

INSIGHTS FROM SCIENCE
AND EXPERIENCE



Denise Trippold

## Who am I?

- Denise Trippold
- Graz (Austria)
- Master's student of Psychology
- Women's National Team
- Member of the Presidium (ACF)
- Chairwoman of the Women's Commission (ACF)
- Chess Coach



# Agenda

Introduction

**Biological Factors** 

**Psychological Factors** 

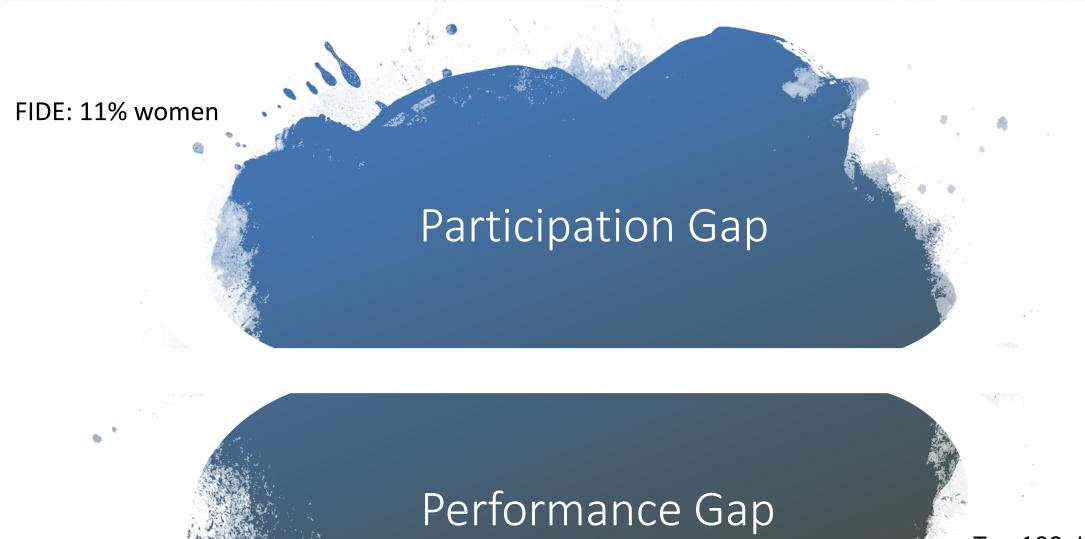
**Social Factors** 

**Historical Factors** 

**Communications** 

**Role Models** 

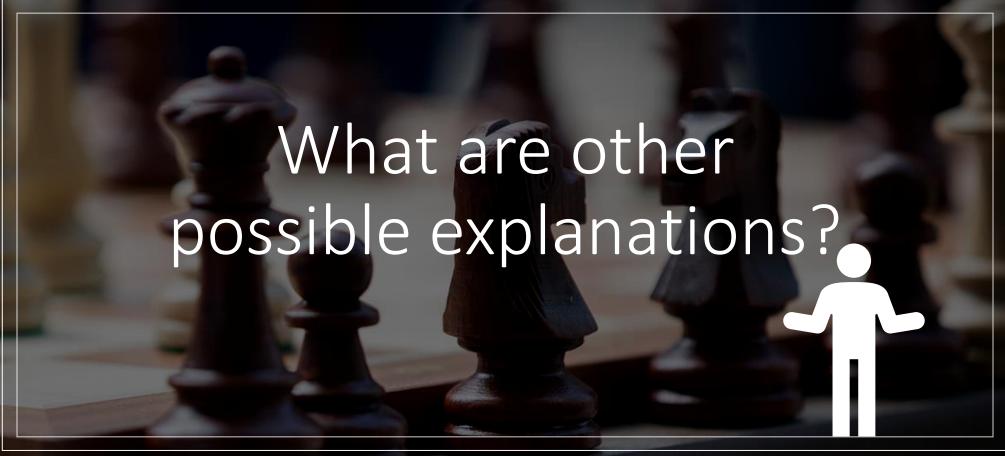
Questions

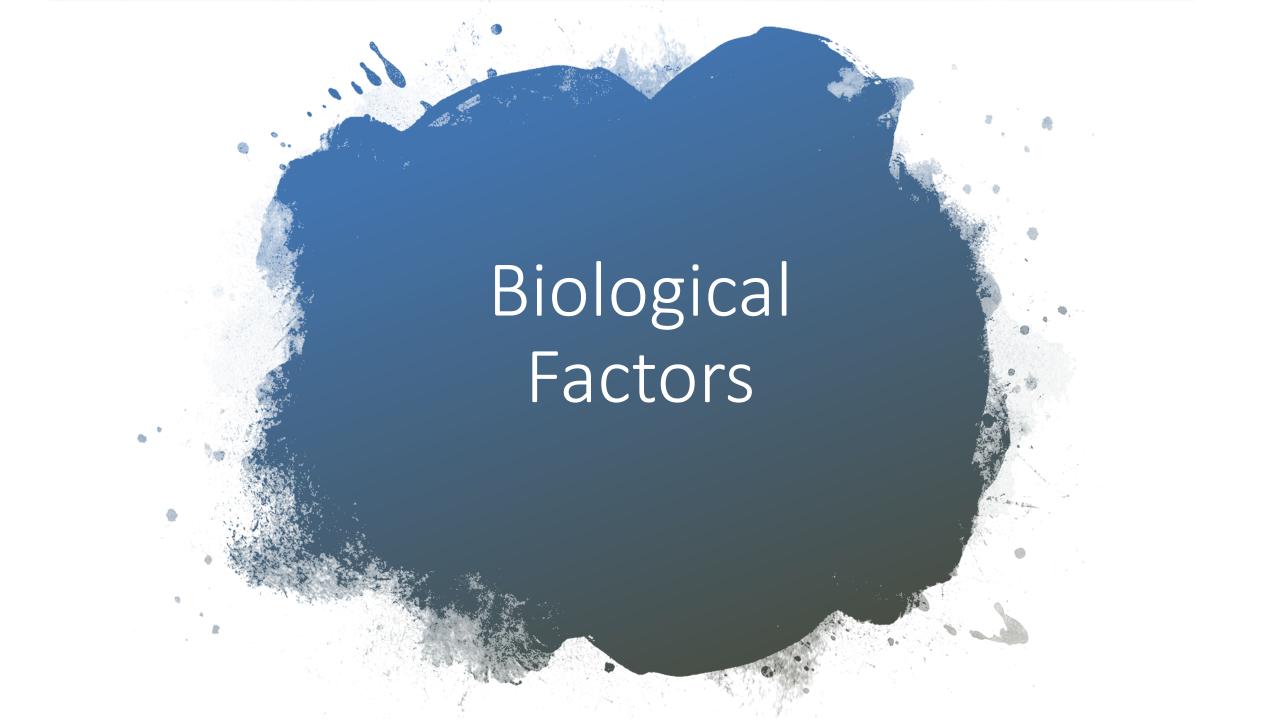


Top 100: Hou Yifan

(No. 99: 2650 Elo)







# Differences between male and female brains?



Memory verbal abilities social skills



Mathematics spatial abilities

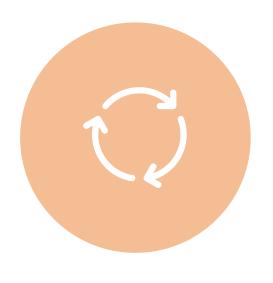
### Testosterone

- Competition → aggressive behavior
- Winner-effect
- Enjoyment of winning
- Enjoyment of competition
- Willingness to attend a competition

Do female chess players need other trainings' incentives?

"But overwhelmingly it relies on opinion, 'common sense' and naturalistic 'observation', and is largely dismissive of the prevailing evidence from meta-studies that there tend to be greater intellectual differences evident within gender groupings than between them."

