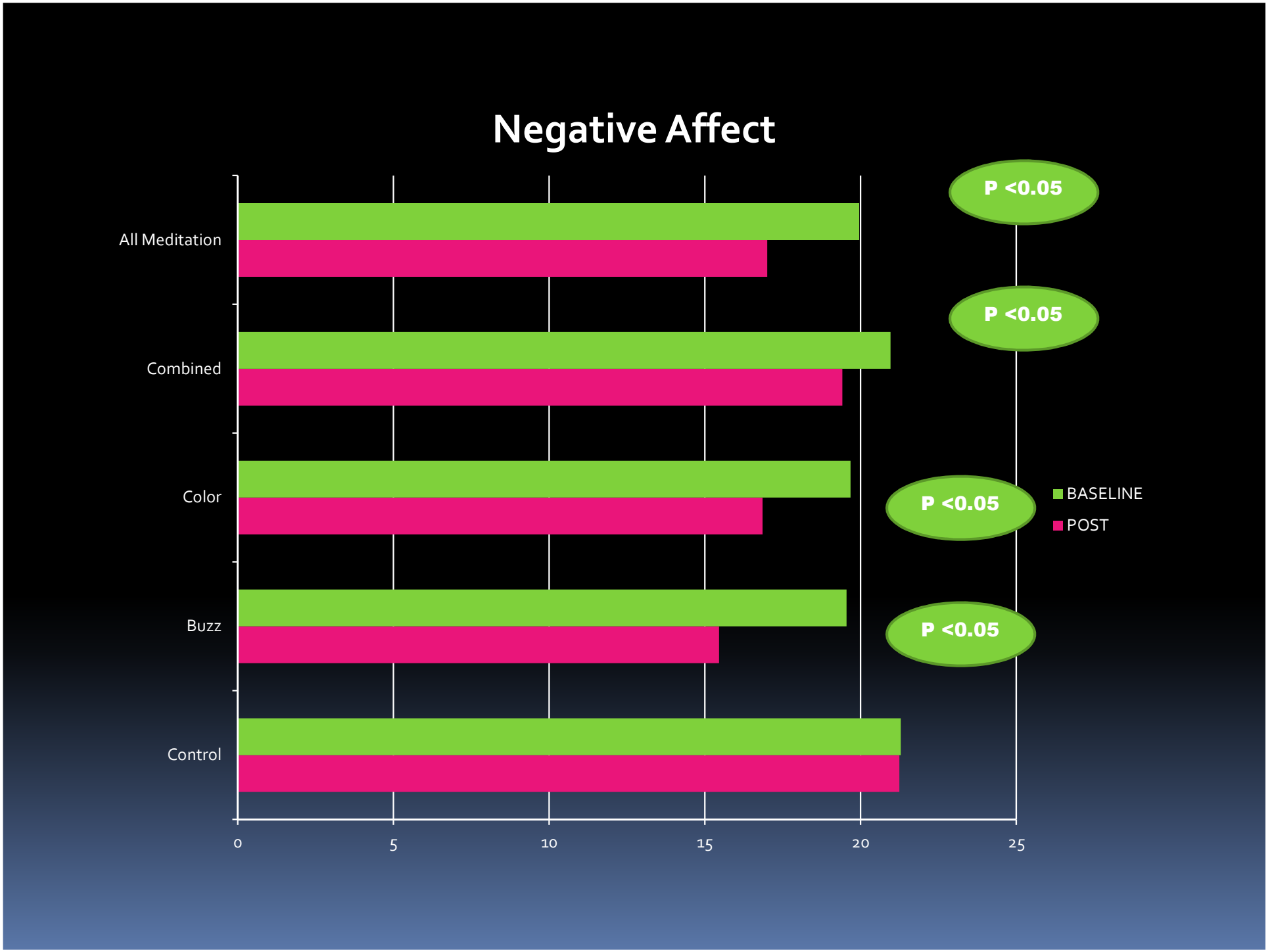
CHANGES IN ATTENTION, COGNITION, MEMORY, AFFECT AND PULMONARY FUNCTION AFTER MAHAPRAAN AND COLOR MEDITATION IN A CONTROLLED STUDY OF COLLEGE STUDENTS

