

Supplemental Materials

Results from a Two-Step Cluster Analysis using Kelly, et al. STEM Professional Identity Model (Kelly et al. 2020)

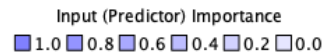
Model Summary

Algorithm	TwoStep
Inputs	5
Clusters	5

Cluster Quality



Clusters

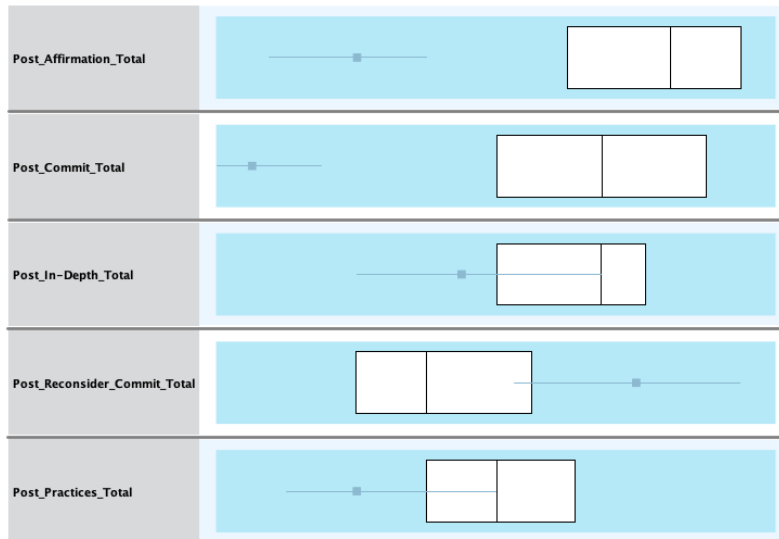


Cluster	5	3	4	2	1
Label	Achievement	Undefined	Foreclosure	Moratorium	Moratorium
Description					
Size	35.6% (128)	27.8% (100)	15.8% (57)	13.3% (48)	7.5% (27)
Inputs	Post_Affirmation_Total	Post_Affirmation_Total	Post_Affirmation_Total	Post_Affirmation_Total	Post_Affirmation_Total
	Post_Commit_Total 18.09	Post_Commit_Total 14.56	Post_Commit_Total 14.72	Post_Commit_Total 10.81	Post_Commit_Total 5.63
	Post_In-Depth_Total 16.17	Post_In-Depth_Total 15.83	Post_In-Depth_Total 11.53	Post_In-Depth_Total 11.31	Post_In-Depth_Total 10.74
	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total
	Post_Practices_Total 14.03	Post_Practices_Total 11.52	Post_Practices_Total 12.30	Post_Practices_Total 9.06	Post_Practices_Total 9.11

**Cluster 1 – Moratorium**

Cluster Comparison

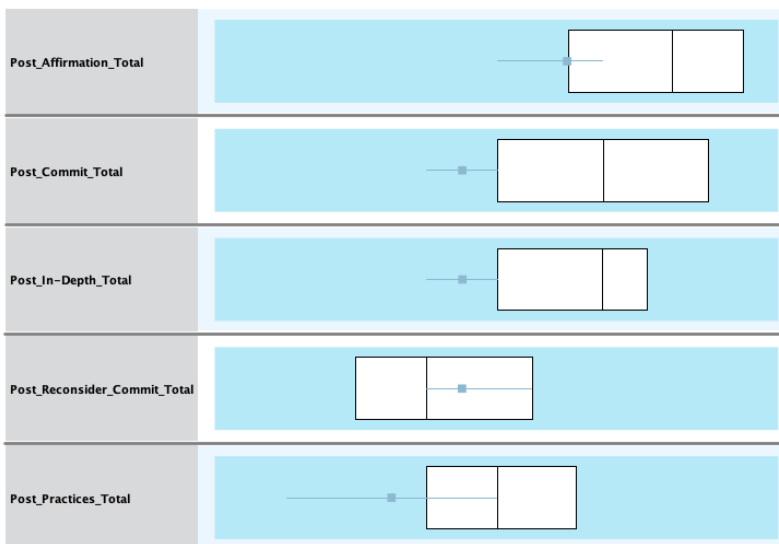
■ Moratorium(1)



