"Train a Scribe" card from *Lost & Found*, illustration by Annie Wong and Mimi Ace

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Global Conflicts, Episodic Framing and Attitude Change Towards the Israeli-Palestinian Conflict

Ronit Kampf

Abstract

This study compares the effects of episodic framing of the Checkpoint scenario and the Military Raid scenario in *Global Conflicts* (2010), a computerized simulation of the Israeli-Palestinian conflict, on developing impartial attitudes towards this conflict. The former presents a more human, individual and personal framing of the conflict than does the latter. Two hundred and ten Israeli-Jewish and Palestinian undergraduate students participated in the experiment. They filled in questionnaires measuring attitudes towards the Israeli-Palestinian conflict before and after playing the scenarios. Results suggested that participants playing the Checkpoint scenario became more impartial toward the Israeli-Palestinian conflict, unlike those playing the Military Raid scenario. The results show that computerized simulations of the Israeli-Palestinian conflict can be used for attitude change intervention, but the framing of the story in the game may be crucial in determining whether the players become impartial regarding the situation or not.

Keywords: Episodic Framing, Games for Change, Persuasive Games, Computerized Simulations, Israeli-Palestinian Conflict, Impartial Attitudes

Introduction

This article compares episodic framing outcomes of the only two scenarios of the Israeli-Palestinian conflict in *Global Conflicts* (GC) (2010) for generating impartial attitudes (i.e., being able to look at the situation through the lenses of both sides). GC is a role-playing computerized simulation of the Israeli-Palestinian conflict (Buch and Egenfeldt-Nielsen 2007). In GC a player assumes the role of a Western reporter arriving in Jerusalem to put together a news report about the situation after

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interviewing Israeli and Palestinian characters in the conflict. The Checkpoint scenario takes place at an Israeli checkpoint in East Jerusalem where both Israeli soldiers and Palestinian people feel stressed regarding their security and suffer from their impossible situation in the conflict. The Military Raid scenario takes place in a small Palestinian village in the Western Bank where Israeli soldiers conduct a violent raid to arrest a group of Palestinians accused of committing violent actions against Israelis in West Jerusalem.

Episodic framing is used in the context of media reporting. This framing offers human interest and individual and personal elements of a specific case story (Iyengar 1991; further elaborated in the next sections). This framing strategy was selected because (a) it may indicate the differences between the only two scenarios in GC by examining the extent of the scenario presented in personal, individual and human interest terms, and (b) as mentioned earlier, this game focuses on news reporting by asking the player to produce a news report for different newspapers based on the interviews she conducts with various Israeli and Palestinian characters in the assignment.

Using the two scenarios in GC, an experiment was conducted among Israeli-Jewish and Palestinian undergraduate students, who are directly involved parties to the conflict with political positions that are rigid, entrenched, and characterized by strong ideological, cultural and religious considerations which are more resistant to change (e.g., Alon and Bar-Tal 2016, Eagly and Chaiken 1998, Reiter 2017). Therefore, it should be interesting to examine under what conditions (i.e., the extent of the scenario presented in episodic and human interest terms) the two scenarios in GC can serve as effective attitude change interventions for young people on this divide with strong and ethnocentric attitudes (i.e., being able to look at the situation only

through the lens of one's own side) toward the issues.

The present study compares the extent of episodic and human interest framing of the only two scenarios of the Israeli-Palestinian conflict in GC. This comparison can indicate which of the two scenarios can facilitate changes in attitudes towards the situation. In fact, previous studies have only examined attitude outcomes of the Checkpoint scenario (e.g., Cuhadar and Kampf 2015, Kampf and Cuhadar 2015) without conducting a comparative study including the Military Raid scenario. As mentioned earlier, GC is a role-playing computerized simulation of the Israeli-Palestinian conflict which is seen as an especially preferable method for generating new insight, empathy, and impartial attitudes (Baylouny 2009, Williams 2006). Yet there are some differences between the two scenarios in terms of the extent of episodic and human interest framing of the story in the game which may impact their attitude outcomes, as detailed in the next sections. In addition, this study examines whether young Israeli-Jewish and Palestinian people on the Middle Eastern divide relate similarly to the two scenarios in GC, because we know very little about whether different cultural and religious groups, particularly directly involved parties to the conflict, relate similarly to the same situation.

Literature Review

Computer Games: From Learning to Persuasion

Currently more popular than Hollywood movies, computer games have become influential tools of entertainment (Squire 2003, Tawil-Souri 2007). The computer, video and online game industry is thought to be one of the most profitable in the USA and worldwide. A vast majority of teenagers (97%), more than three-quarters of college students, and over half of adults reported playing computer, video or online

games (Lenhart et al. 2008).

Whenever a medium becomes popular, researchers start investigating its effects. Roig and colleagues (2009) explain that the effects of computer games can be understood through the overall framework of media practices. Along with introducing new forms of pleasure due to their distinct structural features and playability functions, they argue that considering the cultural context in which computer games evolve is essential to understanding their effects. The trend in studying computer games' effects on individuals and society focuses on violent feelings and aggressive behavior (e.g., Barlett et al. 2008, Eyal et al. 2006, Peng, Klein and Lee 2006, Weber et al. 2009). Conversely, this study investigates positive rather than negative effects of computer games. The focus here is on games that have been described as serious games (Michael and Chen 2006, Mitgutsch 2011), civic games (Kahne, Middaugh and Evans 2008), and persuasive games (Bogost 2007, 2008). While these terms are often used interchangeably throughout the literature, this study refers to them here as persuasive games, based on the assumption that their goal is to facilitate changes in attitudes and/or behaviors.

In addition to their popularity, computer games' structural and content features may make the learning process more appealing and goal-oriented (Gee 2008, Mitgutsch 2011, Squire 2003, Tawil-Souri 2007). These qualities have also led to the use of computer and video games for social and political purposes. The U.S. Army has been using computer and video games to boost its recruitment numbers (Reiss 2009), and advertisers and marketers have been integrating products and advertising messages in various gaming environments (Bailey, Wise and Bolls 2009, Smith and Just 2009, Wise et al. 2008). While this terminology puts vastly different games into one group, the commonality among these different types of computer and video games is their

focus on persuading players.

Bogost (2007) explicates persuasive games through the lens of what he calls procedural rhetoric. He argues that computer games do not present direct persuasive messages to the players, but rather provide players with an environment (a set of rules and procedures) wherein they become part of the persuasion process by developing the arguments needed to fulfill the game's goal(s). For instance, Peng and colleagues (2006) found support for this in a study where those who played the role of a police officer in a computer game were generally more lenient when evaluating crimes committed by police officers rather than those committed by generic criminals.

