

DOES THE NUMBER OF FACEBOOK 'LIKES' INFLUENCE HOW
USERS PERCEIVE HUMOROUS PICTURES SHARED ON FACEBOOK?

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USERS PERCEIVE HUMOROUS PICTURES SHARED ON FACEBOOK?

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ABSTRACT

83 participants, recruited from a large Midwestern university, viewed 10 humorous pictures, half of which were significantly funnier than the other half. The number of times each picture had been ‘liked’ on Facebook was displayed below each picture, and this number was manipulated so that half of the participants thought the pictures had been ‘liked’ around 1000 times while the other half thought they had been ‘liked’ less than ten times. Participants rated how funny, enjoyable, and pleasant they thought each picture was, and they also rated how likely they were to ‘like’ the picture on Facebook. They were surreptitiously recorded while viewing the pictures, and the videos were later coded to determine how much each picture caused them to laugh and smile.

The results revealed that no matter how humorous the pictures were, the number of Facebook ‘likes’ had no effect on how participants rated the pictures or on how much they laughed or smiled.

Literature Review

Social media sites are hugely popular. U.S internet users spend one out of every six minutes online on them (Evans, 2011), and Facebook alone has over 800 million users (Facebook, n.d.).

One way in which people communicate on social media is by posting and sharing media content. They link to articles on Facebook and tweet them on Twitter. They upload videos on YouTube. All in all, users share over 27,000,000 pieces of content each day, and 23% of social media messages include links to such content (Aol/Nielsen, 2011).

Once a user shares media content on a social media site, other users are free to consume it, share it, praise it or berate it, and many social media sites make these actions visible to other users. How might these actions affect how other users perceive and evaluate the content? Do they add to or change its meaning?

This study examines how one of those user actions influences how users perceive shared content on one social media site, namely how does the number of Facebook ‘likes’ influence how users perceive humorous pictures. Though this is a narrow focus, the idea behind it is can be applied much more broadly. It can be applied to news content: does the number of times a news story has been shared influence how we engage with the story? It can be applied to persuasive content: does the sharing of ads influence how we view the brand? This research study, then, can be seen as an initial piece in a larger body of potential research--research that could provide wide insight into the effects of content sharing on social media.

Facebook and the ‘like’ button

Facebook is a social media site created in 2004 that allows users to create profiles and interact with other users. As of February 2012, it had 845 million users. (Protalinski, 2012)

The ‘like’ button is one way users can interact on Facebook. The button appears below every Facebook post, and users typically click it to show that they feel positively about the post. Next to the ‘like’ button, Facebook also displays the number of other users who have ‘liked’ the post, allowing users to see how much attention or approval each post has received.

This number of likes creates an expectation:

Social media users know there’s a reason why certain content garners a lot of attention, or is shared or ‘liked’ thousands of times: in some way, that content must have been compelling to other users. And if it was compelling to other users, then a user might assume that there’s something inherently compelling about the content. Therefore, if Facebook users see that a picture has been ‘liked’ many times, they might expect the picture to be compelling.

Expectations:

An expectation is a belief about the probabilities associated with a future state of affairs (Olson, 1996). Stated more plainly, it’s thinking that the future will occur in a certain way. The potential expectation being investigated in this study is the belief that the picture one is about to view on Facebook will be compelling or satisfying, an expectation formed by the number of Facebook ‘likes’.

Expectations as top-down effects on attitudes:

If knowing that a picture has been ‘liked’ many times on Facebook creates an expectation and this expectation affects how users perceive and evaluate the picture, then this would represent a ‘top-down effect’ on processing. Top-down effects occur when information from outside an actual experience affects how one processes the experience. Examples of top-down effects include pre-existing knowledge, expectations, memories, and biases, which all influence how we perceive reality. Top-down effects contrast with bottom-up effects, which are factors that stem from the actual data one gathers from an experience (Geers, 2001).

Research on expectations prior to the affective expectation model:

Many researchers have investigated the influence of top-down effects. One researcher who investigated the effect of expectations on experience prior to formation of the affective expectation model (this study’s main theoretical model) was Levanthal (1979). Participants in his experiment submerged their non-dominant hand in a tank of water chilled to 7 degrees Celsius. He told some of the participants the water could be painful and unpleasant, while he said nothing to other participants. Participants who had been given the negative expectation of the water reported significantly more unpleasantness, pain, and distress than participants without the expectation. These findings, which were confirmed by Berkowitz and Thome (1987), demonstrated that expectations can influence experiences.

The Affective Expectation Model:

With their affective expectation model (AEM), Wilson et al. (1989) sought to explain in one overarching theory how affective expectations influence affective

reactions. In simple terms, the model holds that people form their affective reactions to experiences in reference to prior expectations about how they thought they would feel.

Affective expectations:

At the heart of the AEM lies its most basic component---the affective expectation. Affective expectations are “people’s predictions about how they will feel in a particular situation or toward a specific stimulus” (Wilson & Klaaren, 1992, p. 3). Examples include how funny you think a movie will be, how much you think you will like or dislike a restaurant, and how anxious you think you will feel while interviewing for a job. According to the AEM, affective expectations guide people’s perceptions of incoming information and shape how they react to and evaluate experiences (Geers, 1999). Wilson et al. state that expectations can be as influential in determining how people feel about an experience as the experience itself (1989).

Humor as an affective reaction:

How people feel about an experience is their affective reaction. One possible affective reaction is humor.

From the philosophers of ancient Greece to the researchers of contemporary universities, many thinkers have pondered the meaning and function of humor. One recent paradigm in humor and media entertainment studies focuses on the physiological and evolutionary benefits of pleasant affective states. As Vorderer and Hartmann (2009) state, humans evolved to feel pleasure when they experience something that increases their chances of survival. Because physiological and psychological balance promote survival, this often means that people seek things that helped achieve and maintain

balance. Therefore, pleasure can be seen as a psychological and physiological reaction that often indicates progress towards that balance (Vorderer & Hartmann, 2009).

One thing that is not adaptive, that does not promote physiological and psychological balance, is cognitive incongruity. Fully understanding one's environment maximizes one's chances of survival, and therefore, puzzling aspects of one's environment can be vexing. Therefore, one seeks to resolve these incongruities, and when they are resolved, one experiences a pleasant feeling of relief. The sudden resolution of these incongruities can cause humor, a rush of euphoria that includes joy and laughter (Vorderer & Hartman, 2009). Thus, humor can be seen as the resolution of cognitive incongruities which helps maintain physiological and psychological balance, which in turn causes a positive affective state. This notion fits well with the relief theory of humor, a popular view of humor that holds that people experience humor because they sense that a stress has in some way been reduced (Meyer, 2000).

One last, important aspect of humor is that it is highly contextual. What is hilarious in one situation may be only mildly interesting in another (Meyer, 2000). Could the number of Facebook 'likes' create an affective expectation, and thus represent such a contextual factor?

Sources of affective expectations:

Researchers have identified three potential sources of affective expectations and of expectations in general. The first is previous personal experience with a stimulus (Jonas & McGillis, 1976). For example, one may expect to like a movie because one liked a previous movie made by the same director. This type of expectation is called a target-based expectation.

The second source of expectations is cultural norms that dictate how one is supposed to feel in certain situations. These expectations are called cultural feeling rules (Hochschild, 1979). For example, cultural norms dictate that one should feel sad at a funeral and happy at a wedding; therefore, one may expect to feel those emotions in those situations.

The last source of expectations is others' evaluations (Jonas & McGillis, 1976), called category-based expectations. If others evaluate something in a certain way, then we may expect to experience that thing in the same way. For example, one may expect to enjoy a movie because one has heard others say that they enjoyed the movie. This study focuses on a category-based expectation. The number of times a picture has been 'liked' could represent a positive evaluation by others that might make the next user expect the picture to be compelling.

