

## **Analysis of Israel's Happiness in the Shadow of War 2024**

### **Introduction to the World Happiness Report**

The World Happiness Report is a landmark survey that measures global happiness in over 150 countries. It was first published in 2012 and has become a crucial tool for policymakers, academics, and the public to understand the key factors that influence happiness. The report is based on data from the Gallup World Poll, which surveys a representative sample of people in each country on various aspects of their lives. The World Happiness Report reflects a worldwide demand for more attention to happiness and well-being as criteria for government policy. It reviews the state of happiness in the world today and shows how the science of happiness explains personal and national variations in happiness.

The report uses several key indicators to measure happiness, including:

- **Life Ladder:** A self-reported measure where respondents rate their life on a scale from 0 to 10. This measure is also referred to as Cantril life ladder, or life ladder.
- **Log GDP per capita:** The natural logarithm of GDP per capita, which serves as a proxy for material well-being.
- **Social support:** The perceived support one can expect from others in times of need.
- **Healthy life expectancy at birth:** The number of years a newborn is expected to live in good health.
- **Freedom to make life choices:** The degree to which people feel free to make important decisions about their lives.
- **Generosity:** A measure of the willingness to donate to charity.
- **Perceptions of corruption:** A measure of the perceived level of corruption in government and business.
- **Positive and Negative Affect:** Emotional indicators that capture the frequency of positive (e.g., happiness, laughter) and negative (e.g., worry, sadness) experiences.

The most recent survey, from which this report's Happiness score is drawn, was completed on February 15, 2024. Given this timeline, it is safe to assume that the significant events of 2023—most notably the events of October 7th—have been factored into the responses provided by individuals, thus affecting the overall scores.

Some readers might argue that the limited number of questionnaire respondents could skew the findings, particularly for countries like Israel, where one can find many different ideologies, ways of living and opinions about everyday life. The analysis is based on responses from around 1,000 individuals per country, with larger populations like China and India contributing approximately 3,000 responses. However, given Israel's smaller population, it's reasonable to assume that the results for Israel may provide a more accurate reflection of the overall population, due to the higher respondent-to-population ratio.

The data analysis presented in this report was conducted using SQL and Python, specifically leveraging libraries such as Matplotlib and Seaborn for data visualization. All the graphs displayed in this analysis are original and created by me, except for one that is explicitly noted. The data used throughout this analysis was sourced from the World Happiness Report.

## **1: Exploring Israel's Resilience: Happiness in the Face of Adversity**

Israel has consistently ranked among the top countries in the World Happiness Report, despite being in one of the most volatile and conflict-prone regions in the world. This raises the question: how does Israel maintain its high happiness scores despite facing numerous military operations, revolutions, and ongoing security concerns?

To explore this, I focused on years with significant military operations in Israel during the years 2010-2024. I've chosen three operations I felt like I would see a certain change in the happiness data: 2014 (Operation Protective Edge), 2021 (Israeli-Palestinian crisis or "Unity Intifada") and 2023 (Operation Shield and Arrow). I aimed to determine whether there was a noticeable impact on the happiness of the Israeli people during these periods.

While exploring the Life Ladder data, it is important to note that the gathered data in the report is the national average response to the question of life evaluations. The English wording of the question is "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?".

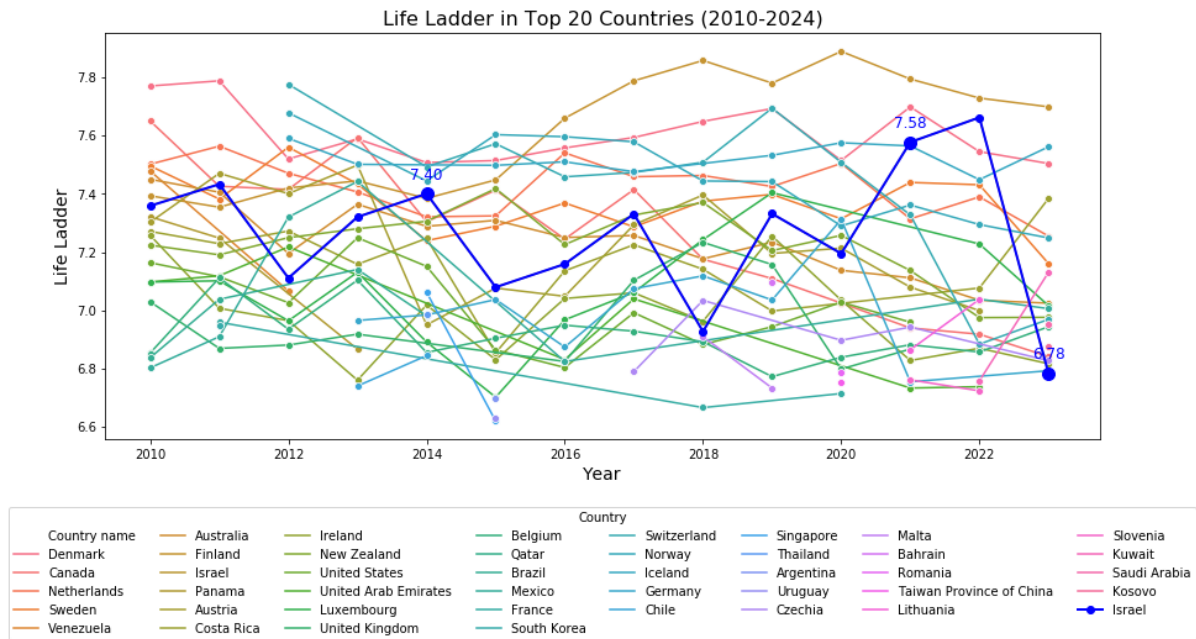


Figure 1: Life Ladder in Top 20 Countries through the years 2010-2024, Israel's parameters are highlighted. The significant years with military occurrences in Israel are highlighted as well.

Interestingly, the graph reveals that there is no clear correlation between military operations and a decline in happiness scores prior to 2023. For example, in 2014, during Operation Protective Edge, Israel's happiness scores remained stable, even with a little incline in the Life Ladder, and a respective decline in Negative Affect. Further analysis of Israel's ranking during the 2021 military operations also shows a significant incline in happiness score, reinforcing the idea that while military conflicts affect the nation, they do not drastically alter its position in the rankings. This resilience could be attributed to a strong sense of social support and community, which has been consistently high in Israel, as well as the nation's ability to maintain a healthy life expectancy despite ongoing conflicts.

