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Selling Gender: Associations of Box Art Representation of Female Characters With Sales for Teen- and Mature-rated Video Games

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Abstract

Content analysis of video games has consistently shown that women are portrayed much less frequently than men and in subordinate roles, often in “hypersexualized” ways. However, the relationship between portrayal of female characters and videogame sales has not previously been studied. In order to assess the cultural influence of video games on players, it is important to weight differently those games seen by the majority of players (in the millions), rather than a random sample of all games, many of which are seen by only a few thousand people. Box art adorning the front of video game boxes is a form of advertising seen by most game customers prior to purchase and should therefore predict sales if indeed particular depictions of female and male characters influence sales. Using a sample of 399 box art cases from games with ESRB ratings of *Teen* or *Mature* released in the US during the period of 2005 through 2010, this study shows that sales were positively related to sexualization of non-central female characters among cases with women present. In contrast, sales were negatively related to the presence of any central female characters (sexualized or non-sexualized) or the presence of female characters without male characters present. These findings suggest there is an economic motive for the marginalization and sexualization of women in video game box art, and that there is greater audience exposure to these stereotypical depictions than to alternative depictions because of their positive relationship to sales.

Keywords

Video games; gender representations; content analysis; media effects

Introduction

Video games have often drawn criticism for stereotypical depictions of women as passive partners for the (male) protagonist in such situations as the cliché “save the princess” scenario or as sex objects present primarily for the gratification of a male audience (e.g., Provenzo, 1991). Studies completed on video games sold in the US have shown that female characters are not given representation equal to male characters in video games and are often created from a male perspective that is less than “realistic,” exaggerating their sexual or feminine traits (e.g., Beasley & Collins Standley, 2002; Burgess, Stermer & Burgess, 2007; Downs & Smith, 2010; Martins, Williams, Harrison & Ratan, 2009; Williams, Martins, Consalvo & Ivory, 2009). Lara Croft of *Tomb Raider* fame, to use an obvious example, may be an active protagonist and capable adventurer and gunslinger, but she also exhibits the oversized breasts and unusually thin build of a Barbie doll rather than the muscular physique an equivalent male character would have (Jansz & Martis, 2007). These depictions in video games potentially influence the socialization of young people, who make up a large part of their audience, and thus may transform or reproduce gender representations in the general

culture (Downs & Smith, 2010). To date, research has focused on describing depictions of women and men in all video games, not how these depictions influence sales and, in turn, audience exposure to particular depictions (Williams et al., 2009). This study uses a different tactic, assessing which depictions of video game characters are associated with higher game sales, under the assumption that only best-selling games have much impact on general culture. That is, the focus here is on game sales as the outcome variable, with depiction of female and male characters as the antecedent variables.

At a simplistic level it might be assumed that sexualized representations of women are used in video games because such depictions increase game sales. Similarly, it might be assumed that female characters are usually cast in supporting rather than central roles while male characters take central roles because the predominantly male audience is better able to identify with a male protagonist, incentivizing the use of a male protagonist. Since best-selling games reflect both the average cultural preferences of gamers and the content that is most widely available for producing gender socialization (e.g., Williams et al., 2009), it is important to test the conditions under which gender representation predicts game sales. This study attempts to do just that by relating video game sales data to a content analysis of the representations of men and women on the box art for the same games. The research question explored here is whether particular depictions of female (and male) characters on game box art, specifically the presence, centrality, and sexualization of female characters and the presence and centrality of male characters, are related to sales. I posit that associations between game sales and their box art representations of men and women result from differentially valued gender coding rather than sexualization or identification per se. In short, it is expected that “sex sells,” but only when the sexualized women portrayed are also depicted as marginalized, consistent with a gender coding of the game that fits cultural stereotypes (Kimmel, 2008). In this view, the success of Lara Croft was anomalous, as she was depicted as a central (albeit highly sexualized) female protagonist in the box art for *Tomb Raider*.

This study focuses on box art for games sold in the US (as do the studies cited below, unless otherwise noted), but often similar box art is used in the games sold in other markets as well; the US game industry—one of the largest—has a huge influence on games published all over the world and indirectly influences culture outside the US. Video games are truly an international product that crosses national borders with little hindrance, with the possible exception of a few countries that censor for political or religious reasons. Compared to other cultural artifacts, many of the highest selling video games are truly global in their reach, even though the producing firms are often headquartered in just a few geographic areas (e.g., the US, Canada, Japan, Europe, and Australia).

This study also uses a purposive sample of games that received an ESRB rating of *T* or Teen (age 13+) or *M* for Mature (age 17+), a subset of games that are most often targeted at young males and are the most likely to feature sexualized women. Findings from this sample would not generalize to all games, for reasons noted below, but only to those aimed at young males, where the marginalization and sexualization of female characters would signal the masculine gendering of the game space (Kimmel, 2008; Ward Gailey, 1993).

Representation of Women and Men in Video Games

The portrayal of men and women in video games has been investigated with both qualitative research and quantitative research. Several studies provided qualitative analyses of specific images (Fontane, 2003; Herbst, 2005; Labre & Duke, 2004; Mikula, 2003). Others examined the reactions of female gamers to the gendering of video gaming and video game characters (e.g., Bryce & Rutter, 2003).

Of the quantitative studies of the representation of female characters in video games, most have used content analysis to examine gender roles, as recommended by Rudy, Popova and Linz (2010, 2011) in their introduction to two special issues of *Sex Roles*. These have produced consistent results, showing that women are underrepresented relative to men and are more likely to be depicted in sexualized and passive roles, as described below. An early study showed that the most popular Nintendo games of the time often placed female characters in either a passive, helpless role as a “damsel in distress” motivating the actions of the male protagonist or a negatively-valued, sexualized role as a “bad girl” minor antagonist (Provenzo, 1991, 1992). A few years later, Dietz (1998) found no female characters at all in a third of games viewed. More recently females represented a small proportion of all characters in the games sampled (Beasley & Collins Standley, 2002; Burgess et al, 2007; Downs & Smith, 2010; Williams et al., 2009) and fewer than half of all characters depicted in ads in major gaming magazines (Scharrer, 2004).

Playable female characters (i.e., those characters that could be selected as one’s avatar and actively played) were also in the minority. Half of the female characters in a content analysis of game play videos were playable (Haninger & Thompson, 2004) and a fifth of female characters in a content analysis of game reviews were playable and therefore active rather than passive (Ivory, 2006).

Finally, female characters were more likely than male characters to be depicted as sex objects (Dietz, 1998), sexier (Burgess et al., 2007), more attractive (Scharrer, 2004) or in ways that were sexually suggestive (Ivory, 2006). When female characters were pictured as dominant they also were more likely to be portrayed as hypersexualized (Jansz & Martis, 2007). In a recent study (Downs & Smith, 2010), most of the women either wore revealing clothing or were at least partially nude. Earlier studies similarly noted revealing clothing (Miller & Summers, 2007) and partial nudity (Heintz-Knowles & Henderson, 2001) among female characters. Measurement of their body proportions suggested that female characters in games aimed at older players were thinner than adult females in the US (Martins et al., 2009); in contrast, male characters in those games were proportional to actual sizes of adult US males (Martins, Williams, Ratan & Harrison, 2011).

Nevertheless, there is some heterogeneity of gender representation in games by genre and target audience. For instance, in so-called “casual games” aimed at female players and played on smart phones or in short periods of time (e.g., 3–5 minutes), more than half of the main characters were women (Wohn, 2011). Similarly, games aimed at children (which usually receive ESRB ratings of E, for Everyone) are less likely to sexualize female characters than games aimed at teens and adult men (Wohn, 2011).

The Importance of Video Game Representations

Potential effects of video games on consumers have received attention in both the popular press and empirical research, especially with regard to the effects of video game violence on children (e.g., Haninger & Thompson, 2004). There is similar concern about the effects of the representation of women in video games because game characters often serve as role models, especially to young children (Miller & Summers, 2007). Children may build their gender identities, roles and schemas in part on their observation of characters in video games and through their symbolic interaction with these roles (Dietz, 1998; Beasley & Collins Standley, 2002; Collins, 2011), just as Goffman (1979) suggested for consumers of magazine ads. Children who see female characters portrayed as attractive and sexy and male characters portrayed as muscular and strong may experience low self-esteem when their own bodies do not meet those expectations (Miller & Summers, 2007) and may mimic gender behavior seen in games that is inappropriate in actual social situations (Beasley & Collins Standley, 2002; Downs & Smith, 2010).

