

Raising Mental Health Awareness to Increase Safety
of Staff in a Private Practice

Folawewo Ajayi

Rutgers, the State University of New Jersey-School of Nursing

DNP Chair: Gerti Heider, PhD, MSN, GNP-BC, ANP

DNP Team Members: Joyce Hyatt, PhD, DNP CNM, FACNM

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ABSTRACT

Workplace violence in healthcare settings may erupt at any time either in an inpatient or outpatient setting. A doctor's private practice is a small healthcare office setting that has largely been overlooked when it comes to workplace violence. During behavioral crisis in such settings, help is limited. The gap identified is how to keep staff safer in a private practice during mental health crisis. The purpose of this project is to use a best practice educational program to educate staff working in a psychiatric/behavioral health private practice. The project will delineate the importance of early awareness of violence to reduce injuries to staff, and ultimate other people at this work site during such crisis. To detect a problem with the mentally ill, requires some knowledge of the disease process. The knowledge to action theoretical framework will be used to guide the development of this project. Mental Health Literacy (MHL) and the Agency for Healthcare Research and Quality (AHRQ)'s Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) will both be employed to develop an educational program for the staff in the selected private practice. TeamSTEPPS is an office-based patient's safety tool. The focus is to teach how situational monitoring and awareness may improve communication and heighten crises recognition in this setting (AHRQ, 2018). Statistics will be used to describe the sample and analysis of variance to evaluate the pretest and posttest. The office staff will be assessed for knowledge, their level of confidence and stigma for mental illness. The expected results will suggest that the training program for the staff in this private practice is effective to positively improve knowledge, increase levels of confidence and decrease stigma.

Keywords: Violence in the workplace, injuries, staff injuries on psychiatric or unit, safety, safety in the physician's office, violence in outpatient setting, mental health literacy.

BACKGROUND AND SIGNIFICANCE

Mental illness and substance use disorder MI/SUD is a phenomenon that is undesirable and may adversely affect those who find themselves in this circumstance. The ability to recognize a psychiatric emergent situation, in accordance with a familiar and specific psychiatric diagnosis is based on understanding of the situation presented, knowing the appropriate evidence-based interaction or techniques to utilize in management of crisis (Crisanti, Li, McFaul, Silverblatt, Pyeatt, & Luo, 2016). Feeling safe is important to healthcare staff, as the expectation of each employee is to return home safe (Isaak, Vashdi, Bar-Noy, Kostisky, Hirschmann, & Grinshpoon, 2017). Awareness of psychiatric-mental health stems from the beliefs and knowledge of the illnesses which centers on increased acknowledgement, prevention, and management of mental health disorders (Jorm, 2012). Similarly, developing a therapeutic alliance with patients who are psychiatrically ill is extremely important for successful engagement outcomes and maintenance of a safer environment for all staff and patients (Redknap, Di, Rock & Towell, 2015). Also, mental health literacy programs are limited and underutilized (Yifeng, McGrath, Hayden, & Kutcher, 2016). Worldwide, psychiatric-mental health patients continue to increase, the national volume and prevalence of such patients are treated in various healthcare settings, and is particularly on the rise in the primary care private practice (Olfson, 2016; National Center for Health Statistics [NAMCS], 2015; Feinstein, 2014). Consequently, patients with mental health disorders are interacting with office staff who do not possess the psychiatric education necessary to provide best practice support to this population (Mello, Bell, Siegel, & Ward, 2016). The purpose of this project is to increase the knowledge of the staff in this setting. Utilizing situational monitoring to heighten awareness and improve communication to ensure safety of the staff members at this private practice (Agency for

Healthcare Research and Quality [AHRQ], 2018). It is imperative to note that the first staff who patients frequently come in contact with in such settings may have the least amount of training specific to mental health literacy (NAMCS, 2015; Cherry, Albert, & McCaig, 2018).

