

**Jasmine Paolini – WTA Player Analysis**

**Course Project- Part One**

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# Player Profile – Jasmine Paolini

This report will focus on a statistical analysis for WTA Tour star athlete Jasmine Paolini in her competitions from 2021 to 2024. We will also provide an outlook on Jasmine Paolini’s career going forward and add recommendations for improvements Jasmine should focus on to improve her WTA rank and her record against top competitors.

Jasmine Paolini is an Italian tennis player who has been competing at a WTA level since 2017. Jasmine is currently the fourth highest ranked women’s singles player in the world, which is the highest she has ever been rated. At 28 years old, Paolini made it past the second round of a major tournament for the first time in her career by qualifying for the fourth round at the 2024 Australian Open. She responded from this breakout performance with a monumental rise, qualifying for the finals of the next two major tournaments and earning a gold medal in the women’s doubles at the Paris Olympics. We chose to examine Jasmine’s last 4 seasons to gain insights into how she was able to improve so much in the last year and examine if this success is sustainable for the player. We will also make recommendations for areas Jasmine should be looking to improve to keep her high ranking and continue to have success in Grand Slam tournaments.

Paolini is such an interesting player to analyze because she has a distinct style that requires a lot of discipline and technique, but does not necessarily cater to modern, metric-based tennis strategy. The most visually striking analytic disadvantage would be her size; Jasmine Paolini stands at 5 feet, 4-inches (1.63m) tall, making her the shortest player ranked in the top 25 of the WTA tour by three inches. Her strengths are not service speed or ace rate, but she is still capable of earning wins against some of the most talented players in the world in the most competitive tournaments of the season. Comparing Paolini’s statistics to some of the other top players should illustrate the notable differences between Paolini’s strategy and the strategy of other similarly ranked athletes.

# Data Collection

We extracted key data points to illustrate the 2021-2024 seasons of WTA tennis superstars Jasmine Paolini, Zheng Qinwen, and Aryna Sabalenka. Data for this analysis was pulled entirely from tennisabstract.com. Data was collected to reflect various aspects of each player’s game, including service stats, rally statistics, return statistics, and other key statistical areas. Data points collected include season-long statistics and match-by-match results. Data points also were created by combining different data points to create new metrics. A glossary of these data points can be found below.

*Season-long statistics*

**WTA Rank**: Any player who has earned ranking points in at least three tournaments or earned a minimum of ten singles ranking points in one tournament will appear on the WTA Rankings. Points are awarded based on the level of tournament and a player's round-by-round progression at that tournament.[[1]](#footnote-2)

**WTA Wins (W):** Match Wins earned per WTA season.

**WTA Losses (L):** Match Losses conceded per WTA season.

**Hard Court Wins (hW):** Match Wins earned on Hard Court per WTA season.

**Hard Court Losses (hL):** Match Wins earned on Hard Court per WTA season.

**Grass Court Wins (gW):** Match Wins earned on Grass Court per WTA season.

**Grass Court Losses (gL):** Match Losses conceded on Grass Court per WTA season.

**Clay Court Wins (cW):** Match Wins earned on Clay Court per WTA season.

**Clay Court Losses (cL):** Match Losses conceded on Clay Court per WTA season.

**Ace Rate (A%):** Percentage of total points won earned by Ace. Aces occur when a direct point is scored by the serving player without the opponent being able to return the ball.

**Double Fault Rate (DF%):** Percentage of total points conceded by Double Fault. Double Faults occur when a direct point is earned by the returning player because the serving player is unable to perform a playable serve within two service attempts.

**1st Serve Points Won (1st%):** Percentage of total points won by the serving player when the first serve is playable.

**2nd Serve Points Won (2nd%):** Percentage of total points won by the serving player when the first serve was not playable, but the second serve is playable.

**Return Points Won (RPW):** Percentage of total points won earned as the returning player.

**Service Points Won (SPW):** Percentage of total points won as the serving player.

**Hold Percentage (Hold%):** Percentage of points won in return point opportunities.

**Break Percentage (Break%):** Percentage of points won in service point opportunities.

*Match-by-Match Statistics*

**Match:** Indicates the name of the WTA Tournament, the round the matchup was drawn, and the year the tournament was played (Ex: 2021 Indian Wells R128).

