Operation Themis and the Central Mediterranean Route

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Abstract

In almost all political and human rights crises, a policy will be created to respond to such issues. Therefore, policies would need to be very influential and effective to be able to create tangible changes in society. This paper analyzed the Frontex policy called Operation Themis. The policy looks to address migration issues along the Central Mediterranean route. This policy was studied because it was implemented in 2018 and in the following year the mortality rate spiked along the Central Mediterranean route (European Council and IOM). This research project looked to see if Operation Themis was the cause of the increased number of deaths. There was some evidence suggesting that the policy could have led to more deaths. However, this can not be said with certainty as there were many other factors that increased the migrant mortality rate in 2019.
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References
1 Introduction

Over roughly the past decade, the issue of migration has become apparent in European politics as migrants are leaving their home countries and heading to Europe in order to escape from issues such as, “…war, persecution and poverty…” (Haq et al., 2023). However, migrants are not entirely free from danger once they leave their home countries, as they still face many threats during their journeys towards Europe. These journeys taken by migrants are dangerous due to the fact that many migrants drown, are murdered, or die from exposure when attempting to cross the three main migration routes into Europe: the Central, Western, and Eastern Mediterranean Routes (IOM). In response to these events, the European Border and Coast Guard Agency, also known as Frontex, has implemented policies in order to address the flow of migrants crossing the Mediterranean Sea in order to reach Europe. Frontex has launched, “…operations in the Mediterranean to rescue migrants at risk and fight migrant smuggling.” The operations that address specific migration routes are Operation Themis, Operation Indalo, and Operation Poseiden. Operation Themis addresses the Central Mediterranean Route, Operation Indalo addresses the Western Mediterranean Route, and Operation Poseidon addresses the Eastern Mediterranean Route (European Council). While these operations may intend to save migrants’ lives, there has been little research done to understand if these operations are actually achieving this goal.

In order to understand if Frontex policies are effective at reducing migrant deaths, this research project will focus specifically on the Central Mediterranean Route. The Central Mediterranean Route is used by migrants from North African countries who enter Europe through Italy (Frontex). From 2010 to 2022, the Central Mediterranean Route has had the highest mortality rate out of the three routes described above (Steinhilper and Gruijters, 2018, p. 523 and
IOM). Looking at how Frontex policies influence the Central Mediterranean Route is important due to the fact that the route is very deadly (IOM). Therefore, it is important to research the interventions that attempt to save lives along this route in order to understand which interventions save migrants.

This project will then specifically focus on the mortality rate along the Central Mediterranean Route from 2010 to 2022. When looking at this data, the mortality rate along the Central Mediterranean Route kept increasing every year from 2015 to 2019, until there was a drastic decline in the death rate after 2019 (IOM). In 2018, Frontex implemented Operation Themis along the Central Mediterranean Route (European Council). Then, in 2019, there was a large spike in the migrant mortality rate following the policy implementation (IOM). Therefore, this project will seek to answer the research question: Did Operation Themis contribute to the increased mortality rate along the Central Mediterranean route in 2019?

In order to answer this question, data from the Western and Eastern Mediterranean Routes will also be analyzed and compared to the trends along the Central Mediterranean Route. The mortality rates along the Western and Eastern Mediterranean Routes from 2010 to 2022 will be compared to the mortality rate along the Central Mediterranean Route during this same time period. By comparing these mortality rates, it will become clear if these routes are affected by the same events, or if some routes experience lower mortality rates. Understanding these trends will bring light to why migrants may be dying along these routes.

Due to the fact that FRONTEX policies are not the only factors that determine if migrants will die during their journeys to Europe, other factors will be discussed in order to explain the trends behind migrant mortality rates. Events that led to migration along the Central Mediterranean Route from 2010 to 2022 will be discussed as this will help explain migration
flows. Other factors such as extreme weather conditions will also be taken into account when trying to understand why the migrant mortality rate has fluctuated along the Central Mediterranean Route.

Investigating the efficiency of Frontex policies will help determine if the measures taken by the border control agency are effective at saving lives. It is necessary to understand how European intervention influences the migrant mortality rate as these findings may reveal how the agency can alter future policies in order to prioritize migrant safety. The goal of this research project is to understand why migrants are dying and if the European Union’s interventions will be able to limit these mortality rates.
2 Literature Review

2.1 Introduction

There is existing literature that discusses the relationships between migrant deaths and the creation of migration policies. This literature review will focus on three components that discuss migration policy development and the perceptions of migrant deaths. The first concept this literature review will explore is that the European Union has created policies with the goals of deterring migration, and not necessarily saving migrant lives (McMahon and Sigona, 2021, p. 615). The second concept is that there are lower migrant mortality rates when European policies prioritise Search and Rescue missions, as opposed to border control efforts (Steinhilper and Gruijters, 2018, 525-526). Finally, this literature review will discuss how the risk and presence of death along migration routes influences migrants’ decisions about migrating to Europe (McMahon and Sigona, 2021, 607).

2.2 European Union Priorities Deterring Migration over Saving Lives

In McMahon and Sigona’s article, “Navigating the Central Mediterranean in a Time of ‘Crisis’: Disentangling Migration Governance and Migrant Journeys,” the authors discuss how the European Union uses migrant categorisations to determine who they will allow to enter the European Union. When migrants arrive on land, they are brought to a port where much of their personal information is recorded. In this process, migrants are then categorised as refugees, which are migrants who can legally enter the EU, or as economic migrants who cannot legally enter the EU. Many EU officials have stressed the point that they cannot receive economic migrants (Reuters, La Stampa, Giornale di Sicilia qtd. in McMahon and Sigona, 2018, 503).
This information is necessary to take into account as it discusses how the European Union will respond to migrants based on categorisations. This literature points to a theme that the European Union will prioritise migration deterrence over saving lives. Therefore, this theme may be present when analysing if Operation Triton and Operation Themis are efficient at saving the lives of migrants.

Steinhilper and Gruijters have also contributed literature towards the topic of deterring migration into the European Union with the article, “A Contested Crisis: Policy Narratives and Empirical Evidence on Border Deaths in the Mediterranean.” They discuss the “pull factor” hypothesis which is another line of reasoning used in migration discussions as it is used to argue against using humanitarian initiatives to respond to migrants. Many politicians and, “… EU leaders, have claimed that the presence of rescue boats close to the Libyan coast serves as a ‘magnet’ or even a ‘bridge to Europe.’” According to this theory, the presence of humanitarian aid will motivate smugglers to send larger numbers of migrants into Europe on unsafe boats. Therefore, increasing humanitarian efforts near Libya’s coast will lead to more migrant deaths (Anetzberger qtd. in Steinhilper and Gruijters, 2018, 524). However, Steinhilper’s and Gruijters’ research disapproved this theory as they found that the number of migrants did not change when there were high levels of Search and Rescue initiatives compared to when there were low levels of Search and Rescue initiatives available to help migrants (Steinhilper and Gruijters, 2018, 525). Understanding the presence of Search and Rescue initiatives will play a role in determining if Operation Themis is effective at saving migrants. When analysing these two policies, their implementation of Search and Rescue initiatives will most likely play a large role in the migrant mortality rates during the activity period of these policies. Steinhilper’s and Gruijters’ literature has emphasised the influence that Search and Rescue initiatives have on migrant mortality rates.
In McMahon and Sigona’s article, “Death and Migration: Migrant Journeys and the Governance of Migration During Europe’s ‘Migration Crisis’,” the scholars discuss how being exposed to death plays a role in shaping a migrant’s journey. Migrants make decisions about if and when they are going to migrate due to witnessing death, or having their own lives put at risk. This article also discusses the fact that migration policies are developed in political spaces that are physically very far from the realities that migrants experience when travelling towards Europe. Migrant deaths have been politicised in a narrative that has been created through, “ …a geographically limited humanitarian gaze on the Mediterranean Sea” (Andresson and Feldman qtd. in McMahon and Sigona, 2021, p. 607). It is important to understand that migration policies are developed in a room that is very far from the realities that migrants experience during their journeys. Being aware of this fact will be beneficial when analysing Operations Triton and Themis because it may help to explain migrant death trends. If politicians are framing a humanitarian issue as an issue of immigration control, this will come to surface when comparing these policies and looking at death rates.