Psychiatric-mental illness is a condition that may alter a person's mood, perception, thinking, or feelings. It includes, but is not limited to psychotic disorders, affective disorders, and personality disorders (National Association of Mental Illness [NAMI], 2017; Whiteford, Ferrari, & Degenhardt, 2016). These disorders place serious strain on the affected individuals and their families. Globally, mental illness account for disease burden rate of about 7.4 percent (Whiteford, Ferrari, & Degenhardt, 2016). In comparison to other global health issues, such as diabetes mellitus, tuberculosis, HIV/AIDs, etc., psychiatric-mental health and substance use disorders are the fifth leading cause of disability, and leading cause of years lived in disability--spanning two decades or more, between 1990 to 2010, there was a 37.6 % increase in mental health and substance use disorders (Whiteford et al., 2016). The United States remains susceptible to this pandemic. According to the National Association of Mental Illness (NAMI), about one in five adults will experience mental illness in a given year (NAMI, 2017; Whiteford et al., 2016). These statistics do not only give a perspective on the number of individuals suffering from psychiatric-mental illness and substance use disorder; they also display the need for comprehensive programs that will increase psychiatric-mental health awareness for the healthcare workers that interact with these patients.

According to NAMI, currently there is an estimated eight to ten year gap between the first time an individual presents any symptoms of mental illness and the time the individual is first diagnosed for the management and treatment of the symptoms (NAMI, 2017; Whiteford et al., 2016; Olfson, 2016). Therefore, patients with untreated mental illness utilize various

outpatient settings, primary care physician's office and emergency services for care related to exacerbation of symptoms which should no longer be ignored. According to Centers for Disease and Control and Prevention (CDC) and National Institute of Mental Health (NIMH), in 2016, mental illness affected about 45 million U.S. adults. While mental health-related office visits are often made through referrals to psychiatrists (Cherry, McCaig, & Albert, 2015), primary care physicians may serve as the main source of treatment for patients with mental health disorders; and, the availability of each provider type varies according to geographic region (Olfson, 2016). According to the National Ambulatory Medical Care Survey (NAMCS) performed by the National Center for Health Statistics (NCHS) between 2012 and 2014, the research data indicates that during 2012–2014, an estimated annual average of 30 million mental health-related physician office visits were made by adults aged 18 and over (NCHS, 2014; Olfson, 2016; Cherry, McCaig, & Albert, 2015). Psychiatrists provided care for 55% of these office visits, primary care physicians cared for 32%, and other specialists took care of 13%. These were further broken down as follows: Mental health-related visit rates by physician specialty were 693 per 10,000 adults for psychiatrists, 397 per 10,000 adults for primary care physicians, and 162 per 10,000 adults for other specialties. Overall, the mental health-related office visit rate was 1,251 per 10,000 adults (Cherry, Albert, & McCaig, 2018). Also, out of an estimated 95 million emergency department visits per year, about 12% of these patients have a mental health diagnosis (Harris, Beurmann, Fagien, & Shattell, 2016). This places staff in this work environments in precarious positions as they interact with patients that present with primary psychiatric-mental illness.

Psychiatric emergencies may include, but are not limited to patients presenting with extreme agitation, panic attacks, anxiety, phobias, impulsivity, hyperactivity, inattentiveness,

autism spectrum, PICA, mood dysregulations disorders—depression or mania, psychosis, substance use leading to self-harming behaviors, and suicidal/homicidal ideations (Harris et al., 2016). Staff members who interact with these individuals should possess the ability to provide evidence based practices therapeutic intervention to appropriately care or support these individuals until their psychiatric symptoms stabilizes. Regrettably, many of the initial contacts in an office setting lack the mental health knowledge or training to provide initial care for this population when they are encountered (Mello et al., 2016). These initial barriers lay the foundation for poor interpersonal relationship between patient and provider. Such encounters have been noted to produce increased stress for both the patient and staff, and it sometimes contributes to negative patient-provider experience (Harris et al., 2016; Mello et al., 2016). Therefore, the need to implement an office-based educational program to address the deficits in mental health knowledge and awareness in private practice is paramount. This will include recognition of common psychiatric mental health illnesses and substance use disorders along with providing best practice techniques to increase awareness of violence, and specific evidence based practice techniques that can be used to improve communication and provide support for the patients to prevent mental health crises (Agency for Healthcare Research and Quality [AHRQ], 2018). The TeamSTEPPS training program will enable staff maintain a safer environment; thereby increase the quality of care provided to the patients presenting such illnesses to this private practice.