This argument was also supported in a series of studies with *PeaceMaker* (2007), a video game in which people play the role of the Palestinian President or the Israeli Prime Minister and respond to various scenarios through diplomatic, economic, and military decision-making. Alhabash and Wise (2012) showed that American participants, before playing *PeaceMaker*, expressed higher favorability toward Israelis than Palestinians. Those who played the Palestinian role reported positive changes in attitudes toward Palestinians and negative changes toward Israelis, while those who played the Israeli role reported no meaningful attitude changes toward either national group after playing the game. Another study of Alhabash and Wise (2015) showed that *PeaceMaker* changes Israeli and Palestinian participants' explicit stereotypes of the two national groups in a role-congruent fashion. Those who played the Israeli role or the Palestinian role changed their evaluations of the opposing national group. Finally, Cuhadar and Kampf (2014) used *PeaceMaker* among Israeli-Jewish, Palestinian, Turkish and American students and showed attitude change only for the latter two groups who are secondary/tertiary parties to

the conflict.

Smith and Just (2009) agree with Bogost's (2007) claims that some sort of persuasion takes place when playing certain types of computer and video games, yet they call for a more analytical and rhetorical look at this medium. They argue that computer games vary in the level of persuasion due to three factors: message autonomy, integration, and goal. Furthermore, the level of persuasion depends on the extent to which a computer game contains these three factors. Below, this study describes GC, the computer game used here, in terms of these three factors.

- **Autonomy**. In GC, players choose the newspaper they wish to represent (Israeli, Palestinian or Western) and the quotes from the interviews they conducted that best reflect their response to in-game events. Players must make decisions in order to respond to these events, which are taken from real-life events in the conflict. According to Smith and Just (2009), autonomy deals with the level of explicit arguments presented within the game. While a low-autonomy game presents players with more arguments than a high-autonomy game, high-autonomy games are thought to elicit more deliberation, leading to greater persuasion. This study argues that GC is high on autonomy because it is based on responding to in-game events rather than evaluating persuasive arguments.
- **Integration**. Integration is the extent to which an object of persuasion (i.e., a product or brand) is embedded in the game design and content. From a traditional marketing perspective, GC does not have an object of persuasion per se. However, the object of the game—learning about the Israeli-Palestinian conflict— is thoroughly embedded in all game-play aspects, which this study argues makes this game an example of high integration.
- **Overlap**. Finally, Smith and Just (2009) argue that the level of overlap between the game's goal and its learning goal influences the level of persuasion. Games

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with high overlap force players to elaborate on the game's learning objectives in order to perform well. This study argues that there is a high level of overlap between the game and learning goals in GC. Players in GC are scored according to ratings from different sides and need to establish good relations with both their own and the opposing side. In order to perform well, the player needs to learn which quotes to select in order to establish good relations with different sides in the conflict. For example, if a player representing an Israeli newspaper selects quotes that enhance only the Israeli side, then the resulting score would be low, as opposed to selecting quotes reflecting an understanding of both sides' objectives.

Based on Smith and Just's (2009) discussion of autonomy, integration and goal overlap, the current study classifies GC as a persuasive game. In fact, previous studies have indicated that GC can generate changes in attitudes towards the Israeli-Palestinian situation, even among Israeli-Jewish and Palestinian young people with strong and ethnocentric attitudes toward the situation (Cuhadar and Kampf 2015, Kampf and Cuhadar 2015). However, these studies focused on the Checkpoint scenario, and possible differences in episodic and human interest framing between this scenario and the Military Raid scenario in GC may make for distinguishable changes in their attitude outcomes (i.e., impartial attitudes) as illustrated in the next sub-section.

Episodic Framing: The Checkpoint Scenario vs. the Military Raid Scenario
According to Gamson and Modiligiani (1987), a frame is "a central organizing idea or story line that provides meaning to an unfolding strip of events weaving a connection among them. The frame suggests what the controversy is about, the essence of the issue" (143). Numerous studies have shown that the particular frame

imposed on an issue or event can shape opinion on related policies (e.g., Druckman 2001, Gross 2008, Sniderman and Theriault 2004). Episodic framing, the focus of this study, presents an issue by offering a specific example, case study, or event-oriented report; describing such specific cases in personal, human and individual terms; and focusing on human interest elements (e.g., covering unemployment by presenting a story on the plight of a particular unemployed person; e.g., Iyengar 1991).

Prior research on episodic framing has mostly focused on its use in news coverage (e.g., Cozma and Kozma 2015, Ostfeld and Mutz 2014, Rysftel et al. 2014, Springer and Harwood 2015) and has failed to examine its role in contributing to impartial attitudes, particularly in the context of intractable conflicts like the Israeli-Palestinian situation. For instance, Iyengar (1991) showed that the dominance of episodic framing in political news coverage diverts attention from societal responsibility and leads people to hold individuals responsible for their own predicaments, thereby dampening support for government programs designed to address problems and shielding leaders from responsibility.

The more "human interest" elements there are, the more episodic the framing is considered to be (e.g., Gross 2008). The "human interest" details of an episodic framing should be emotionally engaging. After all, the emotional power of episodic framing to engage the audience is probably one of its strongest appeals. While episodic frames should elicit more emotions in general, the nature of the emotional response (and attitude outcomes) would depend on the content of a given frame. Thus, one must consider the details of the particular frame used in an episodic frame in order to determine the nature of attitude outcomes.

Studies in the context of conflict resolution have indicated that presenting episodic

and human interest framing of ethno-political issues like the Israeli-Palestinian conflict, by focusing on particular individuals on both sides and presenting them in human, individual and personal terms, may produce more empathy and identification with both sides, eliciting more impartial attitudes towards the situation (e.g., Bar-Tal, Halperin and Pliskin 2014, Schori-Eyal, Halperin and Bar-Tal 2014). However, these studies did not compare the extent of episodic and human interest framing between different scenarios in computerized simulations as this study does.

Both scenarios in GC present particular instances in the Israeli-Palestinian conflict. The Checkpoint scenario focuses on the life of Israeli soldiers and Palestinian civilians at a checkpoint in East Jerusalem, while the Military Raid scenario presents the particular case of a military raid in a small village in the West Bank where a unit of Israeli soldiers conducts a raid to arrest a group of Palestinians accused of committing violent actions against Israelis in West Jerusalem. Both scenarios include violent actions and security concerns from the content perspective, and two separate studies validated insignificant differences between them in this respect. A content analysis in 2017 suggested insignificant differences between the two scenarios in the number of instances of violent actions (four instances in the Checkpoint scenario and six instances in the Military Raid scenario) and the number of instances of security concerns (ten instances in the Checkpoint scenario and eight instances in the Military Raid scenario) used in both of them as illustrated below. In addition, a separate study in 2017 elaborated in the Methods section suggested insignificant differences between the two scenarios in their perception by Israeli undergraduate students of Jewish and Palestinian origin from the content perspective (i.e., violent actions vs. security concerns).