How affective expectations influence affective reactions:

As shown above, researchers have identified three potential sources of affective expectations. But how do these expectations influence affective reactions? Researchers have provided a number of possible explanations (Geers, 1999).

The first explanation holds that affective expectations change "the nature of the data base that makes up the affective reaction" (Wilson & Klaaren, 1992, 18). For example, a movie viewer who expects a movie to be hilarious might pay more attention to the funny parts than a viewer who does not have this expectation of the movie. Thus, the viewer with the expectation would have a different data set with which to form his or her affective reaction (Wilson & Klaaren, 1992).

The second explanation states that an affective expectation causes its holder to interpret the experience differently. For example, a viewer who expects a movie to be hilarious might interpret its jokes as being funnier than she would if she didn't have that expectation (Wilson & Klaaren, 1992).

The last explanation posits that an affective expectations cause its holder to weigh the information from a stimulus differently. For example, movie viewers who expected a movie to be funny might focus on the funny parts of the movie more than if they had not had that expectation (Wilson & Klaaren, 1992).

Expectations, assimilation, and contrast:

No matter the mechanism by which affective expectations influence affective reactions, this influence can cause two possible outcomes: assimilation or contrast. Assimilation occurs when people shift how they perceive an experience *towards* their expectations of that experience. For example, assimilation occurs when one expects to like a movie and this expectation makes them like it more.

Researchers have hypothesized that expectations can produce assimilation in three possible ways. The initial effects hypothesis holds that expectations influence reactions during an experience itself, literally changing how one experiences an experience (Klaaren, Hodges & Wilson, 1994).

Unlike the initial effects hypothesis, the second possible process of assimilation occurs not while the experience is occurring, but rather after it's done. The reinterpretation hypothesis holds that as time passes, people reinterpret the aspects of an experience that contrasted with their expectations in a way that is more and more congruent with their expectations (Klaaren, Hodges & Wilson, 1994).

The last possible process of how expectations produce assimilation---the selective memory hypothesis---resembles the reinterpretation hypothesis in that occurs after an experience is over. It states that expectations act as a filter on memory, making people more likely to remember aspects of an experience that were congruent with their expectations and less likely to remember aspects that contrasted with their expectations (Klaaren, Hodges & Wilson, 1994).

Standing in contrast to all this is the contrast effect. Contrast occurs when people shift their evaluations of an experience *away* from their expectations of that experience (Stapel, Koomen, & Van Der Plight, 1997). For example, if one expects a movie to be good and it turns out to be bad, one might end up liking the movie less than if one had had no expectation at all.

The interaction of expectation and reality--four possible scenarios:

Researchers have identified four possible scenarios that can result from the interaction of an expectation and an experience (Wilson et al. 1989).

In the first scenario, there is no expectation, so no such interaction occurs at all. Wilson et al. note that this is rare because people usually have some expectation of future events (Wilson et al., 1989).

The second scenario occurs when an experience confirms what was expected of it. In this case, the expectation can increase the intensity of the reaction to the experience and can also reduce the amount of processing needed to form that reaction. One example is when one expects a movie to be good and it actually is good. The positive expectation could make one like the movie more and also decrease the time it takes to decide whether one likes the movie (Wilson et al., 1989).

The third scenario occurs when an experience does not confirm the expectation but when this discrepancy goes unnoticed. This scenario could occur if a viewer expects a movie to be good, it actually turns out to be bad, but the viewer doesn't notice it's bad. In this case, the viewer may assimilate his reaction to his expectation and consequently think the movie is good (Wilson et al. 1989).

Like the third scenario, the last scenario occurs when a stimulus does not confirm an expectation. In this scenario, however, one notices the discrepancy. Consequently, processing of the stimulus becomes slower and more critical, and the reaction to the stimulus is contrasted away from its expectation. This scenario could occur if a viewer expected a movie to be good, it turned out to be bad, and the viewer noticed that it was bad. In this case, the viewer would evaluate the movie more negatively than if she had had no expectation in the first place (Wilson et al. 1989).

Initial testing of the AEM:

The first experiment to test the AEM was designed to test for the existence of the third and fourth scenarios. In the first part of the experiment, Wilson et al. (1989) recorded participants' facial mirth and laughter as they read three funny and three unfunny cartoons. The participants also rated how funny they thought the cartoons were, and the researchers recorded how long it took the participants to produce these ratings. Half of the participants were given the expectation that the cartoons would be funny, while the other half were given no expectation.

The results showed no significant difference in how the groups reacted to the funny cartoons; both groups rated the cartoons as funny, both displayed equal amounts of facial mirth, and both took approximately the same time to evaluate the cartoons. In the

case of the unfunny cartoons, however, the group who expected the cartoons to be funny rated them as significantly funnier than the group without the expectation; they also displayed significantly more facial mirth and took significantly less time to evaluate them. This supported the existence of scenario three: that people can assimilate their reactions to an expectation even when the experience is discrepant with the expectation (Wilson et al. 1989).

The second part of the experiment tested for the existence of scenario four—that when an experience is discrepant from an expectation and that discrepancy is noticed, one’s affective reaction to the stimulus will be contrasted away from the expectation. Participants were shown a series of moderately funny cartoons. Before participants viewed them, the researchers told some participants the cartoons would be funny, others they wouldn’t be funny, and others nothing at all. Additionally, another independent variable was added to the experiment: half of the participants in each group were asked to rate the series of cartoons overall, while the other half rated each cartoon individually. The researchers hypothesized that rating each cartoon individually would make participants process them more thoroughly, consequently making them more likely to notice any discrepancy between their expectation of the cartoons and the cartoons themselves (Wilson et al, 1989).

The findings of this part of the experiment confirmed some aspects of the AEM but failed to confirm others. Participants who rated the cartoons overall and who also expected the cartoons to be unfunny rated them significantly less funny than the groups who had no expectation or a positive expectation; in other words, this group assimilated their reactions to their expectations. However, the group the researchers were most

interested in--the group who rated the cartoons individually and who expected them to be unfunny--didn't behave as predicted. It was hypothesized that because they rated the cartoons individually, they would notice the discrepancy between their expectations of the cartoons and the cartoons themselves and therefore would contrast their affective reactions away from the expectations. However, they assimilated their reactions to their expectations and rated the cartoons as unfunny. Thus, the experiment failed to provide evidence for the contrast effect (Wilson et al, 1989).

The researchers gave two reasons for this failure. First, they proposed that the contrast effect maybe be rare; our expectations may be so influential on our affective experiences that they almost always trump any discrepant information. The researchers also questioned the design of their experiment. Perhaps the experimental stimuli didn't contrast enough with the expectations; the cartoons may have not been funny enough to elicit any contrast effect in the participants who expected them to be unfunny (Wilson et al, 1989). To these two possible explanations, this researcher adds a third: perhaps the condition that was supposed to make subjects notice the discrepancy failed to do its job. Asking participants to rate each cartoon individually instead of collectively may have not caused processing deep enough to make them notice the discrepancy between their expectation and reality.

Subsequent Studies Demonstrating Assimilation Effects:

Various studies have confirmed the main finding of Wilson et al's initial research (1989)--that people can assimilate their affective reactions to their affective expectations.

Klaaren, Hodges and Wilson (1994) hypothesized that affective expectations can influence not only how people perceive and evaluate experiences, but also whether they

decide to repeat those experiences. Participants in their study watched a silent movie clip in one of two positions: sitting comfortably, or sitting in an awkward position that made them crane their necks and strain to see the television. Additionally, half the participants were given the expectation that they would enjoy the experience, while the other half were given no expectation at all.

