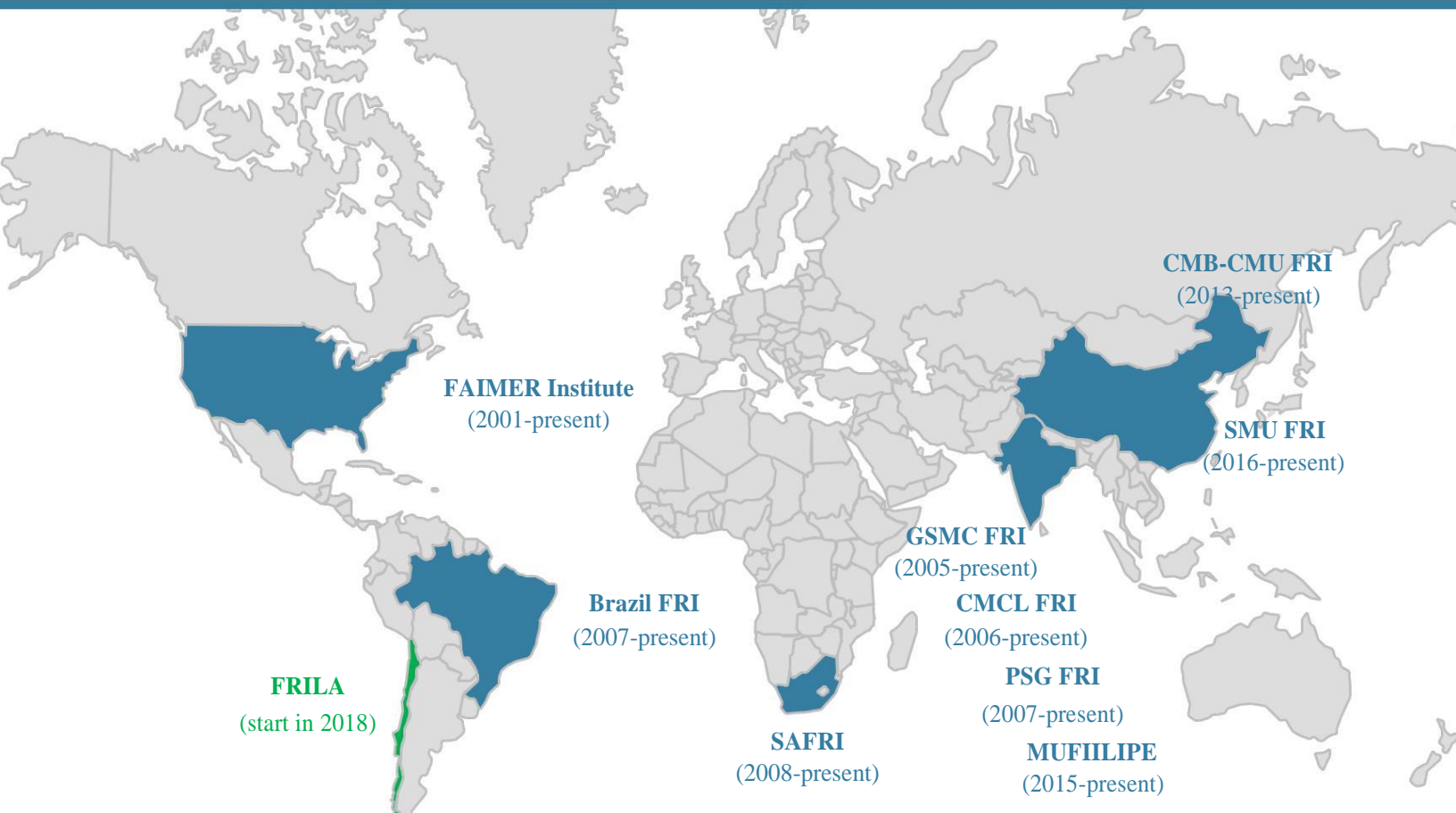

FAIMER Education Evaluation Report

Prepared for:

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Applications Overview

Currently, there are in total 3849 applications across all fellowship programs. For the 2017 program year, there are in total 406 applications, which was decreased by 44 from 2016. As shown in **Table 1**, compared to 2016, in 2017 there is a decrease in number of applications for Brazil (-17%), GSMC (-25%), MUFILIPLE (-37%), and PSG (-22%). Number of Applications in 2017 increased for CMB-CMU (35%), CMCL (15%) and SAFRI (13%). There was no big change in number of applications for SMU and FAIMER Institute from 2016 to 2017. **Table 2** shows the number of Fellows, as percentage of applicants from 2016 to 2017 program across all fellowship programs.