What has not been empirically examined is the effect of these images on purchasing behavior, which in turn affects consumers' exposure to the images. Many variables influence video game purchase decisions, such as magazine and online game reviews, magazine, television and online ads, word of mouth from friends, and box art. Of these, box art (the ads depicting game scenes on the front of the video game box) is the only content to which nearly all buyers and potential buyers are exposed (Burgess et al., 2007), and thus seems the most likely to widely influence sales; most games are bought new and even buyers of used games usually receive the box. In addition, game producers presumably design these ads to influence purchase decisions; they have less control over reviews and over other ads, which are likely seen by a much smaller percentage of the target buyer group. Finally, studies of the effects of packaging indicate that consumers pay more attention to product imagery (e.g., a picture of the product) on the package when consumers have little familiarity with the brand or the product or when the product is "experiential" or provides "sensory pleasure, variety, and cognitive stimulation" (Underwood, Klein & Burke, 2001, p. 407). Video games are unknown products offering experiential benefits, so the use of pictures is particularly likely to draw consumer attention and encourage purchase.

The goal of this study is to provide an examination of the relationship between box art and game sales using content analysis of the box art and controlling for the associations of reviews and other game characteristics with sales. The game box provides a clear point of contact with the consumer and an obvious place to try to advertise the product and influence buying behavior. In the same way that consumers read the cereal box in order to make a choice, they peruse the video game box (either online or in a store) in order to learn about the game content. In both cases, the content is meant to influence purchase behavior, not to represent the full range of product characteristics; it is intended to convey the overall flavor of the game and emphasize content the producer believes will attract buyers, not to portray all characters in the game or all events likely to happen (Burgess et al., 2007). Thus, content analysis of box art is an appropriate method for interpreting the marketing used by producers in order to assess its effect on subsequent buyer behavior (i.e., sales).

Buyer behavior is important because it provides an indication of the relationship between video games and the larger culture. When representations of characters were investigated over a twelve month period, male characters were found to outnumber female characters but the effect was even more pronounced in the highest-selling games (Williams et al., 2009). It is not clear whether games feature dominant men and sexualized women because this is what game producers tend to create or because this is what their audience demands (Williams et al., 2009). However, games with high sales can influence a greater number of people than those with low sales. As Williams et al. (2009) noted, in their sample a few games sold millions of copies while most sold only a few thousand copies; they concluded that those games selling more copies would probably exert greater influence on the behavior of players because they were played by far more people. Studies of the representation of men and women in a broad sample of video games may therefore provide a biased view of the effects of video games on the behavior of players, since most players do not see most games. Instead, focusing on representation of men and women in games with strong sales would provide a more accurate view of the potential effects of this portrayal on their audience (Williams et al., 2009). Following the recommendation of Williams and colleagues, in this study the relationship between portrayal and sales is examined empirically in order to assess how gender roles are depicted in those games seen by the largest audiences. This appears to be the first time that such an analysis has been undertaken, because earlier research assessed depiction of female characters in general, rather than the relationship between depiction of female characters and game sales, as reviewed above.

Theoretical Frameworks for Explaining the Consequences of the Representation of Women

Given the importance and consistency of representations of men and women in video games, the question of why these conventions continue arises. The production of culture perspective (Peterson & Anand, 2004) offers a useful approach to examine this question. This theoretical framework examines the production and reception of cultural objects (e.g., video games) by considering the context of the producers, the consumers, and the general culture. In particular, Griswold (2008, p. 16) provides an analytical tool she terms the “cultural diamond,” a diagram in which the four points—the cultural object, its producer, its audience or receivers, and the social world—are each interconnected in determining what is produced and how it is received. Our particular concern in this paper is the link between producers and receivers.

The link between producers and receivers is a “filter” process (Hirsch, 1972), a succession of “gatekeepers,” including developers, publishers, retail outlets and reviewers, who determine whether a product is released and influence its success based on their decisions. Like the book publishing and media industries, the producers of the video game industry are split into developers, who do the creative work and production for games, and publishers, who market and distribute these games. Publishers are solely concerned with selecting games that they believe will be well-received by the audience and marketing them in a way that will encourage purchases (including box art design). Thus, if publishers believe that the marginalization or sexualization of women in games and their box art will improve sales to their target audience, they will emphasize such portrayals, and so the prevalence of these portrayals will persist.

The other set of gatekeepers of interest in this study is reviewers. While they cannot prevent a game’s release or guarantee its success, reviewers may hold considerable influence over consumer purchasing decisions, so they could be influential gatekeepers. In contrast to buyers, reviewers have played the game before they write their reviews, so reviewers’ decisions are influenced by the game play as well as the box art; thus, this study controls for review scores as a pathway through which game quality and community opinion may indirectly affect sales.

However, it may not be specifically the presence of sexualized female characters that improves the reception of a game with sexualized women in the box art. Rather, the sexualization *together with* the marginalization of women is part of a convention (along with violent or aggressive game play and content) that genders video games as a masculine space (Jansz, 2005), and their presence reflects the masculine gendering of a game’s content (Kimmel, 2008). According to Kimmel (2008), it is in part because video games are usually gendered as a masculine-only space that they are attractive to males. Video games are one of the few spaces in which it is still conventional to overtly privilege males and assume a specifically masculine perspective. Thus, the absence of female characters or their depiction as sexualized and powerless help to maintain this gendered space, both by preserving an association between masculinity and privilege and by deterring “invasion” of the space by female players (Kimmel, 2008). As a result, producers of most games (with the exceptions of casual and children’s games) likely feel little pressure from their primary audience to change their portrayal of women, despite calls to reduce the “gendering” of video games and thereby attract more female players (e.g., Casell & Jenkins, 1998).

If box art serves the overall purpose of signaling that the game will provide a masculinized space for players then it would be expected that box art that provides the clearest signals will be associated with stronger game sales. As noted above, game sales is a proxy variable for measuring the extent of cultural influence of a particular game. Games with higher sales

exert potentially greater influence on players because they are seen by more people than other games. This leads to specific hypotheses concerning both the presence and portrayal of male and female characters. It should be noted that all hypotheses pertain to that subsample of games aimed at adolescent and older players (i.e., Teen and Mature games); casual games designed primarily for women (Wohn, 2011) or children's games designed for younger players (Martins et al., 2009, 2011) do not attempt to provide the gendered space seen in the subsample of games for older or mostly male players, and are therefore beyond the scope of this study.

Hypotheses

The previous research has demonstrated that women are underrepresented relative to men in video game play, in game reviews, in video game magazine ads, and in video game box art; further, they are often portrayed as highly sexualized and less central as characters, as reviewed above. The research question in this study is whether the images of women and men seen in box art predict the success of those games, measured here as game sales. Sales of games are important because they reflect how widespread the influence of particular games (and their gendered images) is on players, as Williams et al. (2009) note; but at the time of their study, sales figures by game were not easily available, so their sample of games was small and limited to the period of one year. Newly available data allow direct examination of the relationship between portrayals of male and female characters and game sales over the period of several years for a large sample.

Clearly video game sales are influenced by many variables other than the representation of male and female characters in box art. Control variables used in this study include year of publication, ESRB rating, review score, genre, system manufacturer and producer. Measures for each of these control variables are described in the Methods section. Because this is the first study of its kind to use sales as the dependent variable, earlier studies do not provide clear guidance as to the need for these controls so the rationale is explained below in some detail.

