presenting presenting poseture posters

### #FEESMUSTFALL2016: PERCEIVED AND MEASURED EFFECT ON CLINICAL MEDICAL STUDENTS

RESULTS

Phase 1: Students' perceptions of the effect of #FMF2016 and

A total of 120 students completed the guestionnaire. The student

response rate was 87.0%, with an equal distribution between males

and females. Student ages varied between 20 and 28 years, with a

results of PTSD screening

mean of 22 years.

#### BACKGROUND In mid-August 2016, the Minister of Higher Education announced a maximum fee increase of 8% for universities. Within days, students at most universities participated in the #FMF2016 campaign.

#FMF2016 resulted in violent protests and the eventual closure of most SA universities towards the end of 2016. Medical students are under immense academic stress. Campus unrest can contribute to stress and influence academic

performance, social behaviour, emotional stability and financial expenses. To determine the perceptions and measured effect of the #FMF2016 protest on the 2016 3rd-year undergraduate medical

students at UFS who experienced physical test disruption and temporary interruption of classes and clinical training. Specific objectives were: (i) to assess the perceptions of students regarding the effect of the protests on academic performance, social behaviour and financial implication: (ii) to determine the presence of post-traumatic stress disorder

(PTSD) after students experienced violent and physical test disruption, using a validated post-traumatic stress tool; and ii) to measure the effect of #FMF2016 on academic performance by comparing end-of-year examination marks with marks of students not affected by protests.

### MATERIAL AND METHODOLOGY

To address the study objectives, the project consisted of two phases In phase 1, a descriptive study was performed to gather students' perceptions of the effect of #FMF2016, and screening for PTSD took place. In phase 2, the examination marks of students affected by #FMF2016 were compared with those not affected by #FMF2016. Phase 1: Student perceptions Study population and sampling

The study population consisted of 138 medical students who were in their 3rd year in 2016 at the UFS Bloemfontein campus. This class was selected because they experienced physical test disruptions and violent behaviour at a university venue. Measurements

The perceived effects of the protest were measured using voluntary, anonymous self-administered questionnaires. The first part of the questionnaire gathered demographic information. This was followed by 25 statements on the perceived effect of the protests on academic performance, finances and social behaviour, as well as students attitudes to the UFS management, the protest in general, and the The last part of the questionnaire included a validated PTSD screening tool developed by Brewin et al.[21] The screening tool consisted of 10 questions and according to the instructions, a score of ≥6 was considered positive for PTSD. The study was performed in the second semester of 2017 after

ethical, and UFS permission had been obtained Phase 2: Comparison of student marks Study population and sampling The study population consisted of the 3rd-, 4th- and 5th-year medical students at UFS who took part in the end-of-year assessment during 2015, 2016 and 2017, respectively.

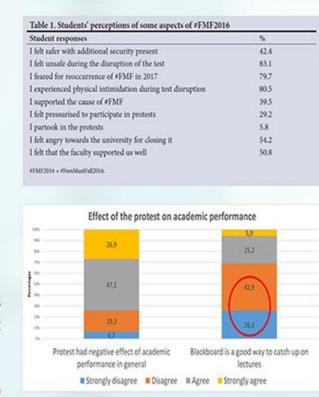
the marks of the 2016 3rd-year students were then compared with the 3rd-year marks of the 2015 and 2017 students. The 4th-year marks of these students were also compared with the 4th-year marks of the 2015 and 2016 students.

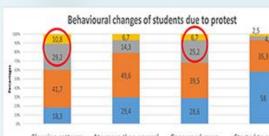
Data were filled in on Excel 2016 spreadsheets (Microsoft, USA) and double-checked for errors. The Department of Biostatistics, Faculty of Health Sciences, summarised the data using frequencies and percentages (categorical variables) and mean (age).

Ethical considerations Ethical approval to conduct the study was obtained from the Health Sciences Research Ethics Committee of UFS (ref. no. HSREC-S 24/2017). Approval to include students and use student marks was granted by the appropriate authorities of UFS. No person was identified, as the questionnaires were anonymous and only studen

numbers were used for the mark comparison. A psychologist was

available to assist students who experienced high levels of stress





Sleeping patterns Ate more than normal Consumed more Started to smoke or changed due to protest to cope with stress of alcohol during protest smoked more during protest protest Strongly Disagree Disagree Agree Strongly Agree

Results of PTSD assessment

Ising a validated post-traumatic stress disorder (PTSD) screening I, 12.7% of the affected students screened positive for PTSD after the test disruption. This is much higher than the world figures of 7.8-9.2% in populations exposed to a traumatic event. ue to the high stress levels, a clinical psychologist was appointed the School of Medicine, UFS, to support the students.