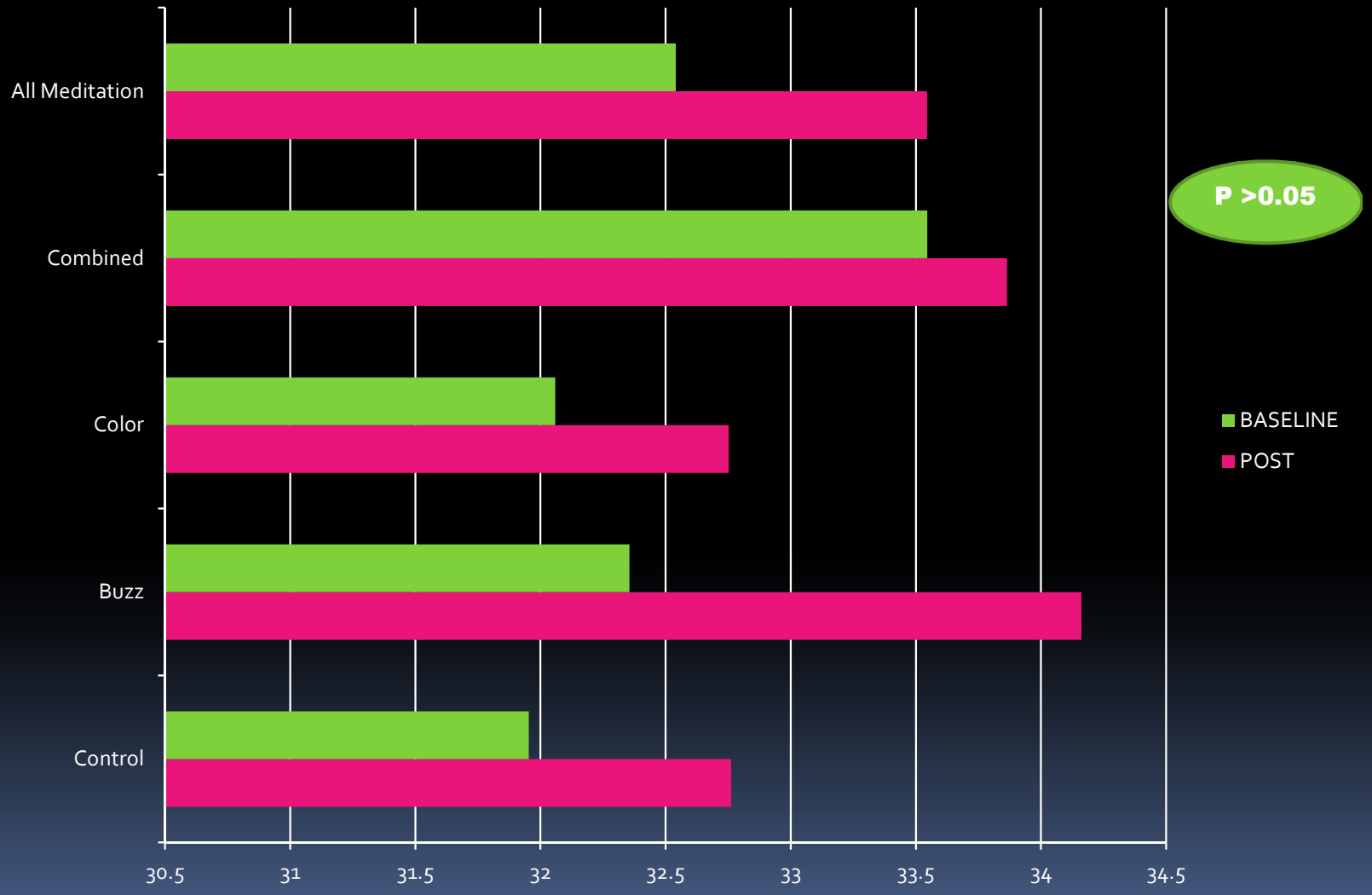
FUNDED BY JERF and FIU


Impulsivity Score
All Meditation
Combined
Color
Buzz
Control
0
0.2
0.4
0.6
0.8
1
1.2
P <0.05
BASELINE
POST

