Satender Kumar - Data Analyst Collaborating with Psychological Team to Understand Couple Dynamics, Behavioral Patterns, and Intimacy Issues

Project Overview: Analysing Husband-Wife Arguments and Intimacy Dynamics

In this project, I collaborated with a psychological team to analyse the dynamics between couples, focusing on arguments and behavioural patterns as well as intimacy-related issues. The goal was to uncover patterns in couple interactions, both in terms of conflict resolution and how sexual satisfaction affects relationship dynamics. These insights can help foster better communication, conflict resolution, and overall relationship health.

The dataset comprised 1,500 documented arguments between husbands and wives, including details such as argument duration, topic, emotional tone, resolution type, mood swings, and notes on intimacy-related discussions. This comprehensive analysis helped us understand common issues, emotional triggers, and how sexual satisfaction (or lack thereof) can impact relationship stability.

Key Findings: Emotional Tones, Intimacy Issues, and Resolution Patterns

1. Average Argument Duration:

 The average duration of an argument was 32 minutes, with a standard deviation of 15 minutes. This highlighted the significant time couples invest in discussions, indicating the importance of communication, especially on sensitive topics like intimacy.

2. Emotional Tone Frequencies:

- Anger: 45% of arguments involved anger as the primary emotional response, often due to recurring unresolved issues, including sex-related dissatisfaction.
- Frustration: 35% of arguments reflected feelings of frustration, which were commonly linked to emotional disconnect or intimacy-related problems.
- Calmness: Only 20% of arguments were approached in a calm manner, indicating that most couples struggle to maintain emotional control during disputes, especially when discussing sensitive matters like sexual satisfaction or unmet expectations

3. Resolution Strategies:

- The arguments showed a balanced use of different resolution strategies:
 - **Apologies**: Used in **40%** of the cases, this was the most common way couples ended disputes, including those related to intimacy issues.
 - Compromises: 35% of the arguments were resolved through compromise, particularly in topics related to household responsibilities and sexual expectations.
 - **Silent Treatment**: In **15%** of the cases, arguments led to silence rather than resolution, often related to emotionally charged topics like sexual dissatisfaction.

■ Escalation: 10% of the arguments escalated rather than being resolved, reflecting a minority of cases where unresolved sexual tension worsened other relationship conflicts.

4. Mood Swings and Argument Duration:

Mood swings during arguments played a significant role in how long the arguments lasted. Arguments with severe mood swings (rated 4-5 on a 1-5 scale) were 30% more likely to last longer than 40 minutes. This indicates that emotional instability, especially when linked to sensitive topics like intimacy, can prolong conflicts and make them harder to resolve.

Intimacy and Sexual Relationship Issues

1. Sexual Satisfaction:

 Approximately 25% of the arguments in the dataset were related to sexual satisfaction. Key triggers included frequency of sexual activity, emotional connection during intimacy, and mismatched sexual expectations. This suggests that sexual dissatisfaction is a common cause of tension in relationships, often leading to extended and emotionally charged arguments.

2. Physical Intimacy:

Couples who reported issues in physical intimacy—such as a lack of sexual activity or dissatisfaction with sexual encounters—were significantly more likely to experience longer and more heated arguments. The average duration of arguments related to sexual dissatisfaction was 45 minutes, compared to the general average of 32 minutes. This extended duration highlights the depth of emotional frustration linked to unmet sexual needs, which can escalate other relational conflicts.

3. Positive Discussions on Intimacy:

In 10% of cases, couples used arguments as an opportunity to discuss sexual intimacy in a positive light, aiming to resolve issues and improve their sex life. These discussions often led to compromises or apologies, showing that open communication about sexual preferences and needs can significantly enhance the emotional bond between partners. Couples who openly discussed sex without feeling judged or misunderstood experienced higher levels of emotional satisfaction and relationship resilience.

4. Openness and Trust in Sexual Discussions:

Couples who frequently and openly discussed their sexual desires and intimacy issues—without harbouring trust issues—tended to have more elastic and durable relationships. These couples were better able to adapt to emotional fluctuations and external stressors, as their open communication about sex fostered mutual understanding and trust. As a result, they often reported higher levels of sexual pleasure in bed, strengthening the physical and emotional aspects of their bond.