**Cluster 2 – Moratorium**

Cluster Comparison

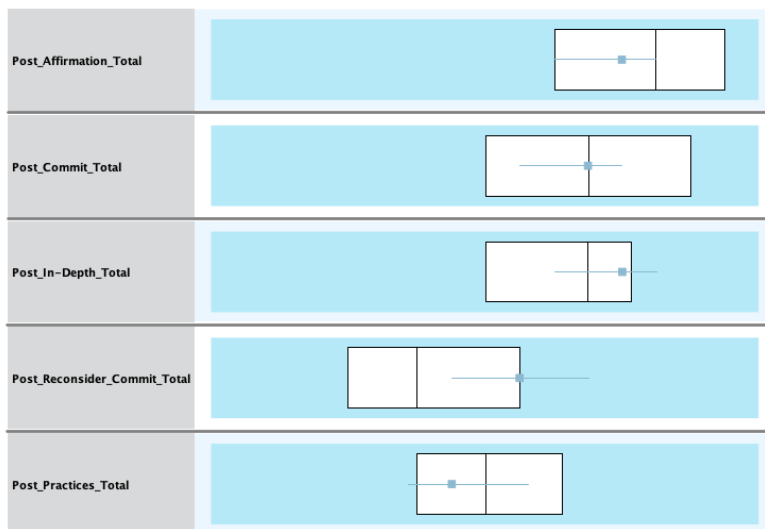
■ Moratorium(2)



**Cluster 3 – Undefined**

Cluster Comparison

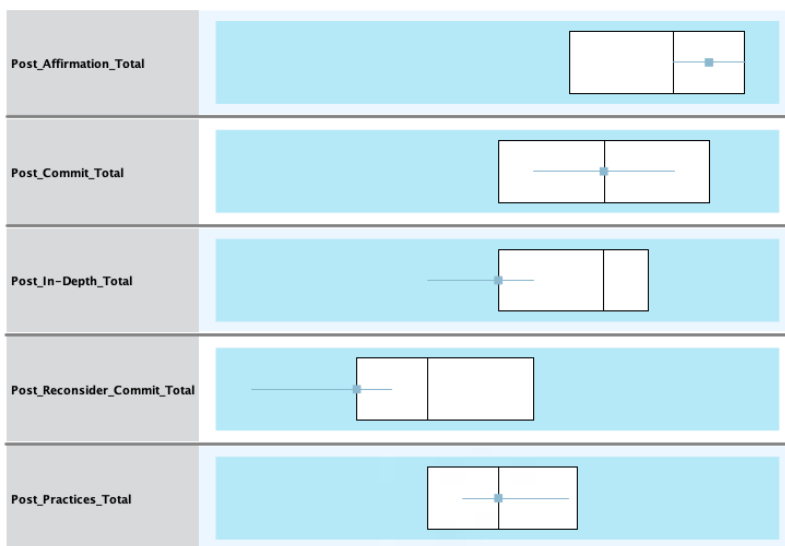
■ Undefined



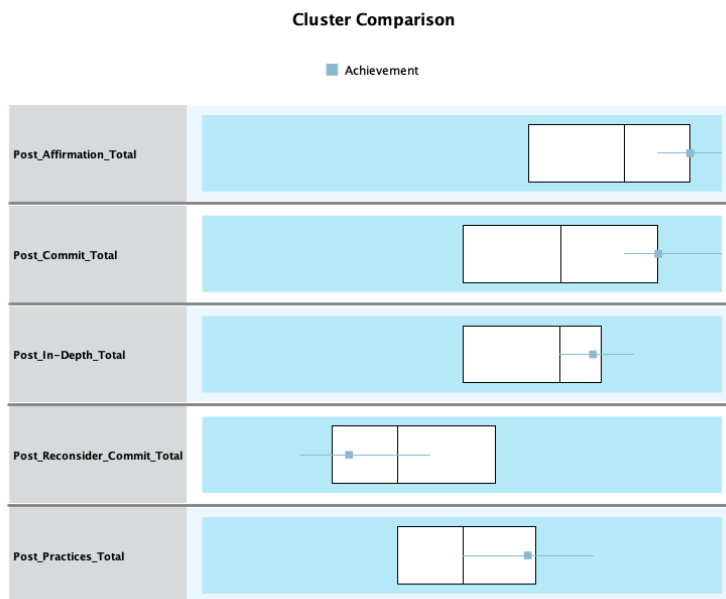
**Cluster 4 – Foreclosure**

Cluster Comparison

■ Foreclosure



Cluster 5 – Achievement

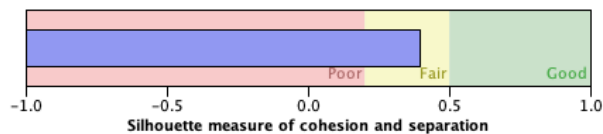


Results from a Two-Step Cluster Analysis using Crocetti et al. STEM Professional Identity Model (Crocetti et al. 2010)

