

# Market Transformation in Transformative Works: The Effects of Introducing Incentives in Markets for Fanfiction

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## Abstract

This research examines how mainstream recognition of a form of transformative work known as fanfiction affected incentives for author creativity. Using the recent and overwhelming popularity of *50 Shades of Grey*, a work of fanfiction, as a natural experiment, this study studied changes over time in reader responses to works of fanfiction on the popular website *Fanfiction.net*. Results suggest that preferences have shifted away from what might be considered more “original” work and closer to the source material, likely due to a new, more mainstream audience.

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## I. Introduction

What do the authors of *50 Shades of Grey* and *Wuthering Heights* have in common? Despite differences in century, audience, and genre, both were avid writers of fanfiction (The British Library, 2011), a literary subset of transformative works that borrows characters or settings openly from other works. While many prominent authors wrote fanfiction, fanfiction has been largely considered as no more than a subculture on the Internet. Authors of fanfiction had no expectations of mainstream publishing success or even ownership over their pieces of writing (Tushnet, 2007); authors wrote primarily for themselves or for other fans of the original work.

Fanfiction has long been recognized for its significant cultural implications. Scholars have celebrated it for its importance to the queer community (Falzone, 2005), predicted its importance for youth literacy and creativity (Black, 2005), and struggled with its ramifications on traditional copyright laws (Tushnet, 2007). Yet little economic research has been focused on literary publishing markets, let alone fanfiction. Scholars have puzzled over the continued production of fanfiction without traditional incentives, but have come up with few explanations (Kosnik, 2009).

More recently, however, the market for fanfiction has seen changes in both its demand and supply. The introduction of significant and new incentives means that fanfiction authors have new considerations for what they produce. The publishing industry has begun to take notice of fanfiction authors. Fanfiction authors have received 7-figure book and movie deals and gained widespread celebrity (Media Bistro, 2012). Most notably, the best-selling *50 Shades of Grey* originated as a popular piece of *Twilight* fanfiction. Parodied on *Saturday Night Live* and gaining a movie deal interesting the likes of Mila Kunis and Emma Watson (Huffington Post, 2013), *50 Shades of Grey* has spawned fanfiction of its own and expanded fanfiction

authors' expectations. Authors can now conceivably attain monetary compensation and wider audiences.

There remain, however, significant impediments to fame and fortune. First, publishing deals remain rare. While there are hundreds of thousands of fanfiction authors (Fanfiction.net), publishing deals with major publishing companies remain in the double digits (Good Reads). Second, publishing companies have to consider the legal ramifications of publishing works that originated from others. While some critics have argued that all works are in some way unoriginal (Lethem, 2007), the blatant borrowing of much fanfiction blurs the lines between homage and theft. Making these works profitable involves a long process of major editing. The world of *Harry Potter*, for instance, is so highly recognizable that publishing companies would risk significant legal repercussions should they publish most pieces of *Harry Potter* fanfiction. With *50 Shades of Grey*, however, this task was made exponentially easier by the fanfiction's setting in an alternate universe (AU; or a setting in which the world characters interact in is significantly different from that of the source material) to *Twilight* and its significant thematic (genre) departure. From a publishing perspective, copyright concerns have changed the value of certain works of fanfiction.

For most authors, publishing deals are a lofty goal and the primary measurable reward for writing fanfiction appears to be positive reviews from readers. Fanfiction's shift towards the mainstream means that fanfiction is reaching wider audiences with different expectations. With articles in news outlets from *The Huffington Post* (Weiss, 2013) to *The Wall Street Journal* (Alter, 2012), fanfiction is no longer simply on the fringes of society and academia. With the awareness of *50 Shades of Grey*'s success, these new audiences may not see fanfiction simply as supplements to the original piece, but as works of their own. They may be more

willing to accept new characters or situations in transformative works and move the field of fanfiction towards greater creativity.