Yet the security concerns and violent actions in the Checkpoint scenario are presented in more human interest terms (e.g., a Palestinian who tries to break into the checkpoint is shot dead by an Israeli soldier or Israeli soldiers, and Palestinian civilians describe their security-related stress and suffering in their impossible situation at the checkpoint in the Palestinian territories). In contrast, the violent actions and security concerns in the Military Raid scenario are presented in less individual, personal and human interest terms (e.g., a group of Israeli soldiers uses force in order to break into a house in the village in which a group of Palestinian people accused of committing violent actions against Israelis is hiding, both sides shoot at one another with casualties on both sides, or describing general security concerns regarding terrorist attacks in Israel and Israeli military raids in the Palestinian territories).

Thus, there are some differences between the two scenarios in the extent of the scenario presented in human interest terms, as validated in a separate study presented in the Methods section conducted in 2017. The Checkpoint scenario focuses on a narrative that represents the hardships of both Israeli soldiers and Palestinian civilians at a checkpoint in the Palestinian territories, tending to present them as individual people who experience security-related stress and suffering from their impossible situation. For instance, this scenario presents the dilemmas of a soldier who shot a Palestinian civilian trying to break into the checkpoint. This scene emphasizes the soldier's emotional difficulties in shooting a person for the first time and his suffering from this incident. This scenario also presents the suffering of a Palestinian pregnant woman fainting after waiting for hours at the checkpoint. This scene emphasizes how this women asks the soldier again and again to let her through given her medical condition but she ends up waiting for hours at the checkpoint and going under security checks despite her special condition.

In contrast, the Military Raid scenario presents a narrative focusing on a violent raid by a unit of Israeli soldiers on a village in the Palestinian territories in order to arrest a group of Palestinians accused of committing violent actions against Israelis, tending to present both sides in group terms (i.e., a unit of soldiers vs. a terrorist cell), not specifying individual, human interest and personal consequences of the situation. For instance, this scenario does not present dilemmas of the soldiers who break into the house of a Palestinian family in the middle of the night, making a mess while looking for the Palestinians who are accused of committing violent actions against Israelis. The scenario also does not provide personal explanations for the violent actions of the Palestinians against Israelis in the central bus station in Jerusalem. Finally, this scenario focuses on Israeli soldiers and Palestinians shooting at one another without specifying human interest and personal elements of the situation.

From the visual and content perspectives, the Checkpoint scenario presents Israeli soldiers and Palestinian civilians as individual people, and the interviews are conducted with each person separately. In addition, this scenario presents a variety of characters on both sides (e.g., soldiers, civil right people, civilians, media people) suggesting a more human interest perspective on the situation. In contrast, the Military Raid scenario presents Israelis and Palestinians in group terms rather than individual people focusing on a unit of Israeli soldiers and a Palestinian terrorist cell without showing other individual people on both sides. In addition, the reporter in this scenario interviews a group of characters rather than individual people on both sides contributing to looking at the situation in less individual and human interest terms.

Therefore, the Checkpoint scenario presents a more episodic framing of both sides in the conflict by focusing more on human interest, personal and individual elements

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compared to the Military Raid scenario. Based on the aforementioned research in the conflict resolution field (e.g., Bar-Tal, Halperin and Pliskin 2014, Schori-Eyal, Halperin and Bar-Tal 2014), it can be expected that the Checkpoint scenario, in contrast to the Military Raid scenario, may produce more empathy and identification with the other side, eliciting more impartial attitudes towards the situation by being able to look at the conflict through less biased lenses.

Attitudes Towards the Israeli-Palestinian Conflict: Israeli-Jews vs. Palestinians
This sub-section focuses on the unique cultural, religious and situational characteristics of the Israeli-Palestinian conflict which make the political positions of Palestinians more rigid, entrenched, and characterized by strong ethnocentric and ideological considerations that are more resistant to change.

Alon (2010) examines the ways in which cultural differences between Israel and the Palestinians present barriers to developing more impartial attitudes, particularly on the Palestinian side. A "cultural barrier" is defined as an impediment or hindrance to the process of conflict resolution that is caused by cultural misunderstandings, inconsiderateness or insufficient familiarity with the culture of the opposing party (Alon and Bar-Tal 2016). The most difficult issue associated with cultural gaps, it seems, is connected to perceptions of the trustworthiness of the opposing party in the face of divergent perceptions of fundamental issues such as the nature of peace and adherence to agreements and commitments. The importance of cultural values and the influence of cultural players are deeply pronounced in Palestinian society, which is dominated by Islamic culture and the conflicts between self-identity vs. the other and collectivism vs. individualism, power and value gaps, and different perceptions of uncertainty and time. These unique cultural characteristics make the positions of Palestinians regarding the conflict more strong and resistant to change

compared to their Israeli counterparts (Alon and Bar-Tal 2016).

Yitzhak Reiter (2010, 2017) reaches a similar conclusion after he examines the role of religion as a barrier against developing impartial attitudes within the Israeli-Palestinian conflict. The religion barrier exists in a situation where religious values and symbols prevent any possibility of negotiation and compromise as a means of settling a territorial dispute. Reiter claims that the importance of religious values and the influence of religious players are more pronounced in Palestinian society than in Israeli society, because Palestinian society is less secularized and because of the power Hamas wields through its parliamentary organization with a wide base of popular support.

Finally, given the occupation, Palestinians live under more difficult and harsher conditions compared to Israeli-Jews, which makes their political positions more rigid and entrenched (e.g., Bar-Tal 2013). In fact, face-to-face workshops in the Middle East consistently show more positive attitude outcomes for Israeli-Jewish young people than for their Palestinian counterparts given the cultural, religious and situational gap between both groups on this divide (e.g., Salomon 2008). It should be interesting to examine if this finding can also be applied to new media technologies such as computerized simulations of the Israeli-Palestinian conflict, particularly since previous studies conducted with these simulations only focused on comparing attitude outcomes between secondary/tertiary parties to the conflict (i.e., Americans and Turks) and directly involved parties to the conflict (i.e., Israeli-Jews and Palestinians; e.g., Cuhadar and Kampf, 2014, Kampf and Cuhadar, 2015).

