it. (He grabs a pole.) So, uh, this is your first time in the marketplace, huh?

(ALADDIN pole vaults to the next building, leaving JASMINE behind.)

JASMINE: Is it that obvious?
ALADDIN: Well, you do kinda stand out. (He stares at her, still in love. She returns the look. But he realizes what he is doing, and returns to normal.) I mean, uh, you don’t seem to know how dangerous Agrabah can be. (He lays a plank between the buildings for her to walk over, but as he is leaned down, she vaults over his head. He looks back in surprise. She tosses the pole to him. Both ALADDIN’s and ABU’s eyes bulge.)

JASMINE: I’m a fast learner.
ALADDIN: Right. C’mon, this way. (They go inside the roof of a building, dodging planks and beams as they go.) Whoa. Watch your head there. Be careful.
JASMINE: Is this where you live?
ALADDIN: Yep. Just me and Abu. Come and go as we please.
JASMINE: Fabulous.
ALADDIN: Well, it’s not much, (he pulls back the curtain and exposes the palace) but it’s got a great view.
Palace looks pretty amazing, huh?

JASMINE: Oh, it's wonderful.

ALADDIN: I wonder what it would be like to live there, to have servants and valets...

JASMINE: Oh, sure. People who tell you where to go and how to dress.

ALADDIN: It's better than here. Always scraping for food and ducking the guards.

JASMINE: You're not free to make your own choices.

ALADDIN: Sometimes you feel so--

JASMINE: You're just--

BOTH: (in unison) --trapped.

(They look at each other, realizing that they're perfect for one another. But ALADDIN then realizes where he is, and breaks the look. He takes the apple out of ABU's hand and rolls it down his arm into the hand of JASMINE.)

ALADDIN: So, where're you from?

JASMINE: What does it matter? I ran away, and I am not going back.

ALADDIN: Really? (He takes a bite from the apple in his hand, then hands it to ABU, who has a disgusted look on his face.)

ABU: Why you!

(ALADDIN walks over and sits next to JASMINE.)

JASMINE: My father's forcing me to get married.

ALADDIN: That's--that's awful. (ABU appears from behind the princess and tries to steal the apple.) Abu!

(ABU races up to a higher point, chattering and cursing as he goes.)

JASMINE: What?

ALADDIN: Abu says that--uh--that's not fair.

ABU: What?

JASMINE: Oh did he?

ALADDIN: Yeah, of course.

JASMINE: And does Abu have anything else to say?

ALADDIN: Well, uh, he wishes there was something he could do to help.

ABU: Oh, boy!

JASMINE: Hmm, tell him that's very sweet.

(ALADDIN and JASMINE have been getting closer and closer, until ALADDIN leans in to kiss her. He is interrupted, however, by the GUARDS, who have found them.)

GUARD: Here you are!

ALADDIN and JASMINE: They've found me! (To each other) They're after you?

JASMINE: My father must have sent them--

ALADDIN: Do you trust me?

JASMINE: What?

ALADDIN: Do you trust me? (He extends his hand)

JASMINE: Yes. (She takes it.)

ALADDIN: Then jump!

(They both jump off the roof, fall and land in a pile of salt. They
try to get away, but the exit is blocked by a GUARD.)

GUARD: We just keep running into each other, don't we, street rat?

(Again, the GUARD's turban is pulled down by ABU, but more guards are here and block the exit. The first GUARD pulls ABU off his head and throws him in a vase. Three other GUARDS grab ALADDIN.)

GUARD: It's the dungeon for you, boy.
ALADDIN: Hey, get off of me!
JASMINE: Let go of him.
GUARD: (Not realizing she is the princess) Look what we have here, men--a street mouse. (He throws her down.)
JASMINE: (standing up and pulling off the hood of her cloak) Unhand him, by order of the princess.

(The GUARDS suddenly stop and bow, forcing ALADDIN to bow as well.)

GUARD: Princess Jasmine.
ALADDIN: The princess?
ABU: (peeking out from the vase) The princess?
GUARD: What are you doing outside the palace? And with this street rat?
JASMINE: That's not your concern. Do as I command. Release him!
GUARD: Well, I would, princess, but my orders come from Jafar. You'll have to take it up with him.

