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# The Influence of Professional Critic Reviews

## EEDAR/SMU Behavioral Study - July 2010

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# EEDAR

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During the week of March 29<sup>th</sup> 2010, Southern Methodist University (SMU) and Electronic Entertainment Design and Research (EEDAR) conducted a study on the SMU campus. The study measured how video game reviews affect the participant's perception of the quality of a video game, willingness to purchase, and willingness to recommend to friends.

The study manipulated a single independent variable: the subject's exposure to quantitative and qualitative remarks by professional review critics. Three groups were exposed to mock reviews scores before playing a 20-minute session of the game *Plants vs. Zombies*. Group A was exposed to "high" review scores (aggregate mean of 90/100) for *Plants vs. Zombies*, while Group B was exposed to "low" (aggregate mean of 61/100). Both groups had mock qualitative remarks to match their "anchored" score. Additionally, both groups were exposed to mock summary reviews (qualitative and quantitative) from five well-known media outlets and were told the aggregate average was comprised of 51 professional reviews. Group C, the control group, were not exposed to review scores or qualitative remarks. After playing *Plants vs. Zombies* for 20 minutes, participants were asked to review the game, giving it a score from 0 to 100. After reviewing the game, participants were offered \$10 in cash for participating in the study or a copy of *Plants vs. Zombies* for the PC/Mac.

*Plants vs. Zombies* was the sole game used in the study. *Plants vs. Zombies* was used because it is regarded by the gaming community and by critics as a high quality title of broad appeal, which should result in minimal variance based on participants personal gaming preferences.

To qualify for the study, participants could not own or have previously played *Plants vs. Zombies*. The study had 188 participants, of which 165 qualified.

## What is Anchoring?

Anchoring is a psychological behavior that influences the way people subconsciously evaluate a probability or event. This involves the person developing a reference, or "anchor" point, which serves to influence their perception of all related material subsequently encountered.

In the SMU/EEDAR study, the anchor was remarks and review scores by professional critics, with the final measuring value being the subject's own review score, willingness to purchase, and willingness to recommend *Plants vs. Zombies*.

## Summary of Results

- The data from the EEDAR/SMU study concludes that participants exposed to higher review scores **were twice as likely to take a copy of *Plants vs. Zombies* over the \$10 cash and 85% more likely to take the game than the control group.** All participants played the same game, on the same type of computer, in the same environment, for the same amount of time.
- Because nearly twice as many participants in the high review group took the copy of *Plants vs. Zombies* over \$10 vs. the participants exposed to low reviews, **the EEDAR/SMU study posits that the relationship between video game sales and professional review scores are not correlative but causal.**
- **Data from the EEDAR/SMU study suggests that high critic reviews have a strong positive impact on the likelihood of positive word-of-mouth recommendations.** Professional critic reviews act as a multiplier for the likelihood of a consumer positively recommending the game to a friend.
- Both groups exposed to review scores prior to playing *Plants vs. Zombies* deviated from the anchored review score and gave the game a review score directionally towards the control group's (no review score exposure) average. Consumers, despite being influenced by critics, still deviate towards the game's inherent quality. **The data suggests that although professional critic reviews influence consumer purchasing habits, likelihood to recommend, and subsequent consumer perception of quality, their influence is *not* absolute.**
- The sole independent variable in the EEDAR/SMU study was professional critic reviews. The study makes no conclusions about other variables such as marketing, pricing, release timing, brand awareness, and other factors that likely have correlative or causal relationships with video game sales. It very well could be that professional critic reviews and the strengths of a game's marketing campaign or brand awareness amplify or reduce the weighted factor of professional critic reviews.
- All statistical tests measuring differences between the control and experimental groups had a p-value < .05; it is highly unlikely that these differences are due to chance.
- The EEDAR/SMU study suggests that both quantitative and qualitative remarks from professional critics should be an intricate part of a game's marketing campaign. However, the EEDAR/SMU study makes no conclusions on the weight the quantitative (review score) vs. qualitative (critics remarks) had on the participants' results.

## Hypothesis of the EEDAR/SMU Study

1. Exposing a subject to high review scores of an unfamiliar game before they play it will:
  - a. Increase the review score that the subject gives the game
  - b. Increase the subject's willingness to purchase the game
2. Exposing a subject to low review scores of an unfamiliar game before they play it will:
  - a. Decrease the review score that the subject gives the game
  - b. Decrease the subject's willingness to purchase the game
3. There is positive causation between a favorable review by professional video game critics and a consumer's willingness to recommend that game to a friend

## Method

Day one of the study was conducted on the main campus of SMU Guildhall. The study occurred in an air-conditioned room divided into three areas, with two of the areas having three gaming laptops and the other area having four gaming laptops.

Subjects were divided into three groups, those exposed to positive reviews, those exposed to negative reviews and the control group who were not exposed to any reviews. To avoid contamination, each group played the game in an area with subjects belonging to the same group, were required to wear headphones and instructed to avoid speaking to other subjects.

A fourth table, including two laptops used for recording study data, also included eight copies of the game *Plants vs. Zombies*.

Participants could inspect the game's packaging material upon request.

Days two and three of the study were conducted on SMU's main campus, with a setup similar to that used on day one.

