True Love Lasts Forever: The Influence of a Popular Teenage Movie on Belgian Girls' Romantic Beliefs

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Abstract

The current experimental study ($N = 88$) investigated the short-term effect of a popular teenage movie on early adolescent girls' beliefs about romantic relationships, with particular attention to the moderating role of parasocial interaction with media characters and age. The results indicated that 11 to 14-year-old girls with higher levels of parasocial interaction were more inclined to endorse idealistic romantic beliefs after watching *High School Musical*. In addition, the effect of watching a romantic movie decreased with increasing age. The present study provides further insight into the causal order of the relationship between romantic media use and romantic beliefs and warrants attention to girls' consumption of unrealistic romantic media contents.

Keywords: romantic beliefs, movies, early adolescent girls, parasocial interaction, age

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Beliefs

The idea of finding true love and living happily ever after is frequently portrayed in

popular mass media. Almost eight million Americans watched in 2006 the premiere of *High

School Musical* on television. This movie tells a passionate love story about a pretty girl and a

handsome boy who share their enthusiasm for music and fall unconditionally in love. Such

popular depictions of romance and love are entertaining, though idealistic; they reduce the

complexity of personalities and emotions to an uncomplicated story of sexual attraction and

blistering love (Hefner & Wilson, 2013; Tanner, Haddock, Zimmerman, & Lund, 2003).

Correlational studies have suggested that exposure to romantic media contents is associated with

adolescents' views and expectations of love relationships (e.g., Eggermont, 2004).

The current experimental study ($N = 88$) adds to this literature by investigating the effect

of a popular teenage movie on young adolescent girls' beliefs about romantic relationships.

Particular attention is given to girls' affective interpersonal involvement in media characters (i.e.,

parasocial interaction; Rubin, Perse, & Powell, 1985) and age as potential moderators. The study

contributes to the scholarly knowledge about romantic media in several ways. First, our study

adds experimental evidence to previously reported relationships on exposure to romantic media

and romantic beliefs in cross-sectional studies (e.g. Hefner & Wilson, 2013; Lippman, Ward, &

Seabrook, 2014). Second, the study researches girls as they are more likely to watch romantic

movies than boys (ter Bogt, Engels, Bogers, & Kloosterman, 2010). Gender socialization

literature has also described that especially girls are socialized toward valuing long-term

romantic relationships (Tolman, Striepe, & Harmon, 2003). In addition, we focus on early

adolescent girls (11 to 14 years old) because they tend to be more susceptible to sexual media

effects as compared to older adolescents or adults (e.g,. Brown, Halpern, & L'Engle, 2005; Ward, 2003). Lastly, this study contributes to existing literature by exploring the theoretically proposed moderating role of parasocial interaction (e.g., Rubin et al., 1985) and age (e.g., Ward, 2003).

Adolescence, Romantic Beliefs, and Relationships

During childhood, children develop basic notions of romantic relationships (Bachen & Illouz, 1996). Adolescence is characterized by a heightened interest in romance as compared to childhood (Furman, 2002). Mixed-gender groups that are formed during early adolescence may gradually develop into dyadic romantic relationships (Connolly, Craig, Goldberg, & Pepler, 2004). Research has highlighted the significance of experiences with romantic relationships in adolescent development. For example, romantic experiences may affect the changes in the nature of family relationships (e.g., decrease of parental support), the development of identity (e.g., romantic self-concept and gender-role identity), and close relationships with peers (Furman & Shaffer, 2003).

Research among adolescents has also highlighted the importance of (idealized) beliefs about and representations of romantic relationships (e.g., Bachen & Illouz, 1996; Furman & Simon, 1999). Romantic beliefs refer to beliefs that compose the ideology of romanticism and typically include idealization of a romantic partner and relationship, the ideal that love can overcome all barriers and obstacles, the conviction that there is only one true love, and the idea of love at first sight (Sprecher & Metts, 1989; 1999). These beliefs are organized in a romantic script that can be described as a mental representation of a sequence of events related to romance (Abelson, 1981). The standards associated with the beliefs and thus included in the romantic

script are used to organize and evaluate one's own behavior, and to predict and interpret the

behavior of a (potential) romantic partner (Furman & Simon, 1999; Sprecher & Metts, 1989).

Accordingly, research supports that romantic beliefs predict the quality of future

relationships. More precisely, these beliefs predict outcomes associated with increased as well as

decreased relationship quality. For instance, a romanticized view of marriage increases the

likelihood of becoming disappointed in a relationship (Segrin & Nabi, 2002). Idealistic romantic

expectations are generally not met in actual relationships and can therefore lead to several

adverse outcomes, such as negative emotional and behavioral responses to relationship problems

(e.g., Baucom et al., 1996). On the other hand, idealistic romantic beliefs may also positively

affect feelings about a relationship. For instance, Sprecher and Metts (1999) found that

individuals who endorsed romantic ideals more strongly experienced feelings of love in their

present relationship more intensely and were more committed to their relationship than those

who endorsed romantic ideals less strongly. In addition, individuals who score high on romantic

beliefs tend to love and like their partner more strongly and experience more passionate love

(Sprecher & Metts, 1989). These and other studies show that the endorsement of idealized

romantic standards have important consequences for actual relationships.