The researchers found that the participants with the positive expectation enjoyed the viewing experience more than the subjects with no expectation. Furthermore, the researchers called the subjects several weeks after the initial experiment and asked if they'd be willing to participate in a similar study; they found that no matter whether the subjects were in the comfortable or awkward viewing condition, those with positive expectations were more likely to want to participate again (Klaaren, Hodges & Wilson, 1994).

Evidence of affective reactions being assimilated to affective expectations also comes from Hodges, Klaaren and Wheatley's (2000) study of college students discussing safe sex. The participants, undergraduate females, each had a one-on-one discussion of safe sex practices with a college-aged, male confederate of the researchers whom they thought was another participant in the study. In half of the discussions, the confederate acted calmly and collectedly, and the discussion progressed smoothly. But in the other half he acted awkwardly, mumbling and whispering responses, seeming very embarrassed by the situation. After the completion of the discussion but before the subjects rated how their discussions went, half were told that discussing safe sex gets easier with time, while the other half were told nothing. Thus, half were given a positive expectation and half were not.

Not unexpectedly, when the participants rated their discussion experience, the subjects who had experienced a smooth discussion gave significantly higher ratings than those who endured the awkward encounter. Interestingly, however, subjects who were given the positive expectation rated their experience significantly more positively than those who were given no expectation; this demonstrated the assimilation. Furthermore, when the researchers called the participants several weeks later and asked if they'd be willing to participate in a similar study, those who were given the positive expectation were significantly more likely to be willing to participate (Hodges, Klaaren & Wheatley, 2000). This showed that expectations can influence not only how one evaluates an experience but also one's willingness to experience that experience again.

Lee, Shane and Ariely (2006) also demonstrated that affective reactions can be assimilated to affective expectations. The researchers went to a bar and asked participants to taste an experimental concoction: beer with several drops of vinegar. Participants were divided into three groups. Participants in the first group were never told that the beer contained vinegar; participants in the second group were told before they tasted the beer; and participants in the third group were told after they tasted but before they rated the beer.

Participants who were never told about the vinegar and participants who were told about the vinegar after they tasted the beer rated the beer similarly. However, participants who were told about the vinegar before they tasted the beer rated the beer significantly lower than the other two groups; this group assimilated their reactions to the beer to their expectations of the beer (Lee, Frederick & Ariely, 2006). These findings supported the initial effects hypothesis. The participants who learned about the vinegar

before they tasted the beer rated it significantly lower than the control group. But the group that learned about the vinegar after tasting but before rating the beer did not rate it differently than the control group. This suggests that the expectation (knowing about the vinegar) affected the actual experience of tasting the beer, which is what the initial effects hypothesis proposes.

Evidence of affective reactions being assimilated to affective expectations can also be seen in medical studies. Tate et al. (1994) told one group of participants in their nicotine withdrawal study to expect somatic symptoms but not psychological symptoms, and this group reported more numerous and more severe somatic symptoms than subjects who were told not to expect those symptoms. Moreover, participants who were told to expect no somatic symptoms reported significantly fewer somatic symptoms than subjects who were given no expectation about potential symptoms. Lastly, in regard to psychological symptoms of withdrawal, participants who were told to expect no symptoms reported significantly less mood disturbance than subjects who were given no expectation about possible symptoms (Tate et. al, 1994).

Evidence supporting the contrast effect of the AEM:

The above studies, the earliest of which occurred only a few years after Wilson et al's (1989) initial test of the AEM, confirmed the finding that people can assimilate their affective reactions to their affective expectations. It would take a full decade after the initial test of the AEM, however, for researchers to provide evidence supporting the AEM's contrast effect.

This evidence was first supplied by Geers and Lassiter (1999). Before watching a relatively unfunny film clip, half of the participants in their experiment were told that the

movie was very popular and had received praise from other students, while the other half received no expectation of the movie. Furthermore, the researchers sought to manipulate how the subjects processed the clip by using altering how they unitized it. The unitization paradigm holds that people divide information from the environment into discrete units of meaning (Newston, 1973). Furthermore, people can vary this process, at times dividing incoming data into small chunks (fine unit analysis) and at other times breaking it into larger chunks (gross unit analysis). Research has shown that fine unit analysis leads to more information gain than gross unit analysis. Therefore, Geers and Lassiter (1999) hypothesized that people using fine unit analysis would be more likely to notice the discrepancy between an experience and their expectation of the experience and consequently be more likely to contrast their affective reactions away from their affective expectations.

To test this hypothesis, they told half of their participants to divide the clip into the “largest actions that are meaningful” by pressing a button whenever they felt such a segment had occurred (Geers & Lassiter, 1999, 400); this represented the gross unit analysis condition. Conversely, they instructed participants in the fine unit analysis condition to press a button to divide the clip into the “smallest actions that are meaningful” (Geers & Lassiter, 1999, 400).

The findings confirmed their hypothesis. Participants in the positive expectation, gross unit analysis condition rated the clip more favorably than participants who were given no expectation; this showed that when participants gained little information, they assimilated their affective reactions to their affective expectations. However, participants who had a positive expectation of the film but who analyzed it using fine unit analysis

rated the clip significantly more negatively than participants who had no expectation of the clip; they gained more information about the clip, noticed how it differed from their expectations, and contrasted their affective reactions away from these expectations. These results provided the first evidence supporting the contrast effect of the AEM and also showed that the amount of information one gains from an experience correlates with how likely one is to contrast an affective reaction away from an affective expectation (Geers & Lassiter, 1999).

Subsequent Studies Demonstrating the Contrast Effect:

Following Geers and Lassiter's (1999) study demonstrating the first evidence of the contrast effect, researchers have sought to show that certain individual characteristics or external circumstances may make people more likely to gain more information from an experience, thus making them more likely to notice the discrepancy between their expectations of an experience and the experience itself, and thus more likely to contrast their reactions away from their expectations.

In this framework, Geers and Lassiter (2002) investigated optimism and pessimism. They hypothesized that because optimists rely on unrealistic thinking, they would tend to overlook information that contrasted with their expectations, therefore making them more likely to assimilate their reactions to their expectations. Conversely, they predicted that because pessimists tend to focus on contrary information, they would be more likely to notice discrepancies between their expectations and their reactions, and thus be more likely to contrast their reactions away from their expectations. The findings of the study confirmed these hypotheses; when presented with a stimulus contradictory to

their expectations, the optimists assimilated their reactions to their expectations while the pessimists contrasted their reactions away from them.

Gendolla, Brinkmann, and Scheder (2008) investigated how another individual characteristic--ego involvement-- influences the contrast effect of the AEM. They asked participants to hedonically rate a series of hedonically neutral photographs. Half of the subjects were given a positive expectation for the photos, and the other half were given no expectation. Additionally, half were told that the experiment would test their perceptual abilities and other important social characteristics (the high ego involvement group), while half were told that the experiment was a simple pretest of stimulus materials to be used in a future study (the low ego involvement group). The researchers hypothesized that the instructions given to the high ego involvement group would motivate them to perform well and focus hard. Consequently, it would make participants in the high ego, positive expectation condition more likely to notice the discrepancies between the photos and their expectations. Participants in the low ego involvement group would not have this motivation to focus, and consequently it was hypothesized that participants in this group would be less likely to notice a discrepancy between their expectations and the photos.

The findings confirmed these hypotheses. Participants with positive expectations of the photos rated them more favorably, but only in the low ego involvement group. Participants in the positive expectation, high ego group rated them the same as those with no expectations. This showed that high ego involvement caused participants to gain more information about the photos, which neutralized the assimilating influence of the positive expectation. Furthermore, participants in the high ego group took significantly longer

than subjects in the low ego group to rate the photos; this suggested that high ego involvement creates the increased processing necessary to notice discrepancies between an expectation and an experience. Although no contrast effect was found, together the above findings suggest that ego involvement moderates the influence of affective expectations (Gendolla, Brinkmann & Scheder, 2008).