Patients diagnosed with psychiatric-mental illness, particularly those with serious mental illness (SMI) are at increased risk for chronic medical conditions. SMI contributes to decreased life expectancy patients by twenty-five years compared to those without serious mental illness (Janssen, McGinty, Azrin, Juliano-Bult, & Daumit, 2015). Additionally, the psychiatric need of

patients experiencing a mental health crisis may not be met promptly, care may be delayed because the needed specialized psychiatric assistance required are not readily available due to other extenuating factors; such as, specialist waiting list, or other more pressing medical condition that demands immediate attention. Hence, psychiatric needs are relegated to the background for later healthcare encounters or cared for in private practice (Olfson, 2016, Feinstein, 2014). Awareness will allow the various levels of the office staff to recognize psychiatric patient's need, prioritize, assist and support patients to meet both medical and behavioral needs, this is called integrated healthcare. TeamSTEPPS safety framework for office based care (AHRQ, 2018) will be used in delivering mental health literacy (O'Connor & Casey, 2015; Jorm, 2012) to the staff in the private practice.

PROBLEM STATEMENT

Presently, there is no universal educational programs that focus on developing therapeutic communication techniques with early recognition and thorough description of specific psychiatric-mental illnesses to assist staff caring for patients with a psychiatric-mental health complaint (APNA, 2016; Feinstein, 2014). Therefore, this project plans to introduce an office-based educational program to enhance safety in a private practice office setting. The evidence-based training, TeamSTEPPS, was designed by the Agency for Healthcare Research and Quality (AHRQ) and the Department of Defense. This safety tool will be utilized in conjunction with mental health literacy (MHL) to teach the office staff how to identify patients with mental illness, recognize signs of violence before it erupts, and how to deal with them. Topics included in the mental health literacy are anxiety phobias, mood disorders (depression, dysthymia or mania), psychosis, insomnia, self-harm, suicidal ideations, substance use disorder, personality disorder, attention seeking, attention deficit hyperactivity disorder, etc. The training will provide

therapeutic communication techniques that can be used to develop and foster a therapeutic alliance, as well as provide interventions that can be applied when patients are experiencing a mental health crises.

Given this information, the PICO(T) (Patient population/problem-Intervention-Comparison-Outcome-Time) question is: Among the staff members in a private practice, will the implementation of a structured, educational program geared toward management of patients with mental health and substance use disorder, increase staff member's knowledge, improve communication and heighten awareness skill generally through MHL when interacting with patients with mental health with the goal of ultimately make the private practice office environment safer?

NEEDS ASSESSMENT

Global statistics indicate that the number of individuals with mental illness currently stands at about 430 million (WHO, 2018). Mental illness within the United States is estimated to affect roughly one in every five Americans, this correlates to about 45 million individuals; however, only about 10% of such individuals seek assistance, and are diagnosed for a serious mental illness (SMI). Serious mental illness is defined as a psychiatric-mental disorder that greatly disrupts one or more major activities in one's life, meaning it affects the individual's functionality (NAMI, 2017; Whiteford et al., 2016). Such individuals do not seek help for mental health disorders. Most of these patient's present to the emergency department when experiencing a psychiatric decompensation. 20% - 50% of such patient presents with agitation (Zun, 2016; NCHS, 2018, Feinstein, 2014) making providers and their staff vulnerable to injuries. Furthermore, literature suggest that 10% of patients evaluated for psychiatric evaluation may

become violent during examination. This account roughly for 1.7 million emergencies related to agitated patients (Zun, 2016).

Violence within healthcare settings, particularly in emergency departments, in-patient and physician's private practices are concerning national issue. Workplace violence is defined as either physical and verbal threats or actual assaults (Wyatt, Anderson-Dreves, & Van Male, 2016). According to the Bureau of Labor Statistics 2013 report, the incidence rate of violence against health care workers averaged 16.2 per 10, 000 employees with full-time status, while private sector employees experienced workplace violence at a rate of 4.2 per 10,000 employees with fulltime status. Between 2010 and 2013 there were about 24,000 assaults in health care settings which was classified as causing psychological harm, major and minor physical injury, permanent or temporary disability, and death (Lee Gillespie, Leming-Lee, Crutcher, & Mattel, 2016).