Year of publication is controlled in this study because more recently published games will have had a shorter period of time in which to increase sales than will older games. ESRB rating is the industry content rating of each game that indicates its appropriate audience (e.g., young children vs. teens); in this study the sample is limited to games aimed at teens and mature adults, but even this classification may make a difference in sales, so whether the game is classified T for teens or M for mature adults is controlled. Genre of the game is controlled where feasible, because some genres (e.g., sports games) have greater sales than others aimed at smaller audiences (e.g., simulations). Review score is used to measure game quality and control for its influence on sales; review scores for games are available online through *MetaCritic*, a webpage that amalgamates review scores of games from multiple sources, thereby providing a resource widely used by gamers to learn about game quality prior to purchase. Game system manufacturer (e.g., Nintendo vs. Microsoft or Sony) is controlled because players may have one system and not another or may develop brand loyalty to one system manufacturer, limiting the selection of system-exclusive games available to them. Similarly, game publishing by a few notable publishers is controlled because some producers are more likely than others to produce high-selling games; larger firms or those with a good reputation are usually more successful than others in game sales (due to a reciprocal relationship between publisher characteristics and success). In other words, every attempt was made to control the effects of variables that would influence the dependent variable but have no relationship to the predictor variables so that the relationships of the predictor variables with the dependent variable could be more reliably assessed.

As noted above, previous research suggests that women are much less likely to be depicted in video games than are men. Theory suggests that this is because game producers aim to provide a product consistent with a masculinized space that will prove attractive to male gamers. Within the production of culture perspective (Peterson & Anand, 2004), it is argued that producers must provide cultural artifacts that fit the desires of the audience, at the same time as those artifacts also shape the desires of the audience. This theoretical framework provides a basis for understanding why female characters are less likely to be depicted in game box art than are male characters, especially under some conditions.

The first hypothesis is that the presence in the box art of female characters without male characters is negatively associated with game sales, since the exclusive presence of female characters threatens the masculine coding (Kimmel, 2008) of the product. Box art with any male characters or no characters present supports the default assumption that the game is masculine but box art with only female characters present compromises the “masculinity” of the game by implying that only women are important in the game. Thus:

- H1** Presence of female characters alone in box art (i.e., absent other characters, either male or non-human) is negatively associated with game sales.

Non-central women do not threaten the game’s coding as masculine (since men or even non-human objects such as cars are usually the central focus in such cases), but any indication that women are of sole or equal importance disrupts the assumption of a masculine-coded product. The presence of men as central characters, in contrast, reaffirms the masculine coding of the product. As discussed above, the masculine coding of the product (Jansz, 2005; Kimmel, 2008), shown through the ways in which men and women are depicted, is predicted to be associated with higher sales.

- H2** In box art that includes female characters, centrality of female characters is negatively associated with game sales.

- H3** In box art that includes female characters, centrality of male characters is positively associated with game sales.

On the other hand, the presence of non-central female characters in box art can reinforce a game’s coding as masculine if those characters are sexualized in a stereotypical way. Because the sexualized female characters are marginalized instead of strong and central, they do not represent a threat to the masculinized space of the game (Kimmel, 2008). In fact, the inclusion of non-central, sexualized women codes the product as specifically “for” men. However, sexualized women who are depicted as central to the action do not have the same effect; their implied agency still threatens the masculine coding of the product, and thus Hypothesis 2 applies to them. In other words, sexualization of women will be positively associated with game sales, but *only* in cases where the women portrayed are not in a central position on the box. This prediction is consistent with Kimmel’s grounded theory suggesting that male gamers are often looking for a masculinized space in which the politically correct views of society at large need not be voiced.

- H4** In box art that includes female characters, portrayal of female characters as non-central and sexualized is positively associated with game sales.

In summary, the four hypotheses tested here suggest that video game sales will be higher when male and female characters are portrayed in a way that is consistent with the masculine space that gamers are seeking (Kimmel, 2008). Specifically, sales will be high when male characters are portrayed as central to the game play through their dominant

position on the box art. Sales will also be high when female characters are portrayed in ways that are consistent with the masculine space, that is as not present or, if present, as non-central and sexualized. If female characters are presented as central, sales are expected to be low, regardless of sexualization. In other words, the prediction here is not that sexualization of female characters is associated with high sales, but rather that the marginalization of female characters is associated with high sales. Marginalization may be signaled in one of three ways: by not showing female characters at all; by showing female characters as subordinate to other characters through portraying them as non-central; and by portraying sexualized female characters as non-central so that they are not shown to be both sexualized and dominant.

Method

Sample

This study uses a purposive sample drawn from a sampling frame of about 6400 games with US sales of at least 10,000 copies (the lowest recorded number) listed on VgChartz.com. Cases were randomly selected from this sampling frame so long as they met other restrictions. Specifically, games had to be released in the US for a major home console (Nintendo GameCube, DS or Wii, Sony PS2, PS3 or PSP, or Microsoft Xbox or Xbox 360) in the period of 2005 through 2010, have an ESRB rating of *Teen* or *Mature*, and have a full MetaCritic score in order to be included in the sample. PC games and games from other consoles of the period were excluded because fewer of them had available sales data. Duplicate cases of the same game (often the same game released on different systems) were deleted unless they had different box art, and only the version of the game with the greatest sales was included in the sample. Box art is often very similar when a game is programmed for multiple game systems, so it was important to eliminate duplicate games from the sample. The final sample of 399 games is listed in the Appendix. Sales data and publisher data were obtained from VgChartz.com. Release date, and ESRB rating and review scores were obtained from the MetaCritic.com site. Large, easily readable box art images were available on GameFaqs.com and these images provided the raw data for coding.

Measures

The primary variables used in the analyses are game sales and box art portrayals of women and men. The first analysis examines the association of mere presence of male and female characters in box art with sales and includes games with both human and non-human characters. The second analysis examines the relationship between box art portrayals and sales in only those games that include female characters in the box art.

Sales count—Sales count was the number of copies of the game (in thousands) that have been sold in the US, obtained from VgChartz.com. Sales figures in dollars were not used because games vary in price, both individually over time and in comparison with one another, so using dollar figures would have produced inflated results for some games. Sales count was calculated at the time of data collection, in late 2011. Therefore the sales variable was measured later than all other variables.

Box art—Coded categories based on content analysis of box art depictions of male and female characters on the front of the US version were used as the primary independent variables in both analyses. (Box art used in other countries sometimes varies from that used in the US and may reflect cultural differences that are beyond the scope of this study.) Content not on the front of the box was ignored, as potential buyers will usually see the front box art (because it is featured in online sales or in retail stores) but will generally see the back only if they physically pick up the game box and turn it to the reverse side. Box art

content was initially coded for six traits: no human characters present; women present; women present and centrally featured in the box art; women present and highly sexualized; men present; and men present and centrally featured in the box art (see Table 1 for an explanation of coding categories). Box art is created and rendered on the box when the game is first published. Only in very rare cases does the art change during the life of the game. Thus the publication of box art that was coded for the portrayal measures preceded the sales count figure that ultimately resulted for each game.

Presence of male and/or female characters: The first trait, no humanoid characters present, was included because some box art depicts no living characters, non-human characters whose gender may be ambiguous or human characters whose features are sufficiently obscured by clothing to prevent gender categorization. For example, *Fallout 3* is a game depicting a fully armored person whose gender cannot be determined. If the box art did feature humanoid (human or near-human) characters of discernible gender, they were coded as female or male. These codes for the presence of characters by gender were then combined in a single categorical variable used in the first regression to test H1, with the categories of no characters, male characters only, female characters only, and both male and female characters. According to H1, games portraying women exclusively would be negatively associated with sales relative to the other categories.

Centrality of characters: Both male and female characters were classified as being central or peripheral. Cases were coded as having central female characters when the box art indicated a female character to be the lead character or one of multiple major characters of equal importance through such visual indications as centering the perspective on that character, putting that character in the foreground or in front of other characters, or showing only that character. When all female characters were placed in the background and off to the side, women were classified as non-central. Male characters were similarly classified as being central or not central using the same criteria. Based on the second hypothesis, it was expected that when box art included female characters, the presence of central female characters would be negatively associated with sales. According to the third hypothesis, the presence of lead male characters would be positively related to sales in this subsample of games where box art included female characters.

Sexualization of female characters: Box art was coded as sexualized when human females were shown with disproportionately large breasts, clothes prominently showing the midriff or cleavage, clothing similar to swimwear, dress revealing any undergarments, or a suggestive pose. Female characters were classified as non-sexualized when they lacked any of these characteristics or when only head shots were provided.