(The GUARDS drag ALADDIN out, bowing as they go.)

JASMINE: (getting a very pissed-off look) Believe me, I will.
### Appendix A: Dutch subtitles

<table>
<thead>
<tr>
<th>Time</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>189</td>
<td>00:15:39,870 --&gt; 00:15:45,900</td>
</tr>
<tr>
<td></td>
<td>Sorry, Rajah. Ik kan hier niet blijven.</td>
</tr>
<tr>
<td></td>
<td>Ik wórd hier geleefd.</td>
</tr>
<tr>
<td>190</td>
<td>00:15:47,830 --&gt; 00:15:49,821</td>
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<tr>
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<td>Ik zal je missen.</td>
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<td>191</td>
<td>00:15:57,990 --&gt; 00:15:59,981</td>
</tr>
<tr>
<td></td>
<td>Vaarwel.</td>
</tr>
<tr>
<td>192</td>
<td>00:16:06,229 --&gt; 00:16:09,983</td>
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<tr>
<td></td>
<td>Sinaasappels uit Jaffa.</td>
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<tr>
<td>193</td>
<td>00:16:10,070 --&gt; 00:16:12,061</td>
</tr>
<tr>
<td></td>
<td>Toe maar, Abu.</td>
</tr>
<tr>
<td>194</td>
<td>00:16:13,350 --&gt; 00:16:17,547</td>
</tr>
<tr>
<td></td>
<td>Proef eens.</td>
</tr>
<tr>
<td></td>
<td>Uw tong zal dansen en zingen.</td>
</tr>
<tr>
<td>195</td>
<td>00:16:19,550 --&gt; 00:16:21,620</td>
</tr>
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<td>196</td>
<td>00:16:21,710 --&gt; 00:16:26,499</td>
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<td></td>
<td>Ophoepelen, vieze, vervloekte aap.</td>
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<tr>
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<td>197</td>
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<td></td>
<td>00:16:27,869 --&gt; 00:16:29,461</td>
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<td></td>
<td>De groeten.</td>
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<td></td>
<td>198</td>
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<tr>
<td></td>
<td>00:16:29,549 --&gt; 00:16:31,540</td>
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<tr>
<td></td>
<td>Goed gedaan.</td>
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<tr>
<td></td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>00:16:32,789 --&gt; 00:16:34,780</td>
</tr>
<tr>
<td></td>
<td>Het ontbijt is klaar.</td>
</tr>
<tr>
<td></td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>00:16:38,509 --&gt; 00:16:42,741</td>
</tr>
<tr>
<td></td>
<td>Wilt u een prachtige pot van brons of zilver kopen?</td>
</tr>
<tr>
<td></td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>00:16:42,829 --&gt; 00:16:47,345</td>
</tr>
<tr>
<td></td>
<td>Dadels. Dadels en vijgen.</td>
</tr>
<tr>
<td></td>
<td>202</td>
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<tr>
<td></td>
<td>00:16:47,429 --&gt; 00:16:51,422</td>
</tr>
<tr>
<td></td>
<td>Een mooie halsketting voor een mooie vrouw.</td>
</tr>
<tr>
<td></td>
<td>203</td>
</tr>
<tr>
<td></td>
<td>00:16:51,509 --&gt; 00:16:54,103</td>
</tr>
<tr>
<td></td>
<td>Verse vis. Zelf gevangen.</td>
</tr>
</tbody>
</table>
Nee, liever niet.

Pardon.

Het spijt me echt vreselijk.

Hallo?

Je hebt vast honger.

Alsjeblieft.

Ik zou mij maar snel betalen.

Ik zoek je overal.

- Ken je dit meisje?

Betalen?

- Ik laat me niet bestelen.

Het spijt me. Ik heb geen geld.

Dief.

Ik haal even geld bij de sultan.

Weet je wat de straf voor diefstal is?

Dank u.

Fijn dat u haar gevonden heeft.

Ik zoek je overal.

Meedoen.

- Ken je dit meisje?

Helaas wel. Het is m'n zuster.

Beetje gek.
- Ze kende de sultan, zei ze. 00:18:35,427 --> 00:18:38,260
Zeg, uwe Rotheid...

00:17:59,708 --> 00:18:02,745
Ze denkt dat het aapje de sultan is.