The statistics both nationally and statewide in New Jersey produced similar rates of healthcare workers experiencing workplace violence, with New Jersey experiencing 80%, and the national incidence rate at 70% (ACEP, 2016; Wolf, Delao, & Perhats, 2014). The need to address psychiatric-mental health knowledge in relation to physician's office staff that cares for this population is absolutely illustrated by these statistics. The characteristics of the psychiatric patients that present to the private practice with some risk of violence include both patients who have a primary complaint of mental illness or those with substance use disorders (Gillespie, Gates, & Berry, 2013). According to the New Jersey Hospital Association (NJHA, 2016; Zun, 2016), the number of cases in the ED involving individuals with mental illness/substance use disorder (MI/SUD) as a primary diagnosis in 2014 was 154,617, a 9% increase from 141,879 which was reported in 2010. The volume in the number of patients in New Jersey with mental

health and substance use disorders as a primary or secondary diagnosis in 2014 was 534,517, represents a 29.7% increase from 412,239. The number of cases of patients with mental or substance use disorders as the primary or secondary diagnosis accounted for 17.3% of all ED volume compared to 14.4% in 2010. The patients with a primary or secondary diagnosis of mental health or substance use disorder currently account for more than one-third of all inpatient admissions (NJHA, 2016; Zun, 2016). In one New Jersey County, the number of individuals with MI/SUD who visited the ED was 372,934. This number represent 19.75% of all ED visits in the county (NJHA, 2016; Zun, 2016). Such statistics were not found for the physician's office at the state level, however, internationally according to the National Ambulatory Medical Care Survey (NAMCS), the National Center for Health Statistics (NCHS) research data of 2012–2014 indicates an estimated annual average of 30 million mental health-related physician office visits were made by adults aged 18 and over (NCHS, 2014; NAMCS, 2015; Cherry et al., 2015; Olfson, 2016).

The staff in the private practice comprise of medical doctors, specialists/attending (psychiatrist in this case), nurse practitioners (specialty, family and psychiatric-mental health nurse practitioner's in this office), technicians/psychiatric aides, registered nurses, nursing assistants, receptionist, office manager, billing staff. The number of staff in each office varies, it can range from five or less, and up to thirty (30) or more, depending on the size of the private practice and how many sub-specialties are integrated in the location (Cherry et al., 2015; Olfson, 2016). The setting of interest has 15 staff members with titles mentioned earlier. The paraprofessionals who have the initial contact with the patient, and probably spends more time with the patient while in the waiting room or preparing them to be seen by the doctor are not licensed and have limited knowledge of mental illness. Most of the states in the US except for

Arkansas, Colorado, California, and Kansas do not offer licensures for psychiatric technicians or aides (Mello et. al, 2016). The main requirement to become a psychiatric aide or staff in a physician's office is a high school diploma or its equivalent. This brings the need for this education into perspective. This educational program will enable the office staff to acquire mental health literacy that would allow them to recognize patients with a primary complaint of mental illness; as well as understand that such patient population requires considerably different interactional style than patients with primarily physical complaints. Most of the professionals/clinical staff interactions with these patients may possess some proficiencies related to trauma and surgical education depending on their specialty and job description (Blando, O'hagan, Casteel, Nocera, & Peek-Asa, 2013). Therefore, educational programs that focus on the management of psychiatric patients is a necessity in all healthcare setting treating mental health patients including emergency department (ED), and private practice office settings (Mello et al., 2016). Despite doctors and nurses' extensive psychiatric education that is a part of the curriculum for their credentialing; nonetheless, both healthcare professionals acknowledges the need for refresher course to bring their knowledge and skills on how to handle escalating psychiatric patients effectively and up to par (Mello et al., 2016; Zun, 2016).

Currently, the private practice setting where the educational program will be implemented do not have such program in existence; however, they reported two incidents within six months in 2018, where mental health patients became enraged, and the local police had to be called to subdue the patients. In one of the events, the psychiatrist was injured before the police arrived.

AIMS AND OBJECTIVES

AIM: To implement a structured, evidence-based educational program geared toward increasing staff member's awareness of behaviors presented by patients with mental health and substance use disorders in a private practice.

- Objective 1:

Educate staff on how to recognize disruption in therapeutic interaction when managing behaviors of patients with mental health and substance use disorders. This will be implemented utilizing an evidence based comprehensive educational program to elicit mental health literacy in combination with TeamSTEPPS "situational monitoring/awareness and communication." TeamSTEPPS office based safety tool will be used. This is one of the safety tools developed by the Agency for Healthcare Research and Quality in collaboration with the Department of Defense (AHRQ, 2018) The intended purpose is to maintain safety and reduce work place violence. When trainees are able to recognize mental health patients in crisis, it will allow trainees the ability to provide early interventions to individuals who are in distress, or escalating due to experiencing a mental health crisis (Kitchener & Jorm, 2004).