Researchers have also investigated how the need for cognition influences affective expectations (Geers & Lassiter, 2010). Before watching a boring movie clip, some participants were given a positive expectation of the clip, some were given a negative expectation, and others were given no expectation at all. Those with the negative expectation of the movie rated it significantly worse than those with the positive expectation of the movie. This demonstrated the assimilation effect. More interestingly, however, the researchers found that need for cognition correlated with how participants in the positive expectation group rated the clip. Subjects with a positive expectation and high need for cognition rated the clip significantly lower than the no expectation group, while subjects with a positive expectation but low need for cognition rated it significantly higher than the no expectation group. The researchers explained these results by noting that those with high need for cognition would be more likely to notice how the clip differed from their expectations, making them more likely to contrast their reactions away from their expectations.

Geers and Lassiter (2005) have studied how prior exposure to a stimulus moderates the contrast affect of the AEM. They predicted that prior exposure would make it easier to detect information about the stimulus during a later exposure, and

consequently they hypothesized that prior exposure should make the contrast effect more likely.

In the first part of their study, they showed participants one of two films: an unfunny clip that would act as the stimulus clip for the experiment and an unrelated film clip. Several weeks later they brought the participants back to the lab and showed them the same unfunny clip that half of them had seen a few weeks earlier. Before this viewing, however, they gave half the participants an expectation that the film would be funny and the other half no expectation.

Their findings confirmed their predictions about the effect of prior exposure on the contrast effect of the AEM. Among participants who had not seen the stimulus clip during the initial phase of the experiment, those with positive expectations for the clip rated it significantly higher than those who had no expectation; this demonstrated assimilation. However, among participants with prior exposure to the clip, those with a positive expectation rated the clip significantly lower than those who had not been given a positive expectation; this showed that prior exposure caused participants to contrast their reactions away from their expectation. Overall, these results demonstrated that prior exposure moderated the contrast effect of the AEM (Geers and Lassiter, 2005).

The Importance of the Contrast Effect to the AEM:

Geers (2001) noted that evidence supporting the contrast effect was crucial to the AEM because

without evidence for the contrast effect many of the results supporting the AEM model could be explained by a variety of alternative theoretical approaches. For example, cognitive-consistency formulations, such as dissonance (Festinger,

1957), balance (Heider, 1958), and congruity (Osgood & Tannenbaum, 1955) theories, suggest the possibility that the participants in the aforementioned studies were not truly assimilating their evaluations to their expectations, but were instead changing their interpretation of the experience to reduce any perceived inconsistency between what they expected to feel and what they were actually feeling. However, evidence showing that affective expectations can lead to both assimilation and contrast effects would be able to rule out such alternative explanations (Geers 2001, p 27.)

Critique of the AEM-*is it just cognitive consistency?*

Geers (2001) claims that evidence of the contrast effect rules out cognitive-consistency formulations. For the contrast effect, this may true; cognitive-consistency theories may simply not be able to explain why contrast occurs. However, this does not mean that cognitive-consistency theories can't explain assimilation, and Geers (2001) provides little evidence as to why cognitive-consistency explanations may be ruled out in these cases.

This raises the question: is the assimilation effect of the AEM just a form cognitive-consistency? Most results demonstrating assimilation in AEM experiments could indeed have been caused by the desire for cognitive consistency. In most of the experiments, subjects were asked to rate how much they liked a certain stimulus after they experienced the stimulus. In all these instances, subjects could have simply been reinterpreting the experience to achieve cognitive consistency between their expectations and the experience itself.

Furthermore, two of the three hypotheses about how affective expectations influence affective reactions closely resemble cognitive consistency theories. The reinterpretation and selective memory hypotheses hold that people reinterpret their experiences so that they're more *consistent* with their expectations.

The initial effects hypothesis differs from cognitive consistency:

However, the other hypothesis about how affective expectations influence affective reactions—the initial effects hypothesis—does not involve any such reinterpretation of events. Rather, it states that an expectation changes how one actually experiences a stimulus. If the initial effects hypothesis occurs during an experience, but attempts to achieve cognitive consistency are reinterpretations of an experience that occurs after it ends, then cognitive consistency cannot be the cause of the initial effects hypothesis. Therefore, in instances when an expectation changes how one actually experiences a stimulus, cognitive consistency theories can be ruled out.

Furthermore, studies of the AEM have provided evidence supporting the initial effects hypothesis. In the first study, Wilson et al (1989) recorded the facial mirth of participants as they read cartoons; the researchers found that participants with a positive expectation displayed significantly more facial mirth than those with no expectation. This showed that the expectation affected how participants experienced the cartoons themselves. Furthermore, Lee, Frederick & Ariely (2006) also found that an expectation changed how participants experienced an experience; it changed how the vinegar beer tasted.

The AEM—two types of dependent measures are needed:

Affective expectations, then, could conceivably influence affective reactions in two possible ways: by causing one to reinterpret an experience to achieve cognitive consistency, or by altering how actually experiences that experience. Therefore, studies examining the AEM should not only seek to determine if an expectation influences a reaction, but they should also try to determine by which of these mechanisms this influence occurs.

To do this, AEM studies need to measure affective reactions in at least two ways. One dependent measure can be a post-stimuli rating that many of the aforementioned researchers have used. This type of rating—assessing how much one likes a stimulus--essentially measures attitude towards the stimulus (Nabi & Krmar, 2004). Indeed, Eagly and Chaiken (2003) define attitude as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (p. 3). Therefore, a simple rating scale may be used to evaluate whether an expectation has influenced participants’ attitudes.

However, to discern if the expectation caused participants to actually experience the stimulus differently, then another type of measurement must be used. It must measure participants’ reactions to a stimulus while they are experiencing the stimulus itself, such as Wilson et al’s (1989) measurement of facial mirth.

If an expectation changes how participants experience a stimulus, then participants with the expectation should react to the stimulus differently than participants without the expectation while the stimulus is occurring. If they do not react differently to the stimulus while it’s occurring but do rate the stimulus differently after it’s over, this

suggests that the expectation caused the subjects to reinterpret the experience to achieve cognitive consistency.

The AEM and this study's dependent measures:

Therefore, this study will use two types of dependent measures. Participants will be asked to rate each picture after viewing them, and the amount of facial mirth they display while viewing the pictures will also be recorded.

Combined, these measures should show whether the number of Facebook 'likes' creates an expectation that influences how participants perceive and evaluate the pictures and it should also show how this influence occurs.

Hypotheses and Research Question:

After careful study of the AEM, the researcher predicts that the number of Facebook 'likes' will create an expectation in users' minds that influences how they perceive and evaluate humorous pictures. The researcher expects that:

H1: How humorous a humorous picture is will correlate positively with how much facial mirth users display while viewing it

H2: How humorous a picture a humorous picture is will correlate positively with how much users like the picture

H3: A large number of Facebook 'likes' will increase the amount of facial mirth users display while viewing a humorous picture

H4: A large number of 'likes' will increase how much users like a humorous picture

To these hypotheses, the researcher adds the following research question:

RQ: Will the level of humor of a humorous picture influence the effect that the number of Facebook ‘likes’ has on users? How will these two factors interact?

Method:

RQ:

Does the number of Facebook 'likes' create an expectation in the minds of users that influences how they perceive humorous pictures?

Participants:

Participants for a pretest and main experiment were recruited from a large Midwestern university. 74 participated in the pretest, and 83 participated in the main experiment.

Materials:

The experiment was run on the researcher's computer. The computer's built-in webcam recorded participants' reactions to the pictures, and the questionnaire was hosted on surveygizmo.com. The researcher gathered the pictures for the pretest by searching the Internet for funny pictures.