The introduction of publishing incentives and mainstream success to the market of fanfiction has unquestionably changed perceptions both in and outside of the market. What remains to be seen, however, is exactly how authors and readers of fanfiction have responded. What specific aspects of fanfiction have become more popular and more highly incentivized? Fanfiction authors might be rewarded for imitating elements from *50 Shades of Grey* or audiences might react more positively to author reduction of copyright-specific impediments to publishing. Audiences might even go so far as to seek more original material, rather than simply acquiescing to it. The former mimicry of *50 Shades of Grey* hypothesis would suggest a decrease in creativity, while the latter hypothesis implies the expansion of imagination. Attempts to move away from copyrighted original material might be seen in changes to the universe (the “AU” setting), the introduction of original protagonists (or “OC”s), or a change in the marketed audience (targeting, for example, adults instead of teens). This movement away or towards copyrighted material is significant as copyright has been suggested both to decrease (Lessig, 2004) and increase (Boldrin & Levine, 2009) incentives for originality.

This paper compares data before and after the peak of *50 Shades of Grey*'s popularity on July 2012 (Google Trends). It examines trends in the data to see whether fanfiction written and completed in the six months after *50 Shades of Grey* achieved mainstream success differs significantly in content from fanfiction written and completed in a six-month time period before. Specifically, copyright-sensitive variables and ratings similarities to *50 Shades of Grey* are analyzed. Secondly, this paper analyzes whether content-closeness to *50 Shades of Grey* or the original source material is considered positively or negatively by readers, and whether this has

changed after the mainstream success of *50 Shades of Grey*. Finally, this paper looks at how the introduction of incentives in the market of *Twilight* fanfiction affected other large markets with smaller success stories (namely *Harry Potter*) and whether similar results are found across markets.

We hypothesize that following the publication of *50 Shades of Grey*, audiences will be more receptive to viewing fanfiction as original, rather than derivative, pieces of work, and will respond more positively to Original Characters, Alternate Universes, characters further from the original main characters, and genres further from the original genres. Additionally, we hypothesize that audiences will prefer more mature ratings, due to the adult nature of *50 Shades of Grey*. We hypothesize a positive relationship between positivity and number of words that does not differ significantly between time periods.

### I.I. Data

Data were collected from the largest fanfiction hosting website, Fanfiction.net in the categories of *Twilight* and *Harry Potter*. Data were current as of February 7, 2013. Data were only collected on stories written in English, as non-English stories may be assumed to have a different audience and authorship. Stories with fewer than 25 reviews were also excluded to ensure that data on reviews could be collected and were not subject to one person's opinion on a piece. All stories were completed within a 200-day period so that comparable analysis could be run before and after the introduction of *50 Shades of Grey* to the market. Data begun fewer than 200 days before the peak of *50 Shades of Grey*'s popularity were discarded. About 40% of the pieces of *Twilight* fanfiction took more than 200 days to complete; the analysis may not apply to pieces that take longer to complete but, until more time has passed, it is impossible to include these pieces in any comparison. Information on ratings (a system for providing information about the appropriateness of the content of the

piece for different age groups, similar to film ratings), genre, primary characters (the protagonists of the piece of fanfiction, not the original work), and completion status were self-reported to the website by each piece's author, while number of chapters, word length, number of reviews, publish and update information were collected by the website. A data scraper was used to analyze summaries and determine the presence of Original Characters and Alternate Universes for fandoms (when this information was not already available on fanfiction.net). Data on quality were calculated using the sentiment analysis program, Linguistic Inquiry and Word Count (LIWC) (Pennebaker, Booth, & Francis, 2007). LIWC ran each review to determine the positivity and negativity of each review. Presence of positive words increased the score of positivity for a review, while negative words decreased the score for negativity for a review; sentence structure was also accounted for in score determination (so that ambiguous words, such as "cry" in "so good it made me want to cry" would be read positively rather than negatively). The negativity of a review was subtracted from the positivity of a review. All reviews for a piece were then averaged for a Positivity score.

