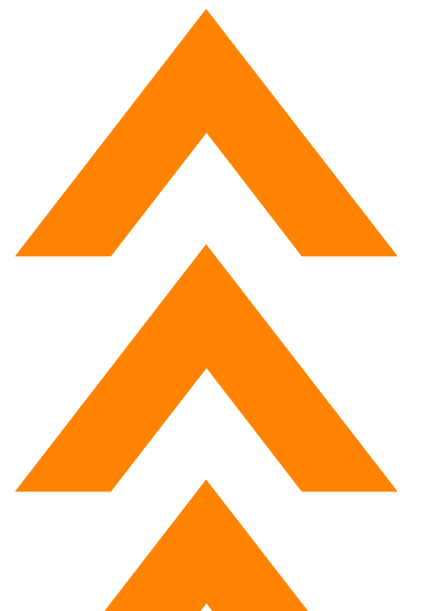# SPSS BOOK DATA ANALYSIS

Mandy King, Kailin Nguyen, Jack Slade, Jada Seaman, Zoe Velas, Kevin Adelsberger

CONTENT

- Our Topic
- The Significance
- Our Process
- Our Analyses
- Takeaways

OUR TOPIC

BOOKS

BOOK TITLE

Genre	Library Thing Rating	Goodreads Rating	Amazon Rating	Barnes & Noble Rating	Binomial Book Length
Release Year	Total Number of LT Ratings	Total Number of GR Ratings	Total Number of Amazon Ratings	Total Number of B&N Ratings	Best Seller on Amazon
Number of Pages	Author's Gender	Author's Goodreads Followers	Paperback Amazon Price	Paperback B&N Price	Editor's Pick on Amazon

THE SIGNIFICANCE

THE appears above, then **SIGNIFICANCE**
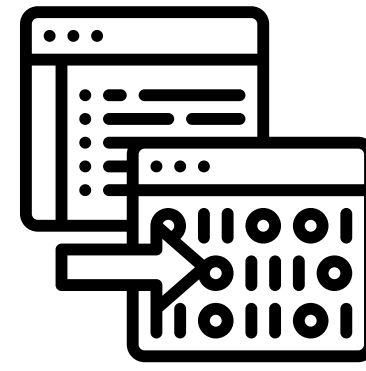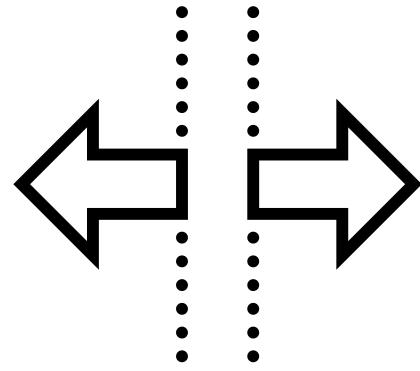
TO BE ABLE TO FIND VALUABLE BOOK INFORMATION FROM 4 PROMINENT BOOK-REVIEW WEBSITES

Authors can observe ways to increase popularity & book ratings

Allows for authors to find ideal platforms to sell their books on to receive positive feedback

OUR
PROCESS

Delegate by genre

SciFi - Jack S.
Romance - Kailin N.
Fantasy - Mandy K.
Horror - Jada
Mystery - Kevin
Classics - Zoe

Individual data
collection via
Amazon, Barnes
and Noble,
Goodreads, and
Library Thing

Reconvene and
compile data

Complete analysis

WHERE WE GOT OUR DATA

amazon → Paperback price, Amazon rating, Amazon reviews, Amazon Best Seller, Amazon Editor's Pick

goodreads → Goodreads followers, rating, total ratings, author gender

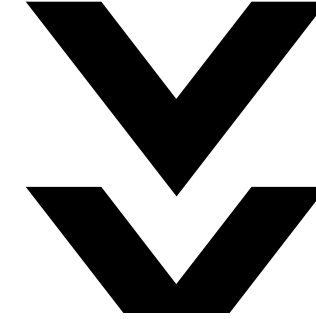**BARNES&NOBLE BOOKSELLERS** → B&N price, B&N rating, B&N reviews