Design:

The study investigated whether a causal relationship exists: does knowing that a picture has been 'liked' many times on Facebook affect how people perceive that picture? Therefore, the research question was tested with an experiment, because the experiment is the best method for social scientists to establish cause and effect (Grabe & Westley, 2003; Wimmer & Dominick, 1997).

A 2 X 2, post-test only experiment was used (Grabe & Westley, 2003). The first independent variable, which was run within subjects, was how humorous the pictures were, and this variable had two levels: moderately humorous and very humorous. To

manipulate this variable, the researcher conducted a pretest in which participants viewed and rated 40 humorous pictures. Five of the least funny and five of the most funny were selected for the main experiment.

The second independent variable, which was run between subjects, was how many times participants thought each picture had been 'liked' on Facebook, and this variable also had two levels: a high number of 'likes' and a low number of 'likes'. To manipulate this variable, the researcher photoshopped the number of 'likes' into the bottom of each picture.

There were three dependent variables. The first was participants' attitudes towards each picture, which was assessed by having them complete a questionnaire on an online survey site after they viewed each picture. The questionnaire asked them to rate the pictures on 1-9 scales that measured funniness, enjoyableness, pleasantness and the likelihood that they would 'like' the picture on Facebook.

The second dependent variable was how much facial mirth participants displayed while viewing each picture, which was recorded surreptitiously by a built-in camera on the computer on which the participants viewed the pictures. The researcher and an assistant later watched these recordings and coded the mirth responses of the participants using a coding system similar to Gavanski's (1986) system. In that system, different values were assigned to different mirthful reactions: one point was given for attenuated smiles, two for full smiles, and three for laughter. In this experiment, one point was given for no reaction, two for an attenuated smile, three for a full smile, and four for audible laughter. To prevent any coding bias, the researcher and the assistant did not know the experimental condition of each participant.

The last dependent variable was how long it took participants to complete the questionnaire. The researcher had planned to include this variable because the AEM states that an affective expectation often lessens the amount of time one needs to process a stimulus. Therefore, if the number of Facebook ‘likes’ created an expectation in the minds of users, then participants in the high ‘like’ condition might spend less time looking at the pictures and completing the questionnaire than their counterparts in the low ‘like’ condition. However, this variable was not included in the final data analysis for two reasons. The first was researcher error. The researcher configured the online survey site to record how long it took participants to complete the whole experiment instead of configuring it to record how long it took them to look at each picture and answer its corresponding questionnaire. This time measurement even included the time it took them to complete the manipulation check at the end of the experiment. Therefore, the researcher couldn’t determine if there was any difference in how long it took participants to process the moderately humorous and very humorous pictures. Furthermore, a number of unexpected factors further invalidated the time measurement; some participants couldn’t figure out how to use the mouse, others asked the researcher for further instructions during the middle of the experiment, and some took phone calls and texts during the middle of the experiment. These factors, combined with the researcher’s error, made time an invalid measurement.

Procedures:

The researcher searched the internet for humorous pictures and systematically selected 40 to use in the pretest. For the main experiment, he selected five of the pictures that the participants rated as least humorous and five they rated as most humorous.

During the final experiment, participants viewed the pictures individually on an online survey site on a computer provided by the researcher. Subjects were randomly assigned to one of two groups-- a low 'like' group and a high 'like' group-- and both groups viewed all ten pictures. However, the groups differed in how many times they thought the pictures had been 'liked'. The number of 'likes' was displayed at the bottom of each picture, and in the low 'like' condition this number was between one and ten, while in the high 'like' condition it was between 950 and 1,394. After viewing each picture, participants completed a short questionnaire on the online survey site assessing their attitude towards it.

After participants had viewed and rated each picture, a final manipulation check was performed. Participants completed a short questionnaire asking how many times the pictures had been 'liked' on Facebook. This assessed whether the high 'like' group thought the pictures had been 'liked' significantly more than the low 'like' group.

Results:

Pretest:

Participants rated how funny and how enjoyable 40 pictures were, and because these two measures strongly correlated ($r(74) = .944$, $p < .001$), they were combined into a single humor index.

The researcher then systematically selected five of the pictures with the highest humor ratings (which would be used in the very humorous condition in the main experiment) and five with the lowest ratings (used in the moderately humorous condition), trying to ensure that the pictures in the very humorous and moderately humorous conditions would have equal amounts of text-driven humor and visual humor. This systematic selection helped reduce the chances of an extraneous variable, such as picture format, from influencing the results.

A paired samples t-test was then performed using the very humorous picture with the lowest rating ($m = 6.03$, $sd = 2.18$) and the moderately humorous picture with the highest rating ($m = 4.36$, $sd = 2.38$), and it was found that participants had rated the very humorous picture as significantly more humorous ($t(74) = -5.20$, $p < .001$). Because these two pictures were significantly different even though they represented the most similar means from the very humorous and moderately humorous conditions, it can be assumed that all the pictures in the very humorous group were significantly different than all the pictures in the moderately humorous group.

Table 1

Pretest means of pictures selected for the main experiment

Picture	Mean	Sd.
Moderately humorous 1	3.81	2.28
Moderately humorous 2	3.89	2.32
Moderately humorous 3	4.03	2.12
Moderately humorous 4	4.26	2.25
Moderately humorous 5	4.36	2.38
Very humorous 1	6.03	2.18
Very humorous 2	6.14	1.85
Very humorous 3	6.14	2.02
Very humorous 4	6.32	2.34
Very humorous 5	6.39	1.72

Note. Bold indicates the pictures used in the t-test. n=74. Scale was 1-9.

At the end of the pretest, participants were asked to report what they thought was a high number of ‘likes’ and a low number of ‘likes’ on Facebook. Most reported that a low number of ‘likes’ meant less than ten. Therefore, in the final experiment all the pictures in the low ‘like’ condition were ‘liked’ less than 10 times. However, participants reported a wide range of values for what constituted a high number of ‘likes’. The researcher eventually decided that pictures in the high ‘like’ condition would be ‘liked’

around 1000 times, high enough to be significantly different from the low ‘like’ condition, but not high enough to arouse suspicion among the participants.

Main Experiment:

Manipulation Check:

At the end of the experiment, participants reported how many times the pictures they viewed had been ‘liked’ on Facebook (on a scale from one to nine, with one being very few times and nine being a lot of times). A one-way ANOVA was computed to determine whether participants in the high ‘like’ condition thought the pictures had been ‘liked’ significantly more than participants in the low ‘like’ condition. The ANOVA revealed that the manipulation had been successful ($F(1, 81) = 36.64, p < .001$); the high ‘like’ group ($m = 7.10, sd = 1.87$) thought the pictures had been ‘liked’ significantly more than the low ‘like’ group ($m = 4.50, sd = 2.01$; 1-9 response scale).

Facial Mirth

Before coding all of the participants’ facial mirth reactions, the two coders conducted an intercoder reliability check, coding the facial mirth reactions of just ten participants. The reliability check yielded a kappa level of .805. After the reliability check, the coders held another training session to discuss what they had disagreed on. After that, the coders equally divided the remaining 72 videos and coded them all.

After all the coding was complete, a 2 X 2 mixed-design ANOVA (see table 3) showed that the participants displayed significantly more facial mirth while viewing the very humorous pictures ($m = 2.33, sd = .92$) than they did while viewing the moderately humorous pictures ($m = 1.99, sd = .82$) ($F(1,80) = 13.31, p < .01$). This finding

supported H1, the prediction that the level of humor of a humorous picture would correlate positively with how much facial mirth participants display while viewing it.

However, there was no significant interaction between how humorous the pictures were and how many times they had been ‘liked’ ($F(1,80) = 2.13, p > .05$) (for descriptive statistics, see table 2). Nor was there was any significant main effect for how many times the pictures had been ‘liked’ ($F(1,80) = .14, p > .05$) (for descriptive statistics, see table 2); this latter finding refuted H3, the prediction that a large number of ‘likes’ would increase the amount of facial mirth users display while viewing a humorous picture.

