

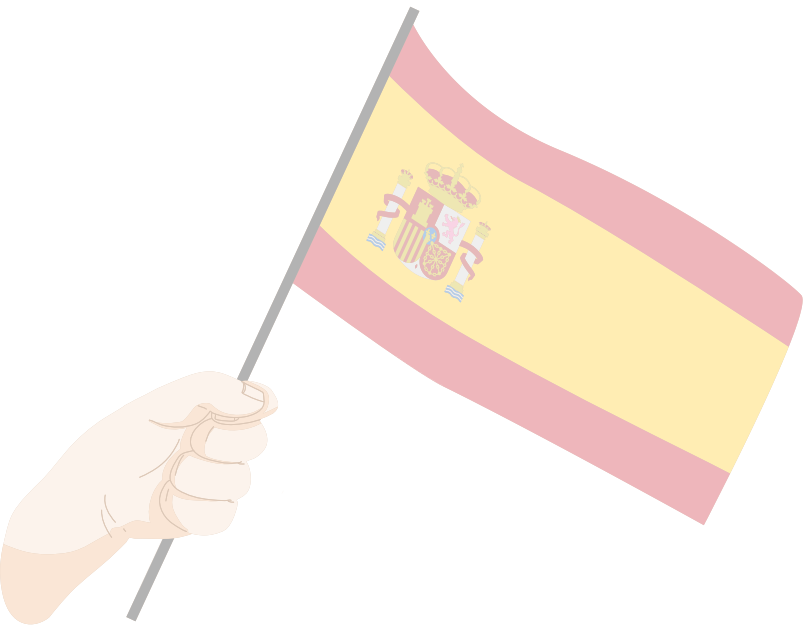
FINAL PROJECT

# BARCELONA LISTINGS

Presented by Bryan Benisti

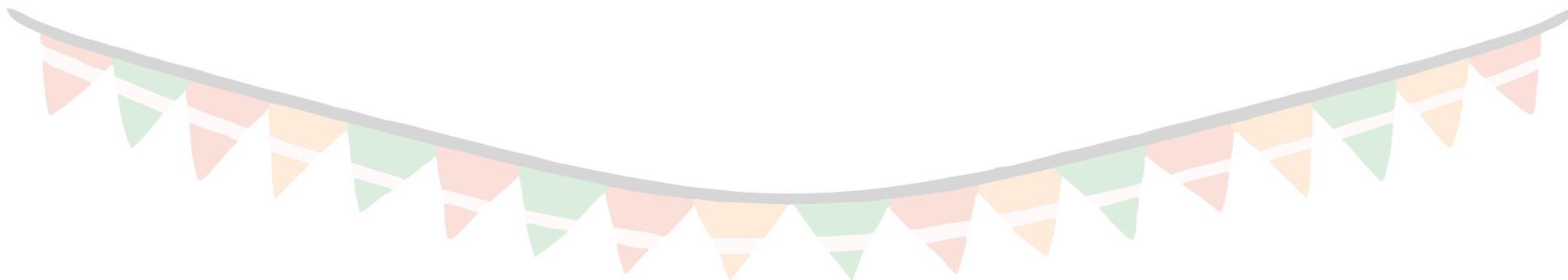
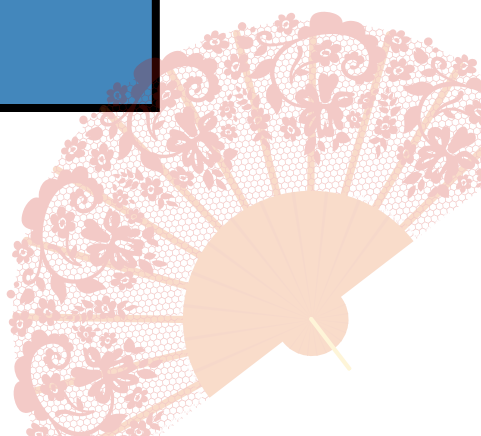


# General Overview



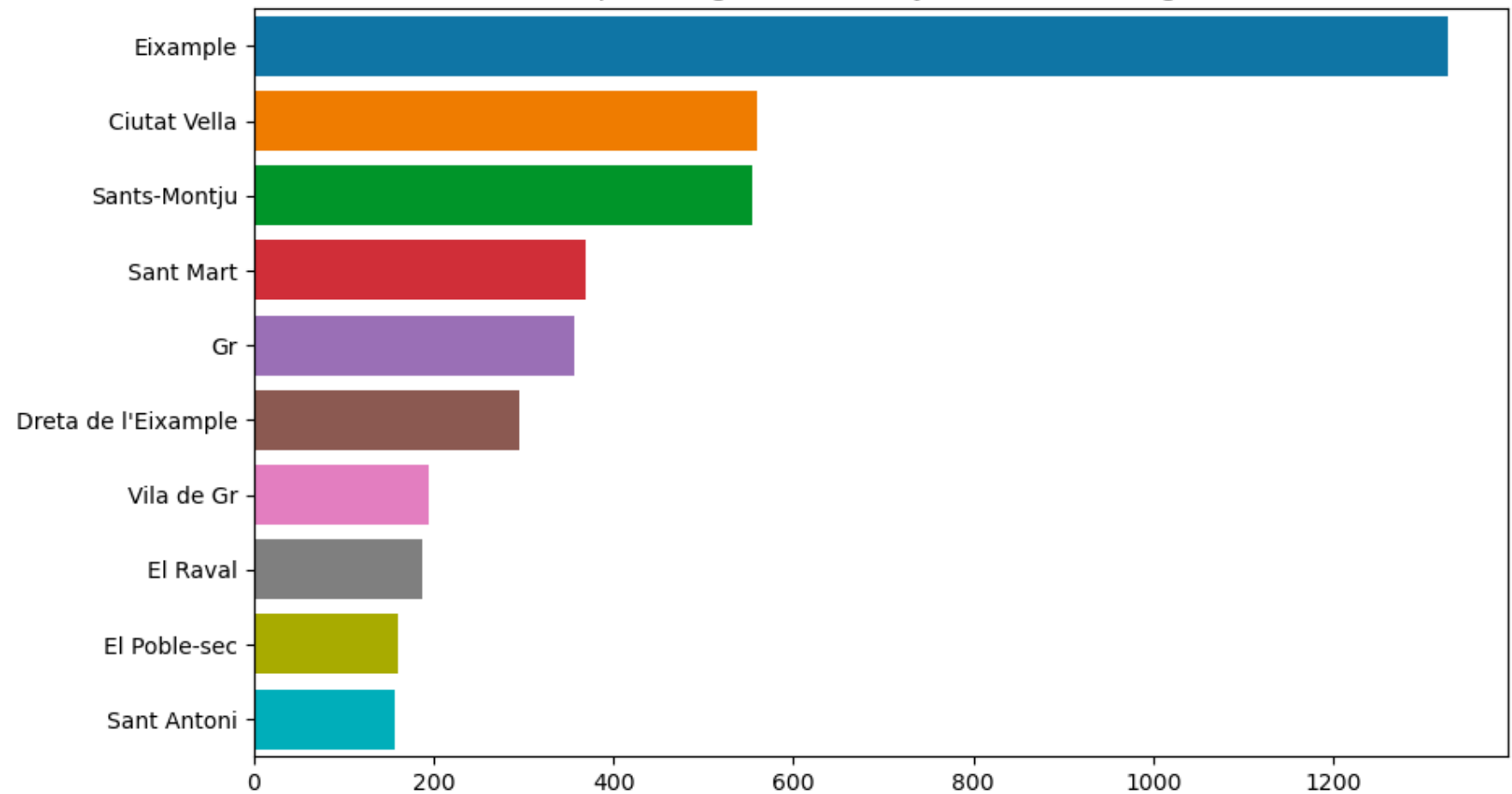
- The dataset looks at 5999 AirBnb listings in Barcelona
- There are 95 columns that define different aspects of the listing.
- There are 3398 unique hosts in total.
- Average price per night is €136.9
- Min price per night: €9.
- Max price per night: €9120.