Portrayal of female characters: The third analysis used a categorical variable based on the two codes for portrayal of female characters. The variable for portrayal of female characters had four categories: non-central non-sexualized (the reference category); non-central sexualized; central non-sexualized; and central sexualized. According to the fourth hypothesis, non-central, sexualized female characters would be associated positively with game sales. In contrast, central sexualized and central nonsexualized female characters would be negatively associated with game sales, based on the second hypothesis.

Coding reliability: As recommended by Rudy et al. (2011) coders included both a woman and a man. The coders were trained for about 20 minutes each in the coding method. The coding schemas were explicit and unambiguous so training was not problematic. In her recent primer of methods for executing content analysis, Neuendorf (2011) recommends a clear and comprehensive codebook for all categories and thorough training. She suggests

that the coding be clearly linked to theory and the hypotheses, which is the case here, and that validity and reliability be described (see also Krippendorff, 2004). Coding methods for the box art used here were similar to those used earlier in studies of both box art and game play, listed above. In earlier studies, coding categories that were clear and simple were found to be most reliable; for example, it was easier to reliably rate degree of nudity than to rate “attractiveness” of female characters. For this reason, the descriptors selected here to rate sexualization and centrality were concrete, clear, and coded only as binary variables. For measuring inter-coder rating reliability with ordinal measures, Neuendorf (2011) recommends several measures (e.g., Scott’s Pi and Krippendorff’s alpha) that take into account the likelihood of chance agreement; she suggests that at least 10–20% of the cases be coded by multiple coders. Scott’s Pi, with the Potter and Levine-Donnerstein (1999) correction formula for expected agreement, was used to check inter-rater agreement between coders on 149 cases (37%) for each of the six binary codes, since these measures had been used in earlier studies (e.g., Downs & Smith, 2010), thereby allowing for direct comparison. Scott’s Pi ranged from .88 to .96 for each of the six codes (Table 1), thereby meeting Neuendorf’s (2011) recommendation of a chance-corrected coefficient of at least .6.

Control variables—Several variables on sales were controlled for in the analyses; these included review score, year of game release, console maker, publisher, and ESRB rating. Each is described below, and all were obtained from MetaCritic.com.

MetaCritic’s review scores, based on a 100-point scale, are aggregate scores based on reviews from other sources (e.g., websites, magazines) if there are at least five reviews available for the game. Thus, the MetaCritic review score was a count variable with a range from 1 to 100. Review scores were viewed as a proxy for game quality; controlling for review scores allowed assessment of the relationship between box art and sales without the influence of game quality (which could only be estimated through actual game play, not by observing box art).

Year of game release was controlled because older games have the potential for greater sales since they have been on the market longer. Year of game release was coded based on the last two digits of the year (i.e., five through ten so 2005 was coded 05).

Console manufacturer—the company that manufactures the system on which the game is played—was treated as a categorical variable (used in the analyses as a set of dummy variables) that included Nintendo, Sony, and Microsoft, with Nintendo as the reference category. I also coded publisher as a categorical variable with categories for games produced by a large publisher, specifically Nintendo, Ubisoft, Activision, or EA, versus smaller publishers. These controls are included because the industry is dominated by a few larger publishers and console makers that have garnered reputations and partially separate audiences (such as people who own only one of the consoles), which may affect sales and reviews.

Finally, ESRB ratings (ratings for level of adult content such as sex, violence and drug use from the industry-associated Entertainment Software Ratings Board) were coded as a binary variable (T or M, with T as the reference category; only games aimed at teens (T) or adults (M for mature) were included in the sample). While all of the games in this sample include some amount of sexual, violent, and/or drug content due to the sample restrictions, this content is more intense in games rated M than those rated T, which may affect sales.

Results

Descriptive Statistics

Table 2 lists ranges and incidence rates for the variables used in the analyses. Most games (42%) showed male characters exclusively, with about a quarter showing male and female characters together and another quarter showing only non-human characters. Only 7% of game boxes showed female characters exclusively. This means that female characters were shown in about one third of the games. Female characters were central in 19% of all games or 55% of those games showing box art with women. In contrast, 66% of all games, or 95% of games that showed men in the box art, featured central male characters. Female characters were sexualized in 21% of games, representing 61% of the games that showed women at all. It should be remembered that this sample was purposive and included only Teen and Mature games; despite this, the incidence figures are similar to those seen in earlier studies.

The mean release date for games in the sample was 2008 ($SD = 1.7$). The mean MetaCritic review scores was 68 ($SD = 14$). Sales figures were skewed, with a mean of 368,000 copies and a standard deviation of 622,000. The 25th percentile was 70,000 copies, the median was 150,000 copies, the 75th percentile was 390,000 copies, and the 99th percentile was 3,540,000 copies. The single highest-selling game sold over five million copies. In other words, the best-selling games sold a disproportionately large number of copies.

Presence of Female Characters

The first analysis (Table 3) uses a negative binomial count regression ($N = 399$) of a categorical variable for the presence of female and male characters (presence of men only, women only, both, or neither, with men only as the reference category) on sales, holding constant review scores, year, publisher, ESRB rating, and console manufacturer, for all games in the sample; this analysis is used to test the first hypothesis. Negative binomial count regression is appropriate when the dependent variable is an overdispersed count variable (positive integer values with a large range) and variable associations may be nonlinear (Gardner, Mulvey & Shaw, 1995). This is the case here, since sales count is a count variable with a large range (from 10,000 to 5.7 million copies) and some nonlinear associations with other variables (e.g., sales increase exponentially as review scores increase beyond 80). The table presents the raw regression coefficients (b); incidence rate ratios (exponentiated coefficients, denoted e^b), which represent factor changes in sales per unit increase in the variable; standard errors and z-scores; and Chi-squared values from nonlinear Wald tests with one degree of freedom of coefficients of interest for hypothesis testing. For the incidence rate ratios, values below one are negative relationships, and values above one represent positive relationships. All results use a one-tailed significance test because hypotheses had predicted the direction of relationship.

The first hypothesis predicted that the presence of female characters alone would be negatively associated with sales; this hypothesis was supported, as seen in Table 3. Compared with cases that included only men in the box art, cases that included only female characters sold significantly worse ($\chi^2 = 10.81$, $p < .001$), decreasing sales by a factor of .44, while sales for cases that included no human characters or both men and women were not significantly different from cases with only men ($\chi^2 = .31$ and $.12$, $p = .58$ and $.73$, respectively). In addition, some control variables were significantly related to sales. Review scores and an ESRB rating of M (as opposed to T) were positively associated with sales while year of publication was negatively related to sales (more recent publication associated with lower sales). Some genres also were positively or negatively associated with sales. These results suggest that it is not the presence of women (or men) in box art *per se* that

affects sales, but the presence of female characters alone (without male characters) that reduces sales.

Centrality of Female and Male Characters

Results from the second negative binomial analysis (Table 4) indicate the associations of centrality of female characters (second hypothesis) and centrality of male characters (third hypothesis) with sales for that subsample of cases that includes women in the box art, controlling for sexualization of female characters, review scores, release year, publisher, ESRB rating, and console manufacturer ($n = 135$). Genre controls were not included because there were too few cases to provide sufficient power for this analysis. According to the second hypothesis, it was expected that the presence of central female characters would be negatively associated with sales. Results of the negative binomial regression analysis supported H2 because centrality of female characters was negatively associated with sales ($\chi^2 = 20.11, p < .001$), decreasing sales to a factor of .53 compared with games that had only non-central female characters. Findings shown in Table 4 also supported H3 because centrality of male characters was positively related to sales ($\chi^2 = 2.86, p < .05$), increasing sales by a factor of .31 relative to box art with no central male characters. Control variables that were related to sales were review score, ESRB rating and year of publication (inverse), as well as some producer dummy codes.

Centrality and Sexualization of Female Characters

The third analysis, seen in Table 5, provides a test of the fourth hypothesis, using negative binomial regression to examine the association of portrayal of female characters (with categories of non-central non-sexualized, non-central sexualized, central non-sexualized, and central sexualized) with sales of games, controlling for the centrality of male characters, the review scores, release year, publisher, ESRB rating, and console manufacturer. Again, this analysis uses only that subsample of games that includes at least one female character in the box art ($n = 135$). A categorical comparison of portrayal was used instead of a traditional moderated analysis to test for interaction between centrality and sexualization of female characters (as is predicted in Hypothesis 4) in order to avoid collinearity between the main effects and the interaction term.