Given the importance of romantic ideals, research attention is warranted to understand

how adolescents develop romantic beliefs organized in a romantic script. Prior research showed

that these beliefs are influenced by several factor, such as romantic relationship experience (e.g.,

Frazier & Esterly, 1990), parental divorce (e.g., Sprecher, Cate, & Levin, 1998) and media use

(e.g., Bachen & Illouz, 1996). The current study focuses on the socialization adolescents receive

from media.

Media and Romantic Beliefs

Mass media are important sources of information about romance (Bachen & Illouz, 1996) and sexual activities (Ward, 2003). Various content analyses have described the ubiquitous depictions of idealized romance in media aimed at children and adolescents (e.g., Johnson & Holmes, 2009; Pardun, 2002; Signorielli, 1997). For instance, an analysis of 26 Disney movies revealed that the majority of the movies included references to "love at first sight" and "living happily ever after" (Tanner et al., 2003). Similarly, Johnson and Holmes (2009) found that romantic comedies typically depict relationships as developing instantly into emotionally meaningful and significant attachment bonds. These depictions do not correspond with the longer time needed for actual relationships to grow into a profound relationship (e.g., Welsh, Haugen, Widman, Darling, & Grello, 2005). A content analysis of 52 romantic comedies showed that romantic ideals are often rewarded (e.g., receive praise from another character) (Hefner & Wilson, 2003). Romantic challenges also occurred, but were more likely to be associated with negative outcomes (e.g., rejection) (Hefner & Wilson, 2003).

Script theory proposes that exposure to media content activates the retrieval of existing, related scripts in the memory. The activated script serve as an interpretative frame for subsequent judgments (Hansen & Hansen, 1988). For example, media exposure can activate a romantic script that functions as a reference framework for a media user to evaluate his/her own romantic relationship or partner. In addition, research has shown that long-term media exposure can render thoughts and beliefs consistent with the media content more accessible in the audience's mind (e.g., Shrum, 1996). Moreover, a media stimulus may activate similar thoughts or related scripts immediately after the exposure through the process of priming. Such activation leads to a stronger endorsement of the promoted meanings and ideas (Hansen & Hansen, 1988). The latter priming effect is the focus of this study.

Romantic media effects have been supported in correlational research that reported cross-sectional relationships between romantic media and romantic beliefs. For instance, one study showed a positive relationship between the preference for romantically themed media and beliefs about relationship destiny (Holmes, 2007). In addition, Segrin and Nabi (2002) demonstrated that romantically themed television viewing is positively associated with idealistic expectations about marriage. Another study highlights the importance of distinguishing between different romantic screen media genres. The study reported several associations between exposure to specific romantic genres (e.g., marriage-themed reality shows) and viewers' endorsement of specific romantic beliefs (e.g., belief in love at first sight) (Lippman et al., 2014). In adolescent samples, two survey studies indicated that heavy television viewing is related to teenagers' idealistic expectations of a romantic partner (Eggermont, 2004) and marriage (Signorielli, 1991).

However, the current knowledge on romantic media effects is limited in two ways. First, the relationship between watching romantic media (in particular romantic movies) and the endorsement of romantic beliefs has rarely been studied among adolescents. Adolescents explore their own romantic identity as a response to romantic interests that increase during early adolescence. Hence, early adolescents may be especially prone to external influences that promote particular romantic beliefs, such as romantic media (Brown et al., 2005; Ward, 2003). Second, although experimental research informs us on the causal order of the relationship between romantic media use and romantic beliefs, experiments are largely absent in this research field. Correlational findings have thus far only been supported by one experimental study (Holmes & Johnson, 2009). This study found that single college students experienced more dissatisfaction about their prior romantic relationships after watching a romantic comedy. The authors explained that the exposure to idealistic content evoked a contrast effect that caused

dissatisfaction among the college students as their own romantic experiences did not correspond with idealistic romantic standards.

In sum, theory and research has suggested that romantic movies affect young media users' beliefs about relationships. The present study aims to complement this knowledge by conducting an experiment on the effect of watching a romantic movie among 11- to 14-years old girls. This study focuses on girls as romantic movies are mainly preferred and consumed by girls (ter Bogt et al., 2010). Based on prior literature, the following hypothesis was postulated:

H1: Early adolescent girls that have watched a romantic movie will express stronger support of romantic beliefs than will girls that have watched a movie with no reference to romance.