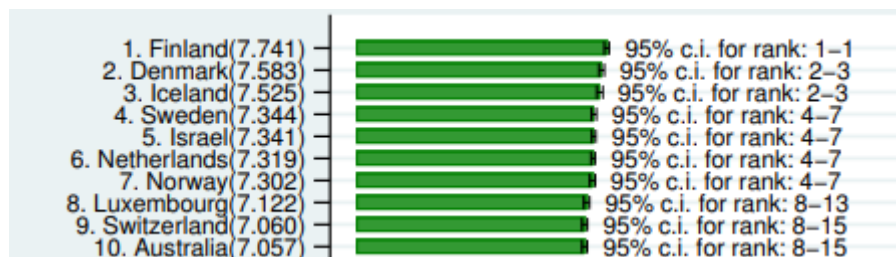
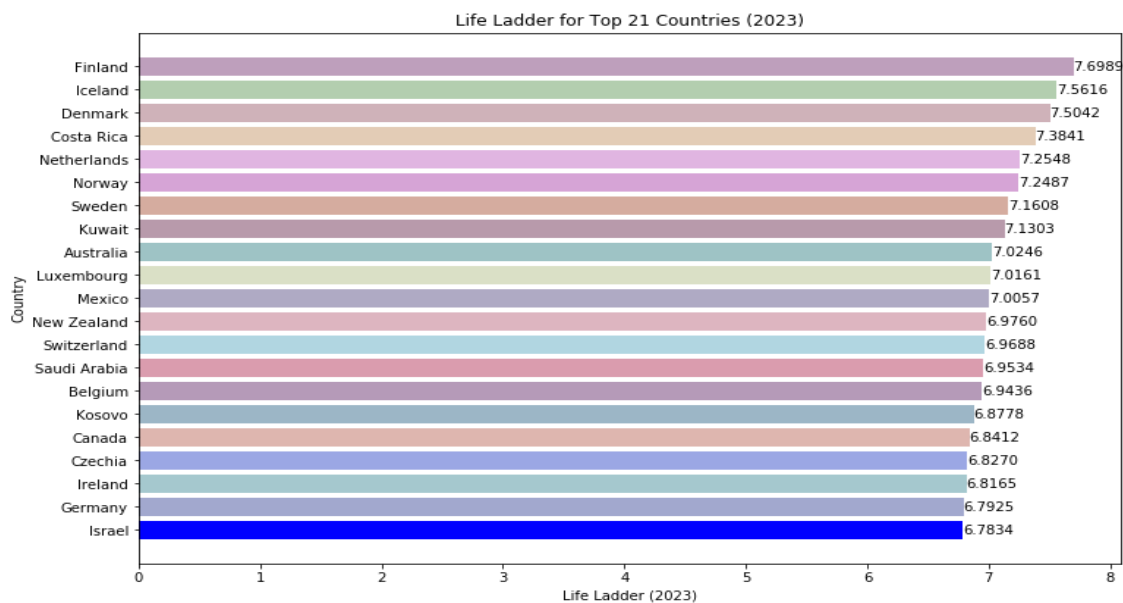


Figure 2: The Ranking of Happiness: 2021-2023 (Part 1) as showed in the World Happiness Report 2024

The 2024 World Happiness Report ranks Israel within the top countries, on the fifth place to be exact, which initially appears surprising given the October 7th, 2023, events—marked by unprecedented violence and conflict.



*Figure 3: Life Ladder in Top 21 Countries in 2023 alone*

However, upon closer inspection, it becomes clear that Israel's high ranking is largely due to the multi-year averaging of happiness scores from 2021 to 2023. This approach somewhat masks the immediate impact of the 2023 events.

When isolating the data for 2023, Israel would have been ranked 21st, the lowest position it has ever held in the World Happiness Report. This steep decline reflects the direct consequences of the October 7th events, which profoundly impacted the nation's well-being. The drop in ranking is indicative of the immense challenges faced by the Israeli population during this period, despite their resilience in previous years.

However, while the primary analysis centered on Israel's unprecedented decline in the 2023 ranking, further exploration of the data unveiled unexpected insights. Beyond the overall happiness score, the dynamics of Positive and Negative Affect presented a unique and intriguing aspect of Israel's emotional landscape, revealing complexities that merit deeper examination.

## **2: Serendipitous Discovery: Positive and Negative Affect: Israel's Unique Position**

Positive and Negative Affect are critical components in the World Happiness Report that help provide a more nuanced understanding of the emotional experiences of people in different countries. These measures give insight into how frequently individuals in a country experience specific positive or negative emotions, offering a balance to the more general "Life Ladder" score that reflects overall life satisfaction.

**2.1: Positive Affect** is defined as the average of three positive emotional experiences measured in the Gallup World Poll (GWP): laughter, enjoyment, and doing interesting things. Specifically, it is derived from responses to the following questions:

1. "Did you smile or laugh a lot yesterday?"
2. "Did you experience the following feelings during a lot of the day yesterday? How about enjoyment?"
3. "Did you learn or do something interesting yesterday?"

These questions aim to capture the day-to-day emotional positivity that individuals experience, reflecting their ability to find joy and interest in their daily lives.