## II. Methods

Basic summary statistics were run to determine whether there were significant changes in characters, genre, rating, or length before and after *50 Shades of Grey*'s success. Additionally, basic summary statistics were run to compare LIWC scores before and after the publishing of *50 Shades of Grey* to ensure that fanfiction written after *50 Shades of Grey* did not defer significantly in positivity. See complete summary statistics for *Twilight* and *Harry Potter* in Table 1 and Table 2.

Regressions were run to determine whether audience positivity was related to changes in similarity or characters, genre, rating, and length to *50 Shades of Grey* and original source material in the two time periods (before and after the publishing of

*50 Shades of Grey*). For equations involving *50 Shades of Grey*, all variables were binary variables except for *Length*.

Positivity dependent on closeness to *50 Shades of Grey* before and after publishing:

$$Positivity_t = \beta_0 + \beta_{1t} Length + \beta_{2t} Character + \beta_{3t} Genre +$$

$$\beta_{4t} Rating + \beta_{5t} OC + \beta_{6t} AU$$

$$Positivity_{t+1} = \beta_0 + \beta_{1t+1} Length + \beta_{2t+1} Character + \beta_{3t+1} Genre +$$

$$\beta_{4t+1} Rating + \beta_{5t+1} OC + \beta_{6t+1} AU$$

- *Positivity*, an average score of LIWC positivity minus LIWC negativity of all reviews for one piece of fanfiction.
- *Length*, the number of thousands of words in all chapters of a piece of fanfiction.
- *Character(Twilight)* = 2 if neither the primary character nor the secondary character of a piece of fanfiction was a main character in *Twilight* (Bella Swan, Edward Cullen, or Jacob Black); 1 if either the primary or secondary character was a main character in *Twilight*; 0 if both the primary and secondary characters were main characters in *Twilight*.
- *Character1(HP)* = 0 if the primary character of the piece of fanfiction was a main character in *Harry Potter* (Harry Potter, Hermione Granger, or Ron Weasley); 1 if the primary character of the piece was not a main character in *Harry Potter* but was mentioned more than 25 times throughout the 7 books (Draco Malfoy, Albus Dumbledore, Sirius Black, etc.); 2 if the primary character of the piece was mentioned fewer than 25 times through the 7 books (Blaise Zabini, Amycus Carrow, Madame Pince, etc.); 3 if the primary character of the piece was an Original Character.

- $Character2(HP) = 0$  if the secondary character of the piece was a main character in *Harry Potter*; 1 if the secondary character of the piece was not a main character in *Harry Potter* but was mentioned more than 25 times throughout the 7 books; 2 if the secondary character of the piece was mentioned fewer than 25 times through the 7 books; 3 if the secondary character of the piece was an Original Character.
- $Character(HP) = Character1 + Character2$ , a combined measure of closeness of the piece's characters' closeness to the source material.
- $OC = 1$  if an original character is mentioned in the story synopsis (0 otherwise). This variable was not included for analysis of *Harry Potter* fanfiction, as fanfiction.net allows this variable to be included in the *Character* variable.
- $Genre = 0$  if neither the primary genre nor the secondary genre in the piece of fanfiction was a genre used in the source material (Romance, Drama, or Supernatural for *Twilight*; Adventure, Drama, or Fantasy for *Harry Potter*); 1 if either the primary or secondary genre was a genre used in the source material; 2 if both the primary and secondary genre was a genre used in the source material; 3 if both the primary and secondary genres were main genres in the source material.
- $AU = 1$  if an alternate universe setting was mentioned in the story synopsis (0 otherwise).
- $Rating = 0$  if the content of the piece of fanfiction is suitable for most ages; 1 if some content may not be suitable for young children; 2 if content is not suitable for children; 3 if content is suitable for mature teens and older.