The Moderating Role of Parasocial Interaction

Previous research has indicated that viewer characteristics may moderate media effects (Ward, 2003). For example, audience members that are highly involved in media content are more inclined to adopt beliefs promoted in media content (e.g., Green & Brock, 2000). One specific type of involvement in media content is parasocial interaction. Parasocial interaction has been defined as a one-sided interaction with a media character that results into a parasocial relationship with the media character (Giles, 2002; Horton & Wohl, 1956). Such relationships are characterized by the lack of obligation and the freedom of audience members to withdraw from the relationship at any time. A parasocial interaction includes a feeling of friendship (Horton & Wohl, 1956) that results from the affective interpersonal involvement with the media character (Rubin et al., 1985). A parasocial interaction involves more than merely identifying with a media character as it can take multiple forms, such as having the feeling of knowing the media character, perceiving the character as a friend, and having the desire to meet the character

in person (Rubin et al., 1985). Viewers may feel a connection with, for instance, their favorite movie character that causes them to believe that they understand how the character reasons, acts, and experiences particular situations (Rubin et al., 1985). Parasocial relationships are believed to develop especially after repeated viewing (Horton & Wohl, 1956). However, previous experimental research has demonstrated that parasocial interaction, operationalized as the affective involvement in a media character (Rubin et al., 1985), occurs also when viewers have no pre-existing history with the character (Auter, 1992).

Audience members who share a parasocial relationship with a media character may be more likely to accept the narrative world and corresponding claims of the character. When the audience is involved or absorbed in a story, as is the case with parasocial interactions (Rubin et al., 1985), narrative events are more likely to be experienced like real events (Green & Brock, 2000). The immersion leads to a psychological distance from reality. As a result, real-world facts that could contradict story claims are less accessible in the mind. Research has shown that individuals who are involved in a story are more likely to accept story claims and to endorse story-consistent beliefs as compared to individuals who are less involved in a story (Green & Brock, 2000). In line with script theory, involvement literature thus suggests that romantic media content activates romantic scripts in a user's mind; immersion in a story leads to a decreased chance of activating critical scripts that question the portrayed events in the story. At the same time, immersion activates romantic scripts, and thus makes story-consistent beliefs more accessible. As individuals with higher levels of parasocial interaction with a media character are more involved in a story, we expect that they will be particularly likely to accept the romantic claims of stories.

This prediction has not yet been explored in media research. However, research has provided support for the moderating role of other types of involvement. One experimental study found that the self-concept of teenage girls with average to strong levels of media character identification was more affected by watching the romantic movie *Twilight* compared to the control group (Vandenbosch, Frison, & Eggermont, 2012). Building on script theory and prior research, we propose to test the following hypothesis:

> H2: The effect of watching a romantic movie on romantic beliefs is stronger among early
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> adolescent girls with higher levels of parasocial interaction with their favorite movie
>
> character as compared to girls with lower levels of parasocial interaction.

The Moderating Role of Age

In addition to parasocial interaction, age is frequently described as an important moderator of media effects (Ward, 2003). Young adolescent girls demonstrate an emerging interest in sexuality because of the challenging, critical task of developing a sexual identity (Weinstein & Rosen, 1991). Although both younger and older early adolescents face questions about sexuality, a substantial difference may be expected between these age groups.

Direct experience with relationships together with increased information about sexuality may result in a more realistic view of romantic relationships. A realistic view enhances the processing of romantic media messages in a more critical way (Bachen & Illouz, 1996). With age, the likelihood of being involved in romantic relationships increases (Connolly et al., 2004). As a consequence, adolescents are likely to experience for the first time what it means to have a "boyfriend" or "girlfriend." Adolescents involved in relationships are able to adjust existing, potentially incorrect, views of romantic relationships by comparing them to their own experience, thereby developing more realistic views of romantic relationships (Simon et al.,

2000). Moreover, the amount of information that adolescents receive about relationships and

sexuality increases with age. For instance, the sexual communication between mothers and

daughters increases with the age of the adolescent (Dilorio et al., 2000). Also, peers will

increasingly use each other as information sources about sexuality (e.g., Bleakley, Hennessy,

Fishbein, & Jordan, 2009).

Cognitive developmental changes increase adolescents' capacities to organize and

process information (Furman & Simon, 1999). For instance, adolescents' skills to take a

different point of view and self-reflect improve as they get older. These new skills allow to

increasingly recognize alternative views, to compare alternative views more intensively with

one's own views, and to adjust one's own views accordingly (Furman & Simon, 1999). These

changes in cognitive development also relate to adolescents' relationship conceptions and

experiences. Literature has suggested that with increasing age, adolescents advance their notions

of being in love such that these become more detailed, specific and complex. As adolescents

grow older, they describe love more by mentioning more specific and abstract notions of caring,

affection, and sexual attraction (Montgomery & Sorell, 1998). Likewise, research focusing

among early adolescents has demonstrated a change in interpretations of romantic relationships.

References to intimacy (e.g., trust, closeness) seem to increase with age, whereas references to

passion (e.g., having a crush on someone, having very strong feelings for someone) and

affiliation (e.g., feelings of liking someone, friendship) decrease (Connolly et al., 1999).