Table 1: Number of applications: 2016 and 2017

▲ increased from 2016 ▼ decreased from 2016 ► similar to 2016

	Brazil	CMB-CMU	CMCL	GSMC	MUFIL-IPE	PSG	SAFRI	SMU	FAIMER Institute
2016	108	23	54	48	30	77	30	30	50*
2017	90	31	62	36	19	60	34	28	46
Change	▼-17%	▲35%	▲15%	▼-25%	▼-37%	▼-22%	▲13%	►-7%	►-8%

Table 2: Percent acceptance and number of Fellows, 2016 and 2017

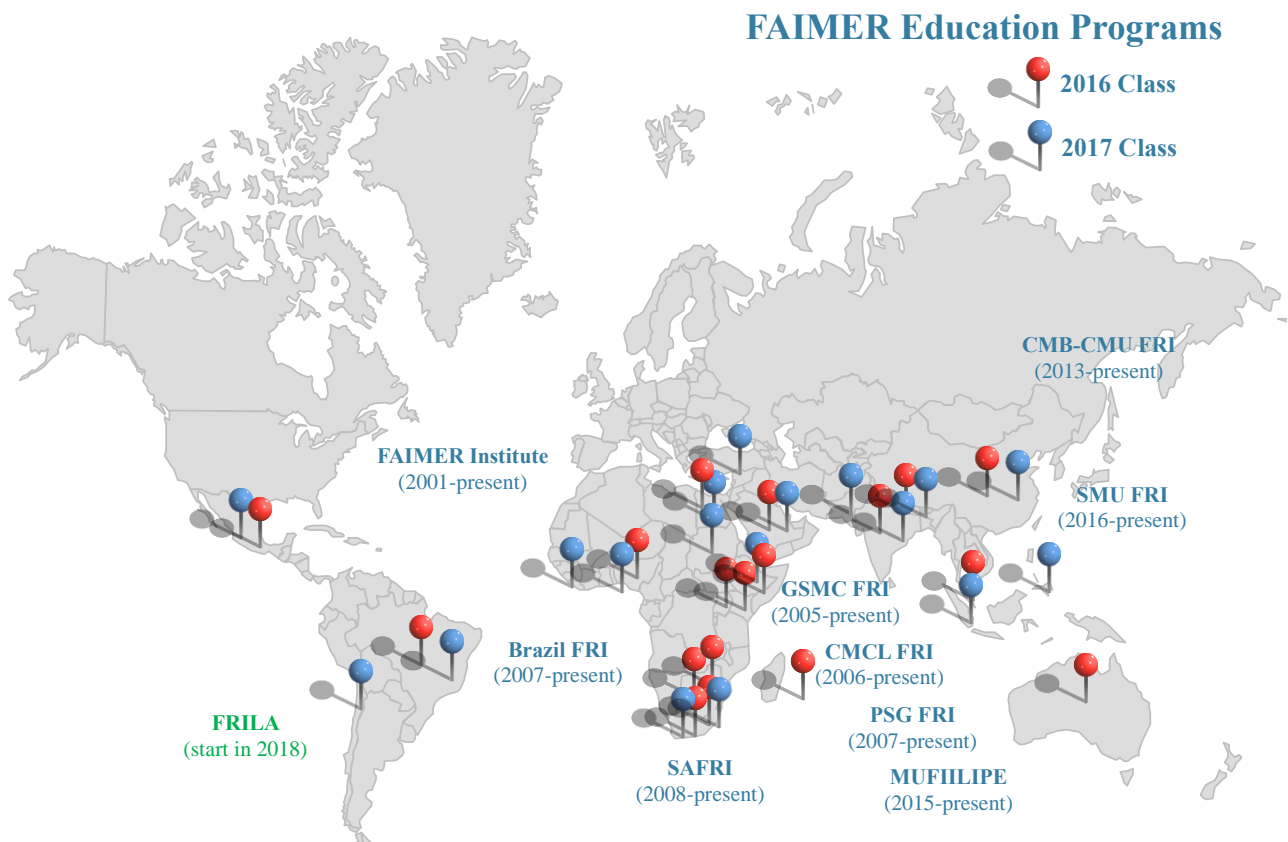
	Brazil	CMB-CMU	CMCL	GSMC	MUFIL-IPE	PSG	SAFRI	SMU	FAIMER Institute
	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)
2016	30 (39)	91(21)	30 (16)	33(16)	77 (23)	21 (16)	60 (18)	63 (19)	26 (13)*
2017	25 (40)	65 (20)	27 (17)	44 (16)	100 (19)	27 (16)	44 (15)	71 (20)	35 (16)