**Result:** Indicates the binary result of the match and the opponent of the selected player (Ex: W vs. Hontama).

**Returns in Play (RiP):** Percentage of return shots put in play.

**Points Won when Return is put in Play per Point (RiP W/Pt):** Percentage of points won when opponent’s service is returned in play.

**Return Winners per Point (RetWnr/Pt):** Percentage of return points won from winning shots on returns.

**Rally Length (RallyLen):** Average length of rally.

**Return Rally Length (RLen-Return):** Average length of rally as a returning player.

**Service Rally Length (RLen-Serve):** Average length of rally as a serving player.

**Forehand Winners per Point (FH Wnr/Pt):** Percentage of points won as winning shots and induced unforced errors via a forehand shot.

**Backhand Winners per Point (BH Wnr/Pt):** Percentage of points won as winning shots and induced unforced errors via a backhand shot.

**Forehand Potency (FHP):** Measures effectiveness of forehand groundstrokes. (Higher numbers indicate better effectiveness)

**Backhand Potency (BHP):** Measures effectiveness of backhand groundstrokes. (Higher numbers indicate better effectiveness)

**Dropshot Frequency (Drop: Freq**): Frequency of dropshots utilized as a percentage of all shots taken.

**Dropshot Winners per Point (Drop: Wnr/Pt):** Percentage of dropshots which are converted as winning shots or induced unforced errors.

**Net Play Frequency (NetFreq):** Frequency of shots taken at the net as a percentage of total shots taken.

**Net Play Winners per Point (Net W/Pt):** Percentage of shots taken at the net which are converted as winning shots or induced unforced errors.

*Created Data Points*

**WTA Win Percentage (Win%):** WTA Wins (W) / (WTA Wins (W) + WTA Losses (L))

**Hard Court Win Percentage (hW/Pt):** Hard Court Wins (hW) / (Hard Court Wins (hW) + Hard Court Losses (hL))

**Grass Court Win Percentage (gW/Pt):** Grass Court Wins (gW) / (Grass Court Wins (gW) + Grass Court Losses (gL))

**Clay Court Win Percentage (cW/Pt):** Clay Court Wins (cW) / (Clay Court Wins (cW) + Clay Court Losses (cL))

**Year:** Indicate what year the match was played.

**Player?:** To differentiate between each player analyzed, numbered 1 to 3 (1 – Paolini, 2 – Zheng, 3 – Sabalenka)

**Win?:** Binary classifier to indicate if player won or lost a given match (0 – Loss, 1 – Win).

# Performance analysis – Jasmine Paolini

## A graph with blue and green bars Description automatically generatedWTA Record (2021-2024)

Figure

### WTA Match Record

From 2021-2023, Jasmine Paolini had an overall win percentage of 51.0%. In 2024, she was able to win 66.7% of her matches, raising her average win percentage over the last four years to 55.0%. Last year, Paolini was also able to increase her Game Win Rate from 49.0% to 54.1% and her Set Win Rate from 47.9% to 63.0%. All of these wins culminated in her best season at a professional level supplemented by her best performance at every single Grand Slam event. The most notable wins for Paolini in 2024 came against Emma Navarro and Madison Keys on her way to the Wimbledon Final, and three wins against Elena Rybakina in the quarterfinals of Roland Garros, the quarterfinals of the Dubai Championship, and a round robin match at the Riyadh Finals. Paolini also had wins against a few players ranked within the top 15 of the WTA Rankings at the Dubai Championship and Stuttgart Grand Prix. Her two most notable losses came in the Roland Garros and Wimbledon Finals coming against Iga Swiatek and Barbora Krejcikova, respectively. Other notable losses came from Aryna Sabalenka, Elena Rybakina, Daria Kasatkin, and two losses to Zheng Qinwen.