Research Hypotheses

H1: Participants playing GC will become more impartial towards the conflict than those who do not play the game.

H1a: Participants playing the Checkpoint scenario will become more impartial toward the Israeli-Palestinian conflict than those playing the Military Raid scenario.

H2: Israeli-Jewish participants playing the Checkpoint scenario in GC will become more impartial regarding the conflict compared to Palestinian participants playing it.

Methods

Participants

Two hundred and ten Israeli-Jewish and Palestinian undergraduate students from the Schools of Education in Tel-Aviv University and Al-Quds University participated in the experiment. Eighty participants played the Checkpoint scenario, including 50 Israeli-Jewish students and 30 Palestinian students. Seventy participants played the Military Raid scenario, including 40 Israeli students of Jewish origin and 30 Palestinian students. Sixty participants did not play the scenarios, including 30 Israeli-Jewish students and 30 Palestinian students.

Table 1 suggests that participants who played the Checkpoint scenario, the Military Raid scenario or neither did not differ in key characteristics that could provide alternative explanations for the results. A one-way ANOVA with scenario type as a between-subjects factor and political attitudes as a within-subjects factor suggested insignificant differences between the three groups in political attitudes (F(1, 203)= .37, p=n.s.).

	Age M(SD)	Male	Political attitudes 1 ---------- 10 Left Right M(SD)	Religiosity 1 ---------- 10 Religious Secular M(SD)	Played a digital game in the last 6 months
Checkpoint	23.1 (1.25)	36%	6.02(2.45)	6.7(1.17)	45%
Military Raid	22.4 (1.18)	33%	5.67(2.37)	5.79(1.15)	47%
No scenario	22.9(1.23)	34%	5.88(2.29)	6.45(1.12)	48%

Table 1. Demographics.

Stimulus

GC is an award-winning educational game developed in 2010 by Serious Games Interactive in Denmark (https://school.seriousgames.net/). The game environment is based on real-life accounts reported to human rights organizations and news agencies by victims and witnesses, as well as various other sources.

The game consists of several different scenarios, each putting the player in a different context and requiring the deployment of different skills. This study selected the only two scenarios about the Israeli-Palestinian conflict, as specified earlier. The player is represented by the avatar of a Western reporter who arrives in Jerusalem. Her task is to write for one of the following newspapers: Israeli, Palestinian, or Western. The player is expected to produce a news report geared to the audience of one of these newspapers based on the interviews she conducts with various Israeli and Palestinian characters in the scenario. At the end of the game, the player chooses some of the quotes she collected throughout the interviews, including them in her final news report on which she is evaluated. This evaluation indicates whether the report is placed in the front pages of the newspaper or in the back, whether the quotes indicate important pieces of information about the conflict, whether the quotes reflect understanding of both sides' objectives and whether these quotes are a good

fit for the newspaper selected for the assignment.

The player is challenged to keep her work objective while gathering important information to be used in the news report. In the meantime, the player experiences the developments in the Israeli-Palestinian conflict and learns about the issues that are central to this conflict. The student has to form an opinion based upon her own actions and after meeting characters who represent different attitudes towards the conflict, despite the fact that she writes for a specific newspaper.

Validation of Stimulus

Given that this study does not compare attitude outcomes of the same scenario presented in varying levels of episodic and human interest, two validation studies were conducted to indicate that the Checkpoint scenario presents more episodic and human interest elements than does the Military Raid scenario, and that attitude change may be the outcome of the framing effects rather than of other elements in the narrative such as the content.

In order to validate that the Checkpoint scenario frames the conflict in more personal, individual and human interest terms (i.e., episodic framing) than the Military Raid scenario, 45 Israeli students of Jewish origin and 35 Israeli students of Palestinian origin from the departments of communication and political science at Tel Aviv University were asked to play the two scenarios in random order.

It should be noted that the Palestinian participants were citizens of Israel and not from the Palestinian territories as were those participating in the experiment. Yet the majority of Palestinians in Israel have family ties to Palestinians in the West Bank and the Gaza Strip, as well as to Palestinian refugees in Jordan, Syria, and Lebanon. In fact,

Palestinians in Israel identify themselves as Israeli by citizenship and Palestinian by nationality (Ghanem 2001, Jamal 2007). The identification of Palestinians in Israel with Palestinians in the West Bank and the Gaza Strip is reflected in their language, religion, and culture, as well as in their negative attitude towards Israeli policy toward Palestinians in the West Bank and the Gaza Strip. In addition, previous studies conducted with computerized simulations of the Israeli-Palestinian conflict, such as GC and *PeaceMaker*, suggested insignificant differences between Israelis of Palestinian origin and Palestinians from the Palestinian territories in terms of attitude change and perspective taking regarding the conflict (Cuhadar and Kampf 2014, Kampf and Cuhadar, 2015).

After playing the two scenarios in random order, the participants were asked to evaluate the degree to which the framing of the situation was human, individual and personal on a six-point scale, with 1 representing not at all human, individual and personal and with 6 representing very much human, individual and personal. Results suggested that the Checkpoint scenario was perceived as framing the situation in more personal, individual and human terms than the Military Raid scenario (M=4.8, SD=0.8; M=2.3, SD=0.56; F(1, 79)=91.8, p<.001). Insignificant differences were found in terms of nationality and scenario order in the evaluation of the two scenarios.

In order to validate that the Checkpoint scenario and the Military Raid scenario are not perceived significantly differently from the content perspective (i.e., violent actions vs. security concerns), 40 Israeli students of Jewish origin and 30 Israeli students of Palestinian origin from the department of political science at Tel Aviv University were asked to play the two scenarios in random order.

After playing the two scenarios in random order, the participants were asked to

evaluate the degree to which the scenario focuses on violent actions from the content perspective on a six-point scale, with 1 representing "not at all" and with 6 representing "very much." They were also asked to evaluate the degree to which the scenario focuses on security concerns from the content perspective on the same six-point scale. The two questions were presented in random order. Results suggested insignificant differences between the Checkpoint scenario and the Military Raid scenario from the content perspective (Security concerns $M=3.6$, $SD=0.7$; $M=3.45$, $SD=0.8$; $F(1, 69)=.05$, n.s.; Violent actions $M=3.5$, $SD=0.9$; $M=3.65$, $SD=0.83$; $F(1, 69)=.08$ n.s.). Insignificant differences were found in terms of nationality, scenario order and questions order in the evaluation of the two scenarios.