Compared to cases with non-central, non-sexualized female characters, those with non-central, sexualized female characters were significantly and positively related to sales ($\chi^2 = 3.93, p < .05$), increasing sales by a factor of .52, as predicted in Hypothesis 4. Compared to cases with non-central, non-sexualized female characters, those with central sexualized or central non-sexualized female characters were significantly and negatively associated with sales ($\chi^2 = 3.03$ and 3.02 , respectively, $p < .05$ for both), both decreasing sales by a factor of about .3. Notably, there was no significant difference between the coefficients for central sexualized women and central non-sexualized women ($\chi^2 = .02, p = .89$). Some control variables also showed significant associations with sales: games rated M or with high review scores positively predicted sales; release date was negatively associated with sales. In addition, some publishers were more strongly associated with sales. In other words, as Hypothesis 4 predicted, sexualized female characters were positively associated with sales only when they were also marginal—that is, not central in the box art depiction. Female characters that assumed a central position were negatively associated with sales (as per the prediction of Hypothesis 2), regardless of whether they were sexualized.

Discussion

The research question explored in this study was whether the presence and portrayal of female characters on video game box art would be related to sales. Earlier research has

shown that female characters are shown less frequently than male characters in video games, take a lead role in games less frequently than male characters, and are often portrayed as highly sexualized, especially in best-selling games (Williams et al., 2009). Many researchers have posited that video games have a large impact on players and the larger culture, but they have not always specified *which* games (or which audience); not all games have an equally large impact, as Williams et al. (2009) pointed out. They therefore argued that it was important for future research to consider presence and portrayal of female and male characters in the video games played by the largest audience, since these are the games with the greatest potential to impact their audience. Drawing on this idea, this study examines the associations between game sales and box art depictions of the presence, centrality, and sexualization of female characters; it also investigates depictions of the presence and centrality of male characters with game sales. The goal is to determine which gendered portrayals of women and men the audience of “traditional” console games are most exposed to. Results from this study suggest that, among Teen and Mature games, sales are highest in games with box art depicting non-central, sexualized female characters. Thus, not only are female characters (particularly central or non-sexualized ones) underrepresented in game box art, they are particularly underrepresented when taking into account the number of game copies sold. In contrast, the presence of central male characters was positively associated with sales.

The other goal of this study was to try to understand (admittedly through indirect means) *why* these depictions are so prevalent. The simple answer implied by these results is that these depictions are prevalent because they tend to sell better, and marketers presumably know this fact. Specifically, sexualization of female characters is associated with higher sales *only* when no female characters are central in the box art. These findings suggest an answer as to why the most prevalent and stereotypical depictions of characters in box art improve sales. They are all signals that code a game as masculine, something that this audience expects and values in games. Hypersexualized and objectified women, aggressive men, and signs relating to violence or war are effectively symptoms of a masculine-coded space or cultural object, not just content that this audience desires for its own sake; in other words, a masculine-coded space signals potential buyers that the game will meet the cultural norms for this type of game space. In contrast, central female characters and any signs that might code the game or space as feminine contradict audience expectations and desires. The higher sales of games rated Mature lends further credence to this idea—these games received a higher ESRB rating than games rated Teen because they had more violent, sexual, and/or drug-related content, all of which are generally coded as masculine. While it is possible that potential consumers seeking masculine games note the ESRB rating in making purchasing decisions (since ESRB ratings are listed on the box front), it seems likely that potential buyers also detect cues of masculine coding in box art. Thus, it appears from these results that it is overall gender coding of games and their box art, not necessarily specific depictions of men and women in and of themselves, that affects sales through audience preferences. These associations with sales are consistent with the predicted dynamics of gender coding resulting from producer-receiver interaction; however, these data do not allow for examination of the decision-making processes for the creation of box art depictions or of player purchasing decisions, so further research is required to verify that this is the correct explanation.

That being said, new genres and niche markets are emerging, bringing with them the possibility of new genre conventions motivated in part by new audiences. “Casual” games, which often have less masculine-gendered game play and goals (such as raising crops in *Farmville* or mimicking the physical movements of real sports or fitness exercises in some Wii games), have emerged as a growing portion of the video games market. These games have gained popularity with demographic groups that have not traditionally been represented

among gamers, such as women and older people, and seem to have changed the composition of the overall games audience. The Entertainment Software Association (2011) found that the average age of gamers is 35 years of age and that adult women now represent a larger portion of the gaming audience (30%) than males under 17 (18%). As a result, these games are often gendered gender-neutral or even feminine, and accordingly often portray women differently from traditional games (Wohn, 2011). Accordingly, as Kimmel (2008) would predict, casual games are often derided by “hardcore” gamers (more traditional, primarily male gamers) as inferior or not “real” games. These developments suggest that the emergence of new genres that appeal more to women, rather than changes in the conventions of existing, masculine-coded genres, may result in more realistic and diverse portrayal of women in at least some video games in the near future. With time, such a portrayal of women may even spread to the majority of games, either if more gender-neutral “casual” games take up more of the market or if game producers innovate ways to include more realistic portrayals of women in “traditional” games without sacrificing their masculine coding in an attempt to attract a larger audience. For all of these reasons, one should not interpret the results of this study as indicating that a marginalized portrayal of women will necessarily improve game sales; furthermore, designing games to capitalize on a marginalized portrayal of women based on such a simplistic interpretation could negatively impact society because of the potential negative effects of stereotyped gender portrayals on players’ gender schemas and self-esteem.

Limitations

There are at least three limitations in this study that render the findings tentative. While box art is a widely accessible advertisement of video game content, it is far from the only form of advertisement and may produce an incorrect estimate of the incidence of female characters and highly sexualized female characters in games themselves. Thus, it is conceivable that the portrayal of women in other forms of advertisement or in game content itself may better predict game sales.

Second, the box art examined in this study was for games marketed in the US only; results may not generalize to games marketed in other countries. Often the same or similar box art is used for games sold in different geographic areas, but this is not always the case. It is quite possible that results would be similar if the study was replicated for sales in Japan, Europe or Australia, but this cannot be determined from the current study.

Finally, because the sample did not include PC games or free-to-play games, the results may not be representative of these sections of the population. Similarly, they almost certainly are not representative of casual games and games aimed at children, as the sample did not include games with ESRB ratings lower than T.

Conclusions

Findings from earlier research of gendering of video games have shown that female characters are less likely to appear as central characters and are more often portrayed as sex objects than are male characters. With one exception (Williams et al., 2009), earlier studies focused on a broad sample of video games, and even that study was unable to identify high-selling games precisely. In contrast, this study focuses on games rated Teen or Mature (games that are usually aimed at the “traditional,” young male audience of video games) and uses sales as an indication of potential influence on socialization and culture. Because players are very likely to be exposed to a select group of top-selling games, the depictions of women and men in these games may have disproportionate influence. Based on this study’s results, this influential group of games tends to include either no characters or one or more male characters in its box art, to place male characters in central positions, to include female

characters only in conjunction with male characters, and to depict female characters (when they are present) as sexualized and non-central.