00:18:04,227 --> 00:18:08,506
Wijze sultan, hoe kan ik u van dienst zijn?

00:18:10,988 --> 00:18:15,186
Tragisch, niet?
Gelukkig is het goed afgelopen.

00:18:15,267 --> 00:18:17,862
We gaan naar de dokter, zusje.

00:18:17,948 --> 00:18:22,305
Dag dokter. Hoe gaat 't?
- Niet die.

00:18:22,387 --> 00:18:24,379
Kom, sultan.

00:18:28,907 --> 00:18:31,547
Kom hier, vuile diefjes.

00:18:35,427 --> 00:18:38,260
Zeg, uwe Rotheid...

00:18:04,227 --> 00:18:08,506
Wijze sultan, hoe kan ik u van dienst zijn?

00:18:10,988 --> 00:18:15,186
Tragisch, niet?
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00:18:15,267 --> 00:18:17,862
We gaan naar de dokter, zusje.

00:18:17,948 --> 00:18:22,305
Dag dokter. Hoe gaat 't?
- Niet die.

00:18:22,387 --> 00:18:24,379
Kom, sultan.

00:18:28,907 --> 00:18:31,547
Kom hier, vuile diefjes.
We moeten hem laten uitnodigen in het paleis.

Zullen we?
- Heel fijn.

We zijn er bijna.

Bedankt dat je die man tegenhield.

Laat maar.

Je was voor ‘t eerst op de markt, hè?

Kon je dat zien?

Je valt nogal op.
Mooi hè, het paleis. 00:20:22,545 --> 00:20:24,376

Prachtig. 00:20:25,1785 --> 00:20:25,937

Hoe zou 't zijn om daar te wonen 00:20:28,985 --> 00:20:32,455
met bedienden en zo?

En mensen die zeggen 00:20:28,985 --> 00:20:32,455
wat mag en niet mag.

Hoe zou 't zijn om daar te wonen 00:20:28,985 --> 00:20:32,455
meet bedienden en zo?

En mensen die zeggen 00:20:28,985 --> 00:20:32,455
wat mag en niet mag.

Hoe zou 't zijn om daar te wonen 00:20:28,985 --> 00:20:32,455
met bedienden en zo?

En mensen die zeggen 00:20:28,985 --> 00:20:32,455
wat mag en niet mag.
Dat is gemeen.

267
00:21:18,025 --> 00:21:20,823
O ja?
- Ja, natuurlijk.

268
00:21:20,905 --> 00:21:24,692
Heeft Abu nog meer te zeggen?

269
00:21:24,785 --> 00:21:27,902
Hij wou dat ie je kon helpen.

270
00:21:27,985 --> 00:21:29,975
Jemig.

271
00:21:31,824 --> 00:21:35,100
Zeg maar dat 't heel lief van 'm is.

272
00:21:36,984 --> 00:21:38,622
Daar ben je.

273
00:21:38,705 --> 00:21:40,899
Ze zoeken me.
Jou ook?

274
00:21:40,984 --> 00:21:44,659

M'n vader stuurt ze om...
- Vertrouw je me?

275
00:21:45,665 --> 00:21:47,063
Spring dan.

276
00:21:52,904 --> 00:21:57,978
We lopen elkaar steeds maar tegen 't lijf, straatjoch.

277
00:21:58,064 --> 00:22:00,134
Rennen.

278
00:22:02,624 --> 00:22:04,660
Jij gaat de kerkier in.

279
00:22:04,743 --> 00:22:06,462
Laat 'm gaan.

280
00:22:06,544 --> 00:22:10,173
Kijk nou eens. Een straatmeid.

281
00:22:11,023 --> 00:22:14,619
Laat 'm los.

282

Bevel van de prinses.
Prinses Jasmine.

Wat doet u hier met dit schoffie?

Gaat je niks aan.
Doe wat ik zeg. Laat hem vrij.

Ik heb m'n orders van Jafar, prinses.

U moet bij hem zijn.
- Reken maar.
Appendix A: Dutch text

Oh het spijt me Rajah. Maar ik kan hier niet blijven en mijn leven laten leven. Ik zal je missen. Vaarwel.

Dadels. Hele mooie dadels.