count	5999.0
mean	136.983997
min	9.0
25%	40.0
50%	73.0
75%	125.0
max	9120.0

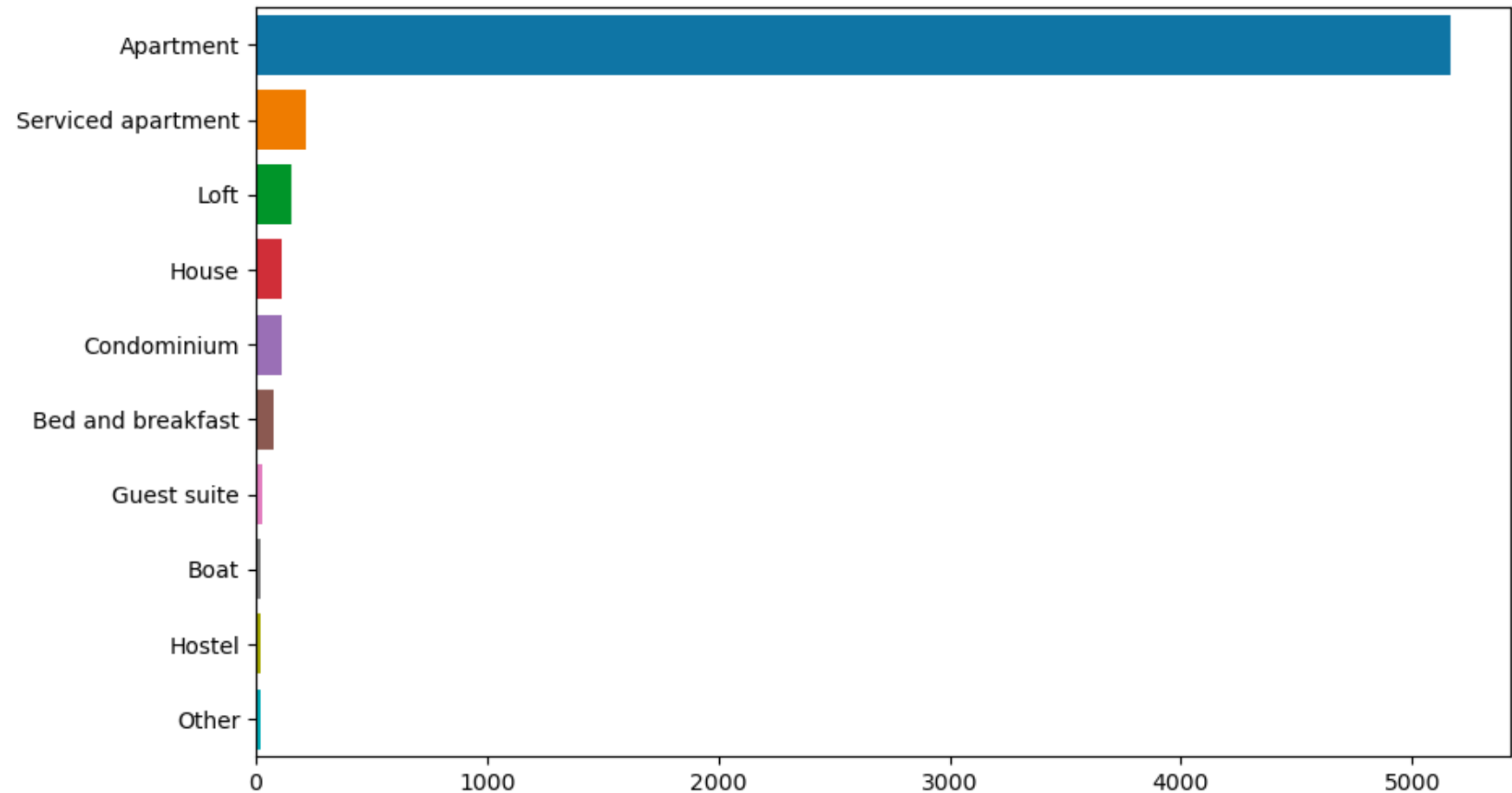


# General Overview

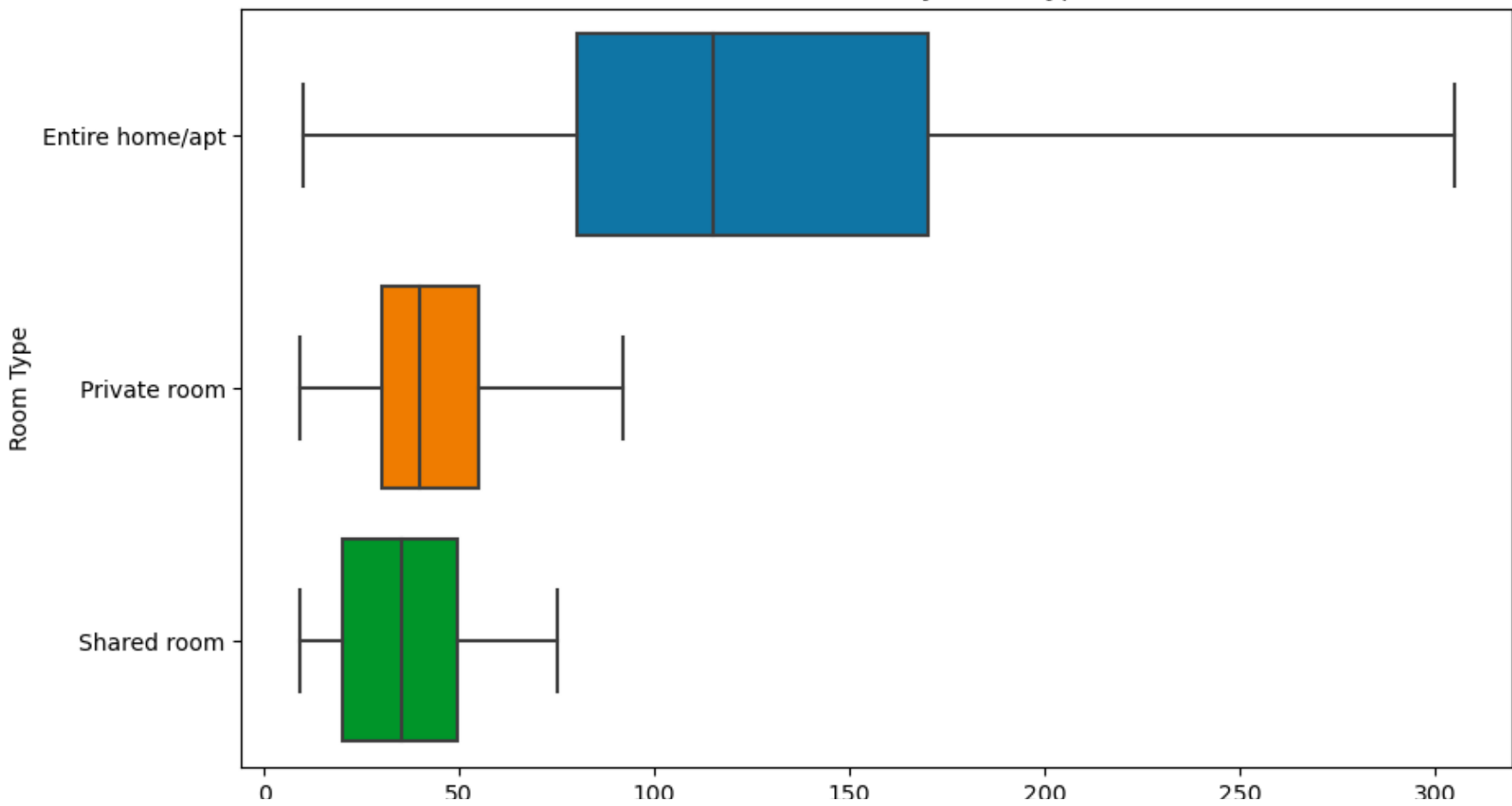
Top 10 Neighbourhoods by Number of Listings



Top 10 Property Types



Price Distribution by Room Type



- **Neighbourhood Listings:** Eixample is the neighbourhood with the highest number of listings, significantly outpacing others and indicating it as a popular choice for Airbnb hosts in Barcelona.
- **Property Type Distribution:** Apartments dominate the property type listings on Airbnb, making up the vast majority, followed by a smaller but notable number of serviced apartments and lofts.
- **Price Distribution by Room Type:** Entire homes/apartments show the highest price range and median price compared to private and shared rooms, which have a more modest price distribution, suggesting that guests pay premium prices for privacy and space.

