

**SELF EFFICACY**  
**Gymnasts vs.**  
**Musicians**



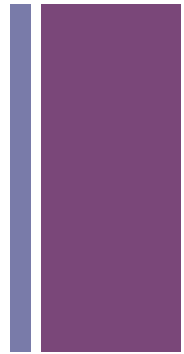
# What is 'self-efficacy'?

- 'Self-efficacy is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations'

*Albert Bandura*

# + Background

- Whether performing as an athlete or a musician, levels of self-efficacy affect the way we learn, practice and perform
- 'A strong sense of efficacy enhances human accomplishment and personal well-being in many ways' *Albert Bandura*





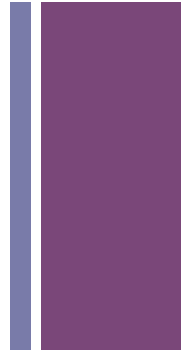
- Different methods we use to prepare ourselves for performance have a strong ability to affect our level of self-efficacy
  
- ‘Those who have a high sense of efficacy, visualize success scenarios that provide positive guides and supports for performance’ *Albert Bandura*



- If we invert this idea; we can see that ‘Those who have a low sense of efficacy, visualize failure scenarios that provide negative guides for performance’
- We have all seen unsuccessful performances numerous times. It may not have been because the performer lacked the necessary skills required to perform, but more often that their performance was compromised by the affect of adverse psycho-physical symptoms caused from, amongst other factors, a low level of self-efficacy

## + Method

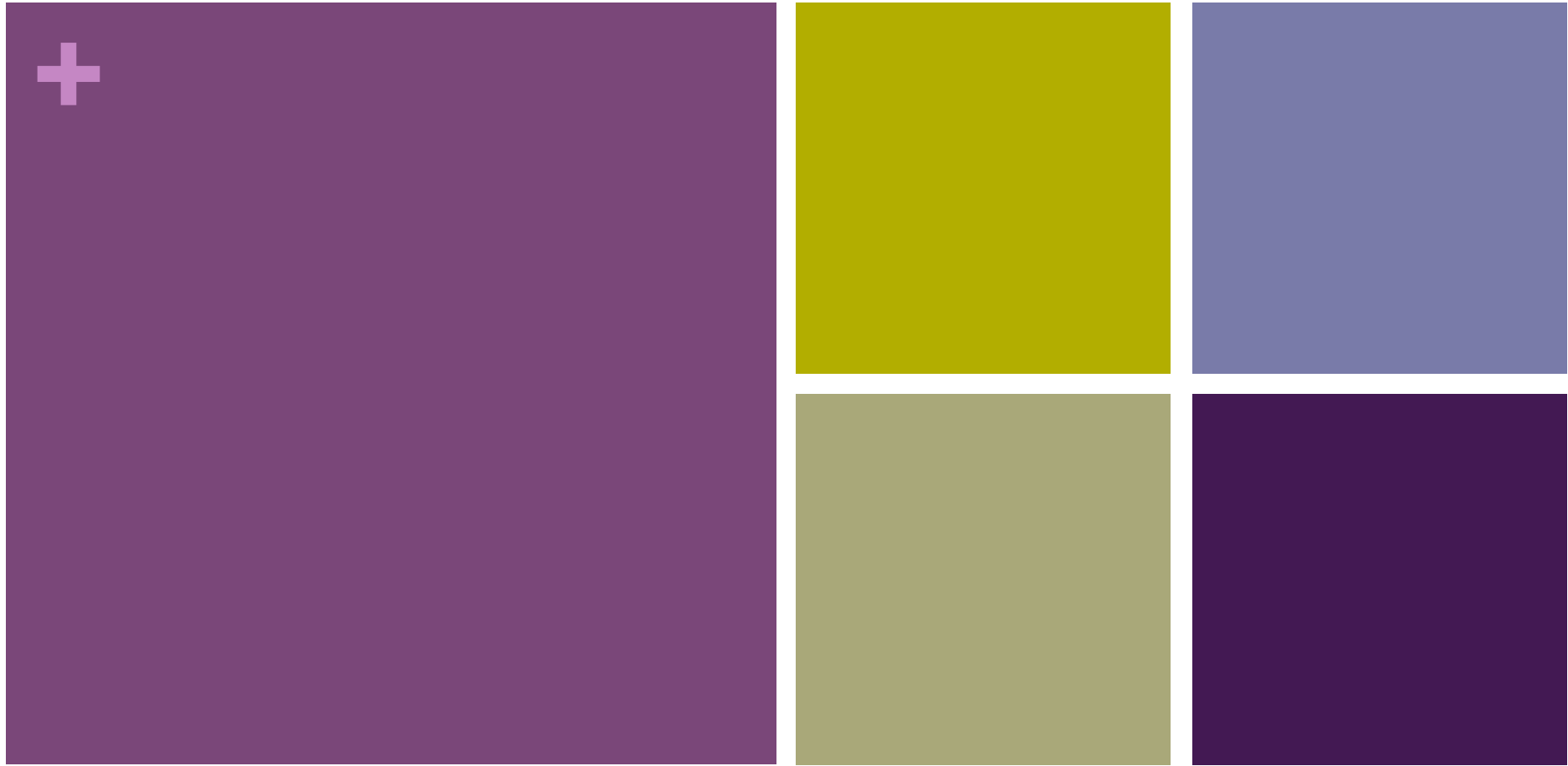
- A sample of 40 participants (20 from each discipline) were used for the study. They had either National or International performing experience. I decided to compare pianists with tumblers. My reasons for doing so are as follows:
- Pianists and tumblers focus on *one* discipline in their fields only
- They perform on *different* instruments and equipment at competitions and so on



