Women and girls in the chess world. History. Inspiring stories. Achievements in the Sport and in Education.

Making the Right moves

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Scholastic Chess Testimonies

- The magic of chess
  https://www.youtube.com/watch?v=Tr8F0Xp5Cq8
  4’:44” min

- Girls in chess
  https://www.youtube.com/watch?v=9iOJ6QHHwmQ
  3’:37 min
History of Women playing Chess

• **Between 14\textsuperscript{th} - 18\textsuperscript{th} Century** Chess was a social pastime for both men and women of the upper classes in Europe. Among them: Mary, Queen of Scots, Queen Elizabeth I. The Duchess of Bourbon Bathilde d’Orleans was also a strong player and often played Benjamin Franklin. Thomas Jefferson has written about their matches.

• **19\textsuperscript{th} century** Male Dominated the chess world

• **20\textsuperscript{th} Century** Female players made significant progress in breaking male dominance on the game. Vera Menchik could compete successfully with men.
History of Women playing Chess

• **1978** Nona Gaprindashvili from the country of Georgia was the first female awarded the title of International Grandmaster.

• **2000** Judit Polgar from Hungary becomes the top woman player. Georgian and European female players are recognized as well in the overall (male and female) competition.

• **2010-Current time.** Hou Yifan from China, leads the female player ranking list. She is the only woman currently ranked in the top 100 overall chess player followed by Current Women World Champion from China Ju Wenjun ranked 285 on the overall world ranking.

Females with F.I.D.E Absolute Titles

- There are currently 37 female players who hold the title of Grandmaster.
- As of November 2019, the FIDE database lists 116 living women who hold the International Master title.

Research and Publications

- In (Bilalic, 2009) the higher strength of top male chess players is attributed mostly to participation rate and male predominance at the top. (Bilalic, 2010) is a very interesting and visual research on the difference in pattern recognition (which is seen as the key strength factor of chess masters) between chess experts and novices. Female chess players were not included in the research group.

- Other variables attributed are memorization and psychological factors that lead different strategic decision-making between the two genders. This projects wants to create a homogeneous test for each of these variables to present a clear visualization of the specific strengths of both genders.

Source: Chessbase
Research and Publications

• The choice to only look at male chess players leaves a wide research gap open to explore. In order to increase participation rate amongst female chess players, chess education needs to be tailored to their specific needs, like in many sports and disciplines.

• Measuring the differences in the above-mentioned variables between the two genders will lead to significant insights into the gender difference in perception of the game of chess, which can be used to improve training approach and raise the participation rate amongst females.

• In a psychological game like chess, it is of importance to research these differences. The insights could furthermore lead to evidence for further fMRI studies into generalizing gender brain differences in decision-making. Which at the moment there are some research in progress but with mixed groups of male and female.

Source: Chessbase
How Chess Stimulates the Brain

**THE BRAIN**

**FRONTAL LOBE**
The Frontal Lobe deals chiefly with cognition and memory. Ability to concentrate, judgment, consequence analysis, problem solve, plan, personality (including emotional traits).

**PARietal LOBE**
The Parietal Lobe plays an important role in integrating information from several senses. Also processes spatial orientation, some parts of speech, visual perception, and pain and touch sensations.

**OCCipital LOBE**
The Occipital Lobe is the visual processing center of the brain. It contains most of what is referred to as the “visual cortex.” It is also the part of the brain where dreams originate.

**TEMPORAL LOBE**
The Temporal Lobe is the chief auditory receptive area and contains the Hippocampus, which is the chief region where long-term memory is formed. Also deals with high-level visual processing (faces & scenes).

**CEREBELLUM**
The Cerebellum chief function are motion-related activities. Contributes to coordination, precision, accurate timing, but does not initiate movement. Regulates fear and pleasure responses, and some cognitive functions such as attention and language.

**BRAIN STEM**
Serves as brain’s warning system and sets alertness level.

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Made with love in Barcelona, Spain. Inspired by Colorful for iPhone.
“Thinking the way that chessplayers thinks can modify in a significant way your brain structure”...
The architecture of the chess player's brain.