# IMPACT OF THE NUMBER OF AMENITIES ON THE PRICE

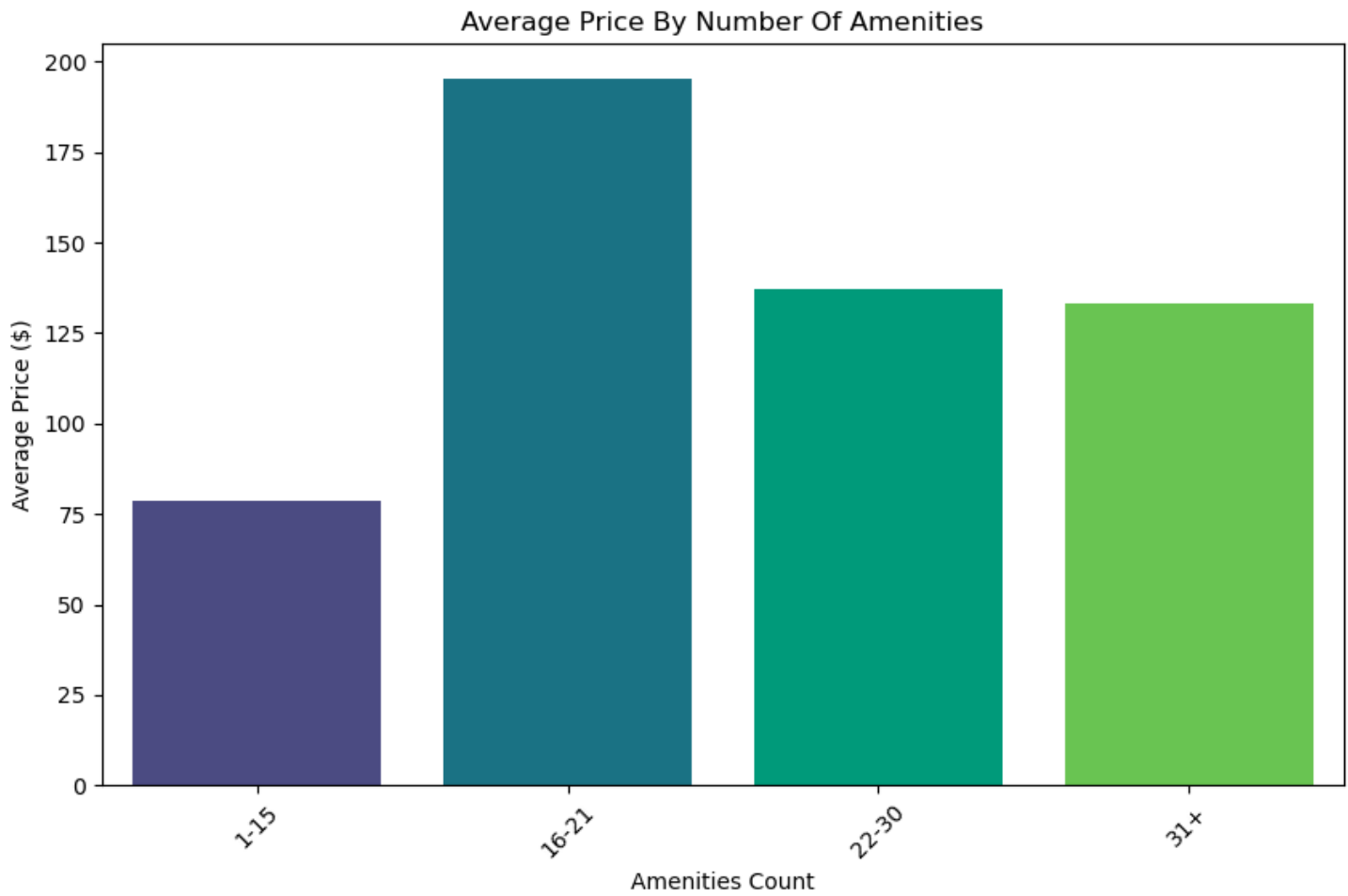
Artist count and song popularity

Trends of songs attributes over the year

Hit Score

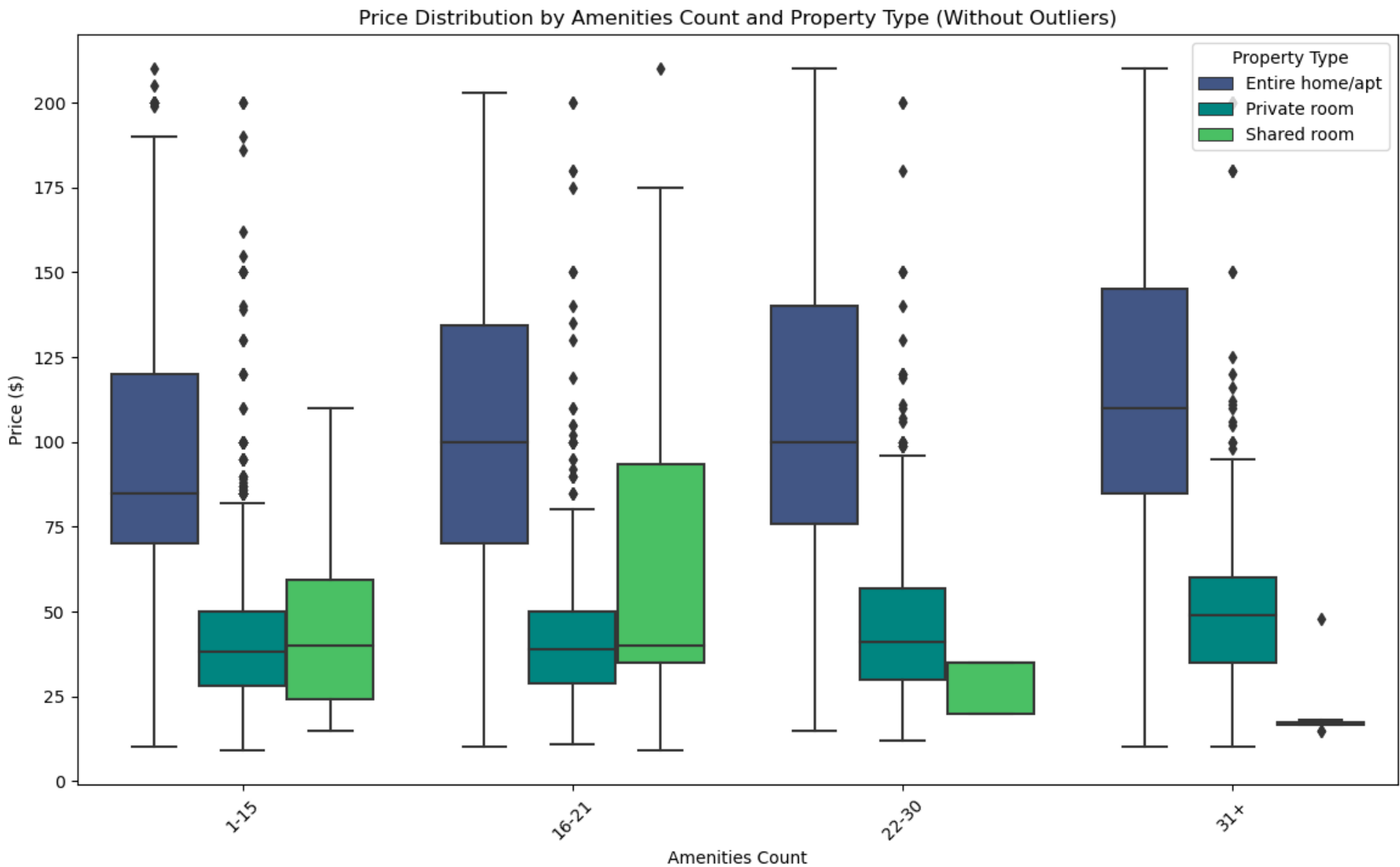
Mood Metrics

CRS

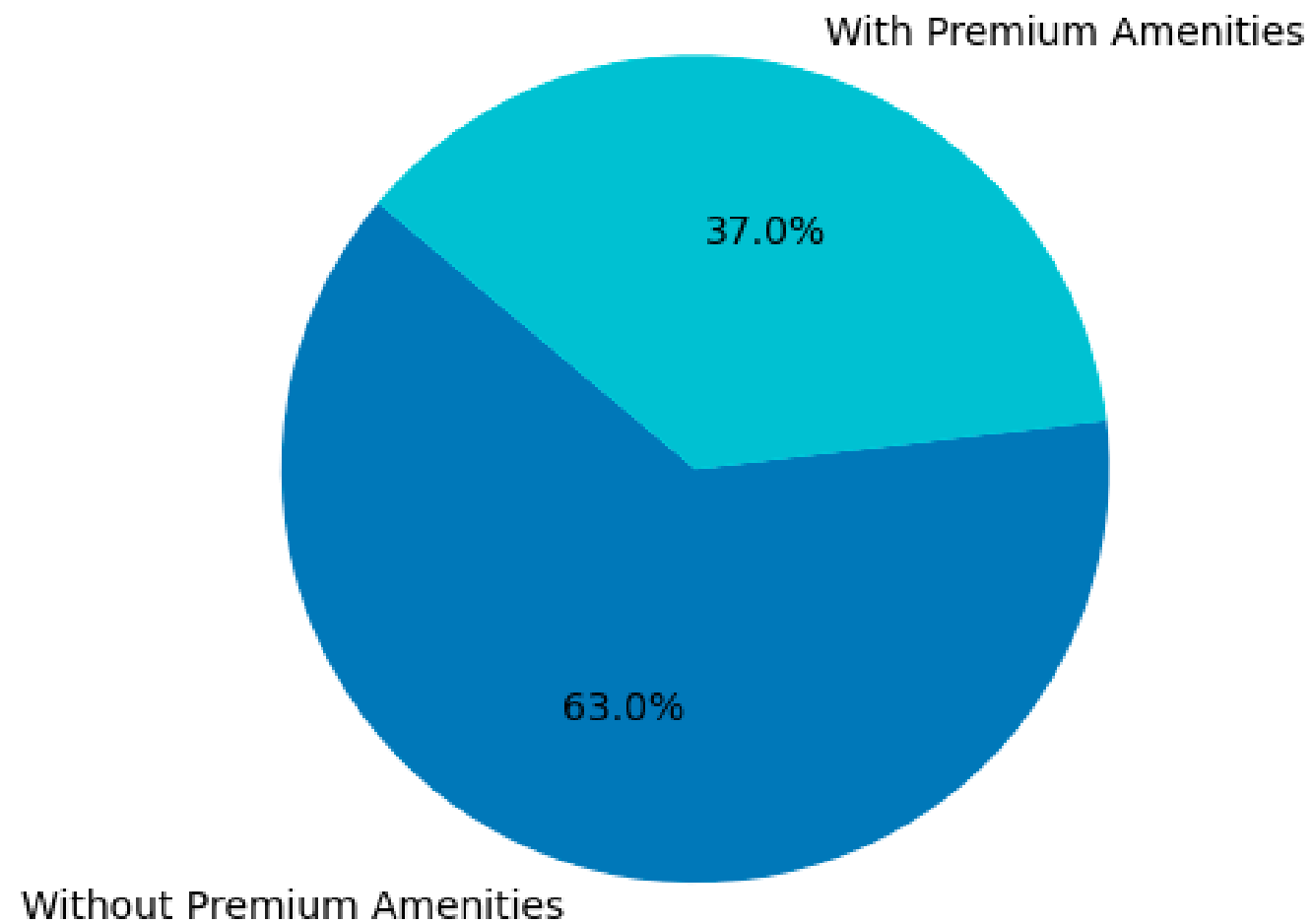


- Optimal Range for Amenities: The data indicates that listings with 16–21 amenities command the highest average price, challenging the notion that more amenities always lead to higher prices.

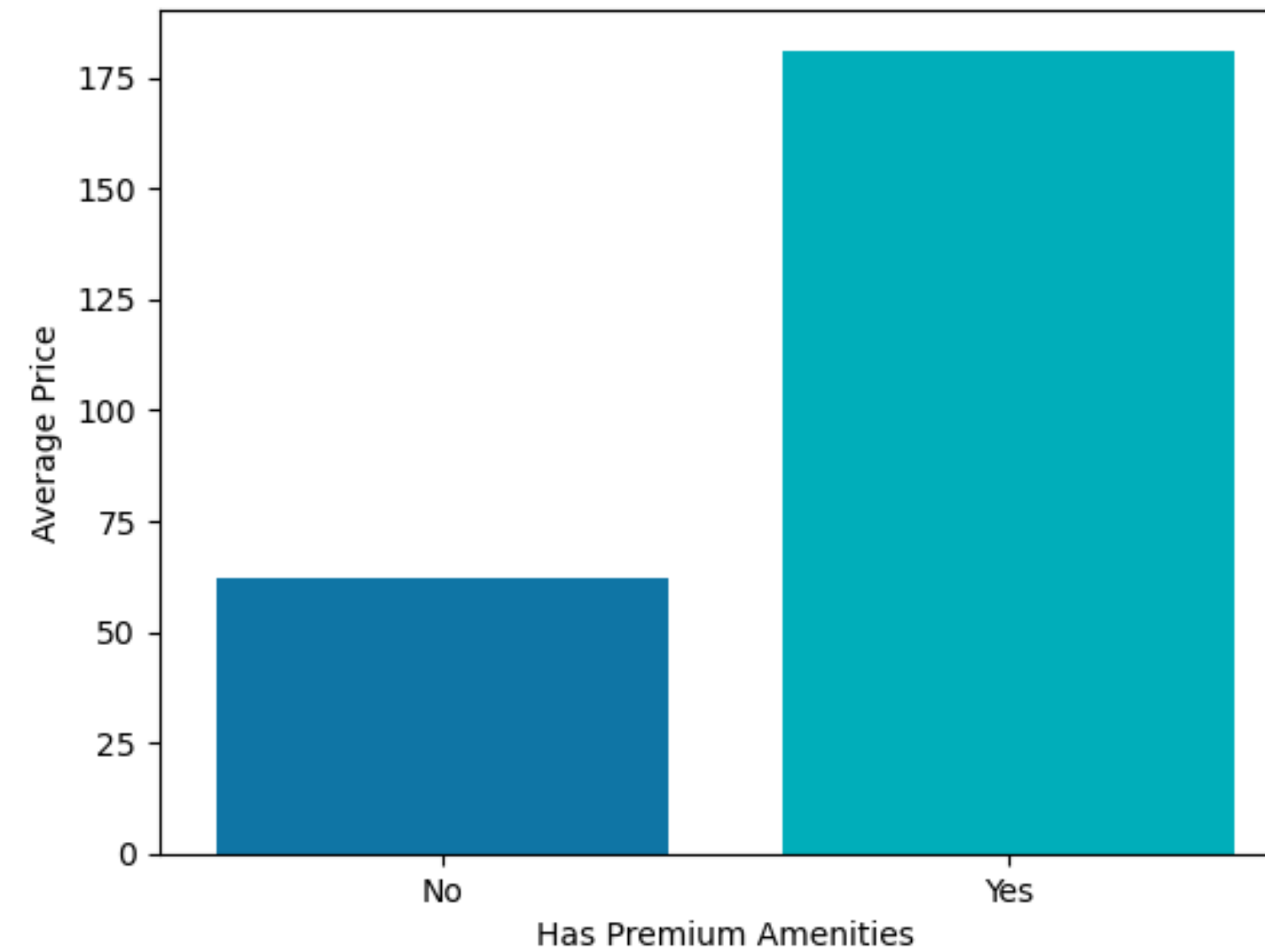
- Distinct Impact by Room Type:** For entire homes/apartments, there is a positive correlation between the number of amenities and the listing price, suggesting that guests are willing to pay more for added features.
- Stable Pricing for Private Rooms:** Private rooms show a relatively stable price regardless of the number of amenities, indicating that other factors may be more influential on price for these listings.
- Decreased Value for Shared Rooms with More Amenities:** Interestingly, shared rooms exhibit a decrease in price as the number of amenities increases, which may reflect market preferences or an overvaluation of additional amenities in these shared spaces.