### Record on Each Surface

A graph with different colored lines

Description automatically generated

Figure

Most of Paolini’s WTA Tour matches are played on hardcourts. This large sample size minimizes the variance present in hardcourt win percentage from season to season. Paolini’s hardcourt performance hovers around 60.0%. In 2021 and 2022, Paolini played only one match each year on grass courts (2021 & 2022 Wimbledon R128) and lost both of them, resulting in a 0.0% win percentage on grass courts for those two seasons. In 2023, she played in Rothesay International in Eastbourne where she was able to raise her grass court win percentage despite losing in the first round of the Wimbledon for the third year in a row. In 2024, reached the semi-finals in Eastbourne and was the runner-up at the 2024 Wimbledon which gave her a 80.0% win percentage on grass courts for 2024 and raised her average win percentage on grass courts to 30.0% over the last 4 seasons. Clay courts have always been a strength for Paolini, but in 2024 she was able to improve her win percentage on clay courts by 3.9% by winning over 70% of her matches on clay.

## Service Statistics

### A graph with green and blue lines Description automatically generatedAce Rate & Double Fault Rate

Figure

Looking at the last four years of service statistics, Jasmine Paolini’s ace rate has increased every year since 2022, and her double fault rate has decreased every year since 2021. These statistics often are seen trending in the same direction due to the inherit nature to be more aggressive when trying to increase ace rate and therefore leading to a higher double fault rate. Paolini’s ability to increase aces while still minimizing double faults is an illustration of Paolini’s service discipline.

Paolini’s double fault rate was one of the five lowest of all WTA players qualifying for a WTA Ranking. Her ability to serve the ball in play at a high rate forces her opponent to have to make a return shot before a point is decided. By not conceding automatic points to her opponent, Paolini increases her opponent’s likelihood of an unreturned serve or an unforced error. Conversely, her ace rate ranked within the ten lowest of all WTA players qualifying for a WTA Ranking. Despite having this low ace rate, Paolini still currently sits as the fourth ranked female singles player in the world, however, increasing her ace rate from 1.1% in 2022 to 2.1% in 2024 may have had a noteworthy effect on how well her breakout campaign has gone.

## Return Statistics

### Returns in PlayA screen shot of a graph Description automatically generated

Figure

Without a high ace rate to rely on for unreturned service points, Paolini needs to rely on earning points as a returning player and negating the ace rate of her opponents. Adding to the challenge, most of Paolini’s top competitors utilize aces as a main strategy for dominating opponents and winning big tournaments.

As seen in Figure 4, Paolini lost a high percentage of her matches from 2021-2024 when she won less than 55.0% of her return points that she put in play (i.e. return points that were not aces or unforced errors). It is also notable that she won 100.0% of her matches when she returned over 75% of her return shot opportunities in play and converted at least 55% of these opportunities into a break point won. While it would be naïve to assume that this trend would continue at a 100.0% success rate, the sufficient sample size makes this trend worth targeting. While not trending at 100.0% win rate, Paolini seemingly greatly increases her chances of victory when she is able to return over 65% of her return shot opportunities and convert at least 50% of these opportunities into a break point won. This trend should be a major impact point when targeting improvements and strategizing for upcoming matches.

## Rally Statistics

### A screen shot of a graph Description automatically generatedReturn Rally Length & Service Rally Length

Figure

Being that Paolini has a low ace rate, it would be logical to assume that she would need to extend service rallies in order to win matches. However, as seen in Figure 5, Service Rally Length does not seem to have any significant trend on Paolini’s match results. On the other hand, Paolini seems to slightly increase her win percentage in matches she is able to extend her return rallies over 4.25 shots.

While this trend is far from decisive and could use a larger sample size of outcomes that follow the trend rules, it is a strategy worth targeting for more reasons than just the trend observed on win percentage. As stated earlier, Paolini earns points via ace at a considerably lower rate than her usual opponents and other players of similar rank, therefore, by extending return rallies past 4.25 shots, Paolini would be effectively negating most of her opponents’ main competitive advantage.