		2015	2016	2017	p-value
3rd year	Mean %	64.4	63.2	64.7	0.10
	Failure %	5.2	6.7	3.4	0.69
4th year	Mean %	67.3	68.0	67.1	0.37
	Failure %	1.9	1.9	5.9	0.14

### DISCUSSION The response rate of 87.0%, equal gender split and age distribution

students, and generalisability of results is therefore p Despite many efforts on the part of the university, three-quarters of the students felt that the protests had a negative effect on their academic performance. Although the School of Medicine continued with training, despite the closure of the rest of the university, alternative and adapted measures were put in place. Although the protests did not have a major effect on smoking, a third of the students confessed to consuming more alcohol and 40.0% experienced changes in sleeping patterns. Both alcohol consumption and changes in sleeping patterns can negatively affect academic performance through the direct effect on memory, decreased motivation and less time to spend on studies. Behaviour changes during protests are not unique to our setting, as various studies have reported that protests contributed to behaviour changes and increases in alcohol consumption. Higher alcohol consumption may also contribute to increased financial expenditure.

No negative effect of the protests could be demonstrated from the student marks, although 74.0% of students felt that the protests had a negative effect on academic performance. A negative effect on academic performance has been reported in other studies, but all were self-reported views. Stress does not necessarily affect cognition negatively, and academic performance may even improve with moderate added stress.[9,

Study limitations The data collection on student perceptions of #FMF2016 only took place during 2017, as the students left for their holiday after the examination, and the study could only be conducted after ethical approval and granting of permission by the authorities.

### CONCLUSION

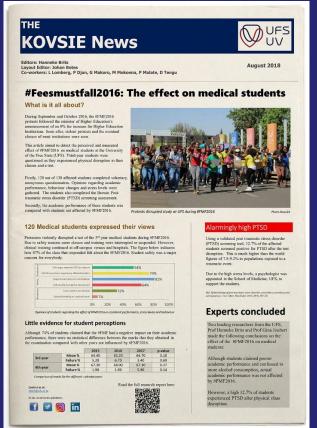
Reported negative behaviour changes occurred, with 31.9% of students reporting increased alcohol consumption and 40.0% reporting changes in sleep patterns. Both these factors may have a negative effect on academic performance, although it was not Although 74.0% of students claimed poorer academic performance due to the protests, this could not be proved by comparing examination results with those of students not affected by protests

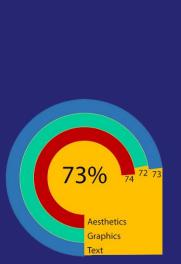
REFERENCES Abdulghani HM, AlKanhal AA, Mahmoud ES, Ponnamperuma GG, Alfaris EA. Stress and its effects on medical students: A crosssectional study at a college of medicine in Saudi Arabia. J Health Popul Nutr 2011;29(5):516-522. https://doi.org/10.3329/jhpn.v29i5.8906 Atwoli L, Stein DJ, Koenen KC, Epidemiology of post traumatic stress disorder: prevalence, correlates and consequences. Curr. Opin. Psychiatry 2015:28(4):307-311. Fiksenbaum LM, Wickens CM, Greenglass ER, Wiesenthal DL. Students' perceptions of fairness following an academic strike. Can J Higher Educ 2012;42(3):24-44. Haldorsen H, Bak NH, Dissing A, Petersson B, Stress and symptoms of depression among medical students at the University of Copenhagen. Scand J Public Health 2014;42(1):89-95. https://doi.org/10.1177/1403494813503055 Saipanish R. Stress among medical students in a Thai medical school. Med Teach 2003;25(5):502-506. https://doi.org/10.1080/0142159031000136716

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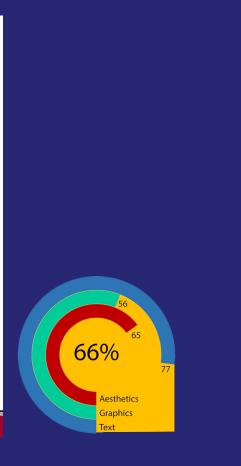








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# **Poster properties**

- Posters and oral presentations have equal scientific and academic value
- conference

# **Professional findings**

What attracts you to a poster?