## Procedure

1. Participants filled out the ***Plants vs. Zombies Intake Survey*** in its entirety.
2. Participants were disqualified from entering the study using the following criteria:
  - a. If the subject was under the age of 18 (lack of parental consent) [**Question 1.1 and 1.2**]
  - b. If the subject did not own a personal computer [**Question 3.8**]
  - c. If the subject had previously played, seen played or owned *Plants vs. Zombies*, or reported that they “knew a lot about it” [**Question 8.1, 8.2, and 8.3**]
3. Upon qualification, participants were randomly assigned to a group (positive review exposure, negative review exposure, control)
  - a. Participants were not made aware that the groups were different.
4. Participants were instructed to read the information packet in front of them and follow all instructions. Informational Packets differed depending upon which group the subject was assigned to. (Reference ***Plants vs. Zombies Informational Packet***)
  - a. An associate of the EEDAR team recorded the start time and laptop location of the participant
  - b. Participants had unlimited amount of time to read the Informational Packet

5. After 20 minutes of play, the subject was instructed to stop playing the game and to fill out ***Plants vs. Zombies Exit Survey***.
6. Upon completion of the survey, an associate of the EEDAR team reviewed **Question 4** to determine if the participants wanted a copy of *Plants vs. Zombies* or \$10 cash.

## Abnormalities and Disqualifications

### Participants that did not play the entire allotted time:

A handful of participants did not fully complete the study. Any subject that did not complete the full 20 minutes of play time, or that did not answer all required questions on the intake or exit survey were disqualified and their data was not used in the study.

### Contamination:

We had two situations in which a previous study participant influenced a potential participant or friend by commenting on the quality of *Plants vs. Zombies*. In one scenario, the participant said “Plants vs. Zombies is awesome.” In another situation, a previous participant said “Dude, just take the survey, they are giving away \$10.” In each situation, all participants within earshot, including those filling out the intake survey, were disqualified from participating. In one case, because one participant had fully completed the 20 minutes of play time and was filling out the exit survey, we allowed her to finish the study and choose \$10 or a copy of *Plants vs. Zombies*; her survey and data points were, however, dismissed.

In one situation when a participant took an excessive amount of time deciding between \$10 or a copy of *Plants vs. Zombies*, an associate of SMU attempted to aid her in the decision making process. Whilst the comments were unbiased and non-persuasive, we decided to dismiss this participant's survey and data points.

The quantity of study participants does not include disqualified participants. In total, 188 participants began the process, with 165 qualifying for use in the study.

## FAQ

The following are the standard answers given to study participants. Those assisting in administering the study directed all questions from participants to Jesse Divnich of EEDAR who was onsite during the study.

### **Q: Does this game work on the MAC?**

A: Yes and you may inspect the game box to ensure your computer meets the qualifications.

### **Q: How much does this game cost online/at stores/retail/etc?**

A: Unfortunately, we cannot answer that question.

### **Q: Who do you work for / Did you make this game / Why are you conducting this study/survey?**

A: We work for Electronic Entertainment Design and Research, we are a research firm in the video game industry. We did not make *Plants vs. Zombies*, we are just asking people to play the game to see what they think about it.

### **Q: Can we take the study twice?**

A: No, unfortunately not.

## Results Summary: Effect of Professional Review Scores on Participant Review Scores

- The group shown high review scores before playing *Plants vs. Zombies* gave the game a mean review score 6 points higher (+7%) than the control group and 14 points higher (+16%) than the group shown low review scores (**See Table 1**).
- The group differences in mean review scores are statistically significant when tested by a between subjects ANOVA statistical test ( $p < .05$ ).
- The standard deviations of review scores given by all groups were significantly higher than the standard deviation of review scores given by professional critics (**See Table 2**) – i.e. subject review scores have greater variance than critic review scores.

### Tables 1 and 2

Groups	Anchor Review Score	Participant Mean Review Score	Participant Median Score	Critic Mean Review Score	Critic Median Score*
A (High Review Scores)	90	85	90	88	90
B (Low Review Scores)	61	71	70	88	90
C (No Review Scores)	N/A	79	85	88	90