Vooruit Abu, nu.

Meneer, probeer deze ware stelring voor de tong. He, blijf er vanaf met je poten. Oh jij! Jij moest maken dat je wegkomt, vieze vervloekte aap!

Heel goed, Abu. Hier de helft voor jou.

Kijkt u eens, dadels rijp en groot. Dadels vijgen, zoveel u maar wilt! Een ketting voor de dame, een mooie ketting voor de dame. Verse vis!

Nee dankuwel. Neem me niet kwalijk.

Eh, het spijt me heel erg. Werkelijk.

Wauw.

Oh, je hebt vast honger. Alsjeblieft.


Weet je welke straf er staat op stelen?

Nee, alstublieft!

Oh, hartelijk dank meneer. Wat fijn dat u haar heeft gevonden. Ik heb je overal gezocht.

Wat ben je aan het doen?

Speel nu maar mee.

He, jij kent dit meisje?

Helaas wel meneer. Het is mijn zusje. Ze is een beetje getikt.

Ze zegt dat ze de sultan kent.

Ah, ze denkt dat mijn aapje de sultan is.

Oh wijze sultan, hoe kan ik u dienen?

Tragisch he. Hier, uw appel.

Kom maar zus, we moeten naar de dokter.

Oh hallo dokter, hoe gaat het?

Nee nee, niet die dokter. Kom mee Sultan.

Kom hier brutale dief!

Met alle respect uwe rottigheid, waarom kunnen we niet wachten tot het echt gaat onweren?
Sparre je adem, Jago, sneller!
Goed, oh almachtige boosdoener.
Zand des tijds, laat mij zien wie degene is die de grot in mag. Ja, jaa. Daar is hij. Mijn ruwe diamant.
Is dat ‘m? Die idioot op wie je al zolang wacht?
Laten wij de wachters vragen hem uit te nodigen in het paleis. Wat jij?

We zijn er bijna.
Bedankt dat je die man tegengehouden hebt.
Niets te danken. Dus je was zeker nog nooit eerder op de markt he?
Was dat zo duidelijk?
Nou ja, je valt nogal op ja. Ik bedoel eh, je schijnt niet te beseffen hoe gevaarlijk het in Agrabah is.
Ik leer snel hoor.
Kom maar, hierheen. Ho, pas op je hoofd.
Woon je hier?
Ja, Abu en ik. Hier doen we wat we willen.
Lijkt me geweldig.
Ach, het stelt niets voor. Maar het uitzicht is fantastisch. Oh, wat is het paleis toch prachtig he.
Oh, schitterend ja.
Hoe zou het zijn om daar te wonen? Met bedienden en lakijen.
Oh, geweldig. Ze kiezen zelfs je kleding uit voor elk diner.
Ha, dat is beter dan hier. Ik moet maar zien hoe ik mijn eten bij elkaar jat.
Je mag niet eens je eigen keuze maken.
Je voelt je helemaal niet zo
Nee niet...

Vrij (tegelijk)
Ehm, zeg. Waar woon jij?
Hmm, wat maakt het uit. Ik ben weggelopen en ik ga niet meer terug.
Echt waar, maar waarom?
Mijn vader wil me dwingen om te trouwen.
Wat vreselijk. Abu!
Wat?
Eh, Abu zegt eh. Da’s niet eerlijk.
Oh werkelijk?
Ja, tuurlijk!
En heeft Abu nog meer te zeggen?
Nou eh, hij wou dat ie je ergens mee kon helpen.
Zeg m dat is ontzettend lief.
Daar zit je!
Ze zoeken mij! (tegelijk)
Zoeken ze jou? (tegelijk)
M’n vader heeft ze natuurlijk gestuurd omdat...
Vertrouw je me?
Wat?
Vertrouw je me?
Ja..
Spring dan!
Da’s toevallig. We komen elkaar steeds tegen, straatrat!
Kom, snel. Wegwezen!
In de kerket met die rat!
He, laat me los!
Laat los!
He kijk nou, een straatmuis!
Laat ‘m los, op bevel van de prinses!
Oh, Prinses Jasmine.
De prinses?
Wat doet u buiten het paleis? En met die straatrat?
Dat gaat je niets aan, doe wat ik je zeg en maak hem los.
En of ik dat doe..
Appendix B: Complete questionnaire

Thesis vragenlijst

Q1 Dankjewel dat je mee wilt doen aan dit onderzoek. Lees alsjeblieft nog even de volgende uitleg voordat je begint met het beantwoorden van de vragen.