# + Tests used in the research



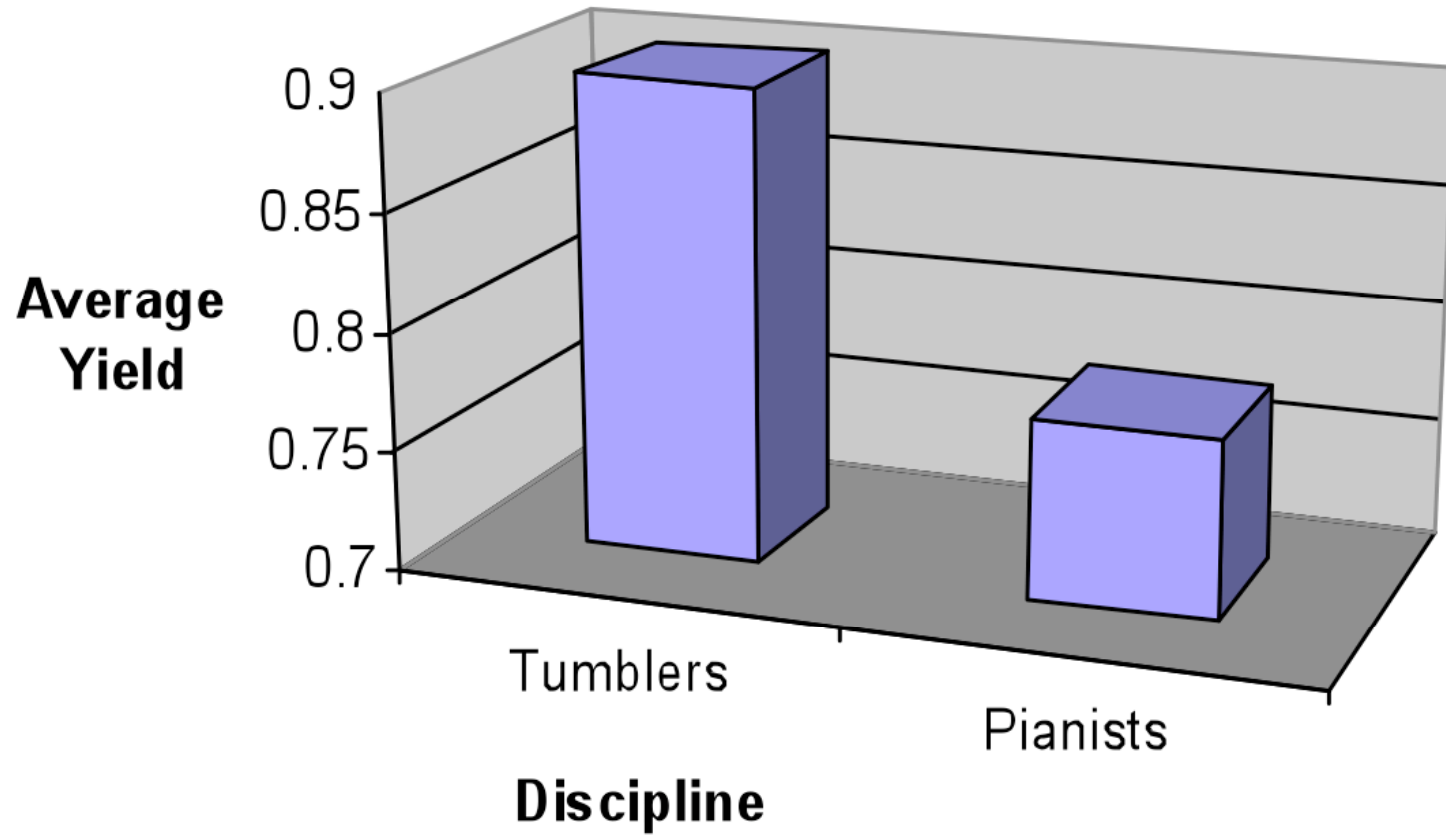
- Participants firstly answered the 10 questions of the 'General Self-efficacy Scale' - *See the handout*
- Then Participants completed the Test of Performance Strategies – *See the handout*
- Participants then completed a questionnaire, designed with open questions, relating to the findings from the two tests to allow for further data analysis - *See the handout.*