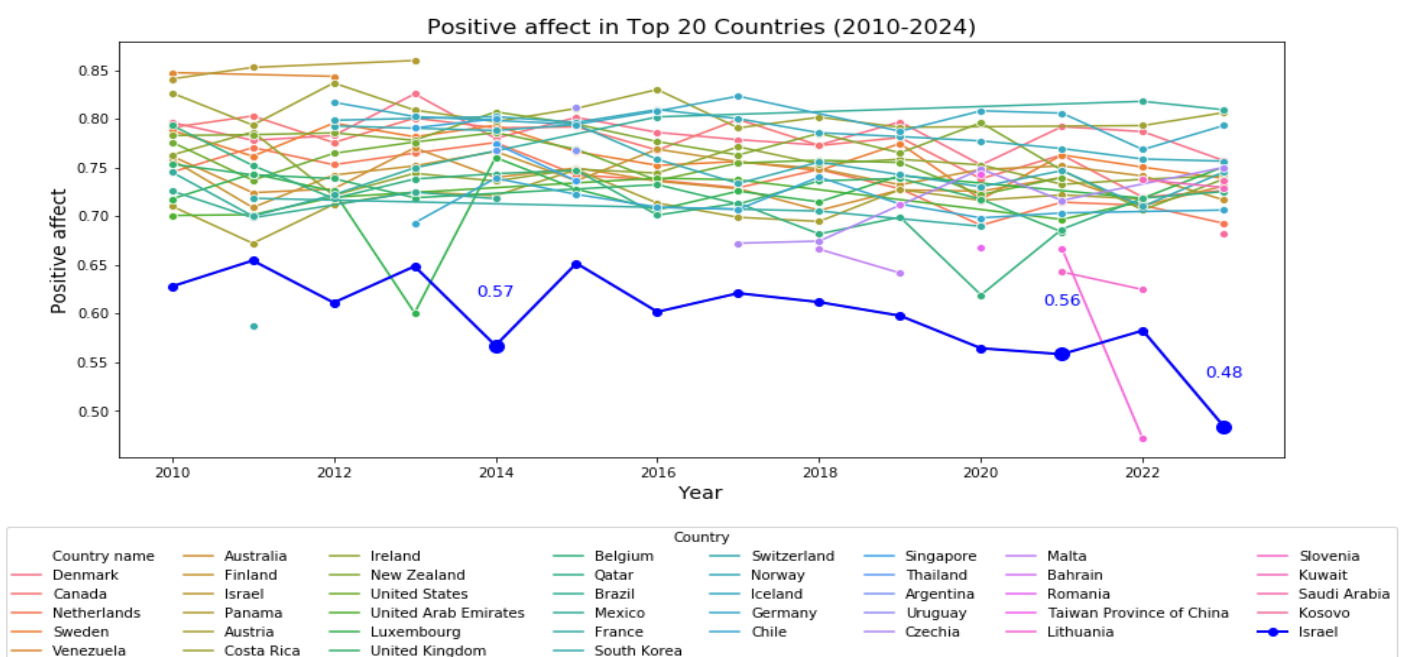


Figure 4: Positive affect in Top 20 Countries for 2010-2024.

In the graph presented, Israel's Positive Affect consistently ranks lower than most other countries in the top 20, with a particularly steep decline visible in recent years. The graph shows that while many countries maintain relatively stable and high levels of Positive Affect, Israel's trajectory is marked by significant fluctuations, culminating in a substantial drop in the most recent year (2023).

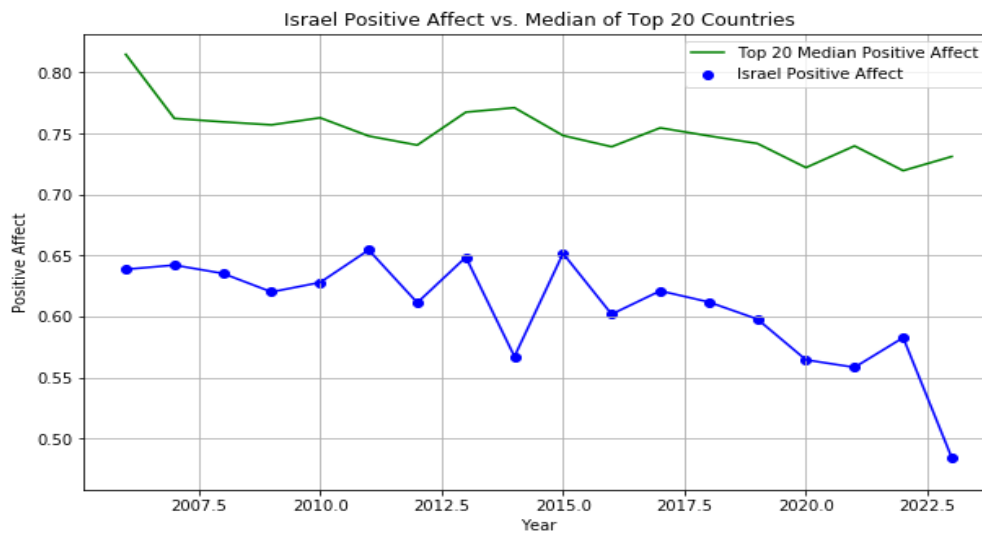


Figure 5: Israel's Positive Affect compared to the median of the Top 20 Countries (not including Israel's statistics)

The median positive affect scores for the top 20 countries have remained relatively stable over time. In contrast, Israel's scores exhibit significant volatility. The stable median scores of other countries underscore Israel's unique emotional trajectory, with decreasing positive emotions.

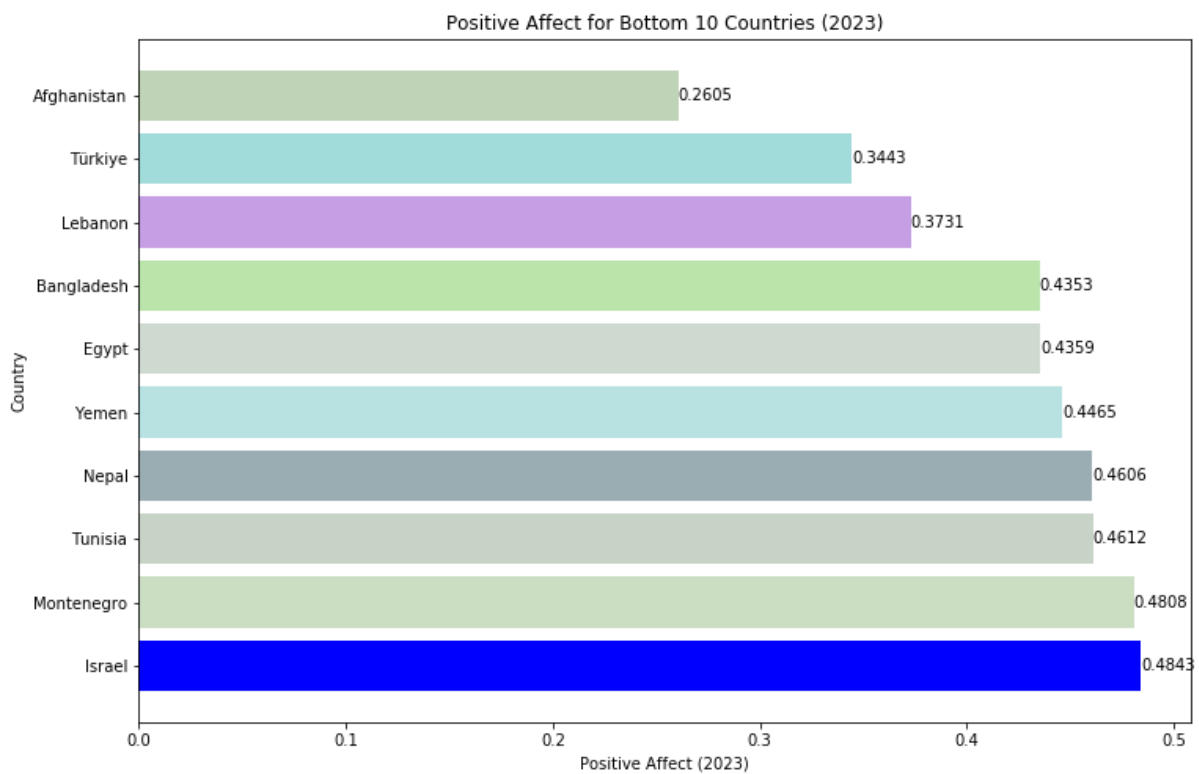


Figure 6: Top 10 Countries with the lowest Positive Affect 2023

When examining the top 10 countries with the lowest positive affect in 2023, Israel ranks 10th, surpassing several struggling third-world nations such as Pakistan, Congo, Ethiopia, and Iraq. The next first-world country in the rankings is South Korea, which stands at 40th place, far behind Israel in terms of positive affect.