*Number of applications for 2015 FAIMER Institute. There is no 2016 class for the FAIMER Institute.

Fellows' Country Distribution

Currently, there are 1465 FAIMER Fellows¹ (Male=587, Female=878) enrolled in or have completed a fellowship program. **Figure 1** below shows the geographic location of 2016 class (N=181) and 2017 class (N=179) across all fellowship programs. Top countries in which Fellows reside are India (2016 class N=68; 2017 class N=61), China (2016 class N=40; 2017 class N=42), and Brazil (2016 class N=39; 2017 class N=40). This is connected to the fact that there are four Regional Institutes in India, two Regional Institutes in China, and one Regional Institute in Brazil. The target class size at each Brazil FRI (N=35~40) is larger than that at other Regional Institutes (N=16~25). Compared to FAIMER Institute, Fellows at Regional Institutes are more likely to reside in the same country or region where the Regional Institutes are located, thus we see a larger Fellow population density in India, China and Brazil. Comparatively, there is a lower density but broader distribution of Fellows in the Africa continent and Western Asia. SAFRI, located in South Africa, accepts applicants from all countries in Africa continent.

Figure 1: Country distribution: all FAIMER Fellows 2016, 2017

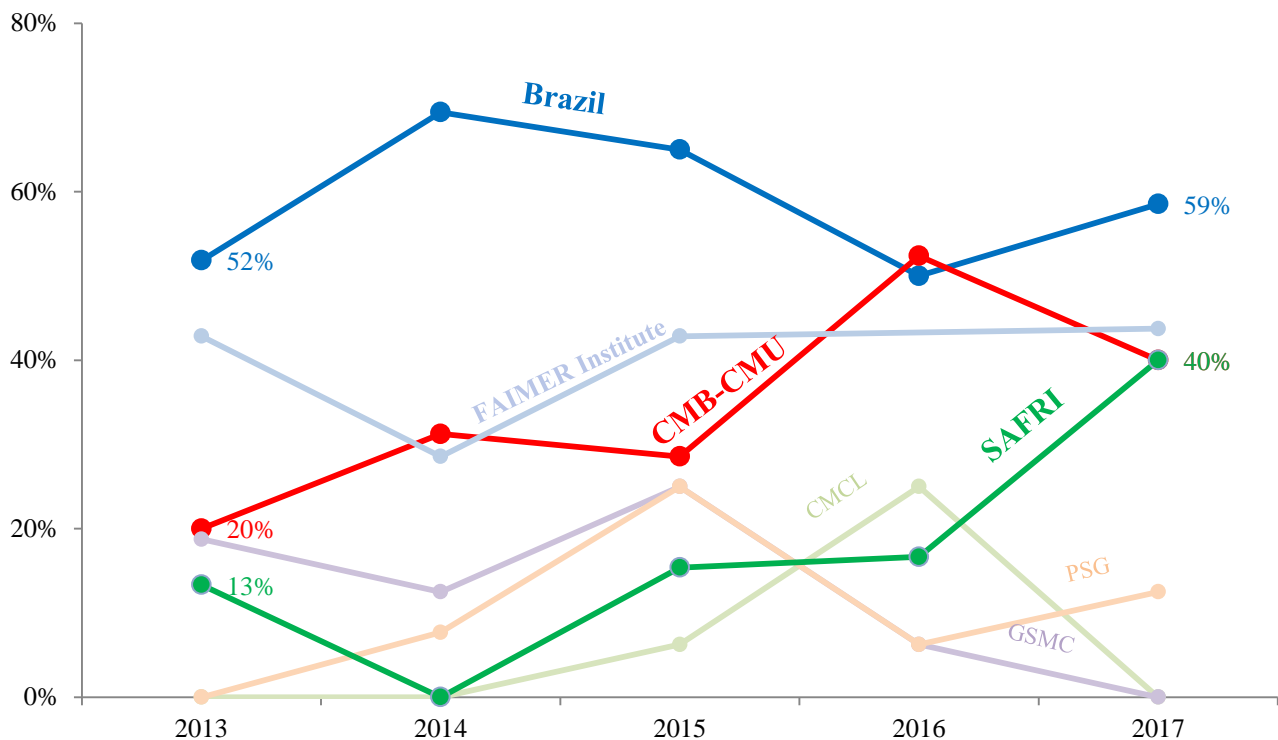


¹Six FAIMER Fellows have completed more than one fellowship program.

Fellows' Professional Experience