Aesthetics Graphics

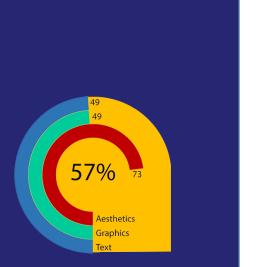


Use the QR code to assess the posters via the validated

## Johan Botes and Hanneke Brits

UNIVERSITY OF THE FREE STATE UNIVERSITEIT VAN DIE VRYSTAAT YUNIVESITHI YA FREISTATA





• Posters ensure visual communication throughout the

• E-posters offer the advantage of multi-media inclusion • Posters offer an excellent opportunity for networking

space

# **Problem and Process**

What are the attributes of an effective and powerful scientific poster?

10 Experts in poster assessments Opinions on assessment • Evaluation of 4 purposefully designed posters with • A validated poster assessment tool • Voluntary participation and ethics approval

## What do you consider most important in a poster?

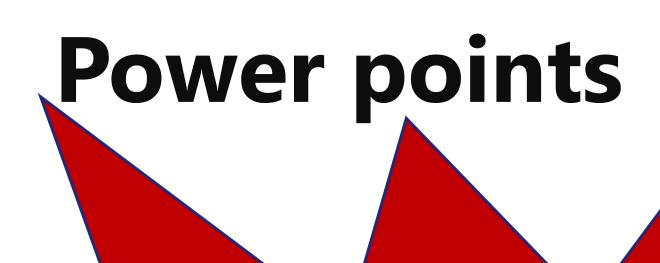
Clear message

Visual Attraction

Good structure

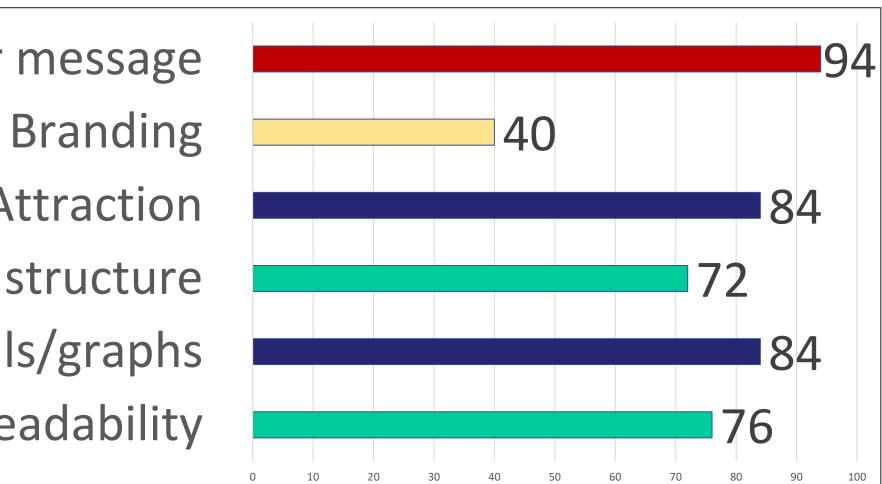
Quality visuals/graphs

Readability





Leave them with a clear message



## Attract them with your topic, colour and visuals

## Give them a balance between text, graphics and aesthetics

presenting presenting powerfut posters

### THE **KOVSIE News**

#### **Editors: Hanneke Brits** Layout Editor: Johan Botes

Co-workers: L Lomberg, P Djan, G Makoro, M Mokoena, P Malate, D Tengu



August 2018

### **#Feesmustfall2016: The effect on medical students**

#### What is it all about?

During September and October 2016, the #FMF2016 protests followed the minister of Higher Education's announcement of an 8% fee increase for Higher Education Institutions. Soon after, violent protests and the eventual closure of most institutions were seen.

This article aimed to detect the perceived and measured effect of #FMF2016 on medical students at the University of the Free State (UFS). Third-year students were questioned as they experienced physical disruption in their classes and a test.