In addition, the participants were asked at the game's end why the Checkpoint scenario may have produced more impartial attitudes than the Military Raid, and what should be done regarding the latter to produce more impartial attitudes. The results regarding the Checkpoint scenario indicate that (a) 90% of the participants mentioned human interest and personal elements, (b) 30% of the participants mentioned victim elements, (c) 15% of the participants mentioned presenting both sides in the conflict in an equal manner, and (d) 10% of the participants mentioned security concerns. The results regarding changes in the Military Raid scenario showed that (a) 95% of the participants mentioned adding human interest and personal elements, (b) 25% of the participants mentioned adding victim elements, (c) 15% of the participants suggested decreasing aggressive elements, and (d) 10% of the participants suggested adding more security concerns.

Design and Procedure

The experiment was conducted as part of classes in qualitative research methods and participants were randomly divided to play one of the two scenarios (i.e.,

experimental group) or to not play either (i.e., control group). The participants received credit for their participation in the study. The data were collected in the last week of May 2016. No major event happened during this period that could provide an alternative explanation for the results.

The experimental condition took up to three hours and included four parts. First, the URL of the study was provided to the participants. When they opened the URL, they were introduced to the GC game and played a short demo not related to the conflict. Second, they filled in a short questionnaire administered online before playing the scenarios in GC. Third, participants played either the Checkpoint scenario or the Military Raid scenario in GC, randomly assigned by the study website. They were instructed that their task was to write a news report for a Western newspaper based on the interviews they conduct with various Israeli and Palestinian characters in the scenario. In the Checkpoint scenario, the participants were asked to write a news report describing life at a checkpoint in the Palestinian territories from the perspective of both Israeli soldiers and Palestinian civilians, while in the Military Raid scenario, they were asked to write a news report describing this raid from the perspective of both Israeli and Palestinian characters participating in it. The game also provides the options to write a news report for an Israeli or a Palestinian newspaper. This study preferred a Western newspaper over an Israeli or a Palestinian newspaper, because the former is considered a more neutral assignment for both Israeli-Jewish and Palestinian participants compared to the latter two because it involves trying to examine the situation from both Israeli and Palestinian perspectives. Finally, after playing the scenario, the participants again filled in a short questionnaire administered online. The questionnaire used before and after the scenario was almost identical in content with the exception of a few additional questions in the post-scenario questionnaire concerning participants' experience

with the game.

The control condition included three parts and took up to three hours. First, the URL of the study was provided to the participants. When they opened the URL, they filled in a short questionnaire. They were then given an online lecture about unobtrusive measures of studying political attitudes of young people (related to the class in qualitative research methods from which they were recruited, but not related to the conflict). Finally, they again filled in a short questionnaire administered online. The two questionnaires were identical in content and similar to those used in the experimental condition of the two scenarios (besides questions concerning participants' experience with the game).

Instruments

In order to assess impartial attitudes in the conflict, the study used a measure focusing on long-lasting historical issues in the conflict, examining the degree of 'rightness' of each side regarding key historical and political issues in the conflict including water, refugees, borders, settlements, Jerusalem, and security, using the following scale: 1. Palestinians are absolutely right, 2. Palestinians are somewhat right, 3. Both sides are equally right, 4. Israelis are somewhat right, and 5. Israelis are absolutely right. The end categories of this scale indicate more ethnocentric attitudes towards the conflict, while the middle category indicates more impartial attitudes towards the conflict. In order to measure impartiality and ethnocentricity in this study, the data was transformed by measuring the distance to the middle-point which represents impartiality. A larger distance indicates less impartial attitudes (i.e., more ethnocentric attitudes) and a smaller distance indicates more impartial attitudes.

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This measure has already been used in previous studies conducted with computerized simulations of the Israeli-Palestinian conflict, which examined impartial attitudes in participants who are direct parties to the Israeli-Palestinian conflict and those who are secondary/tertiary parties to the conflict (e.g., Cuhadar and Kampf 2015, Kampf and Cuhadar 2015), and it is based on a questionnaire developed by conflict resolution scholars in Israel and Palestine (e.g., Bar-Tal 2013, Rosen and Salomon 2011). A factor analysis indicated that in the pre-game intervention, the six key issues were loaded on one factor explaining 64.38% of the variance. Similarly, a factor analysis indicated that in the post-game intervention, the six key issues were loaded on one factor explaining 66.23% of the variance. Therefore, the average of answers given on the six key issues (after the transformation specified above) was used as a measure of attitude change about key issues in the conflict before and after playing the game.

The study measured the relevance of the Israeli-Palestinian conflict to the participant (the extent of attachment) because it can indicate attitude strength, which is closely related to taking a less impartial view on the conflict (e.g., Eagly and Chaiken 1998, Pettigrew 1998). People holding strong ethnocentric attitudes on issues which are more relevant to them may find it harder to become more impartial regarding the situation (e.g., Bar-Tal 2013, Eagly and Chaiken 1998, Rystfel et al. 2014). This measurement was taken by asking a question examining the participant's degree of emotional involvement regarding the Israeli-Palestinian conflict. A four-point scale was used in this question, with 1 representing completely uninterested and 4 representing extremely interested.

Political attitudes were measured by the following question: "If you were to place yourself on the following scale, where would you locate yourself in political terms?" A

ten-point scale was used in this question, with 1 representing extreme left and 10 representing extreme right.

Religiosity was measured by the following question: "If you were to place yourself on the following scale, where would you locate yourself in religious terms?" A ten-point scale was used in this question, with 1 representing very religious and 10 representing very secular.

The frequency of news consumption about the conflict was measured by the following question: "In an average week, how often do you follow the news about the Israeli-Palestinian conflict?" A five-point scale was used in this question, with 1 representing never and 5 representing always.

Statistical Procedures

A repeated-measures ANCOVA was used investigating the effects of scenario type (Checkpoint, Military Raid, No Scenario) and nationality on attitude values at two separate time points: pre- and post-scenario intervention. The important point with this study design is that the same participants are measured twice on the same dependent variable. Therefore, this test detects any overall differences between related means. Several measures were used as covariates, including gender, religiosity, political ideology, frequency of news consumption about the Israeli-Palestinian conflict and interest in the conflict. Given that the covariates were insignificant, only the critical F-statistics are reported in the text.

Results

Scenario type and impartial attitudes toward key issues in the Israeli-Palestinian conflict

Results suggested that the main effect of time on impartial attitudes towards key issues in the conflict was insignificant ($F(1, 202)=0.23$, p=n.s.). The interaction between time and scenario type was significant, suggesting that the three groups differed in impartial attitudes towards key issues in the conflict ($F(2, 202)=17.6$, $\eta^2=.18$, $p<.001$). The interaction between time and nationality was significant, suggesting that Israeli-Jewish and Palestinian participants differed in impartial attitudes towards key issues in the conflict ($F(1, 202)=10.21$, $\eta^2=0.04$, $p<.05$). The interaction between time, nationality and scenario type was significant, suggesting that Israeli-Jewish and Palestinian participants differed in impartial attitudes towards key issues in the conflict in the three groups ($F(2, 202) = 6.54$, $\eta^2 = .04$, $p < .05$).