**2.2: Negative Affect**, on the other hand, is defined as the average of three negative emotional experiences also measured in the GWP: worry, sadness, and anger. The corresponding questions are:

1. "Did you experience the following feelings during a lot of the day yesterday? How about worry?"
2. "Did you experience the following feelings during a lot of the day yesterday? How about sadness?"
3. "Did you experience the following feelings during a lot of the day yesterday? How about anger?"

These questions are designed to gauge the prevalence of negative emotions in daily life, offering insight into the challenges and stresses that individuals may face.

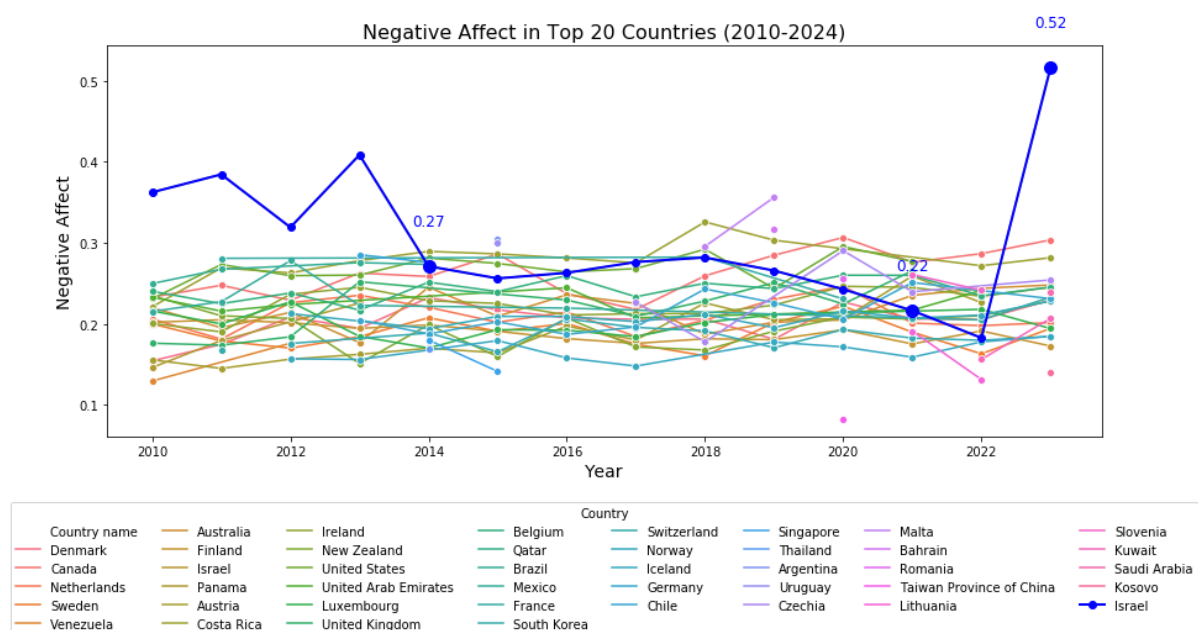


Figure 7: Negative Affect in Top 20 Countries (2010-2024)

Israel's negative affect statistics are higher than most of the other countries in the top 20. However, there are a few countries that have higher numbers than Israel in specific years, but clearly not enough to conclude a different tendency.

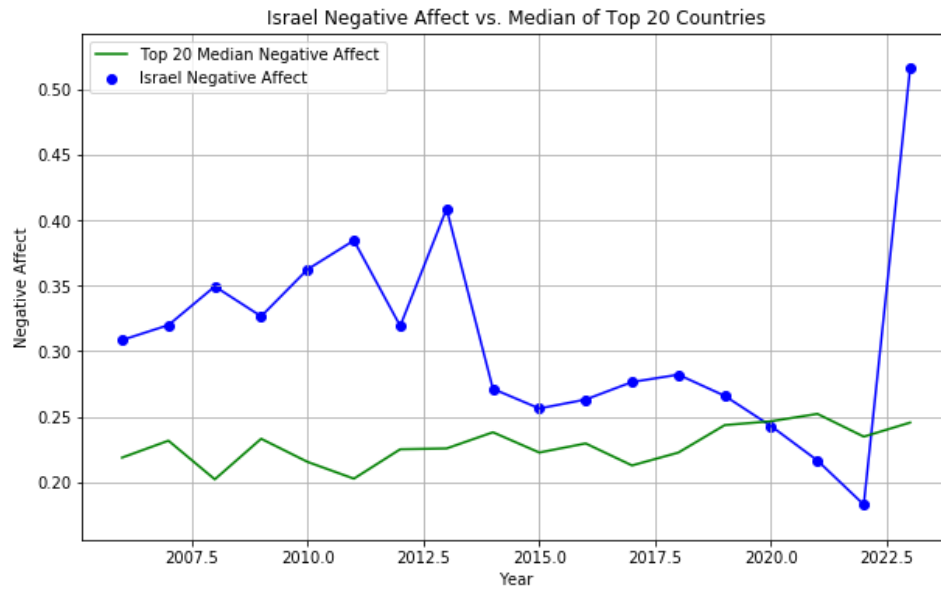


Figure 8: Israel's Negative Affect compared to the median of the Top 20 Countries (not including Israel's statistics)

In the context of Israel, these affective measures reveal an intriguing contrast. Despite its high ranking in overall happiness, Israel consistently shows relatively low Positive Affect and high Negative Affect compared to other countries in the top 20.

