

## How To Present Your Research

### The Good, the Bad, and the Ugly

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## Disclosures




I have no ties to commercial entities; however...

I'm an Assistant Editor for *Academic Medicine* and a Deputy Editor for *JGME*. I'm also a Captain in the **U.S. Navy**. The views expressed in this presentation are mine; they do not necessarily reflect the official policy or position of *Academic Medicine*, *JGME*, Uniformed Services University of the Health Sciences, U.S. Navy, Department of Defense, or U.S. Government.



## Learning Objectives


BY THE END OF THIS SESSION, YOU WILL BE ABLE TO...

- *Recognize* the characteristics of effective (and ineffective) presentations
- *Describe* a framework (the *p<sup>3</sup> model*) to guide your research presentation
- *Identify* some common PowerPoint faux pas (and some better options)

- *Communicate* your research more effectively

## Consider These Examples...


WHAT DOES THIS PRESENTER DO WRONG?




Dr. Fisher-Katz,  
Massachusetts  
Institute of  
Technology

## Consider These Examples...


WHAT DO THESE PRESENTERS DO RIGHT?




Dr. Lorelei Lingard, Centre for Education Research & Innovation (CERI), Western University, London, Ontario, Canada



Dr. Glenn Regehr, Centre for Health Education Scholarship (CHES), University of British Columbia, Vancouver, British Columbia, Canada



Dr. Brian Hodges, The Wilson Centre, University of Toronto, Toronto, Ontario, Canada



[Me](#)

## Our Recommendations

Let's build a list of research presentation best practices

### Presentation Math

$p^3 =$  "Every great presentation is the product of its **story** (p1), the **supportive media** (p2), and the **delivery** of that (p3)."

-Ross Fisher, Surgeon, Sheffield, UK<sup>1</sup>

$p^3 =$  p1  
story x p2  
supportive  
media x p3  
delivery

<sup>1</sup><http://ffolliet.com/>

### Presentation Math

$p^3 =$  p1  
story x p2  
supportive  
media x p3  
delivery

$p^3 = 1 \times 1 \times 1 = 1$

$p^3 = 1 \times 1.9 \times 1 = 1.9$

$p^3 = 1.3 \times 1.3 \times 1.3 = 2.2$

$p^3 = 3.0 \times 3.0 \times 3.0 = 27$

### p1 – The Story

Convert the "what" of the data to the "so what" for the audience

*Once upon a time* *researchers believed that...*

But then I thought that maybe...

So what I did was...

And I've discovered that...

Which has changed the way that we...

<sup>1</sup>van Schalkwyk (2017)


### p1 – The Story

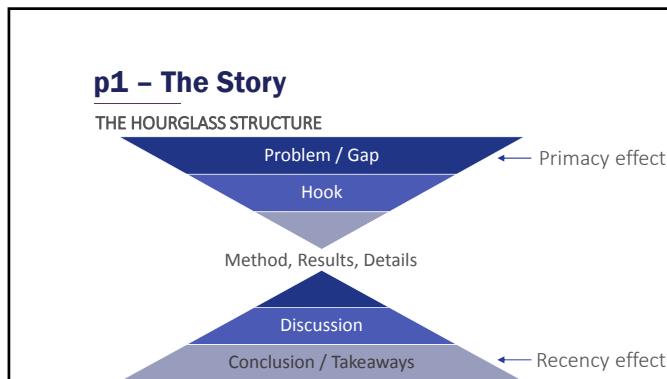
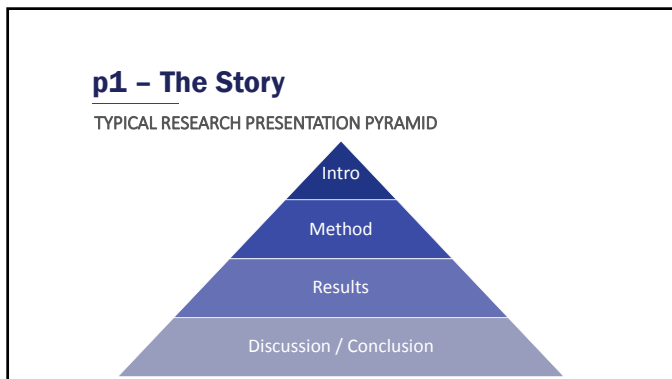
KNOW YOUR AUDIENCE



