

**MORAL DISTRESS THERMOMETER**  
**SOCIAL CONTEMPT TOWARD NURSING AS A PROFESSION**

A Thesis Prospectus  
In STS 4500  
Presented to  
The Faculty of the  
School of Engineering and Applied Science  
University of Virginia  
In Partial Fulfillment of the Requirements for the Degree  
Bachelor of Science in Biomedical Engineering

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November 1, 2021

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Moral distress is a complex problem that occurs when person is unable to act in a correct manner according to their internal code of ethics due to institutional level parameters (Morley, 2018). This condition is most commonly found in healthcare workers, and even more specifically nurses. Due to their role in hospitals, nurses are frequently placed in moral dilemmas to which their position in the institutional hierarchy does not allow them to act in lines with their values (Burston & Tuckett, 2013). The accumulation of morally distressing events is met with nearly zero outlets, as hospitals rarely have units designed to handle such cases. Left unabated, these problems affect patient care and increase the already expanding burnout rates plaguing the United States (Jacobs, 2021).

These issues will be addressed through a tightly coupled technical and STS project presented in this report. The technical project will focus on the software development of a mobile device app. This app will serve as a point of contact between nurses and higher-level hospital staff, as well as provide strategies to alleviate problems associated with moral distress. In a world built around communication, speaking out about mental health often creates a negative portrayal of the speaker to their peers (Stuart, 2006). The anonymity that is supported through the app will help to increase the number of reports, and ensure a healthy workplace environment. The STS project will focus on aspects of societal influence on a nurse's mental health. Since nurses are especially susceptible for moral distress, it is important to understand their role in society. How they are portrayed through media, as well as their position in hospital hierarchies, cultivate a stigma that encourages their continued neglect. It is difficult to work confidently when moral distress is exacerbated, due to your profession being received with a negative connotation from society (Hayes, 2019). This paired research project will both increase outlets and resources for nurses, while making more apparent a stigma that is detrimental to our healthcare system. The

work for this project will be completed through the fall 2021 semester and the spring 2022 semester. The project will work on a timeline according to the chart depicted in figure 1.

### Gantt Chart UVA Moral Distress: Fall 2021 – Spring 2022

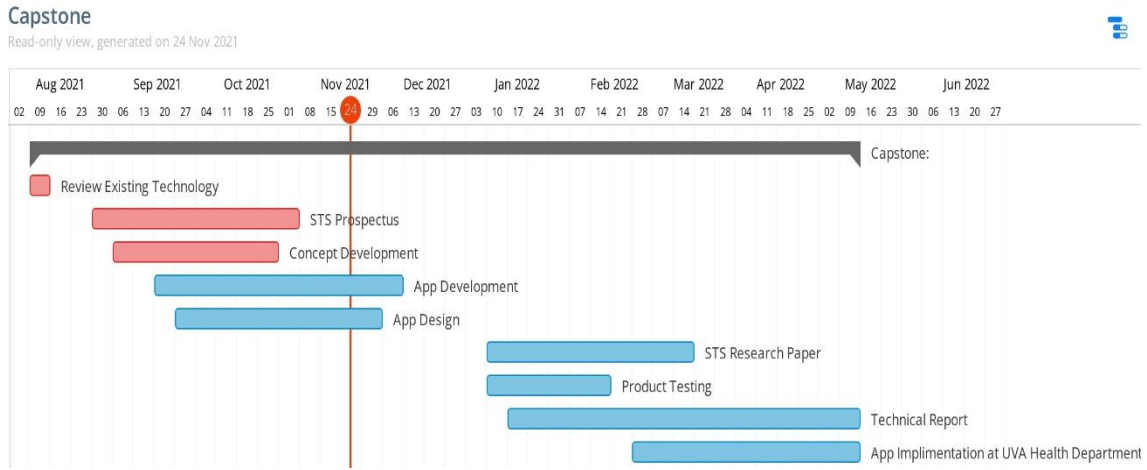


Figure 1: Gantt Chart UVA Moral Distress: Fall 2021 – Spring 2022: This picture shows what projects will be completed and by when they will be finished. (Miroulis, 2021)