Firstly, 120 out of 138 affected students completed voluntary anonymous questionnaires. Opinions regarding academic performance, behaviour changes and stress levels were gathered. The students also completed the Brewin Posttraumatic stress disorder (PTSD) screening assessment. Secondly, the academic performance of these students was

compared with students not affected by #FMF2016.



#### 120 Medical students expressed their views

Protesters violently disrupted a test of the 3rd year medical students during #FMF2016. Due to safety reasons some classes and training were interrupted or suspended. However, clinical training continued at off-campus venues and hospitals. The figure below indicates how 87% of the class that responded felt about the #FMF2016. Student safety was a major concern for everybody.

cademics Felt	Felt angry towards UFS for closure	•			54%		
Felt	that protests negatively affected studie	s				74%	
Safety	Experienced physical intimidation Felt unsafe during the disruption	A.			64	81% %	6
Behaviour	Consumed more alcoho Started smoking or smoked more		7%	32%			
100		0%	20%	40%	60%	80%	100%

Opinions of students regarding the effect of #FMF2016 on academic performance, stress levels and behaviour

#### Little evidence for student perceptions

Although 74% of students claimed that the #FMF had a negative impact on their academic performance, there were no statistical difference between the marks that they obtained in the examination compared with other years not influenced by #FMF2016

		2015	2016	2017	p-value
and man	Mean %	64.40	63.20	64.70	0.10
3rd year	Failure %	5.20	6.70	3.40	0.69
	Mean %	67.30	68.00	67.10	0.37
4th year	Failure %	1.90	1.90	5.90	0.14
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### Alarmingly high PTSD

Using a validated post traumatic stress disorder (PTSD) screening tool, 12.7% of the affected students screened positive for PTSD after the test disruption. This is much higher than the world figures of 7.8-9.2% in populations exposed to a traumatic event.

Due to the high stress levels, a psychologist was appointed in the School of Medicine, UFS, to support the students.

consequences. Curr. Opin. Psychiatry 2015:28(4):307-311

Ref: Epidemiology of post traumatic stress disorder: prevalence, correlates and

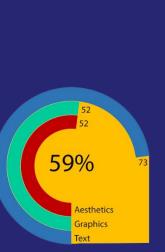
### **Experts concluded**

Two leading researchers from the UFS, Prof Hanneke Brits and Prof Gina Joubert made the following conclusions on the effect of the #FMF2016 on medical students:

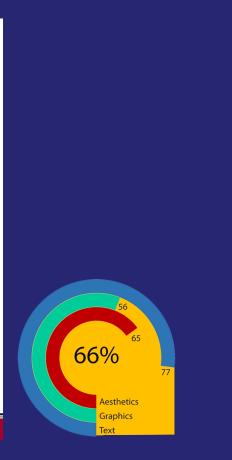
Although students claimed poorer academic performance and confessed to more alcohol consumption, actual academic performance was not affected by #FMF2016.

However, a high 12.7% of students xperienced PTSD after physical class

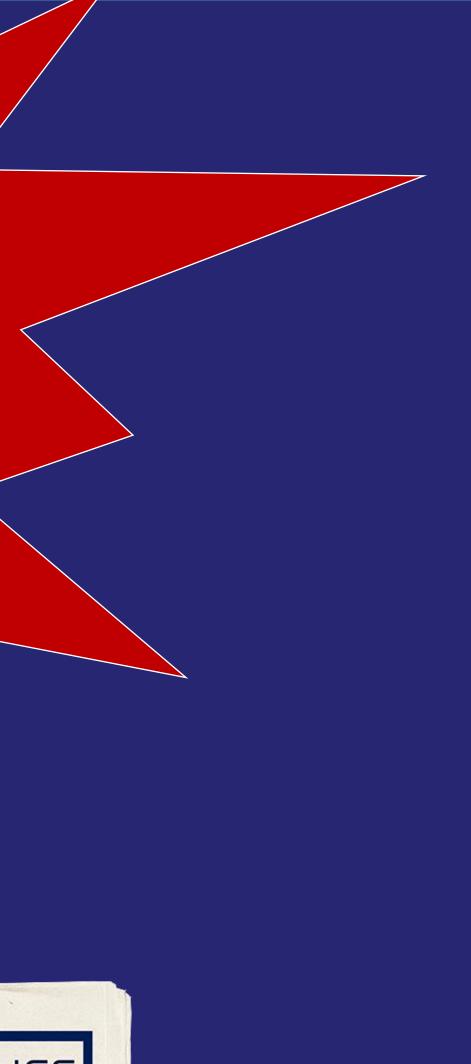




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# **Poster properties**

- Posters and oral presentations have equal scientific and academic value
- conference

# **Professional findings**

What attracts you to a poster?