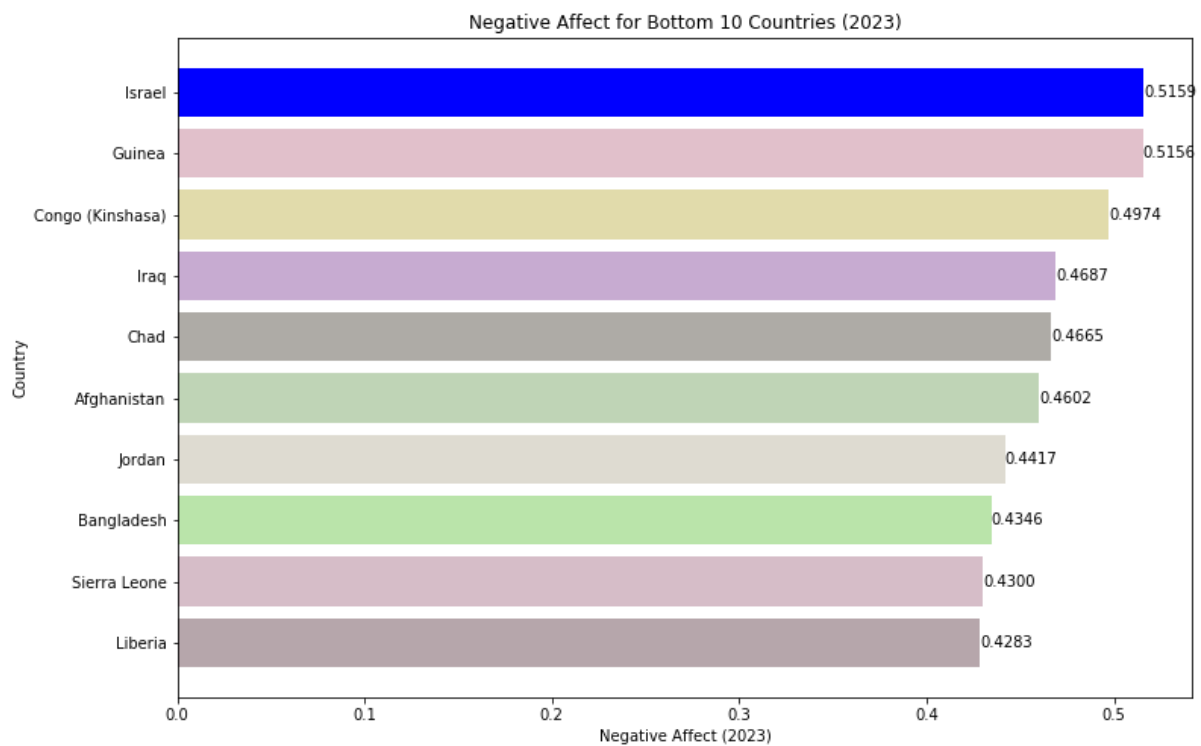


Figure 9: Top 10 countries with Highest Negative Affect 2023



In 2023, Israel topped the global negative affect rankings, recording the highest negative affect score in the world. This placed Israel ahead of countries such as Iran, Afghanistan, Guinea, and Congo, all of which have traditionally high negative affect scores. This marked Israel's highest negative affect rating since the inception of the World Happiness Report, with a significant increase from 2022—a sharp rise of 0.333. It is also important to note that Israel surpassed all third-world countries while being the only first-world nation on the list for a significant period. The next first-world country with a relatively low negative affect score is Spain, which ranks 49th from the bottom with a score of 0.325—nearly 1.5 times lower than Israel's score. Given this stark contrast, it is reasonable to assume that if Israel had been rated solely on 2023 data across other parameters, its overall rankings would likely have been much lower compared to most countries.

### **2.3: Key Observations on Positive and Negative Affect:**

#### **1. Stability vs. Volatility:**

- The median positive and negative affect scores for the top 20 countries have remained relatively stable over time. However, Israel's scores show increased volatility, with a pronounced shift in 2023. The significant rise in negative affect and drop in positive affect emphasize Israel's unique emotional trajectory, diverging further from the relative stability seen in other countries.

#### **2. Comparative Analysis:**

- Israel stands out as a developed country experiencing emotional turmoil on a scale more commonly associated with third-world nations. Despite its economic and social advancements, Israel ranked 1st in negative affect and 10th in low positive affect in 2023. No other first-world nation came close—Spain was the next developed country in the negative affect rankings, but much further down, highlighting Israel's exceptional position.

#### **3. Potential Causes of Emotional Strain:**

- The profound shift in Israel's emotional state can likely be attributed to the events of 2023, particularly the October 7th attack and the ongoing conflict in Gaza. The steep rise in negative affect reflects the heightened anxiety, stress, and trauma faced by the population, while the decrease in positive affect suggests a reduced capacity for optimism and joy during these turbulent times.

#### **4. Broader Context and Future Outlook:**

- Israel's current trajectory in both positive and negative affect indicates an increasingly polarized emotional climate. While the nation maintains resilience

in its "Life Ladder" and social support, the growing negative emotions are a significant concern. If this trend continues, it may affect Israel's overall happiness scores more severely in the coming years. Addressing these emotional challenges will require targeted strategies to manage stress, foster positivity, and strengthen social cohesion even in times of ongoing conflict.

In summary, Israel's emotional well-being took a dramatic turn in 2023, as reflected by its highest negative affect score and a continued decline in positive affect. These findings underline the immense emotional toll of the current crisis, emphasizing the need for a deeper understanding of the population's psychological and emotional needs.

### 3: The Silver Lining - Social Support Amidst Adversity

Amid turmoil and uncertainty, one aspect of Israel's 2023 World Happiness Report results stands out as a beacon of hope: the nation's Social Support ranking. Despite the devastating events of October 7th, which contributed to Israel's lowest overall happiness ranking to date, the country's Social Support score remained high.

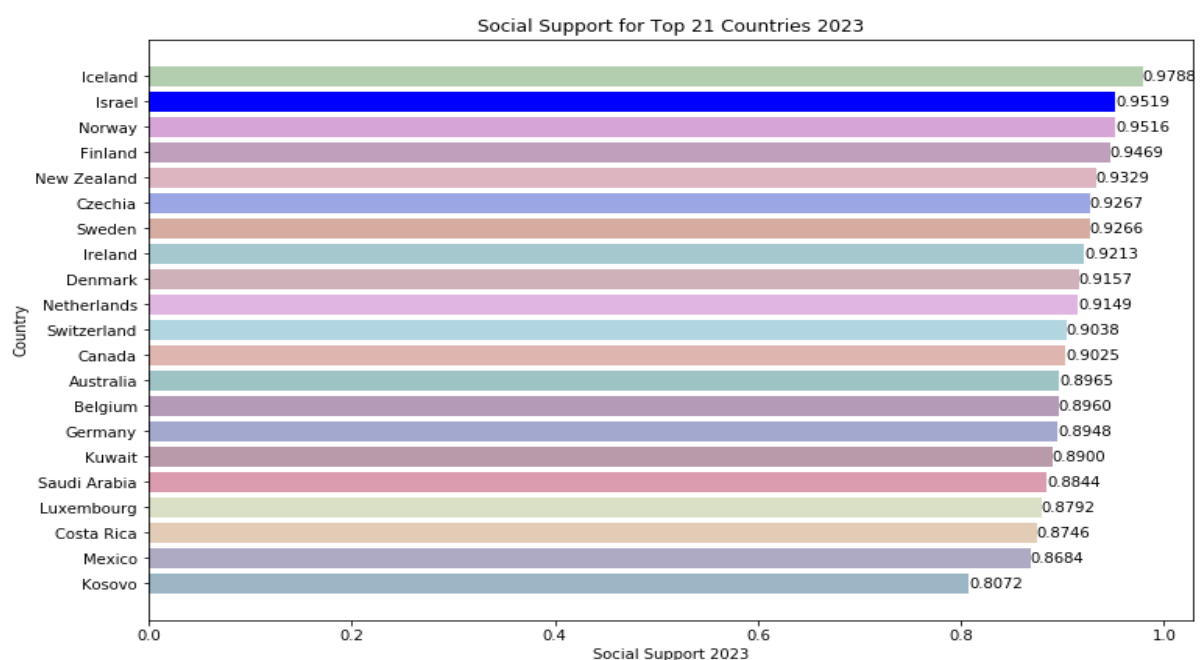


Figure 10: Social Support in Top 20 Countries including Israel (2023)