5. Cultural and Gender Differences in Sexual Communication:

 Data showed that 80% of Asian women and 10% of women in the USA were unable to openly discuss their sexual needs or intimate preferences with their partners.
 This cultural barrier often resulted in unfulfilled desires and emotional frustration, which could contribute to a decrease in relationship satisfaction. Women who felt unable to communicate their mood habits, sexual preferences, and emotional needs with their partners tended to experience lower sexual satisfaction, leading to strained emotional connections and a lack of trust in their relationships.

6. Challenges for Men in Providing Sexual Satisfaction:

- 60% of men reported being unable to provide sexual satisfaction to their wives due
 to various factors, including size-related insecurities and communication barriers.
 Many men felt uncomfortable discussing these issues openly with their partners,
 which hindered their ability to address their spouse's emotional and sexual needs.
- Men who lacked open communication with their partners about intimacy and were unable to build trust often found it difficult to maintain a satisfying sexual relationship. The lack of dialogue around these intimate topics can lead to a cycle of disconnection and frustration, further straining the emotional and sexual aspects of the relationship.

Implications for Relationships and Communication:

- Couples who talk more openly about their sexual desires and preferences without fear of judgement are more likely to experience higher levels of sexual satisfaction, which can lead to a healthier and more enduring relationship.
- Cultural differences play a significant role in the ability to discuss sexual needs. Cultural
 norms can inhibit open discussions, especially in more conservative societies like parts of
 Asia, where women are often less comfortable discussing intimacy openly.
- Trust-building through communication is critical to improving sexual satisfaction and emotional bonding in relationships. When partners feel safe to express their needs and emotions, they are more likely to experience physical satisfaction and emotional fulfilment in their relationship.

By fostering trust, open communication, and mutual understanding, couples can significantly enhance both their emotional connection and physical intimacy, leading to a more resilient and fulfilling relationship.

Additional Key Findings: Patterns of Conflict Based on Topics, Including Sexual Issues

1. Most Common Argument Topics:

Money Management: 206 arguments (most frequent topic).

o Family Responsibilities: 200 arguments.

Household Chores: 197 arguments.

• Parenting Styles: 188 arguments.

 Sexual Intimacy: Sexual intimacy was directly or indirectly involved in 25% of the documented arguments, with topics ranging from sexual frequency, emotional connection during intimacy, and mismatched expectations.

2. Emotional Reactions by Topic:

- Money Management was frequently associated with feelings of anger and annoyance, highlighting financial stress as a key emotional trigger.
- Parenting Styles often led to feelings of frustration or disappointment.
- Sexual Issues were more likely to provoke intense emotional reactions such as
 frustration, anger, or even feelings of rejection. Couples that expressed
 dissatisfaction with their sex life tended to show higher levels of emotional volatility.
- Social Activities were more likely to have positive emotional tones like happiness or calmness, compared to other topics.

3. Resolution Type by Topic:

- Money Management and Household Chores showed the highest percentage of unresolved arguments.
- Apologies were most common in arguments about family responsibilities and sexual intimacy, where emotional vulnerability often leads to a desire for reconciliation.
- Compromises were frequently used for conflicts related to parenting styles and intimacy, where couples negotiated on sexual frequency or emotional connection.

Visual Insights: Trends in Conflict and Intimacy Dynamics

To better understand these patterns, I created a series of visualisations using **Matplotlib** and **Seaborn**:

- 1. **Count Plots**: These plots displayed the frequency of different argument topics, including discussions about sexual intimacy, and emotional tones.
- Box Plots: These showed the distribution of argument durations, with a median of 30
 minutes and a 75th percentile of 40 minutes. In cases related to sexual issues, the argument
 duration tended to be higher, with a median of 45 minutes.
- Correlation Matrix: A heatmap was used to identify correlations between key variables, showing that argument duration had a moderate correlation with emotional tone and mood swings, particularly in discussions related to sex and intimacy.
- 4. **WordCloud Analysis**: Using WordCloud, I visualised the most frequent words in the argument notes. Words like "**money**," "**sex**," "**time**," and "**responsibility**" were prominent, reflecting recurring sources of conflict. Notably, the word "**intimacy**" appeared often in a positive context when resolutions were achieved through discussion.
- Monthly Trends: Arguments peaked in February and January, with over 300 arguments each month. This might be linked to holiday stress or emotional strain related to sexual and relationship expectations during these months.
- 6. Weekend vs Weekday Argument Duration: Arguments that took place over the weekend tended to last longer, with weekends being associated with increased discussions about relationship issues and intimacy. Weekend arguments averaged longer than weekday arguments, with weekends showing a higher tendency for conflict escalation regarding sexual expectations.