Readability 2





Use the QR code to assess the posters via the validated

## Johan Botes and Hanneke Brits

UNIVERSITY OF THE FREE STATE UNIVERSITEIT VAN DIE VRYSTAAT YUNIVESITHI YA FREISTATA



• Posters ensure visual communication throughout the

• E-posters offer the advantage of multi-media inclusion • Posters offer an excellent opportunity for networking

Space

# **Problem and Process**

What are the attributes of an effective and powerful scientific poster?

10 Experts in poster assessments Opinions on assessment • Evaluation of 4 purposefully designed posters with • A validated poster assessment tool • Voluntary participation and ethics approval

## What do you consider most important in a poster?

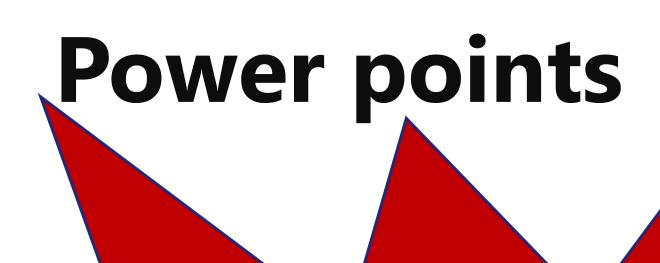
Clear message

Visual Attraction

Good structure

Quality visuals/graphs

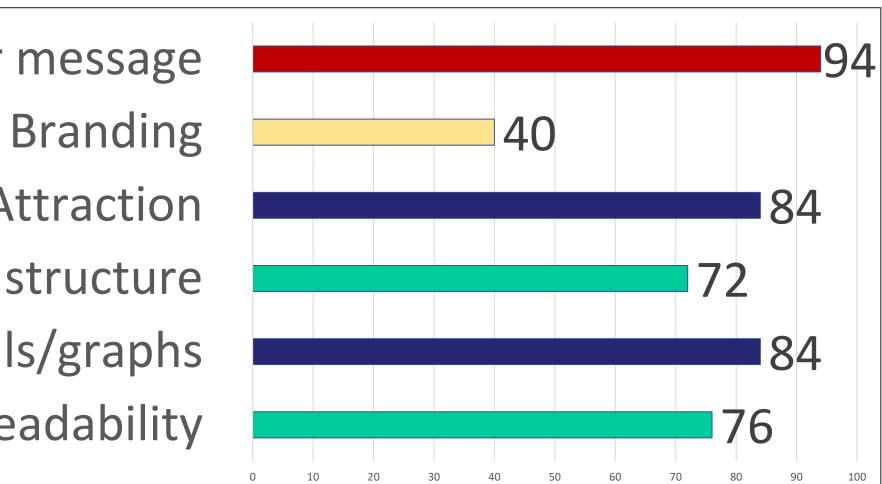
Readability



Aesthetics Graphics



 Leave them with a clear message



## Attract them with your topic, colour and visuals

## • Give them a balance between text, graphics and aesthetics

presenting presenting poseture

### #Feesmustfall2016: Student experiences and performance

Hanneke Brits and Johan Botes University of the Free State

#### Background

Medical students are under immense academic stress. Campus unrest can contribute to stress and influence academic performance, social behaviour and emotional stability.

In mid-August 2016, the Minister of Higher Education announced a maximum fee increase of 8% for universities. Within days, students at most universities participated in the #FMF2016 campaign. #FMF2016 resulted in violent protests and the closure of most SA universities

#### Aim and objectives

study aimed to determine the perceptions and measured effect of the #FMF2016 protests on students directly affected by the protest.

Objectives included:

- The opinions of the students
- The stress levels of the students
- The effect on academic performance

#### 120 out of 138 affected students participated.

Demographic data Males and females were equally distributed Ages varied between 20 and 28, with a mean age of 22.