2.3 Factors that Contribute to Migrant Mortality Rates

Steinhilper’s and Gruijters’ article, “A Contested Crisis: Policy Narratives and Empirical Evidence on Border Deaths in the Mediterranean," also sheds light on how policies can play a role in the migrant mortality rate (Steinhilper and Gruijters, 2018, p. 518). While border policies can influence migrant mortality rates, other factors can also influence death rates such as smuggling operations, as well as the initial issues that cause people to leave their homes (Del Valle, and Den Heijer et al. qtd. in Steinhilper and Gruijters, 2018, p. 524). The authors stress that these other factors cannot be separated from the potential results of implemented policies
(Steinhilper and Gruijters, 2018, p. 524). This is an important point to be aware of because, when researching Operations Triton and Themis, there will be trends that arise that will not be able to be certainly confirmed that they are results of the implemented policies. There are a number of factors that can play a role in mortality rates aside from policies. Furthermore, it can be difficult to determine if a policy is causing a specific effect. For instance, Steinhilper and Gruijters discuss an example where a migration policy has been implemented and it, “… might prevent deaths …, but also increase the number of attempted crossings …, making its effect on the overall death toll difficult to isolate” (Steinhilper and Gruijters, 2018, p. 524). Also, policies that uphold migrant deterrence might cause smugglers and migrants to journey across, “… longer and more dangerous routes (Mainwaring, Spijkerboer qtd. in Steinhilper and Gruijters 2018, p. 524). This literature is important because it stresses the point that there are many reasons, besides policy, that can determine mortality rates along a migration route. This is important to keep in mind while researching Operations Triton and Themis to understand that, while there may be some links between a policy and migrant death rate, it should never be said with complete certainty that the migrant mortality rate was changed due to the implementation of a policy.

Steinhilper’s and Gruijters’ also used a formula to calculate a migrant mortality rate that will be adopted and used in this thesis. “Following Carling (2007), we define the mortality rate (MR) as: \( MR_{tr} = \left( \frac{F_{tr}}{D_{tr}} \right) \times 1000 \) where \( D \) is the number of attempted crossings in year \( t \) and route \( r \), and \( F \) is the corresponding number of fatalities. Because \( D \) is not observed, it is approximated by the number of arrivals plus the observed number of fatalities” (Carling qtd. In Steinhilper and Gruijters 2018, p. 521-522). Steinhilper’s and Gruijters’ research has calculated the migrant mortality rate for the Central, Eastern, and Western routes from 2010-2016 (Steinhilper and Gruijters 2018, p. 523). This data will be used for this research project until
2016. Then from 2017 to 2022, the formula will be used to calculate the migrant mortality along these three routes. Therefore, this formula plays a vital part in this research project.

Steinhilper’s and Gruijters’ research also looks at how the presence of Search and Rescue (SAR) initiatives implemented in a policy would play a role in migrant mortality rate. For instance, Mare Nostrum was a SAR mission that ran from October 2013 to October 2014, “…with an explicit humanitarian objective, managed by the Italian navy” (Steinhilper and Gruijters, 2018, p. 525). The operation was active near Libya’s coast and the mission rescued over 156,000 people (Cusumano qtd. in Steinhilper and Gruijters, 2018, p. 525). However, the pull factor hypothesis came back into play and thus Mare Nostrum was not extended and was instead succeeded, “…by the new Frontex operation Triton (Steinhilper and Gruijters, 2018, p. 525). Unlike Mare Nostrum, Operation, “Triton was primarily a mission to combat crime and secure the EU’s external borders, and not explicitly designed as a SAR mission” (Tazzioli qtd. in Steinhilper and Gruijters, 2018, p. 525). However, Triton eventually expanded in response to, “…two large-scale accidents in April 2015. …. Around the same time, a number of NGOs started operating SAR missions in the area” (Cusumano qtd. in Steinhilper and Gruijters, 2018, p. 525). Then in “June 2015 rescue capacity returned to about the same level it had been during Mare Nostrum (this phase is here referred to as ‘Triton II’)” (Steinhilper and Gruijters, 2018, p. 525).

In this study, Steinhilper and Gruijters divide Operation Triton into two time periods defined by their level of SAR activity. Triton I is characterised by having low SAR activity and runs from November 2014 to May 2015. Triton II is characterised by having high SAR activity and runs from June 2015 to December 2016. The study does not divide Mare Nostrum and looks at the SAR activity during the time frame of the operation which was October 2013 to May 2014 (Steinhilper and Gruijters, 2018, p. 526). The study disproved the pull factor hypothesis as it
found that the number of migrant arrivals did not vary between times of low SAR activity and times of high SAR activity. It was found that there were more deaths during the time of low SAR activity. Therefore, these findings support the notion that more SAR activity could have prevented migrant deaths during Triton I (Steinhilper and Gruijters, 2018, p. 525-526).

These findings are relevant to the research project as they highlight the role SAR operations can play in reducing migrant mortality rates. When analysing Operations Triton and Themis, their levels of SAR activity could influence the migrant mortality rate. Steinhilper and Gruijters have compared death rates across two policies and analysed specific factors, such as SAR activity, to understand the variance of mortality rates between the two different policies. This literature is then applicable to this research project as Operation Triton will be compared to Operation Themis. Steinhilper’s and Gruijters’ study is a strong example about how to compare migration policies and mortality rates.

2.4 Death Influencing Migrant Decisions

Death is also a factor that migrants take into account during their migration journeys. McMahon and Sigona’s article, “Death and Migration: Migrant Journeys and the Governance of Migration During Europe’s ‘Migration Crisis’,” tackles the gap in existing literature surrounding how the reality and existence of death influence migrants’ behavior (McMahon and Sigona, 2020, p. 606). This article discusses how, in previous studies, “… death has often been considered a “push factor” from which people are compelled to flee” (Altai Consulting and UNHCR qtd. in McMahon and Sigona, 2020, p. 607). This article also found, “…that exposure to death …” can influence how a migrant’s journey will change over time (McMahon and Sigona, 2020, p. 607). In the fall of 2015, “… a team of field researchers carried out 205
interviews in Italy, 215 in Greece, 20 in Malta, and 60 in Turkey” (McMahon and Sigona, 2020, 608). It was found that the Central Mediterranean Route was, “… was more deadly, with 10 percent of interviewees who took that route reporting someone dying on the way, in contrast to the 2 percent of those who took the Eastern Mediterranean route.” Furthermore, “…32 percent of interviewees who crossed the Central Mediterranean had a direct (witnessing someone die) or indirect (hearing from others of deaths in that particular place) experience of death along their way, in contrast to 9 percent of people who crossed the Eastern Mediterranean” (McMahon and Sigona, 2020, 616). It was also found that Libya had the highest amount of reported deaths. Of the migrants in Libya, 27% of those interviewed, “… spoke of either directly witnessing death or becoming aware of deaths by hearing of them from others, with West and Central Africans the most likely to experience violence and witness death in Libya.” Many of the migrants observing or hearing about, “…death in Libya did so while seeking to stay in the country to reside and work, and interviewees stated that they had been targeted due to their race, religion, and language …” (McMahon and Sigona, 2020, p. 618). In Libya and Iran, witnessing death served as a factor that motivated migrants to leave these countries. Many of these migrants realized that they would not be able to live safely if they remained in these countries (McMahon and Sigona, 2020, pp. 619-620).