Table 2
Descriptive statistics of participants’ facial mirth reactions.

Number of ‘likes’		Moderately humorous pictures	Very humorous pictures	Total
Few ‘likes’	Mean	1.95	2.42	2.19
	N	41	41	41
	Sd.	.77	.84	.69
Lots of ‘likes’	Mean	2.02	2.23	2.13
	N	41	41	41
	Sd.	.87	1.00	.82
Total	Mean	1.99	2.33	2.16
	N	82	82	82
	Sd.	.82	.92	.76

Note. Scale was 1-4. Bold indicates significantly different means.

Table 3

Facial Mirth ANOVA

	<i>df</i>	<i>F</i>	η_p^2	<i>p</i>
Number of 'likes'	1	.14	.00	.71
Level of Humor	1	13.31	.14	<.001
Number of 'likes' X Level of Humor	1	2.13	.03	.15

Overall, the results showed that no matter how funny the pictures were, the number of 'likes' had no effect on how much facial mirth participants displayed while viewing them.

Humor Ratings

A principle component analysis with varimax rotation (see table 4) was conducted on the data gathered from the five questions that evaluated participants' attitudes towards the pictures. This analysis suggested that four of the items (funniness, enjoyableness, pleasantness, and likelihood to 'like' on Facebook) could be combined into a single humor index that encapsulated participants' positive feelings about the pictures. A Cronbach's reliability analysis ($\alpha = .91$) revealed that these items indeed could be combined.

Table 4

Factor Loadings for the questions that evaluated participants' attitudes towards the pictures

Question	Factor Loadings
How funny was the picture?	.94
How enjoyable was it to look at the picture?	.96
How pleasant was it to look at the picture?	.93
How unpleasant was it to look at the picture?	-.27
How likely would you be to 'like' the picture on Facebook?	.76

Note. Bold indicates the items combined into the final humor index

Next, a 2 X 2 mixed-design ANOVA (table 6) was computed to analyze how the participants rated the pictures. It revealed that they rated the very humorous pictures ($m = 5.73, sd = 1.44$) significantly more positively than the moderately humorous pictures ($m = 3.97, sd = 1.20$) ($F(1,81) = 138.28, p < .001$). This finding confirmed H2, the prediction that the level of humor of a humorous picture would correlate positively with how much users liked the picture.

However, there was no significant interaction between how humorous the pictures were and how many times they had been 'liked' on Facebook ($F(1,81) = .087, p > .05$) (for descriptive statistics, see table 5). Nor was there any significant main effect for how many times the pictures had been 'liked' ($F(1,81) = .000, p > .05$) (for descriptive statistics, see table 5). This latter finding refuted H4, the prediction that a large number of Facebook 'likes' would increase how much users like a humorous picture.

Table 5
Descriptive statistics of how participants rated the pictures.

Number of 'likes'		Moderately humorous	Very humorous	Total
Few likes	Mean	3.95	5.75	4.85
	N	41	41	41
	Std. Deviation	1.19	1.50	1.14
Lots o likes	Mean	4.00	5.71	4.85
	N	42	42	42
	Std. Deviation	1.26	1.38	1.15
Total	Mean	3.97	5.73	4.85
	N	83	83	83
	Std. Deviation	1.20	1.44	1.14

Note. Scale was 1-9. Bold indicates significantly different means.

Table 6
Humor Ratings ANOVA

	<i>df</i>	<i>F</i>	η_p^2	<i>p</i>
Number of 'Likes'	1	.00	.00	.99
Level of Humor	1	138.28	.63	<.001
Level of Humor X Number of 'Likes'	1	.09	.00	.77

Overall, the results showed that no matter how humorous the pictures were, the number of Facebook 'likes' did not affect how participants rated the pictures for funniness, enjoyableness, pleasantness and likelihood to 'like' on Facebook.

Discussion:

The purpose of this study was to determine if the number of times a humorous picture has been ‘liked’ on Facebook creates an expectation in the minds of users that influences how they perceive and evaluate that picture. The results showed that the number ‘likes’ did not affect how participants perceived and evaluated the pictures, and this suggests that the number of ‘likes’ did not create an expectation about that picture in the minds of the participants. If it had created an expectation, then participants in the high ‘like’ condition would most likely have assimilated their reactions to their expectations. Therefore, they would have shown more facial mirth and rated the pictures more positively than participants in the low ‘like’ condition.

Though the data strongly suggest that the number of Facebook ‘likes’ has no effect on users, faulty experimental design could have caused these nonsignificant findings. Because the number of Facebook ‘likes’ was shown outside its normal Facebook context, participants may have not considered it to represent an actual endorsement by other users but rather some poorly concealed experimental manipulation. Therefore, if the researcher were to repeat the experiment, he would tell participants that he had found the pictures on Facebook, and that the number of ‘likes’ was the actual number of times the pictures had been ‘liked’ when he found them.

Furthermore, the high and low ‘like’ conditions may not have differed enough to elicit differing reactions and evaluations. Though a manipulation check showed that participants in the high ‘like’ condition thought the pictures had been ‘liked’ significantly more than participants in the low ‘like’ condition, participants in the low ‘like’ condition

still thought the pictures had been ‘liked’ a moderate amount of times (mean of 4.5 on a scale of 1-9). Therefore, if the researcher were to repeat the experiment, he would use an even smaller number of ‘likes’ for the low ‘like’ condition. Perhaps it would change the results.

Overall, this study suggests that there is no relationship between how many times a humorous picture has been ‘liked’ on Facebook and how users perceive that picture. Therefore, the AEM--a theoretical model that proposes a relationship between expectations and reactions--cannot be applied in this situation. The AEM posits that our expectations about a stimulus influence how we react to that stimulus. The researcher believed that the number of Facebook ‘likes’ could create such an expectation that influenced how we perceive humorous pictures. The results showed that his was not the case.

However, this doesn’t mean that the AEM could not be usefully applied in other situations in which content is shared and ‘liked’ on Facebook. Users share far more than just funny pictures; they share insightful news stories, clever ads, dramatic personal narratives and an array of other content. How might Facebook ‘likes’ affect how users perceive these types of content? This is a question that should be explored by future researchers, because though the findings of this study were nonsignificant, it doesn’t mean that the number of Facebook ‘likes’ doesn’t influence how users perceive these other types of content.

Future studies could also investigate if user comments influence how users perceive shared content. Could a slew of positive comments create an expectation in

users' minds that influences how they perceive that content? How might negative comments affect users' perceptions? These are questions that need to be explored.

For strategic communication practitioners--those who manage the Facebook pages of brands both small and large-- the results of this study bring both bad and good news. Practitioners love it when users 'like' content shared by a brand on its Facebook page because when users 'like' that content, this action becomes visible to all the users' Facebook friends, thus providing more exposure for the brand. However, this study's results suggest that the number of 'likes' doesn't influence how other users perceive that content, and thus a large number of 'likes' will not make other users more likely to 'like' it themselves. However, the fact that the number of 'likes' doesn't create an expectation in the minds of users could also work to a brand's advantage. If few users 'like' the content a brand posts, at least the low number of 'likes' won't make users perceive that content more negatively.

Limitations:

The simplicity of the facial mirth coding system used in this study limits the power of the facial mirth results. Reducing participants' mirthful reactions to just four discrete levels was convenient, but human reactions are far more complex. All laughter is not created equal--nor are all smiles or attenuated smiles--yet the coders treated them like they were. Future studies exploring this subject could benefit from using a more complex method of coding facial expressions. One such method is the Facial Action Coding System, or FACS (Ekman & Friesen, 1978). Using FACS, researchers can code nearly all possible facial displays, enabling them to make intricate judgments about the emotions of participants.