Post-traumatic stress disorder 12,7% of students screened positive for PTSD after the violence.

#### Table 1: Students' responses on the protests

Student responses	%
I supported the cause of the protests	39.50
I felt pressurised to participate in the protests	29.20
I partook in the protests	5.80
I felt that the faculty supported us well	50.80

#### Discussion

Although #FMF2016 did not directly negatively affect academic performance, PTSD and increased alcohol consumption may have long-term effects on individuals in this already stressful environment.

The student opinions on the protests may assist to plan better for future disruptions

Results

Felt angry towards UFS for cl alt that protests negatively affecte Felt unsafe during the disrug Consumed more al Started smoking or smoked more 7% 0% 20% 40% 60% 80% 100%

Figure 1: Students' perceived effect on Academics, safety and behaviour

		2015	2016	2017
2	Mean %	64.40	63.20	64.70
3rd year	Failure %	5.20	6.70	3.40
Athucan	Mean %	67.30	68.00	67.10
4th year	Failure %	1.90	1.90	5.90

### Conclusion

Students felt that #FMF had a negative effect on academic performances and felt unsafe during the protests.

Almost 13% of the students screened positive for PTSD.

Measured academic performance was not negatively affected.

Referencess

0.37 0.14

Method

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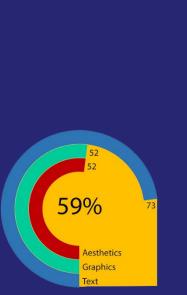
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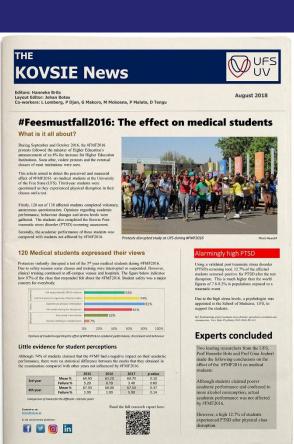
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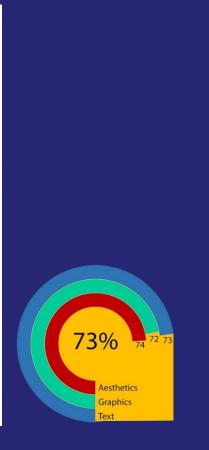
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# **Professional findings**

What attracts you to a poster?

Readability 2





Use the QR code to assess the posters via the validated

## Johan Botes and Hanneke Brits

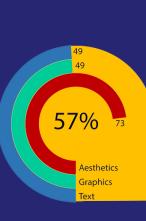
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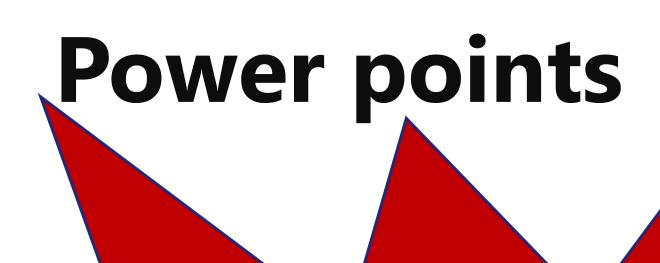
Clear message