### III. Results

Means of review positivity were calculated for *Twilight* fanfiction written before and after July 1, 2012. Fanfiction written before July 1, 2012 was slightly more positively received ( $M = 7.56$ ,  $SD = 3.10$ ) than fanfiction written after July 1,

2012 ( $M = 7.45$ ,  $SD = 3.18$ ); this difference in positivity was not statistically significant. Pieces written after the peak popularity of *50 Shades of Grey* were more likely to have a genre or setting close to the source material, not be set in an alternate universe, be longer, and take more time to complete. There was no significant difference in rating or presence of original characters (see Table 1).

For the *Harry Potter* market, fanfiction completed before July 1, 2012 was more positively received ( $M = 8.29$ ,  $SD = 3.48$ ) than fanfiction written after July 1, 2012 ( $M = 7.22$ ,  $SD = 2.96$ ). Pieces written after the peak popularity of *50 Shades of Grey* were more likely to have a genre closer to the source material, be rated for more mature audiences, be longer, and take more time to complete. There was no significant difference in characters used, presence of an alternate universe, nor number of reviews (see Table 2).

It is also worth noting that the average number of pieces produced per day and the average number of reviews increased following the popularity of *50 Shades of Grey* for both *Harry Potter* and *Twilight*. This suggests that *50 Shades of Gray* has attracted more authors and readers to fanfiction.

Research hypotheses were tested by running the two previously outlined regression equations.  $R^2$  values ranged from .10 to .13, with 10% (before the success of *50 Shades of Grey*) and 13% (after the success of *50 Shades of Grey*) of the variance in the data for *Twilight* and 11% (in both time periods) of the variance in the data for *Harry Potter* explained by our variables; this is unsurprising, as our regression equation included no measure for actual quality of the piece, which should be a primary driving factor of positivity of reviews.

Both before and after the success of *50 Shades of Grey*, readers of *Twilight* fanfiction appeared to have no preference for an AU setting ( $p = 0.58$  before;  $p = 0.284$  after). Length also held a consistent and slight negative penalty to positivity of

reviews. Contrary to the hypothesis, while there was no found relationship between positivity and presence of an OC before the success of *50 Shades of Grey*, readers perceived the presence of an OC more negatively after,  $F(6,1212) = 30.61$ ,  $MSe = 2.49$ ,  $p = .09$ . Also contrary to the hypothesis, readers increased their preferences for main characters from the source material ( $p = .02$  before;  $p = .02$  after). Following the popularity of *50 Shades of Grey*, rating preferences for more universally suitable material dematerialized ( $p < .001$  before;  $p = .40$  after). Controlling for number of reviews for each piece and amount of time taken for completion had no significant effects on any results. See full regression results in Table 3.

In the *Harry Potter* fanfiction market, readers lost a preference for less mature stories and fewer alternate universes following the success of *50 Shades of Grey*. They also had less negative views of stories that included genres closer to the source material. Controlling for number of reviews for each piece and amount of time taken for completion had no significant effects on any results. See full regression results in Table 3.

There were some concerns of endogeneity with the variable *Length*; writers who receive more positive reviews might be more likely to write more. The coefficient on *Length* was negative, however, suggesting this was not the case. An inter-item correlation was run to ensure that *Length* was not biasing the other variables. No items had more than a 0.16 Pearson's  $r$  correlation coefficient with any of the other variables, suggesting negligible relationships between the variables. See full table of correlation coefficients for both *Twilight* and *Harry Potter* in Table 4 and Table 5.

#### IV. Discussion

Overall, responses to fanfiction from within the community remain largely positive, with few reviews garnering negative positivity scores. Fanfiction is easily

searched for and there is a strong ability to select pieces that match one's preferences thanks to improved search engines. This indicates that people searching for fanfiction are, and always have, found what they were looking for.

There are a number of significant trends, however, that imply that *who* is looking may be changing. Most notably, character inclusion in *Twilight* fanfiction has begun to matter more since the success of *50 Shades of Grey*. Sentiment towards Original Characters or even any character who is not a main character is increasingly negative. This finding was contrary to the original hypothesis, but is not wholly inexplicable. The new demand for fanfiction may be more mainstream since the popularity of *50 Shades of Grey*. A significant increase in the average number of reviews for each piece suggests there may indeed be an expanding demand for fanfiction. The new audience for fanfiction may seek less niche types of fanfiction and may find similarities to the original story more comfortable. These preferences hint at a broadening of the market that may actually hinder fanfiction's production of more "upstream" or "original" material.