## Tactical Statistics

### Forehand Winner Rate & Backhand Winner Rate

A screen shot of a computer screen

Description automatically generated

Figure

It is notable that Jasmine Paolini earns her winning shots with both forehand shots and backhand shots in relatively balanced measures. Paolini averages about 15.0% of her winning shots to be forehand winners in a given match while averaging around 10.0% backhanded winners per match. This illustrates the balance of Paolini’s technique and her ability to create winning shots from any tactical situation her opponent can force her into.

### A graph of a graph Description automatically generated with medium confidenceDropshots and Shots at the Net

Figure

Jasmine Paolini utilizes dropshots at a very low clip comparatively to other strategic tactics, never attempting more than 2.0% dropshots as a percentage of total shots taken in a match. On average, less than 50% of Paolini’s dropshots are winning shots, but some matches she has converted 0.0% of her dropshots into winning points, while other matches she has actually converted 100% of her dropshots into points. This variance probably contributes to Jasmine Paolini’s insignificant usage rate of the dropshot, but a larger sample size may reveal a clearer trend.

A more significant part of Jasmine Paolini’s game would be shots taken at the net, averaging around 5.0% shots at the net per match – occasionally reaching over 20.0% frequency for shots taken at the net as a percentage of total shots in a given match. Paolini has been able to rely on a consistent ability to create winning shots in these situations, averaging well over 60.0% winning percentage on shots taken at the net – at lowest averaging just under 40.0% winners on shots at the net in a given match.

Despite the incredibly promising metrics involving Paolini’s net play, intuitively, playing at the net comes with risk of the opponent returning the shot out of reach over her head. This consequence is even more worrying for Jasmine Paolini who is one of the smallest players playing on the WTA Tour. So, while Jasmine Paolini has shown to be effective in these situations, it would be advised to use caution in utilizing this approach at a rate that would be outside of her regular gameplan.

# Comparison – Zheng Qinwen & Aryna Sabalenka

## WTA Record & Rank (2021-2024)

### A graph of different colored lines Description automatically generatedWTA Match Record

Figure

The relative progression of these athletes’ win percentages have categorically shifted year-to-year. In 2021, Zheng Qinwen was in her first season on the WTA Tour and therefore had too small of a sample size to truly make a fair comparison to the other two athletes. Sabalenka, had earned an exceptional win percentage in 2021, while Paolini had an even 20 win-20 loss record leaving her win percentage at a flat 50.0%. The following season, Sabalenka’s win percentage deceased over 11.0%, Zheng won 56.1% of her matches in her first full tour, and Paolini won one more match than she lost, leaving all three athletes with a similar win percentage in 2022. In 2023, Zheng was able to significantly improve her win percentage by over 6.5%, however Sabalenka pulled away from the other two athletes by winning 79.7% of her matches. Paolini on the other hand, remained consistent with her win percentage of the past two seasons only improving a negligible 0.7% from 2022. In 2024, we again saw increases in win percentage from all three athletes at different magnitudes for each athlete. This time, Paolini was the biggest riser winning two thirds of her matches in 2024. Sabalenka saw a small increase in win percentage from her already seemingly unachievable mark from 2023 and Zheng showed steady growth from Year 1 to Year 3, without any setback years.

In career head-to-head matchups, Jasmine Paolini lost to Zheng Qinwen in all four matches played and holds a 2 win-3 loss record against Aryna Sabalenka. Paolini matched up with both opponents most recently at the 2024 Riyadh Finals in the Round Robin round and lot to both Zheng and Sabalenka.

### A graph with different colored lines Description automatically generatedWTA Rank

Figure

Due to her ability to perform her best in the biggest tournaments and earn wins in the high rounds of the 2024 Roland Garros and Wimbledon, Jasmine Paolini has been able to rise to fourth in the overall WTA Tour singles. This ranking is higher than Zheng Qinwen, who is the fifth ranked player, despite Paolini having a lower win percentage in every season since 2022. Both Paolini and Zheng have significantly improved their overall rankings in the last two seasons. Sabalenka stands alone out of these three having never fallen below a final overall ranking of fifth in the four analyzed seasons.