As age increases, the comprehension and evaluation of media messages increases (Ward,

2003). These cognitive developmental advances allow older adolescents to react more critically

to media messages. In this view, one study showed that 12-year-old adolescents face more

problems with fully understanding television portrayals of sexual innuendos than 15-year-old

adolescents (Silverman-Watkins & Sprafkin, 1983).Therefore, the susceptibility to the influence

of romantic media may change with age. As such, we predict that:

> H3: As age increases, the effect of exposure to a romantic movie on the romantic beliefs
>
> of early adolescent girls will decrease.

The three hypotheses will be tested using the romantic movie *High School Musical*. This

stimulus was chosen because of its global success among young audiences and its idealistic

representation of romantic relationships (Disney, 2009; Potter, 2012). Moreover, the study will

control for relationship experience, parental divorce, enjoyment of media content, and past

exposure to media content. In particular, romantic experiences can lead to a change in romantic

beliefs as idealistic expectations are rarely met in actual relationships (Frazier & Esterly, 1990).

Women with divorced parents have been found to have less idealized romantic beliefs (Sprecher,

Cate, & Levin, 1998). Furthermore, media research suggests that enjoyment of media content

and past exposure to media content may influence media effects (Ward & Rivadeneyra, 1999;

Ward & Friedman, 2006).

Method

Participants

Participants were recruited through youth movements. In Flanders (Belgium), youth

movements are a popular leisure activity for children of 6 years and older (Studiedienst van de

Vlaamse Regering, 2013). Members can participate weekly in playful activities that are guided

by a leadership team of young volunteers (17 years and older) (De Pauw, Vermeersch, Coussée,

Vettenburg, & Van Houtte, 2010). Seven youth movements agreed to cooperate. In total, 88 girls

aged between 11 and 14 ($M = 12.73$, $SD = 1.04$) participated in the experiment. Thirty-six

percent ($n = 32$) were attending primary school; the others ($n = 56$) were attending secondary

school. Ethical guidelines that were customary in Belgium at the time of the study were followed.

Procedure

The experiment was presented as a youth movement activity. Participants were told that they would participate in two unrelated studies. For the ostensible first study, a film study, participants watched a full length movie in a room of their youth movement. The seven youth movements were randomly assigned to one of the movies. The number of members present at the time of the study differed according to the movements. Members of three movements ($n = 42$) were assigned to the control movie condition and watched the movie *Over the Hedge*. The members of the other four movements ($n = 46$) watched the romantic movie *High School Musical*. During the movie, the girls were seated next to each other, and drinks and snacks were provided to imitate a natural movie setting. Directly after seeing the movie, participants completed a questionnaire containing questions related to the movie they had seen, filler questions and a measure of parasocial interaction. The second questionnaire was distributed among the participants immediately after the first questionnaire and was described as an unrelated study on girls' social environment and relationships. This questionnaire included questions regarding romantic beliefs.

Material and Measures

Movies. To select the movies, two researchers first discussed the popularity of several movies. Two movies that were similar on several factors, but differed from each other with regard to the number of romantic references were selected. *Over the Hedge* was selected for the control condition and *High School Musical* for the experimental condition. Both movies were released in 2006 and were popular among the target group (i.e., they won several awards). *High*

School Musical depicts the story of two high school students. As soon as they meet they seem to be attracted to each other. Despite from being from different school cliques, they decide to audition together for the lead roles in their school's musical. The movie was broadcasted for the first time on the Disney Channel in 2006. In line with prior experimental research focusing on the moderating role of audience involvement in romantic media stimuli (e.g., Vandenbosch et al., 2012), an animated movie was selected for the control condition. *Over the Hedge* is an animated, adventurous comedy based on the comic strip of the same name. It presents a story about a raccoon and a group of forest animals that are looking for food in the human world. The underlying theme is the importance of family and friends.

Next, a third researcher coded the movies in a small pilot study to ensure that the stimuli differed substantially on the number of romantic references. The movies were analyzed using the coding categories used by Johnson and Holmes (2009) in their content analysis of 40 romantic movies. More specifically, the 15 categories that were relevant for this study were selected (affection, commitment, demonstrating caring, expression of emotions, family and friend approval, gestures, importance of partner, one-of-a-kind relationship, open communication, relationship discussion, relationship issues, relationship with ex, romantic speech, time together, trust in partner). The analysis unit used was a scene (i.e., a collection of shots of one action or one event taking place at the same location). The pilot study revealed that romantic acts are present in 22.6% of the scenes of *High School Musical*. *Over the Hedge*, on the contrary, contains no romantic references at all.