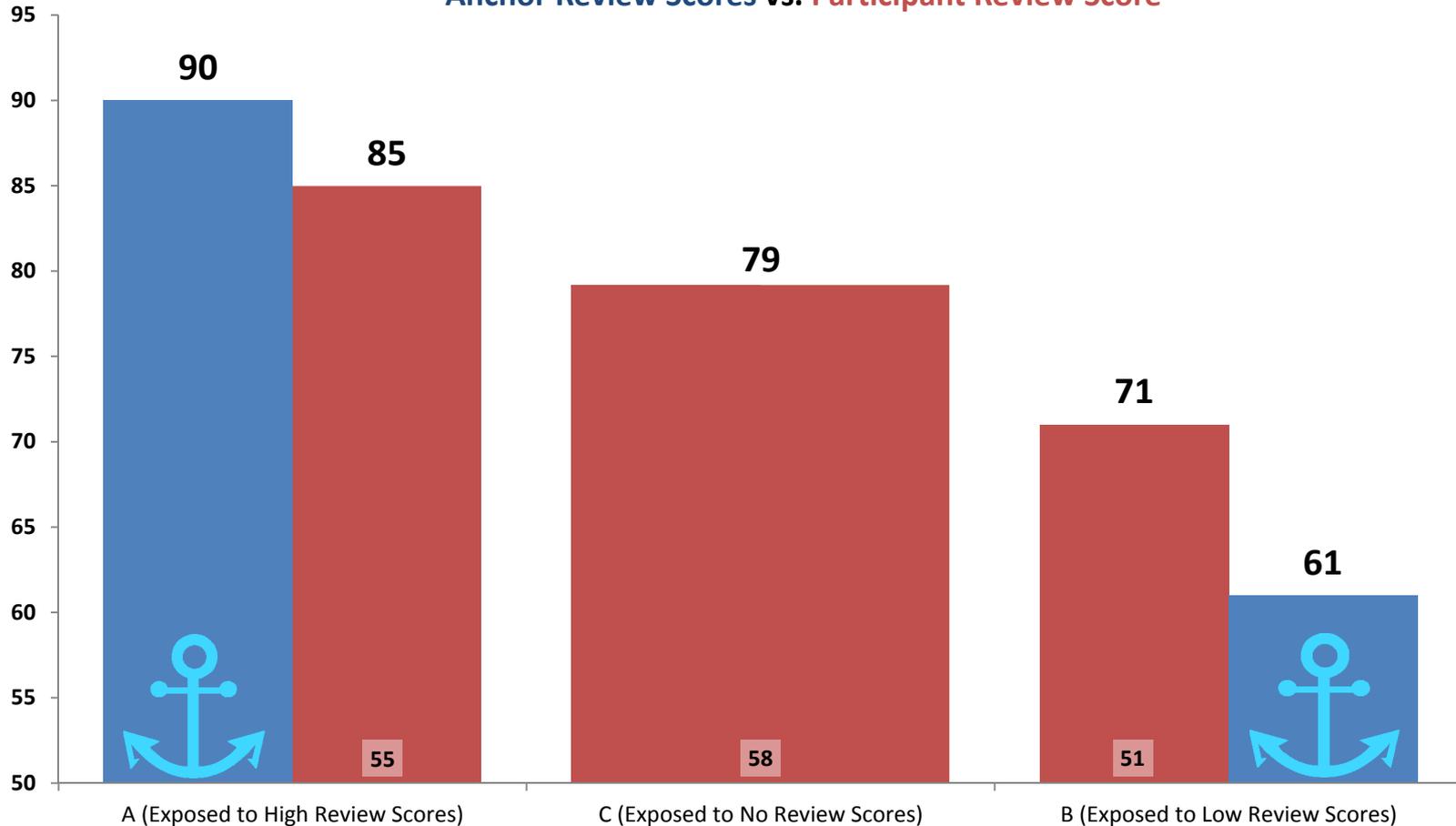
Groups	Participant Mean to Critic Mean	Participant Mean to Anchor Score	Participant Standard Deviation	Critics Standard Deviation
A (High Review Scores)	-3	-5	12.49	7.06
B (Low Review Scores)	-17	+10	14.26	7.06
C (No Review Scores)	-9	N/A	13.73	7.06

\* Based upon 62 review outlets

# Review Score Anchoring – Graph 1

## SMU/EEDAR Study

Anchor Review Scores vs. Participant Review Score



## Influence of Professional Reviews

### Anchoring

Anchoring is a psychological behavior that influences the way people subconsciously evaluate a probability or event. This involves the person developing a reference, or “anchor” point, which serves to influence their perception of all related material subsequently encountered.

This study divided the participants into three groups, all of whom were screened to exclude those familiar with the study’s test game *Plants vs. Zombies*. Prior to playing the video game *Plants vs. Zombies*, Group A were exposed to a series of favorable reviews of the game (averaging 90 out of 100). Group B were exposed to non-favorable reviews (averaging 61 out of 100). Group C, the control group, were not exposed to any reviews of the game at all.

By picking subjects not familiar with *Plants vs. Zombies* and exposing them to reviews of the game prior to their play experience, we hoped to anchor their perception and subsequent observation of game quality.

The group shown high review scores prior to playing *Plants vs. Zombies* gave the game an mean review score 20% higher (14 points) than the group shown low review scores. This group also gave the game a mean review score 8 percent (6 points) higher than the control group with no review score anchor. These differences in aggregate review score mean are statistically significant ( $F = 14.3, p < .001$ )

The results of this study reinforce the results of previous studies/reports (Tversky, A & Kahneman, D. 1974; McElroy, T & Dowd, K. 2007; Ariely, Loewenstein & Prelec, 2003; Mussweiler & Strack, 2001; Goldsmith, Lafferty & Newell, 2000) showing that people tend to rely on to previous experiences or references points (anchors) and self-adjust based on those anchored values. In the EEDAR/SMU study, the mock review scores significantly influenced the participant’s subsequent evaluation of the product, greatly influencing the review score given to the game they just played.

## Distance of Group Means from the Anchors

Although participants were influenced by mock review scores, they still formed their own opinion of the overall quality of the game. Both Group A (high review exposure) and Group B's (low review exposure) mean review scores deviated from the anchored review score and gave the game a review score directionally towards Group C's (control group) review score. Group A's mean review score was 6 points below the mock review score, whilst Group B was 10 points above the mock review score.

This shows that, even with an anchor point (expert's opinion), participants still judged the game they played closer towards the true review score (control Group C) than the fake review score. That being said, even with first-hand experience of time spent playing the game, those exposed to high review scores give the game a higher review and those exposed to low review scores gave the game a lower score. Clearly, this initial review exposure influenced their opinion, even after they played the game themselves.

## Participants versus Professional Critics

It is not surprising that the control group gave an aggregate mean review score different from the mean review score of professional critics. Professional critics have a both a different motivation and a wider breadth of experience reviewing games than non-professional participants.

### Review score variances

Consumer review scores had a greater variance from the mean than professional critic review scores, which had a tighter clustering around the mean (standard deviation). The review score standard deviations of all the experimental groups were significantly higher than the standard deviation of professional reviews. Participant review scores ranged from 40 to 100, whilst the range for professional reviewers ranged from 60 to 100.

Whilst no specific rules exist for how experts should review a product, there are some general guidelines. One rule is that a review should not directly reflect the reviewer's personal opinion of the game, genre, brand, or publisher. Instead, reviewers should grade the game based on its inherent merits. Consumer reviews have no need to divorce their review from their personal

opinion of the game. Additionally, professional critics actively analyze a larger set of games over their lifetime, allowing them to develop a more refined set of judging criteria, resulting in a more consistent set of reviews.