A second limitation stemmed from the levels of humor of the pictures. Though participants rated the very humorous pictures ($m = 5.73$, $sd = 1.44$) as significantly more humorous than the moderately humorous pictures ($m = 3.97$, $sd = 1.20$) (scale was 1-9), these two levels didn't differ as much as the researcher would have liked. This was because the researcher struggled to find extremely humorous pictures for the very humorous category. Therefore, as the mean of the very humorous picture category indicates, he settled on pictures that may be more correctly called 'moderately humorous' than 'very humorous'. If he had been able to find extremely humorous pictures, would the results have been different? Furthermore, it might also have been interesting to use pictures that were only slightly humorous or non-humorous.

Another factor that limited the study was that the researcher overlooked the different contexts in which content can be shared on Facebook; these contexts could

affect how users perceive the number of 'likes'. For example, if a post by an ordinary person were 'liked' a few dozen of times, this might be considered a large number of 'likes' for that context, because rarely does one see that many 'likes' for that type of post. However, if a post by a major brand were 'liked' only a few dozen times, this might be considered a relatively low number, because major brands can have millions of fans and thus the content that these brands post can often be 'liked' thousands of times. Therefore, future studies investigating how Facebook 'likes' influence users should consider these different contexts.

Another limitation was that the researcher didn't take into account the many different types of humor. The pictures in the experiment displayed an array of different types of humor, and this could have acted as an uncontrolled extraneous variable. A future study on this topic could benefit from using pictures that feature one type of humor only, or from using multiple types of humor systematically to determine if the type of humor has any effect on how 'likes' influence users.

Lastly, as mentioned above, the researcher made a mistake in his attempt to record how long it took participants to evaluate the pictures, and this mistake made the time variable invalid. Because the data for all the other variables were nonsignificant, it can be predicted that the results for this variable would have been nonsignificant too. However, no one can be certain.

Conclusion:

The results strongly suggest that the number of Facebook ‘likes’ has no effect on how users perceive humorous pictures shared on Facebook. The number of ‘likes’ doesn’t create an expectation that influences users’ reactions to these pictures.

Interestingly, and perhaps refreshingly, it seems that users are unaffected by these endorsements of others. Rather, they judge the pictures for themselves.

Could the number of ‘likes’ create an expectation that influences users’ reactions to other types of content, such as new stories or advertisements? Given the convincing, nonsignificant findings of this study, the researcher thinks probably not. However, that is still a question that might be worth exploring in future studies.

APPENDIX

Table 7

Descriptive Statistics of Participants' Facial Mirth Reactions to Each Picture

Picture	Condition	Mean	Sd.
Moderately Humorous 1	Low 'like'	1.63	1.20
	High 'like'	1.80	1.29
	Total	1.72	1.24
Moderately Humorous 2	Low 'like'	1.85	1.30
	High 'like'	1.88	1.29
	Total	1.87	1.28
Moderately Humorous 3	Low 'like'	2.02	1.39
	High 'like'	2.24	1.50
	Total	2.13	1.44
Moderately Humorous 4	Low 'like'	2.07	1.389
	High 'like'	2.02	1.39
	Total	2.05	1.38
Moderately Humorous 5	Low 'like'	2.17	1.43
	High 'like'	2.17	1.43
	Total	2.17	1.42
Very Humorous 1	Low 'like'	2.61	1.46
	High 'like'	2.24	1.50
	Total	2.43	1.48
Very Humorous 2	Low 'like'	2.34	1.44
	High 'like'	2.24	1.41
	Total	2.29	1.42
Very Humorous 3	Low 'like'	2.54	1.43
	High 'like'	1.93	1.33
	Total	2.23	1.41
Very Humorous 4	Low 'like'	2.80	1.45
	High 'like'	2.59	1.48
	Total	2.70	1.46
Very Humorous 5	Low 'like'	1.85	1.33
	High 'like'	2.15	1.39
	Total	2.00	1.36

Table 8
Descriptive Statistics of How Participants Rated Each Picture

Picture	Condition	Mean	Sd.
Moderately Humorous 1	Low 'like'	3.51	1.85
	High 'like'	3.80	2.29
	Total	3.66	2.08
Moderately Humorous 2	Low 'like'	4.57	2.04
	High 'like'	3.92	1.97
	Total	4.24	2.02
Moderately Humorous 3	Low 'like'	3.95	1.99
	High 'like'	4.40	2.15
	Total	4.17	2.07
Moderately Humorous 4	Low 'like'	3.60	1.91
	High 'like'	3.83	2.13
	Total	3.71	2.01
Moderately Humorous 5	Low 'like'	4.12	1.92
	High 'like'	4.03	1.78
	Total	4.08	1.84
Very Humorous 1	Low 'like'	5.62	1.94
	High 'like'	5.30	2.31
	Total	5.46	2.13
Very Humorous 2	Low 'like'	5.73	2.02
	High 'like'	5.23	1.79
	Total	5.50	1.91
Very Humorous 3	Low 'like'	6.18	2.14
	High 'like'	5.95	1.99
	Total	6.06	2.06
Very Humorous 4	Low 'like'	5.87	2.11
	High 'like'	6.36	1.97
	Total	6.12	2.04
Very Humorous 5	Low 'like'	5.34	2.25
	High 'like'	5.67	1.80
	Total	5.51	2.03

Consent Form

Authorization of Consent

You are invited to participate in a research study conducted by Ryan Kresse, Masters Student at Missouri School of Journalism.

Participation is voluntary, and if you decide to participate, you will be asked to view a series of pictures and answer some questions about each picture. The whole experiment should take 10 minutes or so.

It is possible that some of the pictures may offend you. If you wish to stop the experiment, you may do so at any time without any penalty. The benefit of this study is that it may provide unique insight about how users interact with online content.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential. The data will be coded in such a way so that the information you provide will not be able to be connected with your name. The data you provide will be securely stored and viewed by only the researcher and a research assistant.

Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with the University of Missouri or the Missouri School of Journalism. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty.

For participating in this study, you can expect one point to be added to your final grade in (enter class from which the subjects were recruited).

If you have any questions or concerns about this experiment, email Ryan Kresse (rhkkv9@mail.missouri.edu) or Professor Glenn Leshner (LeshnerG@missouri.edu)

You may contact the Campus Institutional Review Board if you have questions about your rights, concerns, complaints or comments as a research participant. You can contact the Campus Institutional Review Board directly by telephone or email to voice or solicit any concerns, questions, input or complaints about the research study.

483 McReynolds Hall

Columbia, MO 65211

573-882-9585

E-Mail: umcresearchcirb@missouri.edu

Website: <http://www.research.missouri.edu/cirb/index.htm>

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature _____

Date _____

Recruitment Script

“Hello, my name is Ryan Kresse. I’m a masters student.”

“I’m doing an experiment about how people feel about online pictures. This experiment involves research.”

“Dr. _____ has been kind enough to offer you extra credit for participating in my study. For participating, you’ll receive one point added to your final grade”

“If you’d like to participate, I’m passing around a sign up sheet. It has a list of days and times when I’ll be conducting the experiment. Please write your name and email in the time slot you’d like, and I’ll email you to confirm everything.”

“If you don’t want to participate, Dr. _____ will be offering an alternative assignment for extra credit.”

“If you have any questions about this experiment, please feel free to contact me. My email is rhkkv9@mail.missouri.edu. “

“Thank you so much.”

Moderately Humorous Picture 1

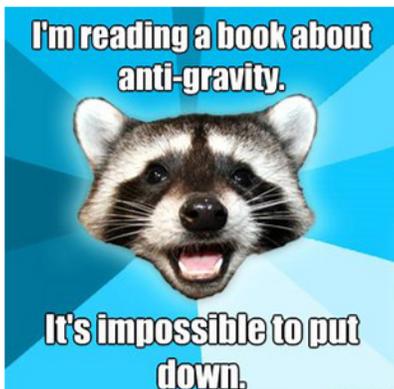


👍 3 people have liked this on Facebook.

