The Mozart Effect
Investigating the Correlation Between Music and Perceived Academic Performance

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BACKGROUND

- The **"Mozart Effect"** suggests that listening to classical music—especially Mozart—can enhance cognitive function and improve mental performance
- Some studies support this claim, while others argue that the effects of music on the brain vary by individual and context
- Music is commonly used by students while studying, but the impact of different genres (e.g., classical, lo-fi, pop, or silence) remains unclear
- This study explores whether the type of music, if any, affects students' perceived academic performance
- Focuses on differences based on education level (undergraduate vs. graduate) and study habits among UC San Diego students

OBJECTIVE

- **Investigate** how different music genres (e.g., classical, pop, lo-fi, silence) influence UC San Diego students' self-reported productivity during academic tasks
- **Examine** how music listening patterns differ across academic tasks (e.g., creative work, math, reading/writing) and how frequently students change the type of music they listen to
- **Explore** where students typically study (e.g., home, library, campus) while listening to music

METHODOLOGY

Sample
- Cross-sectional study conducted using a self-administered, anonymous survey
- Distributed via Qualtrics by email to undergraduate and graduate students at UC San Diego

Exposure (Music Type)
- Participants reported how frequently they listened to different music types (e.g., classical, pop, silence) during academic tasks

Outcome (Perceived Performance)
- Measured through multiple-choice and Likert scale questions
- Focused on music habits, genres, study environments, and perceived impact on focus and task completion

Analysis
- Data analysis was conducted using Microsoft Excel and Qualtrics, examining trends across:
  - Demographics & Background
  - Music Types
  - Self-Assessment of Academic Productivity

RESULTS

Figure 1: Proportion of Students Who Listen to Music While Working on Academic Tasks

Yes	48.9%
Sometimes	35.2%
No	15.9%

Figure 2: Statistical Significance (p-values) of Music Genre Frequency in Relation to Self-Reported Academic Productivity

PLAYLIST

▶ PLAY

FOLLOWERS 110

Track (Music Type)	p-value	Findings (Short "Lyrics")
Classical Music	3.60E-15	"Strongest boost in focus & task completion"
Instrumental	0.01	"Frequent listening linked to better productivity"
Nature Sounds	0.07	"Slight link to staying on task and finishing work"
Classic Rock	0.07	"Slight link to staying on task and finishing work"
Jazz	0.25	"Relaxing, but didn't support productivity"
Rap/Hip Hop	0.39	"Shows even weaker link to task completion"
Pop	0.22	"Very little evidence of helping with task completion"
Cultural/Traditional Music	0.42	"No academic productivity benefit"
Other (Podcast, etc)	0.67	"No identifiable trend in productivity"
Silence (No Music)	0.96	"No connection to productivity — lowest support"

Figure 3: Frequency with Which Students Change Music Genres While Completing Academic Work
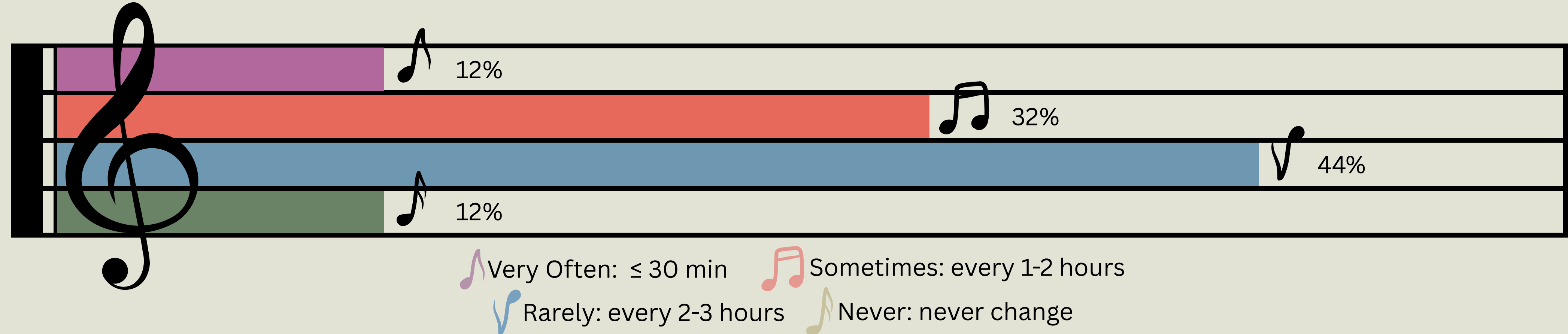
12%
32%
44%
12%

Very Often: ≤ 30 min   Sometimes: every 1-2 hours
Rarely: every 2-3 hours   Never: never change

Figure 4: Percentage of Students Who Listen to Music During Specific Academic Tasks