In addition, there are no professional or social consequences associated with anonymous consumer reviews. Media outlets, however, must be wary of both the professional, financial and social consequences (positive or negative) for giving outlying reviews.

This is not to suggest that professional critics are unbiased or that they purposely score video games higher or lower than their merited value; professional critics must simply consider more than their personal opinion when reviewing video games.

## Results Summary: Effect of Review Score on Purchase Intent

- Group A (high review exposure) was more than twice as likely (121%) as Group B (low review exposure) to take *Plants vs. Zombies* instead of \$10 cash. Group A was 85% more likely to take *Plants vs. Zombies* than Group C (no review exposure). **(See Table 3)**
- A chi square analysis testing the null hypothesis that group differences were the result of chance had a p value less than .05, suggesting that the differences in purchase intent between the three groups were due to the mock review scores rather than chance.

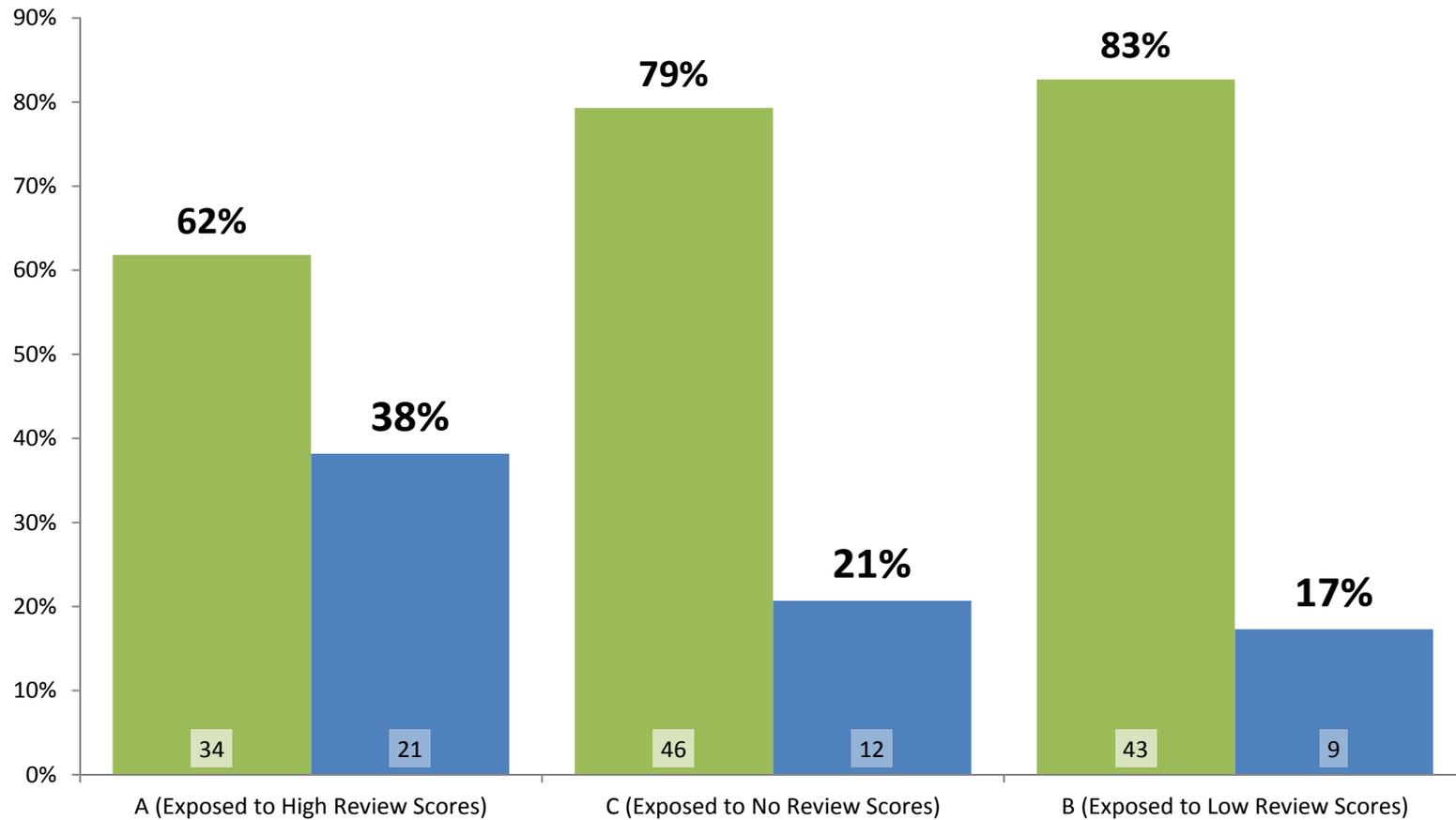
**Table 3**

Groups	Review Scores				
	Anchor	Participant Mean Review Score	Took Money	Took Game	p-value
<b>A (High Review Scores)</b>	90	85	62%	38%	0.027
<b>B (Low Review Scores)</b>	61	71	83%	17%	
<b>C (No Review Scores)</b>	N/A	79	79%	21%	

# Purchase Intent – Graph 1

## SMU/EEDAR Study

Purchase Intent - Took \$10 Cash vs. Took Boxed Copy of *Plants vs. Zombies*



## Review Score and Purchase Behavior

Although all subjects played *Plants vs. Zombies* for the same amount of time, participants exposed to positive reviews of the game opted to take a copy of *Plants vs. Zombies* instead of \$10 more than twice as often as participants exposed to negative reviews did.