Visual Attraction

Good structure

Quality visuals/graphs

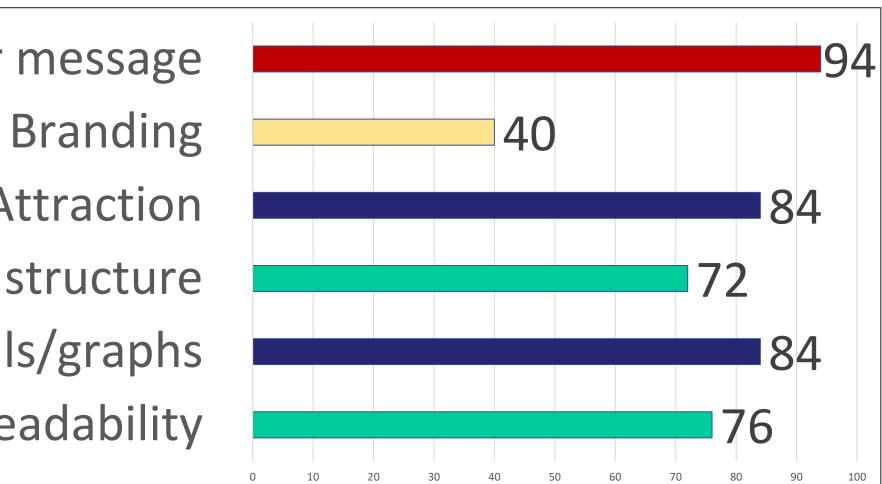
Readability



Aesthetics Graphics



 Leave them with a clear message

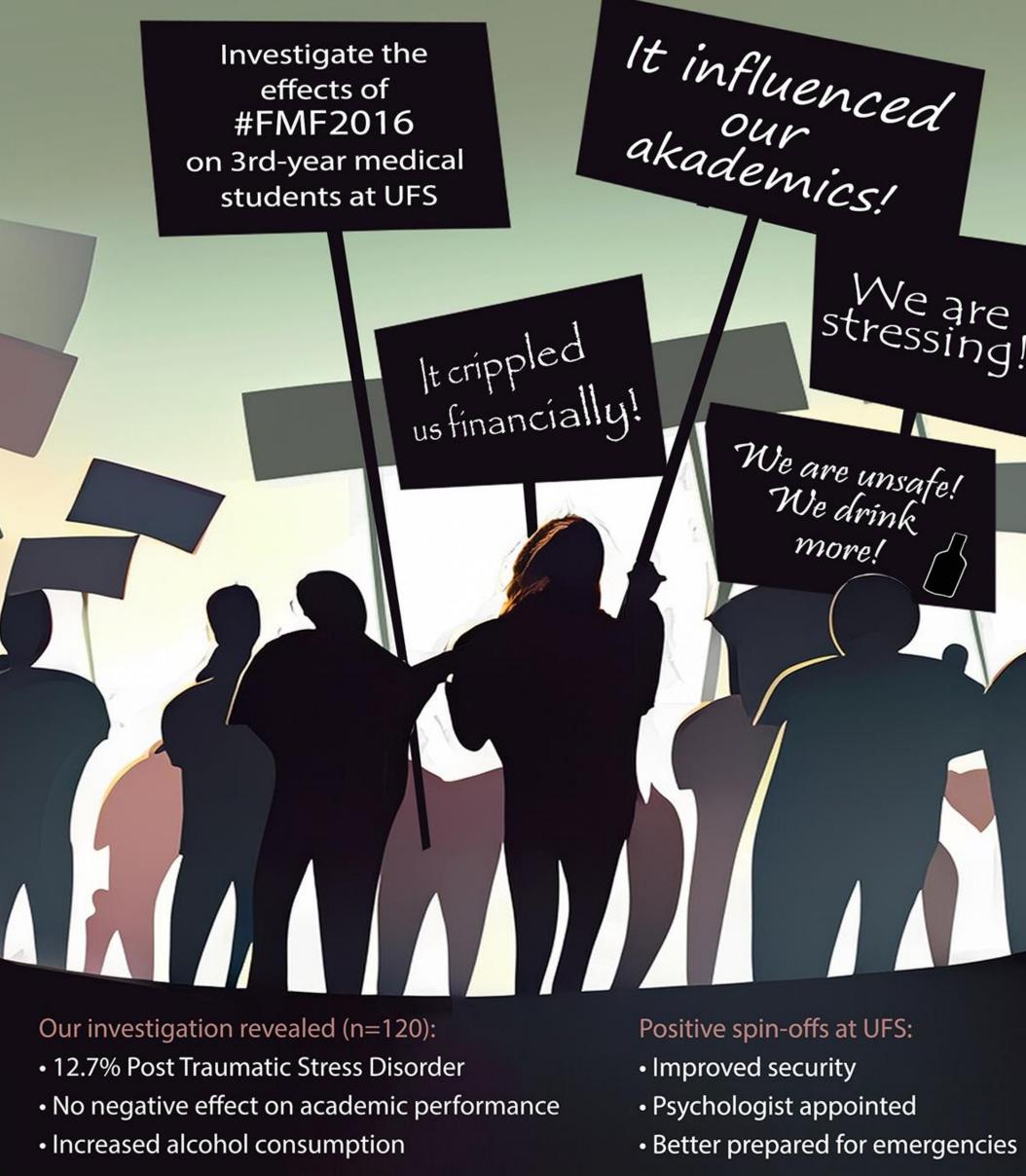


## Attract them with your topic, colour and visuals

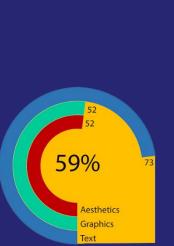
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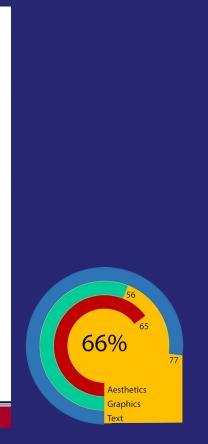


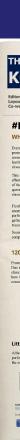


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	#Feesmus	tfall2	016:				
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	Hanneke Brits a						
	University of the	ne Free S	State				
Background	Aim and o	bjectives			Met	hod	
Medical students are under immense academic stress. Campus unrest can contribute to stress and influence academic performance, social behaviour	This study aimed perceptions and mea #FMF2016 protests of affected by the protest	sured effect	of the	obtair anon	ymous que:	g a stionnaire.	voluntary,
and emotional stability.	Objectives included:			<ol> <li>Screet disord</li> </ol>	ening for P der (PTSD)	ost-trauma was perfor	tic stress med.
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	Resu	ilts					
120 out of 138 affected students participated.							
Demographic data		8	ngry towards UFS fo to negatively affecte			54%	74%
Males and females were equally distributed		A	is negativoly affecto erienced physical int			_	81%