Hänggi J\textsuperscript{1}, Brütsch K\textsuperscript{2}, Siegel AM\textsuperscript{3}, Jäncke L

Abstract

The game of chess can be seen as a typical example for an expertise task requiring domain-specific training and experience. Despite intensive behavioural studies the neural underpinnings of chess performance and expertise are not entirely understood. A few functional neuroimaging studies have shown that expert chess players recruit different psychological functions and activate different brain areas while they are engaged in chess-related activities. Based on this functional literature, we predicted to find morphological differences in a network comprised by parietal and frontal areas and especially the occipito-temporal junction (OTJ), fusiform gyrus, and caudate nucleus. Twenty expert chess players and 20 control subjects were investigated using voxel-based and surface-based morphometry as well as diffusion tensor imaging. Grey matter volume and cortical thickness were reduced in chess players compared with those of control men in the OTJ and precunei. The volumes of both caudate nuclei were not different between groups, but correlated inversely with the years of chess playing experience. Mean diffusivity was increased in chess players compared with that of controls in the left superior longitudinal fasciculus and the Elo score (a chess tournament ranking) was inversely related to mean diffusivity within the right superior longitudinal fasciculus. To the best of our knowledge we showed for the first time that there are specific differences in grey and white matter morphology between chess players and control subjects in brain regions associated with cognitive functions important for playing chess. Whether these anatomical alterations are the cause or consequence of the intensive and long-term chess training and practice remains to be shown in future studies.
Women Chess Initiative, Community and Events

- https://new.uschess.org/give/women-chess-initiative/
- https://new.uschess.org/community/womeevents/
Hou Yifan first learnt chess at the age of five.

At 16 Hou became the youngest-ever female world champion, on account of her winning the Women's World Chess Championship. She held on to the tile from 2010 to 2011, and won it again in 2013 and 2016.

While Hou is currently the highest-ranking female player by nearly 100 points, she lost the title of Women's World Champion when she chose not to compete in the women's tournament in 2016. This was a conscious decision to protest the differences between the open and women's world championship systems. While the world champion gets to defend his title against an official challenger, the incumbent female champion can get knocked out without even playing the new champion.

While chess is still a priority, Hou intends to study an MSc in Education at the University of Oxford in 2018.
Inspiring Stories
USCF Girl Club Initiative
Chess: a Family Tradition
Chess and Career: Personal Experience

Carolina Blanco: Maestra Internacional y Estudiante a Tiempo Completo

Ajedrez y Odontología: mi gran equilibrio

TRAZOS DE AJEDREZ
CAROLINA BLANCO
CONSTANCIA CON LOS TREBEJOS

Caracas, junio 20 [REDAGTA]: El Presidente de la República, Rafael Caldera, recibió ino

terior de la Casa de Campo, a un grupo de dirigentes, atletas y periodistas

relacionados con el deporte nacional, y al concurrir el palenque de Fundaporte, indicó

que Carabobo ha contribuido con un reclutamiento, optimizar las diferentes áreas territori-

ales del país, para elevar la calidad y la expectativa de los jugadores nacionales. El ACT

Estadio entregó a la autora Oriana Benitez, a la directora Carolina Blanco, acompañada por el gobernador del estado.

Fundaporte: Rafael Palacios, el presidente del INI, Julio Alejandro Cotte, y el minis-

tro de la familia, Carlos Alfaro. Gridina de Chihuahua, Deportista.
Chess and Career: Personal Experience

Chess and Dentistry:
* Highly motivated

* Learned to keep an organized schedule from primary school years.

* Maintained a high grade (GPA 3.0 and above) in school and completed school requirements before or after chess competitions.

* School and Organizations recognition for sport and academic achievements.

* Sponsorship
Chess in the school as an educational tool
Chess in the school as an educational tool
Chess and emotional intelligence.

“The ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions”

“The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth"
Training Schedule and Organization

A) Time available

B) Resources:
- Material resources: Books, Magazines, chess database, computer and Internet
- Human Resources: Coach, sponsorship for tournaments

C) Training plan

D) Goals

E) Execution

F) Evaluating results
Training resources recommended

Chess Websites:
- Chessbase.com
- Chess.com
- Chesskid.com
- Lichess.com
- Decodechess.com
- Uschess.org

Books recommended:
Journey to the Chess Kingdom by Yuri Averbakh and Mikhail Beilin
Chess Tactics for Kids by Murray Chandler
Chess Opening for kids by John Watson
Chess Endgame for Kids by Karsten Muller
My great predecessors by Garry Kasparov
Judit Polgar- How I beat Fischer’s Record by Judit Polgar
All Girls Summer Camp July 13-17th 2020

“All-Girls” Chess Camp of GA

Learn
Train
Play
Persevere

Awards
Discipline
Sportsmanship
Multicultural

www.orthochess.com
Conclusion

Only one woman is in the world’s top 100; there are seven in the top 500.

Just 16% of US Chess Federation members are female from youth competition and up; that might seem low, but it’s a record high, reached just last year.

With women’s world championship, women’s state, national and continental tournaments used to qualify; There is room for female players to cultivate the game on their own terms and enjoy being part of an elite in the National and international Chess environment.

Females that have included chess as part of their curriculum have succeeded in other professional careers applying the benefits of critical thinking and emotional intelligence learned through playing the game.
“Love what you do. Work hard and your perseverance will pay off”

Thank you!

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