A large amount of research, articles and speeches, both professional and amateur (Divnich 2009, Savillo 2009, Kaminsky, 2008) that have suggested that high review scores have a correlation with video game sales. This study reaffirms the general industry assumption that positive critical acclaim should result with higher sales. There is, however, the question of whether critic reviews influence the consumer's purchase decision or if the quality of the product acts as the sales catalyst. Is it the inherent quality of the video game and subsequent word of mouth that drive sales or expert opinion? Does expert opinion only reaffirm the game's positive/negative characteristics and do little to influence sales?

While game quality (independent of review scores) strongly correlates with a consumer's purchase decision, this study allows us to conclude that high review scores can cause

higher sales; that the relationship between commercial success and review scores is causal rather than a correlation.

EEDAR believes that *Plants vs. Zombies* is an inherently enjoyable game. During the study, participants had a reasonable amount of time playing the game to form their own opinion of it. Under such conditions, one would expect that it would be the quality of the play experience and not the opinion of "experts" that would influence user's purchase intent. However, the findings of this study indicate that critic reviews, independent of product quality, significantly influenced participants' willingness to purchase the product. As painful as it may be for developers to consider, even with the creation of a high quality game, a game is likely to achieve greater commercial success if reviewed highly, than if reviewed poorly or not at all.

This claim cannot, however, be made universally. This study used only a single high quality game, making it difficult to extrapolate these conclusions to games of medium and low quality. This study makes no direct conclusions about whether an inherently low quality title could receive a bump in sales if it is highly reviewed by professionals. However, our general assumption is that a

low quality game could see an increase in sales if it was highly reviewed; however, this is an inherently paradoxical argument, as an inherently bad game should not receive consistent positive reviews from professional critics.

## Purchasing vs. Accepting a Game

There is a difference between making a purchase and accepting a product instead of money. When people receive unexpected cash (lottery, finding money, etc.), that money is often treated differently than money earned through predictable channels such as a salary or paycheck.

Whilst an economist might argue that each participant earned either \$10 in cash for their time or earned a \$10 game, the participants would likely indicate that they were paid \$10 for 30 minutes of their time or that they received a “free” game for participating in a study.

In theory, the economist is accurate, but in reality, we treat the unexpected money differently. The fact that 38% of the participants in Group A chose the game has no direct real world application to purchase behavior, but only in its relative conversion rate of other groups. That being said, unlike a survey where people indicate they “would” buy a

game instead of accepting cash, these study participants actually accepted the game instead of taking the \$10.

## Results Summary: Effect of Review Score on Word of Mouth Marketing

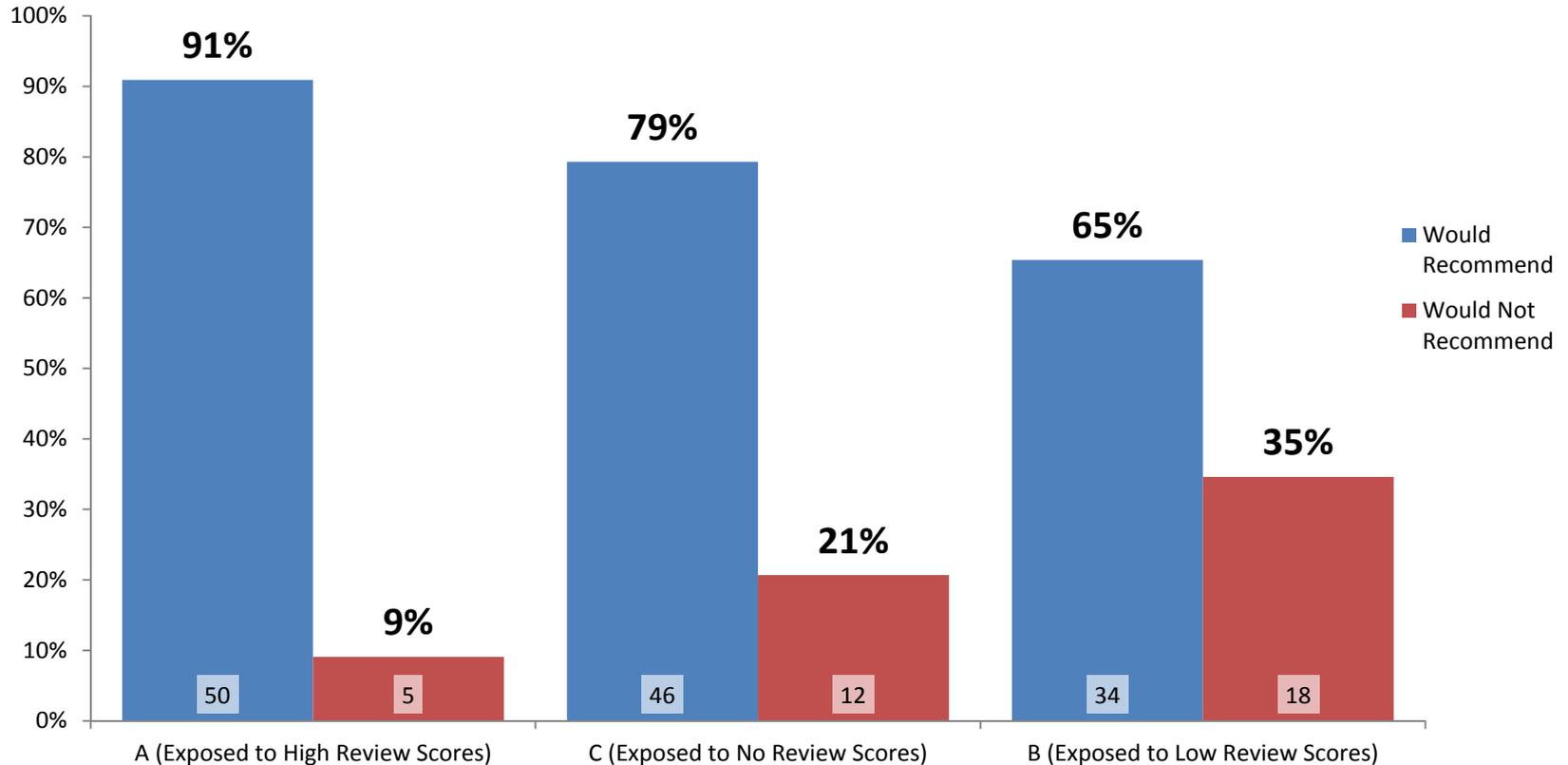
- 91% of participants shown high review scores for *Plants vs. Zombies* would recommend the product to a friend, compared to only 65% of participants shown low review scores and 79% of participants shown no review.
- These group differences are statistically significant in a chi square test ( $p < .001$ ).