Tests of between-subjects effects suggested significant results for nationality ($F(1, 202)=2.69$, $\eta^2=0.09$, $p<.0001$) and scenario type ($F(2, 202)=.662$, $\eta^2=0.03$, $p<.0001$).

Table 2 suggests that before playing the game, Israeli-Jewish and Palestinian participants were less close to the middle-point of impartiality regarding key historical issues in the conflict (i.e., more ethnocentric attitudes). Second, participants playing the Checkpoint scenario got closer to the middle-point of impartiality regarding key historical issues in the conflict after playing this scenario, unlike those playing the Military Raid scenario and those not playing either. Third, Israeli-Jewish participants playing the Checkpoint scenario got closer to the middle-point of impartiality regarding key historical issues in the conflict than did Palestinian participants playing this scenario. Finally, during the same time, no change in attitudes towards key issues in the conflict was found in the control group, and they

retained more ethnocentric attitudes toward the conflict (i.e., larger distance from the middle-point of impartiality).

	Key Issues Before M(SD)	Key Issues After M(SD)
Checkpoint scenario		
Israeli-Jews	1.74 (.16)	1.05* (.02)
Palestinians	1.75 (.23)	1.31* (.28)
Military Raid scenario		
Israeli-Jews	1.79 (.49)	1 .53 (.25)
Palestinians	1.62 (.35)	1.41 (.28)
No Scenario		
Israeli-Jews	1.70 (.16)	1.60 (.29)
Palestinians	(.29)	1.67 (.31)
	1.71 (.25)	

*p<.05

Table 2. Descriptive statistics of scenario type and nationality effects on impartial attitudes toward the Israeli-Palestinian conflict.

A Bonferroni test (Table 3) suggests significant effects in attitude outcomes for participants playing the Checkpoint scenario unlike those playing the Military Raid scenario and those not playing either, shifting to look at key historical issues in the conflict through the lenses of more impartial attitudes (as Table 2 indicated). Therefore, hypothesis 1 is partially confirmed and hypothesis 1.1 is confirmed. Table 3 also shows stronger effects in attitude outcomes for Israeli-Jewish participants playing the Checkpoint scenario than Palestinian participants playing it, shifting to look at key historical issues in the conflict through the lenses of more impartial attitudes (as Table 2 indicated). Therefore, hypothesis 2 is confirmed.

	Key Issues (Before-After) M(SD)
Israeli-Jews	
Checkpoint	.694(.005)***
Military Raid	.261(.006)
No scenario	.054(.006)
Palestinians	
Checkpoint	.407(.006)***
Military Raid	.210(.006)
No scenario	.042(.005)

*** < .0001

Table 3. A Bonferroni test for attitude outcomes regarding the Israeli-Palestinian conflict.

Discussion and Conclusions

The current study employed a controlled experiment to investigate the effect of GC, a computerized simulation of the Israeli-Palestinian conflict, on the degree of change in Israeli-Jewish and Palestinian students' attitudes toward the conflict as a function of the extent of episodic and human interest framing of two scenarios in this game.

Key Results

The results suggested that Israeli-Jewish and Palestinian participants who are direct parties to the conflict became more impartial regarding long-lasting historical issues in the conflict after playing the Checkpoint scenario. However, the same effects were not obtained for the Military Raid scenario. This may be due to the different episodic and human interest framing of the story in the two scenarios. Though both scenarios focus on particular cases, the Checkpoint scenario, more than the Military Raid scenario, presents personal, human interest and individual elements of both Israelis and Palestinians at a checkpoint in the Palestinian territories, an experience which may produce empathy and identification with both sides, eliciting more impartial attitudes towards the situation.

Yet it should be noted that this finding may be also attributed to other elements in the scenario which require more studies in the future. For instance, the Checkpoint scenario, unlike the Military Raid scenario, focuses on presenting both sides as victims of the impossible situation in the conflict. The focus on presenting both sides as victims of the situation may produce more empathy and identification with both sides, eliciting more impartial attitudes towards the situation (e.g., Bar-Tal 2013, Kampf and Cuhadar 2015).

Interestingly, this study indicated that Israeli-Jews playing the Checkpoint scenario in GC became more impartial toward the conflict than did Palestinians playing it. Face-to-face peace education workshops in the Middle East have already suggested more positive attitude outcomes for young Israeli-Jewish people than for their Palestinian counterparts (e.g., Salomon 2008, Salomon and Cairns 2009), but this study is among the first to point out that this finding can also be applied to new media technologies such as computerized simulations of the Israeli-Palestinian conflict. Possible explanations mentioned earlier for the different attitude outcomes of Israeli-Jewish and Palestinian students playing the game included cultural and religious barriers to developing more impartial attitudes, set in the deeper strata of the conflict—national identity, values, belief systems, historical narratives, and collective memory. The different attitude outcomes may also be attributed to the gap in conditions between the two groups in the conflict. This consistent finding may be ascribed to the difficult situation of young Palestinian people living under occupation which makes their political positions more rigid, entrenched, and characterized by strong ideological considerations. It is therefore harder to obtain shifts in these attitudes compared to young Israeli-Jewish people who live under relatively better conditions. Yet, it should be noted that despite the difficult situation and strong ethnocentric attitudes toward the conflict, young Palestinian people still obtained relatively positive attitude

outcomes in this study, developing more impartial attitudes towards the conflict after playing the Checkpoint scenario.

Theoretical, Empirical and Practical Implications

The current study provides new insights to the study of computer game effects. While much previous research focused on the effects of violent computer games (e.g., Anderson 2004), the current results illustrate that playing role-play computer games that include episodic and human interest elements can lead to positive changes in attitudes toward a situation. More specifically, the results indicate that a short period of playing the Checkpoint scenario in GC was sufficient to induce changes to the cognitive structures guiding the situation. Indeed, this finding is limited to the short-term effects, as the measures were employed right after the game-play experience. Future research should explore the long-term effects of such games on attitude and behavior changes. The results can shed light on potential positive media effects on individuals' attitudes and behaviors.