**Results**

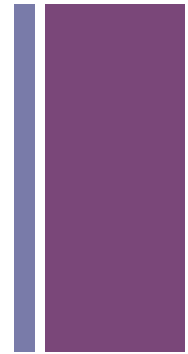


# General Self-efficacy Levels





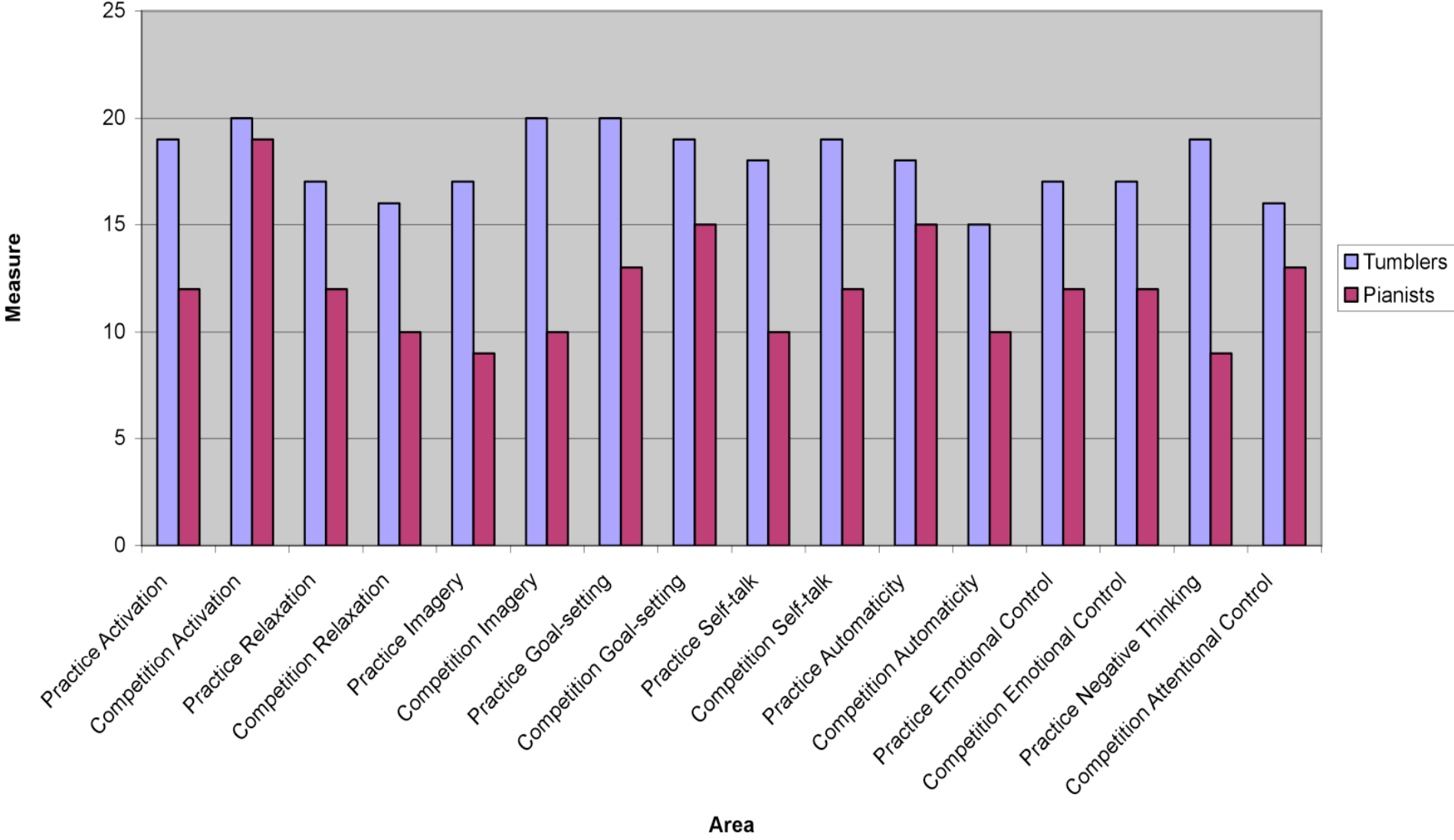
# General Self-efficacy Scale



- As you can clearly see from the results of the 'General Self-efficacy Scale' There was distinctly higher average self-efficacy level amongst the tumblers than the pianists



### Test of Performance Strategies





# Test Of Performance Strategies



- Results from the TOPS showed that the tumblers yielded higher results in all strategy areas
- The more incongruent results were then used in conjunction with the TOPS questions to design the questions in the questionnaire



- Why do levels of self-efficacy vary so much between gymnasts and musicians? – Bandura wrote about many ‘influencing sources of self-efficacy’, it was these sources that provided key pointers and assistance in the evaluation of my results
- The way musicians and gymnasts are taught or coached, the methods of practice or training and other factors, including feedback, were the variables researched

# + Discussion

- The following topics are the areas which were of high interest:
- Worrying about personal injury, even a risk of death is possible during gymnastics training. Because of this, increased levels of adrenaline make the mind focus more readily:





# Increased levels of adrenaline



- ‘Activities in which mistakes can produce costly or injurious consequences call for accurate self-appraisal of capabilities’  
*Albert Bandura*
- Pianists are not under a physical threat when practising, it gives them the option of being freer and less structured in the ways they practise. A tumbler cannot safely begin a pattern of movement and stop half way through, whereas a pianist can stop half way through a phrase, for example, and say “That was terrible!” This difference in practice/training forces the tumbler to believe that he/she can perform the movement, because the other option could cause personal injury by stopping part-way through



# Distractions



- Pianists found that having the distraction of other musicians was disturbing. The nature of practising the piano means that the pianist is isolated, trying to consciously block out any extraneous sounds