Table 4

Groups	Review Scores		Would Recommend	Would Not Recommend
	Anchor Review	Participant Mean Review		
<b>A (High Review Scores)</b>	90	85	91%	9%
<b>B (Low Review Scores)</b>	61	71	65%	35%
<b>C (No Review Scores)</b>	N/A	79	79%	21%

# Consumer Word of Mouth – Graph 1

**SMU/EEDAR Study**  
Participants Willingness to Make a Positive Recommendation to a Friend/Relative



## Review Score and Word of Mouth

91% of participants exposed to high review scores for *Plants vs. Zombies* would recommend the product to a friend if they were asked to recommend a “good game to play”, compared to only 65% from Group B (low review scores) and 80% from the control group.

Even though only 38% of the participants from Group A (high review exposure) took a copy of *Plants vs. Zombies* over the \$10 cash, 91% of these participants said they would recommend the game to a friend if asked. In line with the rest of the study, this data suggests that mock professional reviews significantly influenced whether the participants indicated that they would spread positive word-of-mouth for *Plants vs. Zombies* if asked.

The most surprising result is Group B (low review exposure), where the majority (65%) indicated they would still recommend the game to a friend even though 73% of the group would not purchase it themselves. As we indicated in the “Anchoring” section of the report, Group B’s review score was higher than the anchored review score of 61, indicating that, while reviews influenced their behavior, they still felt that the game was much better than what the “experts” suggested.

This suggests that if a company releases an inherently good game that receives lower than “deserved” review scores, the company may be able to increase sales through a widely played demo. People that enjoy the demo might overcome the influence of negative critic reviews or may tell their friends about the game even if they do not purchase the product themselves. While EEDAR again points to our previous paradoxical question on how a game’s inherent quality could differ from the aggregated opinion of professional critics, we do acknowledge that this rare case could happen.

For high quality games, companies might want to explore marketing campaigns that advertise the availability of a free demo in addition to marketing campaigns that attempts to influence an instant purchase. Medium quality games may wish to release a demo as well, but to do so a few months **after** the release of their game (so as not to deter the people who would otherwise have bought the game but been detoured from doing so from a mediocre demo play experience). This would take advantage of the theory that people recommend products that they have either personally used or have heard good things about. In the same way that people have recommended dentists,

doctors, lawyers, real-estate agents or plumbers to their friends that they find acceptable but not fantastic, people are more likely to recommend products and services they are familiar with, even if the product is only of average quality.

This study did not test if the results also apply to low or medium quality games.

# Word of Mouth versus Review Score

## Results Summary: Review Score versus Word of Mouth Recommendation

- All groups rated “Recommendations from friends” as a stronger influence on their purchase decision than “Review score of the game” (**See Table 5**). This correlates to an independent survey conducted by Cowan and Company in 2009 (Creutz & Nolly, 2009) sampling 1,013 video game players, which similarly indicated that recommendation from friends were among the top influencers.

**Table 5**

Scale of 1 to 3 (1 = Minor Influence, 2 = Moderate Influence, 3 = Major Influence)				
Question	Mean	A (High Review Scores)	B (Low Review Scores)	C (No Review Scores)
Recommendations from friends	2.58	2.57	2.56	2.61
Amount of Free Time	2.45	2.37	2.49	2.49
Price of the game	2.38	2.31	2.50	2.34
Review score of the game	2.18	2.19	2.08	2.25
Game has online gameplay	2.13	2.04	2.18	2.19
Publisher/Developer	1.98	2.04	1.88	2.02
Box art of the game	1.49	1.57	1.43	1.46
Use of Brands/Licenses	1.42	1.41	1.29	1.54
Use of celebrity	1.27	1.24	1.35	1.24

## Word of Mouth versus Review Score

All groups in this study rated “Recommendations from friends” as a stronger influence on their purchase decision than “Review score of the game”, which supports the results of an independent survey conducted by Cowan sampling 1,013 video game players (Creutz & Nolly, 2009).

The EEDAR/SMU study indicates that positive reviews can significantly influence a consumer’s willingness to recommend a game. The relationship between critic reviews and word-of-mouth is complex. For example, early game adopters may use critic reviews as a catalyst for a game purchase. After the purchase, however, the early adopters reach their own conclusion playing the game, starting a new chain of influence in the form of recommendations to friends (word-of-mouth/forum posts/etc.).

Word-of-mouth is usually considered a more influential catalyst than critic reviews. The EEDAR/SMU study indicates that the amount of word-of-mouth spread is directly impacted by critic reviews, making reviews an important element in the purchasing decision process.

Critic reviews are especially important because of the uni-directional relationship between review scores and word of mouth. Critic reviews can amplify or reduce the viral spread of word-of-mouth marketing, but word of mouth does not usually influence critic reviews.