Proportion of Listings with Premium Amenities



Average Price by Presence of Premium Amenities

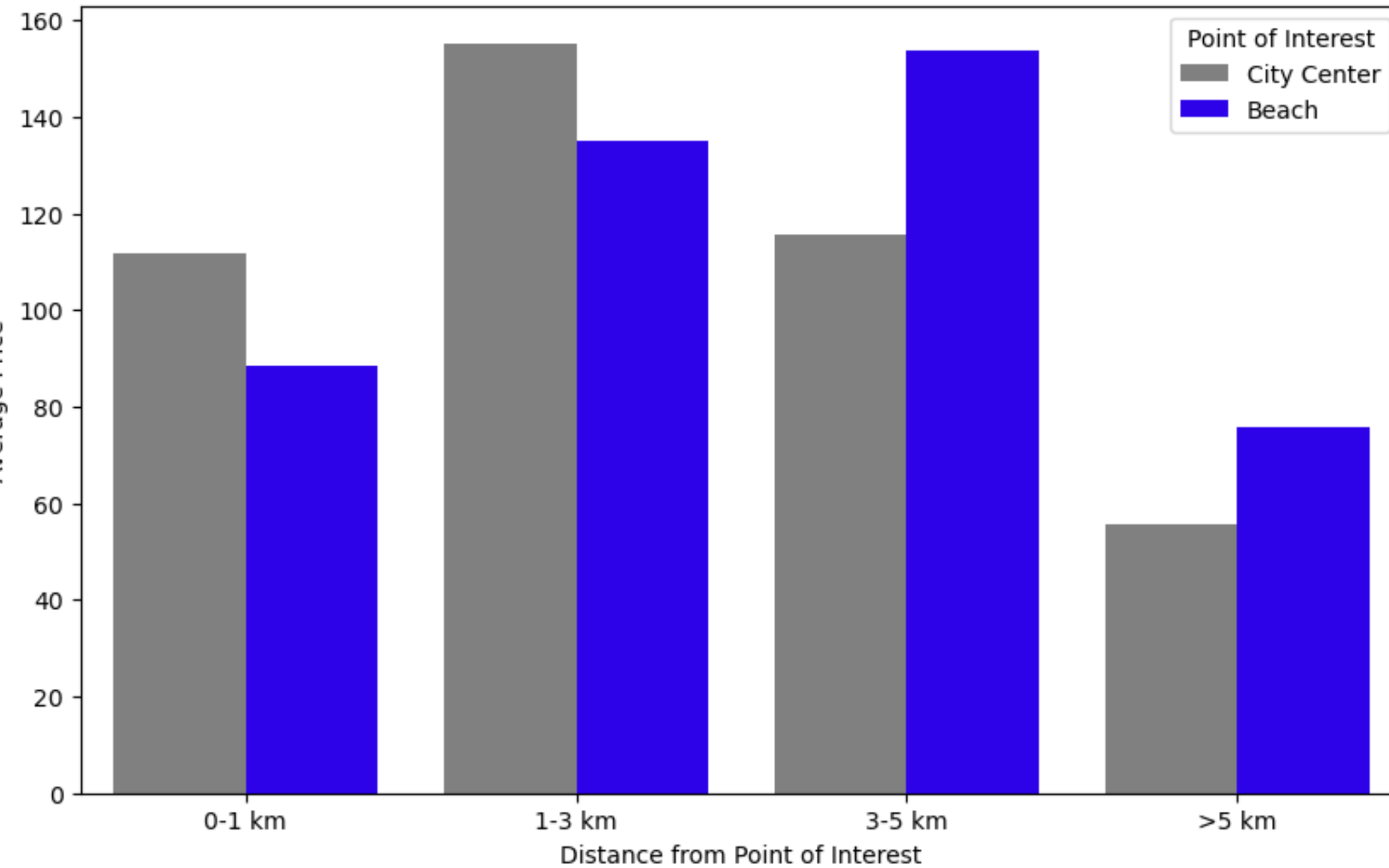


- **Premium amenities:** pools, hot tubs, free parking, air conditioning, gyms, and waterfront access.
- **Selective Presence:** A smaller portion of properties (37%) in the dataset feature premium amenities, which indicates a level of exclusivity in the market.
- **Significant Price Influence:** Despite their lesser prevalence, listings with premium amenities demonstrate a significant increase in average price, highlighting the substantial impact that these amenities have on the pricing strategy.





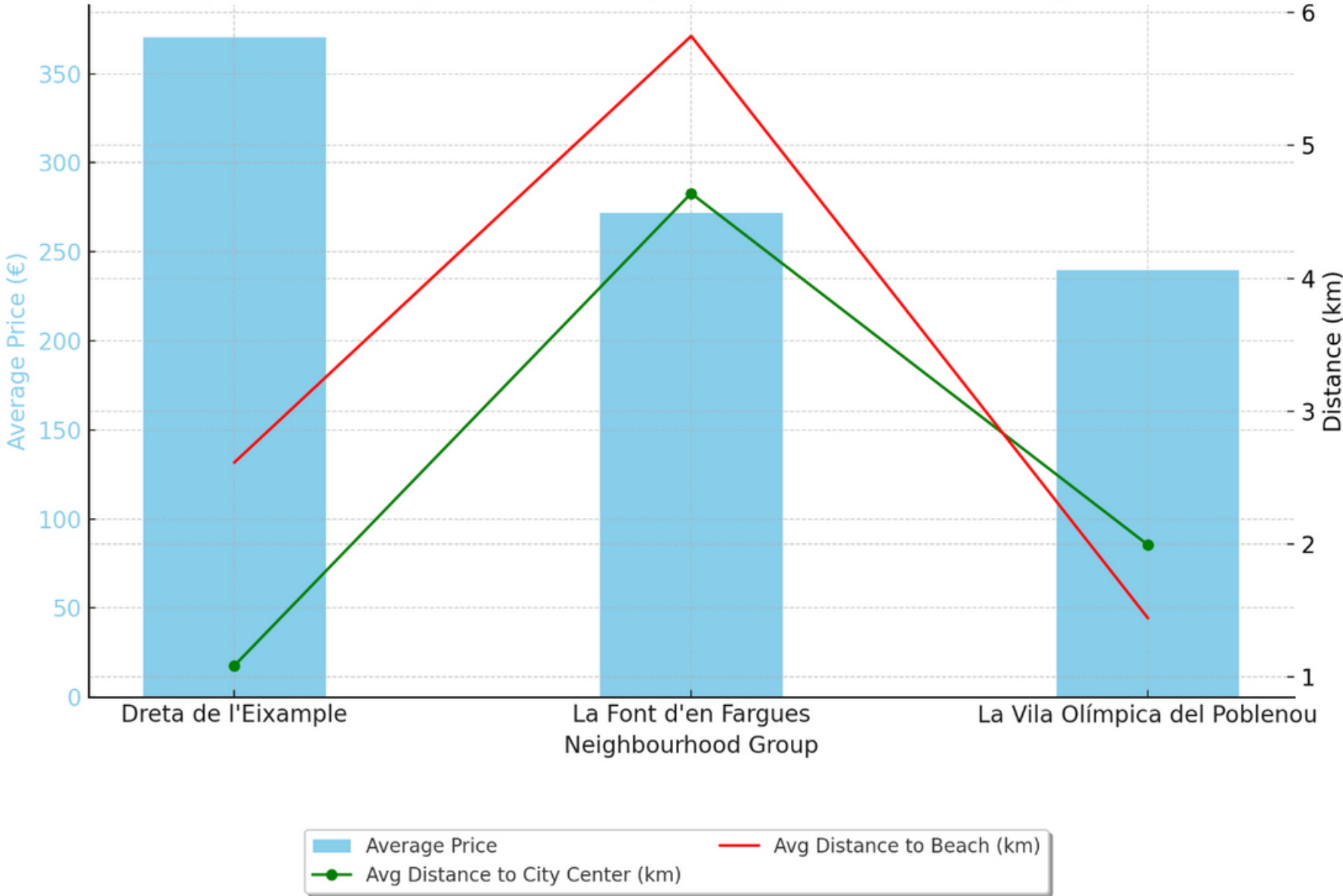
Comparison of Average Price by Proximity to City Center vs. Beach