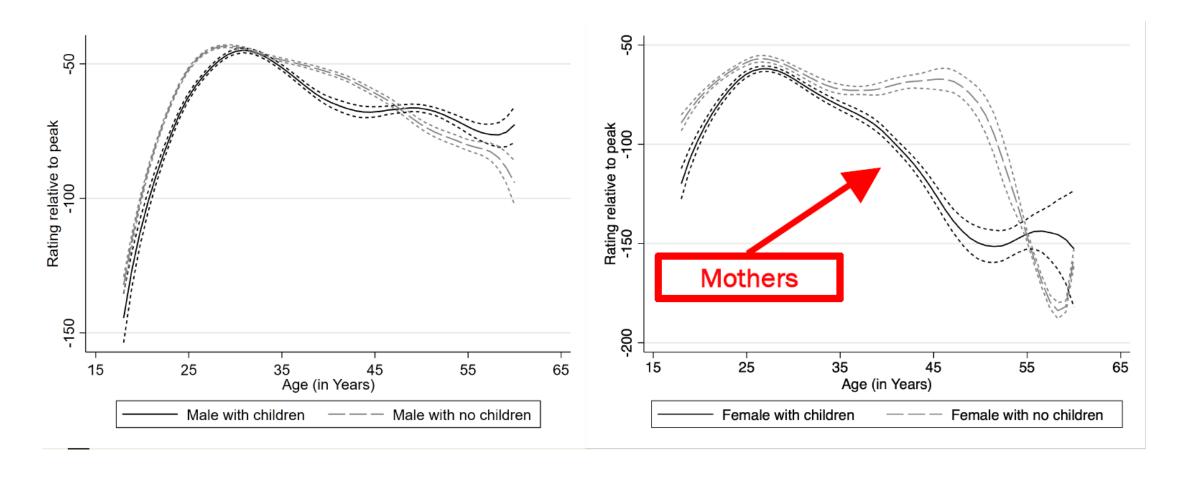
- Barry Hymer

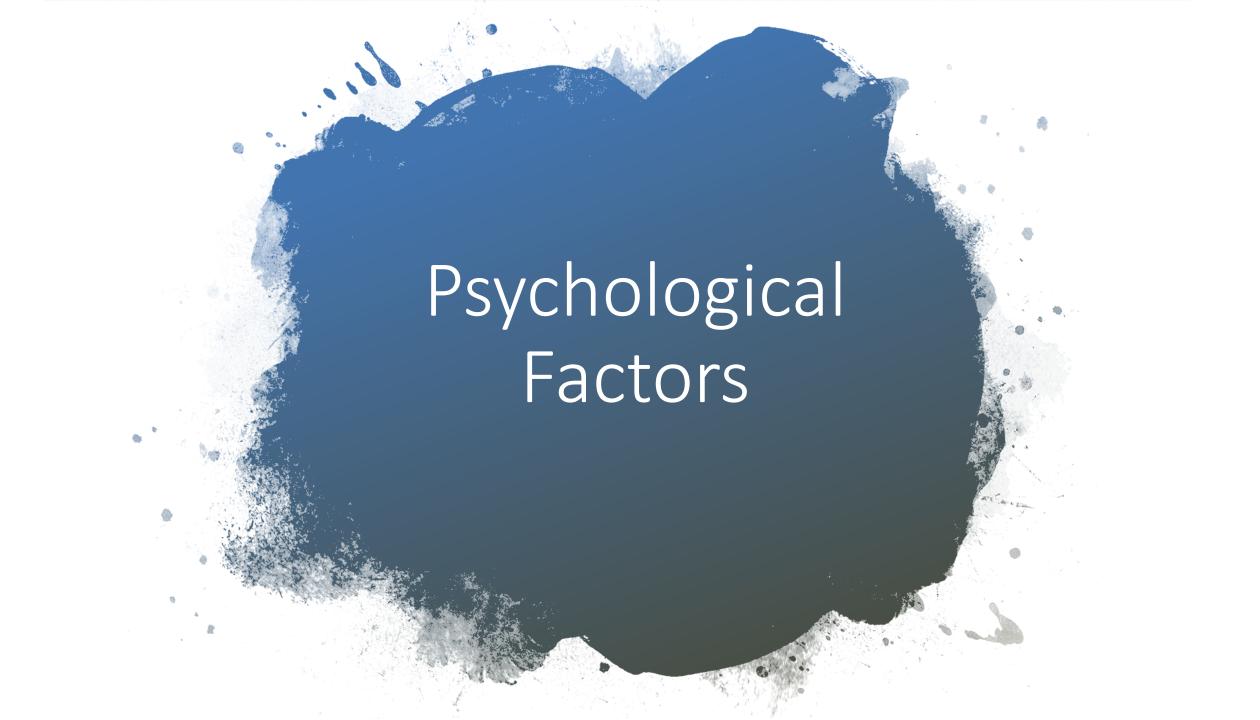


**MENSTRUATION** 



**PREGNANCY** 





# Do girls and boys learn chess in a different way?

- Chessity
- 350 schools
- Results:
  - No difference in learning the game of chess
  - BUT: different processes of learning

Boys
...prefered playing actively
and competitively.

#### Girls

...prefered non-competitive puzzle games.

...social interaction in games.

## Stereotype Threat

"... is where minorities underperform solely because they're aware of a stereotype that people of their group do worse." (Smerdon, 2020)

### Studies

#### **Rothgerber & Wolsiefer (2014)**

US youth tournaments: Girls lost more often when playing against boys.

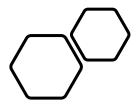
#### Smerdon et al. (2020)

➤ 8 billion games: Female chess players lost more often when playing against male chess players.



# Attribution of Failure and Success

	Success	Failure
Girls	external	internal
Boys	internal	external



# Survey of Tkachiev











COACHES PRAISE

**EMOTIONS** 

CONCRETE COGNITIVE PROCESSING

FAMILIAR MOTIVES

"Women players are mostly worried about what their coaches will say after game. Men usually are just upset to lose."

- Michael Gurevich



"We are raising our girls to be perfect and we are raising our boys to be brave. We have to socialize our girls to be comfortable with imperfection."

- Reshma Saujani

"Geniuses are made, not born."