The lack of significant results for setting variables such as genre and AU presence also speak to people's preferences. Where the action takes place seems to be less important than who is involved. This focus on people and interaction rather than place or time period speaks to fanfiction's importance for its representation of communities and individuals; for example, some queer and feminist communities celebrate fanfiction for its ability to create queer characters or combat a lack of strong female characters, not for its ability to generate stories in new time periods or countries (Falzone, 2005).

Results for *Harry Potter* fanfiction are consistent with the findings in *Twilight* fanfiction for rating preferences. This decline in positivity of reviews for more recent *Harry Potter* fanfiction may reflect a lack of more "mainstream" fanfiction for a new

mainstream audience; *Harry Potter* is an older set of works compared to *Twilight*, and the ratio of new *Harry Potter* to *Twilight* fanfiction stories written is declining (see Tables 1 and 2). Additionally, lack of preference for AU settings following *50 Shades of Grey*'s success could be seen in both fanfiction markets. The effects of length were unchanged in both markets. The one variable that significantly differed in reviews between *Harry Potter* fanfiction and *Twilight* fanfiction was genre; this may have less to do with a difference in market preferences and be more related to the importance of the romance genre (which was considered a main genre in *Twilight*, but not in *Harry Potter*) in all fanfiction. While both markets reflected different preferences prior to *50 Shades of Grey*, the similarity in results afterwards suggests that *50 Shades of Grey* may have had a homogenizing effect on readers of fanfiction. *50 Shades of Grey*'s popularity may have introduced fanfiction to such a wide population that the new readers are not specific to one set of works.

There are a number of additional considerations to this analysis. Mature ratings were previously considered less preferable but appear to have less of a significant effect on people's perceptions of a piece; however, analysis of ratings may not entirely describe people's preferences because of the upward limit on ratings. Fanfiction rated higher than M (such as fanfiction rated MA) are not allowed on the site and all offending pieces of fanfiction have been removed; therefore, this analysis does not capture those who are seeking the particularly adult fanfiction that *50 Shades of Grey* may have inspired.

This analysis might also benefit from more precise measurements. The data scraper noted the presence of all OC and AUs that were in the synopsis but there may have been pieces where an OC or AU was present but not mentioned in the synopsis. The LIWC, too, is a perpetual work in progress whose measurements are being constantly refined.

As noted in the results, the  $R^2$  values were relatively low, likely due to the unobserved effects of quality. Future research should attempt to control for quality, perhaps through the use of a reading level index. There may be issues of endogeneity in which certain authors may supply both a certain quality of fiction as well as a certain type of fiction.

Fanfiction remains a largely unexplored market. Fanfiction's unique features and transformative nature challenges our understanding of its contributions to creativity and intellectual property. The results of this research suggest that *50 Shades of Grey* has inspired an influx into the market and has shifted preferences within the field. The full effect of the introduction of *50 Shades of Grey*, however, may remain to be seen. It has only been seven months since the peak of *50 Shades of Grey*'s popularity, and there may be additional long-term effects that have yet to occur.