- **City Center Proximity Premium:** Listings 1–3 km from Barcelona's city center command higher prices, indicating a value placed on being close to central attractions with the advantage of a less crowded area.
- **Beach Proximity Pricing:** The highest average prices for proximity to the beach are at 3–5 km, challenging the expectation that closer beach access always equates to higher listing prices.
- **Price Drop Beyond 5 km:** There is a significant decrease in listing prices beyond 5 km from both the city center and the beach, reflecting lower demand for accommodations farther from key attractions.
- **Balanced Location Value:** Guests appear to prefer locations that offer a balance between access to the beach and the city center, suggesting the importance of a diverse experience over proximity to a single attraction in Barcelona.

- Top Expensive Neighbourhoods:** Dreta de l'Eixample, La Font d'en Fargues, and La Vila Olímpica lead with average prices of €370, €272, and €240.
- City Center Proximity:** Dreta de l'Eixample is closest to the city center (1.09 km), influencing its high price.
- Beach Access:** La Vila Olímpica, closest to the beach (1.45 km), ranks third in price, showing the value of beach proximity.
- Distance Impact:** Despite La Font d'en Fargues being farthest from city center and beach (>4.6 km), it still commands a high price, showcasing varied distance impacts.

Comparison of Neighbourhoods by Average Price and Average Distances



- Ciutat Vella**
- el Raval
  - el Gòtic
  - la Barceloneta
  - Sant Pere, Santa Caterina i la Ribera
- L'Eixample**
- el Fort Pienc
  - la Sagrada Família
  - la Dreta de l'Eixample
  - Antiga Esquerra de l'Eixample
  - Nova Esquerra de l'Eixample
  - Sant Antoni
- Sants-Montjuïc**
- el Poble Sec
  - la Marina del Prat Vermell
  - la Marina de Port
  - la Font de la Guatlla
  - Hostafrancs
  - la Bordeta
  - Sants-Badal
  - Sants
- PM Parc de Montjuïc  
FP Zona Franca-Port
- Les Corts**
- les Corts
  - la Maternitat i Sant Ramon
  - Pedralbes
- Sarrià - Sant Gervasi**
- Vallvidrera, Tibidabo i les Planes
  - Sarrià
  - les Tres Torres
  - Sant Gervasi-Bonanova
  - Sant Gervasi-Galvany
  - el Putget i Farró

- Gràcia**
- Vallcarca i els Penitents
  - el Coll
  - la Salut
  - Vila de Gràcia
  - el Camp d'en Grassot i Gràcia Nova

- Horta - Guinardó**
- Baix Guinardó
  - Can Baró
  - el Guinardó
  - la Font d'en Fargues
  - el Carmel
  - la Teixonera
  - Sant Genís dels Agudells
  - Montbau
  - la Vall d'Hebron
  - la Clota
  - Horta