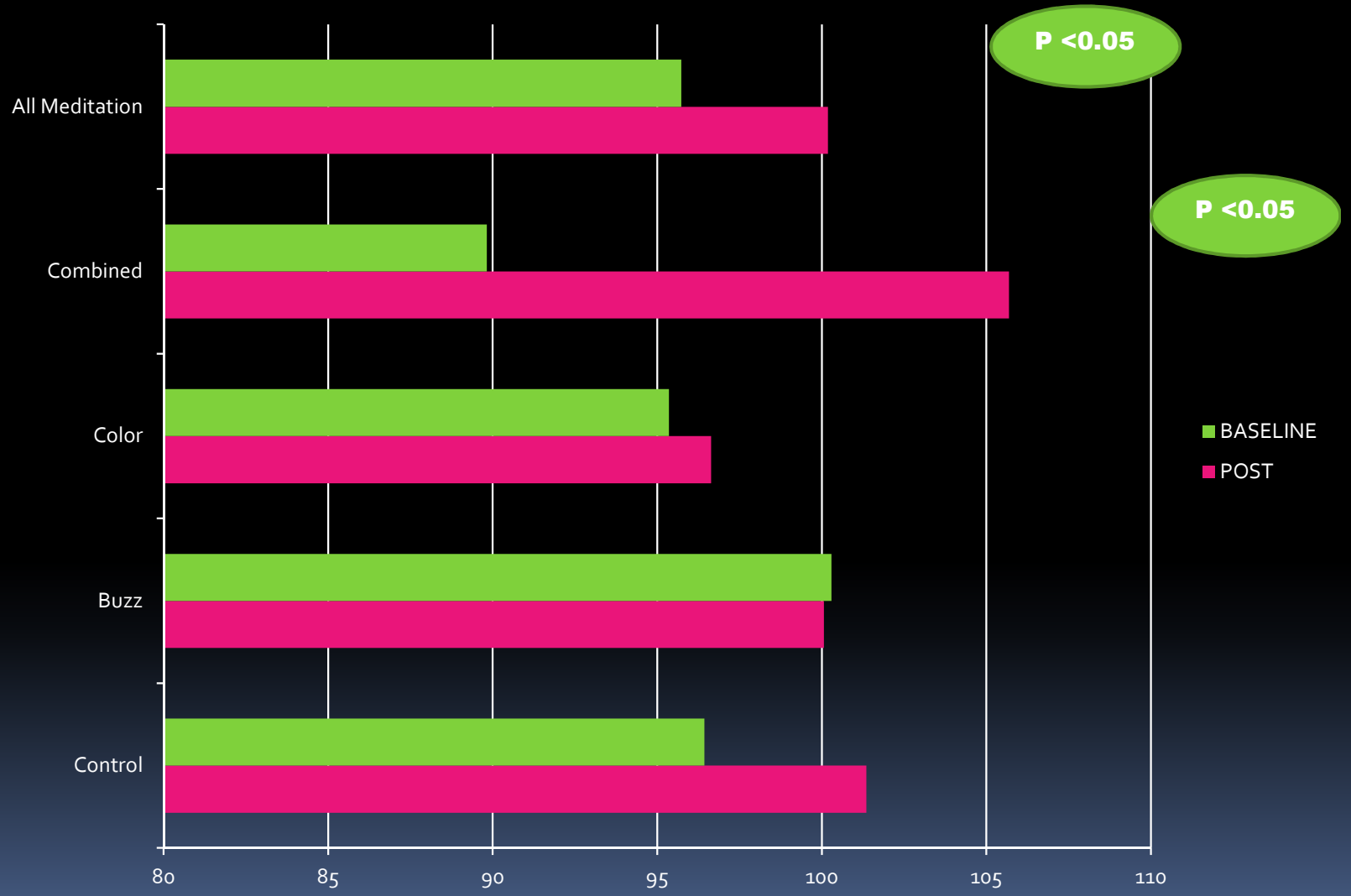

Inattention Score
All Meditation
Combined
Color
Buzz
Control
0
0.5
1
1.5
2
2.5
P >0.05
BASELINE
POST


Negative Affect
All Meditation
Combined
Color
Buzz
Control
0
5
10
15
20
25
P <0.05
P <0.05
P <0.05
P <0.05
BASELINE
POST