Social Support, defined as the national average of binary responses (either 0 or 1) to the Gallup World Poll (GWP) question, "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?", serves as a critical measure of the

strength of community ties. Israel's score of 0.9519, the second highest in the world, reflects a profound sense of unity and communal support during a period of intense adversity.

The significance of this result cannot be overstated. While other dimensions of well-being, such as Positive Affect and overall life satisfaction, may have faltered under the weight of national trauma, Social Support emerged as a critical pillar of resilience. It highlights the unique cultural and social dynamics within Israel, where collective solidarity becomes most pronounced in times of hardship.

In the broader context of the World Happiness Report, Israel's Social Support score offers a crucial silver lining. It suggests that, even when external circumstances are at their bleakest, the fabric of social connections within a country can provide a powerful counterbalance, helping to mitigate the impact of adverse events on the overall well-being of its citizens.

#### **4. Transition to Comparative Analysis of Countries Facing Devastating Events**

My initial exploration aimed to understand how Israel maintains its relatively high happiness scores despite the country's numerous military operations, revolutions, and ongoing security concerns. The hypothesis was that Israel's resilience in the face of adversity might correlate with its position in the World Happiness Report. However, as the data was analysed, a clear connection between these military operations and Israel's happiness scores over the years did not emerge. The relationship seemed complex and not directly influenced by such events in most years, with the notable exception of 2023.

Given the unique challenges Israel faces, comparing it directly with the world's happiest countries might not provide the most insightful analysis. Israel's resilience and overall optimism, as reflected in its Life Ladder scores, deserve to be examined through a different lens—one that considers the context of devastating events that other nations have endured.

It's important to recognize that these scores should not just be viewed in isolation against countries that have enjoyed prolonged periods of peace and prosperity. Instead, a more meaningful comparison emerges when we juxtapose Israel's social support, positive and negative affect, and overall happiness against nations that have similarly faced significant national tragedies or hardships. By doing so, we can better understand the impact of adversity on national well-being and how Israel's response measures up within this specific context.

#### **Comparative Analysis: Devastating Events**

Considering this, the following analysis will focus on countries that, like Israel, have confronted devastating events—be they natural disasters, military conflicts, or financial collapses—and how these events have influenced their respective Happiness Report outcomes. We'll explore

how Israel's social support and affect measures during 2023 compared to these nations, providing a more equitable and insightful perspective on Israel's standing in the World Happiness Report.

#### **4.1: Countries and Devastating Events (2010-2023)**

The following countries have faced significant challenges due to devastating events during the years 2010-2023. These events have had profound impacts on the well-being and happiness of the populations:

##### **1. Ukraine**

- **2014:** The annexation of Crimea by Russia and the onset of conflict in Eastern Ukraine, leading to widespread displacement and economic turmoil.
- **2022:** Full-scale invasion by Russia, resulting in extensive destruction, loss of life, and a humanitarian crisis.

##### **2. Sudan**

- **2023:** Armed conflict and ongoing political instability, including the outbreak of violence in Darfur and other regions, exacerbating the humanitarian crisis.

##### **3. Türkiye**

- **2023:** Devastating earthquakes, particularly the massive earthquake that struck in February, leading to tens of thousands of deaths and widespread destruction across several regions.

##### **4. Haiti**

- **2010:** Catastrophic earthquake that killed hundreds of thousands, displaced millions, and severely damaged infrastructure, leading to long-term recovery challenges.

##### **5. Greece**

- **2015:** Financial collapse and debt crisis, resulting in severe economic hardship, high unemployment, and widespread social unrest.

##### **6. Japan**

- **2011:** The Great East Japan Earthquake and tsunami, followed by the Fukushima nuclear disaster, causing widespread devastation and long-term environmental concerns.

## 7. Nepal

- **2015:** Major earthquakes that caused extensive destruction, loss of life, and displacement, severely impacting the country's economy and infrastructure.

## 8. Syria

- **2013:** Intensification of the Syrian civil war, leading to massive displacement, loss of life, rise of ISIS, and widespread destruction across the country.
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## 9. Israel

- **2023:** Escalation of conflict due to the October 7th events, resulting in significant loss of life and national trauma.

### 4.2: Israel's Performance in the Comparison to other world tragedies

When comparing the parameter of Life Ladder of Israel to other countries that have faced devastating circumstances, Israel's life ladder remains remarkably stable and solid. While other countries seem to be more deeply impacted and their populations more significantly affected by these events, Israelis demonstrate a notable resilience in maintaining their perceived quality of life despite the challenges they face.