### p1 – The Story

WRITE YOUR TALK





### p1 - The Story

JOINING THE CONVERSATION: PROBLEM – GAP – HOOK HEURISTIC

- 1 "Identify a **problem** in the world that people are talking about;
- 2 Establish a **gap** in the current knowledge or thinking about the problem; and
- 3 Articulate a **hook** that convinces readers that this gap is of consequence" (Lingard, 2015)

### p2 - The Supportive Media

Includes not just the PowerPoint slides but anything that will add to the message

### p2 - The Supportive Media

NICE REFERENCES

### p2 - The Supportive Media

KEEP ANIMATIONS TO A MINIMUM

- Keep your animations simple/subtle
- Obnoxious (& distracting) animation #1
- Obnoxious (& distracting) animation #2
- Obnoxious (& distracting) animation #3
- Obnoxious (& distracting) animation #4

### p2 – The Supportive Media

KEEP ANIMATIONS TO A MINIMUM

To what extent do you approve or disapprove of the way Congress is doing its job?

- Very much approve
- Somewhat approve
- Neither approve or disapprove: conceptual midpoint
- Somewhat disapprove
- Very much disapprove
- Don't know
- No opinion

### p2 – The Supportive Media

FONT SIZES

- How do you like this font (16 pt)?
- How about this, big enough (24 pt)?
- And this (28 pt)?
- And this (32 pt)?
- And this (36 pt)?
- And this (40 pt)?

### p2 – The Supportive Media

FONT TYPES

- Choose easy-to-read fonts...
  - *Serif, serif, serif, serif, serif*
  - *Sans Serif, Sans Serif, Sans Serif*
  - *Script, script, script, script*

### p2 – The Supportive Media

FONT FAMILIES

- Arial, Arial black, Arial Unicode MS, **Arial Rounded**, Arial narrow
- Franklin Gothic Book, **Franklin Gothic Demi**, **Franklin Gothic Heavy**
- Segoe UI, Segoe UI Light, **Segoe UI Semibold**, Segoe UI Semilight

### p2 – The Supportive Media

SOME FONTS JUST GO TOGETHER

- ★ **GEORGIA** and **VERDANA**  
For those who wish to save themselves the trouble of always going to for a serif. By coupling the beautiful serif typeface that is Georgia with Verdana, a sans-serif font that was designed for the screen, you'll save a whole lot of trouble.
- ★ **HELVETICA (BOLD)** and **GARAMOND**  
There is no better combination than will always please... this doesn't have a large headline size in Helvetica Bold! The clean and neutral nature of Helvetica makes it a perfect partner for Garamond, one of the most highly printed serif typefaces around.
- ★ **BODONI** and **FUTURA**  
Bodoni's geometric construction and lines of thick and thin strokes make it a true beauty of a font. Combined with Futura, it becomes part of a true poster printing... just add any fashion magazine.
- ★ **FRANKLIN GOTHIC** and **BASKERVILLE**  
Baskerville is an old-time classic designed in 1757 which when combined with the sans and 19th-century typeface Franklin Gothic, makes for an appealing modern and gives you unique the additional touch of sophistication. The combination with the condensed version of Franklin Gothic has a really unique, grabbing headline.

**LESS IS MORE**

### p2 – The Supportive Media

DON'T OVERLOAD YOUR SLIDES

Here's a whole bunch of stuff I want to talk about

- This is the first thing I did by using this method in this way
- Then I did this and controlled for this and thought some about this and didn't forget this
- I also applied techniques X, Y and Z by integrating A, B, and C across the F, G, H components of all this stuff over here
- Also that, I put the right hand in then the right hand out then the right hand back in then I finished all about
- For a few of these other things over here that were different from these other things over there I did the following stuff:
  - Created some for other stuff that had been all done across these times
  - Used a research done over the non-representation to reduce the probability of errors in the statistical dimensionality of the methodology
  - Then I analyzed the whole pile of it all with nothing's Marissa after which I performed numerous hyperhighdimensional functions in 1/4 of this new stream

### Challenges for Girls' Education in Developing Countries

- 80 countries where progress has stalled
  - These countries are not meeting the UN Millennium Development Goals
  - An additional 30 countries have successfully enrolled children in primary and secondary education, but provide low-quality learning
- Early marriages and teen pregnancy
  - 1 in 3 girls in low- and middle-income countries are married before the age of 18;
  - 1 in 9 girls are married before the age of 15
- School-related violence
  - 3 in 5 girls have experienced school-related violence
  - Ranges from bullying and exploitation to kidnapping and bombing