### MORAL DISTRESS THERMOMETER

Nurses are experiencing rapidly increasing burnout rates all across the country (Haddad et al., 2021). The effects of COVID-19 only exacerbated the problem as hospitals are constantly at capacity or turning away patients with less than life threatening needs. Hospitals are unable to support themselves financially and are forced to close all while healthcare frustration rises due to public misconception and political negligence (Jacobs, 2021). All of these problems are placed into the hands of both physicians and nurses. Nurses work tirelessly in some of the most highly demanding environments, and are reaching burnout stages at much earlier points in their careers (Gutsan et al., 2021). Nurses specifically, because of their role in healthcare, are faced with problems such as the prioritization of care, and inability to properly care for each patient. These problems account for significant increases in moral distress, and without the ability to seek support, cascade into a cycle of further decrease in quality of care. The current understanding of

overworked and morally limited nurses is that the hospital mortality rate increases by 7 percent per each patient above 4 assigned to 1 nurse (Gutsan et al., 2021). The only option left is to drop out and switch careers, which is unsustainable in a field that is already projected to experience serious shortages by 2034 (Renfrow, 2021). In order to reduce burnout and increase patient care, nurses need a system in which they can report their emotional states, and receive proper help. Moral distress is especially notorious for having a lack of support services, which is why this app will be targeted toward helping solve ethical dilemmas and the associated problems (Epstein & Delgado, 2010).

To be able to rate the severity of moral distress, a literature review on the accuracy of moral distress thermometers was referenced (Giannetta et al., 2020). The thermometer, as seen in figure 2, acts as a scale for nurses to self-rate their distress, and is accompanied by a survey detailing the reason for their distress.

The team consists of Vanessa Amos, a critical care nurse at the University of Virginia; Beth Epstein, a PhD in nursing as well as a recognized researcher in the implications behind moral distress; Lucia Wocial, a PhD in nursing as well as a developer of a moral distress thermometer; Kevin Sullivan, a PhD in computer science; Nick Phair, a candidate for PhD in computer science; Taylor Brooks, an undergraduate in biomedical engineering; and Keegan Pezzella, an undergraduate in biomedical

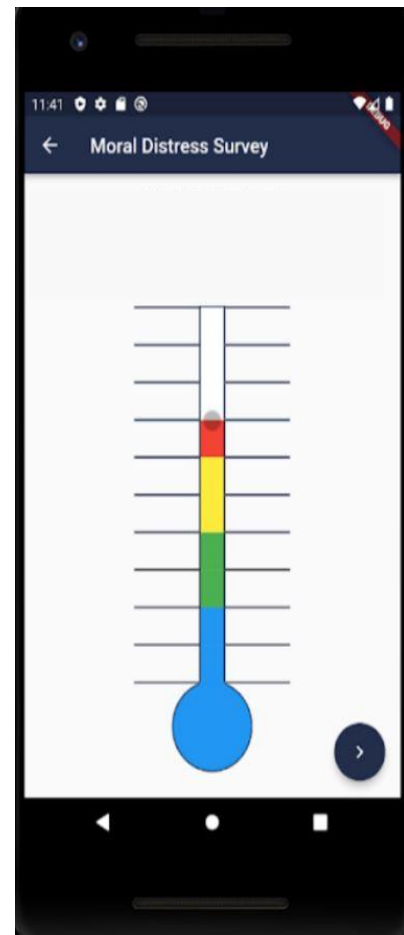


Figure 2: Moral distress thermometer: The thermometer depicted is the current status of the app and has a slider that can be controlled in order to declare severity (Miroulis, 2021).