In addition to the pilot study, a manipulation check was included in the actual experiment. In particular, the participants indicated in a list of movie genres to which genre the movie they had been exposed to could be categorized (0 = *No*; 1 = *Yes*). No girl considered *Over*

the Hedge to be a romantic movie, while the majority of the girls considered it to be a comedy (*n* = 28) and/or an adventurous movie (*n* = 36). *High School Musical* was considered to be a musical (*n* = 43) and/or a romantic movie (*n* = 30). Furthermore, we measured participants' enjoyment of watching the movie on a scale from 1 to 10. Even though both movies received high scores, *High School Musical* (*M* = 7.94, *SD* = 1.37) was more liked than *Over the Hedge* (*M* = 7.19, *SD* = 1.67), *t*(86) = -2.29, *p* = .024. Finally, in each condition, we assessed past exposure to the movie they had just watched. In the past, girls had watched *High School Musical* (*M* = 4.29, *SD* = 5.43) more frequently than *Over the Hedge* (*M* = 1.45, *SD* = 1.97), *t*(56.1) = -3.28, *p* = .002.

The differences in enjoyment of the movie and past exposure to the movie may influence our results (Ward & Rivadeneyra, 1999; Ward & Friedman, 2006). Therefore, subsequent analyses will include these variables as additional control variables.

Socio-demographic variables. The participants reported their age, parental divorce status (0 = *No*; 1 = *Yes*) and prior relationship experience (0 = *No*; 1 = *Yes*). In our sample, 20.5% (*n* = 18) have divorced parents and 73.6% (*n* = 64) have had a boyfriend in the past. The random assignment to the conditions seemed to have worked as age, *t*(86) = -0.73, *p* = .469, parental divorce, χ^2 (1) = 0.10, *p* = .755, relationship experience, χ^2 (1) = 3.50, *p* = .062, did not differ between both conditions.

Romantic beliefs. The Romantic Beliefs Scale (Sprecher & Metts, 1989) was used to assess the endorsement of idealistic beliefs about romantic relationships. This scale has proven to be reliable in previous research with Cronbach's alpha's of .81 (Sprecher & Metts, 1989) and .80 (Hefner & Wilson, 2013). Participants indicated their agreement with 15 items on a 5-point Likert scale ranging from *totally disagree* (1) to *totally agree* (5). Examples of items are "There

will be only one real love for me," "The relationship I will have with my 'true love' will be nearly perfect," and "I am likely to fall in love almost immediately if I meet the right person". One negatively worded item was recoded and the items were averaged to create an index of the participants' ideology of romanticism (α = .76; M = 3.09, SD = .50).

Parasocial interaction. To assess affective interpersonal involvement with their favorite character in the movie, the 10-item Revised Parasocial Interaction Scale from Rubin and Perse's (1987; α = .88) was adapted. Before completing the scale, participants in the experimental condition were asked to select their favorite *High School Musical* character. Two items from the scale were omitted as they refer to a character that appears in several subsequent episodes like in series (e.g., I miss seeing my favorite character when he or she is ill or on vacation). The remaining eight items were scored on a 5-point Likert scale ranging from *totally disagree* (1) to *totally agree* (5). Example items are "My favorite character makes me feel comfortable, as if I am with a friend", and "My favorite character seems to understand the kinds of things I want to know." Items were averaged (α = .66; M = 2.85, SD = .73).

Results

First, Hypotheses 1 and 2 were tested. Before running a general linear model (GLM) to test the influence of movie exposure and parasocial interaction, we ensured that participants in the experimental and control conditions did not differ in their level of parasocial interaction, $t(78.7)$ = -1.85, p = .068. A second independent t-test showed that participants that were familiar with the movie and participants that were unfamiliar with the movie did not differ on the level of parasocial interaction with their favorite movie character, $t(76.6)$ = -.57, p = .568.

A GLM analysis was calculated in which movie (control versus romantic) was entered as a discrete between-subjects factor and parasocial interaction (mean-centered) as a continuous

between-subjects variable. Parental divorce, relationship experience, past movie exposure and enjoyment of the movie were entered as control variables. No significant main effects of movie exposure, $F(1, 76) = 1.51$, $p = .223$, or parasocial interaction, $F(1, 76) = 0.80$, $p = .373$, were found. A significant interaction between movie exposure and parasocial interaction emerged, $F(1, 76) = 5.81$, $p = .018$.

A spotlight analysis at plus and minus one standard deviation from the mean of parasocial interaction and a slope analysis (Aiken & West, 1991) were performed. As predicted, the difference in romantic beliefs between adolescents in the romantic movie condition and the control movie condition was larger for girls scoring higher on parasocial interaction. The difference between the movie conditions was significant for girls experiencing higher levels of parasocial interaction, $t(76) = -2.51$, $p = .014$, but not for those with lower levels of parasocial interaction, $t(76) = 0.97$, $p = .335$. In addition, participants in the romantic movie condition with higher levels of parasocial interaction endorsed more romantic beliefs ($M = 3.19$, $SE = .34$) than those experiencing lower levels of parasocial interaction ($M = 2.77$, $SE = .32$), $t(76) = 3.17$, $p < .01$. There was no significant influence of parasocial interaction on participants in the control movie condition, $t(76) = -0.85$, $p = .396$. None of the control variables had a significant effect (all Fs ≤ 3.47, all ps $\geq .066$).