- Laszlo Polgar

The higher the goal, the higher you reach.

"I always hated the idea of seperate women's tournaments. It is like admitting that we are weaker than men."

- Judit Polgar

# Titles

Open titles	Requirements	Female titles	Requirements
FM	2300 Elo	WFM	2100 Elo
IM	2400 Elo + 3 norms (2450 performance)	WIM	2200 Elo + 3 norms (2250 performance)
GM	2500 Elo + 3 norms (2600 performance)	WGM	2300 Elo + 3 norm (2400 performance)



"She has fantastic chess talent, but she is, after all, a woman. It all comes down to the imperfections of the feminine psyche."

- Gary Kasparow (1988)







Veroníka Exler, Anníka Fröwis und Tobías Mayrhuber

"Even if women think and compete differently, we can attain the same achievements as men: be it in science, art or chess."

- Judit Polgar



Questions?

### Literature

- Ambady, N., Shih, M., Kim, A. & Pittinsky, T. (2001). Stereotype susceptibility in children: Effects of identity activation on quantitative performance.
   Psychological Science, 12, 385-390. DOI: 10.1111/1467-9280.00371.
- Chessity (3.12.2019). Do boys and girls learn chess differently? Verfügbar unter: <a href="https://www.chessity.com/en/blog/3091/gender-differences-in-learning-chess?utm">https://www.chessity.com/en/blog/3091/gender-differences-in-learning-chess?utm</a> source=facebook&utm campaign=
- Hymer, B. (6.1.2022). Closing the gap: How gender-blind is chess, actually? Chessable. https://www.chessable.com/blog/gender-gap-chess/
- Kunze, M. (2020). Neurowissenschaftliche Überlegungen. In H. Schneider-Zinner (Hrsg.), Mädchen- und Frauenschach. Kongress in Salzburg 2020.
- Metz, H. (2002): "Immer noch anormal". taz. Verfügbar unter: https://taz.de/!1112640/
- Polgar, J. (30.11.2019). I might never have become a chess grandmaster if I'd stuck to women-only tournaments. The Guardian. Verfügbar unter: https://www.theguardian.com/commentisfree/2019/ nov/30/chess-grandmaster-women-only-tournament-play-men?fbclid=lwAR1-v2D8AZXOAr5t1%E2%80%A6
- Rest, T. (9.12.2021). Die beste Schachspielerin der Geschichte. Sie brauchte 42 Züge und der grosse Kasparow gab auf. *Tages-Anzeiger. Verfügbar unter:* https://www.tagesanzeiger.ch/sie-ist-gefaehrlich-sie-spielt-nicht-wie-eine-frau-842418088205?idp=OneLog&new\_user=no
- Rothgerber, H. & Wolsiefer, K. (2014): A naturalistic study of stereotype threats in young female chess players. Group Processes & Intergroup Relations. 17(1), 79-90. DOI: 10.1177/1368430213490212.

## Literature

- Sabblah, A. (26.4.2019). Stop playing like a girl": How to communicate with the girls we coach." Verfügbar unter: http://www.a9soccer.com/blog/stop-playing-like-a-girl-how-to-communicate-with-the-girls-we-coach
- Smerdon, D. (13.12.2020). What's behind the gender imbalance in top-level chess? *The Conversation*. <a href="https://theconversation.com/whats-behind-the-gender-imbalance-in-top-level-chess-150637">https://theconversation.com/whats-behind-the-gender-imbalance-in-top-level-chess-150637</a>
- Smerdon, D., Hu, H., McLennan, A., von Hippel, W., & Albrecht, S. (2020). Female Chess Players Show Typical Stereotype-Threat Effects: Commentary on Stafford (2018). Association for Psychological Science, Vol.31(6), p.756-759.
- Smerdon, D. (2022). Facts and Myths about Gender in chess. FIDE Exchange Forum.
- TED: (28.3.2016). Teach girls bravery, not perfection | Reshma Saujani. [Video] YouTube. https://www.youtube.com/watch?v=fC9da6eqaqg&app=desktop
- Tkachiev, V. (8.6.2015): *Tkachiev: Warum dominieren Männer die Schachwelt?* Verfügbar unter: https://chess24.com/de/lesen/news/tkachiev-warum-dominieren-maenner-die-schachwelt
- Watson, L. (12.10.2019): "Queen of chess" says it's hard to imagine women competing at same level as men. The Telegraph. Verfügbar unter: https://www.telegraph.co.uk/news/2019/10/12/queen-chess-says-hard-imagine-women-competing-level-men/?fbclid=lwAR1jtOYbTJDlcWpAUEir1MhOg-jJBdBH8Dr5NlcQls8krcRlzq\_m1MVFAJU