- Despite the fact that a tumbler may be working on an individual routine, he/she trains in a gymnasium full of possible distractions, including music being played and other gymnasts. The tumbler has had to accept the possible disturbances and has learnt to block them out





# Practice/Training Environment



- I would like to discuss the difference in training environment between the two areas; pianists mainly practise alone, whereas tumblers train as part of a social group. Whilst training, tumblers observe each other and take it in turns to practise their routines. This opportunity allows for a variety of social cognitive processes to take place:

# + Vicarious Learning

- ‘The second way of strengthening self-beliefs of efficacy is through the vicarious experiences provided by social models’ *Albert Bandura*
- Bandura talks about how seeing people similar to oneself succeed by sustained effort raises your own beliefs that you too possess the same capabilities. Training as part of a group also allows a person’s sense of collective efficacy contribute to increasing individual self-efficacy, through an increased feeling of support





# Amount & Type of Teaching



- Training with a coach present allows for constant feedback and it is quite rare not to see improvement during any one training session where this kind of regular feedback is given
- Pianists usually receive one lesson from their teacher per week and, if they have practised incorrectly throughout the week, it means that they have wasted a vast amount of time



# Positive Mental Rehearsal



- From the study, it became evident that much more mental rehearsal occurred amongst the tumblers, especially in competition situations. The ability to mentally rehearse successfully appears to be very important and is reflected within the results; tumblers experienced less negative self-talk and many used mental rehearsal as the main strategy of controlling it
- ‘Anxiety arousal is affected by perceived efficacy and controlling disturbing thoughts’ – *Albert Bandura*



# Conclusion

- This cross-disciplinary research project highlights the important susceptibility of a person's self-efficacy. The rehearsal and performance strategies used in different disciplines are varied and some strategies appear to be more effective in boosting self-efficacy than others