The FAIMER Fellowship programs differ from one another with respect to the mix of professional experience and background of their Fellow populations. **Figure 2** shows that percentage of Fellows with a Ph.D. degree at fellowship enrollment in the past 5 years. In this analysis of the past five years of data, we excluded Regional Institutes that started after 2013, i.e. MUFILIFE and SMU. Findings show that Brazil has the highest percentage of Fellows with Ph.D. in each class ($\geq 50\%$), and there has been a steady increase of Ph.D. degree holders in each SAFRI class from 2013 (13%) to 2017 (40%). Similar trend can also be observed in CMB-CMU Regional Institute, where Ph.D. degree holders range from 20% in the 2013 class to 40% in the 2017 class. The findings imply that the curriculum for each fellowship program should fit the experiential need and Fellows with higher professional degrees.

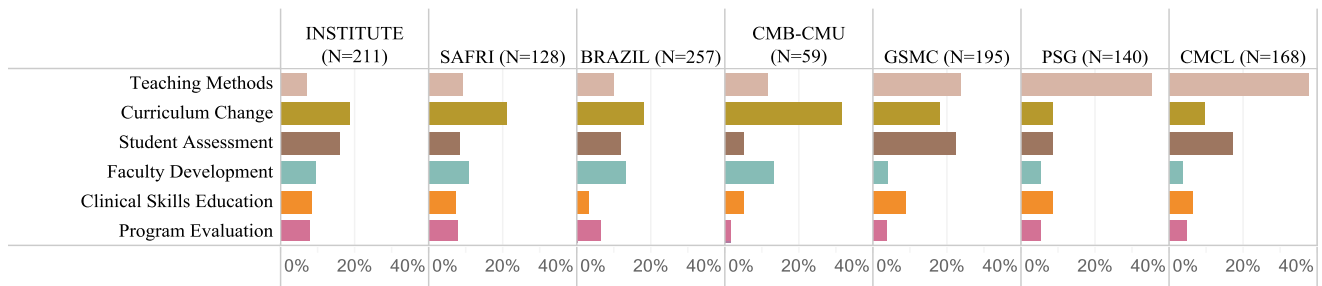
Figure 2: Percentage of Fellows with a Ph.D. Degree at fellowship enrollment from 2013 to 2017



Fellows' FAIMER Innovation Projects Focus

FAIMER Education Innovation Projects are central to the FAIMER fellowship programs, as learning experience and opportunities to improve educational practices and policies. **Figure 3** shows the top six focuses of Fellows' FAIMER Innovation Projects through 2015. Across all programs, top project focuses include Teaching Methods (18%), Curriculum Change (17%), Student Assessment (14%), Faculty Development (8%), Clinical Skills Education (7%), and Program Evaluation (6%). Other project focuses vary from one program to another.