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Table 1

Coding Categories for Characters in Box Art and Inter-coder Reliability

Variable	Coding Category Definition	% of Cases	Scott's Pi
No humans	Character(s) present are not obviously human	24.56%	.89
Females present	At least 1 character is human and clearly female	33.83%	.93
Females central	A female character appears alone, in the foreground, or in front of other characters, suggesting leadership	18.55%	.96
Females sexualized	A female character has disproportionately large breasts, clothes prominently showing the midriff or cleavage, clothing similar to swimwear, undergarments exposed, or suggestive pose	20.80%	.92
Males present	At least 1 character is human and clearly male	68.67%	.88
Males central	A male character is alone, in the foreground, or in front of other characters, suggesting leadership	66.17%	.88

(N = 399)

Table 2

Descriptive Statistics for Video Games in the Sample

Sample Characteristics	Range	Percentage	Count	Mean	SD
Male characters only present	0-1	41.60%	166		
Female characters only present	0-1	6.80%	27		
Both male and female characters present	0-1	27.10%	108		
No human characters present	0-1	24.56%	98		
Female characters central	0-1	18.55%	74		
Male characters central	0-1	66.17%	264		
Female characters sexualized	0-1	20.80%	83		
Non-sexualized, non-central female characters present ^a	0-1	19.26%	26		
Sexualized, non-central female characters present ^a	0-1	25.93%	35		
Non-sexualized, central female characters present ^a	0-1	19.26%	26		
Sexualized, central female characters present ^a	0-1	35.56%	48		
ESRB Rating: Teen	0-1	70.18%	280		
ESRB Rating: Mature	0-1	29.82%	119		
Genre: Action	0-1	26.57%	106		
Genre: Adventure	0-1	5.51%	22		
Genre: RPG	0-1	8.77%	35		
Genre: Shooter	0-1	22.06%	88		
Genre: Platform	0-1	.75%	3		
Genre: Sports	0-1	6.52%	26		
Genre: Racing	0-1	4.26%	17		
Genre: Fighting	0-1	7.77%	31		
Genre: Strategy	0-1	5.01%	20		
Genre: Rhythm	0-1	5.26%	21		
Genre: Life simulation	0-1	1.25%	5		
Genre: Party/collection	0-1	3.26%	13		
Genre: Combat simulation	0-1	3.01%	12		
System manufacturer: Nintendo	0-1	20.05%	80		
System manufacturer: Sony	0-1	46.87%	187		

Near

Sample Characteristics	Range	Percentage	Count	Mean	SD
System manufacturer: Microsoft	0–1	33.08%	132		
Major publisher (vs. other): EA	0–1	9.77%	39		
Major publisher (vs. other): Nintendo	0–1	1.00%	4		
Major publisher (vs. other): Ubisoft	0–1	9.27%	37		
Major publisher (vs. other): Activision	0–1	9.52%	38		
Release year coded 05 (2005) – 10 (2010)	5–10			7.9	1.6
Review score coded from 1 (poor) to 100 (good)	1–100			68.1	14.1
Sales (thousands of games sold)	10–5660			367.7	621.5

(N=399)

^aIn the subsample of games with women present.

Table 3

Negative Binomial Regression Estimates for Sales Based on Character Presence in Game Box Art, Controlling for Reviews, Year, ESRB Rating, Genre, System and Publisher

Independent and Control Variables	b	e ^b	se	z	χ^2
No humans (vs. males only)	-0.07	0.94	0.12	-0.55	0.31
Females only present (vs. males only)	-0.59	0.56***	0.18	-3.29	10.81***
Both males and females (vs. males only)	-0.04	0.96	0.12	-0.35	0.12
Review score	0.04	1.05***	0.00	15.09	
Release year	-0.09	0.92***	0.03	-3.22	
ESRB rating: Mature (vs. Teen)	0.44	1.55***	0.11	4.02	
Genre: Adventure (vs. Action)	-0.38	0.69*	0.20	-1.92	
Genre: Role Playing Game (vs. Action)	-0.38	0.68*	0.17	-2.30	
Genre: Shooter (vs. Action)	-0.12	0.89	0.13	-0.94	
Genre: Platform (vs. Action)	-0.10	0.91	0.48	-0.20	
Genre: Sports (vs. Action)	0.23	1.26	0.19	1.24	
Genre: Racing (vs. Action)	-0.29	0.75	0.23	-1.31	
Genre: Fighting (vs. Action)	-0.06	0.94	0.18	-0.34	
Genre: Strategy (vs. Action)	-0.89	0.41***	0.20	-4.39	
Genre: Rhythm (vs. Action)	0.22	1.25	0.21	1.03	
Genre: Life simulation (vs. Action)	-0.30	0.74	0.39	-0.78	
Genre: Collection (vs. Action)	-0.69	0.50**	0.25	-2.80	
Genre: Combat simulation (vs. Action)	-0.12	0.89	0.28	-0.42	
System: Sony (vs. Nintendo)	-0.12	0.89	0.12	-0.99	
System: Microsoft (vs. Nintendo)	0.04	1.04	0.13	0.28	
Publisher: EA (vs. other)	0.27	1.31*	0.15	1.87	
Publisher: Nintendo (vs. other)	1.68	5.38***	0.43	3.95	
Publisher: Ubisoft (vs. other)	0.07	1.08	0.16	0.48	
Publisher: Activision (vs. other)	0.21	1.24	0.15	1.41	
Constant	3.20	24.62***	0.31	10.28	

N=399, McFadden's pseudo $R^2 = .06$, model LR $\chi^2 = 343.65$ with $df = 24$ ($p < 0.001$), variable χ^2 tests have $df = 1$, residual $df = 375$.

Near

*
p < 0.05,
**
p < 0.01,

p < 0.001, one-tailed.

Negative Binomial Regression Estimates for Sales Based on Centrality of Male and Female Characters in Game Box Art with Female Characters Present, Controlling for Sexualization, Reviews, Year, Rating, System and Publisher

Table 4

Independent and Control Variables	b	e ^b	se	z	χ ²
Female characters central	−0.63	0.53***	0.14	−4.48	20.11***
Male characters central	0.27	1.31*	0.16	1.69	2.86*
Female characters sexualized	0.22	1.25	0.16	1.41	1.99
Review score	0.05	1.05***	0.00	11.40	
Release year	−0.16	0.85***	0.05	−3.55	
ESRB rating: Mature (vs. Teen)	0.60	1.82***	0.19	3.19	
System: Sony (vs. Nintendo)	−0.12	0.89	0.17	−0.70	
System: Microsoft (vs. Nintendo)	0.03	1.03	0.20	0.15	
Publisher: EA (vs. other)	0.13	1.14	0.27	0.48	
Publisher: Nintendo (vs. other)	1.54	4.64***	0.58	2.66	
Publisher: Ubisoft (vs. other)	0.69	2.00*	0.39	1.80	
Publisher: Activision (vs. other)	0.23	1.25	0.34	0.68	
Constant	3.12	22.601***	0.53	5.88	

n = 135, McFadden's pseudo R² = .09, model LR χ² = 163.55 with df = 12 (p < 0.001), variable χ² tests have df = 1, residual df = 123.

* p < .05,

**

p < .01,

p < .001; one-tailed.

Table 5

Negative Binomial Regression Estimates for Sales Based on Character Portrayal in Game Box Art with Female Characters Present, Controlling for Centrality of Males, Reviews, Year, ESRB Rating, System and Publisher

Independent and Control Variables	b	e ^b	se	z	χ^2
Female characters (vs. non-central, non-sexualized)					
Sexualized, non-central	0.42	1.52 *	0.21	1.98	3.93 *
Non-sexualized, central	-0.39	0.68 *	0.22	-1.74	3.02 *
Sexualized, central	-0.36	0.70 *	0.21	-1.74	3.03 *
Male characters central	0.27	1.31 *	0.16	1.66	2.76 *
Review score	0.05	1.05 ***	0.00	11.41	
Release year	-0.17	0.84 ***	0.05	-3.77	
ESRB rating: Mature (vs. Teen)	0.58	1.79 ***	0.19	3.13	
System: Sony (vs. Nintendo)	-0.09	0.91	0.17	-0.56	
System: Microsoft (vs. Nintendo)	0.03	1.03	0.20	0.16	
Publisher: EA (vs. other)	0.17	1.19	0.27	0.64	
Publisher: Nintendo (vs. other)	1.61	4.98 **	0.58	2.78	
Publisher: Ubisoft (vs. other)	0.65	1.91 *	0.38	1.69	
Publisher: Activision (vs. other)	0.19	1.21	0.34	0.56	
Constant	3.09	21.92 ***	0.52	5.91	

n = 135, McFadden's pseudo $R^2 = .09$, model LR $\chi^2 = 165.4$ with df = 13 (p < 0.001), variable χ^2 tests have df = 1, residual df = 122.