In sum, these findings do not support Hypothesis 1 as watching a romantic movie did not increase the endorsement of romantic beliefs in all girls.[1] More precisely, the effect of exposure to a romantic movie on romantic beliefs varied according to the level of parasocial interaction

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[1]When comparing both movie conditions without parasocial interaction in the analysis, the results remain the same.

with girls' favorite character in the movie, thereby confirming Hypothesis2. The results are

presented in Figure 1.

[Figure 1 here]

Second, Hypothesis 3 was tested in a GLM analysis with movie (control versus romantic)

as a discrete between-subjects factor, age (mean-centered) as a continuous between-subjects

variable, and parental divorce, relationship experience, past movie exposure and enjoyment of

the movie as control variables. No significant main effects of movie exposure, $F(1, 76) = 1.32$, p

$= .253$, or age, $F(1, 76) = 0.30$, $p = .586$, on romantic beliefs were found. There was a significant

interaction between movie and age, $F(1, 76) = 5.98$, $p = .017$. As hypothesized, the difference

between the romantic movie and the control condition was larger for younger girls. The

difference between the movie conditions was significant for younger girls (1 SD below the mean

of age), $t(76) = -2.70$, $p < .01$, but not for older girls (1 SD above the mean of age), $t(76) = 0.89$,

$p = .376$. In addition, the regression slope was significant in the romantic movie condition, $t(76)$

$= -2.07$, $p = .042$, but not in the control condition, $t(76) = 1.49$, $p = .139$. In particular, young

early adolescent girls ($M = 3.06$, $SE = .35$) endorsed more romantic beliefs after watching a

romantic movie compared to older early adolescent girls ($M = 2.69$, $SE = .32$). These findings

demonstrate a moderating influence of age and thus support Hypothesis 3. Again, none of the

control variables had a significant influence (all Fs ≤ 2.47, all ps $\geq .120$).

[Figure 2 here]

An additional analysis was performed to test a three-way interaction effect of movie

condition, parasocial interaction and age. The three-way interaction effect was not significant,

$F(1, 79) = 0.28$, $p = .598$.

Discussion

The current study sought to investigate the effect of the popular teenage movie *High School Musical* on girls' beliefs about romantic relationships. We found that immediately after watching a romantic movie, 11 to 14-year-old girls with higher levels of parasocial interaction with their favorite movie character were more inclined to endorse idealistic romantic beliefs. The results also showed a moderating influence of age. As age increased, the effect of exposure to a romantic movie decreased. Taken together, the results of this study provide new insights into the relationship between movie consumption and girls' beliefs about romance and, more specifically, offer three contributions for future research.

The role of romantic movies in adolescence. The current study focused on the understudied genre of romantic movies (Holmes & Johnson, 2009). Scholars have called for research among adolescent samples on the effects of romantic movies because of biological, cognitive, and social developments that increase the prominence of romantic relationships in girls' awareness (Connolly et al., 2004). Our study revealed that romantic movies, such as *High School Musical,* may induce idealized views on romantic relationships among early adolescent girls. Taking account of girls' developing identity (and developing sexual self-concept) and the consequences of idealized romantic beliefs (e.g., Segrin & Nabi, 2002; Sprecher & Metts, 1999), future research may find an interesting task in examining whether similar media effects emerge when focusing on romantic comedies and romantically oriented television programs. In addition, more knowledge is needed on the role media-induced idealized beliefs play in girls' future romantic experiences.

Effect of romantic movies. By using an experimental design, this study provides further insight into the causal order of the relationship between romantic media and the endorsement of romantic beliefs. However, the results of this study particularly showed that idealistic romantic

beliefs were more accessible immediately after exposure to a romantic movie. Our findings are limited as we were unable to determine whether a romantic movie may also affect beliefs on a long-term basis. Once girls have turned their attention away from the stimulus (i.e., the movie), the immediate effect on their romantic beliefs may dissolve relatively quickly. However, prior literature has suggested that the temporary increase in romantic beliefs may appear recurrently, so that the endorsement of the beliefs becomes more stronger and permanent (Bem, 1981; Hansen & Hansen, 1988; Shrum et al., 1998). Adolescents continuously use media of which analyses have warned that they promote idealized romantic views (e.g., Tanner et al., 2003). Script theory predicts that repeated activation of the promoted beliefs is likely to stimulate a permanent endorsement (Bem, 1981; Hansen & Hansen, 1988; Shrum, et al.,1998). This reasoning has received support from survey research showing that television viewing is associated with adolescents' expectations of a romantic partner (e.g., Eggermont, 2004).