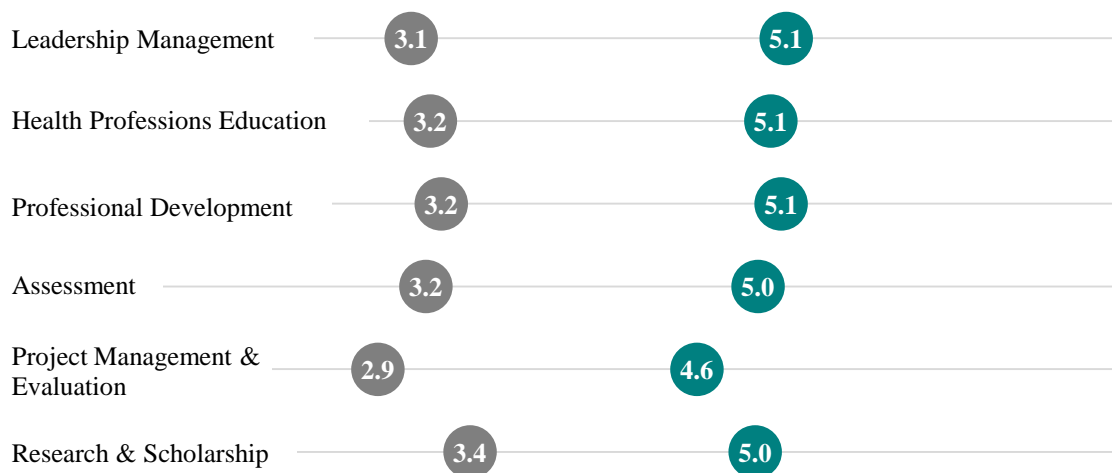
Figure 3: Frequency of project topic focus by fellowship program, through 2015 program year



Retrospective Pre/Post Rating

Fellows complete a retrospective self-rating of their knowledge and skills in various topic areas in Health Professions Education, before and after joining FAIMER fellowship programs that they complete at the end of the second residential session (Session 3). The rating scale is from 1 = No skills to 7 = Expert. **Figure 4** below show the average Pre and Post rating of knowledge, skills and competence from 2016 class Fellows (N= 121) at Session 3 who responded to the survey across all fellowship programs. Fellows reported a significant increase in knowledge and skill across all domains. Although the degree of variation between Pre rating and Post rating varies from one fellowship program to another, this self-reported increase in knowledge and skills in the HPE topic areas is shared across all fellowship programs.

Figure 4: Retrospective Pre and Post Average Rating For Knowledge, Skills and Competence of 2016 Class at Session 3



Paired T-Test results (one-tailed) show that there is a significant increase in the Retrospective Post rating compared to the Retrospective Pre rating for all knowledge domains.

Sentiment Analysis

Sentiment analysis² – otherwise known as opinion mining – is the process of determining the emotional tone behind a series of words, and it is used to gain an understanding of the underlying latent attitudes, opinions and emotions. Emotional readiness, strongly associated with motivation³, is supported through positive learning atmosphere. We used open-ended question responses from our Daily Session Evaluation surveys in the analysis. Our goal is to understand how Fellows perceive the learning atmosphere created at FAIMER, with the assumption that a positive learning atmosphere or environment should be conducive learning outcomes. We piloted this method to mine the free text responses



by FAIMER Institute 2017 class during Session 1, and 2015 Class during Session 3. Textual information was divided into individual words and then matched with emotional tones in National Research Council (Canada) World-Emotion Association Lexicon (also known as EmoLex⁴). Findings indicate that FAIMER Institute has created a positive and enjoyable experience for Fellows, as positive opinions (Trust, Anticipation, and Joy) are dominantly extracted from their responses. A glance at **Figure 5** indicates that positive latent emotions related to trust, anticipation and joy were high compared to negative latent emotions such as fear, sadness and disgust. Similar patterns are shared across all curriculum themes of FAIMER Institute.