This study suggests that the framing of the story in the game may be a factor that influences the success of computerized simulations in changing strong beliefs and attitudes of direct parties to the conflict. It suggests that in order to improve the results, the story should be framed in episodic terms focusing on personal, individual and human interest representation of particular cases of individuals on both sides of the divide. Additional future study should continue analyzing the impact of framing on attitude outcomes in computerized simulations of protracted and intractable conflicts like the Israeli-Palestinian situation.

The current findings strongly establish the Checkpoint scenario in GC as an efficacious intervention for countering ethnocentric and stereotypic attitudes in

Israeli-Jewish and Palestinian young people. The study's findings strongly support the use of such a game-based intervention approach when designing programs for reducing ethnocentric and stereotypic attitudes in intractable conflicts like the Israeli-Palestinian situation. Given that positive attitude outcomes were obtained after such a short and minimal intervention, game-based interventions like the Checkpoint scenario could be a relevant tool for reducing stereotypic and ethnocentric tendencies among youth who live in areas affected by war, conflict and ethno-political tension.

The current study's theoretical findings are applicable to various fields, such as communication, education, political science, game design and conflict resolution. The study shows that new media, specifically persuasive computer games, are capable of inducing changes in attitudes towards complex situations like the Israeli-Palestinian conflict, as well as promoting and educating the younger generations about peace and informing them about the situation and the world around them, transcending existing attitudes and stereotypes. While face-to-face interaction is limited and precluded in the context of the Israeli-Palestinian conflict, computer-mediated communication, much like playing the Checkpoint scenario in GC, has the potential of facilitating conflict resolution beyond existing sociopolitical norms (Kampf 2011, Walther 2009). Also, additional delayed measures of attitude outcomes might be useful in illustrating long-term behavioral changes and not only immediate attitudinal changes.

Limitations

Though very promising, the study's findings should be considered with caution and interpreted in light of the following limitations. First, future research should more directly examine the effects of the same scenario presented in more or less episodic

terms on attitude outcomes by, for instance, changing the group terms in the Military Raid scenario into individual people, and adding personal, individual and human consequences to the situation in order to measure more directly the attitude outcomes of the extent of episodic framing within the same scenario. In addition, this study assigned a Western newspaper journalist to all participants, and in the future it may be interesting to examine the role of the assignment (i.e., writing for an Israeli, Palestinian or Western newspaper) in predicting attitude outcomes regarding the situation compared to the framing of the story in the two scenarios (i.e., the Checkpoint scenario vs. the Military Raid scenario). Finally, it remains unclear to what extent the impartial attitudes are caused by the information the students were exposed to, and to what degree these attitudes are caused by the game aspect of GC. In the future, it could be interesting to investigate the impact of GC compared with another format conveying the same information (e.g., a lecture, a written text, a presentation or videos of others playing the game) in order to examine specifically whether the game aspect of GC adds more than other formats to developing impartial attitudes towards the conflict.

In conclusion, the current study illustrated that a short period of playing the Checkpoint scenario in GC led to changes in attitudes towards the Israeli-Palestinian conflict. This finding paves the way for further exploration of attitude change via interactive media and virtual environments.

References

Alhabash, S. and Wise, K., 2012. PeaceMaker: Changing students' attitudes toward Palestinians and Israelis through video game play. *International Journal of Communication*, 6, 1-20.

Alhabash, S. and Wise, K., 2015. Playing their game: Changing stereotypes of Palestinians and Israelis through videogame play. *New Media & Society*, 17(8), 1-24.

Alon, I., 2010. Cultural barriers in the Israeli-Palestinian conflict. In: Bar-Siman-Tov Y., ed. *Barriers to peace in the Israeli-Palestinian conflict*. Jerusalem: The Jerusalem Institute for Israel Studies, 267-293.

Alon, I. and Bar-Tal, D., eds., 2016. *The role of trust in conflict resolution: the Israeli-Palestinian case and beyond*. Cham: Springer.

Anderson, C., 2004. An update on the effects of playing violent video games. *Journal of Adolescence*, 27, 113-122.

Bailey, R., Wise, K. and Bolls, P., 2009. How avatar customizability affects children's arousal and subjective presence during junk food-sponsored online video games. *CyberPsychology & Behavior*, 12(3), 277-283.

Barlett, C., Rodheffer, C., Baldassaro, R., Kinkin, M. and Harris, R., 2008. The effect of advances in video game technology and content on aggressive cognitions, hostility, and heart rate. *Media Psychology*, 11, 540-565.

Bar-Tal, D., 2013. *Intractable conflicts: Socio-psychological foundations and dynamics*. New York: Cambridge University Press.

Bar-Tal, D., Halperin, E. and Pliskin, R., 2014. Why is it so difficult to resolve intractable

conflicts peacefully? A socio-psychological explanation. In: Galluccio M., ed. *Handbook of international negotiation: Interpersonal, intercultural and diplomatic perspective*. New York: Springer, 73-92.

Baylouny, A. M., 2009. Seeing other sides: Nongame simulations and alternative perspectives of Middle East conflict. *Journal of Political Science Education*, 5, 214-232.

Bogost, I., 2007. *Persuasive games*. Cambridge: MIT Press.

Bogost, I., 2008. The rhetoric of video games. In: Salen K., ed. *The ecology of games: Connecting youth, games, and learning*. Cambridge: MIT Press, 186-195.

Buch, T. and Egenfeldt-Nielsen, S., 2007. The learning effects of Global Conflicts Palestine. In: Fournos Center for Digital Culture, *Gaming realities: The challenge of digital culture*. Athens, October 2007.

Cozma, R. and Kozma, C., 2015. The Syrian crisis in the news. *Journalism Practice*, 9(5), 669-680.

Cuhadar, E. and Kampf, R., 2014. Learning about the Israeli-Palestinian conflict and negotiations through simulations: The case of PeaceMaker. *International Studies Perspectives*, 15, 142-162.

Cuhadar, E. and Kampf, R., 2015. A cross-national inquiry into the Israeli-Palestinian and Guatemalan scenarios in Global Conflicts. *Negotiation and Conflict Management Research,* 8(4), 243-260.

Druckman, J. N., 2001. The implications of framing effects for citizen competence. *Political Behavior*, 23, 225–256.

Eagly, A. and Chaiken, S., 1998. Attitude structure and function. In: Gilbert, D. T., Fiske S. T. and Lindzey L., eds., *The handbook of social psychology*. New York: McGraw-Hill, 125-136.

Eyal K., Metzger, A., Lingsweiler, R., Mahood, C. and Yao, M., 2006. Aggressive political opinions and exposure to violent media. *Mass Communication & Society*, 9(4), 399-428.