Future longitudinal research is needed to examine whether repeated exposure to romantic media messages results in more robust and thus long-term accessible romantic beliefs. Moreover, this research may explore the possibility of a cyclical process and thus whether girls with more accessible romantic beliefs expose themselves more frequently to romantic media content. This media selection effect is hypothesized in various well-known media theories (e.g., Media Practice Model of Steele and Brown, 1999; reinforcing spiral theory of Slater, 2003) and has been supported in research. For instance, a longitudinal study of Bleakley, Hennessy, Fishbein, and Jordan (2008) showed that the relationship between sexual media use and sexual outcomes is reciprocal. Adolescents were shown to select media content in line with their sexual behaviors, and the selected sexual content, in turn, was found to stimulate corresponding sexual behaviors.

Future research may explore whether similar reciprocal relationships can be found when studying exposure to romantic media content and romantic beliefs.

Viewers' characteristics. The current study was the first to explore the role of age and affective involvement (i.e., parasocial interaction) as moderators of the relationship between romantic media exposure and idealistic views of love relationships. As predicted, the results showed that the extent to which adolescents are parasocially interacting with their favorite movie character plays an important role in the effect of romantic media exposure. The difference between the control movie and the romantic movie was only significant among girls with higher levels of parasocial interaction. Thus, in contrast with the research of Green (2006) and Green and Brock (2000) among college students, but consistent with the study of Vandenbosch et al. (2012) among adolescent girls, our results seem to suggest that (affective) involvement is a *necessary* condition for the occurrence of a romantic media effect.

In our experiment, we used an adapted version of the Parasocial Interaction Scale of Rubin and Perse (1985). We aimed to create a scale that was more applicable for the current study (i.e., by removing 2 items). However, the scale may still not have been perfectly suitable. The Parasocial Interaction Scale has proven to be a useful measure of parasocial interaction with media characters one has just become acquainted with during the experimental session (Auter, 1992). Yet, the applied scale was originally developed for survey research, which might explain the moderate level of reliability of the scale in our study. More research is needed to test the face validity of the (Revised) Parasocial Interaction Scale in experimental research. Furthermore, the study included both participants that were familiar and unfamiliar with the movie as no differences occurred in their level of parasocial interaction. Future research needs to explore whether familiarity with a movie may moderate the interaction effect between movie exposure

and parasocial interaction on girls' romantic beliefs. Possibly, familiarity with a movie intensifies the effect of watching a romantic movie.

Although the parasocial interaction levels in the two movie conditions did not differ, the overall score was rather low. This score indicates that the level of actual parasocial interaction with the characters in the selected movies was limited. We recommend future research to pretest movies on their likelihood to provoke parasocial interaction. Moreover, future research would benefit from using movies from the same genre in the experimental and control condition. Animated feature movies differ in several ways from live-action movies and this may have affected our results.

The present study provides evidence for the moderating influence of age. Even though the effect of age has frequently been investigated in research on romantic beliefs (e.g., Frazier & Esterly, 1990; Segrin & Nabi, 2002), it has not yet been studied as a moderator of the influence of romantic media content. We showed that the effect of romantic media exposure decreases with increasing age. This result is of particular interest given the small age range of our sample.

The next research step would be to uncover why age moderates the romantic media effect. For instance, younger early adolescent girls may have less access to sexual information sources besides media than older early adolescent girls. It is also possible that cognitive skills make older girls less susceptible for the influence of romantic media. The observed effects may also be explained by pubertal development and the related bodily changes. Future studies should consider to include a direct measure of pubertal development. Overall, future research is needed to explore the role of age in depth. This research may also examine whether media involvement is more important during adolescence than during (emerging) adulthood.

The results is limited in several ways. Prior research has suggested that additional moderators are worth to consider in future investigation, such as prior media consumption and perceived realism. Research has found an association between romantic media exposure and romantic beliefs (e.g., Lippman et al., 2014). In addition, one study highlights the importance of the perceived realism of televised portrayals of romantic relationships (Osborn, 2012). Furthermore, past exposure to *High School Musical* was included as a control variable in the current study. However, we did not ask participants whether they had seen other *High School Musical* movies (*High School Movie 2, 3* or *4*). Participants who watched one or more versions of the other movies are more familiar with the movie characters. Therefore, future research should take this consideration into account.

The current study focused on adolescent girls. Girls not only consume romantic media more frequently (ter Bogt et al., 2010), they are also socialized to value longterm relationships more strongly than boys (e.g., Tolman et al., 2003). However, research has shown that men too hold idealistic relationship beliefs, even more than women (e.g., Sprecher & Metts, 1989). Therefore, future research on romantic movies should explore whether boys' beliefs are also affected by romantic movies. Furthermore, in the present study, all participants were members of youth movements. Youth movements mainly appeal to (White) youth from a middle class background. Even though the movements were originally rooted in an ideology (e.g., the Belgian youth movements Chiro and Scouts originated from the Catholic Church), contemporary activities of these movements take place in a non-ideological setting and have a main focus on "recreation" due to secularization (De Pauw et al., 2010). However, we did not assess participants' religiosity, ethnicity or social economic background. Future research should include

these factors as control variables. Also, research that focuses on adolescents from a more diverse background can test whether similar results can be found as reported in the current study.