Understanding that death motivates migrants to move is applicable to this project as it can play a role in which migration routes migrants will choose to take. Then, the route they end up taking can heavily influence their chances of death. This literature highlights important information about the Central Mediterranean route as it gives statistics on why it is more dangerous than the other routes (McMahon and Sigona, 2020, 616). Then this article explains that people end up taking the Central Mediterranean route because they have been exposed to
death and this motivates them to continue their migration journeys (McMahon and Sigona, 2020, 619-620). McMahon and Sigona’s article sheds light on why migrants are taking these dangerous journeys. This is applicable to this research project as it explains why many people are taking the Central Mediterranean route. This research will expand on this project by looking at how FRONTEX policies influence the death rate along the Central Mediterranean route. However, this literature is important to this topic as it explains the more personal reasons people decide to migrate and how this can play a role in death rates. This literature helps reinforce the idea that, while FRONTEX policies can play an important role in migrant death rates, policies are not the only factors behind fluctuations in death rates.
3 Operation Themis

This chapter will discuss the objectives of Operation Themis and how the policy may be influencing the migrant mortality rate. When looking at prior research, it was found that there were lower migrant death rates when policies implemented a high number of search and rescue initiatives (SAR). When there was a low number of SAR initiatives, the migrant mortality rate was higher than during times of high SAR activity (Steinhilper and Gruijters, 2018, p. 525-526).

When looking at the mortality rate along the Central Mediterranean Route after Operation Themis was implemented, there was a large increase in this rate compared to the year before the policy. Operation Themis’ objectives could point to an explanation behind this increased mortality rate.

When reading over the policy, I specifically looked at the Annexes of the Operational Plan, Amendment 1. This information was found on the Frontex website as one of the organizations’ documents that are provided to the public. Under this part of the policy, I specifically looked at Annexes 4 and 6. Annex 4 provides operation objectives and Annex 6 describes the specific tasks and instructions for those enforcing border control objectives (Frontex, 2019, p. 22, 26). Annex 4 shows that Operation Themis prioritized border control over SAR efforts due to the frequent mentioning and detail of border control efforts. Annex 6 provided detail regarding SAR initiatives. However, it cannot be said that Annex 6 prioritized SAR over border control policies due to the fact that many details surrounding border control efforts were not disclosed to the public. Therefore, these two annexes of the policy point to the idea that Operation Themis prioritized border control efforts over SAR and this could have contributed to the increased migrant death rate along the Central Mediterranean Route in 2019.
3.1 Annex 4 of Operation Themis

In this annex, there are eight objectives that can be analyzed to understand if the policy prioritizes or does not prioritize SAR initiatives. The objectives are as follows: “Enhance border security; Technical and operational assistance in SAR; Support MS on carrying out coast guard functions; Enhance operational cooperation; Support to migration management; Enhance collection and exchange of information, including personal data; Identify possible risks and threats; Establish and exchange the best practices.” The objectives “Enhance border security; Technical and operational assistance in SAR; Support to migration management,” and “Identify possible risks and threats” are the specific objectives of this annex that may be categorized as either border control efforts or SAR initiatives. The objectives not included on this list mostly focus on how Frontex communicates with international organizations and member states. Communication efforts do not provide much insight into whether the policy promotes border control or SAR initiatives. Therefore, only the four objectives specified will be analyzed in detail. (Frontex, 2019, p. 22-23 and Frontex, 5, 2020).

3.1.1 Annex 4 Objectives that Focus on Border Control

Even though the “Enhance border security,” objective of Annex 4 has goals that could lead to migrant safety, it still prioritizes border control rather than SAR initiatives. The policy states that border surveillance will be used, “… to detect, identify, and intercept the suspicious objects of interest and persons within the operational area,” and, “…to prevent unauthorized border crossings, also taking into account that some situations may involve humanitarian emergencies and distress situations at sea” (Frontex, 2019, p.22). While this statement still makes note of humanitarian crises, the rhetoric around this sentence points to the notion that
border control will be prioritized over humanitarian efforts. This is because the humanitarian crises awareness is added as an after-thought once the goals of border security were made clear.

The following statement of the “Enhance border security,” objective has the goal of targeting, “…cross-border crime including smuggling of migrants, trafficking in human beings and terrorism and taking measures against persons who have crossed the border illegally as well as reporting other illegal activities detected to the competent authorities” While efforts to reduce trafficking and terrorism would most likely save migrant lives, this statement puts more of an emphasis on enforcing repercussions against those who have committed illegal activities (Frontex, 2019, p. 22). Therefore, it cannot be said that SAR efforts are prioritized over border control efforts in this objective.

Also, the indicators used to implement these two above statements are hypervigilant about border control. For instance, many events that operate under this objective will be counted. More specifically there will be a, “Number of detections resulted to the preventions of departures of migrants; Number of cross-border crimes detected, prevented, intercepted and reported; Number of man-days/monthly deployments of human resources and supporting border surveillance; Number of man-days/monthly deployments/patrolling hours performed of TE (total and per type of TE)” and “Number of prevented illegal border crossings.” Because the objective is hypervigilant about keeping a count of factors such as illegal border crossings and resources being used to enforce border control, it can be said that this objective is prioritizing border control over SAR initiatives (Frontex, 2019, p. 22). Therefore, this objective of Operation Themis could explain why the mortality rate increased after the policy was implemented.

Another objective of Annex 4 that focuses on border control rather than SAR is the “Identify possible risks and threats” objective. In this objective, Frontex plans to carry out, “
…interviews and other operational activities to collect operational information and personal data related to suspects of cross border crimes, to be further processed and analysed.” Also, relevant stakeholders will be given information, “…to maintain and improve situational awareness and support operational planning and implementation” (Frontex, 2019, p. 23). This objective seems to be prioritizing border control due to the fact that Frontex is putting effort into debriefing activities to discuss border crimes. The border control agency will also keep track of the, “Number and quality of debriefing interview reports sent to Frontex Risk Analysis Unit.” Also, the, “Average level of preparedness and expertise and knowledge of the TMs1 …,” will be analyzed. Not only is Frontex keeping track of the interviews they are conducting, they are also assessing the border crime knowledge of those participating in the plan (Frontex, 2019, p. 23). Therefore, Frontex is putting a great deal of effort into understanding border crimes. Because Frontex has created this detailed objective discussing how border crimes will be analyzed, it is clear that the organization is working to limit border crimes as much as possible.