7.32%   14.63%
28.46%
35.77%
13.82%

- **Creative work**
- **Breaks or to relax**
- **Math or problem-solving tasks**
- **Reading or writing**
- **Memorization tasks**
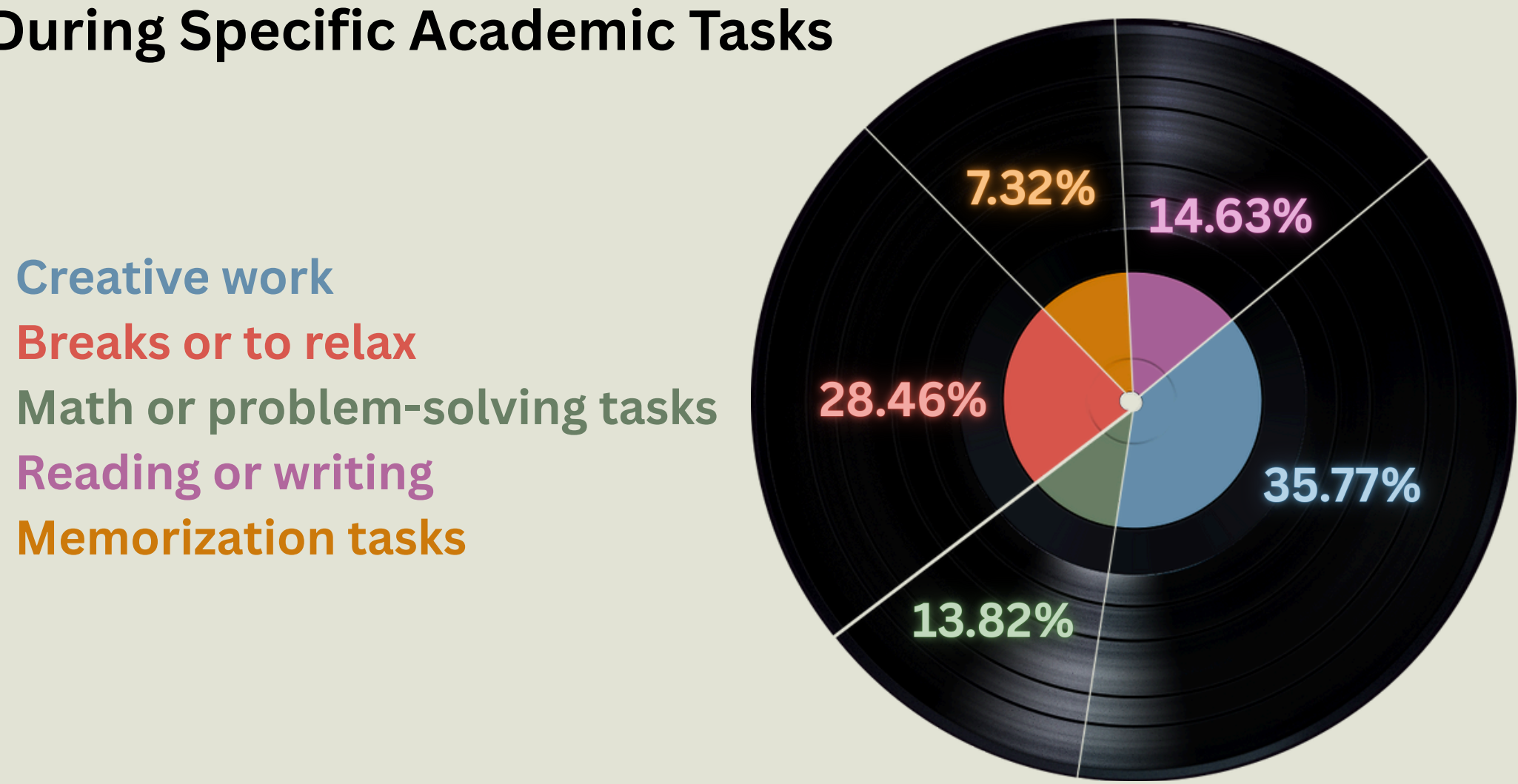
Figure 5: Common Study Locations When Listening to Music During Academic Tasks