- Objective 2:

Determine the effectiveness of an educational program as it relates to staff member's ability to manage patient's behavior with mental health and substance use disorders in the private practice office.

- Objective 3:

Measurement of staff knowledge and demonstration of understanding of the presented information utilizing pretest and posttest design.

REVIEW OF LITERATURE

Search Strategy

The search strategy utilized produced relevant literature to the investigation into workplace violence relative to psychiatric-mental healthcare settings, either in-patient, out-patient, urgent care/ambulatory care, emergency department, or private practice physician's office. The focus is to keep the environment safe while caring for psychiatric patients. Violence in the psychiatric-mental health settings increases anxiety and fears of staff members at work. The plan developed is an educational program to increase knowledge deficits and perceived communication skill to create situational monitoring/awareness (AHRQ, 2018; Feinstein, 2014; Cherry et al., 2015; Olfson, 2016). Key words included in the search are: emergency department, psychiatric department, violence, education, training programs, psychiatric patients, mental health literacy, mental health knowledge, violence in physician's office , healthcare professionals, substance use disorders, mental illness in outpatient, and how many psychiatric patient visits physician's office? The databases that were used were CINAHL, PUBMED, Psych INFO, CLINICALKEY and MEDLINE. Articles that were reviewed include: meta-analysis, systemic review, quantitative, qualitative expert opinion, and gray literatures from various government websites.

Mental Health Literacy

This project is about maintaining a safer environment in the private practice physician's office, thereby reduce injuries to staff. Therefore, reviewing literature on mental health literacy (MHL) is imperative. The concept of MHL's construct contains basic tenants that are similar to health literacy in intention. (Jorm et al., 1997). According to Jorm et al., MHL consists of seven specific domains, they include: recognizing specific mental illness, knowledge of how to collect

information regarding mental illness, knowledge of risk factors related to mental illness, knowledge of causes of mental disorders, knowledge concerning the ability to treat self, knowledge of how to seek professional help, and possessing the attitudinal awareness necessary to increase recognition and/or how to seek assistance in relation to mental illness (Jorm, 2012; Jorm et al., 1997; O'Connor, Casey, & Clough, 2014).

Jorm et al. (1997) postulates that mental health literacy is not just an important public health issue, but noted that MHL is lacking in the general populace in relation to behavioral health such as anxiety, depression and schizophrenia (Jorm, 2012; Jorm et al., 1997). To establish the existence of this deficiency, responses to a national survey were analyzed. The study participants had to respond to questions relation to two vignettes regarding depression and schizophrenia. Findings revealed that more than half of the participants were unable to recognize depression or schizophrenia within the vignettes, neither could they identify the pharmacological intervention needed to treat (antidepressants and antipsychotics) either of the diagnosis. These findings were rated as harmful by many of the participants. Some rated pharmacological treatment helpful, while other participants believed that herbs, vitamins, minerals and tonics are also helpful in the treatment of depression and schizophrenia, with only 3% considering them harmful (Jorm et al., 1997). Similarly, poor knowledge was discovered concerning the right interventions and who would best assist the individuals described in the vignettes. Most of the responders described nonstandard treatments (exercise, herbs, relaxation, and yoga) for both depression and schizophrenia which are good treatment modalities because they are not particularly harmful. However, when asked about admission to a psychiatric unit or electric convulsive therapy, a larger percentage of the sample size thought these were harmful interventions (Jorm et al., 1997).

The nonstandard treatments for depression and schizophrenia have evidence that supports not only their overall lack of harm to patients, but supports the use of this treatment modalities for both the management and reduction of symptom. Similarly, research suggest that ECT is not a harmful standard of treatment either (Freire, Fleck, & da Rocha, 2016). When asked to rate which healthcare professionals would be helpful to individuals presented in the vignettes general practitioners and counselors were considered first, before psychologist and psychiatrist were considered as options (Jorm et al., 1997). These Australian findings have since been replicated in many subsequent studies interested in evaluating the mental health knowledge of their participants. Each time this is performed, the studies suggest, majority of the general public possessed poor knowledge about mental health literacy (MHL) (Jorm, 2012; Mohatt, Boeckmann, Winkel, Mohatt, & Shore, 2017; Moll, Zanhour, Patten, Stuart, & MacDermid, 2017; Parcesepe & Cabassa, 2013; Pescosolido et al., 2010).

