**Prompt 2: Final Report**

[1,154 words]

This qualitative inquiry was driven by a curiosity around slumping performance at the highest level in professional sports and whether a Sophomore Slump even existed and, if so, whether some NFL positions were more heavily impacted. The data set contains basic demographic information about all NFL players, past and present, such as name, birth date, college, position, years played, etc. In addition to demographic information, there are additional tabs that track the relevant NFL season stats for each of these players for their position. Quarterbacks, for example, have data tracking their passing yards, touchdowns, interceptions, passer rating, etc., while defensive safeties have data tracking tackles, interceptions, and sacks. Together, this information would be critical for any quantitative analysis, but served instead as the framework for a qualitative analysis that sought to understand how three avid NFL fans expected the data to look and the reasons for this expectation.

The subjects agreed that the Sophomore Slump is a phenomenon seen in high-level college and professional sports. While there were disagreements between the 3 interviewees around the prevalence of slumps in the NFL, there was a strong belief that the Sophomore Slump is an existing phenomenon. As P3 noted, "Sophomore Slumps do occur every season where players are unable to build off their rookie season momentum or are figured out by the rest of the league through more focused game planning." With this belief established across all three interview participants, the focus shifted to understand what may cause this type of phenomenon at the professional level.

There are many factors to consider when both predicting when a slump may occur and how to quantify a slump itself. First, a player's college experience and, relatedly, draft position, impacts rookie and subsequent season performance. Success at the college level would lead to a greater availability of game tape on the player and could impact performance at the next level as a more known commodity. Similarly, draft position could also affect player performance as more heralded players will likely receive greater attention their rookie seasons as opposed to late-round or undrafted players. Lastly, players from prominent colleges and universities may fair worse than smaller school players transitioning to the professional level due to their lack of anonymity. In quantifying slumps, in addition to raw statistics, an eye test and assessing off-the-field character may also be needed to determine whether a player is slumping. Eye tests would be an important metric to consider when evaluating slumps, as it will be important to understand when statistics are achieved (e.g., in the 4$^{th}$ quarter of close games or blowouts, when the game is already over). Off-the-field issues and character concerns also would be a very important component to consider if there was a quantitative analysis to perform, as well. There isn't one metric to evaluate Sophomore Slumps and it's important to consider this when developing the framework for a quantitative analysis.

External factors play a large role in impacting player performance following their rookie season. First, talent influxes can result in fewer opportunities to meet prior year performance marks. Situations where younger and fresher players take time away from older players is a definite external factor to consider. Recent examples of this include Dak Prescott's disappointing sophomore campaign, stemming from poor performance of teammates as well as Devonta Smith's current sophomore campaign which shows decreased stats due to the signing of a top player at the same position. Additionally, injuries following a successful season are a major factor in whether a slump will occur in the sophomore season. As P1 notes, "the biggest contributors for a Sophomore Slump were injury, followed by complacency and lack of motivation." Next, coaching and team structure are factors out of a player's control that significantly impact year to year performance, as well. As P2 noted, "sustainable player growth requires luck, the right attitude, and strong team support." Coaching and team structure significantly impact player success in both the short and long term. Relatedly, team culture can result in slumps. There was a scenario noted where a player was traded from a relaxed, losing culture to a perennial championship team and flourished within the new system. As a final external factor to consider, the NFL relies on game film review to find player weaknesses to exploit in future years and games. Sophomore Slumps will be more prevalent for players in positions that teams often strategize specifically against, quarterbacks being the biggest example. Players with less footage may be more likely to have a successful rookie season but the league may be able to figure the player out

in the future, leading to a slump or the need for the player to adjust to the implemented strategy. These are all external factors that can lead to Sophomore Slumps. While external factors are the major drivers, there are also internal factors to consider.

Internal factors also play a role in impacting player performance following their rookie season. While slumps were noted by the interviewees to be mainly driven by external factors, player commitment was a common internal driver that was discussed. Similarly, changes in training and lifestyle stemming from being a professional athlete in the spotlight may also be an internal driver that could lead to poor sophomore performance.

The NFL has specific positions that, due to their star power potential, are more prone to slumps than others, and media bias likely impacts public perception around slump prevalence across NFL positions. Interviews commonly called out the wide receiver, quarterback, and cornerback positions as the most prone to slumps due to star power of the position and the attention that opposing coaches pay to these spots. Many examples of slumps detailed the quarterback position. This may point to just the star power of certain positions impacting public perception of which positions are most prone to slumping. An interesting note around media bias was raised by P3. Similarly to the public's bias, the media likely has a focus on the star positions like quarterback, as well, which would impact perception around how certain positions are prone to slumps year over year. It may be possible that the most slump-prone positions are OL or DL, but the public or media's inability to assess performance due to knowledge gaps or a lack of media focus may be shifting the perception around Sophomore Slumps incorrectly.

In conclusion, there does appear to be Sophomore Slumps occurring at the NFL level due to both internal and external factors. While there were specific callouts to the quarterback position being most heavily impacted by slumping, future quantitative analysis should develop an approach for fairly evaluating performance across all positions as media and public perception may be biased towards positions with greater star power. Finally, developing metrics to determine who may be more prone to slumping and to determine a slump itself would be critical in future analytic work as criteria outside of just raw statistics must be considered.