Je hebt zojuist een filmpje gekeken. De volgende vragen gaan over dit filmpje. Wat belangrijk is om te onthouden is dat er geen goede of foute antwoorden zijn. Vul in hoe jij je voelde tijdens het kijken van het filmpje. Ook maakt het niet uit hoe lang je over de vragenlijst doet. Dus probeer je niet te laten afleiden door anderen die al klaar zijn. Als je zelf al eerder klaar bent, wacht dan even met praten tot iedereen zover is. Als je iets niet begrijpt, steek dan vooral even je hand omhoog dan zal ik naar je toe komen.

Je mag nu beginnen aan de vragenlijst!

Veel plezier!
### Q2 Geef aan in welke mate je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
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<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vrijheid is voor mij belangrijk.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vriendschap is voor mij belangrijk.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Stelen mag niet.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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### Q3 Geef aan in welke mate je het eens bent met de volgende uitspraken.

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<th>Neutraal</th>
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<th>Helemaal mee eens</th>
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<tbody>
<tr>
<td>Ik voelde mee met de jongen.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Tijdens het kijken voelde ik me verdrietig als de jongen zich verdrietig voelde.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>In mijn gedachten was het alsof ik de jongen was.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ik had het gevoel dat ik zelf meemaakte wat de jongen meemaakte.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

### Q4 Geef aan in welke mate je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th></th>
<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ik voelde mee met de prinses.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Tijdens het kijken voelde ik me verdrietig als de prinses zich verdrietig voelde.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>In mijn gedachten was het alsof ik de prinses was.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ik had het gevoel dat ik zelf meemaakte wat de prinses meemaakte.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q5 Geef aan in welke mate je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th></th>
<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ik wilde weten hoe het verhaal afliep.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ik was in mijn hoofd met het verhaal bezig tijdens het kijken.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Terwijl ik aan het kijken was, dacht ik niet meer aan wat er om mij heen gebeurde.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ik merkte dat ik aan andere dingen ging denken terwijl ik naar het filmpje keek.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q6 Geef aan in hoeverre je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th></th>
<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ik kon de gebeurtenissen makkelijk volgen</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ik vond het moeilijk om mijn aandacht bij het verhaal te houden.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Het verhaal was logisch en begrijpelijk.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Op sommige momenten was het niet helemaal duidelijk waarom iets gebeurde.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q7 Geef aan wat je van het verhaal vond.

<table>
<thead>
<tr>
<th>Wat vond je van het verhaal?</th>
<th>Helemaal niet leuk</th>
<th>Niet leuk</th>
<th>Neutraal</th>
<th>Leuk</th>
<th>Heel erg leuk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q8 Geef aan in hoeverre je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th></th>
<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ik vond het moeilijk om mijn hoofd bij het verhaal te houden.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ik merkte dat mijn gedachten afdwaalden terwijl ik naar het filmpje keek.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Terwijl het filmpje aan het spelen was, merkte ik dat ik aan andere dingen aan het denken was.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q9 Had je deze film al een keer eerder gezien?

- [ ] Ja
- [ ] Nee

Q10 Geef aan in welke mate je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th>Engelse films en series kijk ik met Nederlandse ondertiteling.</th>
<th>Nooit</th>
<th>Soms</th>
<th>Regelmatig</th>
<th>Vaak</th>
<th>Altijd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Engelse films en series kijk ik in het Engels zonder ondertiteling.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Engelse films en series kijk ik in het Nederlands overgesproken.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q11 Geef aan in welke mate je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th></th>
<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ik ben goed in Engels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ik kan goed Engels lezen.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ik kan goed Engels schrijven.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ik kan goed Engels praten.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ik kan goed Engels verstaan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q12 Mijn moedertaal is:
- Nederlands
- Turks
- Marokkaans
- Duits
- Engels
- Anders: ____________________

Q13 Wat is je nationaliteit?
- Nederlands
- Anders: ____________________

Q14 Wat is je geslacht?
- Jongen
- Meisje

Q15 Wat is je leeftijd?
Appendix C: Control group questionnaire

Thesis vragenlijst zonder beeld

Q1 Dankjewel dat je mee wilt doen aan dit onderzoek. Lees alsjeblieft nog even de volgende uitleg voordat je begint met het beantwoorden van de vragen.