engineering. Working in two groups, one focused on the ethical implications and accuracy of the assessment, and the other focused on the app design and development, is the most effective way to complete the project according to the timeline referenced above. The coding language will be dart, and the app will be uploaded and edited through an online repository that allows branching for multiple programmers to make edits at the same time. This interface was chosen as a high-level platform to ensure successful integration onto both IOS and Android devices. Once the app is completed and the information is accurate at distinguishing between severity of moral distress levels, the app will be given to a small unit in the University of Virginia Health department to test its applicability. The unit will then be given a survey and the appropriate changes will be made to better equip the app for use in the field. The app will be connected to management level employees within the health department in order to monitor levels and make institutional changes in cases of high moral distress within a unit. High level change is something that nurses were previously unable to influence, unless very extreme circumstances were involved. The data will be stored in an online cloud storage site that will process the data, and present the results in a simplistic manner.

The outlined project will be found successful if nursing populations find the app both useful and unrestrictive to the natural flow of their work. This implementation will hopefully result in a long-term reduction of moral distress, which can be monitored through data collected from the app. It should also have an effect in reducing nursing burnout which will be difficult to monitor on a large scale. However, small scale data can be collected on single hospital mortality rate and patient satisfaction to determine the app's efficacy. The project and associated data will be presented in the form of a technical report.

## SOCIAL CONTEMPT TOWARD NURSING AS A PROFESSION

The nursing profession has seen the perpetuation of both stereotypes and societal scrutiny that appear unchanged, even through the modern era of progressivism (Hayes, 2019). The contempt elicited on a societal level can be found from the early role of women as nurses, as well as the portrayal through media outlets (Brennan, 2020). In modern healthcare, nurses face chastisement from multiple sources including, physicians, patients, family members, and management level positions (Godfrey, 2013). The continued aggressions, whether intentional or not, translate to issues that take hold in their work place. Hospitals are already highly stressful environments, and yet they become even more difficult to navigate when paralleled with a lack of confidence and satisfaction. Moral distress can then result if a nurse feels as though they are failing in the duty to provide quality care (Morley, 2018). Per figure 3, the cycle continues if left uninhibited, with nurses performing worse as moral distress increases, leaving the only solution

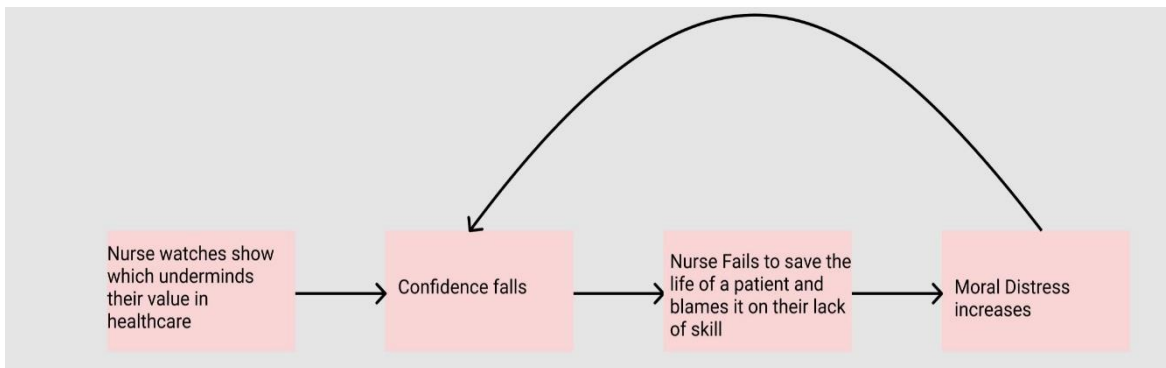


Figure 3: The nursing cycle: This serves as an example to show how society can influence the performance of nurses. The cycle will continue due to the lack of support resources, and the nurse will eventually experience burnout (Miroulis, 2021).

left to switch fields. Not only does this problem increase nursing burnout, but it decreases patient care and further propels the stigma surrounding the nursing profession.