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### p2 – The Supportive Media

COLOR COMBINATIONS

- How do you like this color combination?
- Red and blue color combinations cause eye strain
- And some folks are red-green color blind

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### p2 – The Supportive Media

COLOR COMBINATIONS

Monochromatic Colors

Complementary Colors

Analogous Colors

### p2 – The Supportive Media

COLOR COMBINATIONS

- Use either a light background with dark type

### p2 – The Supportive Media

COLOR COMBINATIONS

- Or dark a background with light type

### p2 – The Supportive Media

DATA SLIDES: "SAVE THE PIES FOR DESSERT"<sup>1</sup>

<sup>1</sup>Stephen Few (2007)

### p2 – The Supportive Media

DATA SLIDES: STACKED BAR CHARTS

### p2 – The Supportive Media

DATA SLIDES: THE TABLE

Response category	Real settings* n (%)	Strategic planning* n (%)	Ministrative restructuring* n (%)
Task-specific process	29 (31.4)	24 (23.8)	64 (56.1)
Identifying symptoms	18 (19.6) <sup>†</sup>	12 (12.0) <sup>†</sup>	33 (29.1) <sup>†</sup>
Identifying contextual factors	2 (8.0) <sup>†</sup>	3 (3.0) <sup>†</sup>	22 (19.4) <sup>†</sup>
Identifying relevant symptoms	3 (3.0) <sup>†</sup>	2 (2.0) <sup>†</sup>	9 (7.9) <sup>†</sup>
Recognizing/defining symptoms	13 (14.0) <sup>†</sup>	11 (10.8) <sup>†</sup>	38 (33.4) <sup>†</sup>
Comparing/recognizing diagnoses	2 (8.0) <sup>†</sup>	4 (3.8) <sup>†</sup>	13 (11.5) <sup>†</sup>
Task-oriented process	16 (17.2)	19 (18.6)	14 (12.3)
Diagnosis	13 (14.0)	N/A <sup>‡</sup>	3 (2.6)
Self-assess	2 (2.0)	11 (10.5)	4 (3.5)
Non-task strategies	4 (4.3)	11 (10.5)	N/A
Personal ability	N/A	N/A	2 (1.8)
Task difficulty	N/A	N/A	3 (2.6)
Teacher skill	N/A	N/A	0
Do not know/care <sup>§</sup>	22 (23.6)	1 (1.0)	N/A
Other	4 (4.3)	18 (17.1)	2 (1.8)

N/A = response category was not applicable to the particular ministrative restructuring.

### p2 – The Supportive Media

DATA SLIDES: THE CORRELATION TABLE

Variable	Mean	SD	Range	1	2	3	4	5	6	7	8	9
1. Goal setting	5.56	2.25	1-7 to 8	—								
2. Strategic planning	5.68	1.91	1 to 2	0.18 <sup>†</sup>	—							
3. Ministrative restructuring	5.98	2.05	1 to 8	0.01	0.03	—						
4. Undergraduate nursing	3.49	0.24	2 to 4 to 5	-0.09	0.11	0.11	—					
5. NCLEX success	9.80	1.44	7 to 14	-0.02	0.04	0.04	-0.23 <sup>†</sup>	—				
6. Course grade	83.39	5.60	75 to 92	0.01	0.40 <sup>†</sup>	0.01	0.14	0.06	—			
7. Satisfaction with	3.02	0.93	2 to 4	0.01	0.30 <sup>†</sup>	-0.01	0.21	0.10	0.04 <sup>†</sup>	—		
8. Overall help	2.028	0.21	1 to 3	0.04	0.20 <sup>†</sup>	0.13	0.26	0.15	0.44 <sup>†</sup>	0.10 <sup>†</sup>	—	
9. Total score	86.39	3.25	81 to 100	0.14	0.17 <sup>†</sup>	-0.01	0.08	-0.08	0.44 <sup>†</sup>	0.30 <sup>†</sup>	0.17 <sup>†</sup>	—

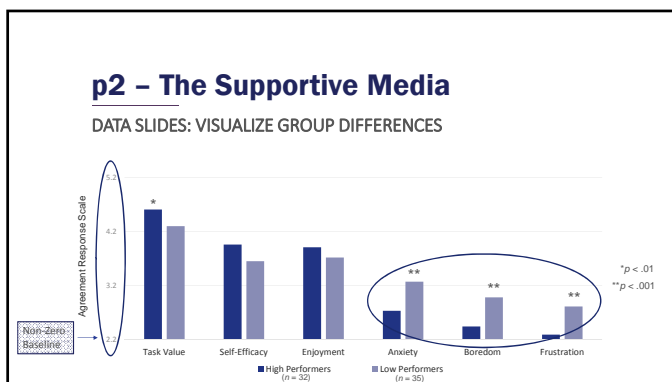
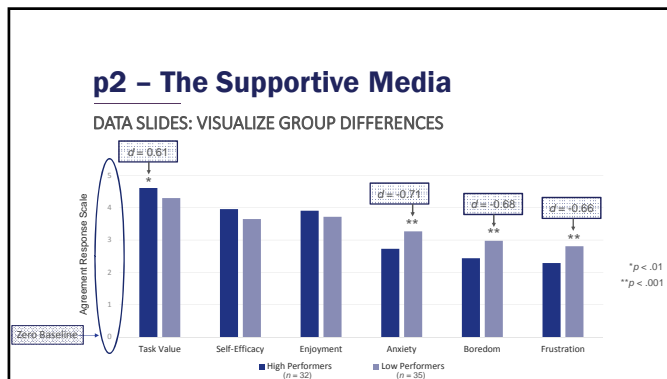
NCLEX success scores were measured on a 10-point scale, course grade and total scores were measured on a 100-point scale. Satisfaction with and overall help were measured on a 4-point scale and Overall Help 9 scores were measured on a 5-point scale.

### p2 – The Supportive Media

DATA SLIDES: THE CORRELATION TABLE

	Goal Setting	Strategic Plan	Meta	Course Grade	2 <sup>nd</sup> Year GPA	USMLE Step 1	NBME Score
Goal Setting	–		.01	.01	.07	.04	-.13
Strategic Plan		–	.03	.40*	.39*	.29*	.338
Metacognition			–	.01	.01	.10	-.01
Course Grade				–	.81**	.61**	.63**
2 <sup>nd</sup> Year GPA					–	.83**	.67**
USMLE Step 1						–	.77**
NBME Score							–
Mean	0.30	0.86	3.08	83.39	3.32	220.80	86.99
SD	2.25	1.74	2.05	5.02	0.49	18.21	7.75

\*p < .01  
\*\*p < .001

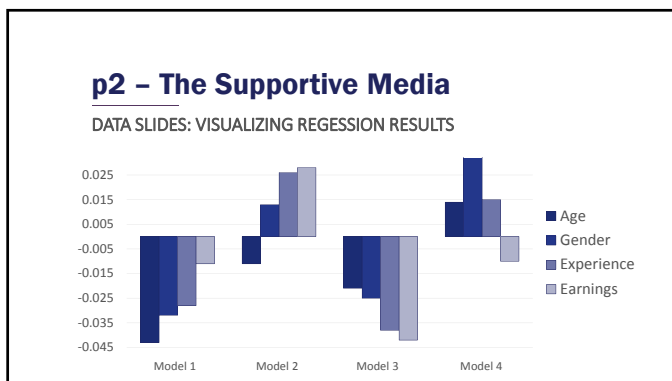


### p2 – The Supportive Media

DATA SLIDES: REGRESSION RESULTS

	Model 1	Model 2	Model 3	Model 4
Age	-.043	-.011	-.021	0.014
Gender	-0.032	0.013	-0.025	.0042
Experience	-.028	0.026	-.038	0.015
Earnings	-.011	0.028	-.042	-.010
R <sup>2</sup>	.25	.34	.40	.42

p < .01  
p < .001



### p3 – The Delivery

A compelling story with supporting visuals has to be delivered well for the presentation to work

### p3 – The Delivery

IT'S NOT A TALK, IT'S A PERFORMANCE



### p3 – The Delivery

PRACTICE!

practice  
practice  
practice  
practice

### p3 – The Delivery

GET PEER FEEDBACK



### p3 – The Delivery

KNOW THE TIME LIMIT & DON'T GO OVER



### p3 – The Delivery

HUMOR CAN BE TRICKY





**p3 – The Delivery**  
 BE ENTHUSIASTIC



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 @MedEdDoc

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<http://follet.com/>