LibraryThing What's on your bookshelf? → LibraryThing rating, LibraryThing reviews
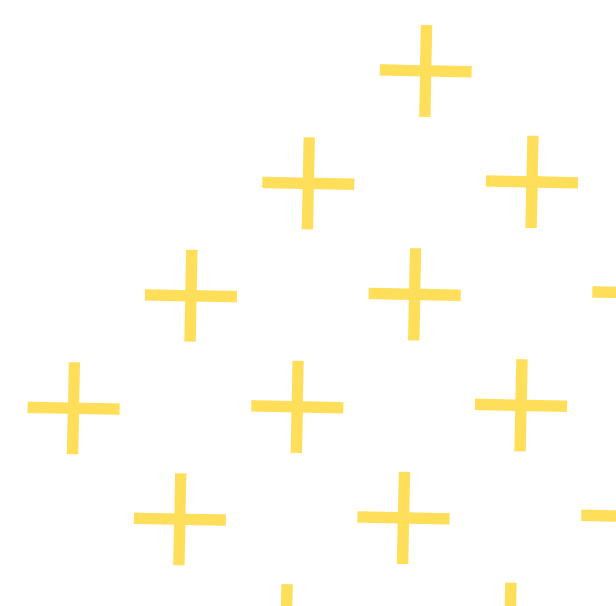
CORRELATIONS
INSIGHT #1

- Significance: .056
- Pearson Correlation: Positive

- Analysis: There is a positive correlation between the amount of followers an author has on Goodreads to their book's Goodreads rating.

Correlations

		author_GRfollowers	goodreads_rating
author_GRfollowers	Pearson Correlation	1	+.145
	Sig. (2-tailed)		.056
	N	175	175
goodreads_rating	Pearson Correlation	.145	1
	Sig. (2-tailed)	.056	
	N	175	175

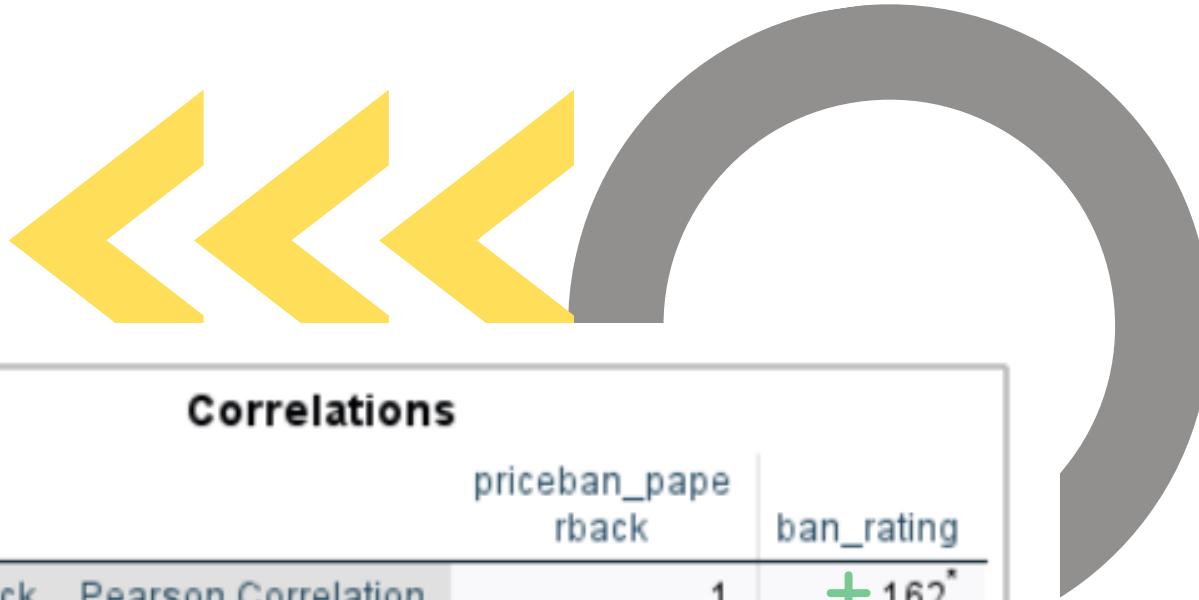**Managerial Recommendation:**

As an author, be aware that there is a correlation between these 2 variables and invest in accumulating Goodreads followers to possibly impact your ratings.

CORRELATIONS
INSIGHT #2

Correlations

		priceban_paperback	ban_rating
priceban_paperback	Pearson Correlation	1	+.162*
	Sig. (2-tailed)		.035
	N	171	168
ban_rating	Pearson Correlation	.162*	1
	Sig. (2-tailed)	.035	
	N	168	170

*. Correlation is significant at the 0.05 level (2-tailed).

- Significance: .035
- Pearson Correlation: Positive

- Analysis: There is a positive correlation between the price of a book at Barnes and Noble and the rating of the book on Barnes and Noble's website.

Managerial Recommendation:

Implement strategic marketing and promotional efforts to boost the book's visibility. Increased exposure can lead to more sales and reviews, which can positively impact its rating and, subsequently, its value.