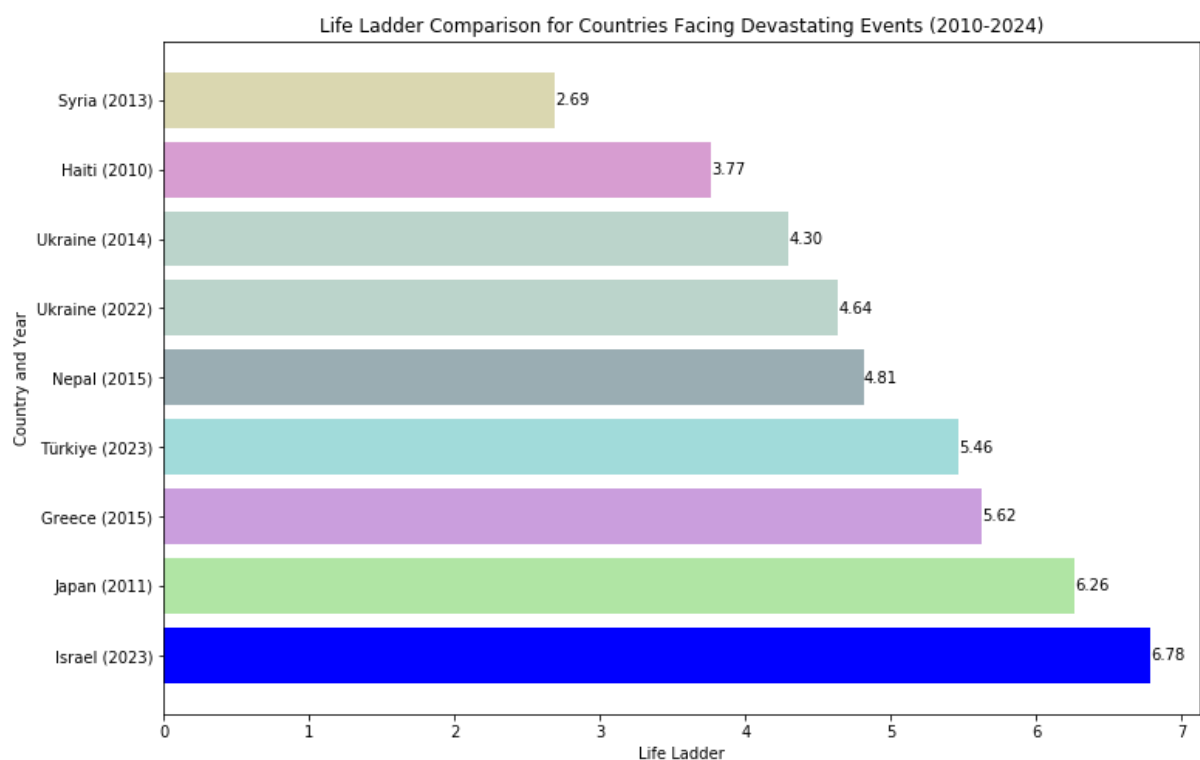


Figure 11: Life Ladder of Countries Facing Devastating Events (2010-2024)

On the other hand, when comparing Israel's positive and negative affects, the results are less encouraging.

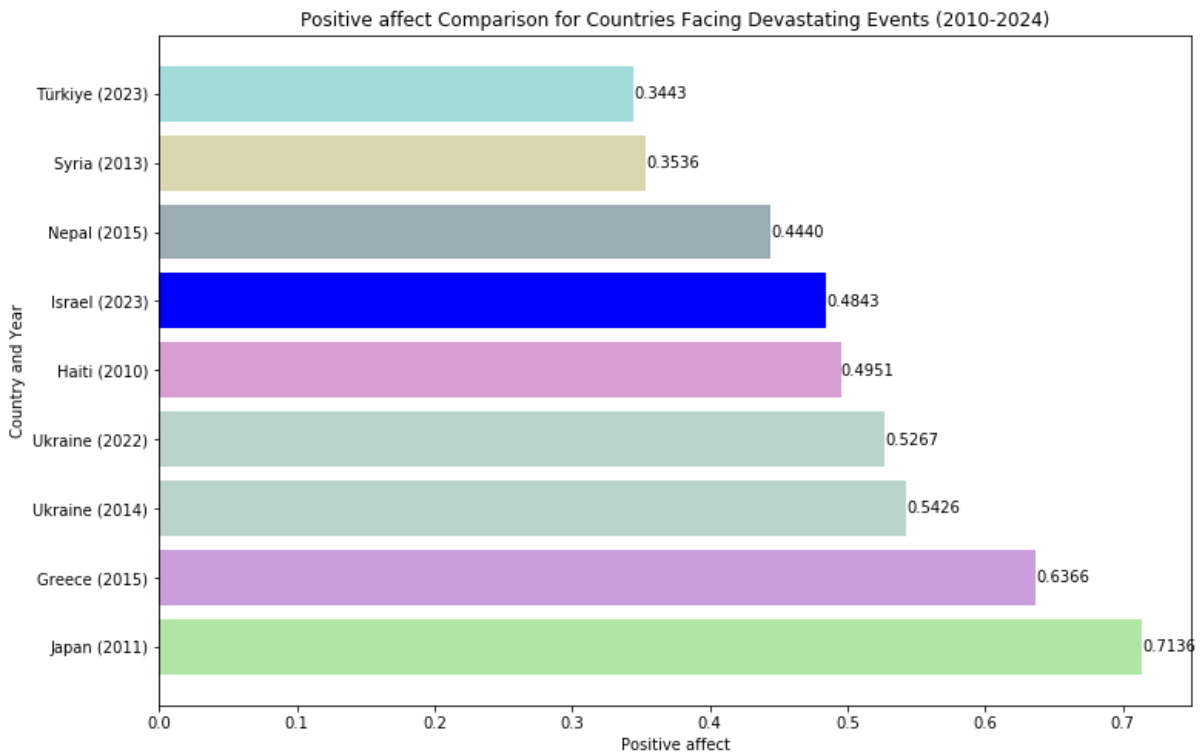


Figure 12: Postive Affect Comparison for Countries Facing Devastatin Events 2010-2024