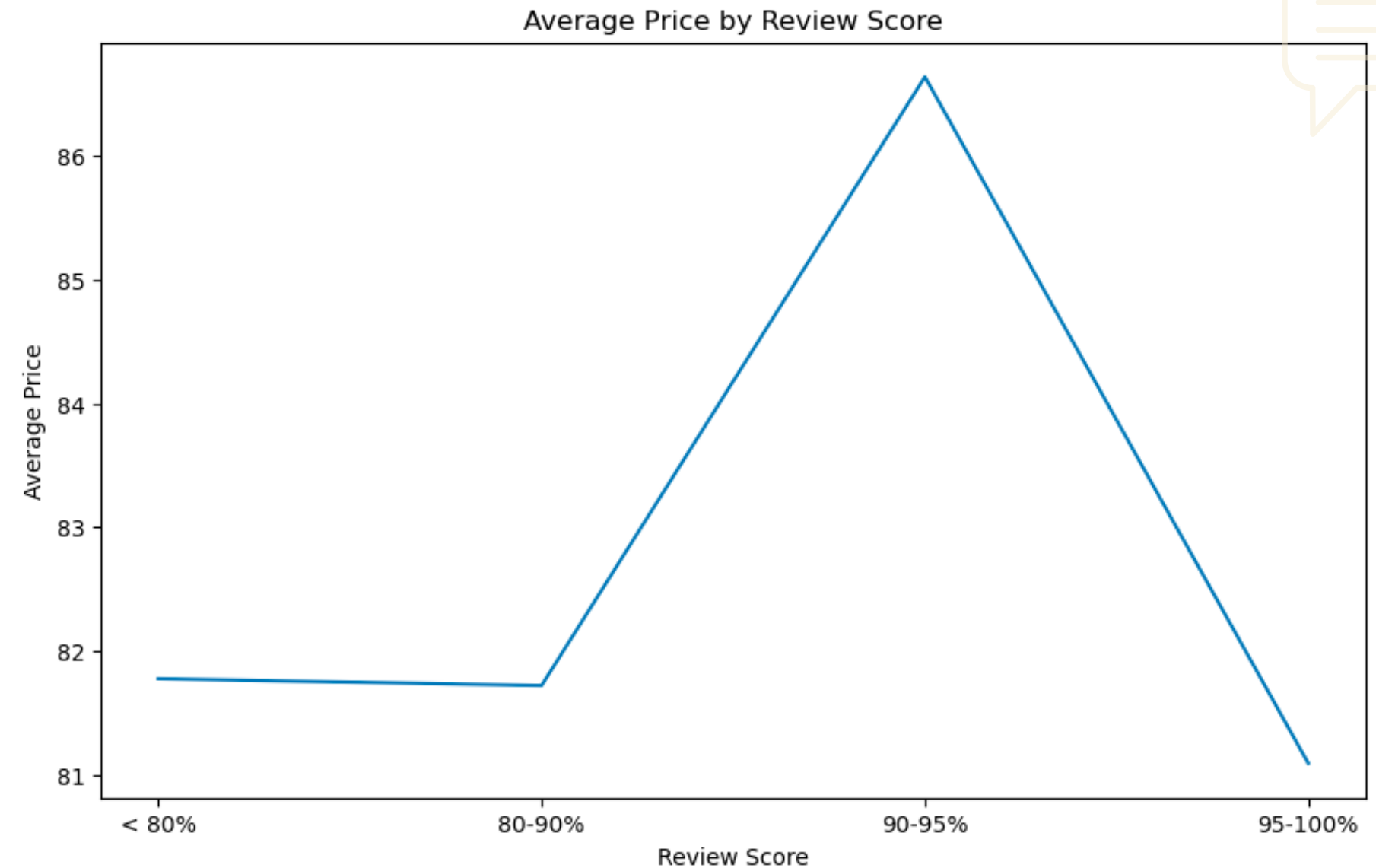
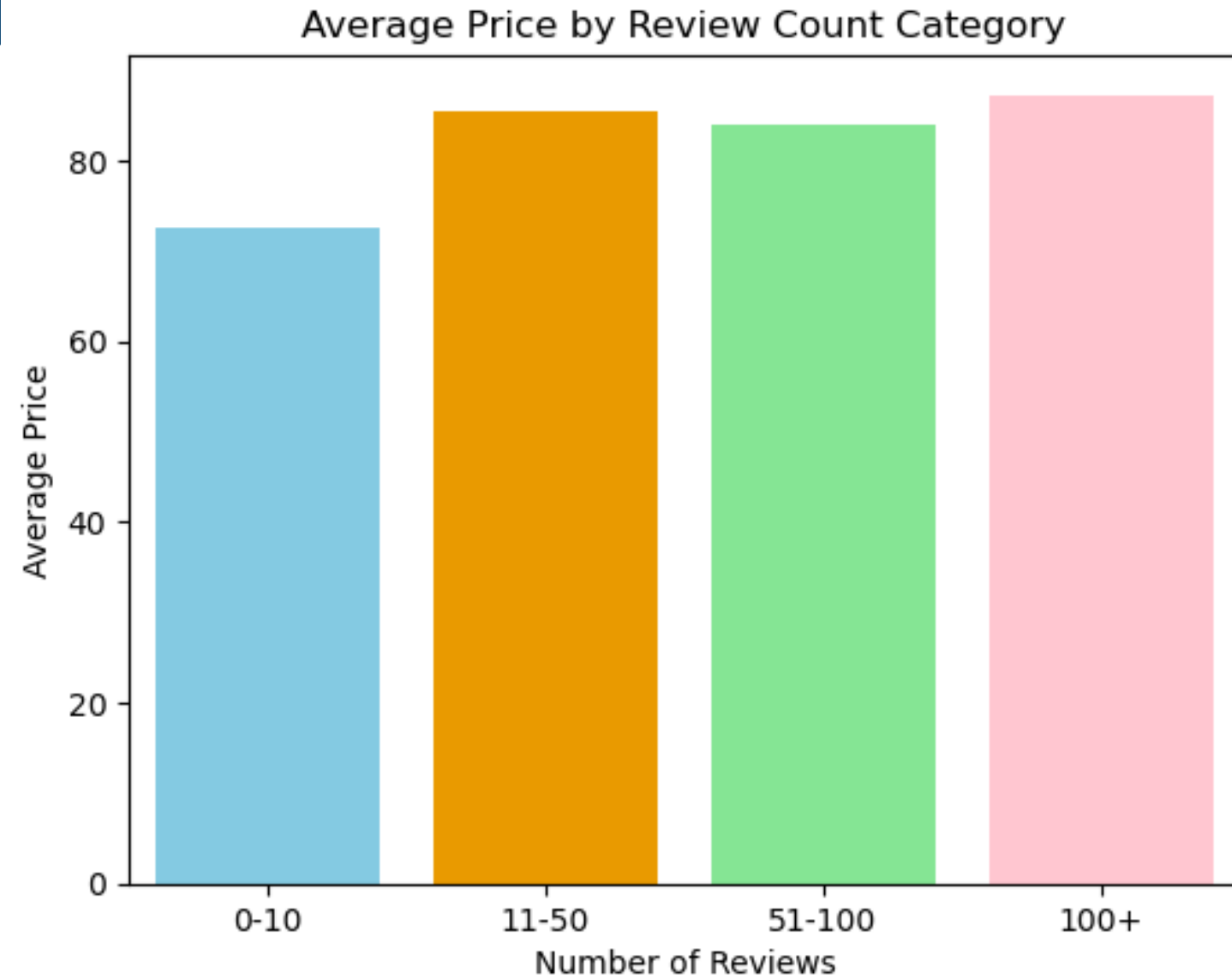
- Nou Barris**
- Vilapicina-Torre Llobeta
  - Porta
  - el Turó de la Peira
  - Can Peguera
  - la Guineueta
  - Canyelles
  - les Roquetes
  - Verdun
  - la Prosperitat
  - la Trinitat Nova
  - Torre Baró
  - Ciutat Meridiana
  - Vallbona

- Sant Andreu**
- la Trinitat Vella
  - Baró de Viver
  - el Bon Pastor
  - Sant Andreu
  - la Sagrera
  - el Congrés i els Indians
  - Navas

- Sant Martí**
- el Camp de l'Arpa del Clot
  - el Clot
  - el Parc i la Llacuna del Poblenou
  - la Vila Olímpica del Poblenou
  - el Poblenou
  - Diagonal Mar i el Front Marítim del Poblenou
  - el Besòs i el Maresme
  - Provençals del Poblenou
  - Sant Martí de Provençals
  - la Verneda i la Pau



Neighbourhood Group	Average Price	Average Distance to City Center (km)	Average Distance to Beach (km)
Dreta de l'Eixample	370.27	1.09	2.62
La Font d'en Fargues	272.00	4.64	5.82
La Vila Olímpica del Poblenou	239.76	1.99	1.45



- **Review Impact:** Listings with over 100 reviews have the highest average price at \$85.
- **Top Scores, Top Dollar:** Accommodations with 95–100% review scores average the highest price at \$86.
- **Price Resilience:** Listings rated below 80% still achieve an average price of \$82, hinting at other value factors
- **Quantity & Quality Gain:** More and better reviews generally lead to higher prices, especially for highly rated, well-reviewed listings.



# Conclusion

- **Premium Amenity Effect:** Listings with sought-after amenities like pools and air conditioning command higher prices, emphasizing the value of luxury features.
- **Location Premium:** Proximity to Barcelona's city center significantly raises listing prices, demonstrating a premium on central locations.
- **Beach Distance Dynamics:** Surprisingly, listings slightly farther from the beach (3–5 km) fetch higher prices, indicating a nuanced market for beach access.
- **Reputation's Pricing Power:** High review counts and scores notably increase listing prices, showing that guests are willing to pay more for well-reviewed accommodations.
- **Price Resilience:** Even listings with lower review scores maintain higher prices, suggesting that factors such as location and unique features play roles in pricing beyond customer feedback.

The pricing of Airbnb listings in Barcelona is primarily **shaped by amenities, location, and reputation**, with each factor contributing to a complex and multifaceted valuation by guests.