Model Summary

Algorithm	TwoStep
Inputs	3
Clusters	5

Cluster Quality



## Clusters

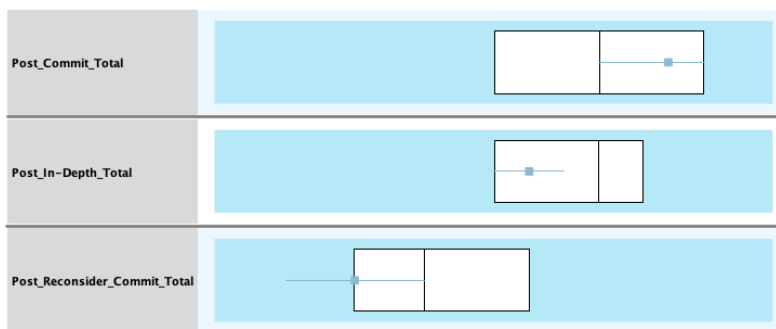
Input (Predictor) Importance  
 ■ 1.0 ■ 0.8 ■ 0.6 ■ 0.4 ■ 0.2 ■ 0.0

Cluster	4	1	5	2	3
Label	Searching Moratorium	Foreclosure	Achievement	Diffuse	Moratorium
Description					
Size	33.3% (120)	20.3% (73)	18.6% (67)	17.2% (62)	10.6% (38)
Inputs	Post_Commit_Total 15.34	Post_Commit_Total 16.95	Post_Commit_Total 18.39	Post_Commit_Total 11.60	Post_Commit_Total 6.63
	Post_In-Depth_Total 16.50	Post_In-Depth_Total 12.53	Post_In-Depth_Total 16.69	Post_In-Depth_Total 11.29	Post_In-Depth_Total 11.32
	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total	Post_Reconsider_Commit_Total