### Record on Each Surface

#### A graph with different colored lines Description automatically generatedHard Court

Figure

Hardcourts are the most common type of court seen on the WTA Tour. Paolini shows consistency in her win percentage on hardcourts, however she ranks worst of the three in win percentage in every analyzed season other than 2022. Zheng shows a consistent ability to perform at a high level on hardcourts, while Sabalenka seems to have more variance in her ability to win on hardcourts, despite having the best win percentage on hardcourts of the three players in 2023 and 2024 by a wide margin.

#### Grass Court

A graph with lines and text

Description automatically generated with medium confidence

Figure

Grass courts are the least common type of court seen of the WTA Tour. For many on the tour, the only tournament they play in on grass courts will be Wimbledon, therefore the win percentages show much more variance than for the hardcourts. Jasmine Paolini lost in the first round of Wimbledon in both 2021 and 2022, while Zheng did the same in 2021 and 2023. Performance at Wimbledon has a major impact on grass court win percentage as Paolini was able to significantly lead Sabalenka and Zheng in grass court win percentage, in large part due to her earning a spot in the 2024 Wimbledon Final.

#### A graph with different colored lines Description automatically generatedClay Court

Figure

Zheng has shown to be the most consistently effective player on clay courts, even in 2021 when she had not played many matches at a WTA Tour level. Paolini has not fallen below a 50.0% win percentage on clay courts, but both Sabalenka and Zheng were able to boast a win percentage around 80.0% on clay in 2024. Paolini winning 70% of her matches on clay is still a positive metric and this point was reinforced with her performance at the 2024 Roland Garros.

## Service Statistics

### A graph with different colored lines Description automatically generatedAce Rate

Figure

As already pointed out, Paolini was able to increase her ace rate from 1.1% to 2.1% in the last two seasons, however this still leaves her far behind the other two athletes. Sabalenka has earned an ace on between 6.5% and 9.0% of her total service shots, while Zheng has gradually progressed closer to an impressive 10% ace rate since her debut in 2021.

### Double Fault Rate

Figure

Jasmine Paolini has consistently excelled in minimizing double faults and has continued to improve this metric every season since 2021. As shown in previously in Figure 14, Aryna Sabalenka had her worst season in terms of double faults in 2022 and this correlates with her worst season analyzed in this report (shown in Figure 8). This point illustrates the importance for Paolini to maintain such a sizeable lead in this metric relative to her opponents. Despite averaging more than double the amount of double faults as Jasmine Paolini, Zheng Qinwen has gradually improved her double fault rate at an even greater rate than her gradual improvement of ace rate. This shows that Zheng shares Paolini’s rare ability to increase ace rate and service aggressiveness while remaining disciplined to service technique and not conceding automatic points to the opponent.

### A graph with different colored lines Description automatically generatedA graph with different colored lines Description automatically generatedService Points

Figure

Figure

Shown in Figures 15 and 16, while Paolini has been able to gradually increase her rate of service points converted, she still significantly lags behind the other two athletes in this metric. Being that Paolini’s ace rate is so low, it seems logical that her service points won would also be lower, however this is an area that still can be improved even without requiring a game-changing ace rate.

## Return Statistics

### Return PointsA graph with lines and a black background Description automatically generatedA graph with lines and a line Description automatically generated with medium confidence

Figure

Figure

As seen in Figures 17 and 18, these metrics seem to be more favorable towards Jasmine Paolini and her style of play compared to service statistics. In 2024, Paolini narrowly lead all three athletes in both Return Points Won as a percentage of total points won and Break Points earned as a percentage of all break point opportunities. These metrics have been consistent strengths for Jasmine Paolini in the analyzed seasons.

## Rally Statistics

### A screen shot of a graph Description automatically generatedRally Length

Figure

As seen in Figure 19, Jasmine Paolini is able to extend her rallies for much longer than both Zheng and Sabalenka, especially her return rallies. Sabalenka and Zheng having a high consistency of matches averaging short service rallies is probably contributed to by the two athletes’ high ace rate.