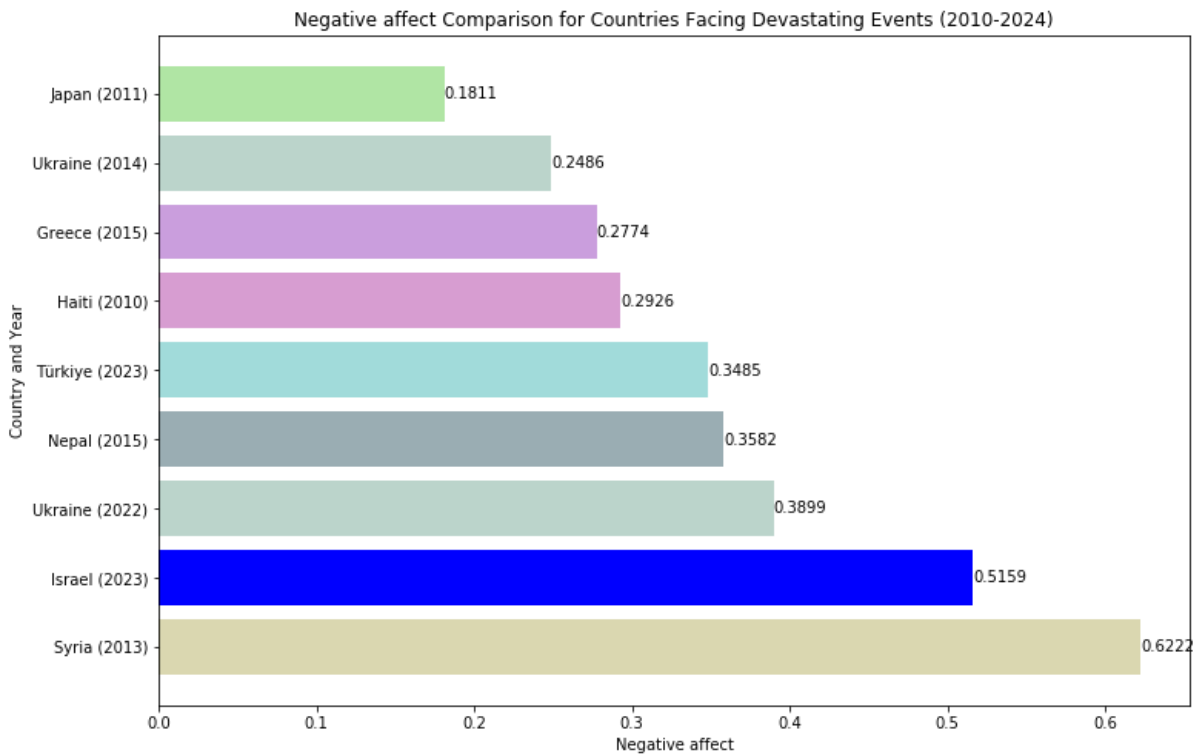


Figure 13: Negative Affect Comparison for Countries facing Devestating Events (2010-2024)

Israel ranks second in negative affect, surpassed only by Syria. In terms of positive affect, Israel is ranked fourth from the bottom, even below Haiti, which experienced a devastating earthquake that claimed hundreds of thousands of lives. This suggests that Israelis are not particularly optimistic and find fewer reasons to smile, while dealing with more concerns and stress, even compared to other countries that have faced severe hardships.

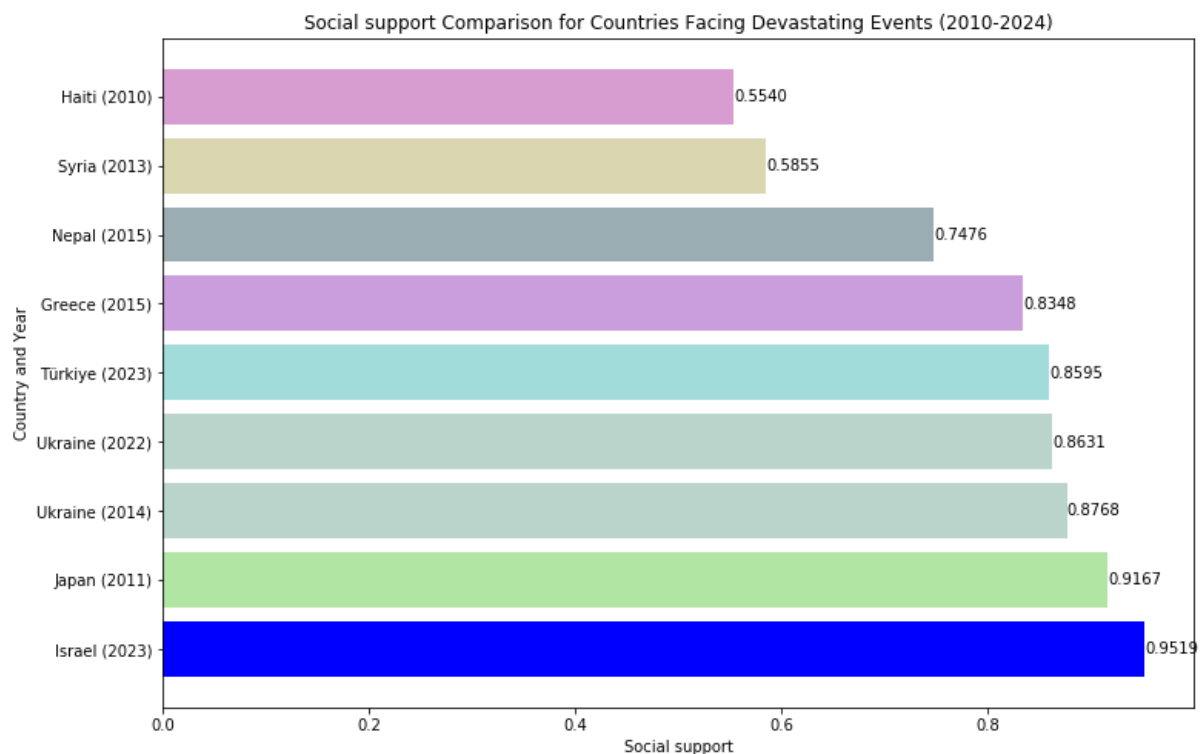


Figure 14: Social Support Comparison for Countries Facing Devastating Events (2010-2024)

Once again, Israel ranks the highest in social support even among countries that have faced devastating events. This demonstrates that, despite the emotional toll of recent tragedies, Israelis continue to rely on and support one another, showing a strong sense of solidarity in overcoming hardship.

## 5. Conclusion

The war that erupted in Israel in 2023 stands in stark contrast to previous military operations, largely due to the unprecedented hostage situation and the horrific atrocities of October 7th. While past military conflicts were devastating, they pale in comparison to the recent events. Despite the original hypothesis—that Israel's happiness rankings would change significantly during military operations—showing no substantial shift in past years, 2023 offers a powerful example of how a devastating event can profoundly impact a nation's overall well-being and happiness.

Interestingly, Israelis seem to rank their situation relatively optimistically. Although the life ladder score stands at 6.78, which is still high, the same respondents rate their emotional state—both positive and negative affect—much lower. This suggests that while Israelis are clearly struggling with day-to-day worries and challenges, they still perceive their overall quality of life as being quite good, even surpassing several stable nations like Singapore, Austria, and the UAE. It is likely that the strong sense of social support and national identity (Zionism) contributes to this resilience, allowing people to find value in small, everyday positives despite the overwhelming hardship of war.

It was expected, and there is no shame in acknowledging, that Israel's ranking would suffer considering the recent events. However, comparing Israel to other countries that have faced significant tragedies offers a clearer perspective. In this context, Israelis have performed remarkably well in "pulling through" these hard times, maintaining a higher life ladder score than other nations struck by catastrophic events.

Moreover, it's important to recognize that not all countries ranked as "happy" may truly reflect contentment on the ground. For instance, Mexico is ranked 11th in the 2023 Life Ladder, yet the country has seen hundreds of thousands of migrants crossing its borders, fleeing to the United States within the past year. This illustrates that happiness is highly relative, and much like everything else in life, it depends on the lens through which we view it.

In conclusion, while Israel has faced immense challenges, the resilience of its people, their strong social ties, and their enduring optimism provide a nuanced understanding of how nations cope with adversity. The data highlights that happiness, while influenced by external circumstances, is ultimately shaped by the unique cultural and societal factors at play within each country.