The effects pets have on humans social, physical, mental health. ● At least 10 references are cited, 3 of which must be from peer-reviewed journals. ● Follows APA style (includes spelling, grammar, bibliography) ● At least 2000 words in length The purpose/necessary learning objective of this assignment: analysis. You will be mastering scientific method in order to analyze a scientific topic. Your task is to choose a scientific topic and analyze the case study with the following necessary components labeled as “sections” in your literature review: 1. In the “Introduction” section you are to introduce the topic—specifically the hypothesis: ● Hypothesis: Discuss a question that can be solved through investigation or review of current literature (This is not your original research.) You must state the question in the form of a hypothesis. You can choose any topic that is in the realm of scientific peer-reviewed literature. Topics can also be from interdisciplinary peer-reviewed sources. ● Objectives: List objectives that you will address within your literature review. This means that you will map out all of the avenues that you will cover within the subsequent sections and list exactly in what sections you will cover them. These objectives are schematically provided for you in what follows. However, don’t just state: I will talk about the ‘methods’. State, very compactly, 2.a-e. The difficulty in these types of projects is how to express something precisely. 2. In the “Methods” section you are to describe your search process and the rational/criterion for selection of references for inclusion. This means that you will: ● Information Sources: Describe the processes/search engines that you used to search your topic (e.g., google scholar, open source catalogues, databases etc.). ● Source types: Describe the particular sources that you are searching (e.g. books, journals, secondary literature etc.) ● Revisions: Related to “a” and “b”, describe how you formulated your search (e.g. keywords, filters, etc.); and, more importantly, how you revised your search along the way after encountering potential limitations. ● Criterion: Describe the search criterion you used. ● Method of inclusion/exclusion: Describe how you limited the search as well as how certain sources were included and why others were excluded. Here, it is important to address what articles and authors could have been excluded and why. I encourage you to be as inclusive as possible in your search. Academia itself has many systemic biases that need to be uncovered and changed. Certain research projects do not receive funding based on these system biases. Point out these biases and describe how you sought out sources that addressed the biases. Remember, I’m not looking for the right answer on some research project, rather, I’m looking for how you analyze and navigate; and part of that is understanding the inherent biases in certain journals. 3. In the “Results” section you are to synthesize/amalgamate the evidence for the hypothesis by structuring the following: ● Synthesis of information: Synthesize, structure, and analytically summarize the content of reviewed literature. That is, how can we combine all of the various analyses from various sources into one cohesive story? You will have to develop the narrative for that story by organizing the various sources of information and then tracing the story through the sources. I’d recommend attempting to find common variables or parameters between your sources. That is, study 1 and study 2 both focus on Alzheimer oligomer formation and produce the same results, even though the methods differ in the following respect. Here, ‘oligomer formation’ is the variable, the similarity of result is the value of the variable, and the different methods are the experimental or lab setups that are behind the results. The art of analysis in this section will be about organizing and synthesizing the information, and finding a precise thread that can be traced through the information. However, if you have conflicting information, that is good. Scientific method requires disagreement. So, if your story has contradictions, gaps, etc. that will make for a good section 3c as well as 4b. ● Evaluate information: Review and evaluate at least 3 reference sources on their strengths and weaknesses based on at least 2 of the "elements of believability and robustness" and also based on what we learned about criticizing prospective, retrospective, and randomized experimental designs. Here you mustmakesuretoarguewhyyouare designatingaparticularstrengthorweakness.Thatis,explainthe criteria that you are using for your evaluation and why you have chosen it. c. Conflicting information: Describe areas of conflicting views/results or investigations. That is, are there conflicting methods or results between these various sources of information? Here, you do not have to make conclusions about why these conflicts exist or what to do with them. (You will analyze these conflicting results in the next section.) 4. Think of this section as adding an extra layer of interpretation on to the “Results” section. In the “Discussion” section you are to analyze and explain the results and draw your own conclusion about whatis confirmed,disconfirmed,inconflict,etc.: Note: This section should be as long or longer than Section 3 in order to show proper analysis: ● Conclude: Given the information in the “Results” section, draw a clear conclusion in support of (confirmation) or in rejecting (disconfirmation) the hypothesis. i. Provide particular reasons for your conclusion. ii. Draw on specific pieces of information form the “Results” section to make your conclusion. What information is the confirmation based on? Draw upon your organized results in order to explain how your method of confirmation/disconfirmation works. ● Gaps in information: Discuss gaps in existing literature and suggests areas of possible future/expanded research based off of gaps in the existing literature. Make sure to: i. Describe what the gaps are. For instance, in Alzheimer’s research, decades were devoted to analyzing plaque formation and biomarker measurements, as well as drug interventions that addressed specific plaque mechanisms. The detail does not matter—although we will be discussing it. What matters is that a massive gap was there: could infectious disease cause the plaque-ing? Genetic causes that focused on inflammation mechanisms were sought out. But a research team that was focused on viral causes was fully being shut out of academia. They were refused funding and were being blocked from main journals. Guess who had info to fill in the gap? Now this research team has revolutionized the way that we think about causes for Alzheimer’s oligomer formation. ii. Suggest new methods and approaches to closing these research gaps. What can scientists do? That is, what new methodologies can they explore? Can they make the prospective designs into RED designs? Should they? This gets us into an important normative part of the discussion: What do scientists have a normative duty to do? This may seem strange— isn’t science about lab and experimental work?—but think about science for the benefit of society in general. Scientific method is beyond the lab and clinical setting. It is about understanding the complex causal pathways that influence our local communities and our larger Earth ecosystem. For example: Think about the role of care and empathy in a clinical setting that expands the current focus of hospitals on “well-being”. Think about the current COVID-19 pandemic. Do scientists have a duty to apply for funding for research projects that detail systemic social inequalities and biases and COVID-19? We are not dealing with a virus in the lab; we are dealing with a virus in various social contexts that provide causal pathways. Research can and should inform policy about things that need to change. So, think of normative suggestions that your project can address. ● Perspective: Conclude your paper by describing the benefit/advancement of your paper. You’ve just done a thorough and very difficult project. Talk about its importance. Additionally, make applications or recommendations for the utilization of this information.