### A screen shot of a graph Description automatically generatedEffect of Rally Length on FHP

Figure

For all three athletes, the length of a rally has seemingly a minimal effect on the potency of their forehand shots. This is significant because we saw in Figure 6 that Jasmine Paolini earns a larger percentage of her winning shots from forehand shots than backhand shots, so it is important to know that extending rallies will not have a statistical impact on her forehand shots.

### A screen shot of a graph Description automatically generatedEffect of Rally Length on BHP

Figure

As we can see illustrated in Figure 21, rally length clearly has a negative effect on backhand potency, especially for Zheng Qinwen and Jasmine Paolini. This is important because it may expose a weakness that Jasmine can try to expose in her opponents, while at the same time it is important to note how reduced backhand potency would affect her and her opponents’ ability to convert points and convert match wins.

### Backhand Potency vs Forehand Potency and How they relate to Wins

#### A graph with red and blue dots Description automatically generatedSabalenka

Figure

As shown in Figure 22, a high percentage of Aryna Sabalenka’s losses occur when her backhand potency is below 10.0, and she loses at an even higher rate when her backhand potency falls below 2.5. Given what we found in Figure 21, this would imply that the best strategy for earning points against Aryna Sabalenka would be to try to diminish her backhand potency by extending a rally.

#### A graph with red and blue dots Description automatically generatedZheng

Figure

For Zheng Qinwen, the discrepancy between winning and losing when her backhand potency is low is even more pronounced. As shown in Figure 23, Zheng Qinwen lost almost every match where her backhand potency was rated below 0, while, conversely, winning a very high percentage of her matches when her backhand potency is rated above 7.5.

#### Paolini

A graph with red and blue dots

Description automatically generated

Figure

Jasmine Paolini does not necessarily share in this trend of losing matches when her backhand or forehand potency are not highly rated. In fact, Paolini has won more matches when her forehand potency is rated below 10.0 than when her forehand potency is rated above that benchmark. Paolini shows an ability to win matches whether her backhand potency is highly rated or not, which is important if her plan is to extend rallies at the expense of backhand potency.

# Improvement Recommendations – Jasmine Paolini

## Rally Length

Although Rally Length is already a developed strength in Jasmine Paolini’s arsenal, we have uncovered a notable weakness in top competition that is exposed when rallies are extended. As shown in Figure 21, we uncovered a correlation between increasing rally length and diminishing backhand potency (BHP). Then we extended this point to find the effect backhand potency has on winning matches for Jasmine Paolini, Aryna Sabalenka, and Zheng Qinwen. As Figure 23 was able to illustrate, Zheng Qinwen showed major difficulties converting wins when her backhand potency was not a positive factor of her game. This is significant because Zheng Qinwen currently holds an undefeated record against Jasmine Paolini head-to-head across four meetings. Therefore, it would be a sound strategy to prepare to extend rallies against Zheng Qinwen in an effort to diminish Zheng’s backhand potency.

A few ways Paolini can attempt to extend rallies and increase average rally length would be to increase her returns in play and her own backhand and forehand potency. These things can be improved with constant reps returning shots at all angles on the court to perfect return shot technique.

## Returns in Play

While Jasmine Paolini has shown consistency to be a top ranking player every season in terms of return shots put in play, she needs this metric to be considerably better than her competitors. This metric needs to be such a priority for Paolini given her inability to convert service points via ace at the same level as her opponents. There is a sizeable gap between her and other top ranking athletes in terms of ace rate, therefore, Paolini needs to create an equivalent or greater margin between her and her competition in Returns in Play and Win Rate on Return points. This will mitigate the advantage her opponents have on service points, and, in most cases, will negate the opponent’s most dominant skillset.

Adding to this, the trend, uncovered in Figure 4, of winning matches 100.0% when returning over 75.0% of return opportunities and winning the break point in 55.0% of those instances is too positive to ignore. Even if this trend is busted when adding a larger sample size, it would most likely be in Jasmine Paolini’s best interest to aim to reach these returning benchmarks to test the quality of this trend.

