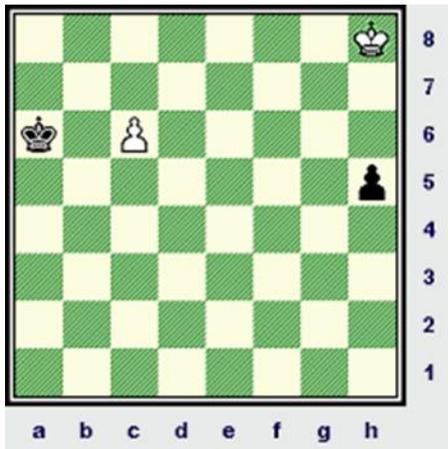


# How Emotions Affect Chess

In his book *Think Like a Grandmaster* Alexander Kotov gives a group of masters a scenario where one is contemplating a move over the chessboard in a tense game. He goes through the thought process that an amateur chess player would go through and how he ultimately makes a decision.

Take an example of this famous endgame problem designed by Reti:



It is white to play. So, you think, if I move my king towards the black pawn, I will not be able to catch it in time before it promotes. If I push my pawn towards the queening square on c8 the black king is just close enough to catch it. In this back-and-forth conversation in your head, you look at the clock and realize your time is running out and you just make the first random move that comes to your head: Kg7! Which happens to be correct! The white king has 2 steps to get into the “square” which is an area that is just close enough to stop the black pawn from queening. Kg7 also happens to move the white king closer to its pawn on c6 and can support it to promotion if black continues with the pawn move h5-h4-h3.

Several studies have been done on memory and alertness in chess to try and explain why the best chess players perform the way they do. Just as many books have been written about and by successful traders to give a manual to newbies, as it were, on how to trade at the highest level. Despite all this material the majorities of chess players never really make it to be masters.

With current technology it is possible to measure emotional responses in different activities. Some researchers have been able to measure memory based on the areas of the brain stimulated while learning.

Emotions are defined as “passions of a short duration” by Letourneau in his book *Physiologie des passions*.

To understand how emotions are linked to performance we must go back in history to the beginning of the investigation into the relationship between emotions and physical stimuli. The innovator of the theory of evolution Charles Darwin presumed emotional expressions served the very useful function of communicating with other members of one's own species. An angry facial expression signals a willingness to fight but leaves the observer an option to back off without either animal being hurt.

In 1890 William James expounded on Darwin's Theory and was the first to coin the term Evolutionary Psychology which is defined by the Merriam-Webster dictionary as the "study of human cognition and behavior with respect to their evolutionary origins."

William James argued that many human behaviors are the product of instincts (inherited predispositions to respond to certain stimuli in adaptive ways). A prototypical instinct for James was a sneeze, the predisposition to respond with a rapid blast of air to clear away a nasal irritant.

Further research into the effects of emotions on human behavior was done by 2 scientists in 1962: Stanley Schachter and Jerome E. Singer who came up with the 2-factor theory of emotion which states that emotions are a product of both physiological and cognitive processes. They proved that if one does not know the reason for a physiological change they will try and find a reason from the environment. The details of this experiment are beyond the scope of this article but suffice it to say most humans are susceptible to environmental stimuli, but this susceptibility can be overcome through training. For example, if you feel your heart pounding, your palms sweating, deep breathing (physiological response) in response to the thought of skydiving out of an airplane (the stimulus) the emotion you may feel would either be fear or excitement depending on what your mind tells you (cognitive process).

The difference between regular players and masters is that masters have learnt to harness their emotions and use them to their advantage.

"Motivation is what gets you started. Habit is what keeps you going"- Jim Rohn

Ultimately, mastery of any skill requires targeted practice, dedication and controlling emotions.