* p < .05,

** p < .01,

*** p < .001; one-tailed.

Appendix

List of Games and Systems

Game	System
.hack//G.U. Vol.2//Reminisce	PS2
007: Quantum of Solace	X360
50 Cent: Bulletproof	PS2
AC/DC LIVE: Rock Band Track Pack	Wii
Ace Combat 6: Fires of Liberation	X360
Ace Combat: Joint Assault	PSP
Air Conflicts: Aces of World War II	PSP
Alex Rider: Stormbreaker	DS
Alien Syndrome	PSP
Aliens vs Predator	PS3
Alone in the Dark	X360
Ar tonelico 2: Melody of Metafalica	PS2
Armored Core 4	X360
Armored Core: Formula Front Extreme Battle	PSP
Art of Fighting Anthology	PS2
Assassin's Creed	X360
Assassin's Creed II	PS3
Assassin's Creed: Altair's Chronicles	DS
Assassin's Creed: Brotherhood	X360
BUZZ! Quiz World	PS3
Baroque	PS2
Battalion Wars 2	Wii
Battle of the Bands	Wii
Battlefield: Bad Company	X360
Bayonetta	X360
Beowulf: The Game	X360
BioShock 2	PS3
Bionic Commando	PS3
Bionicle Heroes	DS
Black	PS2
Blacksite: Area 51	X360
Bladestorm: The Hundred Years' War	PS3
BlazBlue: Calamity Trigger	PS3
BlazBlue: Continuum Shift	X360
Blazing Angels 2: Secret Missions of WWII	PS3
Blazing Angels: Squadrons of WWII	Wii
Bleach: The 3rd Phantom	DS
Bleach: The Blade of Fate	DS
Blitz: The League	XB

Game	System
Blitz: The League II	X360
Blood Drive	PS3
Broken Sword: Shadow of the Templars - The Director's Cut	Wii
Brooktown High: Senior Year	PSP
Brothers In Arms: D-Day	PSP
Brothers In Arms: Hell's Highway	X360
Brothers In Arms: Road to Hill 30	XB
Brothers in Arms: Double Time	Wii
Brutal Legend	PS3
Bullet Witch	X360
Bully	PS2
Bully: Scholarship Edition	X360
C.O.P.: The Recruit	DS
CSI: Fatal Conspiracy	PS3
CSI: Hard Evidence	Wii
Cabela's Big Game Hunter (2008)	PS2
Cabela's North American Adventures	X360
Cabela's Outdoor Adventures (2009)	PS3
Call of Duty: Black Ops	Wii
Call of Duty: Modern Warfare: Mobilized	DS
Calling	Wii
Castlevania: Lords of Shadow	PS3
Champions: Return to Arms	PS2
Chromehounds	X360
Class of Heroes	PSP
Clive Barker's Jericho	X360
Command & Conquer 3: Tiberium Wars	X360
Command & Conquer: Red Alert 3 Ultimate Edition	PS3
Conan	PS3
Conflict: Denied Ops	PS3
Contra 4	DS
Crimson Gem Saga	PSP
Cross Edge	PS3
DJ Hero 2	Wii
Dark Messiah of Might and Magic Elements	X360
Dark Sector	PS3
Darksiders	X360
Darkstalkers Chronicle: The Chaos Tower	PSP
Data East Arcade Classics	Wii
Dead Space Extraction	Wii
Dead or Alive 4	X360
Dead to Rights: Reckoning	PSP

Game	System
Deadliest Catch: Alaskan Storm	X360
DeathSmiles	X360
Deer Drive	Wii
Def Jam Fight For NY: The Takeover	PSP
Def Jam Icon	PS3
Dementium II	DS
Destroy All Humans!	XB
Destroy All Humans! 2	PS2
Destroy All Humans! Path of the Furon	X360
Devil May Cry 4	X360
DiRT 2	X360
Don King Presents: Prizefighter	X360
Dragon Age: Origins	PS3
Dragon Ball Z: Budokai Tenkaichi	PS2
Dragon Ball Z: Budokai Tenkaichi 2	PS2
Dragon Ball Z: Shin Budokai	PSP
Dragon Ball: Raging Blast	X360
Dragon's Lair Trilogy	Wii
Dragoneer's Aria	PSP
Dungeon Maker: Hunting Ground	PSP
Dynasty Warriors	PSP
Dynasty Warriors Gundam	X360
Dynasty Warriors: Gundam 2	PS3
Dynasty Warriors: Strikeforce	X360
EA Sports MMA	X360
Earth Defense Force 2017	X360
Emergency Mayhem	Wii
Enemy Territory: Quake Wars	X360
Enslaved: Odyssey to the West	X360
Eragon	DS
Every Extend Extra	PSP
Fallout 3	PS3
Fallout: New Vegas	X360
Fantastic 4	PS2
Fantastic Four: Rise of the Silver Surfer	X360
Far Cry 2	X360
Fatal Fury: Battle Archives Volume 2	PS2
Fight Night Round 3	X360
Fist of the North Star: Ken's Rage	PS3
FlatOut: Head On	PSP
FlatOut: Ultimate Carnage	X360
Flower, Sun, and Rain	DS

Game	System
Fragile Dreams: Farewell Ruins of the Moon	Wii
From Russia with Love	PS2
Front Mission Evolved	PS3
Frontlines: Fuel of War	X360
Full Auto 2: Battlelines	PS3
G.I. Joe: The Rise of Cobra	Wii
Ghost in the Shell: Stand Alone Complex	PSP
Gladiator Begins	PSP
God of War	PS2
GoldenEye: Rogue Agent	DS
Grand Theft Auto IV	PS3
Grand Theft Auto: Liberty City Stories	PS2
Green Day: Rock Band	PS3
Guilty Gear Dust Strikers	DS
Guilty Gear XX Accent Core	Wii
Guilty Gear XX Accent Core Plus	PSP
Guitar Hero 5	PS2
Guitar Hero II	PS2
Guitar Hero III: Legends of Rock	X360
Guitar Hero: Aerosmith	PS2
Guitar Hero: Metallica	Wii
Guitar Hero: Smash Hits	PS2
Guitar Hero: Warriors of Rock	X360
Guitar Hero: World Tour	Wii
Gun Showdown	PSP
Halo: Reach	X360
Harry Potter and the Deathly Hallows - Part 1	Wii
Harvey Birdman: Attorney at Law	PSP
Heatseeker	Wii
Heavy Rain	PS3
Hellboy: The Science of Evil	PS3
Heroes Over Europe	PS3
Hexyz Force	PSP
IL-2 Sturmovik: Birds of Prey	X360
Indiana Jones and the Staff of Kings	PS2
Iron Man	PS3
Jackass the Game	PS2
Jagged Alliance	DS
Jake Hunter Detective Story: Memories of the Past	DS
James Cameron's Avatar: The Game	X360
James Patterson Women's Murder Club: Games of Passion	DS
Jaws Unleashed	PS2

Game	System
Jeanne d'Arc	PSP
Juiced 2: Hot Import Nights	PS2
Juiced: Eliminator	PSP
Jurassic: The Hunted	Wii
Just Cause 2	X360
Kameo: Elements of Power	X360
Kane & Lynch 2: Dog Days	X360
Kane & Lynch: Dead Men	PS3
Kengo: Legend of The 9	X360
Knights in the Nightmare	DS
Left 4 Dead	X360
Left 4 Dead 2	X360
Legend of the Dragon	PSP
Legendary	X360
Legends of WrestleMania	PS3
Leisure Suit Larry: Box Office Bust	PS3
Link's Crossbow Training	Wii
Lips	X360
Lips: Number One Hits	X360
Lips: Party Classics	X360
Little Red Riding Hood's Zombie BBQ	DS
Lost Planet 2	X360
Luminous Arc	DS
METRO 2033	X360
Manhunt 2	Wii
Marvel Nemesis: Rise of the Imperfects	PSP
Marvel Trading Card Game	DS
Marvel: Ultimate Alliance	PS3
Marvel: Ultimate Alliance 2	X360
Mass Effect 2	X360
Medal of Honor	PS3
Medal of Honor Heroes	PSP
Medal of Honor: Airborne	PS3
Medal of Honor: European Assault	XB
Medal of Honor: Vanguard	Wii
Mercenaries 2: World in Flames	X360
Mercenaries: Playground of Destruction	XB
Metal Slug 7	DS
Metal Slug XX	PSP
Metroid Prime 3: Corruption	Wii
Miami Nights: Singles in the City	DS
Miami Vice: The Game	PSP