She can improve her performance on return points by studying film and analytics on her opponent’s serve tendencies. Returning a serve can call for different skillsets and actions depending on who the opponent is and how the opponent serves, so film study and practice reps would be an effective way to perform better in these metrics.

## Service Points Won

While it is unlikely to assume that Jasmine Paolini will be able to close the gap between the other top WTA Tour ranked athletes and herself in ace rate, she still can strategically improve her performance on service points beyond the first service. Being able to still win service points while also expecting her opponent to return a lot of her serves in play will be a top priority in her game execution.

One way we would suggest improving this metric would be to increase rally length as stated in the first recommendation. By extending service rallies, Paolini increases her likelihood of diminishing her opponent’s backhand potency, which we uncovered has a correlation with winning and losing matches in Figures 21-24. This same strategy applies to both return points and service points.

Improving ace rate and closing the gap between her and her competitors would still be a positive, and, given Paolini’s history of being able to increase ace rate while still decreasing double fault rate, it makes sense to continue to try and improve these metrics. We would not expect Jasmine Paolini’s ace rate to match the ace rate of Zheng Qinwen or even Aryna Sabalenka, but, given her highest ace rate came in her best season of her career, we have reason to believe that any improvement in ace rate would be a significant factor in winning more major tournament matchups.

# Conclusion

Jasmine Paolini is an interesting player to analyze given her unique style of play and pathway to victory against other WTA superstars. Other players on the WTA Tour depend on high service speeds to convert aces and a high rate of service points, but Paolini is the counterattack to this strategy.

Lead by her exceptionally low double fault rate, her ability to extend both service and return rallies, and her high conversion rate on return points, Paolini has been able to compete against the world’s best tennis talent by negating other player’s top skillset and attacking key weaknesses that other players are not capable of exposing. Her ability to extend rallies in rare of any athlete at the WTA Tour level, and even more impressive when considering her physical size.

A large factor of Paolini’s success is her discipline, a hard skill to illustrate metrically, which has benefitted her positively in some of the biggest matches of her career. The best illustration of her discipline is probably shown in the balance she shows in her frequency of winning shots with forehand shots, backhand shots, at-the-net shots, and even the occasional dropshot. Her game requires a balance that takes years to curate and develop into a sound strategy that she can take with her across the major tennis tournaments of the world. While she converts on about 60.0% of her at-the-net shots on average, she still utilizes it at a normal frequency relative to other WTA Tour athletes. It would logically make sense to assume that if she used net play more often then she would score points more frequently, but there is also an argument to be made that she converts such a high percentage of net shots because of the moderation she uses in her net play frequency. Balance is an important element of Jasmine Paolini’s game, because as a player who relies on scoring on return points, Paolini needs to be ready to react to different opponents’ serves and shots. Since each opponent is different, Paolini needs a strategy of balance to be truly effective against all opponents and improve her already stellar world ranking from above fourth in the world.

References

1. *Rankings*. Women’s Tennis Association. (2019, August 15). https://www.wtatennis.com/news/1312140/rankings
2. Tennis abstract: Aryna Sabalenka match results, splits, and analysis. (n.d.). https://www.tennisabstract.com/cgi-bin/wplayer.cgi?p=ArynaSabalenka
3. Tennis abstract: Jasmine Paolini match results, splits, and analysis. (n.d.). https://www.tennisabstract.com/cgi-bin/wplayer.cgi?p=211148%2FJasmine-Paolini
4. Tennis abstract: Qinwen Zheng match results, splits, and analysis. (n.d.). https://www.tennisabstract.com/cgi-bin/wplayer.cgi?p=221012%2FQinwen-Zheng
5. *Tennis rankings: Official Women’s Tennis Rankings – WTA tennis*. Women’s Tennis Association. (n.d.). https://www.wtatennis.com/rankings/singles

1. [Rankings](https://www.wtatennis.com/news/1312140/rankings) [↑](#footnote-ref-2)