Gamson, W. A. and Modigliani, A., 1987. The changing culture of affirmative action. In: Broumgart R., ed., *Research in political sociology*. Greenwich: JAI Press, 137-177.

Gee, J. P., 2008. Learning and games. In: Salen, K., ed., *The ecology of games: Connecting youth, games, and learning*. Cambridge: MIT Press, 21–40.

Ghanem, A., 2001. *The Palestinian-Arab minority in Israel, 1948–2000: A political study.* Albany: State University of New York Press.

Global Conflicts, 2010. [video game] (Microsoft Windows, Mac OS) 1C, RuneSoft, Serious Games Interactive, Serious Games Interactive.

Gross, K., 2008. Framing persuasive appeals: Episodic and thematic framing, emotional response, and policy opinion. *Political Psychology*, 29(2), 125-136.

Iyengar, S., 1991. *Is anyone responsible? How television frames political issues.* Chicago: University of Chicago Press.

Jamal, A., 2007. Nationalizing states and the constitution of 'Hollow Citizenship': Israel and its Palestinian citizens. *Ethnopolitics*, 6(4), 471–493.

Kahne, J., Middaugh, E. and Evans, C., 2008. The civic potential of video games. Oakland, California: Civic Engagement Research Group. Available at https://www.giarts.org/sites/default/files/CIVIC_POTENTIAL_VIDEO_GAMES.pdf, accessed 23 November 2017.

Kampf, R., 2011. Internet, conflict and dialogue: the Israeli case. *Israel Affairs*, 17(3), 384-400.

Kampf, R. and Cuhadar, E., 2015. Do computer games enhance learning about conflicts? A cross-national inquiry into proximate and distant scenarios in Global Conflicts. *Computers in Human Behavior*, 52, 541-549.

Lenhart, A., Kahne, J., Middaugh, E., Macgill, A., Evans, C. and Vitak, J., 2008. *Teens, video games and civics*. Washington: Pew Research Center. Available at http://www.pewinternet.org/2008/09/16/teens-video-games-and-civics/, accessed 23 November 2017.

Michael, D. and Chen, S., 2006. *Serious games: Games that educate, train, and inform*. Boston: Thomson Course Technology PTR.

Mitgutsch, K., 2011. Serious learning in serious games: Learning in, through and beyond serious games. In: Ma, M., Oikonomou, A. and Jain, L. C., eds. *Serious games and edutainment applications*. Berlin: Springer, 45-58.

Ostfeld, M. and Mutz, D., 2014. Revisiting the effects of case reports in the news. *Political Communication*, 31(1), 53-70.

PeaceMaker, 2007. [video game] (Microsoft Windows, Mac OS, Android) ImpactGames, Impact Games.

Peng, W., Klein, J. and Lee, K., 2006. Will role play video games influence how you judge? Favoritism towards similar roles and social judgments towards criminality. In: International Communication Association, *Networking communication research*. Dresden, 19-23 June 2006.

Pettigrew, T., 1998. Inter-group contact theory. *Annual Review of Psychology*, 49, 65–85.

Reiss, A., 2009. Army using video games to tempt recruits. *CNN Edge of Discovery blog*, [blog] 16 January. Available at http://www.cnn.com/2009/TECH/01/14/am.army.experience/index.html, accessed 23 November 2017.

Reiter, Y., 2010. Religion as a barrier to reconciliation in the Israeli-Palestinian conflict. In: Bar-Siman-Tov, Y., ed. *Barriers to peace in the Israeli-Palestinian conflict*. Jerusalem: The Jerusalem Institute for Israel Studies, 294-324.

Reiter, Y., 2017. *Contested holy places in Israel-Palestine: Sharing and conflict resolution*. London and New York: Routledge.

Roig, A., Corneilo, G., Adevol, E., Alsina, P. and Pages, R., 2009. Videogames as media practice: An exploration of the intersections between play and audiovisual culture. *Convergence: The International Journal of Research into New Media Technologies*, 15(1), 89-103.

Rosen, I. and Salomon, G., 2011. Durability of peace education effects in the shadow of conflict. *Social Psychology Education,* 14*,* 135-147.

Rystfel, F. A., Wirz, D. S., Kuhne, R. and Wirth, W., 2014. How emotional media reports influence attitude formation and change: The interplay of attitude base, attitude certainty and persuasion. *Media Psychology*, 17(4), 397-417.

Salomon, G., 2008. Peace education: Its nature, nurture and the challenges it faces. In: de Rivera, J., ed., *Handbook on Building Cultures of Peace*. New York: Springer, 107-122.

Salomon, G. and Cairns, E., eds., 2009. *Handbook of peace education*. New York: Francis and Taylor.

Schori-Eyal, N., Halperin, E. and Bar-Tal, D., 2014. Three layers of collective victimhood: Effects of multileveled victimhood on intergroup conflicts in the Israeli-Arab context. *Journal of Applied Social Psychology*, 44*,* 778-794.

Smith, J. and Just, S., 2009. Playful persuasion: The rhetoric potential of advergames. *Nordicom Review*, 30, 53-68.

Sniderman, P. M. and Theriault, S. M., 2004. The structure of political argument and the logic of issue framing. In: Sari, W. E. and Sniderman, P. M., eds. *Studies in public opinion.* Princeton: Princeton University Press, 133-165.

Springer, S. A. and Harwood, J., 2015. The influence of episodic & thematic frames on policy and group attitudes: Mediated analysis. *Human Communication Research*, 11(2), 145-167.

Squire, K., 2003. Video games in education. I*nternational Journal of Intelligent Simulations and Gaming*, 2(1), 49-62.

Tawil-Souri, H., 2007. From the enemy's perspective: An analysis of pro-Arab video games. In: International Communication Association, *Creating communication: Content, control, & critique*. San Francisco, 24-28 May 2007.

Walther, J. B., 2009. Computer-mediated communication and virtual groups: applications to interethnic conflict. *Journal of Applied Communication Research*, 37(3), 225-238.

Weber, R., Behr, K. M., Tamborini, R., Ritterfeld, U. and Mathiak, K., 2009. What do we really know about first-person-shooter games? An event-related, high-resolution content analysis. *Journal of Computer-Mediated Communication*, 14, 1016-1037.

Williams, V. C., 2006. Assuming identities, enhancing understanding: Applying active

learning principles to research projects. *Journal of Political Science Education*, 2, 171–186.

Wise, K., Bolls, P., Kim, H., Venkataraman, A. and Meyer, R., 2008. Enjoyment of advergames and brand attitudes: The impact of thematic relevance. *Journal of Interactive Advertising*, 9(1), 27-36.