To ensure that hardcore gamers did not significantly skew these results, the study also examined participants that play 6 or more hours of video games a week, a quality correlating with early adopter consumers (those that buy video games launch week, often before recommendations from friends can influence their purchasing decision process). Examining just this group did not change the study results, suggesting that even core gamers, who should be able to form independent opinion, are still significantly influenced by professional critics.

It is important to note that critic reviews are not the sole influence on word-of-mouth recommendations. Marketing, PR, brands, licensing, and many other factors can all play a role in driving viral positive or negative buzz.

## Study Limitations

Whilst the EEDAR/SMU study examines the relationship between critic reviews, purchase behavior, and word of mouth, the study has some limitations.

### **Quantitative vs. Qualitative**

The mock reviews used in the EEDAR/SMU study used both quantitative (90/100) and qualitative (I.E. “Game of the year!”) measurements. It is unclear which information (quantitative or qualitative) played a larger role in influencing the response of participants.

### **High Quality vs. Low Quality Game**

The EEDAR/SMU study used a game that has been widely accepted as “high quality.” Although it is likely that many results in this study would also apply to lower quality titles, it is difficult to make that conclusion without replicating the study with a universally accepted low quality game.

### **Critic Reviews are not a Sole Catalyst**

The EEDAR/SMU study only measured the effects of critic reviews on the reviewing, purchasing decision, and word of mouth process. The EEDAR/SMU study does not examine the effects of marketing, previews, trailers, screenshots, pre-order swag, or the dozens of other factors that likely play a role in influencing consumer behavior.

### **Word-of-Mouth to the First Degree**

The EEDAR/SMU study indicates that critic reviews can influence the purchaser and those in direct contact with the purchaser. However, the study does not make any conclusions on how critic reviews may continue to influence the viral spread of word-of-mouth recommendations after the first degree of separation. Word of mouth recommendations may spread several degrees past the initial recommendation, making the effect of review scores on word of mouth even more important.

## Real World Application

### The Role of Marketing

Marketing's role in the video game industry is essential to a game's commercial success. Whether it is Kevin Butler's Sony campaign, the unique PR strategy of *Dante's Inferno*, or the great implementation of music in the *Borderlands* commercials, the video game industry has a history of innovative marketing.

The EEDAR/SMU study presents several opportunities for further innovation. First, current marketing and PR strategies are oriented around encouraging consumers to make the initial purchase. Once the purchase is complete, the role of marketing and PR targeted at the consumer ends. There have been very few marketing campaigns/strategies targeted at post purchase word-of-mouth. The results of this study reaffirm that word-of-mouth has a very important influence on purchase behavior and that critic reviews can act as a catalyst to spur on word-of-mouth virality. Future marketing campaigns may wish to implement strategies that attempt to influence consumers long past the point of purchase in hopes of spurring on additional word-of-mouth viral marketing.

### Review Scores as Game Box Art

The results of the EEDAR/SMU study suggest that putting favorable critic reviews on the game's box may have a positive impact on sales, as favorable reviews help create a beneficial anchoring effect. Consumers influenced by these reviews are likely to both buy the game and subsequently review it higher themselves. Additionally, consumers will be more likely to recommend the game to friends,

Since the EEDAR/SMU survey indicated that box art does not greatly influence the consumer's purchase decision process, the inclusion of positive critic reviews may help increase the effectiveness of the game's box art in influencing the consumer purchase decision.

Recommendations on the use of box art do impose a complication, since most critic reviews happen after the box art has gone to print. This might be solved by working with editorial outlets further before the release of the game or by extending the game's release schedule to allow key critics to review the game before general release. Alternately, you can follow current

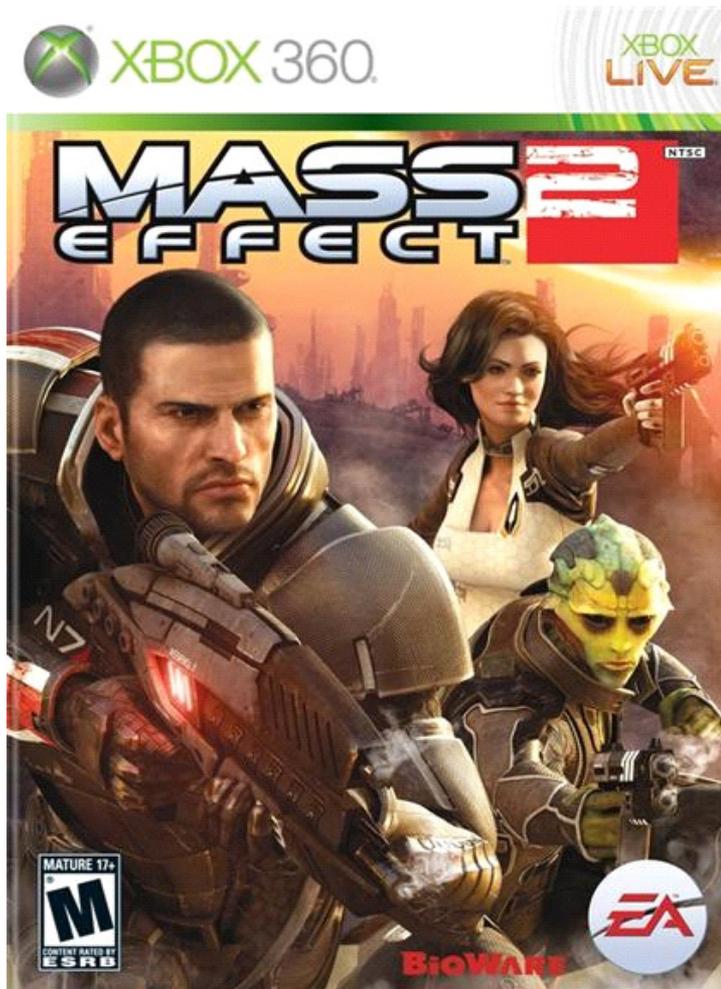
industry practice and slap “Game of the year” style sticker on the front cover.