Moral distress is a relatively new concept, only having been perceived as an important problem for past few decades (Fourie, 2017). While there has been much research on the

associated complications, as well as identification of its triggers, there is a relatively low number of intervention tools available. Similarly, current processes only understand the base level of why it occurs; there is little research explaining the implications of societal stigmatization and hierarchal infrastructures that correlate to increased moral distress levels. It is important to isolate the factors that expand and incite the negative consequences associated with moral distress. Facilities can then be established that work to reduce the effects of moral distress, therefore increasing overall patient care. Further generating awareness of the cause-and-effect relationship involved will result in societal and institutional level changes that could break the paradigm of burnout in nursing culture.

To better understand the connections between society and nursing distress, an Actor Network Theory (ANT) should be referenced. Figure 4 depicts the connectedness of different actors, and how each group can affect the technological and societal impacts of the other. Bruno

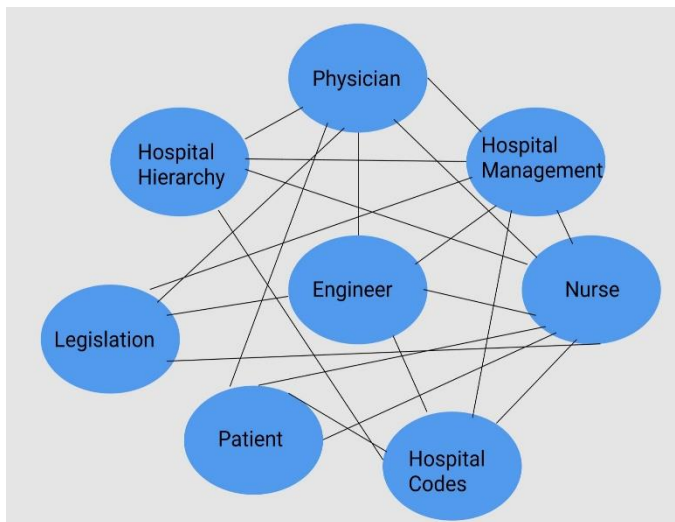


Figure 4: Application of Actor Network Theory: Each group, whether human or non-human, is treated with the same ability to change society and technology (Miroulis, 2021).

Latour, Michel Callon and John Law, the creators of ANT, describe it as a method to create a relationship between factors human or non-human that have power to alter the technological and societal process (Cresswell et al., 2010; Hurtado-de-Mendoza et al., 2015; Law & Callon, 1988). This theory provides reasoning as to why certain technologies or social constructions exist, and gives good

insight into how adding new technology will alter those same factors. ANT is especially good at

creating connections through shifting networks, and explaining how they may change in the future. By applying this to research in moral distress, a network can be created to rationalize the conditions experienced by nurses. It can then be further used to assess what may be the most beneficial process in order to alleviate moral distress through shifting the social presence of nurses in a more positive connotation.

This research will be presented in the form of a scholarly article, with a goal to further the debate on how society influences our healthcare system. By analyzing this view society has on nurses, and understanding what actors are influencing this perception, it is hopeful that the nursing profession will not only see greater confidence levels, but a decrease in moral distress that ultimately correlates to increased patient outcomes. Taking it one step further, this research would spark further debate that results in changes within hospital support services as well as an increase in work satisfaction among nurses.

## **SOCIETY AND TECHNOLOGY**

The technical application coupled with STS research will be able to both identify and solve the problem of moral distress in healthcare. Significant parallels between the two projects allow for ease of transition from theoretical to reality. Changes can be made immediately to the app as research is discovered, allowing for utilization of the most up-to-date processes in reducing moral distress. Further research will create opportunities for expansion of the app to other areas in healthcare in hopes to create better communication and understanding between social groups. It is important to address these problems in healthcare as they will one day affect us all.



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