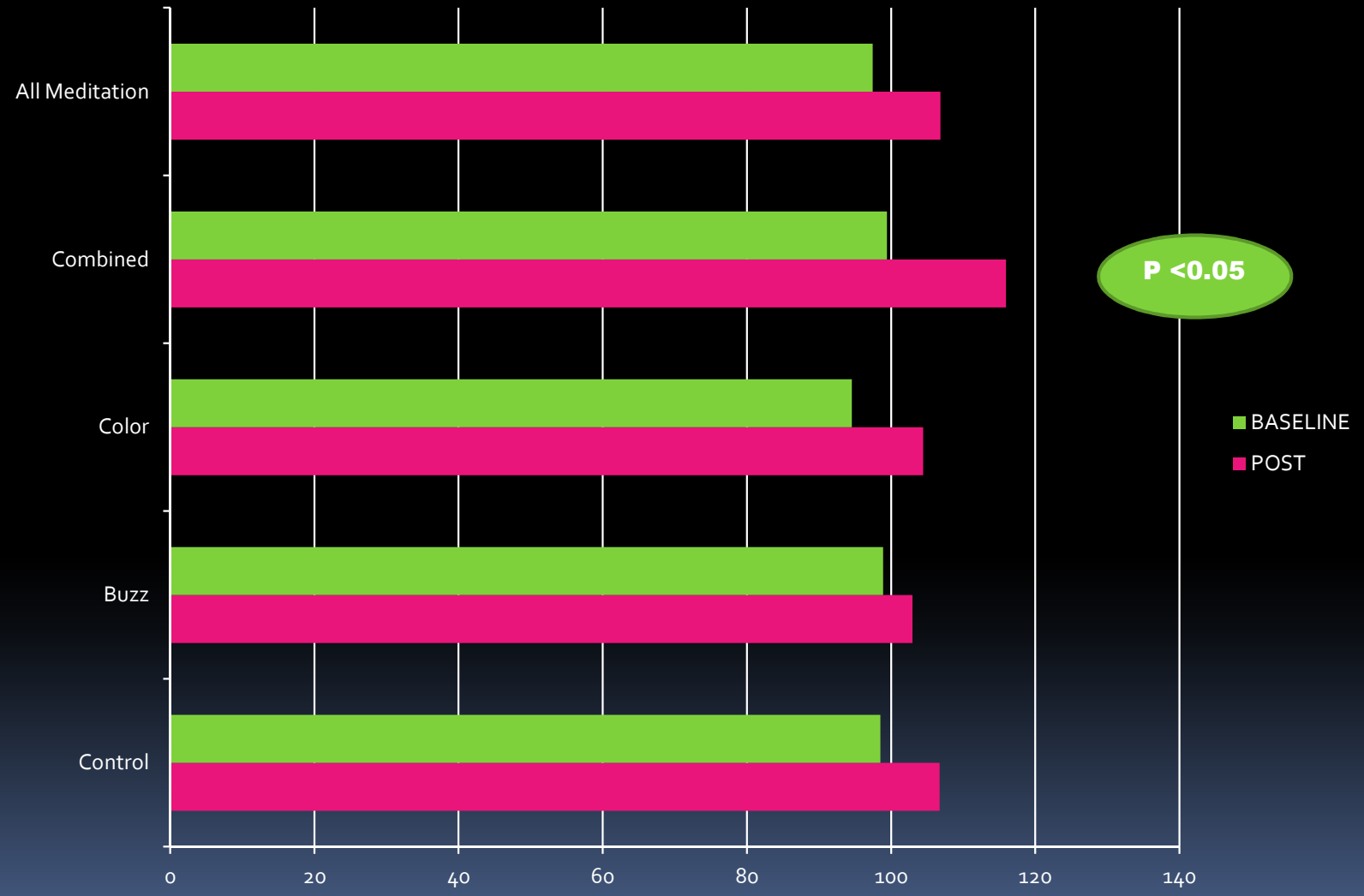
Positive Affect



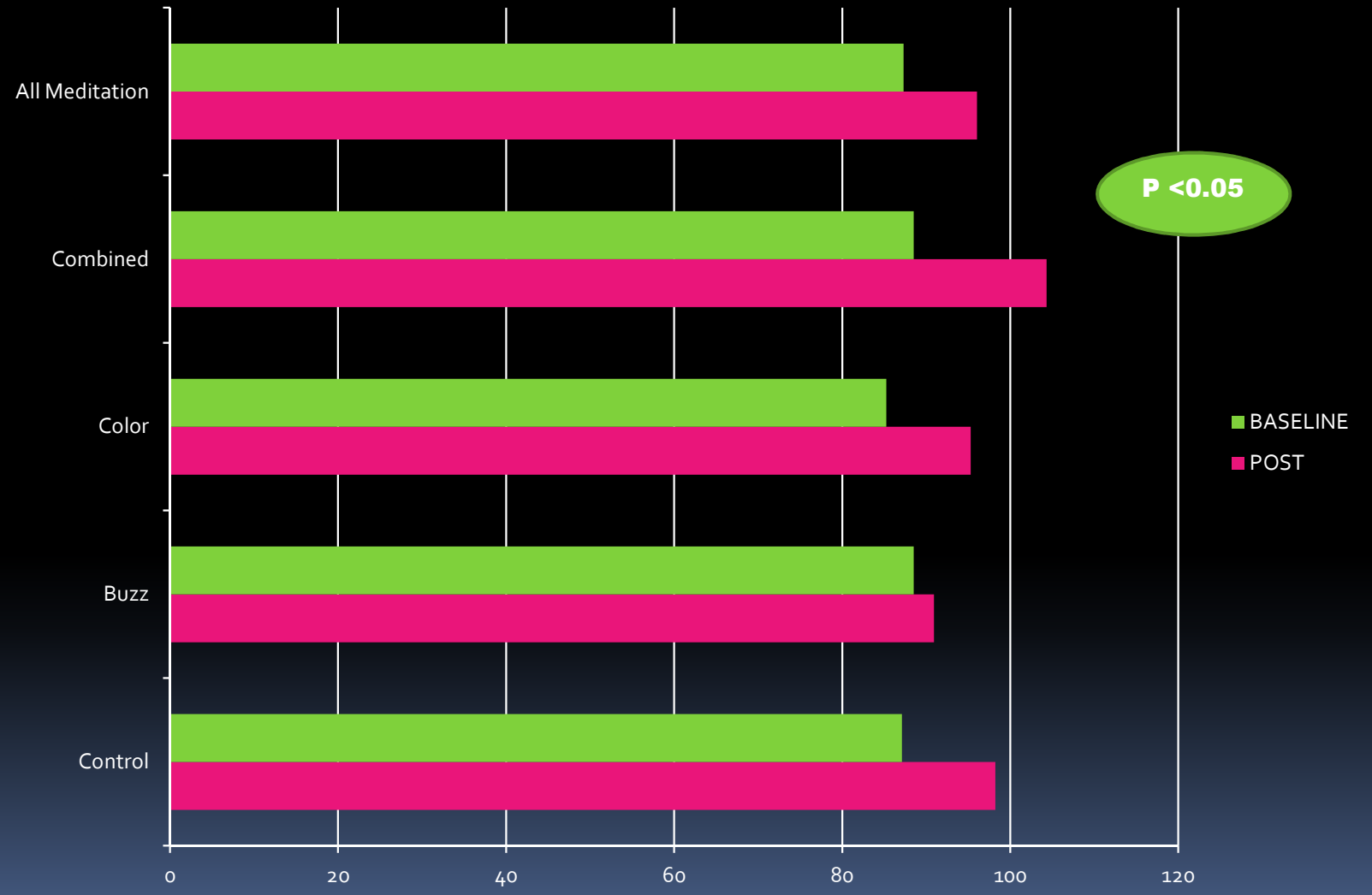
Digital Recall



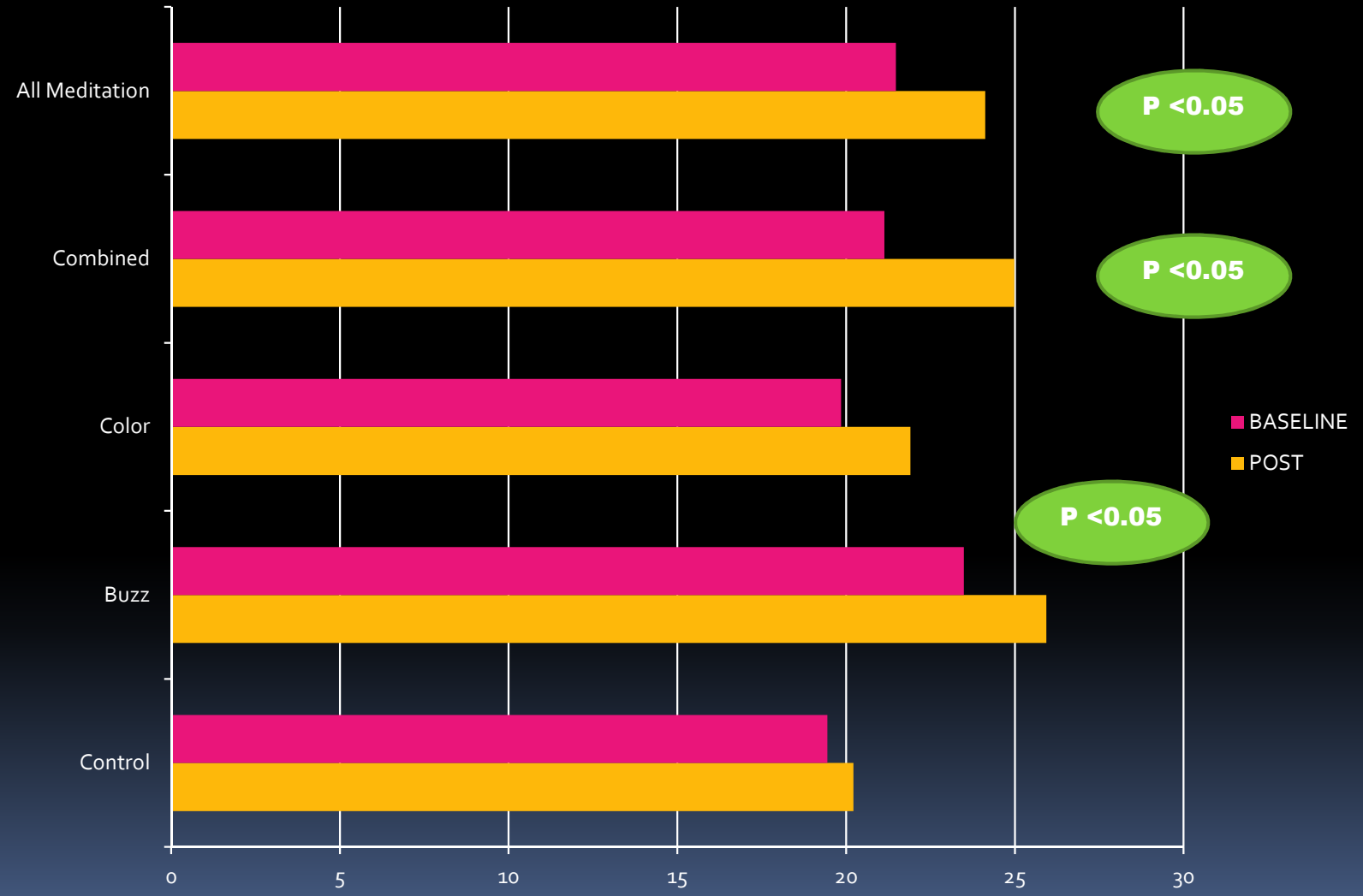
Listening Recall



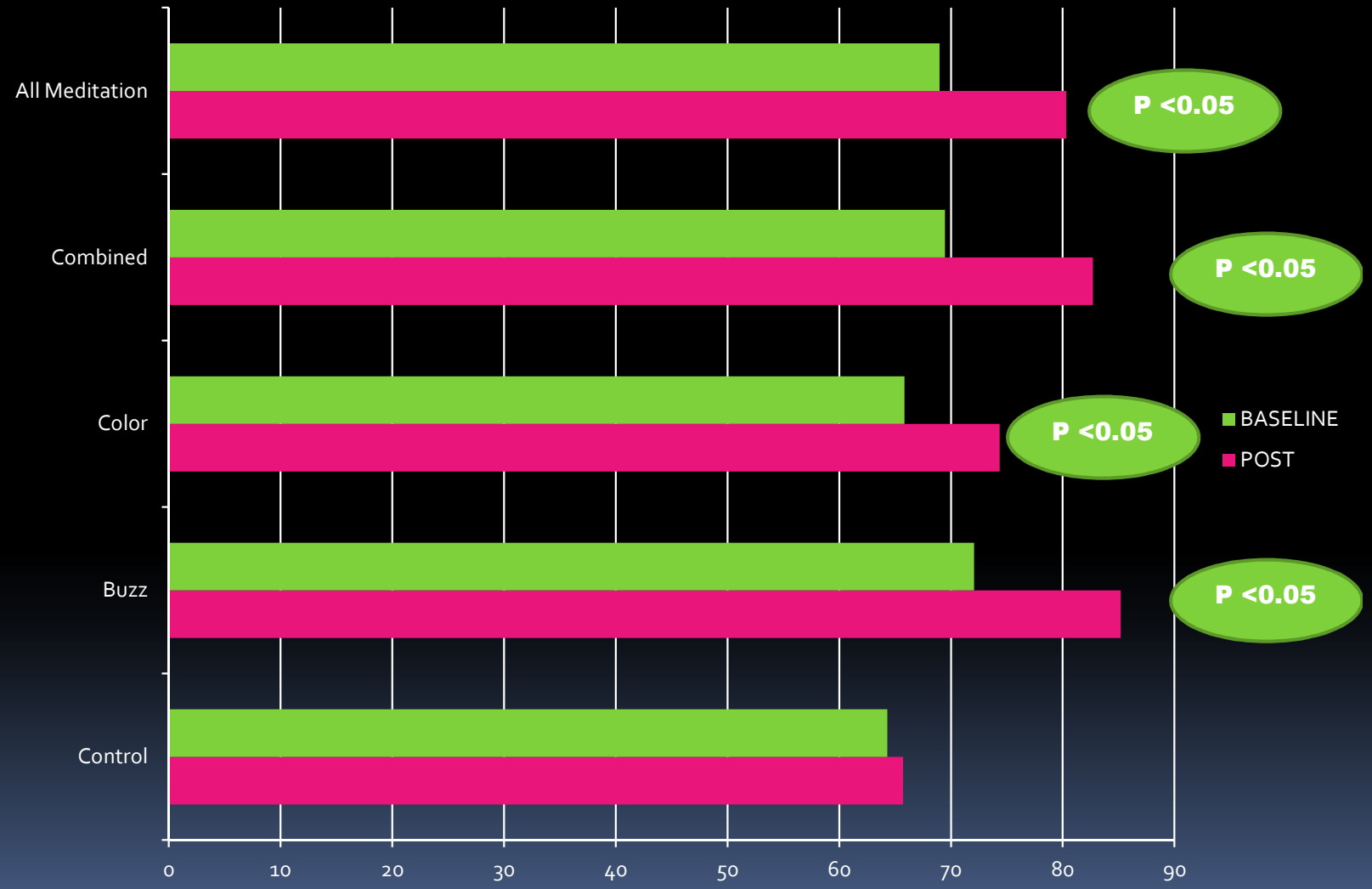
Listening Processing

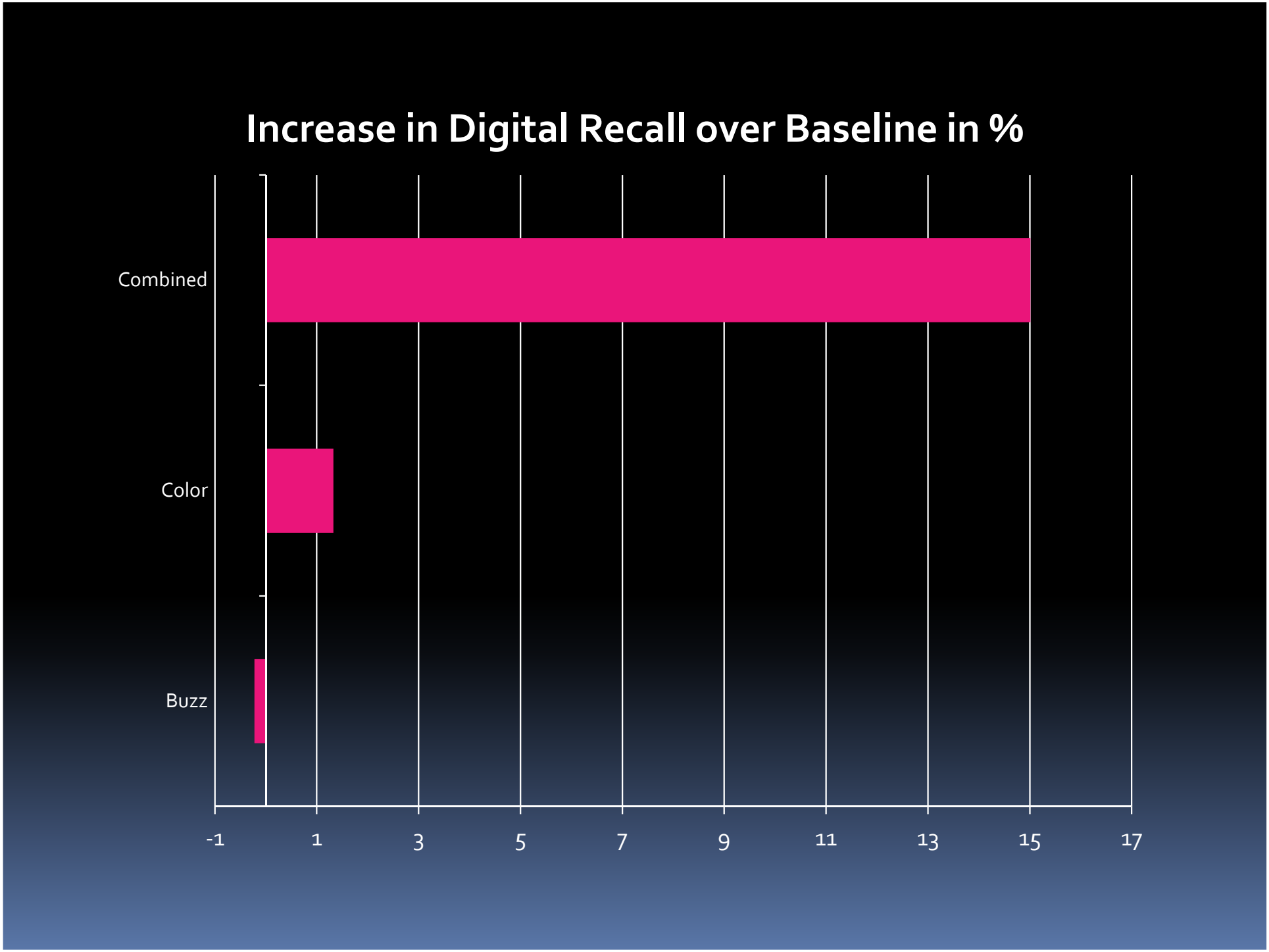


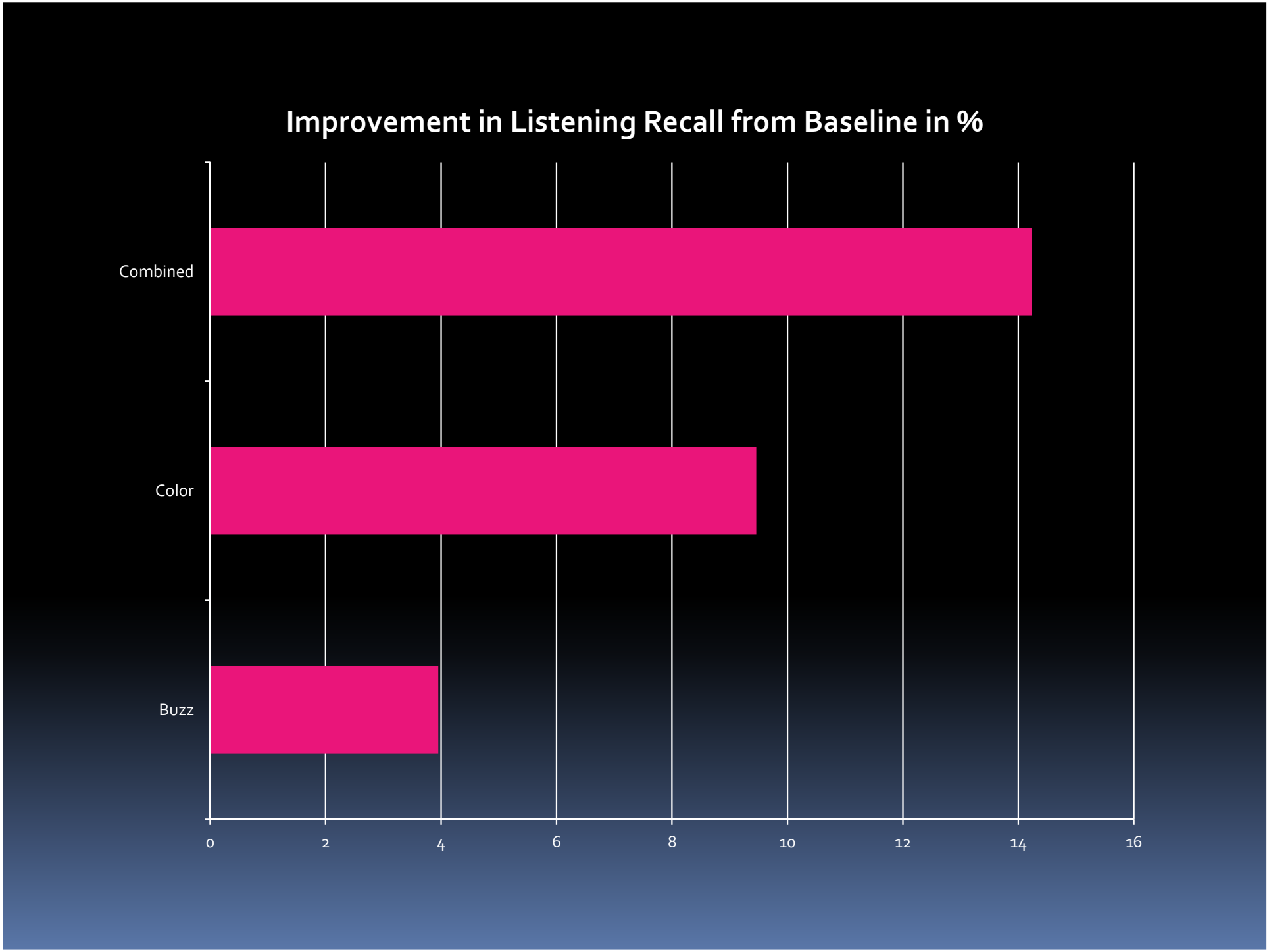
Maximum Duration of Buzzing in Seconds

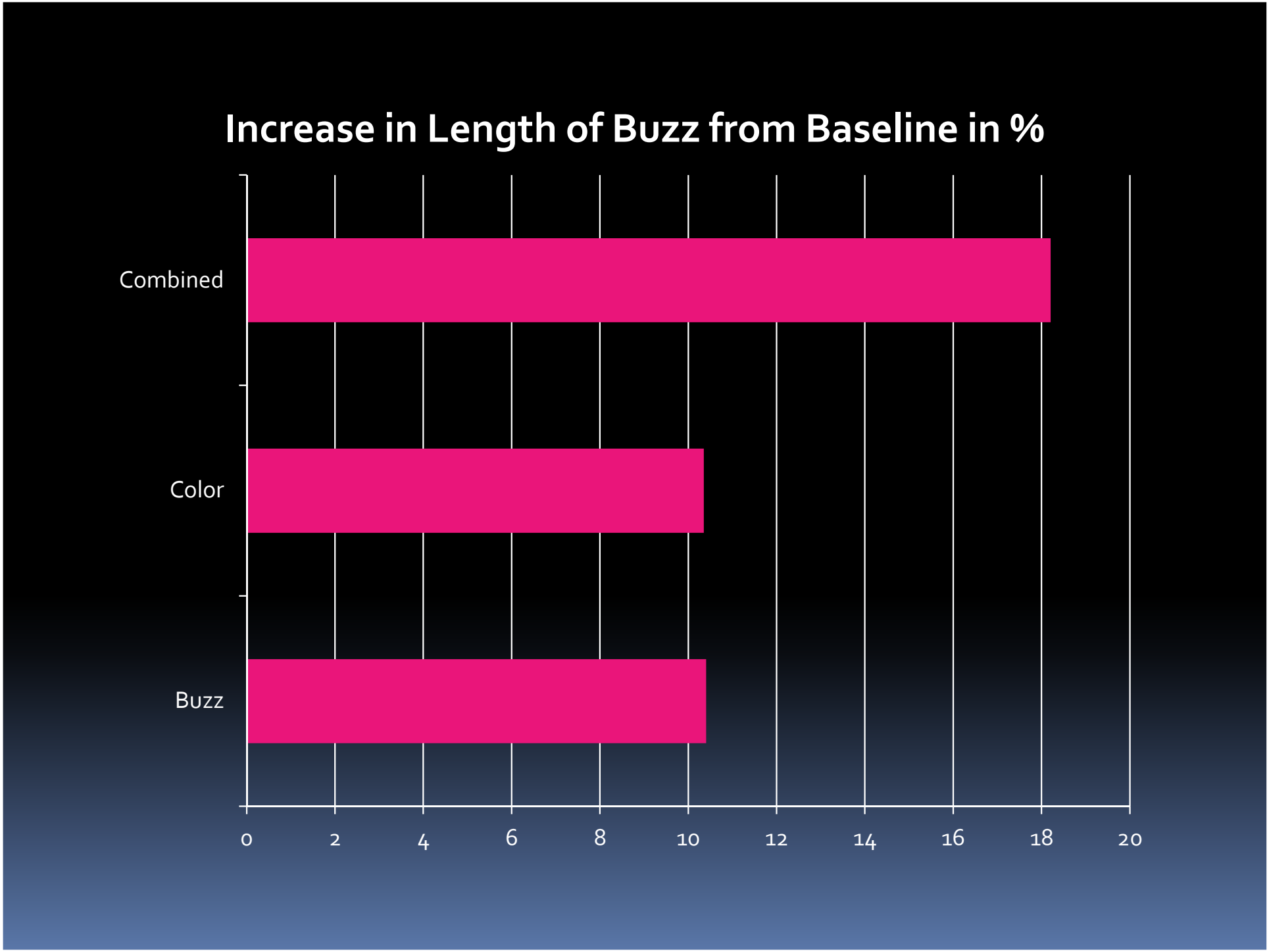


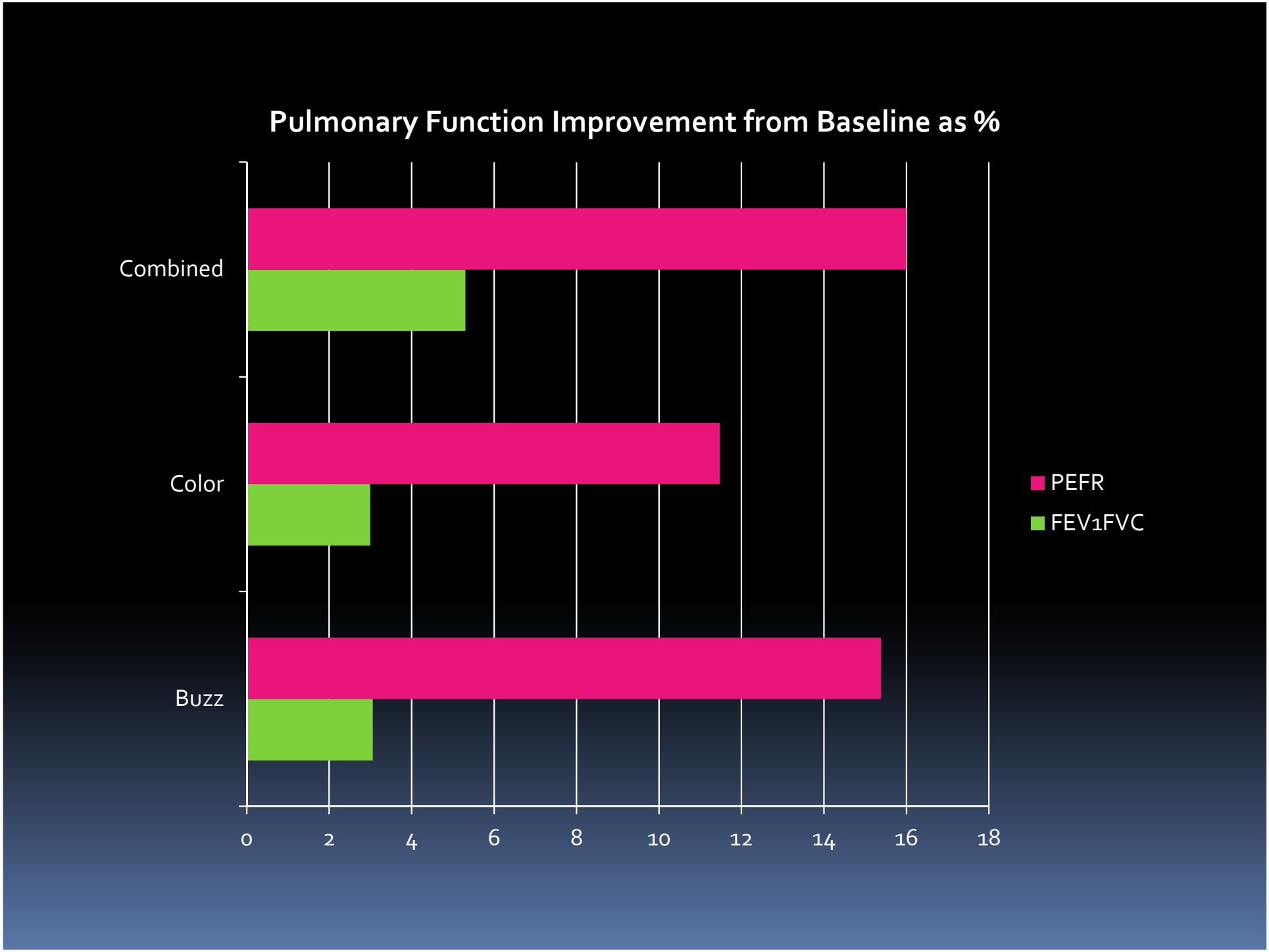
Peak Expiratory Flow Rate




Increase in Digital Recall over Baseline in %