Participants in the experimental condition were asked to select their favorite movie character. The majority of the participants (70.2%) selected one of the two main characters involved in the love story. However, parasocial interaction with a character not directly involved in the romantic story might result in differential effects on romantic beliefs. This could not be tested due to the relatively small sample size of the current study. Therefore, future research should include a larger sample size to test for such potential effects.

Despite these limitations, the current experimental study provides important insights into the causal order of romantic media effects. This study is an important step in researching the understudied effects of romantic media. The findings highlight the importance of continued research attention to the role of mass media as a socialization agent of girls' romantic beliefs and underline the importance of age and parasocial interaction in this socialization process.

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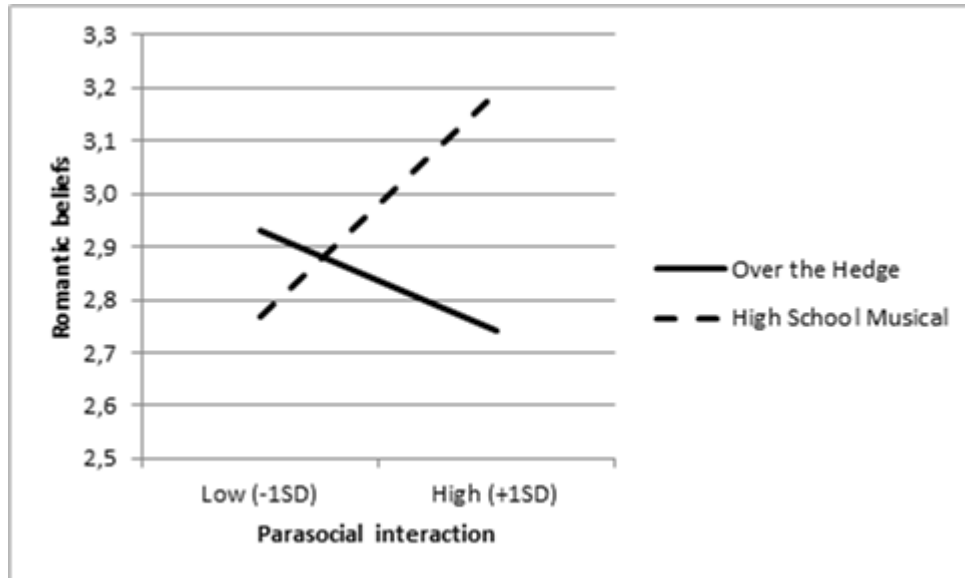Research & Social Policy, 2*, 32-41. doi: 10.1525/srsp.2005.2.4.32

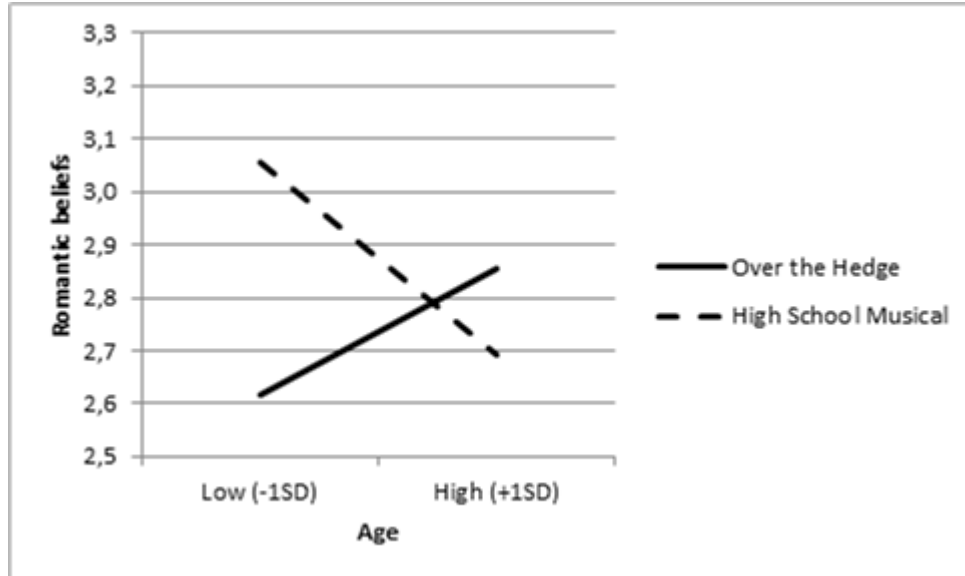*Figure 1*. The influence of movie exposure and parasocial interaction on romantic beliefs.

Figure 2. The influence of movie exposure and age on romantic beliefs.

BIOS

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