(see **Figure 5** on following page)

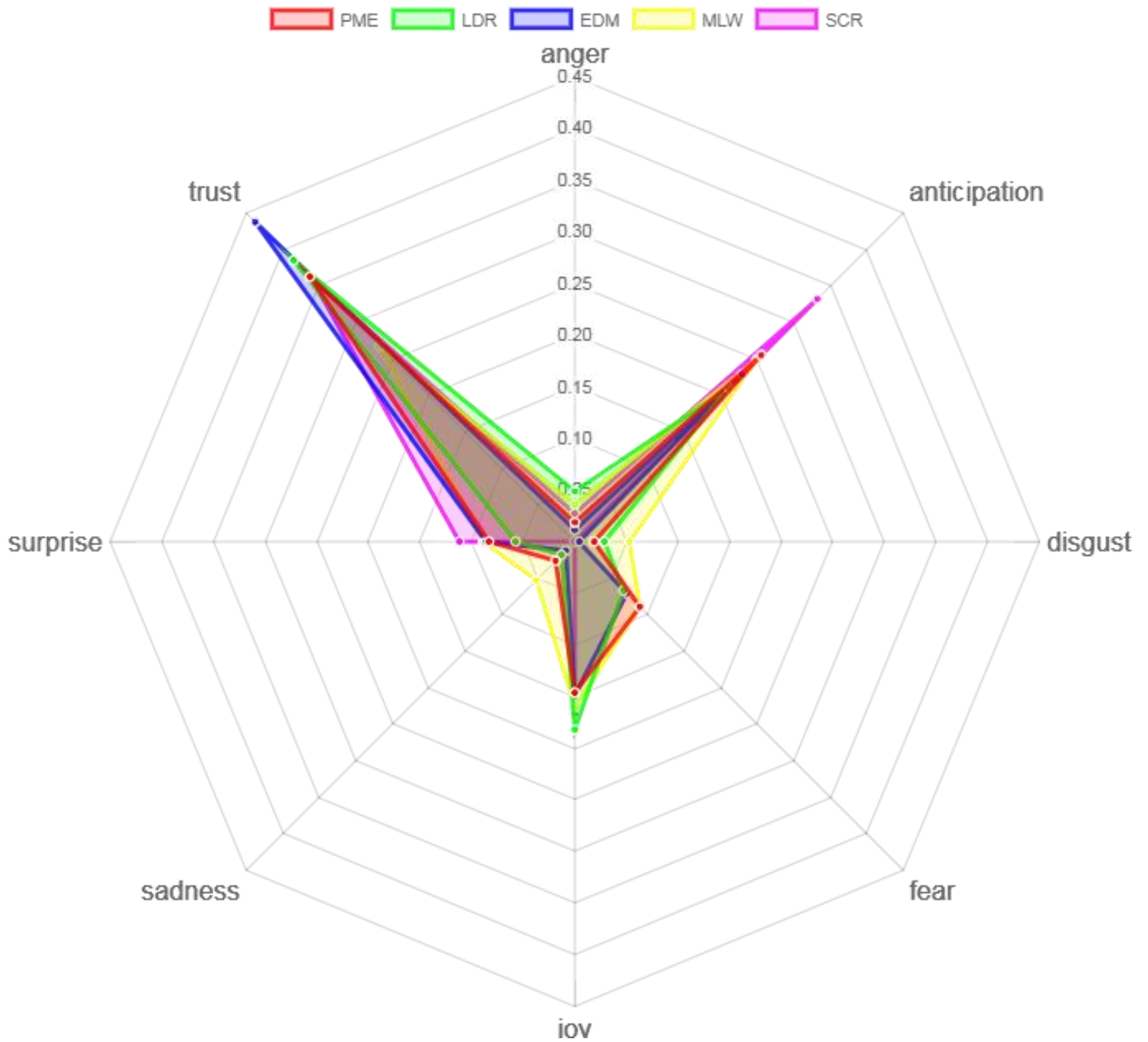
² <https://www.brandwatch.com/blog/understanding-sentiment-analysis/>

³ Bastable, S. Bacorn. (2011). Health professional as educator : principles of teaching and learning. Sudbury, MA: Jones & Bartlett Learning.

⁴ <http://saifmohammad.com/WebPages/NRC-Emotion-Lexicon.htm>

Figure 5: Sentiment Analysis of open-ended question responses (Institute 2017, 2018)

2017 PHL Class (Year 1)



2015 PHL Class (Year 2)