Game	System
Midnight Club: LA Remix	PSP
Midnight Club: Los Angeles	PS3
Midway Arcade Treasures: Extended Play	PSP
Mimana Iyar Chronicle	PSP
Mobile Suit Gundam: Crossfire	PS3
Monster Hunter Freedom	PSP
Mortal Kombat vs DC Universe	PS3
Mortal Kombat: Unchained	PSP
N3 II: Ninety-Nine Nights	X360
Naruto Shippuden: Legends: Akatsuki Rising	PSP
Naruto Shippuden: Ultimate Ninja Storm 2	X360
Naruto: Clash of Ninja	GC
Naruto: Clash of Ninja Revolution 2	Wii
Naughty Bear	PS3
Naval Assault: The Killing Tide	X360
Need for Speed: Most Wanted	XB
Ninja Gaiden II	X360
Ninja Gaiden: Dragon Sword	DS
No More Heroes 2: Desperate Struggle	Wii
Obscure: The Aftermath	PSP
Overlord	X360
Overlord II	PS3
Overlord: Dark Legend	Wii
Overlord: Raising Hell	PS3
Payout Poker & Casino	PSP
Peter Jackson's King Kong: The Official Game of the Movie	XB
Phantasy Star Portable	PSP
Phoenix Wright: Ace Attorney	DS
Phoenix Wright: Ace Attorney - Trials and Tribulations	DS
Pimp My Ride	Wii
Pocket Pool	PSP
Power Stone Collection	PSP
Prince of Persia: Rival Swords	PSP
Prince of Persia: The Forgotten Sands	X360
Prince of Persia: The Two Thrones	PS2
Prison Break: The Conspiracy	X360
Pursuit Force: Extreme Justice	PSP
Quake 4	X360
R.U.S.E.	PS3
Race Driver 2006	PSP
Radiata Stories	PS2
Raven Squad: Operation Hidden Dagger	X360

Game	System
Red Dead Redemption	X360
Red Faction: Guerrilla	X360
Remington Great American Bird Hunt	Wii
Resident Evil 5	PS3
Resistance: Fall of Man	PS3
Rise of the Argonauts	PS3
Robocalypse	DS
Rock Band	X360
Rock Band 3	X360
Rock Band Track Pack: Classic Rock	X360
Rock of the Dead	X360
Rogue Trooper: Quartz Zone Massacre	Wii
SNK Arcade Classics Vol. 1	PSP
SOCOM 3: U.S. Navy SEALs	PS2
SOCOM: U.S. Navy SEALs Confrontation	PS3
SOCOM: U.S. Navy SEALs Fireteam Bravo	PSP
SOCOM: U.S. Navy SEALs Fireteam Bravo 3	PSP
SWAT: Target Liberty	PSP
Sacred 2: Fallen Angel	X360
Saints Row 2	PS3
Samurai Warriors 2	X360
Samurai Warriors 2: Empires	X360
Samurai Warriors 2: Xtreme Legends	PS2
Samurai Warriors: State of War	PSP
Saw II: Flesh & Blood	PS3
Scarface: The World is Yours	XB
Scene It? Bright Lights! Big Screen!	X360
Secret Files: Tunguska	Wii
Section 8	X360
Sega Genesis Collection	PSP
Sengoku Basara: Samurai Heroes	PS3
Shadow of Destiny	PSP
Shaun White Skateboarding	X360
Shin Megami Tensei: Devil Summoner 2, Raidou Kuzunoha vs. King Abaddon	PS2
Shin Megami Tensei: Devil Survivor	DS
Shin Megami Tensei: Persona 3 Portable	PSP
Silent Hill: Homecoming	X360
Silent Hill: Shattered Memories	Wii
SingStar '80s	PS2
SingStar Dance	PS3
SingStar Legends	PS2

Game	System
Singularity	X360
Skate 2	X360
Skate 3	X360
Soul Nomad & the World Eaters	PS2
SoulCalibur IV	PS3
Spectral Force 3	X360
Spectral Force Genesis	DS
Spider-Man 3	PS3
Spider-Man: Shattered Dimensions	PS3
Spider-Man: Web of Shadows	X360
Splatterhouse	X360
Stacked with Daniel Negreanu	PSP
Star Ocean: The Last Hope International	PS3
Star Wars Battlefront II	XB
Star Wars The Clone Wars: Lightsaber Duels	Wii
Star Wars The Clone Wars: Republic Heroes	Wii
Star Wars: The Force Unleashed	X360
Star Wars: The Force Unleashed II	PS3
Stormrise	X360
Street Fighter IV	X360
Stuntman: Ignition	PS2
Super Smash Bros. Brawl	Wii
Superman Returns	X360
Syphon Filter: Dark Mirror	PS2
TNA iMPACT!	X360
Tales of Symphonia: Dawn of the New World	Wii
Tatsunoko vs. Capcom: Ultimate All-Stars	Wii
Tekken 5	PS2
Tekken 6	X360
Terminator Salvation	X360
The Chronicles of Narnia: Prince Caspian	PS2
The Chronicles of Narnia: The Lion, The Witch and The Wardrobe	PS2
The Chronicles of Riddick: Assault on Dark Athena	X360
The Club	PS3
The Conduit	Wii
The Darkness	PS3
The Elder Scrolls IV: Oblivion	X360
The Eye of Judgment	PS3
The Fast and the Furious	PSP
The Godfather (US & Others sales)	X360
The Godfather II	X360

Game	System
The Godfather: Dons Edition	PS3
The History Channel: Battle for the Pacific	PS3
The House of the Dead 2 & 3 Return	Wii
The Hustle: Detroit Streets	PSP
The King of Fighters Collection: The Orochi Saga	PS2
The Lord of the Rings: Conquest	PS3
The Mummy: Tomb of the Dragon Emperor	DS
The Orange Box	X360
The Outfit	X360
The Saboteur	X360
The Shoot	PS3
The Simpsons Game	X360
The Sims 2	PSP
The Sims 3	PS3
The Sims 3: Pets	PS3
Theresia...	DS
Time Crisis: Razing Storm	PS3
Time Hollow	DS
Tokyo Beat Down	DS
Tom Clancy's EndWar	PS3
Tom Clancy's Ghost Recon Advanced Warfighter	XB
Tom Clancy's Ghost Recon Advanced Warfighter 2	X360
Tom Clancy's Ghost Recon: Predator	PSP
Tom Clancy's Rainbow Six: Vegas	X360
Tom Clancy's Rainbow Six: Vegas 2	PS3
Tom Clancy's Splinter Cell: Chaos Theory	DS
Tom Clancy's Splinter Cell: Double Agent	X360
Tom Clancy's Splinter Cell: Essentials	PSP
Tomb Raider: Anniversary	Wii
Tomb Raider: Legend	PSP
Tomb Raider: Underworld	PS3
Tony Hawk's Project 8	PS2
Tony Hawk's Proving Ground	X360
Tony Hawk's Underground 2 Remix	PSP
Transformers: Cybertron Adventures	Wii
Transformers: Revenge of the Fallen	X360
Trinity Universe	PS3
True Crime: New York City	PS2
Truth or Lies	X360
Turok	X360
UFC 2009 Undisputed	X360
Ultimate Duck Hunting: Hunting & Retrieving Ducks	Wii

Game	System
Undead Knights	PSP
Unreal Tournament III	PS3
Untold Legends: Dark Kingdom	PS3
Vanquish	PS3
Velvet Assassin	X360
Viewtiful Joe: Double Trouble!	DS
Vin Diesel: Wheelman	X360
Virtua Fighter 5 Online	X360
WWE SmackDown vs Raw 2008	X360
WWE SmackDown vs. RAW 2007	PSP
WWE SmackDown vs. Raw 2009	PS2
WWE SmackDown vs. Raw 2010	X360
Wanted: Weapons of Fate	PS3
Warhammer 40,000: Squad Command	PSP
Warhammer: Battle For Atluma	PSP
Warriors Orochi	PSP
Warriors of the Lost Empire	PSP
Way of the Samurai 3	PS3
Wet	X360
Wolfenstein	X360
World Series of Poker: Tournament of Champions 2007 Edition	X360
X-Men Legends II: Rise of Apocalypse	PS2
X-Men: The Official Game	X360
Yakuza 2	PS2
Zoids Assault	X360
inFAMOUS	PS3