3.1.2 Annex 4 Objectives that Focus on Search and Rescue

The objective: “Technical and operational assistance in SAR,” prioritizes SAR over border control. In this objective, assistance will be given to member states so that they can assist, “…persons found in distress at sea, whenever and wherever so required” (Frontex, 2019, p. 22). This objective focuses on SAR rather than border control due to the fact that assistance will be provided to those found in life-threatening situations at sea. The indicators of the policy will keep track of SAR incidents. More specifically, there will be a count of the, “Number of SAR incidents during the JO in operational area, Number of SAR incidents during the JO outside operational area,” and, “…Number of SAR incidents in which Frontex co-financed assets have

1 TMs stands for Team Members (Frontex, 5, 2020).
been engaged.” There will also be communication happening between the International Criminal Court and Maritime Rescue Coordination Centers/Joint Rescue Coordination Centers (Frontex, 2019, p.22). Because there is an effort to keep track of SAR efforts, this objective is working to implement SAR measures. Also rescue centers will be contacted under this objective which should help prioritize SAR efforts.

Another objective that seems to promote saving migrants is the, “Support to migration management” objective. In this objective, Frontex assists, “…in screening of nationality, document’s checks, fingerprinting and registration of third-country nationals.” Frontex will also keep track of the, “Number of man-days/monthly deployments of screening experts, ALDO, fingerprinting and registration officers, interpreters” (Frontex, 2019, 23). Because there is lots of attention on registering migrants, this will most likely lead to more lives being saved. This is because Frontex will be paying very much attention to who is coming into the EU. This could lead to increased interest in the migrants and what can be done to save them. Also, there are many resources being tracked in terms of registering migrants. Therefore, since Frontex has created a detailed plan about how they are registering migrants, this will help support migrant lives.

3.1.3 Annex 4 Conclusions

After analyzing Annex 4, it may be difficult to say if the annex works to promote border security over SAR initiatives. This is due to the fact that there are two objectives that focus on border control and two objectives that focus on SAR initiatives. However, out of these four objectives the, “Enhance border security” objective is the most detailed out of these four (Frontex, 2019, p. 22). Because there is a lot of detail and many goals implemented into this one
objective, the claim can be made that the annex prioritizes border control efforts. Therefore, the
death rate along the Central Mediterranean Route may have increased after Operation Themis
gone into effect due to this focus on border control efforts.

3.2 Annex 6 of Operation Themis

Annex 6 of Operation Themis is entitled: “Description of the Tasks and Specific
Instructions To the Members of the European Border and Coast Guard Teams (Rules of
Engagement). This annex gives insight into the responsibilities of the members participating in
the policy. Assessing which bodies have which powers under the policy could help draw
conclusions about how Operation Themis influences the migrant mortality rate. This is because
organizations that enforce border control policies could have a different influence on the migrant
mortality rate compared to organizations that prioritize SAR efforts.

The first part of the annex is called “Executive powers,” and it discusses the authority
given to border guards. The policy states that, “The national border guards of Italy have the
leading role in the implementation of the JO.” It also states that team members must follow the
instructions given to them by, “…the border guards of the host MS.” Team members will also
be authorized by the “…Italian national authorities …,” to consult European and national, “
…databases for operational purposes as set in this Operational Plan” (Frontex, 2019, p. 26).

This portion of the annex also has a section discussing the, “Use of Force and coercive
measure.” The policy states that, “When using force, the Team Members shall not exceed the

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2 JO stands for Joint Operation (Frontex, 5, 2020).
3 MS stands for Member State (Frontex, 5, 2020).
minimum degree that is absolutely necessary, proportional and reasonable in the circumstances. The use of force or coercive measures is possible for the performance of a duty or in legitimate self-defense and in legitimate defense of other persons. The use of force or coercive measures shall never be arbitrary or abusive.” Also, “Team Members may only use force, including coercive measures …” with consent from, “ …both the participating Member State and the host Member State, in the presence of border guards and the host Member State and in accordance with the national law of the host Member State. The host Member State may, with the consent of the home Member State, authorize Team Members to use force in the absence of border guards of the host Member State” (Frontex, 2019, p. 26-27).

The “Executive powers,” section also discusses, “National rules on the use of Force.” This rule pertains to searching vessels, “…suspected of being involved in smuggling of migrants and trafficking in human beings….” And the vessel should be searched, “… in a secure way regarding the boarding team, the crew and the migrants.” It also stresses that weapons should only be used, “… as a last resort.” It will only be used, “…in case of legitimate self-defence and in legitimate defence of other persons.” If firearms are used, “…the Team Members shall ensure that it will be done in such a way that causes the less possible injuries and minimizes the damages.” There is also a section that discusses the conditions in which to use weapons, and these conditions are part of Italian law\(^4\). There is then a section that discusses what needs to be done if, “… force and/or weapons” were used. “The Italian police officer referent …,” must be immediately contacted. Then, “The participants shall immediately follow up health/life safety measures regarding the injured persons against whom the actions were taken.” Also, reports need

\(^4\) See page 27 of the Annexes of the Operational Plan, Amendment No 1, JO Themis 2018 (Document 8) to read more on the specific conditions in which force can be used.
to be made to the ICC\(^5\)/NCC\(^6\) about any weapon use. If someone dies due to a shooting, “…Frontex Headquarters must be informed at any time by phone, in addition to the email to FSC\(^7\) and Cabinet.” (Frontex, 2019, p. 27-28).

The “Executive powers,” section of annex 6 is important to note because it states that Italian border guards have a great deal of authority in this policy (Frontex, 2019, p. 26). This section is also interesting in terms of migrant mortality. This part of the policy seeks to limit the use of force and provides many details about when force should be used and what needs to be done after the use of force. These rules will most likely save migrant lives as border control officers can only use violence against those along migration routes in specific situations (Frontex, 2019, p. 27-28). Because the policy has listed out specific guidelines around the use of force, this could lead to more migrants surviving the journey across the Central Mediterranean Route.

The second section of annex 6 is entitled: “Border surveillance,” and discusses how activity is monitored at the border. The goal of border, “…patrols is to prevent unauthorised border crossings and to tackle cross border crime, in particular smuggling of migrants, trafficking of persons, terrorism, smuggling of drugs, weapons and illicit waste trafficking.” Also, while implementing, “…regular border surveillance activities, NCC could request to ICC the support of Frontex assets for other specific surveillance activities, based on information received by the NCC from Italian judicial authorities.”

This section also imposes guidelines for the Team Members participating in the plan which are as follows: “

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\(^5\) ICC stands for International Criminal Court (Orav, 8, 2022).

\(^6\) NCC stands for National Coordination Center (Frontex, 5, 2020).

\(^7\) FSC stands for Frontex Situation Center (Frontex, 4, 2020).
- bear in mind that the prevention and loss of lives has overall priority in all operational actions;
- promote, guarantee protection and respect the fundamental rights consigned in the Charter of Fundamental Rights of the European Union and other relevant international law, including the 1951 Geneva Convention on the Status of Refugees;
- take due account of the safety and security of the vessel; its crew and its cargo;
- not prejudice the national, commercial or legal interests of the Flag State;
- ensure within available means, that any measure taken with regard to a particular vessel is environmentally sound under the circumstances;
- ensure that the master of the intercepted vessel is, or has been, afforded at any time the opportunity to contact the vessel’s Flag State, and subject to preserving the safety and security of operations, is, or has been, afforded the opportunity to contact the vessel’s owner or manager.”

(Frontex, 2019, p. 28).

This section of the policy is interesting to take note of because it is difficult weather to say it is prioritizing border control efforts or SAR initiatives. This is because it clearly states the goals of border surveillance and how they want to limit illegal crossings. However, there is then the statement that expresses that preventing the, “loss of lives has overall priority in all operational actions.” This is then followed by details on how to uphold safety measures. While this section is entitled “Border surveillance,” Frontex may still be placing more of a priority on saving lives (Frontex, 2019, p. 28).

This section of the annex then goes on to discuss maritime and aerial assets. However, lots of text in these sections is not disclosed to the public. However, in terms of maritime assets,
the policy states that, “Each maritime participating unit must have medical staff on board, if possible and in accordance with the capability of the asset (logic and operational)” (Frontex, 2019, p. 29). All of the text regarding aerial assets has been blacked out.

By ensuring that each, “…unit must have medical staff on board,” this points to the idea that the policy is prioritizing SAR efforts. However, much of the information discussing aerial assets has been blacked out in an effort to protect border control efforts (Frontex, 2019, p. 29). Therefore, it cannot be said whether SAR is prioritized over border control.

The following section then discusses detection. “During border surveillance activities …,” “… information about the situation of persons on board, in particular whether there is an imminent risk to their lives or whether there are persons in urgent need of medical assistance. The ICC shall transmit promptly that information to the competent SAR Authority (RCC) and to the National Coordination Centre of the host Member State. The same rule applies in case of lives at risk or urgent MEDVAC.” (Frontex, 2019, p. 29). Again, the focus on medical attention can be labeled as a SAR initiative in this policy.

Then there is a discussion of, “Interception (Law Enforcement Activity).” This section states that Host Member States authorize, “…the participating units to take one or more of the following measures where there are reasonable grounds to suspect that a vessel may be carrying persons intending to circumvent checks at border crossing points or is engaged in smuggling migrants by sea:

a) host information and documentation on ownership, registration and elements relating to the voyage of the vessel, and on the identity, nationality and other relevant data on persons on board, including whether there are persons in urgent need of medical assistance, and/or persons seeking asylum or international
protection, and making persons on board aware that they may not be authorised to cross the border except those seeking to apply for asylum or international protection;

b)

c) stopping, boarding and searching the vessel, its cargo and persons on board, and questioning persons on board and informing them that persons directing the vessel may face penalties for facilitating the voyage

If evidence confirming that suspicion is found, the Host Member State authorises that participating units to take one of more of the following measures:

a) seizing the vessel and apprehending persons on board;

b) ordering the vessel to alter its course outside of or towards a destination other than the territorial sea or the contiguous zone, including escorting the vessel or steaming nearby until it is confirmed that the vessel is keeping to that given course;

c) conducting the vessel or persons on board to Italian territory.”

This section also states that these above-mentioned measures, “…shall be necessary and proportionate and shall not exceed what is necessary to achieve its objectives.” The “Host Member State …” will work with the ICC to essentially enforce these measures. These measures are also applied to what appear to be stateless vessels since if, “…there are reasonable grounds to suspect that a stateless vessel is carrying persons intending to circumvent the checks at border crossing points or is engaged in the smuggling of migrants by sea, Italian authorities authorises one or more of the measures mentioned above and shall instruct the participating unit
appropriately through the ICC.” The annex also goes over interception protocols in contiguous zones as well as, “…on the High Seas.”

“On the high seas …,” if there is reasonable suspicion, “… that a vessel is engaged in the smuggling of migrants by sea, the participating units shall take one or more of the following measures ….” This will be authorized by, “…the flag State, in accordance with the Protocol against the Smuggling of Migrants, and where relevant, national and international law:

a) requesting information and documentation on ownership, registration and elements relating to the voyage of the vessel, and on the identity, nationality and other relevant data on persons on board, including whether there are persons in urgent need of medical assistance;

b) stopping, boarding and searching the vessel, its cargo and persons on board, and questioning persons on board and informing them that persons directing the vessel may face penalties for facilitating the voyage.

If evidence confirming that suspicion is found, the participating units may take one or more of the following measures, subject to the authorisation of the flag State, in accordance with the Protocol against the Smuggling of Migrants, and where relevant, national and international law:

a) seizing the vessel and apprehending persons on board;

b) warning and ordering the vessel not to enter the territorial sea or the contiguous zone, and, where necessary, requesting the vessel to alter its course towards a destination other than the territorial sea or the contiguous zone”

Once a vessel is seized and/or people are found that will be tried in Italy, the ICC will then be consulted. “For the purposes of adopting the aforementioned measures, Italy shall instruct the participating unit appropriately through the ICC” (Frontex, 2019, p. 30-31). This section of the
policy also states, “…Where the grounds to suspect that a vessel is engaged in the smuggling of migrants on the high seas prove to be unfounded or where the participating unit does not have jurisdiction to act, but there remains a reasonable suspicion that the vessel is carrying persons intending to reach the border of a Member State and to circumvent checks at border crossing points, that vessel shall continue to be monitored. The ICC shall communicate information about that vessel to the National Coordination Centre of the Member State towards which it is directed” (Frontex, 2019, p. 32).

The specific details regarding how to essentially seize a ship points to very strict border control efforts. If Frontex is detailing how to seize ships that may potentially illegally cross borders, then it is clear that the policy is working to uphold strong border control efforts. This could then be an explanation as to why the migrant death rate increased after the implementation of the policy (Frontex, 2019, 30-32).

The “Disposal of migrants’ boats” section also emphasizes that, “… no migrants’ boat is left adrift.” The specific actions that are to be taken by Commanding Officers are not disclosed in the document in an effort to protect border control activities. Frontex may be implementing SAR by not allowing migrant, “…boats to be left adrift,” but the security around discussing border control efforts in the policy points to a prioritization of border control over SAR efforts (Frontex, 2019, p. 33).

The following section is entitled, “Search and rescue situations at sea.” It states that, “Member States participating in the JO shall …” aid, “…any vessel or person in distress at sea and, during the operation, they shall ensure that their participating units comply with that obligation, in accordance with international law and respect for fundamental rights. They shall do so regardless of the nationality or status of such a person or the circumstances in which that
person is found.” The section goes on to discuss what to do in specific situations of a vessel being in a state of, “…uncertainty, alert, or distress.” This section is emphasizing helping anyone, “in distress at sea.” Therefore, this is a portion of the policy that discusses SAR efforts (Frontex, 2019, p. 33-34).

The process discussing “Detention and release of persons and property,” in this section of the policy also gives insight into the policy’s orientation towards the importance of SAR efforts. This section of the policy states, “Vessels, the persons aboard, and property associated with either may be detained at sea, by the participating unit, for the time reasonable necessary to:

a) ensure the safety of persons and property;

b) complete an assessment of a possible violation of law (including interviewing persons on board). A special attention shall be given to interviews conducted with potential victims of trafficking in human beings in order to support their early identification and referral and to avoid their re-victimization). Information about the aim of the ongoing procedure must be provided;

c) Effect other law enforcement action (e.g., seizing the boat, detain a facilitator); and

d) carry out the enforcement of a judicial decision where the vessel, person or property is subject to such order (e.g. vessel subject to forfeiture or person subject to arrest).

No person shall, in contravention of the principle of non-refoulement, be forced to enter, conducted to or otherwise handed over to the authorities of a third country where, inter alia, there is a serious risk that he or she would be suspected to the death penalty, torture, persecution or other inhuman or degrading treatment or punishment, or where his or her life or freedom would be threatened on account of his or her race, religion, nationality, sexual orientation, membership of a particular social group or political opinion, or from which there is a serious risk of an
expulsion, removal or extradition to another country in contravention of the principle of non-refoulement” (Frontex, 2019, p. 35-36).

After this discussion of detention, there is more detail in the policy about border control initiatives. However, most of this text is blacked out and not-disclosed to the public. Therefore, since this specific information detailing border control efforts is not available, it is difficult to tell if the policy prioritizes SAR over border control initiatives (Frontex, 2019, p. 36).

This section of the policy also discusses disembarkation efforts. There is a specific section that discusses the “Disembarkation of people rescued (SAR Activity).” It goes on to say that, “It shall be ensured that coordination and cooperation with the relevant SAR authorities is carried out in such a way that the persons rescued by the participating maritime assets, can be delivered to a place of safety defined in accordance with the article 10 of Regulation 2014/656 within the operational area. However, no person rescued in the operational area or outside the operational area within a SAR incident, by a participating maritime asset, will be handed over to Third Country Authorities or disembarked in the territory of that Third Country” (Frontex, 2019, p. 38). This portion of the policy seems to prioritizing migrant lives as it states that people will not be sent back to a place that puts them in harms way. Therefore, the policy prioritizes SAR to a certain extent.

There is then a discussion of “Follow-up measures,” and there is a focus on helping migrants in this section of the policy. For instance, there is a section discussing a, “Provision of basic human needs.” This states that, “Each participating unit must be equipped with lifesaving equipment, water, provisions, an include at least one person with basic first aid training. Upon disembarkation, Italy shall, prior to any other action, render the basic human needs of the apprehended and rescued persons such as food, shelter, and medical assistance.” Because there is
a focus on providing people with, “basic human needs,” the policy is again outlining initiatives on how to benefit people rescued by Frontex (Frontex, 2019, p. 39).

The policy also discusses, “Special measures applicable to persons in need of international protection.” It states that, “TM and STM\(^8\) shall refer to the national Italian officer with whom they work with when a person is identified to or expressed, in any way, a fear of suffering serious harm if (s)he is returned to his/her country of origin or former habitual residence, or if he/she asks or claims for asylum or any other form of international protection.” Because there are efforts to keep migrants out of harms way, this can be identified as a portion of the policy that focuses on SAR initiatives.

There is also a section outlining, “Special measures applicable to vulnerable persons.” This section provides guidelines for how to help vulnerable persons.\(^9\) (Frontex, 2019, p. 39-40). Because Frontex discusses how to help vulnerable people, this policy is again showing that it cares about implementing SAR initiatives.

3.2.1 Annex 6 Conclusions

While this portion of the policy detailed many SAR plans, it is not easy to make the conclusion that SAR was prioritized over border control efforts in this annex. This is due to the fact that many parts of this annex are not disclosed to the public. Therefore, many of the sections discussing border control efforts could not be analyzed. While Operation Themis may be going into detail about SAR, the increased death rate following the policy implementation does not align with what usually happens when lots of SAR initiatives are implemented (Steinhilper and

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\(^8\) STM stands for Seconded team member (Frontex, 5, 2020).

\(^9\) See page 39 of the Annexes of the Operational Plan, Amendment No 1, JO Themis 2018 (Document 8) to read about how Frontex defines “vulnerable persons” and the specific measures taken to help them.
Gruijters, 2018, p. 525-526). This may point to the idea that the undisclosed border control efforts are playing a larger part in Operation Themis than the disclosed SAR initiatives.

3.3 Operation Themis Conclusions

Analyzing the policy objectives (annex 4) and which bodies are given which authorities in the policy (annex 6), can help determine if border control or SAR is more vital to Operation Themis. Because the border control efforts in Annex 4 were more detailed than those discussing SAR efforts, it can be said that there was more focus on border control than SAR efforts. Therefore, this may be why the mortality rate increased in 2019. Annex 6 discussed how member states and other governing bodies played a role in dealing with migrants. Looking at this annex helped build an understanding of specific border control and SAR activities. However, it is difficult to say if SAR was prioritized over border control efforts as many border control efforts were left undisclosed. However, since Frontex prioritized keeping these efforts non-disclosed for the sake of security, this points to the vitality of border control efforts. Thus, annex 6 may also show that Frontex works to prioritize border control over SAR. This would make sense when looking at the migrant mortality rate following the implementation of Operation Themis.
4 Data & Analysis

This section of the paper will focus on data regarding recorded deaths across the Central, Western, and Mediterranean Route.

4.1 Death Rates

The figures below were created using data from the Missing Migrants Project and from Elias Steinhilper and Rob J. Gruijters’ study: A Contested Crisis: Policy Narratives and Empirical Evidence on Border Deaths in the Mediterranean. The Missing Migrants Project was created by the International Organization for Migration (IOM) and it records the deaths of migrants who have either, “… died at state borders or [who were] in the process of migrating to an international destination.” The initiative, “… hosts the only existing open-access database of records of deaths during migration on the global level” (Missing Migrants Project).

Figure 1 was created by Elias Steinhilper and Rob J. Gruijters using the following formula: $MR_{tr} = \frac{F_{tr}}{D_{tr}} \times 1000$. MR represents the mortality rate, $F$ is the number of deaths, and, “… $D$ is the number of attempted crossings …. ” Since, “… $D$ is not observed, it is approximated by the number of arrivals plus the observed number of fatalities.” Also $t$ represents a given year and $r$ represents a given route in this formula (Steinhilper and Gruijters, 2018, 521-522). To understand the mortality rates across the three routes from 2010 to 2016, I consulted Steinhilper’s and Gruijters’ graphs. Then, to understand the mortality rate along these three routes from 2017 to 2022, I used Steinhilper’s and Gruijters’ formula to generate my own graph. However, one slight difference in my calculation compared to that of the previous authors is that my $D$ variable is approximated in a different manner. Instead of adding together the number of arrivals and the number of deaths, I used the number of attempted crossings along
each route in a given year as I was able to find this data. In short, in my calculation, $D =$ attempted crossings. I was able to gather this data from the *Missing Migrants Project* and in their attempted crossings total they include “…deaths/disappearances, interceptions at sea, and irregular arrivals in Europe …” (Missing Migrants Project). Therefore, this data is able to be used as the D variable in my mortality rate calculation from 2017 to 2022 because it provides a clear approximation of attempted crossings.

**Figure 1.**

This graph, created by Steinhilper and Gruijters, displays the annual death rates along the Central, Eastern, and Western Mediterranean Routes as well as an overall trend line. When discussing this graph, the authors noted that the Central Mediterranean Route was the most dangerous route and the Eastern Mediterranean route was the least dangerous. on this graph. In 2015, “the risk of dying on the central route was over 19 times higher than on the eastern route.” The authors cited Dearden et al. and Pastore to explain that these differences in risk are a result of the, “…differences … in the length of the routes and means of operation of smugglers”
Steinhilper and Steinhilper and Gruijters also noted that the death rate along the Central Mediterranean route, … increased substantially in 2016 …. During this year, 24.6 out of 1000 migrants … died on this route.” Then the authors discussed that, “The overall mortality rate was lowest in 2015 ….” (Steinhilper and Gruijters, 2018, 522-523).

Figure 2.

I created figure 2 using data from the Missing Migrants Project. This graph displays the monthly death rate of migrants along the Central Mediterranean Route from 2016 to 2022. The x-axis displays the months from January 2016 to December 2022. The y-axis is the percent of migrants who died either at state borders or while migrating along the Central Mediterranean Route during the given time period (Missing Migrants Project). When looking at the graph from 2016 to 2019, the mortality rate always stays below eight percent. Then from June 2016 to
October 2016 and February to October 2017, there are particularly low points in this time frame that never go above two percent (Missing Migrants Project).

There then appear to be fewer instances of death rates never going past two percent in 2018. The average mortality rate in 2018 is slightly above two percent at two point six percent. The trend of an increasing death rate can also be found when looking at the 2019 data. The average mortality rate in 2019 was exactly six percent (Missing Migrants Project). Operation Themis launched on February 1, 2018, and this coincides with an increasing mortality rate compared to the two previous years. Therefore, this is an interesting trend to note as it could indicate that the policy led to an increase in migrant deaths. This will be explored later in the paper, as well as alternate explanations for why the migrant mortality rate began increasing in 2018.

Then in 2020, the graph shows that there was a decrease in the migrant mortality rate that only rose above two percent in February and December of 2020. The average mortality rate that year was one point six percent. Then in 2021, the death rate increases slightly in comparison to 2020, but not to nearly as high of a rate as to what was observed in 2019. In 2021, the average mortality rate was one point eight percent. Then in 2022, the mortality rate begins to decrease again with an average rate of one point three percent (Missing Migrants Project). Taking note of this decreasing mortality rate trend compared to 2018 to 2019 could shed light on how Operation Themis has influenced mortality rate. The policy's effects could have started to be seen only in 2020, a few years after its implementation in 2018. Therefore, Operation Themis may be responsible for decreasing the migrant mortality rate. However, there could also be alternate explanations behind this decreasing mortality rate.
4.2 Interceptions

Looking at the number of interceptions along the Central Mediterranean Route can also give insight into mortality trends due to the potential relationship between the two events. This is an interesting trend to take note of as previous authors have found that low levels of Search and Rescue activity may lead to more migrant deaths (Steinhilper and Gruijters, 2018, p. 525-526). Understanding interception numbers during the time period of Operation Themis’ implementation, can be valuable in understanding how efforts to save migrants affects the migrant mortality rate.

In 2016, there was a high number of interceptions compared to the rest of the year from March to June, and then again from September to November. When comparing this to 2016’s mortality trends, the death rate went from two percent in March 2016 to six percent in April 2016. However, the mortality rate then declined from April to June of 2016. From September to October 2016, the interception rate increased, and the mortality rate decreased. In November 2016, there were fewer interceptions compared to September and October, and the mortality rate
increased from October to November. When looking at the data from 2016, there may be a trend that suggests when there are higher numbers of interceptions, there is a decreased mortality rate.

When looking at 2017, this theme is not present. In March 2017, there was a spike in interceptions compared to the two previous months of the year. However, the migrant mortality rate remained the same from February to March 2017. What is also interesting to note is that May 2017 was the month with the highest number of interceptions. However, the migrant mortality rate remained at two percent from February to June of 2017. September 2017 also saw a high number of interceptions with the death rate moving from two percent in August to one percent in September. While there was an instance of decreasing death rate during a month of high interception, there did not seem to be a correlation between the number of interceptions and mortality rate in 2017.

The year 2018 may also show that there does not seem to be a strong relationship between interceptions and mortality rates. June 2018 had the highest number of interceptions that year, as well as the highest mortality rate of the year which was seven percent. However, a low number of interceptions may lead to a high mortality rate. February 2018 had a low number of interceptions, but it also had a high migrant mortality rate at six percent. What is also interesting to note is that April, May, and October of 2018 had a mortality rate of 0 percent. April and May of 2018 had high numbers of interceptions which were 2,202 in April and 2,490 in May. However, there were only 439 interceptions in October 2018. Therefore, it may be difficult to conclude that there is a relationship between interceptions and mortality rates.

The year 2019 also has trends worth noting as it is the year on the given graphs with the highest mortality rates. The number of interceptions are also relatively low compared to the other years being observed. In 2019, there were high mortality rates in January with a death rate of
fifteen percent, July with a death rate of twelve percent, and November with a death rate of ten percent. January had 589 interceptions and July had 826 interceptions. November had nearly double the amount of interceptions in January with a recorded number of 1,148 interceptions. 2019 displays a trend that indicates that lower numbers of interceptions coincide with higher migrant mortality rates.

The year 2020 saw higher interception numbers and a lower death rate compared to 2019. In January and May of 2020, the migrant mortality rate was zero percent. The highest death rate in 2019 was three percent and this was observed in February and December. In January there were 1,388 interceptions and in May there were 2,017 interceptions. In February there were 1,680 interceptions and in December there were 843 interceptions. While May had a lower death rate and higher number of interceptions compared to February and December, February had a higher death rate and higher number of interceptions than in January. Also, July 2020 had the highest number of interceptions that year, but not the lowest mortality rate as it was one percent. Therefore, 2020 does not indicate that more interceptions will necessarily lead to a lower migrant mortality rate.

There continues to be an increase in interceptions from 2020 to 2021, but there is an increased death rate between the two years. June through August of 2021 have the highest interceptions of the year. June 2021 saw 7,035 interceptions, July 2021 saw 7,052 interceptions, and August saw 9,771 interceptions. June had a death rate of one percent, July had a death rate of two percent, and August had a death rate of zero percent. While the death rates are low during times of high interception, only August stands out as it was the month with the highest number of interceptions with the lowest death rate. While August 2021 may indicate high interception leads to a decreased mortality rate, this conclusion can not be guaranteed for the entire year.
Like 2020 and 2021, interceptions continued to increase and death rates continued to decrease in 2022. August through November of 2022 saw the highest number of interceptions for that year. In August there were 8,239 interceptions, in September there were 6,036 interceptions, in October there were 8,363 interceptions, and in November there were 6,090 interceptions. The migrant mortality rates stayed low during these months as well. In August and November the mortality rate was zero percent and in September and October the mortality rate was one percent. Therefore, in 2022, high interception numbers may be a reason for a low mortality rate.

The trends observed in the years 2016, 2019, 2021, and 2022 may indicate that more interceptions will lead to a decreased migrant mortality rate. However, there may be alternate explanations as to why the mortality rate was lower in those years compared to the other years being observed.
4.3 Arrivals

The graph above displays the monthly migrant arrivals in Europe from 2016 to 2022. Analyzing the relationship between migrant arrivals and the migrant mortality rate may point to a relationship between these two factors.

The year 2016 had the second lowest annual average migrant mortality rate at one point four percent. When looking at the graph, 2016 had the highest numbers of migrant arrivals in Europe. Therefore, this may indicate that 2016 was a successful year for migrants attempting to enter Europe. A low annual mortality rate could mean that migrants successfully arrive in Europe instead of ending up in different parts of the world either due to legal intervention or other causes.

In 2017, the third lowest annual average mortality rate was recorded and it was one point nine percent. The graph shows that 2017 still has a high number of migrant arrivals when...
compared to the following years, but the number of arrivals started to decline in 2017. While there is some variation in mortality rates and migrant arrivals between 2016 and 2017, there is not a strong enough difference between these years to draw realistic conclusions about the relationship between the given factors. While in 2017, an increased death rate exists at the same time as fewer migrant arrivals compared to 2016, the small variation between these years does not provide enough evidence to certainly make these claims.

2018, 2019, and 2021, were the years that saw the highest annual average migrant mortality rates. 2018 had a mortality rate of two point six percent, 2019 had a mortality rate of six percent, and 2021 had a mortality rate of one point eight percent. 2018 and 2019 were the years with the fewest number of migrant arrivals according to the graph. 2019 is especially interesting as it is the year with the highest average annual mortality rate, as well as the year with the lowest number of arrivals. When just looking at 2018 and 2019, it would not be improbable to claim that higher mortality rates result in fewer arrivals in Europe. However, 2021 had a relatively high average mortality rate, but higher numbers of migrant arrivals compared to the three previous years. Therefore, while it could be that there will be higher numbers of migrant arrivals if there is a decreased mortality rate, this cannot be said with certainty. Migrants may be surviving, but they could be settling in other areas besides Europe.

The graph is interesting to take note of because it gives insight into if mortality rate plays a role in migrants settling in Europe. When analyzing the data, there is a chance that a lower migrant mortality rate will lead to more arrivals in Europe. However, years such as 2021 may disprove this claim.
5 **Alternate Explanations**

This chapter will look at other reasons, besides Operation Themis, as to why the migrant mortality rate along the Central Mediterranean Route increased from 2018 to 2019. This chapter will analyze activity in nearby migration routes, total numbers of attempted migrant crossings, and noted causes of migrant death. These alternate events may provide a more accurate explanation as to why the mortality rate increased along the Central Mediterranean route in 2019.

5.1 **Nearby Migration Routes**

**Figure 3**
Figure 4

Western Mediterranean Mortality Rate

Figure 5

Eastern Mediterranean Mortality Rate
The graphs above display the monthly mortality rates along the Central Mediterranean, Western Mediterranean, and Eastern Mediterranean Routes from 2016 to 2022. Looking at this data can give insight into if there are similar trends across the routes and if maturation threats are present.

When looking at these graphs, it can be seen that along both the Central and Western Mediterranean Routes, there is a large spike in mortality rates from 2018 to 2019. Because this spike is present along the Western Mediterranean Route, as well as the Central Route, this can point to the idea that Operation Themis is not influencing the migrant mortality rate from 2018 to 2019.
The fact that the death rates appear to be rising along the Central and Western routes in 2019 may be due to the fact that these routes are very close to each other. Along the Central Mediterranean route migrants, “… embark on long, dangerous journeys from North Africa and Türkiye, crossing the Mediterranean Sea to reach Italy, and to a much lesser extent also Malta. The large majority of the migrants transit through Libya on their journey towards Europe” (European Council, 2024). “The Western Mediterranean route refers to irregular arrivals in Spain, both via the Mediterranean Sea to mainland Spain and by land to the Spanish enclaves of Ceuta and Melilla in Northern Africa. Migrants transit through Morocco and Algeria to reach Spain” (European Council, 2023). The map below (figure 6) also displays the three migration routes and shows how close the Central and Western routes are to each other.

The Eastern Mediterranean Route differs from the two routes most likely due to the 2016 agreement between Turkey and the European Union. “In March 2016, EU and Turkish leaders agreed to tackle irregular migration in light of the massive number of migrants travelling through Türkiye. … In 2020 arrivals via the Eastern Mediterranean route were almost 98% lower than in 2015, but numbers increased in 2021 and 2022. The agreement with Türkiye helped to reduce the number of lives lost at sea and tackle migrant smugglers.” (European Council, 2023). Because this agreement between the EU and Turkey mainly applied to the Eastern Mediterranean Route, this may explain why this route’s mortality rate differs from the rates of the Central and Western routes.
5.2 Total Numbers of Attempted Crossings

When looking at the number of attempted migrant crossings from 2016 to 2022, there seems to be a significant drop in migrant crossings from September 2017 to May 2020. This is interesting in terms of Operation Themis and the 2019 spike in the migrant mortality rate. Because there were less crossings during the time period in which Operation Themis was implemented, and death rates were also higher at this time, this could again show that Operation Themis is a policy that prioritizes border control over SAR initiatives. The border control efforts of the policy would explain why there were fewer attempted crossings than in previous years. This graph may show that border control efforts under Operation Themis deterred people from crossing into the European Union. Therefore, this data could serve as proof that border control efforts were effective under Operation Themis. These efficient border control efforts can then explain why the death rate rose following the implementation of Operation Themis.
5.3 Causes of Migrant Deaths

Figure 7

Causes of Death Along the CMR

- Drowned
- Mixed or Unknown Causes
- Vehicle/Transport accidents
- "Harsh Environmental Conditions/lack of adequate shelter, food, water"
- "Sickness/lack of access to adequate healthcare"
- Violence
Figure 8

Causes of Death Along the EMR

- **Drowned**
- **Mixed or Unknown Causes**
- **Vehicle/Transport accidents**
- "Harsh Environmental Conditions/lack of adequate shelter, food, water"

Figure 9

Causes of Death Along the WMR

- **Drowned**
- **Mixed or Unknown Causes**
- **Vehicle/Transport accidents**
- "Harsh Environmental Conditions/lack of adequate shelter, food, water"
This chart above (figure 9) shows the main ways in which migrants die along the Central Mediterranean Route. Looking at the data, drownings are the most common way migrants die followed by mixed/unknown causes (Missing Migrants Project). Therefore, migrants are dying due to natural elements, such as the ocean, which a policy can not have any influence over. While efforts could be implemented in a policy that could help migrants at sea, a policy cannot control whether migrants will survive a journey across the Mediterranean Sea.

Also looking at figures 8 and 9, which display the causes of death along the Eastern Mediterranean Route (EMR) and the Western Mediterranean Route (WMR). The main causes of deaths are also drownings followed by mixed and unknown causes (Missing Migrants Project). Therefore, this reinforces the fact that policies cannot have complete influence over if migrants will survive the journey to Europe. This is because there will always be environmental factors at work that risk migrant lives.
6 Conclusions

This project used data from the International Organization for Migration (IOM) to calculate a migrant mortality rate along the Central Mediterranean route. When counting migrant deaths, the data set does not include those who died in immigrant detention centers, refugee camps, and those who died after deportation to their home country (IOM). Therefore, this paper cannot comment on how Operation Themis affects those migrant categories. This project was also based on the assumption that this data was as accurate as possible. However, it is not possible to know the exact number of migrant deaths along the Central, Eastern, and Western Mediterranean routes. This is due to the fact that migrants may die in remote areas or their remains are never found. Also, migrants who have witnessed deaths and are migrating using illegal means may fear reporting these deaths as they want to avoid interacting with authorities. Therefore, the exact migrant mortality rate will never be known (IOM).

The goal of this research project was to see if Operation Themis was responsible for the increased mortality rate along the Central Mediterranean route in 2019 (IOM). While one policy cannot be completely responsible for an increased mortality rate, Operation Themis may have caused more migrant deaths than in the year before its implementation because of its numerous border control efforts.

Hopefully this research project and others like it will inspire policy makers to implement measures that save lives. Understanding how policies create real-world effects is important for creating the most effective policies. Future research on migration policy may dive deeper into the importance of SAR efforts along migration routes.
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