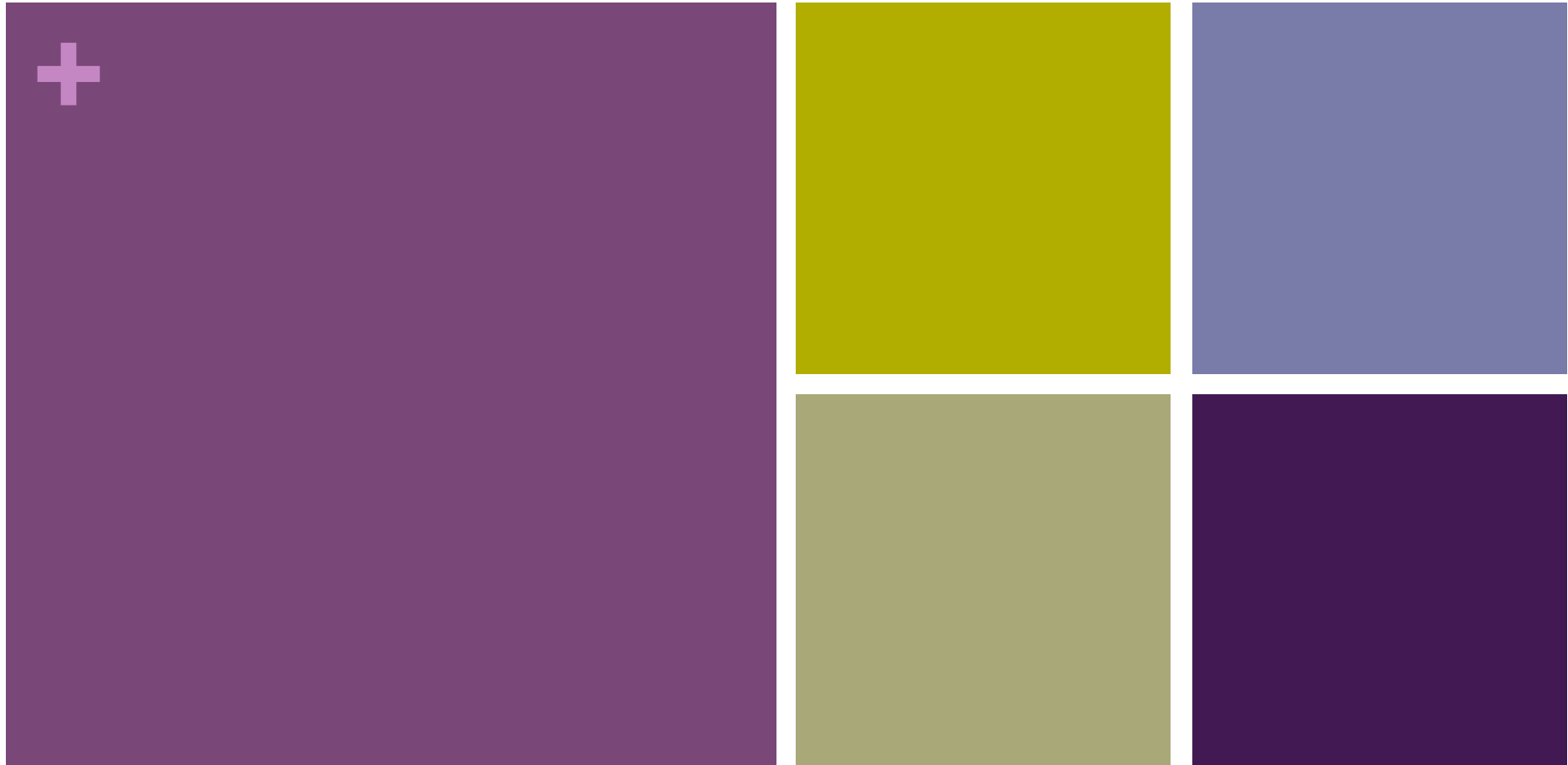


# Implications for musicians



- The way in which we practice is of vital importance; although there is no personal danger during practice, and lower adrenaline levels than in sport, we can still learn to adopt a more objective practice regime
- Being able to focus with minimal distraction is something of great importance.

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- Practising in a group raises some interesting ideas and it is something musicians should explore; a sense of collective-efficacy contributes to raising self-efficaciousness
  - Group practice also allows more opportunity for strengthening self-beliefs of efficacy
  - Practising with your teacher is an area which is of great importance, and interest, as we have seen
  - Positive mental rehearsal increases self-efficacy levels and can help to reduce negative self-talk which most musicians encounter



*Any Questions?*