Wat belangrijk is om te onthouden is dat er geen goede of foute antwoorden zijn. Het maakt het niet uit hoe lang je over de vragenlijst doet. Dus probeer je niet te laten afleiden door anderen die al klaar zijn. Als je zelf al eerder klaar bent, wacht dan even met praten tot iedereen zover is. Als je iets niet begrijpt, steek dan vooral even je hand omhoog dan zal ik naar je toe komen.

Je mag nu beginnen aan de vragenlijst!

Veel plezier!

Q2 Geef aan in welke mate je het eens bent met de volgende uitspraken.

<table>
<thead>
<tr>
<th></th>
<th>Helemaal niet mee eens</th>
<th>Niet mee eens</th>
<th>Neutraal</th>
<th>Mee eens</th>
<th>Helemaal mee eens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vrijheid is voor mij belangrijk.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vriendschap is voor mij belangrijk.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Stelen mag niet.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q13 Wat is je nationaliteit?

○ Nederland
○ Anders: ____________________

Q14 Wat is je geslacht?

○ Jongen
○ Meisje

Q15 Wat is je leeftijd?

Q16 Dit is het einde van de vragenlijst. Heel erg bedankt dat je mee wilde doen!

Appendix D: F-values of the regression analyses with as factor English proficiency
Appendix E: Results of the regression analyses with as factor familiarity with the presented language version

<table>
<thead>
<tr>
<th>Story consistent beliefs:</th>
<th>Adjusted R²</th>
<th>F</th>
<th>B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom (n = 30)</td>
<td>.01</td>
<td>2.03</td>
<td>.11</td>
<td>.15</td>
</tr>
<tr>
<td>Friendship (n = 30)</td>
<td>&lt;.01</td>
<td>1.34</td>
<td>.07</td>
<td>.12</td>
</tr>
<tr>
<td>Thievery (n = 30)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>&lt;-.01</td>
<td>&lt;-.01</td>
</tr>
<tr>
<td>Identification Aladdin (n = 30)</td>
<td>&lt;-.01</td>
<td>&lt;1</td>
<td>-.07</td>
<td>-.06</td>
</tr>
<tr>
<td>Identification Jasmine (n = 30)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>Transportation (n = 30)</td>
<td>.01</td>
<td>1.83</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Narrative understanding (n = 30)</td>
<td>.06</td>
<td>6.33*</td>
<td>.23</td>
<td>.26*</td>
</tr>
<tr>
<td>Flow (n = 30)</td>
<td>.03</td>
<td>3.26</td>
<td>-.18</td>
<td>-.19</td>
</tr>
<tr>
<td>Enjoyment (n = 30)</td>
<td>.02</td>
<td>2.74</td>
<td>.19</td>
<td>.18</td>
</tr>
</tbody>
</table>

*p < .05
### Dutch

<table>
<thead>
<tr>
<th>Story consistent beliefs:</th>
<th>Adjusted $R^2$</th>
<th>$F$</th>
<th>$B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom ($n = 30$)</td>
<td>-.03</td>
<td>.146</td>
<td>-.03</td>
<td>-.07</td>
</tr>
<tr>
<td>Friendship ($n = 30$)</td>
<td>&lt;.01</td>
<td>1.04</td>
<td>-.06</td>
<td>-.19</td>
</tr>
<tr>
<td>Thievery ($n = 30$)</td>
<td>-.02</td>
<td>&lt;1</td>
<td>.08</td>
<td>.11</td>
</tr>
<tr>
<td>Identification Aladdin ($n = 30$)</td>
<td>.02</td>
<td>1.56</td>
<td>-.11</td>
<td>-.23</td>
</tr>
<tr>
<td>Identification Jasmine ($n = 30$)</td>
<td>&lt;-.01</td>
<td>&lt;1</td>
<td>-.09</td>
<td>-.16</td>
</tr>
<tr>
<td>Transportation ($n = 30$)</td>
<td>-.01</td>
<td>&lt;1</td>
<td>-.09</td>
<td>-.16</td>
</tr>
<tr>
<td>Narrative understanding ($n = 30$)</td>
<td>-.02</td>
<td>&lt;1</td>
<td>.06</td>
<td>.13</td>
</tr>
<tr>
<td>Flow ($n = 30$)</td>
<td>-.02</td>
<td>&lt;1</td>
<td>-.06</td>
<td>-.13</td>
</tr>
<tr>
<td>Enjoyment ($n = 30$)</td>
<td>-.02</td>
<td>&lt;1</td>
<td>.06</td>
<td>.11</td>
</tr>
</tbody>
</table>