## References

- Alter, A. (2012). "The weird world of fan fiction." *The Wall Street Journal*. June 14.
- Black, R. (2005). Access and affiliation: The literacy and composition practices of English-language learners in an online fanfiction community, *Journal of Adolescent & Adult Literacy*, 49, 118-128.
- Boldrin, M., & D. Levine. (2009). Does intellectual monopoly help innovation?, *Review of Law & Economics*, 5, 991-1024.
- Falzone, P.J. (2005). The final frontier is queer: Aberrancy, archetype and audience generated folklore in K/S slashfiction, *Western Folklore*, 64, 243-261.
- Fanfiction.net. <http://fanfiction.net>. Web. Accessed 7 February 2013.
- "Fifty Shades of Grey began as Twilight fan fiction," [http://www.mediabistro.com/galleycat/e-l-james-book-began-as-twilight-fan-fiction\\_b48286](http://www.mediabistro.com/galleycat/e-l-james-book-began-as-twilight-fan-fiction_b48286). Media Bistro, Web. 12 March, 2012.
- Google Trends. <http://google.com/trends>. Web. Accessed 7 February 2013.
- Kosnik, A. (2009). Should fanfiction be free? *Cinema Journal*, 48, 118-124.
- Lessig, L. (2004). *Free Culture*, Penguin Books.
- Lethem, J. (2007). The ecstasy of influence: A plagiarism, *Harper's Magazine*, 7 February.
- "Mila Kunis on '50 Shades of Grey': Actress Won't Say If She's Into the Role," [http://www.huffingtonpost.com/2013/02/19/mila-kunis-50-shades-of-grey-casting\\_n\\_2715811.html](http://www.huffingtonpost.com/2013/02/19/mila-kunis-50-shades-of-grey-casting_n_2715811.html). Huffington Post. Web. 19 February 2013.
- Pennebaker, J., Booth, R., & M. Francis. (2007) Linguistic Inquiry and Word Count [Computer program], Web.
- "Published Fanfiction," <http://www.goodreads.com/genres/published-fanfiction>. Good Reads. Web. 7 February 2012.

- “The Brontës’ secret science fiction stories.” <http://pressandpolicy.bl.uk/Press-Releases/The-Bront%C3%A9s-secret-science-fiction-stories-4e7.aspx>. The British Library. Web. 7 February 2012.
- Tushnet, R. (2007). Copyright law and subcultural creativity, *Law and Contemporary Problems*, 70, 135-174.
- Weiss, L. (2013). A serious bump on the head turned this mother of two into a best-selling author. *Huffington Post*. April 10.

Table 1: Summary Statistics (*Twilight*)

	Mean	Std. Dev	Min	Max
<b>Twilight Fanfiction</b>				
Published Before 6/1/2012, N = 2077				
LIWC Positivity	7.56	3.10	-0.83	23.1
Rating	2.73	0.53	0	3
Genre	0.96	0.60	0	2
Character	0.62	0.75	0	2
Days	48.02	59.19	0	200
OC	0.06	0.23	0	1
AU	0.10	0.31	0	1
Reviews	340.55	1178.27	25	32443
Length	32.46	46.08	.15	597.08
Published After 6/1/2012, N = 1219				
LIWC Positivity	7.45	3.18	-0.56	21.62
Rating	2.74	0.54	0	3
Genre	1.02	0.62	0	2
Character	0.52	0.72	0	2
Days	55.70	60.88	0	200
OC	0.05	0.22	0	1
AU	0.06	0.25	0	1
Reviews	451.10	1230.14	25	15816
Length	37.18	45.84	.01	391.14
Standard Mean Difference, N = 3296				
	t	2-tailed p-value		
LIWC Positivity	0.12	0.90		
Rating	-0.69	0.49		
Genre	-3.08	0.00		
Character	-3.86	0.00		
Days	-3.56	0.00		
OC	-0.47	0.63		
AU	-3.94	0.00		
Reviews	-2.56	0.01		
Length	-2.85	0.00		

Table 2: Summary Statistics (*Harry Potter*)