### Cluster 1 – Foreclosure

#### Cluster Comparison

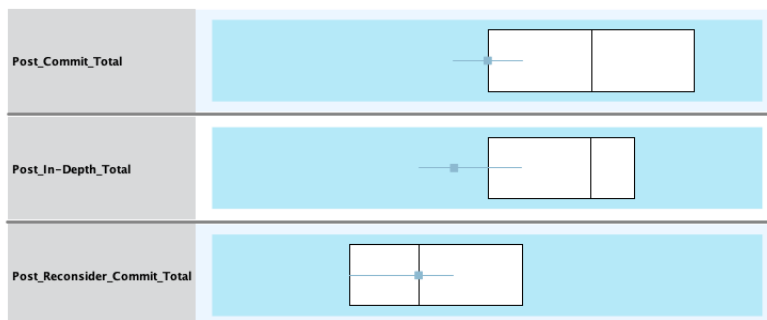
■ Foreclosure



### Cluster 2 – Diffuse

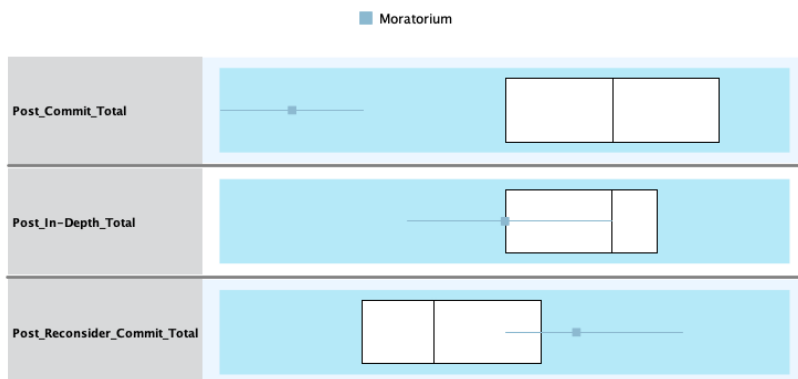
#### Cluster Comparison

■ Diffuse



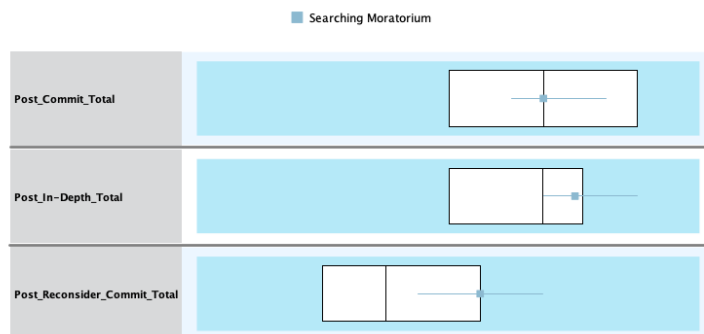
**Cluster 3 – Moratorium**

Cluster Comparison



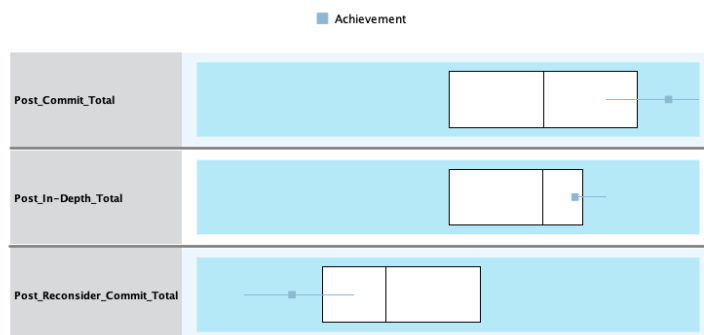
**Cluster 4 – Searching Moratorium**

Cluster Comparison



**Cluster 5 – Achievement**

Cluster Comparison

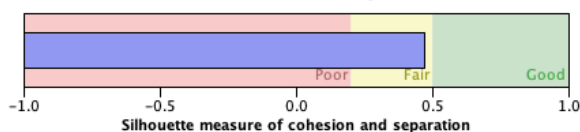


Results from a Two-Step Cluster Analysis using Marcia’s STEM Professional Identity Model (Marcia 1966)

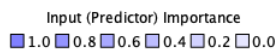
Model Summary

Algorithm	TwoStep
Inputs	2
Clusters	4

Cluster Quality



Clusters

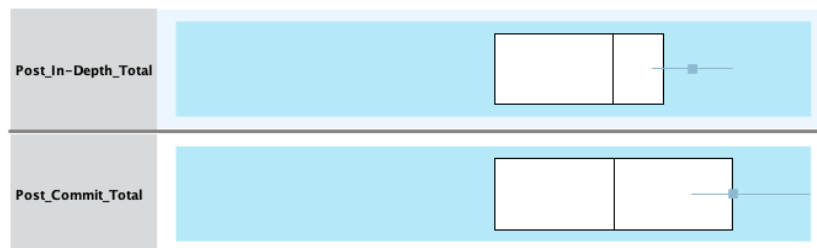


Cluster	1	2	3	4
Label	Achievement	Foreclosure	Moratorium	Diffuse
Description				
Size	32.5% (117)	27.5% (99)	21.4% (77)	18.6% (67)
Inputs	Post_In-Depth_Total 17.02	Post_In-Depth_Total 12.90	Post_In-Depth_Total 15.79	Post_In-Depth_Total 9.84
	Post_Commit_Total 18.12	Post_Commit_Total 16.36	Post_Commit_Total 11.45	Post_Commit_Total 9.84

Cluster 1 – Achievement

Cluster Comparison

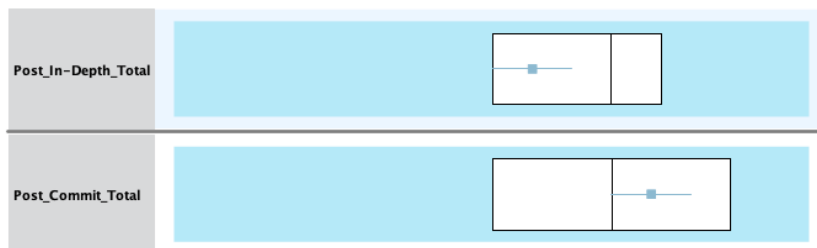
■ Achievement



**Cluster 2 – Foreclosure**

Cluster Comparison

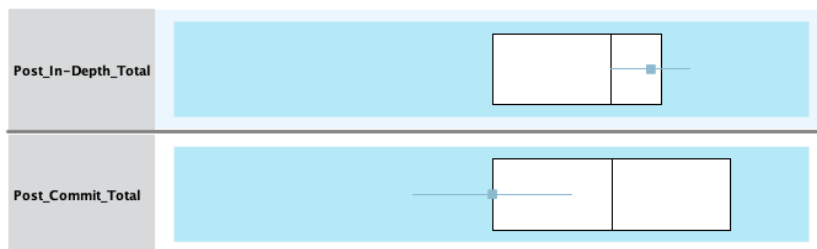
■ Foreclosure



**Cluster 3 – Moratorium**

Cluster Comparison

■ Moratorium



**Cluster 4 – Diffuse**

Cluster Comparison

■ Diffuse