LINEAR REGRESSIONS
INSIGHT #2.5

BARNES AND NOBLE

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4.045	.109		37.168	<.001
	priceban_paperback	+ .015	.007	.162	2.121	.035

a. Dependent Variable: ban_rating

As the price of the book increases by 1 unit on Barnes and Noble, the rating increases by .015 on B&N.

AMAZON

Coefficients[a]

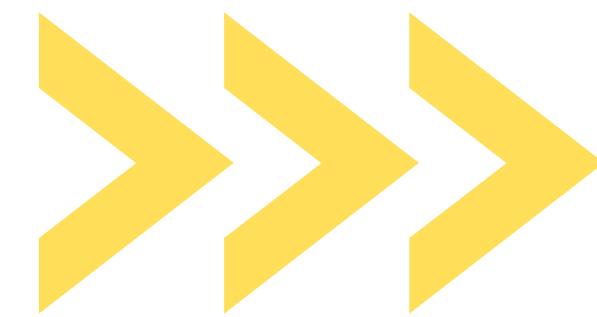| Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4.522	.050		89.938	<.001
	priceamazon_paperback	− −.008	.004	−.145	−1.918	.057

a. Dependent Variable: amazon_rating

As the price of the book on Amazon increases by 1 unit, the rating decreases by .008 on Amazon.

Amazon users are more price sensitive and a book's high price can negatively affect its ratings. An author should sell their book on B&N if they want more freedom with pricing their book more expensively and not experience negative reviews due to its cost.

LINEAR REGRESSIONS
INSIGHT #3

Coefficients[a]

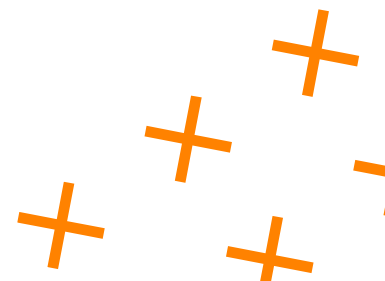| Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	−829888.392	306754.126		−2.705	.008
	amazon_rating	201445.788	69226.129	.214	2.910	.004
	amazon_reviews	.649	.288	.166	2.257	.025

a. Dependent Variable: author_GRfollowers

As Amazon ratings increase by 1 star, GR followers have the potential to increase by 200k

As Amazon reviews increase by 1 unit, GR followers have the potential to increase by .649.

If Authors want to grow their following, they **should focus on increasing Amazon ratings**. The **star rating system carries more weight than written reviews.**

FORECASTING FOLLOWERS
INSIGHT #3

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	−829888.392	306754.126		−2.705	.008
	amazon_rating	201445.788	69226.129	.214	2.910	.004
	amazon_reviews	.649	.288	.166	2.257	.025

a. Dependent Variable: author_GRfollowers

GRfollowers = 201445(rating) + .649(reviews) - 829888

= 201445(4.2) + .649(200) - 829888

= 16,310

If a book has a rating of 4.2 and receives 200 new ratings, authors have the potential to gain **16,310 new followers on Goodreads**
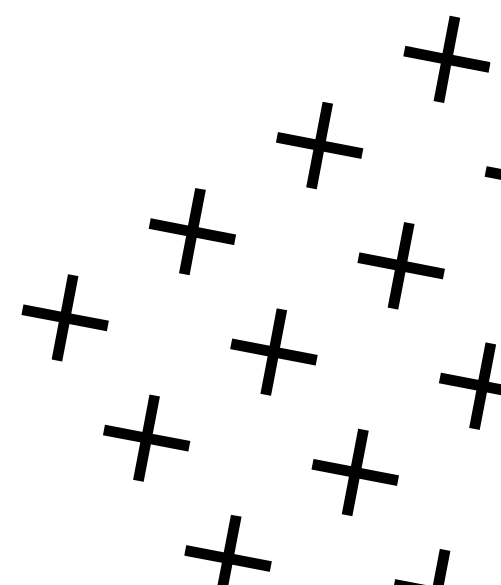
BINARY REGRESSION
INSIGHT #4

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	release_year	-.017	.004	16.990	1	<.001	.983
	Constant	31.355	8.006	15.339	1	<.001	4.142E+13

a. Variable(s) entered on step 1: release_year.

- Significance of Amazon Rating: <.001
- Pearson Correlation: Negative

- Analysis: On average, one unit increase in release year, a book becomes 1.7% less likely to be labeled as a best seller on Amazon

Authors should promote their books as close to their published date as possible because **as books get older, they become less likely to be labeled as a "Best Seller"** on Amazon.