	Mean	Std. Dev	Min	Max
<b>Harry Potter Fanfiction</b>				
Published Before 6/1/2012, N = 22782				
LIWC Positivity	8.29	3.48	-5.00	92.74
Rating	1.98	0.92	0	3
Genre	0.24	0.44	0	2
Character	1.50	1.09	0	5
Days	34.84	52.79	0	200
OC	0.05	0.23	0	1
AU	0.06	0.25	0	1
Reviews	104.13	206.94	25	6952
Length	20.76	38.00	0.03	1390.14
Published After 6/1/2012, N = 1075				
LIWC Positivity	7.22	2.96	-1.73	19.66
Rating	2.15	0.84	0	3
Genre	0.30	0.47	0	2
Character	1.48	1.19	0	5
Days	39.22	51.06	0	200
OC	0.09	0.28	0	1
AU	0.07	0.25	0	1
Reviews	91.69	159.65	25	2590
Length	30.33	40.63	0.02	323.71
Standard Mean Difference, N = 23857				
	t	2-tailed p-value		
LIWC Positivity	9.92	0.00		
Rating	-6.08	0.00		
Genre	-4.68	0.00		
Character	0.60	0.55		
Days	-2.66	0.01		
OC	-4.39	0.00		
AU	-0.53	0.60		
Reviews	1.94	0.05		
Length	-8.05	0.00		

**Table 3: Positivity of reviews: OLS regression results**

Twilight, N = 3296						Harry Potter, N = 23857					
	Published Before 7/1/2012	Published After 7/1/2012	Comparison of Coefficients Between Time Periods		Published Before 7/1/2012	Published After 7/1/2012	Comparison of Coefficients Between Time Periods		Published Before 7/1/2012	Published After 7/1/2012	Comparison of Coefficients Between Time Periods
Constant	9.82** (0.08)	10.01** (0.10)		Constant	9.51** (0.11)	9.51** (0.09)		Constant	9.51** (0.05)	9.51** (0.06)	
Character	-0.20** (0.12)	0.32** (0.14)	0.52* (0.12)	Character	0.03 (0.01)	0.10* (0.01)	0.07 (0.02)	Character	0.03 (0.01)	0.10* (0.01)	0.07 (0.02)
Genre	0.17 (0.11)	0.05 (0.11)	-0.12 (0.17)	Genre	-1.23** (0.05)	-0.84** (0.06)	0.40* (0.08)	Genre	-1.23** (0.05)	-0.84** (0.06)	0.40* (0.08)
Rating	-0.60** (0.12)	0.12 (0.14)	0.72 (0.12)	Rating	-0.27** (0.01)	0.09 (0.01)	0.36** (0.00)	Rating	-0.27** (0.01)	0.09 (0.01)	0.36** (0.00)
Length	-2.02** (0.09)	-2.04** (0.09)	-0.02** (0.00)	Length	-2.02** (0.00)	-2.04** (0.00)	-0.02 (0.13)	Length	-2.02** (0.00)	-2.04** (0.00)	-0.02 (0.13)
AU	-0.12 (0.21)	-0.32 (0.29)	-0.20 (0.39)	AU	-0.47** (0.02)	-0.13 (0.64)	0.34 (0.41)	AU	-0.47** (0.02)	-0.13 (0.64)	0.34 (0.41)
OC	-0.08 (0.29)	-0.55* (0.10)	-0.47 (0.31)	R <sup>2</sup>	0.11	0.11		R <sup>2</sup>	0.11	0.11	
R <sup>2</sup>	0.10	0.13									

Standard Errors in Parentheses

\*\* = denotes significance at 0.05 level

\* = denotes significance at 0.10 level

Table 4: Correlation Coefficients Matrix (*Twilight*)

Variable	Length	Character	Genre	Rating	OC	AU
Length	1.00					
Character	0.05	1.00				
Genre	0.08	0.16	1.00			
Rating	0.08	0.13	0.10	1.00		
OC	-0.10	0.05	0.01	-0.01	1.00	
AU	-0.00	0.02	-0.05	-0.03	0.13	1.00

Table 5: Correlation Coefficients Matrix (*Harry Potter*)

Variable	Length	Character	Genre	Rating	AU
Length	1.00				
Character	0.01	1.00			
Genre	0.06	-0.03	1.00		
Rating	0.09	-0.10	0.11	1.00	
AU	0.10	-0.05	0.06	0.01	1.00