| UCSD Campus	Library	Cafeteria	Dorm Room	Coffee Shop	At Home	Other
40%	39%	3%	31%	30%	70%	8%
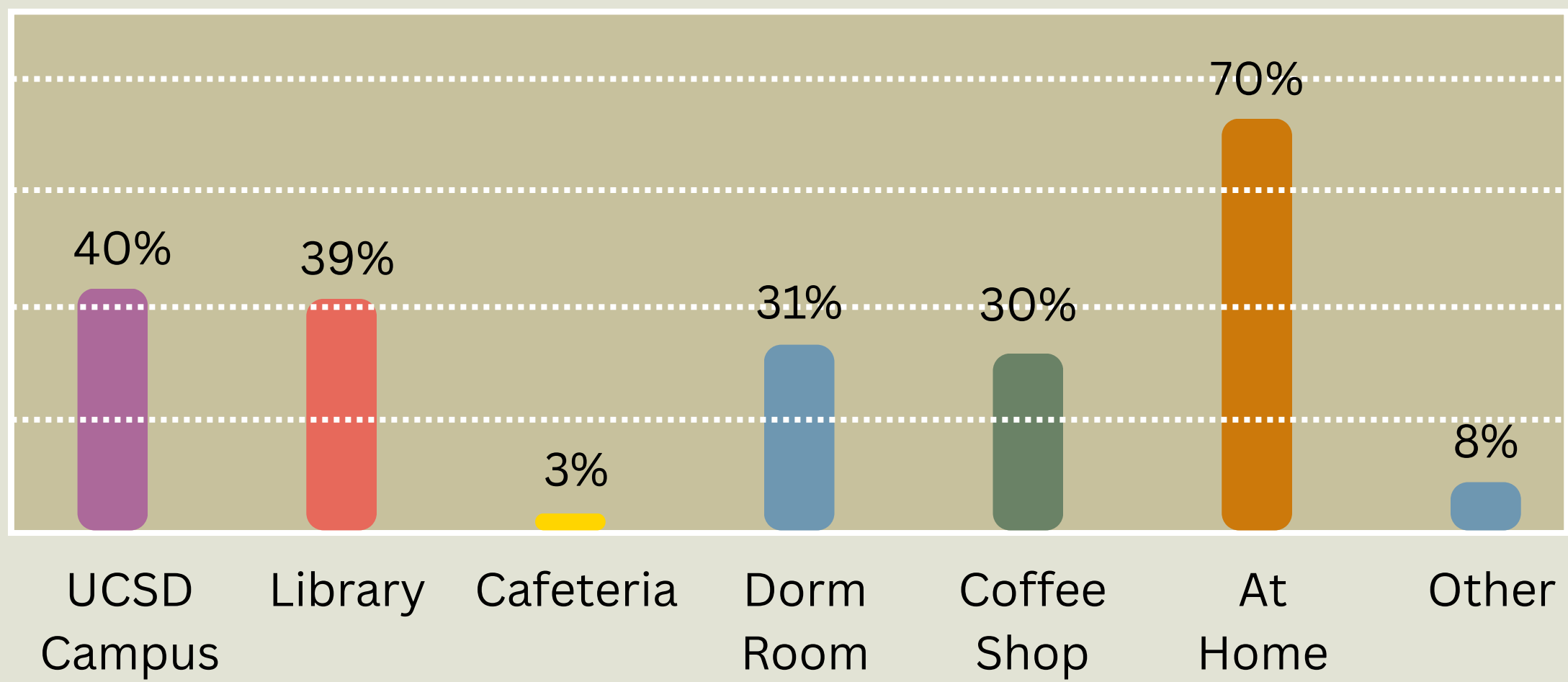
CONCLUSION

- **84%** of students (Yes + Sometimes) listen to music while doing academic work.
- **Strongest positive links in classical and instrumental music** ($p < 0.05$), while silence and others (podcast) showed no meaningful impact ($p > 0.05$) on academic task completion and productivity
- Most students rarely or sometimes change music genres while working, suggesting a preference for consistency.
- Music is most often used during creative work **(35.8%)** and breaks **(28.5%)**.
- Most common locations: **At home (70%), UCSD campus (40%), and Library (39%).**

POLICY IMPLICATION

- **Encourage** curated study playlists (e.g., classical, instrumental) in libraries and academic spaces
- **Raise** awareness about how music choices impact productivity during different tasks
- **Provide** easy access to recommended playlists (e.g., via Spotify QR codes) on posters, websites, and study materials:
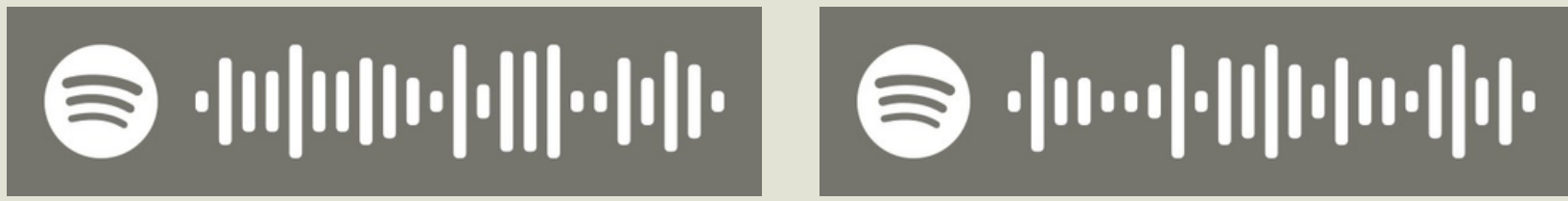
ACKNOWLEDGEMENTS

REFERENCES AND SONG RECOMMENDATIONS

Scan QR code for TOP HITS: