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Defining Intelligence Failure: A Puzzled Discourse

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DEFINING INTELLIGENCE FAILURE: A PUZZLED DISCOURSE

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The views expressed are those of the author and do not reflect the official policy or position of the US Army, Department of Defense, or the US Government.

For my dearest wife & love, Anabel Koshinsky—
A guiding light that has been the foundation for pursuing worthy endeavors.

כִּי אֶל־אֲשֶׁר תֵּלְכִי אֵלֵךְ . “For wherever you go, I will go” – Ruth 1:16

DEFINING INTELLIGENCE FAILURE:

A PUZZLED DISCOURSE

By

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Abstract

A specter is haunting the U.S. Intelligence Community, and this specter is intelligence failure. Up to the present day the Intelligence Community (IC) continues to be mired with allegations of intelligence failure from the media, policymakers, academics, and practitioners alike. An initial review of literature shows a common definition of intelligence failure remains elusive and deficient. This study seeks to add to the scholarly discourse and benefit continued research around intelligence failure, through an attempt to produce a working definition through a systematic review of existing definitions. This study used a systematic review method to examine over 210 sources from Taylor & Francis, JSTOR, & Google Scholar to develop a working definition of intelligence failure based on a wide sample of literature. 33 definitions were derived and analyzed off of this review.

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Introduction

A specter haunts the U.S. Intelligence Community, and this specter is intelligence failure. Since the origins of the National Security Act of 1947, the Intelligence Community (IC) has sought to make up for the failure of the Pearl Harbor attack. However, even up to the present day the IC continues to be scarred with allegations of intelligence failure. These alleged failures are wide ranging; Pearl Harbor, the Bay of Pigs debacle, numerous coups amid the Cold War, the Iran-Contra affair, 9-11, Iraq WMDs, COVID-19, and the recent January 6 Capitol Insurrection are only a small sample of failures often attributed to the IC. As a result, the scarlet letter of intelligence failure tends to be cast broadly. Yet, the threshold that divides intelligence success from intelligence failure remains unclear, and there is no clear approach to studying the causes of intelligence failure (Gill & Phythian, 2018).

Therefore, the fundamental question of inquiry in this thesis is: *what is intelligence failure*? The discourse of this question is often played out through very public congressional hearings and amid the media. A common reality consists of the ritualistic finger-pointing barrage between practitioners, the media, and policy makers (Zegart, 2007). Academics have also sought to further refine a sensible definition of the underlying foundations that cause intelligence failure, but the outcome has been a multi-layered puzzle. The academic and practitioner line of inquiry has been mostly dominated by case studies and memoirs that are limited in scope (Johnston, 2005). An initial assessment of the discourse confirms it is significantly limited.

Dahl (2013), Bar-Joseph & McDermott (2017), and Gill & Phythian (2018) call on future research to compare and examine success and failures. Some authors have explored this avenue to add to the exhaustion of intelligence failure case studies. Other scholars within intelligence studies seek greater emphasis on empirical and mixed research methods similar to the premier

work of Amy Zegart, in *Spying Blind: The CIA, the FBI, and the Origins of 9/11*. However, there seems to be a lack of acknowledgement that the first building block towards more empirical research requires a greater discussion of definitions and adequate cumulation of existing research. The lack of common definition establishes the problem statement. That problem statement remains a puzzle that requires greater discussion across disciplines. One aim of this research is to identify and close gaps within existing definitions.

The stalemate has some parallel lines to other broadly used terms that are not so well defined. De Mauro, Greco, & Grimaldi (2015) conducted an analysis to identify themes and define "big data". The core of their argument runs similar to the puzzled discourse of intelligence failure. Intelligence failure, like big data, has ubiquitous usage across the domains of academia, intelligence professionals, politicians, and the media. Such frequent usage of a term in many contexts can run the risk of hindering the evolution of the concept (De Mauro, Greco, & Grimaldi, 2015). Through their analysis they argued the importance that "A convincing definition of a concept is an enabler of its scientific development" (De Mauro, Greco, & Grimaldi, 2015, p.101).

The broader aim that animated this thesis was to generate a deeper working definition of intelligence failure, which could contribute positively to scholarly debate. What is intelligence failure? What are the common themes and categories? What might definitions in this sample be missing? An initial assumption examined is the use of normative absolutes to define intelligence failure (or deny its existence), and this ignores core tenets of estimative realities that surround the profession of intelligence. Defining intelligence failure helps provide the necessary building block towards developing a framework aligned to estimative probabilities, which might enable a fairer scholarly discourse that appreciates the complex puzzles that surround intelligence failures

and intelligence successes alike. The approach utilized here used a literature review and a systematic review that may benefit future analysis of intelligence failure.

The first phase was the literature review. The literature review provides a general assessment of definitions of intelligence failure and common categories. Despite not being exhaustive, literature reviews help to refine what has been written about, in relation to intelligence failure. However, while the literature review is necessary it is not sufficient. Literature reviews only provide a limited sample and may become suspect to potential biases that ignore other relevant literature (Coulthart, 2017). For this reason, a systematic review provided a means to close existing gaps of available definitions and categories of intelligence failure.

The second phase was the systematic review. The purpose of the systematic review was to analyze a wider array of literature relating to intelligence failure, in order to refine a working definition and analytical framework for discussing intelligence failure. What are common patterns in definitions? What aspects might these definitions be missing? A systematic review provides a deeper framework. More importantly, a systematic review helps to address the lack of structured processes within intelligence studies (Marrin, 2016). A cumulative analysis of literature provides a foundation to build new knowledge that can evaluate cases, in a manner that is fair and reasonable (Marrin, 2016). The objective of the completion of the systematic review was to refine a working deeper definition, while also closing blind spots that may exist within existing definitions.

The research contains five sections. These sections include methodology, literature review, systematic review results, discussion, and a conclusion. First, the methodology provides the basis for how sources are examined and the systematic processes that are used to derive definitions. Second, the literature review focuses on the general body of knowledge that is

known within intelligence failure. The systematic review fills in the gaps of the literature review. Third, the findings of the systematic review are provided in some detail. Fourth, the discussion elaborates on findings and the broader context of what they may mean for intelligence failures. Lastly, the research provides a conclusion aimed towards addressing future avenues of research.

Methodology & Research Design

A literature review and a systematic review were the core basis for research design. The aim of the systematic review was to examine the most relevant literature pertaining to definitions of intelligence failure. Based on an analysis of these definitions a working definition and conceptual model were proposed for future research. The definition and model aimed to assess intelligence failures based on common themes that arise with use of probability-based assessments.

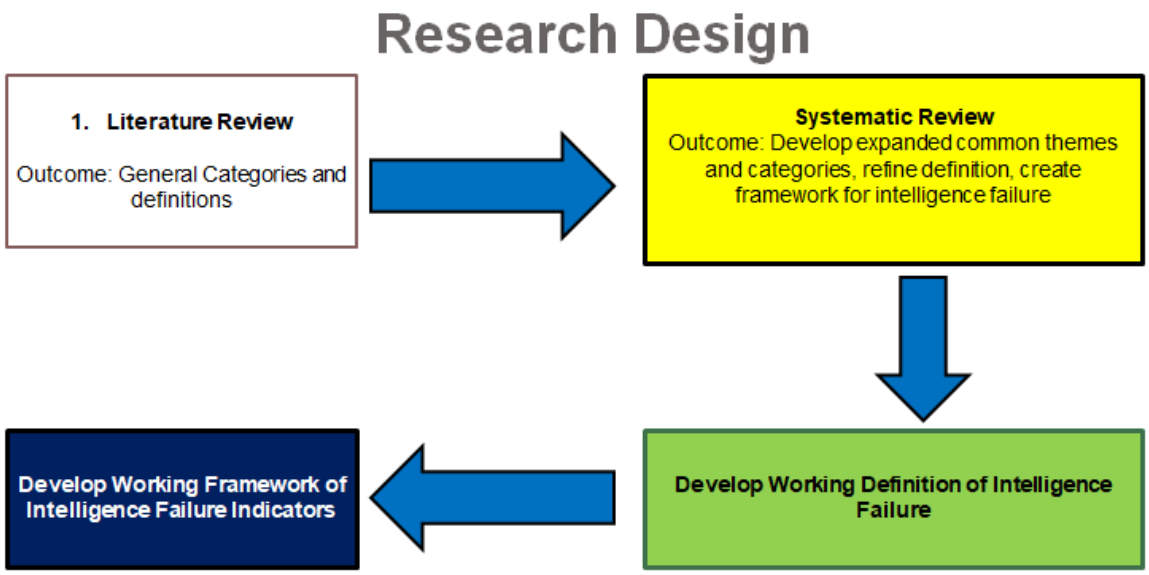

Figure 1.1: Research Design

Literature Review

Literature reviews provided a broad base line understanding of a given subject. As such, the literature was limited in terms of rigor comparative to a systematic review and may omit relevant studies do to bias or inexperience with the subject matter (Coulthart, 2017). The literature review designed for this research aimed to add general context of relevant terms and research that explores the topic of intelligence failure. The literature on intelligence failure was

expansive; given this was the case a series of widely known sources were examined as a basis to build on general concepts.

The literature review included various books, academic journals, and published pieces in mainstream media. Using a diverse array of sources, the search criteria was broadly examined under "intelligence failure" and "intelligence" more broadly as a field of study. Not all the authors aimed to identify intelligence failure, but they provided insights in various aspects that were attributed to intelligence failure. In most cases, the literature review consisted of sources that were already known to the researcher through previous studies.

Some of the sources examined were widely cited within the intelligence studies field. These included Robin Wohlstetter's *Pearl Harbor: Warning & Decision* (1962), Richard Betts various articles and publications, Mark Lowenthal's book *Intelligence: From Secrets to Policy* (2017), Robert Jervis' book. *Why intelligence fails: lessons from the Iranian Revolution and the Iraq War* (2010), Eric Dahl's book *Intelligence & Surprise Attack: Failure and Success from Pearl Harbor to 9/11 and Beyond* (2013), and Amy Zegart's groundbreaking study *Spying Blind: The CIA, the FBI, and the Origins of 9/11* (2007).

A myriad of academic articles existed across the literature that pertained to case studies of intelligence failure. Once again, these provided only a small sample of the wide sample on the topic. However, they did provide a starting point. These substantive sources highlighted the importance of using a literature review as a building block to understand general concepts and discourse that has taken place, but further analysis through a systematic review helped cover some of the gaps.

Systematic Review

The Cochrane group defines a systematic review as a method that is explicit and identifies, selects, and appraises relevant research critically (Cochrane Collaboration, 2016). Systematic reviews provide an explicit basis for the process where assumptions and methods are clear for examination from external parties (Temple University Library, 2020). Systematic reviews may be heavily leveraged in the medical field, but this framework of transparent methodology of sourcing is applicable for assessing a wide array of literature. Systematic reviews provide transparent mode of analysis that are encouraged within the Intelligence Community.

The systematic review, in this sense, aimed alleviate traditional limitations of bias that can occur within literature reviews (Coulthart, 2017). Literature reviews do not detail underlying assumptions or selection for sources contained, and thus may be susceptible to underlying biases (Temple University, 2020). This does not mean systematic reviews are completely free of bias either. The potential still exists, especially related to assessing high-quality versus low-quality of studies.

The aim of the systematic review was three-fold. The first aim was to determine if a widely accepted definition of intelligence failure exists. The second aim was to synthesize a working definition for intelligence failure, in the event there was not a widely accepted definition. This definition provided a foundation to synthesize dimensions, which could further be assessed in future research. The third aim was to use provide insights for future conceptual framework research. In an ironic twist, both systematic reviews and intelligence failure share the common trait of unclear definitions.

Martinic, Pieper, Glatt, and Puljak (2019) examined the definition of systematic review. Through (ironically again) a systematic review they found that of a sample of 533 sources, only 188 provided a definition of systematic review (Martinic, Pieper, Glatt, and Puljak, 2019). The most commonly used definition came from Cochrane, but definitions were vague and not widely accepted (Martinic, Pieper, Glatt, & Puliak, 2019).

A relevant bias to consider was publication bias, or author bias. These biases tie to the potential notion of unblinded bias. Unblinded bias consists of selecting sources based on a preference for a particular author or publication (Morissette, Tricco, Horsley, Chen, and Moher, 2011). This systematic review attempted mitigate the risk of these biases through the use of two separate data bases and a scholarly search engine. All of these sources contained a variety of peer-reviewed journals and books. A variety of sources and authors were available based on an initial assessment of the sample.

Morissette, Tricco, Horsley, Chen, and Moher (2011) conducted a meta-analysis of blinded versus (not knowing the author, publication etc.) or unblinded bias did not find a statistically significant difference between the six studies that qualified their research criteria. Only two studies on the topic determined there was a high risk of bias related to blinded versus unblinded practitioners (Morissette et al, 2011). The latter point here noted one potential weakness with systematic review. Overly robust selection criteria can turn a large sample into a relatively small sample. A small sample can further limit generalizability.

A general framework for systematic reviews includes: a research question, sources searched that include replicable strategy, inclusion/exclusion criteria, selection method, critical appraisal of bias in the studies, information on analysis that is also reproducible (Martinic, Pieper, Glatt, & Puliak, 2019). These elements aligned to the general framework that were

applied to this study of defining intelligence failure. Figure 1.2 provides a visual framework for the systematic review that was conducted pertaining to intelligence failure.

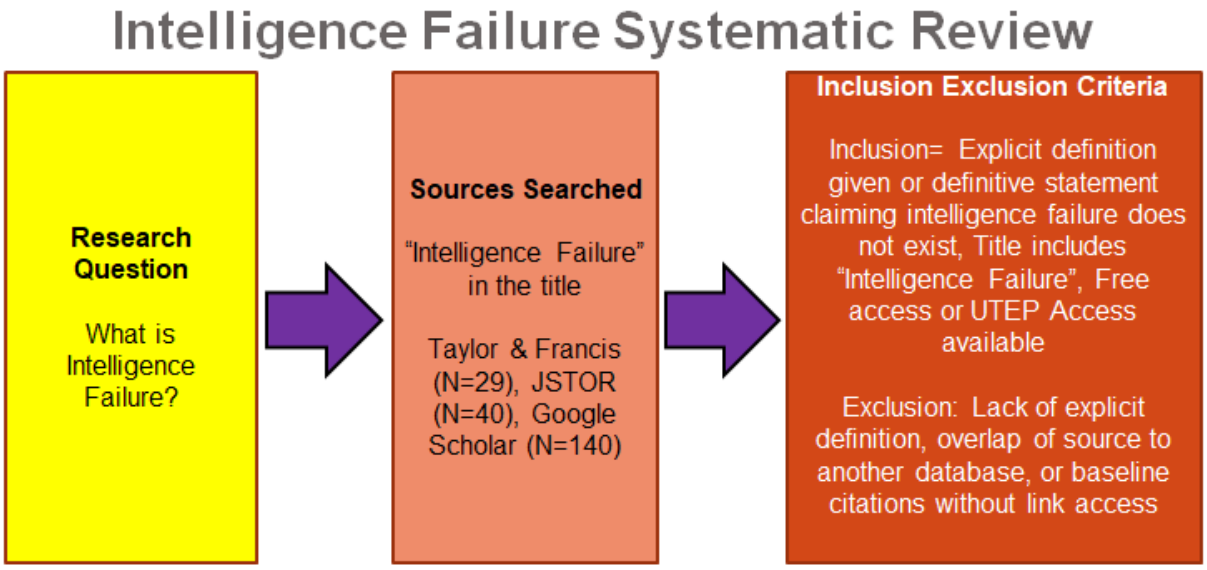

Figure 1.2: Systematic Review Design for Intelligence Failure

Step 1: Research Question

The guiding research question was "what is intelligence failure". Several sub-questions were also relevant. Is there a common definition or components that make up an intelligence failure? What are the explained categorical causes or themes underpinning intelligence failure? Last, what indicators allow analysts to assess categories of intelligence failure?

The selected provided a foundation for examining intelligence failure. The questions of themes and categories (dimensions) further enabled development of a conceptual framework that visualized these dimensions through estimative analysis. A definition provided the overarching basis for dimensions. The dimensions helped to create indicators that were relevant to intelligence failure. The overall outcome of these questions produced a method for assessing the complexity of intelligence failures.

Step 2: Sources Searched

The sourcing strategy examined two databases and one search engine. Expanding source origin venues helped avoid the possibility of potential biases like selection bias or publication bias, which could have occurred with reliance on one specific source or search engine. The databases searched consist of Google Scholar, JSTOR, and the Taylor and Francis database. Nonetheless, the study consisted of a purposive sample. As such, the method of sampling limited the ability to provide far-arching generalizations to the mass array of literature on intelligence failure.

The first database examined was Taylor and Francis online database. This database provided access to peer-reviewed academic journals that were applicable to the field of intelligence studies. The database provided a critical baseline of articles that were focused within the intelligence field. A search of "intelligence failure" resulted in over 993 results. Due to constraints on time and a single-researcher concept, the search was refined to a search based on the title including "intelligence failure" yields 29 results.

The second database examined was JSTOR. The database provided wide access to primary sources, book chapters, and academic journals across 75 disciplines, which otherwise may not be found within the Taylor & Francis database. This was particularly relevant pertaining to book literature that may not be freely available on Google Scholar, or available through Taylor and Francis. A search of "intelligence failure" yielded 1,348 results. When refined to a search of "intelligence failure" for the title, or the abstract the search result yielded 40 results. No year restriction was necessary for the database, which helped to mitigate chronological biases that might have otherwise existed in the search.

Lastly, the systematic review examined the search engine Google Scholar. Google Scholar provided access to peer-reviewed articles and "gray literature" (Coulthart, 2017). It also included dissertations. The wide expanse of information on google scholar allowed for a comprehensive look into intelligence failure. Martín-Martín, Thelwall, Orduna-Malea, & López-Cózar, (2021) conducted an analysis of 3,073,351 citations. They found Google Scholar was the most comprehensive source that found over 88% of the citations (Martín-Martín, et al., 2021).

Any search engine presents the danger of information overload. A Google Scholar search of "intelligence failure" yielded 8,010 results. Given the limitations of number of researchers and time constraints the search had to be further filtered down. The search criterion for the search was limited to an advanced search of "intelligence failure" within the title. The refinement yielded 287 results. A further refined search criterion included restricting publication years between 2009-2020, which produced 140 results.

Step 3: Inclusion/Exclusion Criteria & Definitional Standards

As noted within the sources section the mass array of publications on the topic is expansive. Inclusion criteria began with sources with "intelligence failure" within the title. The source had to also have free access or UTEP available access to be included, which helped to expedite processing. Each source was then searched starting with "intelligence failure definition", "intelligence failure is defined", "definition", "defined", "intelligence failure", and "failure". Consistency of search features adhered to objectivity of process, which is a guiding principle to content analysis (Benoit, 2011). An initial examination aimed to identify if the author defined intelligence failure individually, relied on an existing definition, or did not define the term.

An examination of individual definitions posits the challenge of what constitutes as a suitable definition. While it was difficult to measure the value of a definition, it was possible to set forth some criteria that allowed for inclusion or exclusion of definitions. Systematic reviews are often used in the medical field, and on this basis a medical approach of diagnosis seemed most appropriate for examining the diagnosis of intelligence failure. The analogy here provided the underlying assumption that intelligence failure was an ailment, and the only way to properly diagnose the ailment was to define it adequately enough.

A definition generally speaking here was defined as an explanation for what a term means (Gupta, 2019). Various types of definitions exist and the methodological approach for inclusion was left fairly loose, with some conditions. Definitions that were circular were still included in the sample, but their value certainly did little for developing a working definition. For example, an author could claim intelligence failure is an event that occurs when intelligence fails. Circular definitions do little to get to the essence of a definition, but it was still worth including in the sample given the examination because it might reflect a pattern.

An aspect the methodology considered to be null for consideration were ostensive definitions. Ostensive definitions are rudimentary definitions based on example (Gupta, 2019). There is much greater complexity to ostensive definitions, but as applied to the methodology this would be best phrased as intelligence failure by example. The methodology examines approaches these ostensive definitions narrowly. For example, if an author said, “an intelligence failure is an event that occurs that was similar to Pearl Harbor or 9-11”. This does not demonstrate a reasonable attempt at a definition aimed at explaining the phenomenon. Many authors have written extensively on these cases and assessed many variables differently. There seldom has been universal agreement found with any intelligence failure example.

Moreover, if there was an explicit definition or a definition that the researcher could reasonably conclude was clear, the source was included. Sources that were in the literature were still included as part of the sample. The substance length of the definition was not used as the basis for exclusion; the definition had to be broad enough to address the general concept. There were case studies that only defined intelligence failure with respect to the case. These were excluded if there was not broader attempt at definition more broadly. If no definition was provided, the source was excluded. JSTOR and Google Scholar did have overlapping sources. As such, overlapping sources were only be included only once and excluded from the sample count from other databases.

McPherson, Arango, Fox, Lauver, McManus, Newacheck, Perrin, Shonkoff, & Strickland, B. (1998) set six criteria they used to define children with special healthcare needs. A condensed version of these principles relevant to the methodology focusing on intelligence failure included: a definition that was simple and could be easily understood, have policy or practitioner utility, recognize various linkages, be both specific and measurable (if possible), and reflect current knowledge (McPherson et al., 1998).

There was the possibility that some authors may claim there is no such thing as intelligence failure. Johnston (2005) found in his ethnographic study that some practitioners did not believe intelligence failure existed. Explicit claims to this effect were included to the sample. For example, an author may assert that intelligence failure is really something else, such as a policy failure. It was important to open the realm of possibility that there was no common definition possible of intelligence failure. Thus, the Lowenthal (2008) definition also would be included.

Step 4: Selection/Screening Method

The first column that was filled was the source information. This was standardized APA format, which provided some verification of the title and the relevance of the source. As the article was examined under selected search terms the definition (or claim no definition was possible or exists) was copied and pasted verbatim. If no definition was provided than "no definition" or "no explicit definition" was inputted into the fourth column, and no further analysis was completed. If the definition was provided this led to a further analysis of the source itself to identify examples used and attributes or causes that were explained by the source, in the other columns.

The Table included the database, source, type of study (Qualitative, or Quantitative, e.g., QUANT, QUAL-Single-Case Study, QUAL-Multiple-Case Study, QUAL-Ethnographic, QUAL-Theoretical), the definition, related themes/dimensions (i.e., Cognitive bias/COG, organizational/ORG, policy/POL, or a mix between/MIX), number of citations, and a value assessment which is discussed in the next section.

For example, an author who conducted a case study on intelligence failure X. The author provided a definition meeting the inclusion criteria. Next, the number of citations used within the paper and the number of times the source has been referenced was recorded. The source was scanned to determine the type of study the author was doing. The study type was then recorded into the table.

Also included within the table were specific intelligence failures that the author referenced (i.e., 9-11, Pearl Harbor, Cuban Missile crisis etc.). These examples provided an insightful guide to the breadth of events labeled as intelligence failure, but for the purposes of

methodology they were not weighted. However, examples provided important insights for trends. They also provided insight to why and how authors chose a given definition.

Table 1.1 *Recording Template for Definitions and Source Assessment*

Data Base or Search Engine								
Source	Manuscript Type	Research Method	Definition	Category/Them	Examples Reference	Citation	Cited in Other Work	Value Assess

The data collected systematically falls was inputted into Table 1.1. Presumably, sources with greater rigor were counted on to provide definitions of stronger value, but also definitions that may be better known within the field of intelligence studies. The following provided greater detail on the inputs that are placed in columns.

Some sources across the databases and search engine included book reviews. These reviews were still examined. A case-by-case basis was assessed when it came to obtaining the books they referenced. As time allowed these books were also analyzed to see if they had a definition. For example, the original sample of Taylor and Francis was n=29 but was increased to n=30 because a book was included into the sample.

Potential error was mitigated through the screening process through consultation. As results were obtained consultation with the project advisor provided important insights to further assess the results, and external faculty were also consulted. Peers were also consulted pertaining to their thoughts of particular definitions that were deemed to be in the "gray area" of being a proper addition.

Step 5: Critical Appraisal of Studies

Given the studies were pulled through varying databases and a search engine, a critical appraisal on research type was required. Such criteria remain largely subjective in nature, which also tied to the issue of screening (Martinic, Pieper, Glatt, & Puliak, 2019). Most of the sources

used were peer-reviewed and met a suitable threshold for being sufficient for consideration. Intelligence studies have a significant volume of qualitative research. Both quantitative and qualitative research were equally valued depending on assessed rigor as shown in Table 1.2. It was expected most sources were qualitative and explanatory.

Norman (2006) developed a Trust Scale and Website Evaluation Worksheet assessing various aspects of sourcing and is particularly relevant to assessing Open-Source Intelligence Analysis. The worksheet utilized a scale to assess sources that ranked credibility from low to high. The sources applied to the scale are arguably already qualified to measure as "high credibility sources". Facets of the evaluation worksheet were synthesized into a new framework that was narrower to the topic examined. The synthesis was necessary because the scale does not delineate factored scores based on the type of research method. Moreover, the framework did not delineate the number of times the source had been. While the worksheet has numbers, it was still largely subjective.

The appraisal was based on the highest value a source reaches in two out of three areas of appraisal. Since the focus was on definition, both primary and secondary sources were applicable. A selected source that achieved two out of three high score thresholds gained a high value. A selected source that had two out of three thresholds in the low value was assessed as low value. All other sources were assessed as medium value. If a selected source qualified as meeting requirements with one high, one medium, and one low then it earned a medium value requirement. The following further elaborates on study type, dimensions, and citations.

Table 1.2 *Source Value Appraisal Assessment*

Value	**Study Type**	**Dimensions**	**Citations**
High	May consist of Quantitative studies or Qualitative studies. The latter consists of multiple case studies (2 or more), or ethnographies with a sample size over 30.	Provides detail of multi-dimensional aspects or categories that go into intelligence failure. (More than 2)	Source contains over 20 sources of material supporting, or the source itself has been cited over 10 times in other work.
Medium	Qualitative→ detailed single case study included.	Provides detail of multi-dimensional aspect or categories that go into intelligence failure (up to 2 causal categories)	Source contains 5-20 sources of material supporting claims, or the source itself has been cited over 5 times in other work.
Low	Qualitative/Theoretical→ No detailed case study or empirical analysis. This may also include published articles from practitioners that are limited in scope due to classification or focused solely on first-person experience. Book reviews are also included within this category.	Does not detail dimensional factors at length or asserts a single cause.	Source does not contain significant sourcing, or the source has not been cited in other work up to five times.

The first aspect of appraisal was study type. Rigor was the focus on the appraisal. The use of multiple case studies gained a higher appraisal than case studies. Empirical studies or mixed method studies that maintained a large sample size were also assessed with a high appraisal. Sources with multiple case studies or research ethnographies with a sample above n=30 were considered to have higher value than single case studies. The sample size criteria undergirded the assumption that the source was an academic journal or dissertation. The appraisal also examined

the number of sources used within a given study as a measure of rigor. Furthermore, number of times the source was cited was also considered as a basis for critical appraisal (Table 1.2).

The second aspect of the appraisal was dimensional categories. The use of dimensional mitigated too narrow of a focus centering just to causes or attributes. Both of these concepts tended to bleed over and were not mutually exclusive. Given the significant number of sources relied on qualitative research, it was difficult to assess clear causes as a broader generalization. Delineating causes and attributes became difficult due to the fact they tended to overlap. Dimensions broadened the scope to mitigate this limitation, by creating an umbrella term. However, this study was unable to answer where the line between causes or attributes starts or ends.

Some authors inevitably focused on one dimension more than others. It is understood some of these dimensions had overlaps and greater complexity. Cognitive errors may have disrupted both analysts and policymakers alike. Groupthink represented a cognitive failing but has organizational overlaps. The literature review attempted to organize these dimensions, but the reality remains that overlap occurred. The coding process of dimensions included search terms of “cause” and “attribute”. The search included phrases like “because”, “caused”, and “attributed”. A further examination of headings could shed light on the dimensions the author felt were relevant. Benoit (2011) explained a clear and transparent method for coding is required, and themes may be derived from what was previously known. Inter-rater reliability permeated as a limitation. Therefore, the following explains the coding procedure and what specific qualitative categories entail.

One example dimension would be attributions that were policy based (Coded: Pol) intelligence failure. This code included politicization or the claim a policymaker inappropriately

or inadvertently interfered with the intelligence process (Lowenthal, 2017). It may be attributed to direct or indirect pressuring of policymakers to obtain a certain result, or it could be the attempt of intelligence officials to shape their own policy preferences (Lowenthal, 2017). Policy also included established laws that may have prevented a particular mitigating action from happening or prevented organizations from operating together.

Another dimension would be organizational themes (Coded: Org). This code included attributes like organizational culture, organizational structure, or organizational leadership deficiencies within the organization that contributed to an intelligence failure. Zegart (2009) focused particular attention to organizational fragmentation and adaptation failure that were some of the issues that led to 9-11. Olson (2019) provides similar insight to the troubling organizational cultures that plagued U.S. counterintelligence.

A final dimension highlighted was cognitive (Coded: Cog). The causes may be rooted in psychological causes of comprehending or understanding information due to biases, or flawed assumptions that were never reassessed. Like any professional group analysts and operators might have particular biases that contribute to an intelligence failure. After all, intelligence professionals operate within a world where they have only some puzzle pieces of an incomplete puzzle set. As such, assumptions may be wrong.

The appraisal of these dimensions adheres to the argument of Gill & Phythian (2018) that failures are multi-causal. As such, including more dimensions led to a higher appraisal. Two dimensions met a moderate standard and mentioning only one constituted a low standard. For example, an author may highlight how politicization, organizational culture, and cognitive problems (e.g., coded as Mix: Pol, Org, Cog) played an important role in intelligence failure. However, that author may focus more of their effort on the cognitive cause of a given failure. In

cases where one particular attribute or cause was repeatedly focused on over others an asterisk (*) was included to denote special emphasis by the author. Thus, the coding here would be denoted as Mix: Pol, Org, Cog*. No adjustment to value had been applied to these cases. The asterisk served to highlight patterns where authors placed greater emphasis.

Intelligence failure often constitutes a diluted multi-layered and multi-faceted phenomenon (Figure 1.3). Determining actual causation becomes difficult. This was part of the reason why this topic may be written about often. The overlap of political science, psychology, philosophy/ethics, organizational leadership, and military history highlighted just a few of the multiple overlaps that occur in the complex appraisal of such a topic.

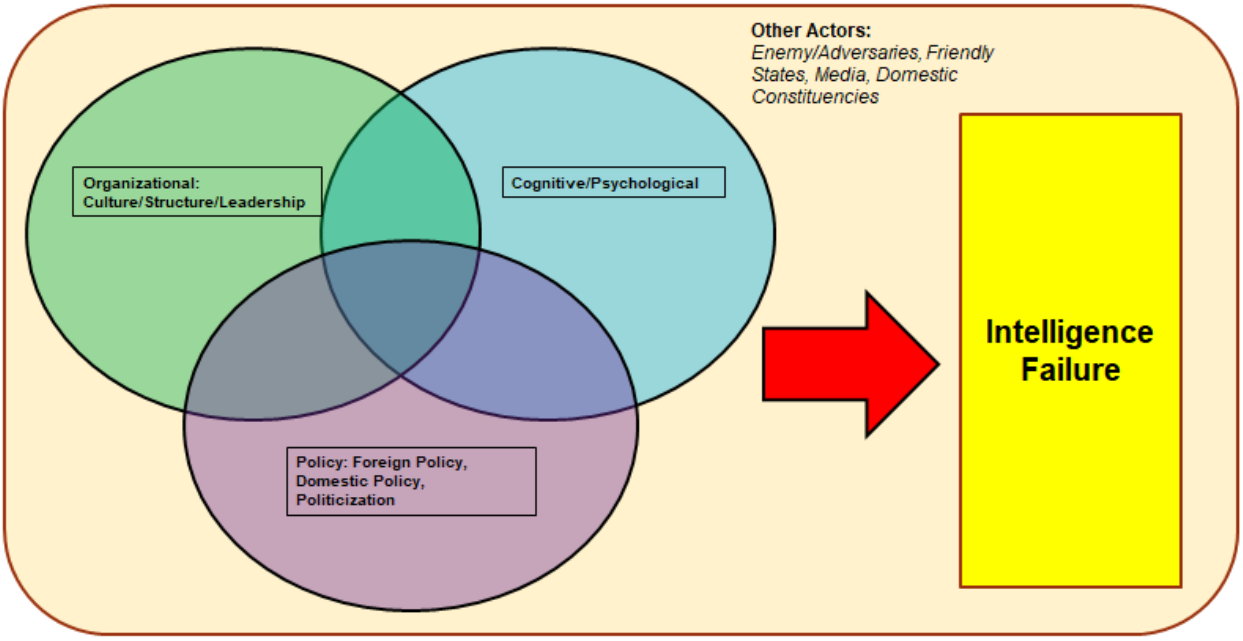

Figure 1.3: The Multitude of Dimensions

Another aspect of appraisal examined citations used within the source as well as the number of times the source has been cited in other work. Over 20 citations within the source met sufficient rigor to rank high based on this appraisal. Above 5 but less than 20 met a moderate qualification, and anything less qualified for a low value. However, a balance was considered

because mainstream journals such as Foreign Policy or others may not have significant citations that can be examined. As such Google Scholar was used to cross reference how many times a selected source was cited in other work. Thus, a source that was cited over 10 times achieved a high appraisal. Being cited 5-9 times achieved a moderate appraisal, and less would be a low appraisal. Deference was given to the source for the highest score of these.

Finally, the definitions were evaluated. This evaluation helped derive the development of a working definition that can contribute to future research. The condensed standards outlined by McPherson et al., 1998) were applied as part of the discussion. However, this assessment was not used relating to the assessed ranking of the source. Weighting definitional values was avoided because of the concern this might interject to much potential bias at the outset. Greater emphasis was placed on the source rigor versus just the definition. As such, the discussion provides an outlet to broadly discuss the definitional findings and what patterns they showed.

Step 6: Information on Analysis Reproducible.

Through clear search criteria and development of graphical depictions of information afforded a clear and transparent means to reproduce information and analysis. In order to avoid definitional confusion, the definitions were copied verbatim into Table 1.1. The biggest risk for replicability related to coding of dimensions. This danger existed because this was mostly done manually, and open to single-coder interpretation. Creswell and Creswell (2018) explained that thick descriptions created the elements of shared experience that enhanced validity. The danger of assessing inflexible categories was that it could take away from emerging themes. Therefore, a priori categories were found in the literature review, but expanding categories were also considered.

Literature Review

A Google Scholar search of "Intelligence Failure" yields over 8,010 results. A search of "Policy Failure" yields 40,700 results. This represents a significant difference in yield, and yet seemingly intelligence failure consumes enormous amounts of headline space and opinion columns. For example, an analysis using the same search in *The New York Times* for intelligence failure yields 388 results. Ironically in a twist a search of policy failure in *The New York Times* results with only 279 results.

While intelligence failure does not outnumber policy failure in broader academic research, there is a great deal of literature concerning its causes and attributes. Generally speaking, the definition of intelligence failure remains as illusive and scattered as the definition of intelligence itself (Gill & Phythian, 2018; Lowenthal, 2017). Lowenthal (2017) explains intelligence is different from other governmental functions because what goes on is secret, and these secrets are a source of controversy.

What is Intelligence?

In order to understand intelligence failure, it is important to define what intelligence is. One cannot assert a failure without having a generally agreed upon concept of what failed. Even in this case the study of intelligence has mixed conceptions. Is intelligence a process, information, a system, or simply and institutional structure for gathering information? Lowenthal (2017) provides one such definition amid the squabble.

> "Intelligence refers to information that meets the stated or understood needs of policy makers and has been collected, processed, and narrowed to meet those needs." (Lowenthal, 2017, p.2)

Other frameworks exist for defining intelligence as well. Knorr (1964b) explains intelligence as an operation that procures and processes information about an external environment, for the purpose of the government to achieve various goals. The world of intelligence operates both within and without the realms of the complicated interagency processes.

Gill & Phythian (2018) and Prunckun (2015) both explore the role of the intelligence cycle as it relates to intelligence. While the early models of this process provide explanatory value, they miss many of the complexities and tangled webs that make the intelligence cycle (Gill & Phythian, 2018). The process may be depicted as a circular practice, but it has many tangled webs at various points. This factor is important because approaching intelligence failure from a process point of view can run the risk of attribution error. Namely, there is the possibility of blaming the wrong link. They cycle steps include planning/direction setting, information and data collection, processing, data analysis, and reporting and disseminating to policymakers (Prunckun, 2015; Gill & Phythian, 2018).

One important component that is widely acknowledged relating to this cycle is the policymaker has a vote (figuratively and literally), and this input can come at any step within the cycle. Lowenthal (2017) draws a figure that expresses the intelligence-policy nexus where intelligence activities are walled off from interfering with policy, but policy makers are able to penetrate the metaphorical intelligence cellular membrane. A general conceptualization of how the intelligence cycle functions shows a very complex process, and while the conceptualization is not as detailed as Gill & Phythian's (2018) model it does encapsulate a process ecosystem (Figure 2.1). Process appears time and again during discussions of intelligence failure with a tendency towards terms like "information sharing" and "interoperability".

The area surrounding emphasizes the non-linear reality. As the diversity of actors increase, so does the uncertainty. The process internally demonstrates that there are multiple interactions that impact the process, and these interactions go both ways. The dark arrows originating from analysis highlight that analysis may (and should) interact across the process with decision makers and collectors. Dashed lines constitute uncertainty of information flow, and this may vary internally or externally depending on processes. The orange arrows denote the standard process, but they were modified to reflect they function back and forth.

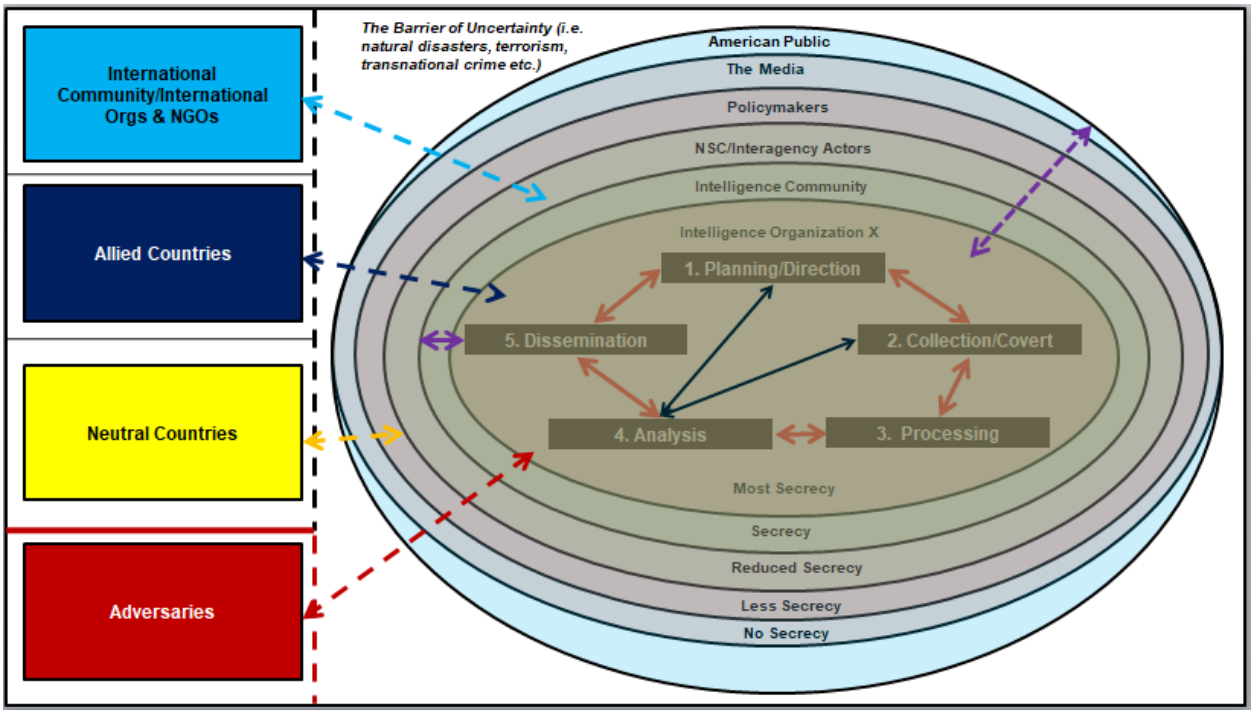

Figure 2.1: The Complex Intelligence Cycle Ecosystem

Prunckun (2015) defines intelligence uniquely through an equation. This definition focuses on the probabilistic/estimative role of intelligence. The equation used is, "(secrecy (information + analysis = intelligence ∴ insight→ reduces uncertainty))" (Prunckun, 2015, p.6). This definition highlights the critical role that unlike other forms of research, intelligence relies

in a world of secrecy. Intelligence relies on probability, and this is why, "it is better—and more accurate—to think of intelligence as proximate reality" (Lowenthal, 2017, p.8).

Intelligence Failure & the Attributes of Intelligence Failure

Gill & Phythian (2018) note that applying the term failure reflects a judgement, but the threshold of success versus failure is unclear. The result of this lack of clarity is that accusations of intelligence failure are rooted in flawed expectations, which lead to misdirected policies to reform intelligence "failures" (Gentry, 2008). Part of this is rooted in the uncertainties inherent to having limited information. Knorr (1964a) provides a realist assessment that the aim of intelligence is to improve the "batting average". This does not suggest surprise is inevitable, but the aim should be to mitigate it. This is because intelligence predictions are future-based, and therefore subject to probabilities of success (Knorr, 1964b).

One way to analyze intelligence failure is to try to answer the question of what is the aim of intelligence in the first place? According to Lowenthal (2017) the aim of intelligence agencies is to avoid/prevent strategic surprise, provide long-term knowledge, support policy processes, and maintain proper secrecy. Presumably, any definition of intelligence failure would reflect a failure in one or more of these purposes. However, the picture is much more complicated in the literature.

Erik Dahl elaborates on three schools of intelligence failure, in his book *Intelligence and surprise attack: Failure and success from Pearl Harbor to 9/11 and beyond*. His breakdown of these schools reflects many of the main themes found within the literature review. Dahl (2013) labels these schools of thought as traditionalist, reformist, and contrarian.

First, the traditionalist school aligns to a more fatalistic and pessimistic view of intelligence failure. It generally ascribes intelligence failures are inevitable and the circumstance

of cognitive challenges of analysis amid uncertain information (Dahl, 2013). The locus of blame with this school exists more at the hands of human nature than at the fault of intelligence organizations. Second, the reformist school demonstrates more optimism and focuses on how organizational information sharing and mitigating bureaucratic hurdles (Dahl, 2013). Here the locus of fault centers on organizations and processes, while limiting the blame on analysts or collectors. Last, the contrarian school places the fault of intelligence failure at the hands of faulty collection and opposes the previous claims of fault being centered on organization or analysis (Dahl, 2013).

Slippery Slides of Strategic Surprise

The first major assessment of intelligence failure was encapsulated in Robin Wohlstetter's book *Pearl Harbor: warning and decision*, which was published in 1962. Pearl Harbor was an awakening for the need of better intelligence to anticipate surprise. Wohlstetter (1962) primarily attributes this intelligence failure to a cumulative failure within the existing intelligence apparatus to discern the sound and noise dilemma infused through Japanese denial and deception, in December 1941 (Wohlstetter, 1962). What leads to specific elements of surprise may vary from sound and noise to human cognitive errors (Wohlstetter, 1962). Bruce and Bennett (2014) elaborate on the sound and noise dilemma. Deception, they argue, is a factor in many intelligence failures. However, the use of denial is a factor in all intelligence failures (Bruce & Bennett, 2014).

Presumably, the successful countering of denial and deception holds the answer to avoiding both tactical and strategic surprise, like those encountered by Pearl Harbor. Yet this would be to assume intelligence or military capability would still be able to avoid the consequence, or that policymakers would have acted. Dahl (2013) highlights the limitations

posed through hindsight bias. This also hints at another bias pertaining to strategic surprise. Bar-Joseph & McDermott (2017) correctly identify that strategic surprise is not only negative. Can there be positive strategic surprises? For example, cases of positive strategic surprise include the collapse of the Soviet Union, or Anwar Sadat's unexpected push for peace with the Israelis, in 1977 (Bar-Joseph & McDermott, 2017).

Another element of value is the role of error. Errors have the inherent ability to cause surprise. At the tactical level this may be necessary, but not sufficient. When dealing with strategic surprise the error needs to expand beyond individual analysts, into an organizational or policy adoption that creates a cumulative error. Very few (if any) 'intelligence failures' can ever be traced to one analyst in a cubicle, or one operative in the field. James Bond may be entertaining, but it is Hollywood. Johnston (2005) conducted an ethnographic study where he derived the following definitions of intelligence error and intelligence failure.

> "Intelligence errors are factual inaccuracies in analysis resulting from poor or missing data; intelligence failure is systemic organizational surprise resulting from incorrect, missing, discarded, or inadequate hypotheses." (Johnston, 2005, p.4)

Responding to denial and deception requires an adaption to the external environment. This adaption failure is conceptualized as change, magnitude of change, and improved fit to respond to the external environment's conditions (Zegart, 2007). Using adaptation failure provides another conceptualization for assessing intelligence failure. Presumably, an organization that fails to adapt to the threat will inevitably be surprised. Zegart (2007) argues that the Intelligence Community was unable to adapt to the emergent threat. Through empirical

analysis found the IC only implemented 35/340 recommendations that were identified by 12 commission and think tank studies from 1991 to 2001 (Zegart, 2007).

However, while surprise may be necessary it is not always sufficient or even necessarily bad. Denn and Ryan (2018) provide another facet to consider relating to their claim that North Korean weapons development was not an instance of intelligence failure. Their definition is rooted in the claim that intelligence failures share negligence, and significant consequences (Denn & Ryan, 2018). Negligence entails omissions or getting intelligence substantially wrong, which resulted in significant consequences (Denn & Ryan, 2018).

Another simplified definition of intelligence failure focuses on the elemental basis of the role of prediction. One such definition claims, "Intelligence failure is a mismatch between estimates and what later information reveals" (Jervis, 2010, p.2). While this is incredibly simple, there is plenty of ambiguity that surrounds the concept of intelligence failure. Jervis (2010) explains the orientation on major surprise intelligence failures narrows the scope because of the traumatic image value, but this rhetorical focus on surprise ignores an expansive arena of other potential intelligence failures (Jervis, 2010).

On the other hand, Lowenthal (2008) argues that intelligence failure is defined by failing to adequately explain the role of intelligence and its limitations to the public. Denn & Ryan (2018) explain misperception of intelligence capabilities creates a false view that intelligence agencies are omniscient. These views are prevalent across the literature. The result of faulty views of intelligence capability is vilification from the public and policymakers. This is an assessment that is hard to refute, especially with the luxury of hindsight bias. The result is blaming intelligence for any surprise (Gentry, 2008). This aligns to a realistic conclusion that intelligence is a necessary but not sufficient for achieving success or victory (Keegan, 2003).

The literature pertaining to intelligence failure largely focuses on case studies (Betts, 2014). However, amid a plethora of case study examples there appears to be a lack of clear and broad definitions of intelligence failure, or a widely accepted definition based on an initial review of literature. Dahl's (2013) delineation of schools of thought may help explain this divide, and more importantly argue for also focusing on intelligence successes, in the literature. The discrepancies between schools demonstrate the diverse attributions for sourcing the cause of failure at particular points, while ignoring others. Given the fact intelligence is a process there can be a temptation of attributing an intelligence failure or intelligence error to a single point such as collection or analysis (Gill & Phythian, 2018).

Gill & Phythian (2018) demonstrate in the cases of 9-11 or Iraq WMDs that intelligence failures tend to be multi-causal as opposed to mono causal. Various variables can be present at one point, or many points of intelligence failures. Such variables include policy failure, organizational/structure culture, and cognitive analysis failures (Gentry, 2008). The vast research tends to be focused within the explanatory methods of qualitative research, but with an ever-changing definition.

A generalized approach to visualizing the problem set also reaffirms a great deal of the literature reviewed. Policy, Organizational, and Cognitive failures provide common themes that are found to varying degrees across intelligence-related literature. These can also be examined from the lens of strategic, operational, and tactical. Strategic intelligence describes a broad long-term focused intelligence relevant to senior decision makers, which aligns to the trends of policy focus (Dahl, 2013). As defined by this research, operational intelligence focuses on specific regions or specified operations pertinent to the organizations involved, and so it fits more organizational overseeing the handling of operations. This area is less defined, and Dahl (2013)

did not define operational intelligence at all. Tactical intelligence entails shorter-term items normally known to lower levels in the hierarchy (Dahl, 2013). Here it makes sense to examine more closely at the individual analyst or team level. Prior to delving into these facets in detail Figure 2.2 provides a conceptual synopsis of the themes and concepts often described further in the literature.

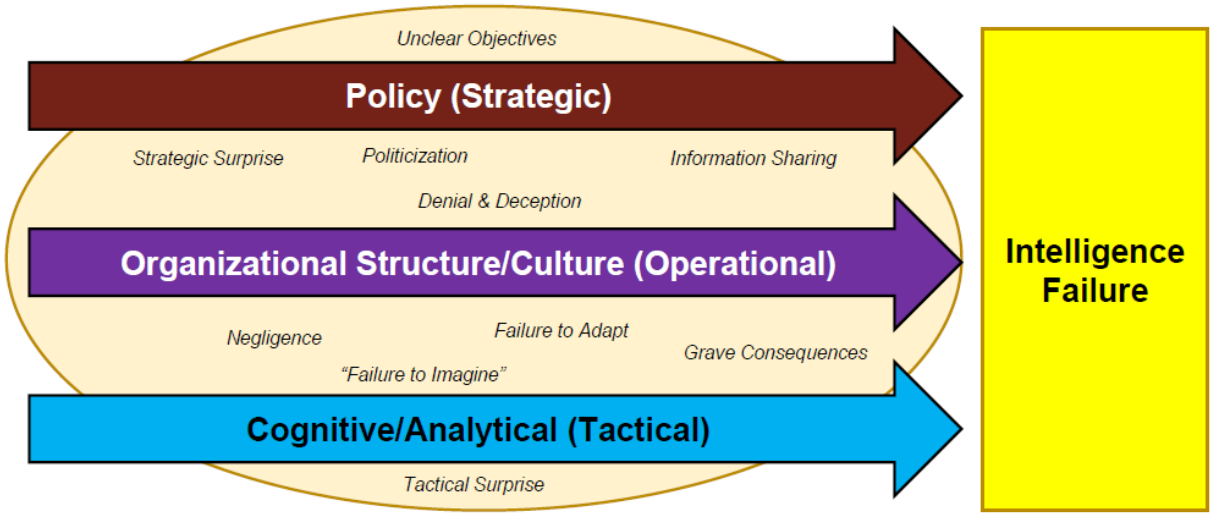

Figure 2.2: Conceptualization of Dimensions Related Intelligence Failure

Figure 2.2 provides one means to summarize the gerneral concept of literature. Common phrases are included into the all encompassing background such as "failure to imagine", grave consequences, politicization, and denial and deception. This only identifies a few, and is not exhaustive. The arrow lines demonstrate the broad themes that many authors tend to focus on. These arrows are elaborated on with subsequent subsections. While these arrows may be separate, this does not mean there is not overlap. Many complex events have numerous overlaps to varying degrees.

Intelligence and Policy

Following the inception of a central intelligence apparatus, there has been a recurring practice of excusing policy failures through identifying weaknesses in the IC (Fingar, 2017). The Director of Central Intelligence was a critical aspect of the National Security Act of 1947, and yet through decades the director was tasked with overseeing the Central Intelligence Agency (CIA) and intelligence community. The latter of which, the director had limited authority over (George, 2017). However, all of this was ineffectually supported by policy that did not give the director budgetary oversight of all intelligence agencies as they expanded or necessary authorities to direct them (Zegart, 2007). This reflects the difficult interagency turf wars and politics that have continued to pervade intelligence. The inherent fragmentation of the policy process makes it difficult to achieve organizational reforms (Zegart, 2007).

Along this line the challenge of fragmentation exists both within the Executive and Legislative branches of government. The Executive consists of competing agencies that often have overlapping interests and responsibilities. Just within the IC agencies exist in numerous cabinet departments and have particular focuses that enable their respective departments. This often results in turf wars, of which the IC is a part. On the other hand, the role of Congressional oversight is matched with a complex committee system and electoral interests among members to their constituents that can hamper major reform efforts (Auerswald & Campbell, 2017).

For this reason, intelligence reforms aimed to correct deficiencies in the 1992 and 1996 fell flat in Congress, and lacked executive support (Zegart, 2007). These reforms were only later acted on following 9-11. The Intelligence and Terrorism Prevention Act of 2004 created the Office of Director of National Intelligence (ODNI) and Director of National Intelligence (DNI), as a remedy for the deficiencies of the Intelligence Community (Fingar, 2017; Hedley, 2014).

The first set of literature generally leaned toward aligning intelligence failures to being rooted to issues of policy or politicization. Gentry (2008) conceptualized intelligence failure using a warning perspective to evaluate the causes of state intelligence failure. While attribution for warning failures is attributed to intelligence agencies, this is distinguishable from other forms of failure. Intelligence failure is defined here as:

> Intelligence fails if a state does not adequately collect and interpret intelligence information, make sound policy based on the intelligence (and other factors), and effectively act. (Gentry, 2008, p.248)

Gentry (2008) divided intelligence failure into six sub-failure groupings that vary in terms of responsible entities. This element could be the intelligence agencies responsible, specific to policy makers, or applicable to both categories. The types and characteristics are featured in Table 2.1, were drawn directly from Gentry (2008).

Table 2.1 *Intelligence Related Failure Types (Gentry, 2008, p.249)*

Type	Name	Characteristic
1	Threat Warning	"Threat Warning Failure by Intelligence Agencies"
2	Threat Response	"Leaders' failure to respond effectively to threat warnings, by policy or executive action"
3	Opportunity Warning	"Failure by intelligence agencies to alert policy makers of opportunities to exploit"
4	Opportunity Response	"Leaders' failure to effectively exploit vulnerabilities"
5	Vulnerability Identification	"Failure to recognize one's own vulnerabilities in the context of other actors' intentions and capabilities"
6	Vulnerability Amelioration	"Failure to ameliorate one's own capabilities"

Varying types of failure can be interconnected and reinforce one another, because the relationship is reciprocal (Betts, 2007). Gentry (2008) attributed intelligence agencies to Type 1

and Type 3 failures, while policy makers are attributed to Type 2 and Type 4 failures. Type 5 and Type 6 failures were seen as analytically distinct from the others were attributed to adaptive threats (Gentry, 2008). This framework places a greater share of responsibility towards the policy maker (Gentry, 2008). Most well-known cases of intelligence failure are more often political rather than organizational (Betts, 2014). This is because consumers of intelligence have policy assumptions that restrain open perception to the products they are given (Betts, 2014). While this may not always be the case there is a great deal of intelligence studies literature that focuses on the role of politicization of intelligence.

The case of Iraq WMDs has continued to be one of the most cited examples of failure often popularly attributed to intelligence, but often within the context of intelligence-policy failure. Pillar (2012) provided a first-person perspective that claimed intelligence did not play a role with invading Iraq. This account asserted the IC had not believe Iraq was allied to Al-Qaeda, and that it was not believed Saddam would use WMDs unless he was invaded (Pillar, 2012). This led many to the deduction that intelligence was likely politicized in some fashion to push a specific policy preference. The WMD case presented further complexity given there was also distinction of strategic and tactical intelligence failure. Tracing politicization in these respects presents many more pieces to fit. Strategic intelligence is focused on long-terms threats, whereas tactical intelligence is near-term focused. Pillar (2012) claimed 9-11 reflected a tactical intelligence failure given it was a specific terrorist attack. From a strategic level, the IC acknowledged the likelihood of emergent terrorist threats throughout the 1990s (Pillar, 2012: Zegart, 2007).

Rovner (2011) explained the functional use of politicizing intelligence. The means of politicization could be direct or indirect. Direct politicization involves direct leader intervention

to have an analytic conclusion changed, while indirect politicization entails tacit signaling such as cherry picking or begging the question (Rovner, 2011). The oversell model contends politicization is likely to occur if leaders make public commitments, and if there is a critical constituency that gives incentive to make intelligence support a policy (Rovner, 2011).

An important aspect of politicization entails proximity. Rovner (2011) claims personal proximity to policymakers, organizational proximity to policy process, and loss of organizational dependence through perverse incentives can lead to politicization. All of these aspects are reflected in varying case studies (Rovner, 2011). However, a complete disconnect within the intelligence-policy interface can lead to other distinct issues. The only method to avoid the risk of politicization is to remove intelligence out of informing decision makers (Betts, 2007). This reflects the sober reality that there are enormous limitations on reforming intelligence drastically. The paradox arises that intelligence is vulnerable to politicization, but policy is blind without intelligence-policy interface.

The 'oversell model' posited by Rovner (2011) provided an important basis for understanding some of the causal factors of politicization. However, there is plenty of literature on intelligence failure that suggests there are other causes to intelligence failure, beyond the troubled relations of intelligence and policy. Jervis (2010) provides a caveat on the methodological issue of causal examination because it searches off of the dependent variable as it relates to failure. Afterall, it is still possible for a perceived success to devolve into a perceived failure as the political landscape changes over time.

Organizational Culture & Fragmentation

The second area of examination of intelligence failure pertains to organizational culture, structure, and fragmentation. While these cannot be completely separated from policy, they are

still distinct. Common issues of stove piping (lack of information sharing) and bureaucratic turf wars are prominent in explanations relating to the failures leading up to 9-11, in particular. These phenomena reflect both the cultural and institutional burdens that can also harm the chances of intelligence success.

Zegart (2007) defined organizational culture as ideas, values, and beliefs that shaped the views of its members. The CIA has been marked by a distinct culture and subculture. Cogan (1993) examined the divide between analysts and operators within the CIA. Analysts were described as favoring the Sherman Kent professional ethics of objectivity and intellectual integrity, while operations officers favored secrecy through safeguarding knowledge as power (George, 2017). This divide provides some insight to the role sub-cultures play within an organization, and the result of stove-piping. This reflects the micro-elements of stove-piping. The mix of culture feeds fragmentation and this may also happen vice versa.

Gentry (2017) examined the role of fear playing a role in intelligence failures. He attributed a culture of fear that had external causes that included politicization and bureaucratic greed. Other fears consisted of personal and organizational fears. This illuminates a psychological and cognitive dynamic that also may contribute to an intelligence failure. The role of cumulative fears may shed light to explain the causes of recent intelligence failures (Gentry, 2017).

An added perspective of culture and structure entailed deficiencies of structure, cultural pathologies, and wrong incentives. First, Zegart (2007) examined various attempts at reforms and finds that fragmentation in the CIA was a significant deficiency from the outset. The split of domestic and foreign intelligence reflected this fragmentation from a policy level. However,

internal fragmentation took root in the form of field offices gaining primacy that focused only on their specific regions (Zegart, 2007).

Second, the realm of cultural pathologies of the IC has been well documented. The general pattern of parochialism and "need to know" sharing has long plagued the relationship between the CIA and Federal Bureau of Investigation (FBI) (Olson, 2019). This divide originated back to the bureaucratic infighting of 1947, itself in part based in fragmentation of domestic versus foreign intelligence. The outcome of these pathologies has been at the cost of information sharing and culminating in the disaster of 9-11. The 9-11 Commission found that there was a failure of information sharing between both the IC and Law Enforcement (Fingar, 2017). An additional aspect attributed to 9-11 was risk aversion and 'failure of imagination' (Hedley, 2014).

Part of the FBI, IC, and Department of Defense (DoD) turf wars were rooted in unique cultures as much as from the policy origins. This creates a "chicken or the egg" dilemma. This applies both to intelligence and counterintelligence. Differing missions, authorizations, and personalities result in turf wars between agencies seeking to actualize their identity (Olson, 2019; George & Rishikof, 2017). In this sense, while policy may create cultural divisions this may not mean that policy changes can overcome ingrained cultures that have been solidified over decades.

Third, the issue of perverse incentives also plays a role in intelligence failure. Zegart (2007) highlights how quantity over quality incentives to analysts, is also supplemented with rewards focused on near-term fires over long-term strategy. Critique of narrowed focus on near term objectives pervades the literature and extends to other departments such as the State

Department. All of these factors in turn helped to contribute to the CIA's inability to adapt to the emerging terrorist threat prior to 9-11 (Zegart, 2007).

Nolan (2013) expanded on this research through an ethnographic study of the CIA and National Counterterrorism Center (NCTC). Through a series of 20 interviews, she found the barrier between agencies was cultural versus structural (Nolan, 2013). While the sample here was low, it does provide detailed insights and patterns that relate to difficulties of information sharing. Information sharing continues to be the all-encompassing indictment in many intelligence failures. However, there is much greater complexity to information sharing beyond the pleasantness of the term. Modern cases like Wikileaks show the potential dangers of too much information sharing. Private Chelsea Manning enjoyed broad access to intelligence systems that provided the plethora of the information that was leaked.

The definition of "greedy institutions" emerged as another facet that helped explain both culture and fragmentation. Nolan (2013) defined a "greedy institution" as an institution where culture was rooted on undivided loyalty and separation of others. Structural fragmentation can also function to cement this culture. The nature of classifications and handling of secrets infused a reinforcing effect of organizational domination, shared identification, commitment through oaths, and integration into the organization (Nolan, 2013).

Other scholars have expanded on the role and complexity of bureaucratic politics and a multitude of actors. The national security enterprise comprises one facet that helps to explain this complexity of interagency organizational interaction. George and Rishikof (2017) defined this interagency paradigm as one that extended beyond formal institutions and included informal players. These players range from think-tanks, the expanding media, and special interest groups.

Intelligence failures relating to leaks show that the media can also play a role in creating surprises that can result in failure or compromise.

Cognitive Failures

A significant amount of literature within intelligence studies pertains to the danger of cognitive biases. While cognitive biases are often tied to analysts, the reality is much more complex. All consumers and producers of intelligence are subject to potential biases. This also may extend to organizational biases influencing individual biases, or vice versa. Biases can thus facilitate unexpected surprises. Davis (2016) examined various biases, and he emphasized intelligence analysis was both a mental and social process. These apply to individual and group dynamics at play. He defined "bad things" that occur to analysts as widely publicized intelligence failures and major analytical errors that undermined good analysts (Davis, 2016).

Bias can come in motivated and unmotivated forms. The former entails distortions driven by world view, while the latter entails those biases that are a distortion of information processing (Davis, 2014). The Pearl Harbor intelligence failure might have represented unmotivated biases. The Japanese use of denial and deception had a psychological effect through the mix of sound and noise (Wohlstetter, 1962). A case study of the Yom Kippur War further expanded the literature on the issue of bias and analysis. Israelis believed an Arab attack was contingent on Egypt rebuilding its Air Force, which became a source of mirror imaging their own logic to the enemy (Davis, 2014). Three previous false alerts of attacks cemented a confirmation bias that there would not be an attack (Shlaim, 1976). A commission found two particular significant failings leading up to the Yom Kippur War. A major source of attribution entailed a strict adherence to "the conception", and the resulting plethora of information from other agencies that was not acted on (Shlaim, 1976).

Psychological factors and institutional factors were both at play. “The conception” was an ingrained institutional belief that Egypt would not attack unless it had aerial deep strike capability (Shlaim, 1976). The acquisition of Soviet missiles for air defense was not considered. The result of the mind-set failed to address the surprise rooted in changes to leadership or set conditions (Shlaim, 1976). This case demonstrates how institutional belief can shape psychological mind-set, and vice versa. Both concepts were reinforcing one another, which led to surprise.

A case study of the Cuban Missile crisis further affirmed the role cognitive dimensions can have with regard to intelligence failure. The Soviet Union enacted a policy of build-up in Cuba that appeared in conflict with U.S. expectations, but this turned out to be not the case (Knorr, 1964a). This dimension helps to understand some of the cognitive limitations that formulate mirror imaging. The role of “national images” regarding attitudes extended to this bias of mirror imaging (Knorr, 1964a).

Some have tried to mitigate the role that cognitive biases. Wohlstetter (1962) proposed that the only way to attain sound over noise was to test hypotheses. Structural analytical techniques were another method meant to challenge and correct faulty lines of logic presented in intelligence failures, and are mandated through ICD 203 (Coulthart, 2017). However, the multitude of variables across other dimensions like policy and organizational dynamics demonstrate many facets fall under intelligence failure. As a result, many gaps among variables exist.

Gaps in Literature

There are two critical gaps in current literature pertaining to intelligence failures in the United States. The lack of a common accepted definition of intelligence failure and a lack of

application beyond the IC both present gaps. Without a common definitional framework or conceptual framework, the discourse of intelligence failure has amounted to a repetitive circular firing squad of finger pointing. The result is a repetitive Groundhog Day seems to await the next case of intelligence failure.

This literature review showed the definition of intelligence failure was wide and complex. There was no common definition discovered to this point that pervades across academia, although there are some common themes. The role of surprise and consequence generally extended to policy, organizational, and cognitive causes linked to intelligence failure. The common facet of most cases was that they involved surprise, but they were unique within their own context (Johnston, 2005).

However, this logic negated a critical reverse possibility. Can intelligence failure occur without surprise? An extensive history of failed covert actions suggests that surprise may not be the defining element. Is it possible for flawed leadership ethics that are known and yet carried out anyway another theme to consider? What about positive cases of strategic surprise, such as the collapse of the Soviet Union? Dahl (2013) emphasizes the importance of examining both intelligence failure and intelligence success, which is seldom done.

Over the course of 20 years, intelligence has exponentially expanded into domains of law enforcement and private sector domains. However, with this growth there has been little analysis or case study research related to intelligence failures or successes. Most research centered on the CIA and military intelligence capacities. Law enforcement and Business have largely been excluded from the discussion of intelligence failure. Research needs to keep pace with change.

For example, The FBI received little scrutiny in terms of their use of intelligence methods extending beyond counterintelligence, or their National Security Division. As law enforcement

has come under sustained political scrutiny for reform, it would add to the body of research to examine intelligence failure and success beyond the confines of Langley. An expanded examination of the FBIs 'successful' operation of HUMINT, which took down La Cosa Nostra (LCN) could provide important insights that have largely been glossed over with the focus on counterterrorism. For this reason, there is added value with aiming to develop a better working understanding on intelligence failure that extends beyond the traditional focuses.

Another shifting area often ignored has been within the field of business intelligence. The more recent hacks of Microsoft, theft of intellectual property, and the reality of corporate espionage demonstrate that this area also merits greater attention from the academic community. The academic community has not been immune from cases involving espionage on the part of academic researchers. Increased overlapping partnerships between the private and public sector have shown the need to examine variables that can lead to potential intelligence failures. These are all areas that are worth closer examination.

An unaddressed gap that this research tries to address relates to aggregating existing research systematically. This systematic review seeks to start bridging the gaps of historical literature to present day practice. A definition focused systematic review constitutes a unique contribution to the field of intelligence studies. Intelligence studies has struggled to evaluate literature cumulatively (Marrin, 2016). This research aims to develop the building block towards more expanded efforts of a broader systematic review that can effectively build bridges to evaluate the puzzled discourse of intelligence failure.

Systematic Review Results

The results of the systematic review provide a glimpse of some of the issues plaguing the studies of intelligence failure. The first glaring observation was there was not a unified definition. Definitions across the sample were diverse and did not reflect a common definition. The second observation of the findings demonstrated the while the term intelligence failure was used frequently, but many sources did not define the term. Another observation to account was that only one author took the explicit position that there was no way to define intelligence failure, or the concept was a misnomer.

The results are divided into several subsections. The first section addresses the aggregate of data. The following sections further detail the results based on Taylor & Francis, JSTOR, and Google Scholar. This provides a basis to further examine unique facets in the results such as common themes and intelligence failures referenced. Areas explored in these subsections include the results of study type, the definition results themselves, causes or attributes that were given, examples of intelligence failure, and the general trend on citations. Overall, these provide a holistic picture of the results that were obtained. They also provide a basis for the discussion elaborating the puzzle that exists.

General Results

The examination of the search yielded over 210 total results. A total of n=33 sources yielded a definition or conceptualization of intelligence failure. Over n=177 sources were excluded for a wide range of reasons. Some of these exclusions were immediately determined where the source was not easily accessible (i.e., cases of citations on Google Scholar), if there was a repeat from a previous sample, no translation was available through other searches, or if

the article was not relevant to intelligence failure. The latter case occurred on Google Scholar, despite narrowed search criteria (Table 3.1).

Table 3.1 *Systematic Review Aggregate Sample Breakdown*

Systematic Review Results										
	Inclusion		*Exclusion*							
Source	*Definition Provided*	*No feasible definition*	*No Definition provided*	*Not Relevant*	*No Translation Possible*	*Sample Repeat (T&F)*	*Sample Repeat (JSTOR)*	*Citations (N/A)*	*Not Accessible*	*Total*
Taylor & Francis	12	0	18	0	0	0	0	0	0	30
JSTOR	6	1	28	0	4	1	0	0	0	40
Google Scholar	14	0	35	3	0	18	5	43	22	140
Total	**32**	**1**	81	3	4	19	5	43	22	210

Inclusion Sample Total	***33***
Exclusion Total	177

The aggregated search included n=33 sources. No definition was provided in n=81 of the sources. In other words, less than half of these sources even made the attempt to define intelligence failure broadly. The lack of definition tended to be tied to case study approaches. Qualitative case studies dominated across the sample. Another relevant area of findings was the breakdown of appraisal based on the included sample. This appraisal was broken down by the two databases and the search engine (Table 3.2).

Table 3.2 *Aggregate Source Appraisal*

Appraisal Evaluation				
Source	*High*	*Moderate*	*Low*	*Total*
Taylor & Francis	12	0	0	12
JSTOR	6	0	1	7
Google Scholar	9	5	0	14
Total	27	5	1	33

The overall inclusion rate of definitions resulted in n=27 being assessed as high value. Only five were assessed as moderate and one was assessed as low. Generally speaking, these sources were all relatively well sourced and addressed multiple dimensions related to intelligence

failure. As later results revealed there were some significant differences among definitions. Copeland (2010) was the only source from Google Scholar was limited access. This access limited assessment to the abstract. This source was included because a definition and other useful information were included within the abstract. The only difficulty with this source was there was no ability to check citations, specific research type, and the paper was referenced five times. As a result, this source was appraised as moderate based on the information available.

Taylor and Francis Results

A breakdown of results for the Taylor and Francis database can be found in Table 3.3. This table includes the study type, the definitions, and the dimensions. The data was rated according to the value assessment. All definitions met the criteria of a high-value assessment.

Table 3.3: *Taylor & Francis Database Definitions*

Taylor & Francis Database						
Source	**Research Method**	**Definition**	**Category/ Themes**	**Sources**	**Cited in Other Work**	**Value Assessed**
Lasoen, K. L. (2018). Two ancient intelligence failure post-mortems. *Comparative Strategy*, *37*(5), 430-441.	Qual-Multiple Case Study	Modern research into intelligence failures has identified four main categories of obstacles: time and space, organization, politicization, and problems of cognition. All four are present in both historical documents. So are the classic problems such as paucity of sources, noise, denial and deception, and the many psychological pitfalls of analyzing intelligence" (p.436)	Mix- Pol, Org, Cog	over 20	11	H
Karam, J. G. (2017). Missing revolution: the American intelligence failure in Iraq, 1958. *Intelligence and National Security*, *32*(6), 693-709.	Qual-Single Case Study	"is the product of two factors: the collection of information from too few and too similar human sources of intelligence in Iraq's ruling regime, and the unreceptivity of US officials to assessing new information and their unwillingness to update assessments of local Iraqi developments." (p.693). "Building on Jervis, we define intelligence failures in their simplest form, as a mismatch between intelligence assessments and reality-what later information reveals." (p.694)	Mix- Org, Cog, Process (Collection/HUMINT)	over 20	7	H
Lillbacka, R. (2019). The Finnish Intelligence Failure on the Karelian Isthmus in 1944. *The International Journal of Intelligence, Security, and Public Affairs*, *21*(1), 25-48.	Qual-Single Case Study	"intelligence failures are here defined as errors in collection and/or analysis, and/or errors in decision based on intelligence, having identifiable detrimental consequences in relation to policy aims." (p.27)	Mix- Pol, Org, Cog, Collection	over 20	1	H
Gill, P. (2020). Explaining Intelligence Failure: Rethinking the Recent Terrorist Attacks in Europe. *International Journal of Intelligence and CounterIntelligence*, *33*(1), 43-67.	Qual-Single Case Study	"More recently, Greg Treverton suggests that most intelligence or warning failures stem from "holding onto stories that events have outmoded." (p.49) " there should be significant shift in those parts of the interactive intelligence process that receive the most attention. As noted above, an examination of the literature on strategic failure indicates its predominant concern with the analysis–dissemination–policy nexus whereas tactical counterterrorist failures occur more around them targeting–store–collection–analysis nexus."" (p.54)	Mix- Pol, Org, Cog, Process	over 20	4	H

Ostergard Jr, R. L. (2020). The West Africa Ebola outbreak (2014-2016): a health intelligence failure?. *Intelligence and National Security*, *35*(4), 477-492.	Qual-Single Case Study	"When taken together, these points represent a health intelligence failure in the reporting of information, the assessment of that information, and in the imagination of what that information could mean in a state with weak institutional, economic, and political capacities" (p.489)	Mix- Pol, Cog, Process	over 20	1	H
Davies, P. H. (2004). Intelligence culture and intelligence failure in Britain and the United States. *Cambridge Review of International Affairs*, *17*(3), 495-520.	Qual-Comparative Case Study	"However, while there may be some marginal cases, and a very real question of where failures of intelligence can merge with failures of political policy, in practical terms a failure to provide warning or the provision of a significantly inaccurate assessment of a matter such as military strength constitutes a failure of intelligence institutions to perform their allotted tasks." (p.496-497)	Mix- Pol, Org, Cog, Process (collectio n)	over 20	106	H
Evans, G. (2009). Rethinking military intelligence failure–putting the wheels back on the intelligence cycle. *Defence Studies*, *9*(1), 22-46.	Qual-Theoretical	In summary, these are: overestimation; underestimation; subordination of intelligence to policy; lack of communication; unavailability of information; over-confidence; complacency; received opinion (sometimes called 'conventional wisdom'); mirror-imaging; failure to link key bits of intelligence. Such criterion have been commonly referred to in a wide variety of academic texts which discuss the concept of intelligence failure, especially where it relates to military defeat." (p.44, footnote 5)	Mix- Pol, Org, Cog, Process	over 20	28	H
Bar-Joseph, U. (1995). Israel's intelligence failure of 1973: New evidence, a new interpretation, and theoretical implications. *Security Studies*, *4*(3), 584-609.	Qual-Single Case Study	"Relying on empirical evidence provided by about fifteen cases of surprise attacks since 1940, this orthodox school asserts that intelligence failures are not the product of insufficient information or of negligence or stupidity by intelligence producers and consumers. Rather, these failures are the result of inherent pathologies of the warning-response process that affect "honest, dedicated, and intelligent men." (p.585). To a large extent the failure was the outcome of various obstacles in the warning-response process, as had always been argued by proponents of the orthodox school. As is now evident, however, the most critical obstacle to the translation of the information which was available to Israel on the eve of the war into a high quality strategic warning and a war-readiness state of alert were unethical acts, consciously taken by the director of Military Intelligence (DMI), Major General Zeira." (p.590)	Mix- Pol, Org, Cog, Process, Ethics	over 20	21	H
Hatlebrekke, K. A., & Smith, M. L. (2010). Towards a new theory of intelligence failure? The impact of cognitive closure and discourse failure. *Intelligence and national security*, *25*(2), 147-182.	Qual-Theoretical	"intelligence failure resides not in the strict technical confines of the intelligence cycle, but primarily in the cognitive processes among intelligence analysts and among those who perceive the intelligence product.2 In this respect, the intelligence cycle must be understood as function and not organization,3... Functional and mental failure that evolves beyond the strict technical and organizational boundaries of the intelligence cycle is therefore manifested as discourse failure, which expresses itself as the failure, 'to identify, analyze, and accept that a significant threat [exists]'.4 This failure arises when one forgets that intelligence operators 'are exposed not only to the internal machinations of their respective institutions but also to influences from society at large'.5" (p.148). "Conceptually, intelligence failure represents 'a misunderstanding of the situation that leads a government (or its military forces) to take actions that are inappropriate and counterproductive to its own interests'.15. Shulsky and Schmitt concur when they argue that 'the heart of the problem of intelligence failure, [is] the thought processes of the individual analyst'.20 Similarly, Woodrow Kuhns also asserts that 'intelligence failures are rarely a problem of collection but generally one of interpretation'.21 A considerable body of opinion thus holds that the causes of intelligence failure are to be found predominantly in the human condition rather than the technicalities of the intelligence process. From this understanding it follows that intelligence failure, and especially discourse failure, operates in two main dimensions: in the analytical process and among those who perceive the final intelligence product." (p.151)	Mix- Pol, Org, Cog	over 20	33	H

Sloan, G. (2013). The British state and the Irish rebellion of 1916: An intelligence failure or a failure of response?. *Intelligence and National Security*, *28*(4), 453-494.	Qual-Single Case Study	"It has been termed 'warning failure'. This usually precedes a surprise attack that takes place in peacetime and leads to the initiation of war." (p.459)	Mix- Pol, Org, Cog, Process (Collection/HUMINT)	over 20	9	H
Barnea, A. (2017). The Assassination of a Prime Minister–The Intelligence Failure that Failed to Prevent the Murder of Yitzhak Rabin. *The International Journal of Intelligence, Security, and Public Affairs*, *19*(1), 23-43.	Qual-Single Case Study	"There are many reasons for intelligence failures. But usually they are related to a strategic surprise due to inaccurate information, a lack of information, and ignoring relevant information or inadequate assumptions (Gentry, 2008; Johnston, 2005; Levite, 1987; Lowenthal, 2009; Sims & Gerber, 2005, p. 17). Intelligence that fails to correctly read and understand the intentions and capabilities of the adversary (Handel, 2003) causes governments and armed forces to act erroneously, often against their own interests (Shulsky & Schmitt, 2002)." (p.25)	Mix- Org, Cog	over 20	2	H
Wirtz, J. J. (1994). *The Tet offensive: intelligence failure in war*. Cornell University Press.	Qual-Single Case Study	Failure to accomplish intelligence cycle tasks: Collection of information, analysis, response & dissemination of warning (p.13)	Mix- Pol, Org, Cog	over 20	161	H

Source & Study Type

Eleven studies of the sample were journal-based articles. Only one source was pulled from a book. This source was added on the further research of various book reviews that were pulled from the wider sample. Not surprisingly, the types of studies were largely case study based. Lasoen (2018) and Davies (2004) were the only sources to use multiple case studies. Eight sources only focused on single case studies, and only two authors focused their studies on theoretical research. Overall, no studies were empirical.

Definition Results

Definitions varied across the sample. Very few sources referenced one common definition. Sources that were excluded made no attempt to make any definition of intelligence failure. Definitions varied in length and substance. As Gentry (2008) explained there is discussion of "types" of intelligence failure. Several authors focused on flawed process, others emphasized the role of warning or strategic surprise (Davies, 2004; Barnea, 2017; Sloan, 2013), and other authors highlighted a multitude of reasons for intelligence failure and what they consist of (Hatlebrekke, & Smith, 2010).

Dimensions Results

All the results for the Taylor and Francis database attributed multiple dimensions to the intelligence failures examined, in their respective studies. This aligned to claims that multiple causes that play into an intelligence failure. All authors addressed policy, organizational, and cognitive/ psychological aspects that helped to cause or underline various intelligence failures. Lillbacka (2019), Karam (2017), Sloan (2013), and Davies (2004) placed particular emphasis on the collection portion of the process as being a flawed aspect. Generally speaking, seven sources highlighted a flaw in process as being one element that contributed to various examples of failure.

Examples of Intelligence Failure

One method commonly used to expand on definitions can be done through example. The Taylor & Francis search provided a plethora of examples, which was even more expansive than anticipated. Out of the definitions (n=12) there were over 23 intelligence failures that were referenced across the literature. Predictably the most cited intelligence failures were Pearl Harbor, the Yom Kippur War (1973), 9/11, Operation Barbarossa, and the Iraq WMD case (Figure 3.1).

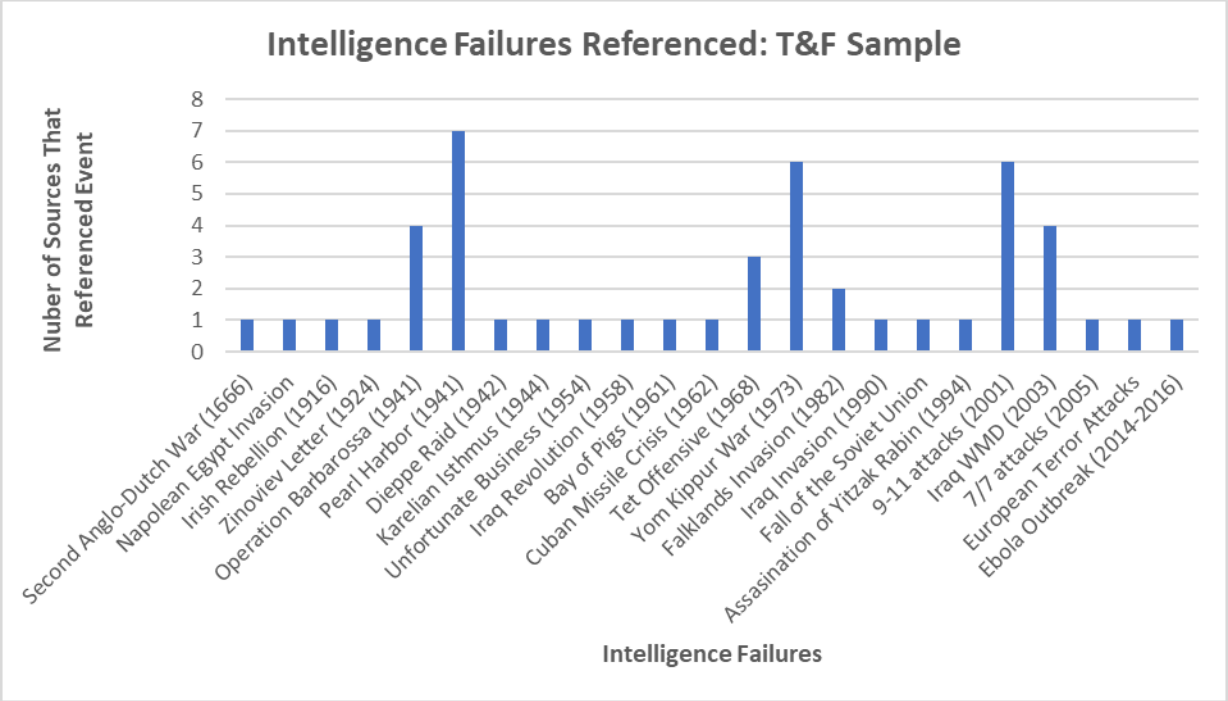

Figure 3.1: Referenced Intelligence Failures from Taylor & Francis Sample

JSTOR Results

The results of the JSTOR database can be found in Table 3.4. No timeframe restrictions were used within the search. However, the search was limited in scope to accessible articles that were searched on the criteria of "intelligence failure" being in the title. The JSTOR sample provided n=6 definitions, and uniquely had the only source to claim intelligence failure could not be defined. Over n=28 sources did not provide a definition at all. Only n=1 source was an overlap repeat sample of Taylor and Francis. Unique to this sample, n=4 sources were excluded due to issues of translation.

Table 3.4: *JSTOR Database Definitions*

JSTOR						
Source	**Research Method**	**Definition**	**Category/ Themes**	**Citations**	**Cited in Other Work**	**Value Assessed**
Betts, R. (2007). Two Faces of Intelligence Failure: September 11 and Iraq's Missing WMD. *Political Science Quarterly, 122*(4), 585-606. Retrieved February 27, 2021, from http://www.jstor.org/stable/20202928	Qual-Theoretical	No clear definition because intelligence failures come with mixed results: successes and failures. "Being wrong for the right reasons means little to citizens who must live with the result, but it does provide a caution against drawing too many lessons from a single failure." (p.606)	Mix- Pol, Org, Cog, Threat Actors (D&D), Process	over 20	56	H
Gentry, J. (2008). Intelligence Failure Reframed. *Political Science Quarterly, 123*(2), 247-270. Retrieved February 27, 2021, from http://www.jstor.org/stable/20203011	Qual-Theoretical	"Intelligence fails if a state does not adequately collect and interpret intelligence information, make sound policy based on the intelligence (and other factors), and effectively act."(p.248). "The inter-connectedness of functions within governments and among states (and non-state actors) means we can identify six general types of intelligence-related failures: threat warning failure by intelligence agencies; leaders' failure to respond effectively to threat warnings; opportunity warning failure by intelligence agencies; leaders' failure to effectively exploit opportunities; failure to recognize one's own vulnerabilities in the context of other actors' intelligence and operational capabilities, thereby giving other parties intelligence-related opportunities; and failure to ameliorate one's self-known vulnerabilities to physical attack and nonviolent manipulation (p.249)"	Mix- Pol, Org, Cog, Threat Actors	over 20	40	H
Bar-Joseph, U., & Levy, J. (2009). Conscious Action and Intelligence Failure. *Political Science Quarterly, 124*(3), 461-488. Retrieved February 27, 2021, from http://www.jstor.org/stable/25655697	Qual-Multiple Case Study	"Although we have identified several analytically distinct sources of intelligence failure at different levels of analysis, we should emphasize that most intelligence failures are the product of the interaction of multiple factors at different levels. In an unambiguous informational environment, psychological biases have a much weaker impact and there are fewer opportunities for the deliberate distortion of intelligence assessments. In an inherently ambiguous informational environment, psychological biases and other variables play a much greater role. Efforts at strategic deception are most effective if they are informed by psychological proclivities of the target and designed to exploit them. Organizational cultures that are conducive to the free flow of information can be compromised by a key intelligence official who has an authoritarian management style and intolerance for dissent. These relationships are complex and context dependent, and as a result, there is no single path to intelligence failure, but instead multiple paths." (p.476)	Mix- Pol, Org, Cog (Deliberate Distortion)	over 20	31	H
Wirtz, J. (2018). When Do You Give It a Name?: Theoretical Observations about the ISIS Intelligence Failure. In Al-Istrabadi F. & Ganguly S. (Eds.), *The Future of ISIS: Regional and International Implications* (pp. 67-86). Washington, D.C.: Brookings Institution Press. Retrieved February 27, 2021, from http://www.jstor.org/stable/10.7864/j.ctt1zctt19.7	Qual-Single Case Study	"intelligence failure usually refers to the absence of a timely warning about the occurrence of a discrete event. In other words, if intelligence analysts fail to estimate what is about to occur, where and when it will occur, and why it is occurring, and to provide that estimate to policymakers in time for them to take appropriate action, then the label “intelligence failure” is likely to be used to characterize recent events." (p.67)	Mix- Pol, Org, Cog, Media, Threat	Over 20	8	H
Betts, R. (1978). Analysis, War, and Decision: Why Intelligence Failures Are inevitable. *World Politics, 31*(1), 61-89. doi:10.2307/2009967	Qual-Theoretical	"In the best-known cases of intelligence failure, the most crucial mistakes have seldom been made by collectors of raw information, occasionally by professionals who produce finished analyses, but most often by the decision makers who consume the products of intelligence services. Policy premises constrict perception, and administrative workloads constrain reflection. Intelligence failure is political and psychological more often than organizational" (p.61)	Mix- *Pol, Org, *Cog	Over 20	556	H

Turner, B. (1976). The Organizational and Interorganizational Development of Disasters. *Administrative Science Quarterly, 21*(3), 378-397. doi:10.2307/2391850	Qual-Multiple Case Study	"Common causal features are rigidities in institutional beliefs, distracting decoy phenomena, neglect of outside complaints, multiple information-handling difficulties, exacerbation of the hazards by strangers, failure to comply with regulations, and a tendency to minimize emergent danger. Such features form part of the incubation stage in a sequence of disaster development, accumulating unnoticed until a precipitating event leads to the onset of the disaster and a degree of cultural collapse. Recommendations following public inquiries are seen as part of a process of cultural readjustment after a disaster, allowing the ill-structured problem which led to the failure to be absorbed into the culture in a well-structured form." (p.365)	Mix- Org, Cog	Over 20	1165	H
Thurston, C. (2013). Intelligence Failure Is More Than "Policy Oversell". *International Studies Review, 15*(4), 625-627. Retrieved February 27, 2021, from http://www.jstor.org/stable/24032996	Book Review	"Rovner hypothesizes that the intelligence-policy-making relationship can fall into one of three "pathologies": neglect, excessive harmony, or politicization. Neglect occurs when the policymaker uses intelligence incorrectly or ignores it. Existing research on this problem focuses on "noise in the system" and the difficulty of communicating intelligence to the policymaker. The second pathology, excessive harmony, arises when intelligence professionals do not challenge policy beliefs, and policymakers do not criticize intelligence conclusions. The cause for intelligence failure in this case is based on proximity—the intelligence professional and policymaker are too cozy to challenge each other." (p.625)	Mix-Pol,Org, Cog, Public (Constituency)	1	0	L

Source & Study Type

All the sources were academic journal articles, with the exception of a book chapter from Wirtz (2018). Once again, the study types reflected a similar pattern for Taylor & Francis. One of the sources was a book review from Thurston (2013), and this was the only source to be assessed as low relating to the sample. The remaining sources received a high value appraisal. Three sources were theoretically oriented articles, two were multiple case studies, and one source was a single case study.

Definition Results

The JSTOR sample provided one case where there was explicit mention of no clear definition being available. Betts (2007) was the only source to claim no definition is available due the existence of mixed results that occur between successes and failures that are inherent to intelligence. This is a shift from Betts (1978) assessment that most intelligence failures can be defined as more of a political and psychological event. Bar-Joseph & Levy (2009), Turner (1976), and Gentry (2008) all elaborate on multiple variables that define intelligence failure, and once again there was elaboration of types of intelligence failure.

Dimensions Results

Most sources tended to highlight the similar three dimensions underlying intelligence failure. Policy, organizational, and cognitive/psychological factors were mentioned, in varying degrees across all sources. Turner (1976) was the only author who limited focus to two dimensions. This article was accepted despite not mentioning "intelligence failure" in the title (the term was in the abstract), though it was unique enough to include because it focused beyond traditional intelligence organizations. Its examination looked at organizational workings in business pertaining to the Aberfan disaster and two other cases. This source attributed the features of failure to organizational, inter-organizational, and cognitive failures.

The results for JSTOR did illuminate some other factors not really examined from the Taylor and Francis example. The role of threat actors was emphasized to a greater degree with the sources of Betts (2007), Gentry (2008), and Wirtz (2018). The practice of denial and deception was commonly discussed. The adage that the enemy gets a vote was better highlighted in some of the results of this sample. Another attribute that was uniquely highlighted in this sample was the role of the media. Gentry (2008) makes some mention of the media perceptions of intelligence, and Wirtz (2018) discussed the role the media as an actor associated with intelligence failure.

Examples of Intelligence Failure

The JSTOR final sample of definitions was smaller than Taylor & Francis. Despite this, more examples of intelligence failure emerged. Some of the new additions include the Rise of ISIL, the Chinese intervention during the Korean War, the Cyprus Crisis, Hurrican Katrina, and several others that are depicted in Figure 3.2. Once again, the pattern of expanding cases of intelligence failure emerged.

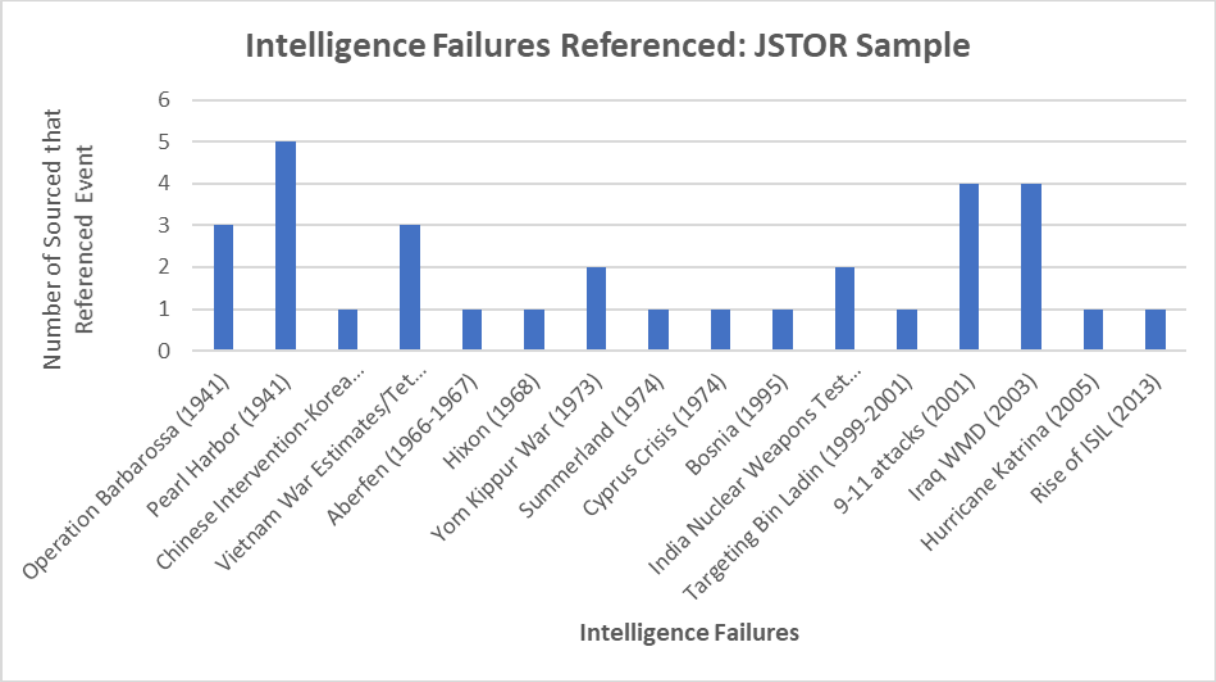

Figure 3.2: Referenced Intelligence Failures from JSTOR Sample

Google Scholar Results

The Google Scholar breakdown of results can be found in Table 3.5. The years for this search result were limited to 2009-2021. The search criteria of "intelligence failure" in the title remained consistent to previous searches. Out of the sample of n=140 numerous exclusions were made. Over n=43 sources were just citations and were not accessible articles. Unlike the other searches, there were n=22 results that were not accessible. Over n=23 sources were overlapped, from the Taylor and Francis and JSTOR. There was n=3 unique exclusions because they were not relevant to intelligence failure and covered unrelated topics despite the search criteria. Out of the remaining n=49 sources, only n=14 defined intelligence failure.

Table 3.5: *Google Scholar Search Engine Definitions*

Google Scholar (2009-2021)							
Source	**Research Method**	**Definition**	**Category/ Themes**	**Examples Referenced**	**Citations**	**Cited in Other Work**	**Value Assessed**
Dahl, E. J. (2013). *Intelligence and surprise attack: Failure and success from Pearl Harbor to 9/11 and beyond*. Georgetown University Press.	Qual- Multiple Case Study	"Intelligence failures can take many forms, but a common theme in major intelligence failures is that decision makers have been surprised"(p.6). Lowenthal definition cited on (p.7) with two others. Dahl definition, "failures can involve the failure of the Intelligence Community to produce the intelligence needed by decision makers, or a failure on the part of the decision makers to act on that intelligence appropriately." (p.7)	Mix- Pol (Paradox of Strategic Warning (p.23)), Org, Cog,	Pearl Harbor, 9/11, East Africa Bombings	over 20	100	H
Copeland, T. E. (2010). Intelligence failure theory. In *Oxford Research Encyclopedia of International Studies*.	Qual- Theoretical	"Intelligence failures are commonly understood as the failures to anticipate important information and events, such as terrorist attacks. Explanations for intelligence failure generally include one or more of the following causal factors: organizational obstacles, psychological and analytical challenges, problems with warning information, and failures of political leadership. " (Abstract-- Limited Access)	Mix- Pol, Org, Cog	9-11, Iraq WMD	UNK	5	M
Firester, D. (2011). Failure to adapt; Intelligence Failure and Military Failure as Functions of Strategic Failure?.	Qual- Multiple Case	"This paper asserts that there is reason to believe that certain causal elements of alleged intelligence failures reside more so in the province of politics, than in the collection and analysis domain of intelligence tradecraft. This is not to say that failures are exclusively of a political nature, but that looking at politics and the relationship of policymakers to the Intelligence Community yields a preponderance of causal evidence." (p.4). Intelligence failure and Military failure both share Zegart's adaptation failure concept.	Mix- Pol, Org, Cog, Process	Iran Revolution, Iraq WMD	Over 20	4	H
Barnea, A. (2011). Financial Crisis as an Intelligence failure. *Competitive Intelligence Magazine, 14*(2), 27-33.	Qual- Case Study	"Failure in human judgement, failure in coordination and sharing of information, failure at the senior executive level, failure of looking over the aggregation of threats" (p.65)	Mix- Pol, Org, Business Leadership, Business Org, Cog, Process	Yom Kippur War, Pearl Harbor, 9/11, Iraq WMD, Financial Crisis (2008)	17	3	M
Wirtz, J. J. (2016). *Understanding Intelligence Failure: Warning, Response and Deterrence*. Taylor & Francis.	Qual- Multiple Case Study	" Indeed, it might be useful to think of intelligence failure, strategic surprise and deterrence failure as three phases of a single phenomenon Intelligence failure and surprise attack generate an immediate strategic defeat for the victim because they literally destroy the victim's national defense strategy. Surprise creates unnecessary wars, wars that should have been avoided because a credible deterrent had been created by the side victimized by surprise. Paradoxically, as the theory of surprise will demonstrate, it is the very existence of a significant asymmetry in military capability that sets the stage for surprise to occur." (p.2)	Mix- Pol, Org, Cog, Threat	Pearl Harbor, 9/11, Kargil Crisis, Vietnam War Estimates	over 20	4	H
Fleisher, C. S., & Wright, S. (2010). Competitive Intelligence analysis failure: diagnosing individual level causes and implementing organisational level remedies. *Journal of Strategic Marketing, 18*(7), 553-572.	Qual- Theoretical	"Intelligence failures are distinguishable from more task-oriented intelligence errors, which are viewed as factual inaccuracies in analysis, resulting from poor and/or missing data. Intelligence failure is defined by Johnston (2005, p. 6) as 'systemic organizational surprise resulting from incorrect, missing, discarded, or inadequate hypotheses'. These failures may be due, in part, to failed analysis, but they can also be caused by other factors that interact with the CI analysis process." (p.554)	Mix-Pol, Org, Cog		Over 20	30	H

Norman, A. (2020). Organizational failure and intelligence: A framework for understanding intelligence failure.	Qual- Case Study	"frequently has dramatic and devastating consequences: Failing to prevent terrorist attacks, not being able to identify an impending attack, the inability to predict the collapse of a state, of the iron curtain, the outbreak of a civil war." (p.1)	Mix: Pol, *Org, Cog	Operation Barbarossa, 9/11, Yom Kippur War	14	0	M
Rao-Chakravorti, T. (2018). *Strategies and responses to intelligence failure: an organizational view* (Doctoral dissertation, Massachusetts Institute of Technology).	Qual-Theoretical/ Single Case Study	"intelligence failure is a remarkably complex and often idiosyncratic phenomenon, and the scholarly debate mirrors this reality. The lines between strategic and tactical intelligence are often blurred, with unclear applications or groups responsible for the production of each type of intelligence. After reviewing the literature, I conclude that a significant portion of the challenge of intelligence reform lies in the multi-part structure of the intelligence production cycle. Because different scholars are analyzing different points of the cycle, they ultimately arrive at vastly different conclusions about the causes of intelligence failure and what constitutes best practices. " (p.14)	Mix-Strategic, Tactical, Pol, Org*, Cog	9/11	Over 20	0	H
Røssaak, M. K. (2017). Searching for Weapons of Mass Destruction: US Intelligence Failure in the 2003 Invasion of Iraq. *Essex Student Journal*, *9*(1).	Qual-Single Case Study	"Intelligence failure can occur when a state fails in collecting or analysing information, national leaders fail to make sound policy on the disseminated intelligence or fails to act effectively on the information received (Gentry, 2008:249)."	Mix: *Pol, Org, Cog, Process	Iraq WMD	19	0	M
Nokov, S. N. (2012). *The Problem of Intelligence Failure: The Case of the Yom Kippur War (1973)* (Doctoral dissertation, Aberystwyth University.).	Qual-Theoretical & Single Case Study	intelligence failure equals, "the inability of one or more parts of the intelligence process- collection, evaluation and analysis, production, dissemination to produce timely, accurate intelligence on an issues or event of importance to national interest,"7 is maintained by multifarious, endemic and very often, self-reinforcing, analytical obstacles, which hinder or distort the analytical accuracy and clarity of the intelligence process, and erode the warning-response process. As Jackson has noted, it is feasible "…to consider the permanent challenges to effective intelligence…in terms of interdependent categories of limitations linked directly to the nature of intelligence as element of politics."8 From this perspective, it is appears logical to foster the deduction that, "intelligence failures are rarely unidimensional in scope."9 Per contra, as Bar-Joseph and Jack Levy have systematized, "most intelligence failures are the product of the interaction of multiple factors at different levels. These relationships between factors are complex and context dependent…."10" (p.7-8)	Mix: Pol, Org, Cog, Process, Strategic, Operational, Tactical	Barbarossa (1941), Pearl Harbor, Korean War (1950), Tet Offensive, Yom Kippur War, Iraq WMD	Over 20	0	H
Ozkan, O. (2013). *A law enforcement perspective to intelligence failure in mass casualty terrorist attacks by global jihadist movements: a comparative study of terrorist attacks of September 11, 2001 and November 15-20, 2003* (Doctoral dissertation, Rutgers University-Graduate School-Newark).	Qual-Multiple Case Study	"Intelligence failure can be defined as the inability of intelligence community as well as policymakers to anticipate or prevent incidents that result in unexpected and undesired consequences." (p.1)	Mix: Pol, Org, Process, Threat	Barbarossa, Pearl Harbor, Yom Kippur War, 9/11, Iraq WMD, Istanbul Attacks (2003)	over 20	1	H

Nutt, C. G. (2019). Proof of the Bomb: The Influence of Previous Failure on Intelligence Judgments of Nuclear Programs. *Security Studies*, *28*(2), 321-359.	Qual-Comparative Case Study	"An intelligence failure is an instance in which the intelligence community errs. This can be a failure of commission or omission; purported facts prove untrue (that is, a false positive) or gathering threats go unseen (that is, a false negative)." (p.328)	Mix: Org, Cog (Judgement Variation)	9/11, Iraq WMD, Libyan Nuclear Program, Syrian Nuclear Program	Over 20	0	H
Arve, S. (2019). Prediction of regime change is a constant challenge to intelligence organizations. What intelligence lessons can be learned from the fall of the Shah in 1978?: Why did the US intelligence community fail to predict the fall of the Shah? What failure theory explains it best? What lessons may be drawn from it? Why was Israeli intelligence more successful in this case? What may we learn combined from the US failure and the Israeli success? How does the case match theory on Regime Change and what may we learn?.	Qual-Multiple Case Study	"More specifically, it uses Dahl's "Intelligence and Surprise Attack" (2013), grouping of "Intelligence Failure" theory into three "schools"; traditionalist, reformist and contrarian. The traditionalists assert that collection has worked and attributes failure mainly to analysis and policy interpretation of analysis. Framework theory is provided by scholars like Wohlstetter and Betts, while cognitive problems are covered by Heuer. The reformists take a more organizational view. They concur concerning collection but blame failure on organizational or bureaucratical malfunctions like insufficient sharing, rather than cognitive problems and faulty analysis. Prominent reformist scholars are Wilensky and Zegart." (p.6)	Mix: Pol, Org, Cog	9/11, Iraq WMD	Over 20	0	H
Brunson, D. (2011). *2003 Iraq War: intelligence or political failure?* (Doctoral dissertation, Georgetown University).	Qual- Case Study	"Recall that intelligence failures occur when intelligence fails to provide warning.63" (p.15)	Politicizat-ion	Pearl Harbor, 9/11, Iraq WMD	Over 20	0	M

Source & Study Type

Given the expanse of Google Scholar there was a much more diversified pull of sources and study types. Out of the sample n=2 of the sources were books (Dahl, 2013; Wirtz, 2016). The Google Scholar pull included n=3 sources that were doctoral theses, and n=1 was a master's thesis. The search engine contained n=8 of the sources appraised at high value, n=5 of the sources in this sample were rated as moderate value, and no sources were rated as low value.

Case studies predominated the sample with n=5 being single case studies. Only n=2 of the sources focused from a theoretical framework. Over n=6 of the sources used multiple case studies as their selected research method. Similar to Taylor & Francis and JSTOR, a heavy reliance on case qualitative research pervaded the sample. This also included the excluded sources. Overwhelmingly, case studies were a common method. No studies included a systematic review.

Definition Results

Similar to the databases there was no common unified definition that was referenced. It was a myriad of puzzle pieces. Some definitions like Nokov (2012) focused on process and the inability to warn of an impending attack. Other definitions like Arve (2019) adopted more of a conceptual explanation that was framed off of Dahl (2013). Sources such as Ozkan (2013) and Norman (2020), both highlighted the role of consequences as being tied to intelligence failure. The sample contained more references pertaining to multiple variables and complexity underlying the definitions of intelligence failure. Rao-Chakravorti (2018), Nokov (2012), and Copeland (2010) all emphasized the role of multiple variables and complexity that defines intelligence failure.

Dimensions Results

Similar results for coded dimensions were seen within the Google Scholar sample. Policy/political, organizational, and cognitive explanations were common trademarks. Some articles also mentioned the role of the threat as being a relevant variable. Common elements of a failure to warn, the importance of process and the role of policymakers listening emerged as a common trait in the results.

Examples of Intelligence Failure

General references of the Google Scholar sample aligned with the results of previous databases. Pearl Harbor, 9-11, Ira WMDs, and the Yom Kippur War were the most referenced instances of intelligence failure. However, other cases also emerged. These included the East Africa embassy bombings (1998), the Iran Revolution (1979), both the Libyan and Syrian nuclear programs, and also of note the 2008 financial crisis (Figure 3.3).

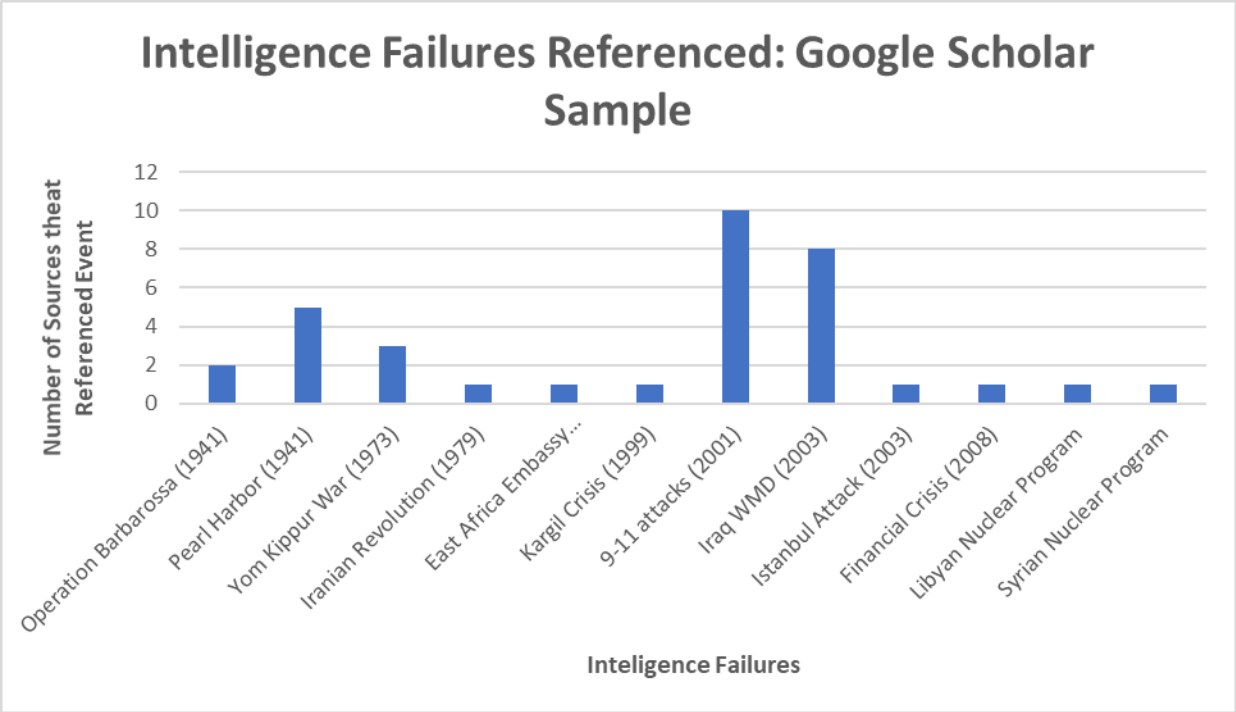

Figure 3.3: Referenced Intelligence Failures from Google Scholar Sample

Discussion

Since Pearl Harbor, the term intelligence failure has steadily increased over time. An N-gram viewer search through google provides one facet for how the frequency of usage has changed over time (Figure 4.1). The highest peak of term usage occurred between 2005-2007. Intelligence failure first appeared in books around 1951, one decade after Pearl Harbor. Following the collapse of the Soviet Union the term has seen a steady increase over time. The fact remains that intelligence failure remains a fixture of discourse. Along with increased usage, the complexities and puzzles that surround intelligence failure continue to expand.

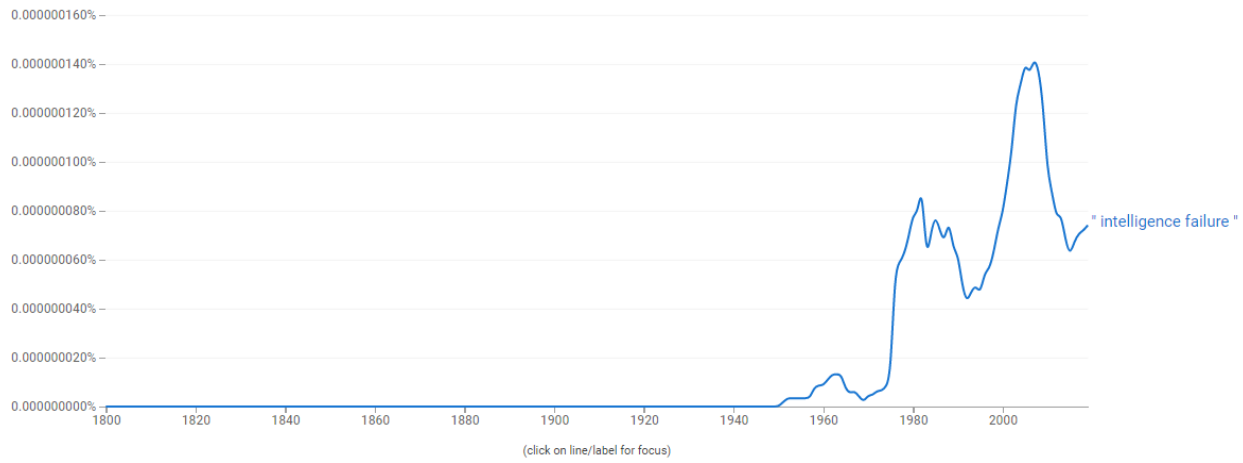

Figure 4.1: N-Gram Viewer of “intelligence+failure” (1800-2019)

Puzzles and Complexities

Intelligence presents a puzzle. The art and science of intelligence involve a process of many actors who are both within the intelligence apparatus and outside of it. Intelligence professionals and policymakers do not operate within vacuums. Many puzzle pieces exist pertaining to intelligence failures. These same pieces may also play a role as they relate to intelligence successes. However, the only way to present a claim of intelligence failure or intelligence success is through defining them.

The systematic review provided important insights. The most obvious observation was that many authors who included “Intelligence Failure” as part of their title did not define the term. The primary emphasis across the board focused mostly on case studies or theoretical concepts of research related to intelligence failure. The authors who did define intelligence failure provided many different definitions as to what the concept or event is. Why? The answer may lean towards inherent limitations to human knowledge between analysts and policymakers alike (Hatlebrekke & Smith, 2010). Intelligence failure exists within complexity.

Returning to the puzzle concept there can be a temptation to focus on only certain aspects of intelligence failure. These provide pieces of an incomplete picture of events leading up to strategic surprise, or some form of grave consequences that undermined national interests. Uncertainty pervades even after an intelligence failure occurs because of the volume of variables and overlapping layers (Rao-Chakravorti (2018). All the definitions were inputted into wordclouds.com to provide a visual of the confusion of varying pieces (Figure 4.2).

Figure 4.2: Intelligence Failure Sample Word Cloud (wordclouds.com)

The puzzle begs the question of how do these pieces interact, and how do outside actors influence them when an intelligence failure occurs? Dahl (2013) defined both strategic and tactical intelligence but made no mention of the operational component. Is there an in-between concept of operational intelligence, and how does this interact with the other layers? These are difficult questions that some definitions address. Nokov (2012), Rao-Chakravorti (2018), and Bar-Joseph & Levy (2009) provide the context for multiple variables at varying levels that commonly overlap to create the conditions for an intelligence failure. These include issues of politicization, policy-maker receptivity and action on intelligence, organizational issues, and cognitive issues that relate to faulty analysis or collection.

> "[…] intelligence failure is a remarkably complex and often idiosyncratic phenomenon, and the scholarly debate mirrors this reality. The lines between strategic and tactical intelligence are often blurred, with unclear applications or groups responsible for the production of each type of intelligence" (Rao-Chakravorti, 2018, p.14).

The general dimensions were similar across the board. While these may have varied to degree of emphasis, they were largely consistent. Intelligence failures involve a combination of political, organizational, and cognitive factors (Bar-Joseph & Levy, 2009; Copeland, 2010; Lasoen, 2018). Process also has numerous mentions across the sample that was examined. First, political factors involve policies, politicization, or policymaker receptivity to intelligence. Note the latter point can overlap with cognitive factors of bias. Analysts may be shaped by bias, but so can policymakers and organizational leaders. Several definitions distinctly frame the role policymakers' actions and intelligence actions coalesce, but typically the weight of blame tends towards policymakers (Betts, 1978; Firester, 2011).

Second, organizational structure and culture can also lead to potential intelligence failures, which echo scholars highlighted within the literature review. This also includes inter-organizational interaction and cultures that can contribute to disasters or intelligence failures (Turner, 1976). Olson (2019) approached intelligence failure from the counterintelligence angle. He stated, "More harm may have been done to the effectiveness of US counterintelligence over the years by interagency sniping and obstructionism than by our enemies" (Olson, 2019, p.53). Similar issues echo in debates of the complex interagency web of the national security state.

Third, cognitive factors like faulty analysis based on mirror imaging, and mind-sets of conventional wisdom can result in intelligence failure (Evans, 2009; Hatlebrekke & Smith, 2010). Lillbacka (2019) provided a definition oriented on errors related to collection or analysis,

or errors related to decisions. Ostergard (2020) focuses on a health intelligence failure but focuses on faulty assessment and a failure of imagination at the outset of the Ebola outbreak. The role of process falls across cognitive, organizational, and policy domains. However, if the process is flawed due to biases or faulty assumptions it will cross into the other domains. The reverse is also true. Organizational culture or policy guidelines can also sway cognitive assessments of events. For example, an organizational culture and policy oriented towards counterterrorism runs the risk of creating risks for analytical and collection focus on other areas like the activities of state-actors.

A frequency table demonstrates key words and phrases (Table 4.1). The list goes from greatest to least in terms of frequency count. Common substantive terms provide some insight to some of the commonalities that were found within the sample, and this may provide further insight for generating a deeper definition. Unlike the word cloud, this analysis combined common words and phrases that were not combined due to tense issues. Terms that occurred in three or more definitions are included in the table. Moreover, only a handful of sources used a definition rooted from other sources. This shows while there were some common dimensions, there was no consistent definition across the sample.

Table 4.1: *Most Frequent Key Words and Phrases Among Definitions*

Key Words/Phrases	**Database/Search Engine**			**Frequency Total**
	Taylor & Francis	JSTOR	Google Scholar	
Cognition	6	2	4	12
Lack of Information	6	4	2	12
Analysis	5	1	5	11
Collection	5	0	3	8
Policymaker	1	2	4	7
Warning Failure	2	2	3	7
Sources (HUMINT)	3	1	2	6
Warning Response Process	2	2	2	6
Organization	1	2	2	5
Policy	2	1	2	5
Denial & Deception	1	2	0	3
Consequence	1	0	2	3
Process/Cycle Tasks	1	0	2	3
Complex	0	1	2	3

Some definitions address varying types of intelligence failure. This provides another perspective for understanding distinct failures that play into the overarching concept of intelligence failure. The following subsections address the definitions that were derived. They generally cover the broad array of definitions that were discovered. The definitions generally fall into types (conceptualization definitions), direct definitions, and complex definitions.

'*Types of Intelligence Failure'*

Based on the results there are varying accounts to types of intelligence failure. Some accounts are very specific, while others are much broader in nature. An issue presented in the research pertains to instances of equivocating terms like warning failure and intelligence failure (Sloan, 2013; Gill, 2020). Warning failure tends to be the associated attribute of some intelligence failures. The central framework contends policymakers who needed to be warned

were not (or did not take a warning seriously), which resulted to some form of intelligence failure. Dahl (2011) argued the failure at Pearl Harbor was not rooted on strategic surprise but can be traced to failure of collection (tactical warning) and poor receptivity of policymakers.

The expansion of the intelligence apparatus and the connection to multiple actors helps to affirm that particular failures may be better attributed to certain types. All of these play a role in causing or being an aspect of a particular intelligence failure. Gentry (2008) provided the clearest conceptualization of intelligence failure types.

> "The inter-connectedness of functions within governments and among states (and non-state actors) means we can identify six general types of intelligence-related failures: threat warning failure by intelligence agencies; leaders' failure to respond effectively to threat warnings; opportunity warning failure by intelligence agencies; leaders' failure to effectively exploit opportunities; failure to recognize one's own vulnerabilities in the context of other actors' intelligence and operational capabilities, thereby giving other parties intelligence-related opportunities; and failure to ameliorate one's self-known vulnerabilities to physical attack and nonviolent manipulation." (Gentry, 2008, p.249)

These varying types of intelligence failure may happen in unison. For example, intelligence agencies could miss an opportunity to exploit while also failing to recognize their vulnerabilities. These types all underline a baseline definition that Gentry (2008) provided. He argued that the state fails to process intelligence, and/or policymakers fail to make appropriate policy that could prevent such a failure. Røssaak (2017) used the Gentry (2008) definition.

Dahl (2013) defined three schools on intelligence failure. This illuminates some of the inherent limitations on how scholars have tended to adhere to certain aspects of intelligence failure. Traditionalists tend to focus on psychological and political inevitability that low

probability events will always slip through the cracks (Arve, 2019). Reformists focus on how organizational improvement can prevent intelligence failure (Dahl, 2013; Arve, 2019). Contrarians focus on the collection aspect as the guiding fault of intelligence failures (Dahl, 2019). On this basis, defining intelligence failure can be defined differently among different types of schools of thought.

A deeper examination of the results demonstrates two broader categories that frame intelligence failure. Direct and complex definitions both present utility for examining intelligence failure. Direct definitions consisted of simplified definitions that were relatively short and easy to comprehend. These definitions did not consist of multiple variables. Complex definitions addressed many variables that underlined intelligence failure. These definitions tended to be estimative given there were so many underlying factors.

Direct Definitions

Several definitions in the sample constitute direct or simple definitions. Direct definitions consist of straightforward definitions that involve little nuance or flexibility. These are definitions that are fixed, and they frame intelligence failure in this framework. For example, one definition asserted that intelligence failures occur, “when intelligence fails to provide warning” (Brunson, 2011, p.15). Warning pervades multiple other definitions as well. This generally tends to lean towards the traditionalist view of warning-response elements being a key factor. Davies (2004) elaborates on the general and a more direct definition of intelligence failure:

> "However, while there may be some marginal cases, and a very real question of where failures of intelligence can merge with failures of political policy, in practical terms a failure to provide warning or the provision of a significantly inaccurate assessment of a

matter such as military strength constitutes a failure of intelligence institutions to perform their allotted tasks." (Davies, 2004, p.496-497)

Wirtz (1994) provided an even more direct approach. He defined intelligence failure as a failure to complete the intelligence cycle tasks (Wirtz, 1994). This takes aim at process as being a predominant focus. This presents a direct definition that almost any person could understand. Various factors still go into the process, but according to this framework intelligence failures manifest through errors of process.

Lasoen (2018) explained intelligence failures fell within four main categories: time and space, organization, politicization, and problems of analytical cognition. Other traditional issues such as limited sources, noise & sound dilemmas, denial and deception, and the many other cognitive limitations (biases) also add difficulty to intelligence analysis (Lasoen, 2018). Many of these trends are echoed in other definitions, though to varying degrees.

Another direct definition posited intelligence failure, “frequently has dramatic and devastating consequences: Failing to prevent terrorist attacks, not being able to identify an impending attack, the inability to predict the collapse of a state, of the iron curtain, the outbreak of a civil war" (Norman, 2020, p.1). This aligns well to consequentialist logic. Ozkan (2013) similarly asserted a definition where the intelligence community and policymakers were unable to predict or prevent events that resulted in undesirable consequence. An added facet to these definitions included the mentioning acts of omission or commission relating to facts that were not true, or threats that were unobserved (Nolan, 2020).

Direct definitions provide simplicity, but the most definitions reflected diversity of nuance and factors. Direct definitions tended to focus on process, or the aspects that were process specific. However, the intelligence process operates within larger processes that

surround it. The interagency process provides one facet where the most basic intelligence tasks become more complex, and also subject to external actors of various policy realms.

Complex Definitions

Complex definitions with the sample shared a greater focus towards estimative nuances. Instead of being simple, they addressed a multitude of competing variables. The majority of definitions that were found center around estimative failures or stipulations that "most" intelligence failure share common definitional attributes. Other definitions characterized that intelligence failures usually had certain attributes, but they did not go as far to claim these applied to all intelligence failures.

For example, Dahl (2013) defined intelligence failures from both the policymaker perspective and the intelligence perspective. He stated, "failures can involve the failure of the Intelligence Community to produce the intelligence needed by decision makers, or a failure on the part of the decision makers to act on that intelligence appropriately" (Dahl, 2013, p.7). Something this definition missed was the opportunity to make it and/or. Intelligence failure may be a failure from one side, or it may be both sides that failed to act appropriately. Setting this critique aside, this definition provides a nuanced approach that addresses the role of policymakers and intelligence professionals.

Copeland (2010) argued that the definition of intelligence failure generally entails one or more causal factors ranging in scope, which is consistent to claims made by other scholars. Betts (1978) and Wirtz (2018) both highlighted the qualifiers of factors they claim applied to most, but not all intelligence failures. Fleisher & Wright (2010) used the Johnston definition of intelligence failure, which includes the caveat such a failure of analysis or counterintelligence analysis might be attributable. They are the only authors to extend the domain of intelligence

failure to counterintelligence. The absence of including counterintelligence into the intelligence failure discourse was further reflected in the results of intelligence failure examples, from this sample. Surprisingly, no mention of espionage cases entered the discussion of cases within the sample, and none of the excluded sources addressed the counterintelligence angle of intelligence failure.

Complex definitions provide another facet to the intelligence failure debate. As the results demonstrated there has been no shortage of intelligence failures. If anything, the list will continue to grow in scope and scale. The fact is intelligence failures may take new forms and shape amid changing structures. Direct definitions offer simplicity, but they are subject to change beyond the traditional scope of state-centric intelligence structures. Complex definitions provide the opportunity to identify gaps.

Filling Gaps towards a Working Definition

Though the definitions of the sample varied in scope, they do provide important facets that help to shape the debate of intelligence failure. They provide a means to peel back the onion to get to the basis of what is intelligence failure. The use of the term intelligence failure has rapidly increased through use. The private sector, academia, and NGOs are all added actors that need to be considered within the context of intelligence failure.

Surprisingly, few definitions addressed the value of secrecy as a guiding variable. The compromise of secrecy that operates centrally to the world of counterintelligence did not find its way into many definitions. Olson (2019) highlighted a plethora of espionage cases that have undermined U.S. intelligence. These cases were not limited to a question of faulty analysis or collection, although both are still critical. Cases of espionage undermine the very fabric that

surrounds the definition of intelligence itself: secrecy. No definitions provide an explicit angle that the compromise of secrets constitute the potential for intelligence failure.

Another missing aspect of intelligence failure pertained to law enforcement, and more particularly how police intelligence has used informants. This extends beyond the traditional examples of intelligence failure. Ozkan (2013) was the only source to approach intelligence failure from a law enforcement angle. Unfortunately, he focuses solely on counterterrorism dimension. Little examination pertained to the issue of negligence or questionable use of informants. The latter can also demonstrate unique dimensions of an intelligence failure. The role of ethics was not a pervasive theme found in this systematic review, but it is worth mentioning as a factor that can draw lines between a perceived success and failure.

The basis for developing a working definition aims to include various components of existing definitions and bridge the common dimensions that were found. The working definition posited here also aimed to address some themes that were not commonly mentioned, such as ethics and negligence. Both of these factors are relevant for all spheres of intelligence operating in liberal democracies. For this reason, when trying to examine intelligence failures there is an obligation to see beyond the traditional examples of strategic surprise or warning failure. Similar to medical doctrine, the goal is to avoid inaccurate diagnoses.

Two case vignettes highlight unique cases that could be included to the realm of intelligence failures on the basis of intelligence agency/law enforcement agency ethical conduct. The aim of the case vignettes is to briefly illustrate other dimensions that are missing in the intelligence failure debate and provide another bridge to a working definition. Common critiques against the intelligence community tend to the focus on collecting and analyzing, while ignoring the pervading possibility of unethical conduct undermining both. Bar-Joseph (1995) was the only

source in the systematic review who focused on the question of ethical misconduct on the part of leaders.

This undermining of social ethics/norms can also lead to an intelligence failure given it can undermine public and policymaker trust in the intelligence or law enforcement apparatus. The first vignette explains some of the background related to the Boston gangster James "Whitey" Bulger, who functioned as an FBI informant for decades. The second vignette covers another high-profile informant for the Provisional Irish Republican Army (PIRA), who was recruited by British intelligence. Both cases highlight instances where perceived success was degraded to failure as more information of unethical practices were made public.

Case Vignette: James "Whitey" Bulger and the FBI

The case of James "Whitey" Bulger has become a legendary embarrassment of the Federal Bureau of Investigation. For the better part of 16 years Bulger was on the FBI most wanted list (Murphy, 2020). It was later revealed that Bulger bribed his handler, killed FBI informants that his handler told him about, and was given early warning to evade capture courtesy of his handler (Bloom, 2002; Boeri, 2008; Murphy, 2020).

During the 1980s the FBI was directed to investigate organized crime to facilitate Department of Justice prosecutions. The Italian Mafia/La Cosa Nostra (LCN) also known as the Mafia had gained a significant foothold in the United States and was engaged in a vast array of criminal activity (Bloom, 2002). As a result, a significant number of incentives to agents and organizational focus was transfixed specifically on the LCN (Bloom, 2002). The problem with this logic became the potential another organization (other than LCN) would exploit the void, which is what occurred with Bulger's gang.

Whitey Bulger grew up in South Boston and became a member of the Winter Hill Gang. The organization was part of the American Irish Mafia. Activities of Bulger's organization ranged from murders, gambling rackets, loan sharking, and political corruption. In the 1970s, Whitey Bulger and his Co-Boss Stephen Flemmi became informants to the FBI. Both men were recruited by James Connolly (Bloom, 2002). Connolly was a childhood friend of Bulger and had a successful career of recruiting organized crime informants (MacKenzie, Karas, & Muscato, 2005).

Bulger and Flemmi were pivotal to providing information on the Patriarca Crime Family in Boston (Bloom, 2002). The Patriarca organization was part of what was known as 'The Commission', which consisted of the major mafia crime families in the United States. Ultimately, the Patriarca Family was prosecuted and imprisoned (Bloom, 2002; MacKenzie, Karas, & Muscato, 2005). The end result was the Winter Hill Gang assumed their criminal rackets. Bulger used his handler and the FBI as top cover from prosecution. The apparent success of the operation enabled Bulger to continue his activities until his escape in 1995 (Murphy, 2020). He obtained information on informants within his own organization and killed them. Bulger committed 11 murders while he was an informant, from 1970-1990 (Bloom, 2002; Goodnough, 2011).

Case Vignette: Freddy Scappaticci and British Intelligence

From 1969-1998 the British were engulfed in a counterinsurgency conflict known as the Troubles in Northern Ireland (Leahy, 2015). The source of the conflict goes much further but can broadly be painted as a sectarian conflict between Irish Catholics who sought unification with Ireland, and Irish Protestants who sought to remain as part of Britain. As early as 1969 it was

clear, “informers and agents again formed a crucial part of an intelligence-led strategy against the Provisional Irish Republican Army (IRA)” (Leahy, 2015, p.7).

Freddie Scappaticci served as a top official for the Irish Republican Army (IRA) counterintelligence unit known as “the Nutting Squad” from the 1970s and early 1990s (Cochrane, 2013). During his tenure, Scappaticci allegedly killed numerous informants and suspected informants (Cochrane, 2013). It is alleged that Scappaticci was among the most important informants who were recruited from British Military Intelligence and was given the codenamed “Stakeknife” (Leahy, 2015). This claim is affirmed by an Army source who claimed “Stakeknife” saved upwards of 180 lives, prevented numerous attacks, and provided locations of weapons (Leahy, 2020).

The British Irish Rights Watch (BIRW) alleged during Scappaticci’s tenure in IRA counterintelligence, over 50 people were killed (Cochrane, 2013). The extent of criminal involvement in this case far outpaces the Bulger case. Lomas (2019) contends the case of Freddie Scappaticci demonstrates how British Military Intelligence ignored criminal activities as a tradeoff for “high-grade” intelligence. Cochrane (2013) specifies that Scappaticci denies any involvement as an informant, but the evidence pertaining to his informant status and activities is hefty.

In the late 1970’s, Scappaticci allegedly become an informant for the British Military Intelligence Force Research Unit (FRU), following internal disagreements he had within the IRA (Leahy, 2015). The successful compromise of top IRA members is attributed as one of the causes for the IRA coming to the peace table in the 1990s and ending the military war against the British (Leahy, 2015). This facet meets the criteria of showing that this intelligence failure appeared to be an intelligence success. In an odd twist, this case reflects an intelligence failure

that both the British and the IRA have sought to conceal due to mutual embarrassment since the revelations of “Stakeknife” were made public (Cochrane, 2013). The latter denial relates more to a matter of embarrassment.

The domestic threat presented in this case was a counterterrorism threat. This makes it distinguishable from standard organized crime activity. However, while the threat may be different in the nature, the rationale used for obtaining a compromised source was similar. The counterterrorism component explains why British Military Intelligence was placed in charge of operations in Northern Ireland (Cochrane, 2013).

The weakness in this case vignette is that Freddie Scappaticci has never been arrested and still denies any role as an informant to British Intelligence (Cochrane, 2013). However, there is broad agreement that Scappaticci was “Stakeknife” from former key players within the IRA and officials who worked in British Military Intelligence (Leahy, 2015).

A Working Definition

The core aim of the systematic review was to generate a deeper working definition of intelligence failure. This was done through examining common patterns and themes that occur among the definitions themselves, as well as the broader attributes the sources addressed. The variance of types of intelligence failure, absolute definitions, and estimative definitions highlight there is diversity among how intelligence failure has been defined. However, pulling together these various aspects to synthesize their patterns is vital towards building a working definition. However, this sample cannot close all gaps. No synthesis can completely close the gaps, and for this reason case vignettes provide some insight to the blind spots that exist.

Both of the case vignettes highlight unique incidents where collection and analysis were used as a means to catch “the big fish”. Initially, both cases represented law enforcement and

military intelligence successes early on. As the methods and choice of informants became public, both cases have turned into examples of questionable ethical means. The heart of these examples highlights ethical dimensions and informant handling that can also undermine intelligence operations. For this reason, these vignettes serve to expand an avenue that the sample left as a void.

Koshinsky (2020) conducted a case study titled *Intelligence Failure: The Puzzle of Robert Hanssen*. The case study sought to expand on existing literature on intelligence failure and apply it specifically to a counterintelligence related case that centered from a law enforcement agency. More importantly, the case study developed a working definition of intelligence failure. Based on the systematic review this definition may provide a good starting framework that bridges both the estimative and absolute definitions of intelligence failure.

> "An intelligence failure is an event that entails systematic breakdown caused by multiple factors that led to serious consequences due to negligence through commission or omission, which could reasonably have been identified at the time." (Koshinsky, 2020, p.8).

This definition does provide a start. Nutt (2019) also highlighted the role of omission and commission relating to intelligence failures. An important facet this definition aimed to resolve was the propensity for hindsight bias. Dahl (2013) explained the Reformist school in particular had the limitation of tending to lean on the weight of hindsight or 20/20 bias. No other definition examined within the systematic review aimed to elaborate qualifiers such as judging acts based on what could be reasonably identified at the time, with existing technologies. This definition aimed to fill that void, in part.

Based on the systematic review of 33 varied definitions, and the expansion of less-known cases related to ethics the definition of Koshinsky (2020) requires further adjustment. Using an estimative approach that reflects intelligence language can function as a future hypothesis for future research. Thus, an amended working definition for intelligence failure also includes a sub-definition including ethical intelligence failure, like those rare cases where ethical conduct became a central feature of turning a perceived intelligence success into an intelligence failure. The latter definition provides a future avenue to further explore, which is consistent with the fringe vignettes that were presented.

The general framework for developing these definitions was derived from McPherson et al., (1998). The verbiage has been adjusted to reflect the intelligence field of study. The definitions derived aim to be: (1) simple & easily understood by a wide audience (2) have utility for academics, practitioners, and policymakers to make informed judgements (3) have utility to state and local law enforcement (4) recognize linkages between various actors (5) be specific and preferably measurable or quantitatively assessable (6) aim to reflect current & emergent knowledge on intelligence studies.

> An ***intelligence failure*** is a catastrophic event derived from a precedent event or series of intelligence-related multi-level (Strategic/Operational/Tactical) errors leading to the undermining national interests/security, law enforcement investigations, or critical business assets. Such errors could be reasonably known or were identified prior to their occurrence. They entail systematic intelligence-policy (police intelligence-prosecutor or private sector intelligence-corporate) apparatus or multi-dimensional factors like policy, organizational, or cognitive dynamics that were successfully exploited by a threat actor.

An ***ethical intelligence failure*** is an event or series of intelligence-related events that leads to serious consequences (typically critical constituent/public outcry) and entails evidence of negligence (professional, ethical, or legal) through commission (action) or omission (inaction), which could have likely and reasonably been remedied at the time. Similar dynamics at play with intelligence failure may also be present with an ethical intelligence failure.

Opportunities: Establishing a Framework

Based on the categories and definitions there is a great opportunity to produce a conceptual framework that pulls in estimative factors used within the IC. The working definition developed here can help to provide a guide for developing indicators, in addition to the sample systematic review. This may provide utility for practitioners and academics alike. A working definition that synthesizes various factors or categories provides a building block looking forward. The aim looking ahead should be to develop a probability chart that speaks the intelligence language. An estimative framework may help to better measure (though subjectively at this point) various indicators related to intelligence failure.

The role of probability has long been discussed within intelligence practitioner circles and Intelligence Studies more broadly. Sherman Kent's model of probability provides an early framework for understanding probabilities that go into intelligence assessments. Many definitions in the systematic review similarly paid attention to qualifying language for defining intelligence failure. Kent (1964) does not include absolutes on either end relating to intelligence assessments (Table 4.2).

Table 4.2: *Kent's Probability Chart (Chart taken directly from Kent, 1964, p.55)*

100% Certainty			
The General Area of Possibility	93%,	give or take about 6%	Almost certain
	75%,	give or take about 12%	Probable
	50%,	give or take about 10%	Chances about even
	30%,	give or take about 10%	Probably not
	7%,	give or take about 5%	Almost certainly not
0% Impossibility			

Kent (1964) acknowledged the challenge of getting this model accepted in terms of an organizational standard and understood by the clients who were confused with probability (or estimative) language. Fortunately, time has vindicated Kent's efforts. While the percentages have changed, the framework is now uniformly adopted under the guidance of the Office of the Director of National Intelligence as of 2007 (Fingar, 2017). The current breakdown of assessments is directly taken from Intelligence Community Directive 203. Table 4.3 is taken directly from ICD 203 as it was updated in 2015.

Table 4.3: *ICD 203 Probability Chart (Chart taken directly from Office of the Director of National Intelligence, 2015, p.3)*

almost no chance	very unlikely	unlikely	roughly even chance	likely	very likely	almost certain(ly)
remote	highly improbable	improbable (improbably)	roughly even odds	probable (probably)	highly probable	nearly certain
01-05%	05-20%	20-45%	45-55%	55-80%	80-95%	95-99%

ICD 203 specifies not to mix the terminology depicted in the columns (Office of the Director of National Intelligence, 2015). This provides the consistency that Sherman Kent sought to instill as an organizational best practice. It is also important to note that ICD 203 also elaborates to ensure that confidence level cannot be combined with the degree of likelihood (Office of the Director of National Intelligence, 2015). This is an important distinction because

confidence level (high, medium, or low) is distinct from degree of likelihood (Friedman & Zeckhauser, 2014). Confidence level refers to the judgement of an event or development changing the assessment of degree of likelihood (Office of the Director of National Intelligence, 2015). However, consumers of intelligence tend to equate the two concepts (Friedman & Zeckhauser, 2014).

The indicator framework (Table 4.4) morphs the ICD 203 chart to address judgments of intelligence failure. The framework encapsulates some of the multi-faceted dynamics that occur within intelligence failures. This also helps to potentially apply the working definition that can be used for future case study research. This framework was derived through common dimensions found across the sample, and also from the insights presented from scholars within the literature review.

Table 4.4: *Intelligence Failure Indicators Chart (Chart amended from Office of the Director of National Intelligence, 2015, p.3)*

Intelligence Failure Estimative Chart (amended from ICD 203 probability chart (ODNI, 2015)									
	Verbal Standard	almost no chance remote	very unlikely highly improbable	unlikely improbable	roughly even chance roughly even odds	likely probable	very likely highly probable	almost certain nearly certain	Cannot be assessed
	Percent Assessed	01-05%	05-20%	20-45%	45-55%	55-80%	80-95%	95-99%	
Dimensions	**Indicators**								
Policy (Strategic)	Indirect politicization present								
	Direct politicization present								
	Inadequate Objectives								
	Failure to head early warning								
	Negative consequence								
	Political Fragmentation								
	Threat Surprise Achieved								
	Negligence								
Organizational Culture and Structure (Operational)	Failure to implement reasonable reforms								
	Leadership politicization present								
	Demonstrable Bias (Groupthink)								
	Organizational Fragmentation/ Information Sharing (External)								
	Organizational Fragmentation/ Information Sharing (Internal)								
	Negative Consequence								
	Threat Surprise Achieved								
	Negligence								
Cognitive (Tactical)	Not Relevant								
	Not independent of political consideration								
	Not Timely								
	Not based onAvailable Sources of Information								
	Demonstrable Bias								
	Negative Consequence								
	Threat Surprise Achieved								
	Negligence								

Assessing intelligence failures constitutes a form of intelligence assessment. Thus, this framework potentially can help bridge academic inquiry to intelligence analysis. The framework relies on subjective judgement, but it provides a conceptual framework for critically assessing indicators common to intelligence failure. Based on analysis of the evidence, a scholar can assess the estimative degree of certainty an indicator was present to a suspected intelligence failure. The framework provides a potential for practical application related to judging intelligence failures. It can help visualize particular indicators that are most present based on the evidence that was evaluated.

Limitations

Various limitations exist in this study. These limitations range in scope. The limitations on the systematic review focus primarily on selection criteria, a single-researcher, and limited technological support such as cloud technology or other technologies that can amount significant samples of content quickly. As a result, the sample size is smaller for this systematic review than ideal. The use of a purposive sample adds further limitation, particularly as it pertains to generalizability to the wider array of intelligence failure literature.

The first limitation pertains to the value assessment of sources and selection of definitions. This process was modified to take a holistic approach to focusing on source value, and not necessarily the substance of the definitions themselves. If the author made an honest effort to define the concept or idea of intelligence failure, then further assessment of the source itself based on objective criteria. The definition of Barnea (2011) and Turner (1976) were exceptions for addition. Their ability to elaborate on failures outside of the standard intelligence apparatus provided wider perspective to how intelligence failures can also play out in the business sector. Hence, excluding them may have presented a bigger problem issue pertaining to

bias than to the inclusion criteria. Some definitions were not as clear or could be considered to be on the edge of inclusion. Decisions for inclusion were based if they added substantive knowledge to the research question.

The method for systematic review assessment specifically related to definitions of intelligence failure has not been previously tested. The lack of application to previous research presents a limitation on its validity, but it also may prove to be a useful building block. Part of the rationale for not emphasizing the focus of weight on definitional substance was to allow for a wider possibility for accepting definitions that may not commonly be known or heard of, which may present issues of author or selection biases. However, a focus on source rigor was emphasized for assessing the value. This is because it is understood that the definition applied to a broader context. An author may use a simple definition but provide significant elaboration on causal themes or categories.

A further limitation for generalizability exists given the methodology is qualitative/non-statistical and due to qualitative sampling lesser inter-rater reliability can be assured (Roberts, 1989). The research was not done by a team, and so some judgements were based on the best judgement of the researcher. The use of clearly articulated based categories and search terms aimed to mitigate this issue to the greatest extent possible. The coding of categories and subsequent indicators may be subject to other interpretations given the fact this is not being conducted with a group of researchers. A critical component of systematic reviews is replicability (Temple University Library, 2020). However, it must also be noted that quality over quantity was maximized through a focused search regimen. An aim to mitigate replicability was to focus on quality, but this comes at the cost of broader generalizability.

Stringent and consistent search criteria were used to mitigate some of these limitations. The specifications for inclusion and exclusion criterion aimed to make the process transparent, and thereby mitigate some limitations with replicability. Some sources that were originally included were excluded after further review and consultation. Perhaps the most abundant fact relating to limitations applies to the topic itself. Intelligence failure is rooted within limited knowledge. Access to sources and a myriad of variables make intelligence failure complex, and the understanding of it is limited. The lack of empirical research that is specific to variables of intelligence failure further limit the scope and range of operationalizing a definition.

Conclusion

As the world grows more inter-connected vulnerabilities have also grown more interconnected. These vulnerabilities might create conditions of the next intelligence failure. This only provides half the story. Vulnerabilities also present the potential for better capabilities. Growing inter-connection can also create opportunities for intelligence success. As governments seek to enhance interoperability and expand partnerships there exists risks and opportunities. A link or set of links can lead to the calamity of intelligence failure, or they may present opportunities to create intelligence success. Intelligence failure no longer exists as a concept limited to the confines of shadowy intelligence agencies who work for policymakers. Intelligence failures and intelligence successes apply to other domains. These domains include law enforcement, the world of business, non-governmental organizations, and academia.

Some scholars like Betts (1978) and Wohlstetter (1962) argued intelligence failures are inevitable. The evidence of this systematic review demonstrates intelligence failures have multiple variables and these variables operate differing levels across cases. This may very well make some intelligence failures inevitable (but not all). Despite the mixture of definitions there are common themes of policy, organizational, and cognitive dynamics that play out through a complex process known as the intelligence cycle. The term intelligence cycle may be a misnomer. A better term may be intelligence-policy cycle, or what Gill & Phythian (2018) call the intelligence web. The vast body of research suggests both intelligence and policy bleed over, into the broader interagency process.

A core aim of the systematic review was to answer the question of what is intelligence failure? Other questions pertained to if there was a commonly accepted definition or if there were common dimensions. The systematic review provides proof that intelligence failures are a

complex phenomenon that have multiple variables often overlapping. These include multiple acting layers that are internal and external to the intelligence apparatus of a government, business, or non-governmental organization. Internal layers include organizational and cognitive dynamics. External layers include inter-organizational dynamics, policymakers, and the media. A working definition sought to define these dynamics through bridging absolute and estimative definitions.

Ultimately, the development of this working definition can frame a pathway for future research and conceptual development. The literature review, systematic review, and development of a working definition forge an initial skeleton of a framework that highlights various aspects of intelligence failure. These building blocks create potential for future conceptual application to case studies. Through aligning a common language, a framework of estimative assessments might help to bridge the gap of practitioner and the ivory tower (and vice versa).

Based on the systematic review two vignettes were presented to highlight how intelligence failure may extend into other areas that were not found during the literature review and were not included in the pulled sources being analyzed. A common critique of some intelligence failures was inadequate collection or more explicitly Human Intelligence (HUMINT). Karam (2017) explicitly addressed deficiencies of HUMINT as it related to the Iraq WMD saga. The vignettes provide another means to examine collection. They provide brief cases of how unethical use of HUMINT can also lead to instances of ethical intelligence failure.

Future Research

Future research may unlock greater insights in three distinct methods that can expand the current discourse. The first form of research is expanded systematic reviews that broaden the scope of this inquiry. A second form of research is applying the estimative framework model

proposed from this inquiry to case studies to analyze particular dynamics. A final area of future research to examine pertains to the political economy of intelligence failure.

Expanding Systematic Reviews

Future research should consider a broader application of systematic reviews into the area of intelligence success and intelligence failures. Dahl (2013) and Bar-Joseph & McDermott (2017) provided an excellent basis for examining several case studies applying both to intelligence success and intelligence failure. Expanding the search criteria to examine the definitions existing across the broad expanses of databases can potentially unlock patterns and bring greater clarity to both concepts. It might also illuminate how some of the faults attributed to intelligence failures may also help in creating intelligence successes. A potential example of this might be the issue of compartmentalization. Compartmentalization may have been a factor that worked in favor of terrorists, but are there cases where it prevented espionage? This presents a tradeoff.

Expanding the search criteria can also help enhance the ability to generalize results and reduce the limitations that exist in this inquiry. This includes expanding to other databases or using broader search criteria to include key words. Another option is to extend this inquiry more towards a meta-analysis that can focus on variances of particular variables based on their frequency per article. De Mauro, A., Greco, M., & Grimaldi, M. (2015) conducted an analysis on the term Big Data examining the abstracts of over 1500 articles using the term in the title or abstracts, and then examined the frequency of key words and phrases within the abstracts to develop themes and a definition. The rationale for focusing on ‘big data’ mirrors some of the definitional issues identifiable with intelligence failure. A similar analysis of key words in abstracts can help confirm or deny the themes examined for this systematic review.

Another facet that systematic reviews may be useful for relates to addressing the number of intelligence failures that are referenced. One of the surprising results of the included studies for this inquiry was the expanse of cases referred to intelligence failure. An expanded study can further illuminate patterns relating to what cases authors describe as intelligence failures. Are there similar categories and themes that were found within this systematic review? Are there other categories and themes that were missed within this review? A guiding question for such a study would concerns the issue if researchers and/or practitioners over-diagnosing or underdiagnosing intelligence failure (or intelligence success)?

Systematic reviews typically are aimed at expanding knowledge in the medical field. Medicine echoes a similar puzzle-based approach to intelligence. Uncertainties exist, yet pieces of the puzzle can be systematically analyzed to get closer to a proper diagnosis. The ailment of intelligence is the specter of intelligence failure. Systematic reviews geared towards consolidating and expanding the diverse array of literature can potentially help narrow a diagnosis or prevent the issues of over-diagnosis.

Future Case Studies

Much has been written about the plethora of case studies pertaining to intelligence failure. They are far ranging in scope. However, little has been done about using a tool or framework for assessing case studies at large. The results section provided dozens of examples of intelligence failure, but little explanation exists of how to assess them with any degree of uniformity. Rao-Chakravorti (2018) explains the vastly different conclusions through the study of intelligence failures are reflective of the propensity to focus only on certain facets of the intelligence cycle they derive divergent conclusions to remedy the issues.

The conceptual framework derived from this inquiry might serve as a steppingstone to examining intelligence failure case studies more broadly. The framework aligns with current intelligence analysis standards for estimation of various components. While this is a subjective/qualitative framework, it might prove utility for putting pieces of the intelligence failure puzzle in context.

Many case studies abound in familiar intelligence failures such as Pearl Harbor, the Iranian Revolution, 9-11, and Iraq WMDs. There is no doubt highlighting and defining intelligence success case studies would provide a comparative picture, which aligns with Dahl (2013) and Bar-Joseph & McDermott (2017). However, they also ignore that there are other intelligence failures to assess. These range from counterintelligence to all the other numerous functions of intelligence. The two vignettes of "Whitey" Bulger and Freddie Scappaticci present opportunities to expand into case study research on ethical intelligence failures.

Undoubtedly, another venue to expand on case study research is in the field of business intelligence and non-traditional sources that are part of the intelligence apparatus. The list of potential case studies on intelligence failure is growing with actors like defense contracting firms (i.e., Edward Snowden), university research espionage, or a major corporation hacking (i.e., Sony).

Investigating the Political Economy of Intelligence Failure

The analysis of diagnosing intelligence failure naturally evolves to a question of costs. Studies related to the political economy can further enhance a broader understanding of intelligence failure. Enders & Sandler (2012) examined various statistical and economic concepts related to terrorism in their book *The Political Economy of Terrorism*. Through using various economic models and statistic models the research provides an important perspective for costs,

benefits, and tradeoffs that pertain to terrorism. It also provides insight to the costs of terrorism. 9-11 was estimated to have cost the United States over $80 billion, and also equated to an enormous death toll (Enders & Sandler, 2012). Another angle to address intelligence failure is the political economy it operates within. Terrorism does not constitute the only basis that intelligence failures occur. What about the costs of failing to predict a conflict within the South China Sea? What about the tradeoffs between civil liberties and the cost of guarding against the next intelligence failure?

Since 9-11, both the intelligence community and Department of Homeland Security (DHS) have grown rapidly. The 9-11 terrorist attacks and expanded globalization both help explain this expansion. Questions that remain entail has this reduced the number of intelligence failures or has it only created higher expectancy to not get it wrong? Amid 17 intelligence agencies are there diminishing returns associated with such expansion?

One such hypothesis may claim that as the number of intelligence agencies increase, so does the likelihood of diminishing returns for intelligence success, and thus increases the likelihood of intelligence failure. The law of diminishing returns suggests as resources (land, capital, or labor) are invested to a given plot the yield will increase to a tipping point when et ceteris paribus, and further investments will lead to a loss of output (Shephard & Färe, 1974). The original analogy posited by Turgot related to laborers working on a restricted piece of land (Shephard & Färe, 1974).

Expanding this to intelligence failure one could posit that as intelligence agencies increase there is a point to which their product (intelligence, early warning, and counterintelligence) decreases leading to increased likelihood of intelligence failure (or less likelihood of intelligence success). Figure 5.1 provides a depiction of this hypothesis. Such a

claim may be extended to other resources like intelligence sharing or interoperability, which in this case is the balancing act of secrecy with information.

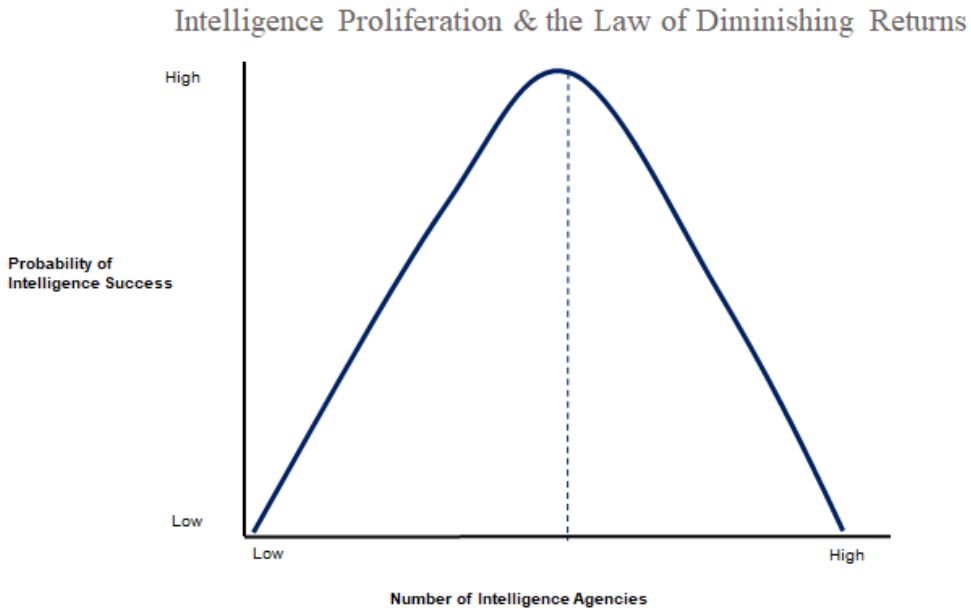

Figure 5.1: Intelligence Proliferation and the Law of Diminishing Returns Hypothesis

Thompson (2015) doctoral thesis titled *Prolegomenon to a Political Economy of Intelligence and Security: Can Microeconomic Analysis Explain Success or Failure in Intelligence Cooperation?* examined how microeconomics theories help explain the cooperation (or lack of cooperation) between intelligence organizations of the United States and United Kingdom. The framework of institutional costs was empirically tested in the thesis. This constitutes another direction future research can explore amongst U.S. Intelligence Agencies or varying governmental levels that deal with intelligence, and potentially mitigate the likelihood of failure.

Lastly, final hypothesis worth future inquiry that also links political economic theory and intelligence failure/success may pertain to the consumer expectations that may be tied to an increase of intelligence agencies. Naturally, one might assume as intelligence spending and

organizational structures expand then consumers (the public and policymakers) will expect a higher likelihood of intelligence success. This highlights the concern Gentry (2008) and Lowenthal (2008) both express regarding a public and policymaker base that holds unrealistic expectations for intelligence. Figure 5.2 depicts how this might look. The empirical hypothesis to test would be that as the number of intelligence agencies increase, consumer expectations for intelligence success will also increase.

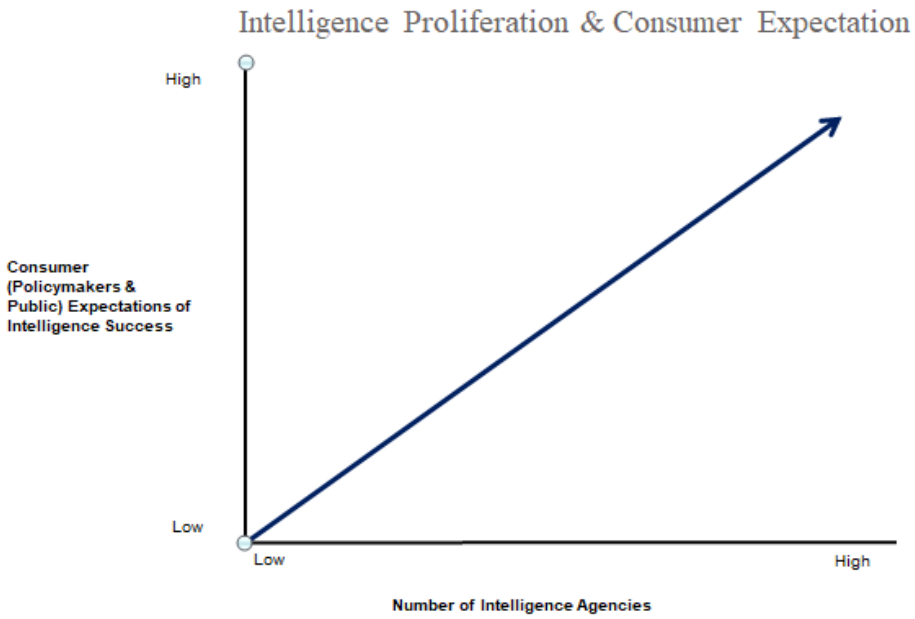

Figure 5.2: Intelligence Proliferation and Consumer Expectation Hypothesis

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Turner, B. (1976). The Organizational and Interorganizational Development of Disasters. *Administrative Science Quarterly, 21*(3), 378-397. doi:10.2307/2391850

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Appendices

Appendix A (Taylor & Francis Results)

Appendix B (JSTOR Results)

Appendix C (Google Scholar Results)

Appendix D (Intelligence Failure Examples)

Appendix A: Taylor & Francis Database								
Source	**Manuscript Type**	**Research Method**	**Definition**	**Category/Themes**	**Examples Referenced**	**Sources**	**Cited in Other Work**	**Value Assessed**
Bar-Joseph, U. (1999). Israel's 1973 intelligence failure. *Israel Affairs* , *6* (1), 11-35.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog	Operation Barborossa, Pearl Harbor, "Unfortunate Business" (1954), Yom Kippur War (1973)	over 20	11	NA
Daugherty, W. J. (2001). Behind the intelligence failure in Iran. *International Journal of Intelligence and Counterintelligence* , *14* (4), 449-484.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog	Iranian Revolution (1979)	over 20	14	H
Lasoen, K. L. (2018). Two ancient intelligence failure post-mortems. *Comparative Strategy* , *37* (5), 430-441.	Journal Article	Qual-Multiple Case Study	Modern research into intelligence failures has identified four main categories of obstacles: time and space, organization, politicization, and problems of cognition. All four are present in both historical documents. So are the classic problems such as paucity of sources, noise, denial and deception, and the many psychological pitfalls of analyzing intelligence" (p.436)	Mix- Pol, Org, Cog	Second Anglo-Dutch War in 1666, the other from Napoleon's invasion of Egypt in 1798, 9-11, 7/7, Iraq WMD	over 20	11	H
Sheldon, R. M. (1993). The Spartacus rebellion: A Roman intelligence failure?. *International Journal of Intelligence and Counter Intelligence* , *6* (1), 69-84.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog	Sparticus Revolt, 9AD loss of three legions, 53 BC Crassus March to Parthia	over 20	1	NA
Smith, T. J. (2014). Overlord/bodyguard: Intelligence failure through adversary deception. *International Journal of Intelligence and CounterIntelligence* , *27* (3), 550-568.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog	Operation Bodyguard	over 20	8	NA
Wilkinson, M. (2015). Nerve agent development: a lesson in intelligence failure?. *Journal of Intelligence History* , *14* (2), 96-111.	Journal Article	Qual-Single Case Study	No definition	Mix- Org, Cog	German Nerve Agent Development	over 20	0	M
Karam, J. G. (2017). Missing revolution: the American intelligence failure in Iraq, 1958. *Intelligence and National Security* , *32* (6), 693-709.	Journal Article	Qual-Single Case Study	"is the product of two factors: the collection of information from too few and too similar human sources of intelligence in Iraq's ruling regime, and the unreceptivity of US officials to assessing new information and their unwillingness to update assessments of local Iraqi developments." (p.693). "Building on Jervis, we define intelligence failures in their simplest form, as a mismatch between intelligence assessments and reality-what later information reveals." (p.694)	Mix- Org, Cog, Process (Collection/HUMINT)	Iraq Revolution (1958), Pearl Harbor, 9/11, Iraq WMD	over 20	7	H
Kahana, E., & Stivi-Kerbis, S. (2014). The assassination of Anwar al-Sadat: An intelligence failure. *International Journal of Intelligence and CounterIntelligence* , *27* (1), 178-192.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog	Assasination of Anwar al-Sadat (1981)	11	7	M
Lillbacka, R. (2019). The Finnish Intelligence Failure on the Karelian Isthmus in 1944. *The International Journal of Intelligence, Security, and Public Affairs* , *21* (1), 25-48.	Journal Article	Qual-Single Case Study	"intelligence failures are here defined as errors in collection and/or analysis, and/or errors in decision based on intelligence, having identifiable detrimental consequences in relation to policy aims." (p.27)	Mix- Pol, Org, Cog, Collection	Pearl Harbor, 9/11, Operation Barbarossa, Yom Kippur War (1973), Karelian Isthmus (1944)	over 20	1	H
Charters, D. (2016). Constructing Cassandra: reframing intelligence failure at the CIA, 1947–2001.	Journal Article	Book Review	No explicit definition provided	Mix- Org, Cog			0	NA
Jones, M., & Silberzahn, P. (2013). *Constructing Cassandra: reframing intelligence failure at the CIA, 1947–2001* . Stanford University Press.	Book	Qual-Multiple Case Study	No definition	Mix- Pol, Org, Cog	Iranian Revolution (1979), USSR Collapse, Cuban Missle Crisis, 9/11,	over 20	32	H
Gill, P. (2020). Explaining Intelligence Failure: Rethinking the Recent Terrorist Attacks in Europe. *International Journal of Intelligence and CounterIntelligence* , *33* (1), 43-67.	Journal Article	Qual-Single Case Study	"More recently, Greg Treverton suggests that most intelligence or warning failures stem from "holding onto stories that events have outmoded." (p.49) " there should be significant shift in those parts of the interactive intelligence process that receive the most attention. As noted above, an examination of the literature on strategic failure indicates its predominant concern with the analysis–dissemination–policy nexus whereas tactical counterterrorist failures occur more around them targeting–store–collection–analysis nexus."" (p.54)	Mix- Pol, Org, Cog, Process	European Terror Attacks, Cuban Missile Crisis, 9/11, Pearl Harbor	over 20	4	H
Peterecz, Z. (2012). Sparrow Mission: A US Intelligence Failure during World War II. *Intelligence and National Security* , *27* (2), 241-260.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Process (planning, timing, secrecy)	Sparrow Mission (WWII)	over 20	1	M
Ostergard Jr, R. L. (2020). The West Africa Ebola outbreak (2014-2016): a health intelligence failure?. *Intelligence and National Security* , *35* (4), 477-492.	Journal Article	Qual-Single Case Study	"When taken together, these points represent a health intelligence failure in the reporting of information, the assessment of that information, and in the imagination of what that information could mean in a state with weak institutional, economic, and political capacities" (p.489)	Mix- Pol, Cog, Process	Ebola Outbreak (2014-2016)	over 20	1	H
Latham, C. (2002). For want of a nail: A German intelligence failure in 1939. *The RUSI Journal* , *147* (4), 70-75.	Journal Article	Qual-Single Case Study	No definition	Cog (application of Radar)	Radar Development WWII (1939) prior to Battle of Britain	1	0	L
Conway, P. (2012). Red Team: How the Neoconservatives Helped Cause the Iraq Intelligence Failure. *Intelligence and National Security* , *27* (4), 488-512.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog, Process	Team B (1976), Iraq WMD	over 20	4	M
Davies, P. H. (2004). Intelligence culture and intelligence failure in Britain and the United States. *Cambridge Review of International Affairs* , *17* (3), 495-520.	Journal Article	Qual-Comparative Case Study	"However, while there may be some marginal cases, and a very real question of where failures of intelligence can merge with failures of political policy, in practical terms a failure to provide warning or the provision of a significantly inaccurate assessment of a matter such as military strength constitutes a failure of intelligence institutions to perform their allotted tasks." (p.496-497)	Mix- Pol, Org, Cog, Process (collection)	9/11, Falklands Invasion, Iraq WMD	over 20	106	H
Rezk, D. (2017). Re-evaluating the Yom Kippur 'Intelligence Failure': The Cultural Lens in Crisis. *The International History Review* , *39* (3), 470-495.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Org, Cog	Yom Kippur War (1973)	over 20	0	H

Evans, G. (2009). Rethinking military intelligence failure–putting the wheels back on the intelligence cycle. *Defence Studies* , *9* (1), 22-46.	Journal Article	Qual-Theoretical	In summary, these are: overestimation; underestimation; subordination of intelligence to policy; lack of communication; unavailability of information; over-confidence; complacency; received opinion (sometimes called 'conventional wisdom'); mirror-imaging; failure to link key bits of intelligence. Such criterion have been commonly referred to in a wide variety of academic texts which discuss the concept of intelligence failure, especially where it relates to military defeat." (p.44, footnote 5)	Mix- Pol, Org, Cog, Process	Dieppe Raid (1942), Tet Offensive, Yom Kippur War (1973), Falkland Islands (1982)	over 20	28	H
Bar-Joseph, U. (1995). Israel's intelligence failure of 1973: New evidence, a new interpretation, and theoretical implications. *Security Studies* , *4* (3), 584-609.	Journal Article	Qual-Single Case Study	"Relying on empirical evidence provided by about fifteen cases of surprise attacks since 1940, this orthodox school asserts that intelligence failures are not the product of insufficient information or of negligence or stupidity by intelligence producers and consumers. Rather, these failures are the result of inherent pathologies of the warning-response process that affect "honest, dedicated, and intelligent men." (p.585). To a large extent the failure was the outcome of various obstacles in the warning-response process, as had always been argued by proponents of the orthodox school. As is now evident, however, the most critical obstacle to the translation of the information which was available to Israel on the eve of the war into a high quality strategic warning and a war-readiness state of alert were unethical acts, consciously taken by the director of Military Intelligence (DMI), Major General Zeira." (p.590)	Mix- Pol, Org, Cog, Process, Ethics	British Zinoviev Letter of 1924, Pearl Harbor, Barborossa, "Unfortunate Business" (1954), Bay of Pigs (1961), Tet Offensive (1968), Yom Kippur War (1973), Iraq Invasion (1990), Fall of Soviet Union	over 20	21	H
Eiran, E. (2020). Dangerous Liaison: The 1973 American intelligence failure and the limits of intelligence cooperation. *Journal of Intelligence History* , *19* (2), 213-228.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Cog, Third Party	Yom Kippur War (1973), 9/11	over 20	0	H
Maiolo, J. A. (1999). Deception and intelligence failure: Anglo-German preparations for U-boat warfare in the 1930s. *The Journal of Strategic Studies* , *22* (4), 55-76.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Cog	German U-Boat preparation	over 20	18	NA
Goldberg, R. A. (2004). 'Who Profited from the Crime?'Intelligence Failure, Conspiracy Theories and the Case of September 11. *Intelligence & National Security* , *19* (2), 249-261.	Journal Article	Qual-Single Case Study	No definition	Mix- Pol, Cog, Public Perception	Pearl Harbor, 9/11, JFK Assasination (1963)	over 20	28	H
Hatlebrekke, K. A., & Smith, M. L. (2010). Towards a new theory of intelligence failure? The impact of cognitive closure and discourse failure. *Intelligence and national security* , *25* (2), 147-182.	Journal Article	Qual-Theoretical	"intelligence failure resides not in the strict technical confines of the intelligence cycle, but primarily in the cognitive processes among intelligence analysts and among those who perceive the intelligence product.2 In this respect, the intelligence cycle must be understood as function and not organization,3... Functional and mental failure that evolves beyond the strict technical and organizational boundaries of the intelligence cycle is therefore manifested as discourse failure, which expresses itself as the failure, 'to identify, analyze, and accept that a significant threat [exists]'.4 This failure arises when one forgets that intelligence operators 'are exposed not only to the internal machinations of their respective institutions but also to influences from society at large'.5" (p.148). "Conceptually, intelligence failure represents 'a misunderstanding of the situation that leads a government (or its military forces) to take actions that are inappropriate and counterproductive to its own interests'.15. Shulsky and Schmitt concur when they argue that 'the heart of the problem of intelligence failure, [is] the thought processes of the individual analyst'.20 Similarly, Woodrow Kuhns also asserts that 'intelligence failures are rarely a problem of collection but generally one of interpretation'.21 A considerable body of opinion thus holds that the causes of intelligence failure are to be found predominantly in the human condition rather than the technicalities of the intelligence process. From this understanding it follows that intelligence failure, and especially discourse failure, operates in two main dimensions: in the analytical process and among those who perceive the final intelligence product." (p.151)	Mix- Pol, Org, Cog	9/11, Yom Kippur War (1973)	over 20	33	H
Bar-Joseph, U. (1995). The wealth of information and the poverty of comprehension: Israel's intelligence failure of 1973 revisited. *Intelligence and National Security* , *10* (4), 229-240.	Journal Article	Qual-Single Case Study	No definition	Mix- Org, Cog, Ethics	Yom Kippur War (1973)	over 20	9	NA
Adamsky, D., & Bar-Joseph, U. (2006). The Russians are not coming': Israel's intelligence failure and soviet military intervention in the 'War of Attrition. *Intelligence and National Security* , *21* (01), 1-25.	Journal Article	Qual-Single Case Study	No definition	Mix- Org, Cog	Egyptian-Israeli War of Attrition (1969-1970)	over 20	10	NA
Sloan, G. (2013). The British state and the Irish rebellion of 1916: An intelligence failure or a failure of response?. *Intelligence and National Security* , *28* (4), 453-494.	Journal Article	Qual-Single Case Study	"It has been termed 'warning failure'. This usually precedes a surprise attack that takes place in peacetime and leads to the initiation of war." (p.459)	Mix- Pol, Org, Cog, Process (Collection/HUMINT)	Pearl Harbor (1941), Irish Rebellion (1916)	over 20	9	H
Barnea, A. (2017). The Assassination of a Prime Minister–The Intelligence Failure that Failed to Prevent the Murder of Yitzhak Rabin. *The International Journal of Intelligence, Security, and Public Affairs* , *19* (1), 23-43.	Journal Article	Qual-Single Case Study	"There are many reasons for intelligence failures. But usually they are related to a strategic surprise due to inaccurate information, a lack of information, and ignoring relevant information or inadequate assumptions (Gentry, 2008; Johnston, 2005; Levite, 1987; Lowenthal, 2009; Sims & Gerber, 2005, p. 17). Intelligence that fails to correctly read and understand the intentions and capabilities of the adversary (Handel, 2003) causes governments and armed forces to act erroneously, often against their own interests (Shulsky & Schmitt, 2002)." (p.25)	Mix- Org, Cog	Assasination of Yitzhak Rabin (1995), Pearl Harbor (1941), Barbarossa, Yom Kippur War (1973), Iraq WMD	over 20	2	H
Edmonds, A. O. (1993). The Tet Offensive: Intelligence Failure in War: Wirtz, James J.: Ithaca, NY: Cornell University Press, 290 pp., Publication Date: January 1992. *History: Reviews of New Books* , *21* (3), 110-110.	Journal Article	Book Review	No definition	Mix- Pol, Cog	Tet Offensive	0	0	NA

Wirtz, J. J. (1994). *The Tet offensive: intelligence failure in war*. Cornell University Press.	Book	Qual-Single Case Study	Failure to accomplish intelligence cycle tasks: Collection of information, analysis, response & dissemination of warning (p.13)	Mix- Pol, Org, Cog	Pearl Harbor, Tet Offensive, Barbarossa, Yom Kippur War (1973)	over 20	161	H

Appendix B: JSTOR								
Source	**Manuscript Type**	**Research Method**	**Definition**	**Category/Themes**	**Examples Referenced**	**Citations**	**Cited in Other Work**	**Value Assessed**
Betts, R. (2007). Two Faces of Intelligence Failure: September 11 and Iraq's Missing WMD. *Political Science Quarterly, 122* (4), 585-606. Retrieved February 27, 2021, from http://www.jstor.org/stable/20202928	Journal Article	Qual-Theoretical	No clear definition because intelligence failures come with mixed results: successes and failures. "Being wrong for the right reasons means little to citizens who must live with the result, but it does provide a caution against drawing too many lessons from a single failure." (p.606)	Mix- Pol, Org, Cog, Threat Actors (D&D), Process	Pearl Harbor, 9/11, Iraq WMD	over 20	56	H
SINGH, N. (2009). The Khan Proliferation Network: INTELLIGENCE FAILURE OR REALPOLITIK? *World Affairs: The Journal of International Issues, 13* (4), 112-123. Retrieved February 27, 2021, from https://www.jstor.org/stable/48505219	Journal Article	Qual-Single Case Study	No explicit definition provided					
Gentry, J. (2008). Intelligence Failure Reframed. *Political Science Quarterly, 123* (2), 247-270. Retrieved February 27, 2021, from http://www.jstor.org/stable/20203011	Journal Article	Qual-Theoretical	"Intelligence fails if a state does not adequately collect and interpret intelligence information, make sound policy based on the intelligence (and other factors), and effectively act."(p.248). "The inter-connectedness of functions within governments and among states (and non-state actors) means we can identify six general types of intelligence-related failures: threat warning failure by intelligence agencies; leaders' failure to respond effectively to threat warnings; opportunity warning failure by intelligence agencies; leaders' failure to effectively exploit opportunities; failure to recognize one's own vulnerabilities in the context of other actors' intelligence and operational capabilities, thereby giving other parties intelligence-related opportunities; and failure to ameliorate one's self-known vulnerabilities to physical attack and nonviolent manipulation (p.249)"	Mix- Pol, Org, Cog, Threat Actors	Barbarossa, Pearl Harbor, Vietnam War, 9-11, Bosnia (1995), 1998 India Nuclear Tests, Iraq WMD, Hurricane Katrina, Osama Bin Ladin Targeting (2000, 2001)	over 20	40	H
Kahn, D. (1991). The Intelligence Failure of Pearl Harbor. *Foreign Affairs, 70* (5), 138-152. doi:10.2307/20045008	Magazine Article	Qual-Single Case Study	No explicit definition provided				52	
Lord, A. (2012). Intelligence Failure or Paralysis? *Jewish Political Studies Review, 24* (3/4), 52-64. Retrieved February 27, 2021, from http://www.jstor.org/stable/4195550	Journal Article	Qual-Single Case Study	No explicit definition provided					
Sloan, G. (2013). The British State and the Irish Rebellion of 1916: An Intelligence Failure Or a Failure of Response? *Journal of Strategic Security, 6* (3), 328-357. Retrieved February 27, 2021, from https://www.jstor.org/stable/26485081	Journal Article		T&F sample					
Hecht, H. (1983). Mossad: An Intelligence Failure. *Journal of Palestine Studies, 12* (4), 178-185. doi:10.2307/2536256	Journal Article	Qual-Single Case Study	No explicit definition provided					
Gunn, C. (2015). The 1960 Coup in Turkey: A U.S. Intelligence Failure or a Successful Intervention? *Journal of Cold War Studies, 17* (2), 103-139. doi:10.2307/26926193	Journal Article	Qual-Single Case Study	No explicit definition provided					
BAR-JOSEPH, U., & LEVY, J. (2009). Conscious Action and Intelligence Failure. *Political Science Quarterly, 124* (3), 461-488. Retrieved February 27, 2021, from http://www.jstor.org/stable/25655697	Journal Article	Qual-Multiple Case Study	"Although we have identified several analytically distinct sources of intelligence failure at different levels of analysis, we should emphasize that most intelligence failures are the product of the interaction of multiple factors at different levels. In an unambiguous informational environment, psychological biases have a much weaker impact and there are fewer opportunities for the deliberate distortion of intelligence assessments. In an inherently ambiguous informational environment, psychological biases and other variables play a much greater role. Efforts at strategic deception are most effective if they are informed by psychological proclivities of the target and designed to exploit them. Organizational cultures that are conducive to the free flow of information can be compromised by a key intelligence official who has an authoritarian management style and intolerance for dissent. These relationships are complex and context dependent, and as a result, there is no single path to intelligence failure, but instead multiple paths." (p.476)	Mix- Pol, Org, Cog (Deliberate Distortion)	Barbarossa, Pearl Harbor, Yom Kippur War, 9/11, Iraq WMD	over 20	31	H
Streifer, B., & Sabitov, I. (2013). The Shock of "First Lightning": An Intelligence Failure? *American Intelligence Journal, 31* (1), 54-58. Retrieved February 27, 2021, from http://www.jstor.org/stable/26202042	Journal Article	Qual-Single Case Study	No explicit definition provided					
Borch, F. (2003). Comparing Pearl Harbor and "9/11": Intelligence Failure? American Unpreparedness? Military Responsibility? *The Journal of Military History, 67* (3), 845-860. Retrieved February 27, 2021, from http://www.jstor.org/stable/3397329	Journal Article	Qual- Multiple Case Study	No explicit definition provided					
BLUM, R. (1988). Surprised by Tito: The Anatomy of an Intelligence Failure. *Diplomatic History, 12* (1), 39-57. Retrieved February 27, 2021, from http://www.jstor.org/stable/24911827	Journal Article	Qual-Single Case Study	No explicit definition provided					
Bar-Joseph, U., & Kruglanski, A. (2003). Intelligence Failure and Need for Cognitive Closure: On the Psychology of the Yom Kippur Surprise. *Political Psychology, 24* (1), 75-99. Retrieved February 27, 2021, from http://www.jstor.org/stable/3792511	Journal Article	Qual-Single Case Study	No explicit definition provided					
Nossal, K. (1977). Chungking Prism: Cognitive Process and Intelligence Failure. *International Journal, 32* (3), 559-576. doi:10.2307/40201581	Journal Article	Qual-Single Case Study	No explicit definition provided					

Aldrich, R. (2005). Whitehall and the Iraq War: The UK's Four Intelligence Enquiries. *Irish Studies in International Affairs, 16* , 73-88. Retrieved February 27, 2021, from http://www.jstor.org/stable/30001936	Journal Article	Qual-Single Case Study	No explicit definition provided					
Winter, P. (2006). British Intelligence and the July Bomb Plot of 1944: A Reappraisal. *War in History, 13* (4), 468-494. Retrieved February 27, 2021, from http://www.jstor.org/stable/26061696	Journal Article	Qual-Single Case Study	No explicit definition provided					
Dahl, E. (2018). Not Your Father's Intelligence Failure: Why the Intelligence Community Failed to Anticipate the Rise of ISIS. In Al-Istrabadi F. & Ganguly S. (Eds.), *The Future of ISIS: Regional and International Implications* (pp. 41-66). Washington, D.C.: Brookings Institution Press. Retrieved February 27, 2021, from http://www.jstor.org/stable/10.7864/j.ctt1zctt19.6	Book (Chapter)	Qual-Single Case Study	No explicit definition provided					
RIJSDIJK, E. (2011). The politics of hard knowledge: Uncertainty, intelligence failures, and the 'last minute genocide' of Srebrenica. *Review of International Studies, 37* (5), 2221-2235. Retrieved February 27, 2021, from http://www.jstor.org/stable/41308453	**Journal Article**	Qual-Single Case Study	No explicit definition provided					
Uri Bar-Joseph. (2012). Confronting the Intelligence Fiasco of the Yom Kippur War. *Bustan: The Middle East Book Review, 3* (2), 131-149. doi:10.1163/18785328-00032003	**Journal Article**	Qual-Single Case Study	No explicit definition provided					
Wirtz, J. (2018). When Do You Give It a Name?: Theoretical Observations about the ISIS Intelligence Failure. In Al-Istrabadi F. & Ganguly S. (Eds.), *The Future of ISIS: Regional and International Implications* (pp. 67-86). Washington, D.C.: Brookings Institution Press. Retrieved February 27, 2021, from http://www.jstor.org/stable/10.7864/j.ctt1zctt19.7	Book (Chapter)	Qual-Single Case Study	**"intelligence failure usually refers to the absence of a timely warning about the occurrence of a discrete event. In other words, if intelligence analysts fail to estimate what is about to occur, where and when it will occur, and why it is occurring, and to provide that estimate to policymakers in time for them to take appropriate action, then the label "intelligence failure" is likely to be used to characterize recent events." (p.67)**	Mix- Pol, Org, Cog, Media, Threat	Pearl Harbor. 9/11, Rise of ISIL (2013)	Over 20	8	H
Bar-Joseph, U. (2013). The "Special Means of Collection": The Missing Link in the Surprise of the Yom Kippur War. *Middle East Journal, 67* (4), 531-546. Retrieved February 27, 2021, from http://www.jstor.org/stable/43698074	**Journal Article**	Qual-Single Case Study	No explicit definition provided					
Ayele, F. (2016). The Northwestern Command's Response to Insurgent Assaults on Dabat, Ethiopia. *Northeast African Studies, 16* (2), 1-22. doi:10.14321/nortafristud.16.2.0001	**Journal Article**	Qual-Single Case Study	No explicit definition provided					
Ocqueteau, F. (2011). Haute et basse police après le 11 septembre: Jean-Paul Brodeur (2008). *Criminologie, 44* (1), 225-245. Retrieved February 27, 2021, from http://www.jstor.org/stable/42745721	Journal Article	Qual-Single Case Study	No english translation available					
Brodeur, J. (2008). Haute et basse police après le 11 septembre. *Criminologie, 41* (1), 133-151. Retrieved February 27, 2021, from http://www.jstor.org/stable/42745636	Journal Article	Qual-Single Case Study	No explicit definition provided w/ english translation					
BRZEZINSKI, Z. (2003). Pour une nouvelle stratégie américaine de paix et de sécurité. *Politique étrangère, 68* (3/4), 495-506. Retrieved February 27, 2021, from http://www.jstor.org/stable/42676512	Journal Article	Qual-Single Case Study	No english translation available					
Betts, R. (1978). Analysis, War, and Decision: Why Intelligence Failures Are inevitable. *World Politics, 31* (1), 61-89. doi:10.2307/2009967	Journal Article	Qual-Theoretical	**"In the best-known cases of intelligence failure, the most crucial mistakes have seldom been made by collectors of raw information, occasionally by professionals who produce finished analyses, but most often by the decision makers who consume the products of intelligence services. Policy premises constrict perception, and administrative workloads constrain reflection. Intelligence failure is political and psychological more often than organizational" (p.61)**	Mix- *Pol, Org, *Cog	Barbarossa, Pearl Harbor, Chinese intervention into N. Korea (1950), Yom Kippur War (1973), Vietnam Estimates, Cyprus Crisis (1974), Indian Nuclear Test	**Over 20**	556	**H**
Turner, B. (1976). The Organizational and Interorganizational Development of Disasters. *Administrative Science Quarterly, 21* (3), 378-397. doi:10.2307/2391850	Journal Article	Qual- Multiple Case Study	**"Common causal features are rigidities in institutional beliefs, distracting decoy phenomena, neglect of outside complaints, multiple information-handling difficulties, exacerbation of the hazards by strangers, failure to comply with regulations, and a tendency to minimize emergent danger. Such features form part of the incubation stage in a sequence of disaster development, accumulating unnoticed until a precipitating event leads to the onset of the disaster and a degree of cultural collapse. Recommendations following public inquiries are seen as part of a process of cultural readjustment after a disaster, allowing the ill-structured problem which led to the failure to be absorbed into the culture in a well-structured form." (p.365)**	**Mix- Org, Co**	Aberfan (1966-1967), Hixon (1968), Summerland (1974)	**Over 20**	1165	**H**
Shlaim, A. (1976). Failures in National Intelligence Estimates: The Case of the Yom Kippur War. *World Politics, 28* (3), 348-380. doi:10.2307/2009975	Journal Article	Qual-Single Case Study	No explicit definition provided					
TWICHELL, H. (1993). *Naval War College Review, 46* (3), 164-167. Retrieved February 27, 2021, from http://www.jstor.org/stable/44637501	Journal Article	Book Review	No explicit definition provided					
Campbell, K. (1993). *American Intelligence Journal, 14* (3), 84-86. Retrieved February 27, 2021, from http://www.jstor.org/stable/44326903	Journal Article	Book Review	No explicit definition provided					

Hilsman, R. (1992). *Political Science Quarterly, 107* (3), 576-578. doi:10.2307/2152474	Journal Article	Book Review	No explicit definition provided					
Thurston, C. (2013). Intelligence Failure Is More Than "Policy Oversell". *International Studies Review, 15* (4), 625-627. Retrieved February 27, 2021, from http://www.jstor.org/stable/24032996	Journal Article	Book Review	**"Rovner hypothesizes that the intelligence-policy-making relationship can fall into one of three "pathologies": neglect, excessive harmony, or politicization. Neglect occurs when the policymaker uses intelligence incorrectly or ignores it. Existing research on this problem focuses on "noise in the system" and the difficulty of communicating intelligence to the policymaker. The second pathology, excessive harmony, arises when intelligence professionals do not challenge policy beliefs, and policymakers do not criticize intelligence conclusions. The cause for intelligence failure in this case is based on proximity—the intelligence professional and policymaker are too cozy to challenge each other." (p.625)**	**Mix-Pol,Org,Cog, Public (Constituency)**	Vietnam, Iraq WMD	1	0	L
Morgan, P. (1992). *The American Political Science Review, 86* (4), 1113-1114. doi:10.2307/1964429	Journal Article	Book Review	No explicit definition provided					
Krepinevich, A. (1993). *The Journal of American History, 79* (4), 1686-1687. doi:10.2307/2080354	Journal Article	Book Review	No explicit definition provided					
Oberdorfer, D. (1993). *The American Historical Review, 98* (1), 274-275. doi:10.2307/2166578	Journal Article	Book Review	No explicit definition provided					
Sinai, J., & Copeland, T. (2019). *Perspectives on Terrorism, 13* (3), 177-177. Retrieved February 27, 2021, from https://www.jstor.org/stable/26681966	Journal Article	Book Review	No explicit definition provided					
Neu, C. (2002). *The International History Review, 24* (3), 731-733. Retrieved February 27, 2021, from http://www.jstor.org/stable/40110260	Journal Article	Book Review	No explicit definition provided					
Cohen, E. (2002). *Foreign Affairs, 81* (1), 211-211. doi:10.2307/20033026	Journal Article	Book Review	No explicit definition provided					
Marchand, J. (2014). *Politique étrangère, 79* (3), 203-204. Retrieved February 27, 2021, from http://www.jstor.org/stable/24638920	Journal Article	Book Review	No english translation available					
Boyle, M. (2008). A War in Search of a Rationale. *International Affairs (Royal Institute of International Affairs 1944-), 84* (5), 1009-1023. Retrieved February 27, 2021, from http://www.jstor.org/stable/25144934	Journal Article	Book Review	No english translation available					

Apendix C: Google Scholar (2009-2021)								
Source	**Manuscript Type**	**Research Method**	**Definition**	**Category/Themes**	**Examples Referenced**	**Citations**	**Cited in Other Work**	**Value Assessed**
Dahl, E. J. (2013). *Intelligence and surprise attack: Failure and success from Pearl Harbor to 9/11 and beyond*. Georgetown University Press.	Book	Qual- Multiple Case Study	"Intelligence failures can take many forms, but a common theme in major intelligence failures is that decision makers have been surprised"(p.6). Lowenthal definition cited on (p.7) with two others. Dahl definition, "failures can involve the failure of the Intelligence Communtity to produce the intelligence needed by decision makers, or a failure on the part of the decision makers to act on that intelligence appropriately." (p.7)	Mix- Pol (Paradox of Strategic Warning (p.23)), Org, Cog,	Pearl Harbor, 9/11, East Africa Bombings	over 20	100	H
Bar-Joseph, U., & Levy, J. S. (2009). Conscious action and intelligence failure. *Political Science Quarterly*, *124*(3), 461-488.			JSTOR Sample					
Jones, M., & Silberzahn, P. (2013). *Constructing Cassandra: reframing intelligence failure at the CIA, 1947–2001*. Stanford University Press.	Book		T&F Sample					
Hatlebrekke, K. A., & Smith, M. L. (2010). Towards a new theory of intelligence failure? The impact of cognitive closure and discourse failure. *Intelligence and national security*, *25*(2), 147-182.			T&F Sample					
Evans, G. (2009). Rethinking military intelligence failure–putting the wheels back on the intelligence cycle. *Defence Studies*, *9*(1), 22-46.			T&F Sample					
Gill, P. (2020). Explaining Intelligence Failure: Rethinking the Recent Terrorist Attacks in Europe. *International Journal of Intelligence and CounterIntelligence*, *33*(1), 43-67.			T&F Sample					
Karam, J. G. (2017). Missing revolution: the American intelligence failure in Iraq, 1958. *Intelligence and National Security*, *32*(6), 693-709.			T&F Sample					
Clausen, H. C., & Lee, B. (2015). *Pearl Harbor: Final Judgement: The Shocking True Story of the Military Intelligence Failure at Pearl Harbor and the Fourteen Men Responsible for the Disaster*. Open Road Media.	Book		No definition		Pearl Harbor	over 20	62	
Zegart, A. B. (2012). The Cuban missile crisis as intelligence failure. *Policy Review*, (175), 23.			No definition					
Copeland, T. E. (2010). Intelligence failure theory. In *Oxford Research Encyclopedia of International Studies*.	Journal Article	Qual- Theoretical	"Intelligence failures are commonly understood as the failures to anticipate important information and events, such as terrorist attacks. Explanations for intelligence failure generally include one or more of the following causal factors: organizational obstacles, psychological and analytical challenges, problems with warning information, and failures of political leadership. " (Abstract-- Limited Access)	Mix- Pol, Org, Cog	9-11, Iraq WMD	UNK	5	M
Kahana, E., & Stivi-Kerbis, S. (2014). The assassination of Anwar al-Sadat: An intelligence failure. *International Journal of Intelligence and CounterIntelligence*, *27*(1), 178-192.			T&F Sample					
Bar-Joseph, U., & McDermott, R. (2017). *Intelligence success and failure: The human factor*. Oxford University Press.	Book	Qual & Empirical: Multiple Case Study	No definition; Strategic surprise defined on p.16	Mix- Pol, Org, Cog (Personality of Key Actors)	Barbarossa, Pearl Harbor, Korean War (1950), Yom Kippur War	Over 20	30	
Smith, T. J. (2014). Overlord/bodyguard: Intelligence failure through adversary deception. *International Journal of Intelligence and CounterIntelligence*, *27*(3), 550-568.			T&F Sample					
Gunn, C. (2015). The 1960 Coup in Turkey: A US Intelligence Failure or a Successful Intervention?. *Journal of Cold War Studies*, *17*(2), 103-139.			JSTOR Sample					
Afeno, O. S. (2012). The Boko Haram uprising and insecurity in Nigeria: intelligence failure or bad governance?. *conflict trends*, *2012*(1), 35-41.	Journal Article		No Access				14	
Firester, D. (2011). Failure to adapt; Intelligence Failure and Military Failure as Functions of Strategic Failure?.	Journal Article	Qual- Multiple Case	"This paper asserts that there is reason to believe that certain causal elements of alleged intelligence failures reside more so in the province of politics, than in the collection and analysis domain of intelligence tradecraft. This is not to say that failures are exclusively of a political nature, but that looking at politics and the relationship of policymakers to the Intelligence Community yields a preponderance of causal evidence." (p.4). Intelligence failure and Military failure both share Zegart's adaptation failure concept.	Mix- Pol*, Org, Cog, Process	Iran Revolution, Iraq WMD	Over 20	4	H
Sloan, G. (2013). The British state and the Irish rebellion of 1916: An intelligence failure or a failure of response?. *Intelligence and National Security*, *28*(4), 453-494.			T&F Sample					
Barnea, A. (2011). Financial Crisis as an Intelligence failure. *Competitive Intelligence Magazine*, *14*(2), 27-33.	Journal Article	Qual- Case Study	"Failure in human judgement, failure in coordination and sharing of information, failure at the senior executive level, failure of looking over the aggregation of threats" (p.65)	Mix- Pol, Org, Business Leadership, Business Org, Cog, Process	Yom Kippur War, Pearl Harbor, 9/11, Iraq WMD, Financial Crisis (2008)	17	3	M

Wirtz, J. J. (2016). *Understanding Intelligence Failure: Warning, Response and Deterrence* . Taylor & Francis.	Book	Qual- Multiple Case Study	" Indeed, it might be useful to think of intelligence failure, strategic surprise and deterrence failure as three phases of a single phenomenon Intelligence failure and surprise attack generate an immediate strategic defeat for the victim because they literally destroy the victim's national defense strategy. Surprise creates unnecessary wars, wars that should have been avoided because a credible deterrent had been created by the side victimized by surprise. Paradoxically, as the theory of surprise will demonstrate, it is the very existence of a significant asymmetry in military capability that sets the stage for surprise to occur." (p.2)	Mix- Pol, Org, Cog, Threat	Pearl Harbor, 9/11, Kargil Crisis, Vietnam War Estimates	over 20	4	H
Dahl, E. J. (2020). Was the coronavirus outbreak an intelligence failure?.			No explicit definition provided					
Lillbacka, R. (2019). The Finnish Intelligence Failure on the Karelian Isthmus in 1944. *The International Journal of Intelligence, Security, and Public Affairs* , *21* (1), 25-48.			T&F Sample					
Lord, A. (2012). Intelligence Failure or Paralysis?. *Jewish Political Studies Review* , 52-64.			JSTOR Sample					
Haynes, J. M. (2009). *Intelligence Failure in Korea: Major General Charles A. Willoughby's Role in the United Nations Command's Defeat in November 1950* . ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS.			No definition					
Dalong, W. (2011). Research in Intelligence Failure Due to Intelligence Decision Maker's Irrational Decision [J]. *Journal of Modern Information* , *8* .			No Access					
Ostergard Jr, R. L. (2020). The West Africa Ebola outbreak (2014-2016): a health intelligence failure?. *Intelligence and National Security* , *35* (4), 477-492.			T&F Sample					
Phythian, M. (2017). Intelligence Failure as a Mutually Reinforcing Politico-Intelligence Dynamic: The Chilcot Report and the Nature of the Iraq WMD Intelligence Failure. *British Yearbook of International Law* , *87* (1), 196-215.	Journal Article	Qual-Case Study	No explicit definition provided				2	*** (does provide various ways intelligence failures are approached.**
Lasoen, K. L. (2018). Two ancient intelligence failure post-mortems. *Comparative Strategy* , *37* (5), 430-441.			T&F Sample					
Zenko, M. (2020). The coronavirus is the worst intelligence failure in US history. *Foreign Policy* , *25* (03).	Citation		N/A					
Conway, P. (2012). Red Team: How the Neoconservatives Helped Cause the Iraq Intelligence Failure. *Intelligence and National Security* , *27* (4), 488-512.			T&F Sample					
Fleisher, C. S., & Wright, S. (2010). Competitive Intelligence analysis failure: diagnosing individual level causes and implementing organisational level remedies. *Journal of Strategic Marketing* , *18* (7), 553-572.	Journal Article	Qual-Theoretical	"Intelligence failures are distinguishable from more task-oriented intelligence errors, which are viewed as factual inaccuracies in analysis, resulting from poor and/or missing data. Intelligence failure is defined by Johnston (2005, p. 6) as 'systemic organizational surprise resulting from incorrect, missing, discarded, or inadequate hypotheses'. These failures may be due, in part, to failed analysis, but they can also be caused by other factors that interact with the CI analysis process." (p.554)	Mix-Pol, Org, Cog		Over 20	30	H
ZHAO, X. K., & DONG, Y. (2009). Theoretical Study on the Intelligence Failure [J]. *Information Science* , *8* .			No Access					
Johnson, J., Lakhan, R., Lecci, L., Dovidio, J. F., & Schellhaas, F. M. (2020). Trait Emotional intelligence moderates the impact of failure feedback: Out-group derogation in Fiji. *Social Psychological and Personality Science* , *11* (7), 975-982.			Not Relevant					
Hammond, J. (2012). „The Lies that Led to the Iraq War and the Persistent Myth of 'Intelligence Failure'". *Foreign Policy* .	Journal Article		No explicit definition provided					
Arve, S. (2020). Learning the lesson of an intelligence failure?. *Kungl Krigsvetenskapsakademiens Handlingar och Tidskrift* , (4), 123-125.	Journal Article	Qual-Theoretical	No explicit definition provided					
Goldman, J. (2011). Epistemology of Forecasting in International Relations: Knowing the Difference between 'Intelligence Failure'and 'Warning Failure'. In *Forecasting, Warning and Responding to Transnational Risks* (pp. 33-46). Palgrave Macmillan, London.	Book		No Access					
Norman, A. (2020). Organizational failure and intelligence: A framework for understanding intelligence failure.	Journal Article	Qual- Case Study	"frequently has dramatic and devastating consequences: Failing to prevent terrorist attacks, not being able to identify an impending attack, the inability to predict the collapse of a state, of the iron curtain, the outbreak of a civil war." (p.1)	Mix: Pol, *Org, Cog	Operation Barbarossa, 9/11, Yom Kippur War	14	0	M

Barnea, A. (2017). The Assassination of a Prime Minister–The Intelligence Failure that Failed to Prevent the Murder of Yitzhak Rabin. *The International Journal of Intelligence, Security, and Public Affairs*, *19*(1), 23-43.	Journal Article	Qual- Case Study	T&F Sample					
Khoshnood, A. (2020). The Al-Masri Assassination: Another Iranian Intelligence Failure. *Begin-Sadat Center for Strategic Studies, Perspective Papers*, (1825).	Journal Article	Qual- Case Study	No explicit definition provided					
Marrin, S. (2011). The 9/11 terrorist attacks: A failure of policy not strategic intelligence analysis. *Intelligence and National Security*, *26*(2-3), 182-202.	Journal Article	Qual- Case Study	No explicit definition provided					
Haynes, M. J. M. (2015). *Intelligence Failure In Korea:: Major General Charles A. Willoughby's Role In The United Nations Command's Defeat In November 1950*. Pickle Partners Publishing.	Book		No Access					
Eiran, E. (2020). Dangerous Liaison: The 1973 American intelligence failure and the limits of intelligence cooperation. *Journal of Intelligence History*, *19*(2), 213-228.			T&F Sample					
Dahl, E. J. (2011). Reassessing the Intelligence Failure at Pearl Harbor. In *APSA 2011 Annual Meeting Paper*.	Journal Article	Qual- Case Study	No explicit definition provided					
Ing, E., & FRSA, F. C. F. C. Intelligence–Failure to Accept.			No explicit definition provided					
Thurston, C. Q. (2013). Intelligence Failure Is More Than "Policy Oversell".			JSTOR Sample					
Han, Z. (2020). Strategic culture and intelligence failure: British intelligence on Japan before the Imphal–Kohima battle, 1943–1944. *War in History*, 0968344519898722.	Journal Article	Qual- Case Study	No definition	**Mix- Strategic Culture (Pol, Org)**	Imphal-Kohima b	**Over 20**	0	**M**
Karam, J. G. (2015). Erik J. Dahl, Intelligence and Surprise Attack: Failure and Success from Pearl Harbor to 9/11 and Beyond.	Journal Article	Book Review	No explicit definition provided					
O'Sullivan, A. (2014). *Nazi secret warfare in occupied Persia (Iran): The failure of the German Intelligence Services, 1939-45*. Springer.	Book		No Access					
Xiaokang, Z. (2010). Research on Intelligence Oversight Which Leads to Decision Failure: Decomposition of Causes & Empirical Model [J]. *Information Studies: Theory & Application*, *9*.			No Access					
Rao-Chakravorti, T. (2018). *Strategies and responses to intelligence failure: an organizational view* (Doctoral dissertation, Massachusetts Institute of Technology).	Doctoral Thesis	Qual- Theoretical/Single Case Study	"intelligence failure is a remarkably complex and often idiosyncratic phenomenon, and the scholarly debate mirrors this reality. The lines between strategic and tactical intelligence are often blurred, with unclear applications or groups responsible for the production of each type of intelligence. After reviewing the literature, I conclude that a significant portion of the challenge of intelligence reform lies in the multi-part structure of the intelligence production cycle. Because different scholars are analyzing different points of the cycle, they ultimately arrive at vastly different conclusions about the causes of intelligence failure and what constitutes best practices. " (p.14)	**Mix- Strategic, Tactical, Pol, Org*, Cog**	**9/11**	**Over 20**	0	**H**
Dahlin, R. A. (2009). *Intelligence Failure: How a Commander Can Prevent It*. NAVAL WAR COLL NEWPORT RI JOINT MILITARY OPERATIONS DEPT.			No definition					
Peterecz, Z. (2012). Sparrow Mission: A US Intelligence Failure during World War II. *Intelligence and National Security*, *27*(2), 241-260.			T&F Sample					
석혜민. (2017). Intelligence Cycle and Intelligence Failure.	Citation		N/A					
Røssaak, M. K. (2017). Searching for Weapons of Mass Destruction: US Intelligence Failure in the 2003 Invasion of Iraq. *Essex Student Journal*, *9*(1).	Essay	Qual-Single Case Study	"Intelligence failure can occur when a state fails in collecting or analysing information, national leaders fail to make sound policy on the disseminated intelligence or fails to act effectively on the information received (Gentry, 2008:249)."	**Mix: *Pol, Org, Cog, Process**	**Iraq WMD**	**19**	0	**M**
Streifer, B., & Sabitov, I. (2013). The Shock of" First Lightning" An Intelligence Failure?. *American Intelligence Journal*, *31*(1), 54-58.			JSTOR Sample					
Cake, T. (2017). America's Alleged Intelligence Failure in the Prelude to Operation Iraqi Freedom: A Study of Analytic Factors.	Thesis	Qual-Single Case Study	No explicit definition provided					
WEI, T. J. (2019). A HISTORIOGRAPHY OF INTELLIGENCE FAILURE AND ACCOUNTABILITY IN THE YOM KIPPUR WAR: 1973-2019.			No Access					
Giannoulis, A. (2011). Intelligence Failure and the Importance of Strategic Foresight to the Preservation of National Security.			No explicit definition provided					

Muralidharan, S. (2013). Intelligence Failure or Design?: Karkare, Kamte and the Campaign for 26/11 Truth. *History and Sociology of South Asia* , *7* (2), 177-201.			No explicit definition provided					
Nokov, S. N. (2012). *The Problem of Intelligence Failure: The Case of the Yom Kippu War (1973)* (Doctoral dissertation, Aberystwyth University.).	Master's Thesis	Qual-Theoretical & Single Case Study	intelligence failure equals, "the inability of one or more parts of the intelligence process- collection, evaluation and analysis, production, dissemination to produce timely, accurate intelligence on an issues or event of importance to national interest,"7 is maintained by multifarious, endemic and very often, self-reinforcing, analytical obstacles, which hinder or distort the analytical accuracy and clarity of the intelligence process, and erode the warning-response process. As Jackson has noted, it is feasible "…to consider the permanent challenges to effective intelligence…in terms of interdependent categories of limitations linked directly to the nature of intelligence as element of politics."8 From this perspective, it is appears logical to foster the deduction that, "intelligence failures are rarely unidimensional in scope."9 Per contra, as Bar-Joseph and Jack Levy have systematized, "most intelligence failures are the product of the interaction of multiple factors at different levels. These relationships between factors are complex and context dependent…."10" (p.7-8)	Mix: Pol, Org, Cog, Process, Strategic, Operational, Tactical	Barbarossa (1941), Pearl Harbor, Korean War (1950), Tet Offensive, Yom Kippur War, Iraq WMD	Over 20	0	H
HAO, M. S. Z. (2020). WHEN AT FIRST YOU DON'T SUCCEED: THE ROLE OF CHOICE IN IMPLICIT THEORIES OF INTELLIGENCE, FAILURE, AND GIVING UP.			No Access			over 20		
Ozkan, O. (2013). *A law enforcement perspective to intelligence failure in mass casualty terrorist attacks by global jihadist movements: a comparative study of terrorist attacks of September 11, 2001 and November 15-20, 2003* (Doctoral dissertation, Rutgers University-Graduate School-Newark).	Doctoral Thesis	Qual-Multiple Case Study	"Intelligence failure can be defined as the inability of intelligence community as well as policymakers to anticipate or prevent incidents that result in unexpected and undesired consequences." (p.1)	Mix: Pol, Org, Process, Threat	Barbarossa, Pearl Harbor, Yom Kippur War, 9/11, Iraq WMD, Istanbul Attacks (2003)	over 20	1	H
Wirtz, J. J. (2017). The Ultimate Intelligence Pathology: Uri Bar-Joseph and Rose McDermott: Intelligence Success and Failure: The Human Factor Oxford University Press, New York, 2017, 248 p, 99.(cloth), 27.95.	Journal Article	Book Review	No explicit definition provided					
Clark, R. W. (2013). Constructing Cassandra: Reframing Intelligence Failure at the CIA, 1947-2001. *Parameters* , *43* (4), 153-156.			No Access					
Charters, D. (2016). Constructing Cassandra: reframing intelligence failure at the CIA, 1947–2001.			T&F Sample					
Gustafson, K. (2019). Intelligence success and failure: the human factor.			No definition					
Amaraegbu, D. A. (2013). Failure of human intelligence, Boko Haram and terrorism in Nigeria. *Journal of Sustainable Development in Africa* , *15* (4), 66-85.			No definition					
de Graaff, B., & Wiebes, C. (2014). Was Srebrenica an Intelligence Failure?. *The Role of Intelligence in Ending the War in Bosnia in 1995* , 149.			No Access					
Nte, N. D., Lucas, O. N., & Featherston, C. (2020). COVID 19, Global Intelligence Failure and Resilient China: Who holds all the Aces?. *Progressive Research Journal of Arts & Humanities (PRJAH)* , *2* (1), 1-20.			No Access					
Rezk, D. (2017). Re-evaluating the Yom Kippur 'Intelligence Failure': The Cultural Lens in Crisis. *The International History Review* , *39* (3), 470-495.			T&F Sample					
Pelucchi, S. (2015). Intelligence failure and the war in Iraq: a cognitive narration.			No Access					
Spinder, S. (2016). The Intelligence Failure of the Yom Kippur War of 1973. *Armstrong Undergraduate Journal of History* , *6* (1), 36-54.			No definition					
Wilkinson, M. (2015). Nerve agent development: a lesson in intelligence failure?. *Journal of Intelligence History* , *14* (2), 96-111.			T&F Sample					
O'Toole, M. (2009). Israel's Foreign Policy and its Intelligence Failure in 1973. *Mapping Politics* , *1* , 39-43.			No definition					
Jervis, R. (2010). 3. The Iraq WMD Intelligence Failure: What Everyone Knows Is Wrong. In *Why Intelligence Fails* (pp. 123-155). Cornell University Press.	Book	Book Chapter-Case Study	No definition					
Dahl, E. J. (2010). The Role of Focusing Events in Determining Intelligence Success and Failure (DRAFT).			No definition					

Hoover, D. L. (2013). A failure of imagination in the US intelligence community. *American Intelligence Journal*, *31*(1), 59-71.			No definition					
Maru, C., Enoki, M., Nakao, A., Yamamoto, S., Yamaguchi, S., & Oguchi, M. (2016, July). Development of failure detection system for network control using collective intelligence of social networking service in large-scale disasters. In *Proceedings of the 27th ACM Conference on Hypertext and Social Media* (pp. 267-272).			No definition					
Nutt, C. G. (2019). Proof of the Bomb: The Influence of Previous Failure on Intelligence Judgments of Nuclear Programs. *Security Studies*, *28*(2), 321-359.	Journal Article	Qual-Comparative Case Study	"An intelligence failure is an instance in which the intelligence community errs. This can be a failure of commission or omission; purported facts prove untrue (that is, a false positive) or gathering threats go unseen (that is, a false negative)." (p.328)	Mix: Org, Cog (Judgement Variation)	9/11, Iraq WMD, Libyan Nuclear Program, Syrian Nuclear Program	Over 20	0	H
Trachtenberg, M. (2018). Assessing Soviet Economic Performance During the Cold War: A Failure of Intelligence?(February 2018). *Texas National Security Review*.			No definition					
Cadbury, M. J., Mattis, P., Sluijter, G. C., & Curran, M. M. (2017). Pearl Harbor: Intelligence, psychology and command failure. *Journal of Intelligence and Terrorism Studies*, *2*.			No definition					
F			No definition					
Goodwin, B. (2011). Poor communication to blame for business intelligence failure, says Gartner. *Computer Weekly. Retrieved from https://www. computerweekly. com/news/1280094776/Poor-communicationto-blame-for-business-intelligence-failure-says-Gartner*.	Citation		N/A					
Breslow, J. M. (2016). Colin Powell: UN Speech "Was a Great Intelligence Failure". *Frontline, PBS. org*.	Citation		N/A					
Piacine, L. C. R. F. (2016). *Pearl Harbor: Failure of Intelligence?*. Pickle Partners Publishing.	Book		No Access					
Onuoha, F. C. (2010). The 9/7 Boko Haram attack on Bauchi prison: A case of intelligence failure. *Peace and Conflict Monitor*, *2*.	Citation		N/A					
Taylor, P. (2013). Iraq war: the greatest intelligence failure in living memory. *The Telegraph*, *18*.	Citation		N/A					
Glees, A. (2011). 9/11: an intelligence failure and its consequences. *LSE Global War on Terror Blog*.			No definition					
Khosravi, A. (2011). Politicization of intelligence: from dis-identification of intelligence to failure of political regime. *Strategic Studies Quarterly*, *14*(53), 69-102.	Citation		N/A					
Camilli, E. (2015). The Paris attacks. A case of intelligence failure. *NATO Review*.	Citation		N/A					
Wirtz, J. J., & Rana, S. (2009). Surprise at the top of the world: India's systemic and intelligence failure. *Asymmetric warfare in South Asia: The causes and consequences of the Kargil conflict*, 215-19.	Citation		N/A					
Burr, W., & Savranskaya, S. (Eds.). (2009). *Previously Classified Interviews with Former Soviet Officials Reveal US Strategic Intelligence Failure Over Decades: 1995 Contractor Study Finds that US Analysts Exaggerated Soviet Aggressiveness and Understated Moscow's Fears of a US First Strike*. National Security Archive.	Citation		N/A					
Xiujuan, Y. B. C. (2012). Factors Analysis of Individual Cognitive Biases in Intelligence Failure [J]. *Journal of Intelligence*, *9*.			No Access					
Baches, D., & Torresi, E. T. B. (2018). Intelligence Studies: An Ironic Tale of Politicization, Failure of Imagination, Lack of Collaboration and Exclusion.			No definition					
Hajiani, E. (2011). Warning: function of intelligence analysis in prevention of failure.			No Access					

Gallagher, R. (2016). Facing data deluge, secret UK spying report warned of intelligence failure. *The Intercept*, *7* (06).	Citation		N/A					
Hatch, S. J. (2013). Managing the "Reliability Cycle": An Alternative Approach to Thinking About Intelligence Failure. *Studies in Intelligence*, *57* (2), 29-37.	Citation		N/A					
Masárová, G., & Štefániková, Ľ. (2015). THE REASONS FOR FAILURE OF COMPETITIVE INTELLIGENCE SYSTEMS. In *SOCIO-ECONOMIC ASPECTSOF ECONOMICS AND MANAGEMENT* (pp. 329-333).			No Access					
Karam, J. G. (2016). *US Intelligence in the Middle East: Lessons of Failure and Success in 1958*. Brandeis University.	Book		No Access					
Kessler, G. (2019). The Iraq War and WMDs: An intelligence failure or White House spin?. *Washington Post*.	Citation		N/A					
Landler, M., & Sang-Hun, C. (2011). In Kim's Death, an Extensive Intelligence Failure. *New York Times*, A1.	Citation		N/A					
Riedel, B. (2017). Enigma: The anatomy of Israel's intelligence failure almost 45 years ago. *Brookings Institution*, *25*.	Citation		N/A					
Neriah, J. (2011). An Iranian intelligence failure: Arms ship in Nigeria reveals Iran's penetration of West Africa. *Jerusalem Issue Brief*, *10* (35), 1-8.	Citation		N/A					
Thomson, J. W. H. (2015). *Prolegomenon to a Political Economy of Intelligence and Security: Can Microeconomic Analysis Explain Success or Failure in Intelligence Cooperation?* (Doctoral dissertation, Brunel University London).	Doctoral Thesis		No definition					
Lee, J. H., & Lee, K. Y. (2011). A Case Study on the Korean Intelligence Failure: Focused on the Case of the Second Battle of Yeonpyeong. *IIAS Research Series*, *10*.	Citation		N/A					
Joshi, S. (2015). Charlie Hebdo attack: A French intelligence failure. *BBC News*, *10*.	Citation		N/A					
Priest, D. (2017). Russia's election meddling is another American intelligence failure. *The New Yorker*.	Citation		N/A					
Glasser, S. B. (2017). Ex-Spy Chief: Russia's Election Hacking Was An 'Intelligence Failure,'. *Politico Magazine*.	Citation		N/A					
Giannoulis, A. (2011). RIEAS Research Paper: Intelligence Failure and the importance of Strategic Forthsight to the preservation of National Security, no: 155.	Citation		N/A					
Goodwin, B. (2019). Poor communication to blame for business intelligence failure, says Gartner. 2011. *January.[Electronic Version](Accessed 20 January, 2018) Available: http://www. computerweekly. com/news/1280094776*	Citation		N/A					
Milo, J., & Silberzahn, P. (2013). Constructing Cassandra, Reframing Intelligence Failure at the CIA, 1947–2001.	Citation		N/A					
Blanton, T. (2012). CIA Analysis Acknowledges Intelligence Failure on Iraq's WMDs. *National Security Archive. Retrieved September*, *5*.	Citation		N/A					
Dahl, E. J. (2018). Not Your Father's Intelligence Failure: Why the Intelligence Community Failed to Anticipate the Rise of ISIL. *Unpublished book*.	Citation		N/A					
Levin, M. (2010). Diego Guzmain de Silva and Sixteenth-Century Venice: A Case Study in Structural Intelligence Failure.	Citation		N/A					
Reidel, B. (2017). Enigma: The Anatomy of Israel's Intelligence Failure Almost 45 Years Ago', Brookings Report, 25 September, Washington: Brookings Institution.	Citation		N/A					
Goodwin, B. (2011). Poor communication to blame for business intelligence failure. ComputerWeekly. *Retrieved February*, *24*, 2016.	Citation		N/A					

Otto, D. (2009). 9/11–Could they have known? How helpful or accurate is it to describe September 11 as an intelligence failure?". *Wissenschaft und Sicherheit*, *3*.	Citation		N/A					
Fazackerley, C. (2010). *The Collapse of the Soviet Union: A Colossal Intelligence Failure?*. VDM Publishing.	Citation		N/A					
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Sinai, J. (2019). Fool Me Twice: Intelligence Failure and Mass Casualty Terrorism.	Citation		N/A					
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Brunson, D. (2011). *2003 Iraq War: intelligence or political failure?* (Doctoral dissertation, Georgetown University).	Doctoral Thesis	Qual- Case Study	"Recall that intelligence failures occur when intelligence fails to provide warning.63" (p.15)	Politicization	Pearl Harbor, 9/11, Iraq WMD	Over 20	0	M
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Muchransyah, A. P. (2013). Keberhasilan intelijen pada operation neptune spear: sebuah komparasi dengan kasus kegagalan intelijen 9/11 dan WMD Irak= The intelligence success of operation neptune spear: a comparison with the intelligence failure cases of 9/11 and Iraq's WMD.			No Access					
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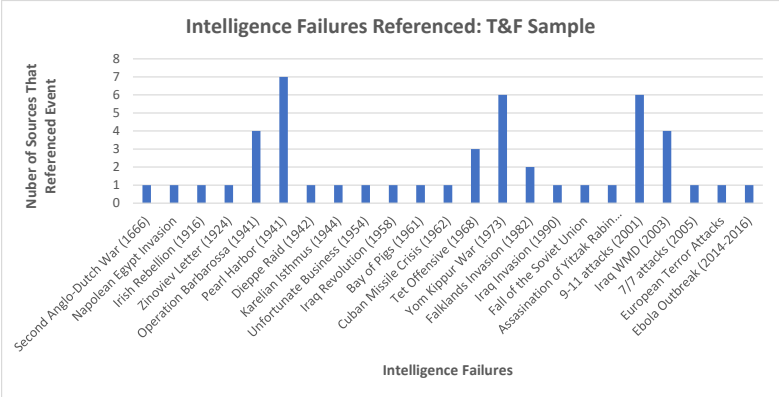
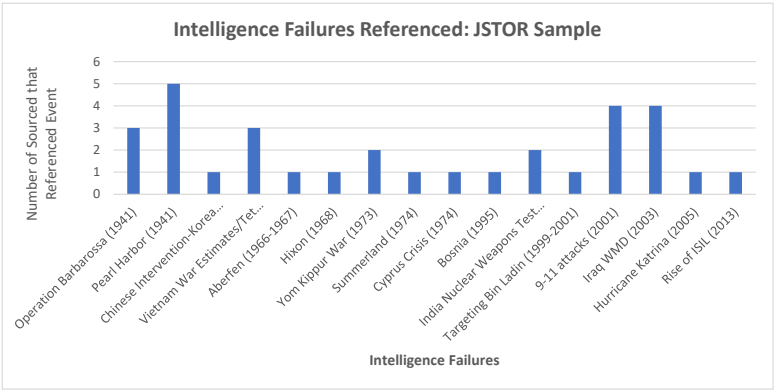
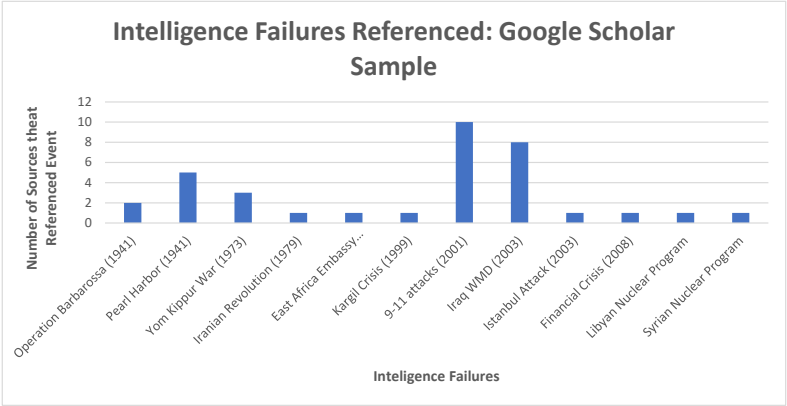
Appendix D: Intelligence Failures Referenced	
Taylor & Francis	
Intelligence Failure	**Times Referenced**
Second Anglo-Dutch War (1666)	1
Napolean Egypt Invasion	1
Irish Rebellion (1916)	1
Zinoviev Letter (1924)	1
Operation Barbarossa (1941)	4
Pearl Harbor (1941)	7
Dieppe Raid (1942)	1
Karelian Isthmus (1944)	1
Unfortunate Business (1954)	1
Iraq Revolution (1958)	1
Bay of Pigs (1961)	1
Cuban Missile Crisis (1962)	1
Tet Offensive (1968)	3
Yom Kippur War (1973)	6
Falklands Invasion (1982)	2
Iraq Invasion (1990)	1
Fall of the Soviet Union	1
Assasination of Yitzak Rabin (1994)	1
9-11 attacks (2001)	6
Iraq WMD (2003)	4
7/7 attacks (2005)	1
European Terror Attacks	1
Ebola Outbreak (2014-2016)	1



Taylor & Francis	
Intelligence Failure	**Times Referenced**
Operation Barbarossa (1941)	3
Pearl Harbor (1941)	5
Chinese Intervention-Korea (1950)	1
Vietnam War Estimates/Tet Offensive	3
Aberfen (1966-1967)	1
Hixon (1968)	1
Yom Kippur War (1973)	2
Summerland (1974)	1
Cyprus Crisis (1974)	1
Bosnia (1995)	1
India Nuclear Weapons Test (1998)	2
Targeting Bin Ladin (1999-2001)	1
9-11 attacks (2001)	4
Iraq WMD (2003)	4
Hurricane Katrina (2005)	1
Rise of ISIL (2013)	1



Google Scholar	
Intelligence Failure	**Times Referenced**
Operation Barbarossa (1941)	2
Pearl Harbor (1941)	5
Yom Kippur War (1973)	3
Iranian Revolution (1979)	1
East Africa Embassy Bombings (1998)	1
Kargil Crisis (1999)	1
9-11 attacks (2001)	10
Iraq WMD (2003)	8
Istanbul Attack (2003)	1
Financial Crisis (2008)	1
Libyan Nuclear Program	1
Syrian Nuclear Program	1



Curriculum Vita

Gabriel I. Koshinsky was born in Cleveland, OH. Gabriel Koshinsky is an active-component Army Captain who holds a Bachelor of Arts in Philosophy at Capital University where he graduated Magna Cum Laude and was a selected as the Distinguished Military Graduate of the Capital University Army ROTC. He commissioned as an Armor officer in 2011. In 2016, he graduated with a Master of Science in Organizational Leadership at Columbus State University. He was inducted into the Beta Gamma Sigma International Honor Society for Collegiate Schools of Business. In March 2021, he presented to the first DoD Threat Lab Counter-Insider Threat Student Symposium with his paper titled *Intelligence Failure: The Puzzle of Robert Hanssen*. He has served as an Army officer in varying capacities through the last 10 years. These positions ranged from Scout Platoon Leader, Troop Executive Officer, Squadron Logistics Officer (S4), Brigade Deputy Operations Officer, and as an Armor Company Commander. He began the Intelligence and National Security Studies master's program at the University of Texas at El Paso (UTEP) in 2019.

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