An ideal scenario would be the creation of a 15 to 30-day grace period between the gold development milestone and the manufacturing process. This would allow brand managers and marketers to select a small number of outlets to review the title under a strict pre-release embargo. The most favorable reviews could then be selected for placement on the game box.

This process would only work if 1) the pre-release review process remains relatively unbiased and 2) the game in question is an inherently a good game. Pressuring media outlets to positively review a game in order to get strong reviews could have a negative long-term effect on both the outlet’s and publisher’s reputation, possibly leading to future consumer rejection of review scores. Bias for the sake of “movie-poster” placement is something that movie critics have come under scrutiny for over the last decade and has likely played a role in the general public’s diminishing reliance on movie critics. A good example of this diminishment is Sony’s David Manning debacle, in which a Sony executive created a fake movie reviewer, “David Manning”, who would

consistently give Columbia Pictures’ movies (a subsidiary of Sony) excellent movie reviews and comments. Sony later faced a class action lawsuit and it forever tarred consumer’s views and reliance upon professional movie critics.

## Mock Examples of Using Professional Media Outlets on Box Art



## Game Demos

Whilst implementing critic reviews into a game demo is almost never done, as demos are typically released weeks before the final version of the game is sent to manufacturing, marketers should not ignore the opportunity to influence consumer purchase and word of mouth behavior.

The EEDAR/SMU study did not measure the influence on qualitative previews; however, one can conclude that using qualitative descriptors from previews and implementing them into a game demo could have a positive influence on the consumer. It could be incredibly influential to include quotes such as “Most Anticipated Game of the Year –[Media Outlet 1]” and “The One We’ve Been Waiting For! –[Media Outlet 2]” during the loading process or on the title screen of the demo as an attempt to provide a positive bias to the consumer’s play experience.

There have been some examples of this strategy in previous demos. However, nearly all of the examples researched for this report included qualitative quotes from media outlets at the end of the demo where it should be shown at the **beginning** to anchor the opinion of the consumer.

## Advertisement/Marketing Examples

Obviously, highlighting both quantitative and qualitative positive rhetoric from critics is imperative during marketing campaigns. This is currently common practice for most publishers. There are, however, still many times when these practices are not used.

Electronic Art’s *Battlefield: Bad Company 2* commercial is a perfect example of how to leverage positive critic reviews within an advertisement. This commercial includes all elements of a successful television campaign, including quantitative and qualitative critic remarks, trendy music, and in-game footage. This video can be seen at:

[http://www.youtube.com/watch?v=j9n\\_LL4b5zw](http://www.youtube.com/watch?v=j9n_LL4b5zw)

Ariely, Loewenstein and Prelec, Coherent Arbitrariness: Stable Demand Curves Without Stable Preferences. *The Quarterly Journal of Economics*, 118, 73, 2003

Creutz, D. and Nolly, A. Fall 2009 Video Game Survey: Ignore the Core at Your Peril 2009, *Cowen and Company*, 2009.

Divnich, J., The Importance of Marketing, *Montreal International Game Summit*, Montreal, Quebec. Nov. 2009.

Goldsmith, R., Lafferty, B. and Newell, S., The Relative Impact of Corporate Credibility and Celebrity Credibility on Consumer Reaction to Advertisements and Brands, *Journal of Advertising*, 29, 43, 2000.

Kaminsky, R., Commercial Success of Video Games, *Design Innovate Communicate Entertain Summit*, Las Vegas, NV. Jan. 2008.

Mussweiler, T. and Strack, F., Considering the Impossible: Explaining the Effects of Implausible Anchors, *Social Cognition*, 19, 145, 2001.

Savillo, R., The Influence of Metacritic on Game Sales, *Bitmob*. 05/02/2010 <http://www.bitmob.com/articles/the-influence-of-metacritic-on-game-sales>

Tversky, A. and Kahneman, D., Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124, 1974.

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All data from sources other than the EEDAR Games Database are clearly cited.

## About EEDAR

EEDAR is a research firm founded by a team of interactive entertainment veterans in 2006. The company's mission is to increase the profitability and creativity of the video game industry by allowing publishers, developers and investors to make more strategic decisions based on objective, accessible and meaningful data.

EEDAR supplies the industry's two leading analytical and information services: DesignMetrics® provides fact-based comprehensive analysis for proposed game titles detailing projected sales and competitive landscapes. GamePulse® is the only information service that delivers crucial sales, marketing and demographic insights on the video game industry via a "real time" accessible website.

In addition to DesignMetrics and GamePulse, EEDAR delivers custom research and industry publications critical to understanding and navigating the highly competitive electronic entertainment and videogame market.

EEDAR's products and services are built upon on its proprietary game feature database, the world's largest dataset of game features, allowing the company to produce highly accurate analysis at even the most granular levels.

EEDAR is based in Carlsbad, California.

## About The Guildhall at SMU

The Guildhall at Southern Methodist University is the premier graduate video game education program in the US. Many of the school's founders are industry icons, and classes are taught by industry veterans. In seven years, the program has graduated over 350 students and alums have worked at more than 100 video game studios around the world, with several graduates now serving in leadership positions. SMU offers both a Master's degree and a graduate Professional Certificate of Interactive Technology in Digital Game Development, with specializations in art creation, level design, and software development. For more information, visit <http://guildhall.smu.edu>