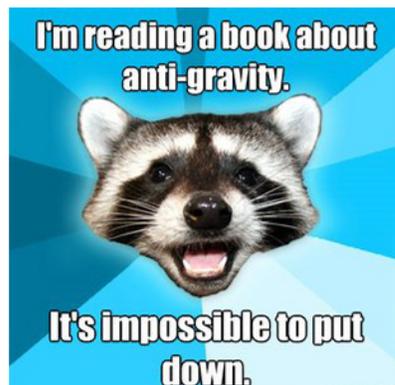


👍 1,023 people have liked this on Facebook.

Moderately Humorous Picture 2



👍 8 people have liked this on Facebook.



👍 1,112 people have liked this on Facebook.

Moderately Humorous Picture 3



👍 3 people have liked this on Facebook.



👍 1,113 people have liked this on Facebook.

Moderately Humorous Picture 4

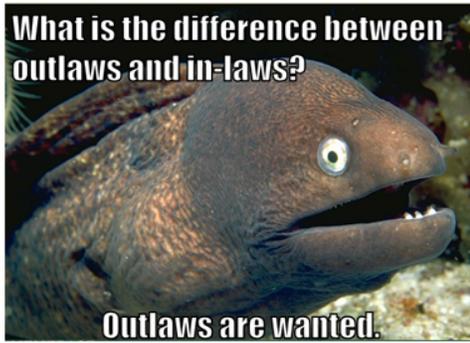


👍 2 people have liked this on Facebook.



👍 992 people have liked this on Facebook.

Moderately Humorous Picture 5



👍 5 people have liked this on Facebook.



👍 897 people have liked this on Facebook.

Very Humorous Picture 1

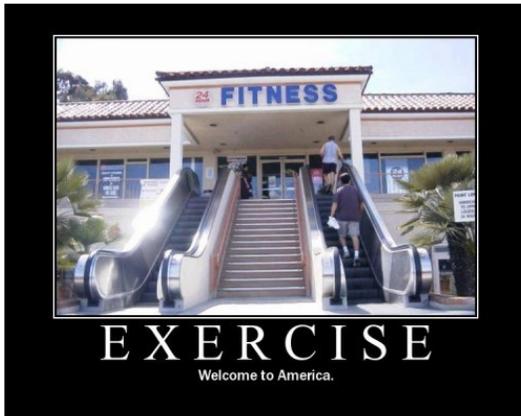


👍 9 people have liked this on Facebook.

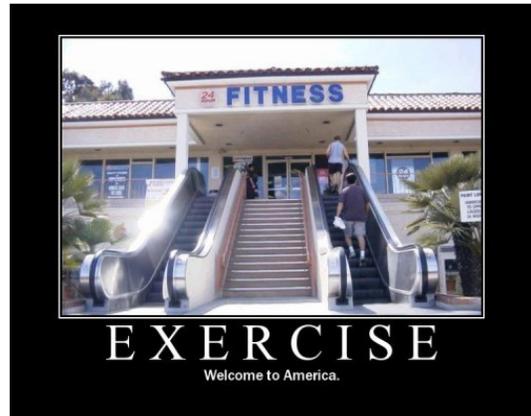


👍 1,057 people have liked this on Facebook.

Very Humorous Picture 2



👍 4 people have liked this on Facebook.



👍 1,204 people have liked this on Facebook.

Very Humorous Picture 3



👍 8 people have liked this on Facebook.



👍 1,394 people have liked this on Facebook.

Very Humorous Picture 4



👍 7 people have liked this on Facebook.



👍 1,063 people have liked this on Facebook.

Very Humorous Picture 5



👍 4 people have liked this on Facebook.

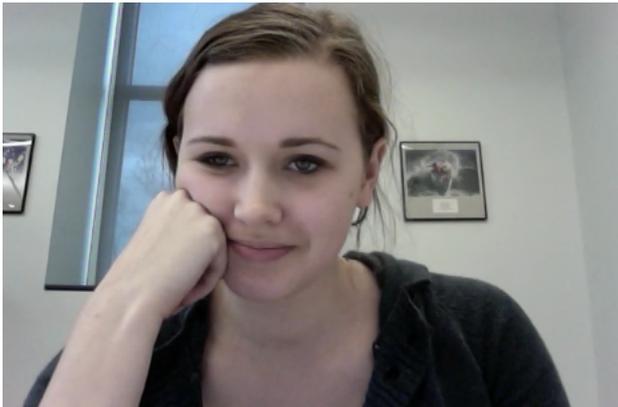


👍 1,098 people have liked this on Facebook.

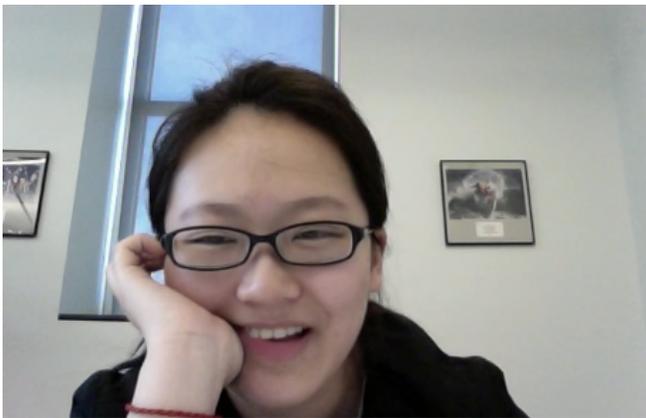
A participant displays no facial mirth while viewing one of the pictures.



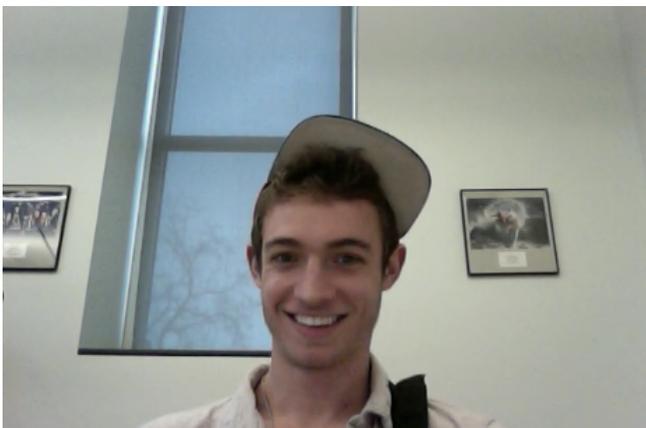
A participant displays an attenuated smile while viewing one of the pictures.



A participant displays a full smile while viewing one of the pictures.



A participant laughs while viewing one of the pictures.



Main Experiment Questionnaire

After viewing each of the pictures, participants answered the following questions. The first five were simple rating scales from 1 to 9, with one being 'not at all' and 9 being 'extremely'. For example, the first question read 'how funny did you find the preceding picture? (1 = not funny at all; 9 = extremely funny)'. To the last question, participants were asked to respond 'yes' or 'no'.

How funny did you find the preceding picture?

How much did you enjoy looking at the preceding picture?

How pleasant was it to look at the preceding picture?

How unpleasant was it to look at the preceding picture?

How many likely would you be to like the preceding picture on Facebook?

Have you seen the preceding picture before?

For a manipulation check, participants were asked the following question after viewing all the pictures. Again, it was a simple rating scale from 1 to 9.

How many times were the pictures you viewed during this experiment 'liked' on Facebook? (1 = an extremely low number of times ; 9 = an extremely high number of times)

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