Combined
Color
Buzz
-1
1
3
5
7
9
11
13
15
17


Improvement in Listening Recall from Baseline in %
Combined
Color
Buzz
0
2
4
6
8
10
12
14
16


Increase in Length of Buzz from Baseline in %
Combined
Color
Buzz
0
2
4
6
8
10
12
14
16
18
20


Pulmonary Function Improvement from Baseline as %
Combined
Color
Buzz
0
2
4
6
8
10
12
14
16
18
PEFR
FEV1FVC

Conclusion

- In a case –controlled study on 108 FIU students over 2 years, benefits of 30 minute sessions of Prekshya Dhyan at least twice a week showed significant benefits.
- We assessed impact of Mahapraan and Color Meditation alone and also when combined to assess additive effects

Inattention and Impulsivity

- Connor's Computerized Performance Test II:
  - Impulsivity improved significantly in those who practiced combined Mahapraan as well as Color meditation, compared with their baseline as well as controls. This was not seen in either Mahapraan or Color meditation groups alone.
  - Inattention improved in the Mahapraan only group though did not reach statistical significance

Digital and Listening Recall

- Digital recall (Verbal Short-Term memory) improved by 15% from baseline in the combined meditation group the most, though all meditation groups also improved statistically
- Listening recall (Verbal Working Memory) improved in the combined Meditation group by 15.5% over baseline, again more than other groups

Conclusion

- This suggests combining techniques of Mahapraan and Color Meditation has at least an additive effect on short term and working memory.
- Impulsivity also improved most when both techniques are combined.
- This is the first study assessing components of meditation in isolation and combined, and may offer further insight into mechanisms of effect

Conclusion

- All forms of meditation were associated with clinically important improvement in pulmonary function. However pumonary function changes were not associated with cognitive, memory or affect improvements.
- This suggests benefits observed are independent of changes in pulmonary function.