### English

<table>
<thead>
<tr>
<th>Story consistent beliefs:</th>
<th>Adjusted $R^2$</th>
<th>$F$</th>
<th>$B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom ($n = 30$)</td>
<td>-.03</td>
<td>&lt;1</td>
<td>-.01</td>
<td>-.05</td>
</tr>
<tr>
<td>Friendship ($n = 30$)</td>
<td>.09</td>
<td>3.80</td>
<td>.09</td>
<td>.35</td>
</tr>
<tr>
<td>Thievery ($n = 30$)</td>
<td>-.04</td>
<td>&lt;1</td>
<td>&lt;-.01</td>
<td>&lt;-.01</td>
</tr>
<tr>
<td>Identification Aladdin ($n = 30$)</td>
<td>-.02</td>
<td>&lt;1</td>
<td>-.05</td>
<td>-.11</td>
</tr>
<tr>
<td>Identification Jasmine ($n = 30$)</td>
<td>.02</td>
<td>1.54</td>
<td>-.09</td>
<td>-.23</td>
</tr>
<tr>
<td>Transportation ($n = 30$)</td>
<td>.06</td>
<td>2.86</td>
<td>-.14</td>
<td>-.30</td>
</tr>
<tr>
<td>Narrative understanding ($n = 30$)</td>
<td>.09</td>
<td>3.93</td>
<td>.19</td>
<td>.35</td>
</tr>
<tr>
<td>Flow ($n = 30$)</td>
<td>-.03</td>
<td>&lt;1</td>
<td>-.05</td>
<td>-.08</td>
</tr>
<tr>
<td>Enjoyment ($n = 30$)</td>
<td>-.02</td>
<td>&lt;1</td>
<td>-.09</td>
<td>-.14</td>
</tr>
</tbody>
</table>

### Dutch subtitled

<table>
<thead>
<tr>
<th>Story consistent beliefs:</th>
<th>Adjusted $R^2$</th>
<th>$F$</th>
<th>$B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom ($n = 30$)</td>
<td>-.03</td>
<td>&lt;1</td>
<td>.05</td>
<td>.08</td>
</tr>
<tr>
<td>Friendship ($n = 30$)</td>
<td>-.03</td>
<td>&lt;1</td>
<td>.03</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Thievery ((n = 30))</td>
<td>-.03</td>
<td>&lt;1</td>
<td>-.04</td>
<td>-.08</td>
</tr>
<tr>
<td>Identification Aladdin ((n = 30))</td>
<td>.01</td>
<td>1.25</td>
<td>.18</td>
<td>.21</td>
</tr>
<tr>
<td>Identification Jasmine ((n = 30))</td>
<td>-.01</td>
<td>&lt;1</td>
<td>.17</td>
<td>.15</td>
</tr>
<tr>
<td>Transportation ((n = 30))</td>
<td>-.02</td>
<td>&lt;1</td>
<td>.07</td>
<td>.12</td>
</tr>
<tr>
<td>Narrative understanding ((n = 30))</td>
<td>.08</td>
<td>3.50</td>
<td>.14</td>
<td>.33</td>
</tr>
<tr>
<td>Flow ((n = 30))</td>
<td>-.03</td>
<td>&lt;1</td>
<td>-.03</td>
<td>-.05</td>
</tr>
<tr>
<td>Enjoyment ((n = 30))</td>
<td>.07</td>
<td>3.03</td>
<td>.16</td>
<td>.32</td>
</tr>
</tbody>
</table>