BINARY REGRESSION
INSIGHT #5

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	priceban_paperback	−.142	.064	4.927	1	.026	.868
	Constant	.270	.931	.084	1	.772	1.310

a. Variable(s) entered on step 1: priceban_paperback.

- Significance of Amazon Rating: .026
- Pearson Correlation: Negative

- Analysis: For each $1 increase in book price at Barnes and Noble, the book becomes 13.2% less likely to be an Amazon Best Seller.
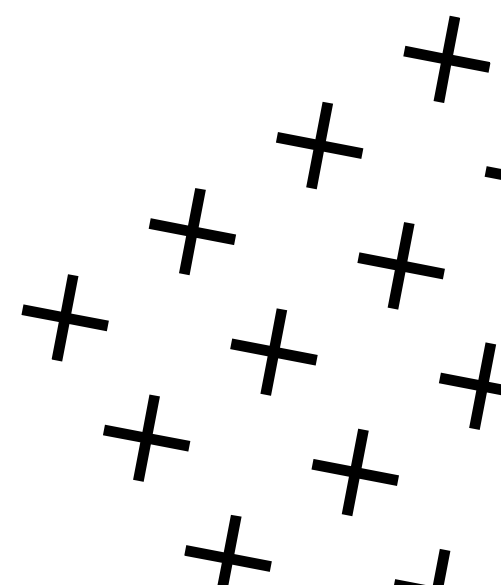
If authors want to obtain the title of an Amazon best seller then they should aim for their book to be sold at a lower price on Barnes and Noble.
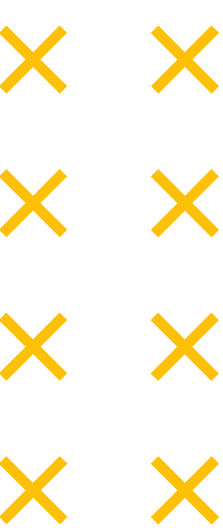
Our Biggest Takeaways

Authors should be cautious of impacts from website reviews (Barnes and Noble)

Diminishing returns with higher priced books along with quality of ratings

Authors should promote early and often to build a bigger following and receive higher and better ratings

THANK YOU!

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You can also record a video inside the editor! Go to 'Uploads' and click on 'Record yourself'.
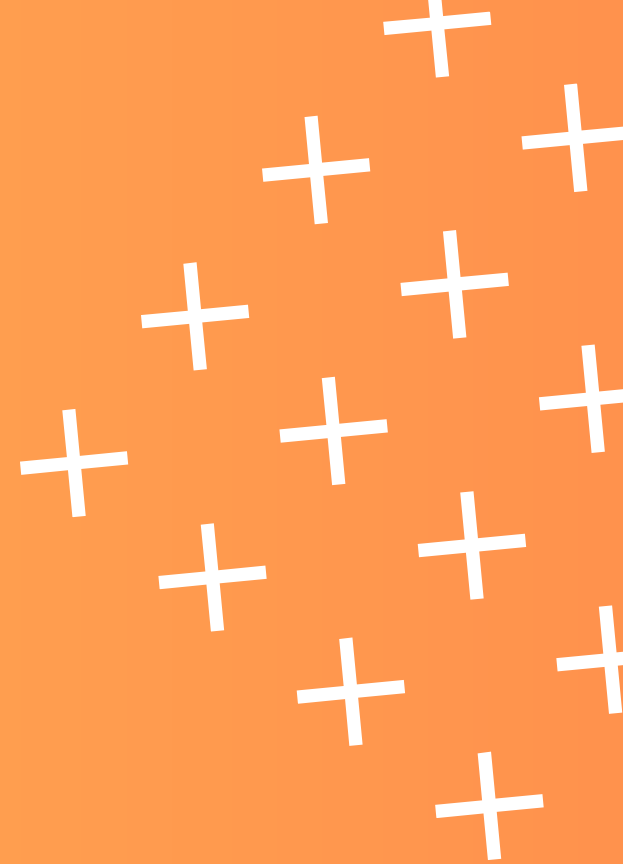
SIGNIFICANCE

TO BE ABLE TO FIND VALUABLE BOOK INFORMATION FROM 4 PROMINENT BOOK-REVIEW WEBSITES

Authors can observe ways to increase popularity & book ratings

Allows for authors to find ideal platforms to sell their books on to receive positive feedback

IN CONCLUSION

Our biggest takeaways...

- Authors should be cautious of impacts from website reviews (Barnes and Noble)

  - Diminishing returns with higher priced books along with quality of ratings

  - Authors should promote early and often to build a bigger following and receive higher and better ratings