Ages varied between 20 and 28, with a mean	age of 22.	Varg Fell	unsafe during the di			64%	
Post-traumatic stress disorder		aniou 10	Consumed mor		32%		
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		Figure 1: Stud	onts' perceived e	flect on Acader	mics, safety an	d behaviour	
Table 1: Students' responses on the protests		Table 2: Mark	comparison of st	udents affected	and unaffecte	d by the protes	da
Student responses	×			2015	2016	2017	p-value
I supported the cause of the protests	39.50	3rd year	Mean %	64.40	63.20	64.70	0.10
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Discussion	Conclu	ision			Refere	encess	
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Hanneke Brits | Johan Botes







# **Poster properties**

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# **Professional findings**

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Readability



Aesthetics Graphics Text



Use the QR code to assess the posters via the validated

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## **Graphics/visuals**

Space

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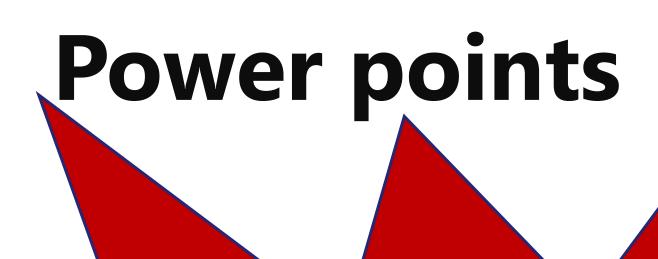
Clear message Branding

Visual Attraction

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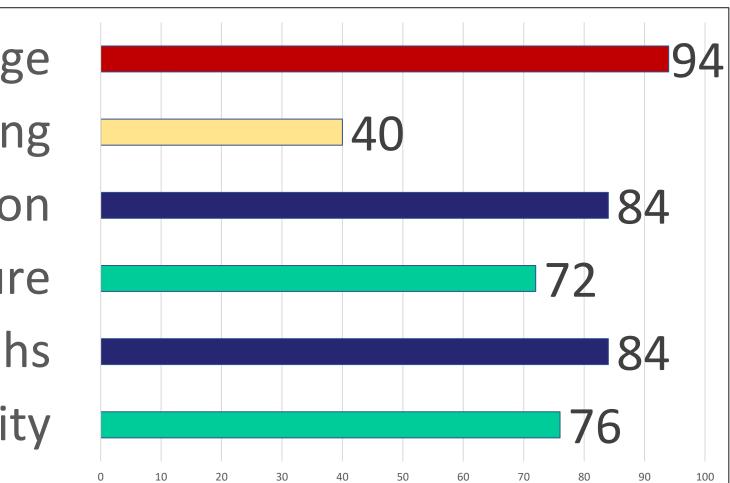
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