Since the national evaluation of MHL by Jorm et al. (1997), other studies have analyzed the concept of MHL from various perspectives relative to numerous psychiatric illness in various populations and settings (Brijnath, Protheroe, Mahtani, & Antoniadis, 2016; Furnham, Cook, Martin, & Batey, 2011; O'Connor & Casey, 2015; Wei, McGrath, Hayden, & Kutcher, 2015). Furnham, Cook, Matrin, & Batey (2011) conducted a study on MHL for students in four universities across Great Britain. The studies assessed students' knowledge asking seven questions related to 97 psychiatric diagnosis. The study revealed that the participants were only able to recognize one-third of the presented psychiatric illness; however, when asked if they could describe signs and symptoms or define the disorders recognized, only nine disorders had a response rate of over 50% (Furnham et al., 2011).

Many studies consistently support the need for MHL as an area that requires improvement in the general public as well as in health care professionals. Both professionals and paraprofessionals in many healthcare setting expresses their discontentment concerning the lack of psychiatric education needed to meticulously treat psychiatric patients (Innes, Morphet, Munro, & O'Brien, 2014; Zun, 2016). Pharmacist are also included in this domain. Although they appear excluded from the interactions that necessitates their involvement in knowledge of mental illness beyond dispensing medication, and requiring a therapeutic conversational element, they are not in isolation from other healthcare professionals, since pharmacist practice in the community and hospital settings and psychiatric patient have contact with them one way or the other when filling medication. With the prevalence of mental health disorders within the general populace, all healthcare practitioners need to possess adequate knowledge about mental health. Many healthcare worker, not only pharmacist lacks the training to assist their psychiatric-mental health patients in many settings (Kirschbaum, Peterson, & Bridgman, 2016; O'Reilly, Bell, Kelly, & Chen, 2015). Hence the need to heighten staff member's awareness in all settings and particularly in the private practice where assistance is limited when patient starts escalating (Feinstein, 2014).

The role that mental health literacy plays in caregivers, those who live with mental illness and the healthcare providers for this population is immense. There is direct correlation between mental health literacy deficiencies, those individuals with mental health illness, the care that are provided, as well as the effects of stigmatization towards this population (Bodner et al., 2015; Wei et al., 2015).MHL deficiencies and the stigma produced is obvious in both the general public and expressed views of the healthcare providers. The seven principle components of MHL may be further grouped into three domains; management, prevention, and recognition of mental

illness. These domains are anticipated to be informed by current scientific evidence that will build knowledge and beliefs in relation to mental illness (Corrigan, Druss, & Perlick, 2014; O'Connor et al., 2014). Therefore, stigmatization hinders knowledge acquisition in mental illness. Additionally, stigma correlates with a set of beliefs, principles, or undesirable evaluations of individuals with mental illness that would cause disparity against this population (Parcesepe & Cabassa, 2013). Stigma presents many barriers for individuals with mental illness including: discrimination, decreased participation in treatment interventions, and the ability to recognize symptom exacerbation (Parcesepe & Cabassa, 2013). A recent study conducted by Bodner, et al. (2015), evaluated adverse attitudes exhibited by mental healthcare workers across four hospitals. It was discovered that negative attitudes are foreseen within this population of healthcare workers which may include: psychiatrists, registered nurses, nurse practitioners, rehab counselors, social workers, medical directors and, psychologists (Bodner et al., 2015). Currently, there are no studies that assesses MHL of paraprofessionals which includes: psychiatric technicians, psychiatric aides, nursing assistants, orderlies, security officers, receptionists, office managers, etc.

Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS)

In response to workplace violence, safety concerns and lack of knowledge, TeamSTEPPS is a teamwork system developed by AHRQ and the Department of Defense to improve patient safety by guiding health care organizations' efforts as well as to increase collaboration and communication among health care professionals. This is an evidence-based framework to optimize team performance across the healthcare delivery system. The core of the TeamSTEPPS framework comprises of four skills: Leadership, Situation Monitoring, Mutual Support, and Communication through teamwork among healthcare professionals. Several versions of

TeamSTEPPS are available, along with individual modules related to specific audiences, settings, or situations (AHRQ, 2018). AHRQ gives free access to utilize these materials with permission to modify them as needed in accordance to each healthcare setting's need. The intent of this program is to use situational monitoring and awareness to heighten healthcare workers sensitivity to know when patients deviate from their baseline. After which communication is used as a team to intervene ultimately leading to safety of staff and all others the private practice environment. To achieve this, mental health literacy (MHL) cannot be overlooked as mentioned earlier. Therefore MHL will be addressed with professionals and paraprofessionals in this private practice. This will enable staff members to recognize when patients experiencing emotional or psychological distress (Jensen, Morthorst, Hjorthøj, Nordentoft, & Vendsborg, 2015). In addition, TeamSTEPPS advocates for reducing stigma, increasing staff member's confidence and detecting early warning signs before violence erupts while enhancing safe patient handling even when in distress (Hadlaczky, Hokby, Mkrtchian, Carli, & Wasserman, 2014; AHRQ, 2018).

Course Content

TeamSTEPPS has influenced the practice of many clinicians and organizations. Since it was launched in 2006, almost 6,200 master trainers have attended the in-person AHRQ training sessions; in turn, approximately 37,000 people have been trained by some of these master trainers. Also, there is online training modules with continuing education credits (CEU). TeamSTEPPS is a national program that awards its trainees a train the trainer certification upon completing required modules. Furthermore, the TeamSTEPPS curricula have been translated into over 20 languages to improve health care and keep patients safe around the world. (AHRQ, 2018). More information and trainings are available at the AHRQ website. The focus of the project is to utilize the TeamSTEPPS for office-based care: Situational monitoring.

Topics will be presented utilizing AHRQ PowerPoints. MHL will be used to assess knowledge deficits and to teach about mental illnesses such as psychosis, anxiety, depression, substance abuse, as well as the presentation of crisis events which may include: traumatic reactions, acute or chronic psychosis, self-injurious behaviors, suicidal behaviors, aggressive behaviors, and substance intoxication (Jensen et al., 2015). In addition to this educational content, introduction of psychiatric knowledge regarding signs and symptoms of mental illness, associated risk factors of mental illness, insight into evidence-based treatment of presenting disorders, and information on where and when such individuals should seek treatment (Jensen et al., 2015).

Evidence Outcomes

TeamSTEPPS have been in practice for over ten years and there is extensive evidence that supports its ability to enhance safety, improve communication skills amongst team members. It may also be used to increase MHL as well as reduce stigma (Crisanti et al., 2016; Jensen et al., 2015; Mohatt et al., 2017; Morawska et al., 2013). This framework was created to optimize team performance, to improve safety and to guide healthcare organizational efforts in increasing collaboration and communication among healthcare staff. A search of AHRQ's website revealed that 37 hospitals and/or healthcare systems have published impact case studies as a result of adopting TeamSTEPPS tools. (AHRQ website). Similarly, in July 2015, AHRQ announced that the nation's largest municipal healthcare delivery system, the New York City Health and Hospital's Corporation (HHC) has adopted several AHRQ resources, including TeamSTEPPS to improve communication and teamwork skills among healthcare providers therefore improving patient care and safety (AHRQ website). HHC has a network of 11 acute care hospitals, five nursing homes, six diagnostic and treatment centers, and more than 70 community-based primary care sites. A typical example, is that the University of Rochester Medical Center used AHRQ

tool to promote mental health telehealth to rural and inner city areas of New York (AHRQ, 2017).

The literature reviewed suggests that workplace safety is a critical issue; and, violence is continually on the rise. Such violence is identified as a significant problem in healthcare settings worldwide (Wyatt et al., 2016; Isaak et al., 2017; Renwick, Lavelle, Brennan, Stewart, James, Richardson, & Bowers, 2016; Redknap et al., 2015; Blando et al., 2013; and Hill et al., 2015). Occupational Safety for Health Administration (OSHA) defined workplace violence as any violent act perpetrated toward the persons at work or on duty. Literature suggests that seventy-five (75) percent of healthcare workers in mental health settings have experienced violence and aggression from patients, causing staff-related stress and physical injury to staff (Redknap et al., 2015; Patient Safety Surveillance unit, 2013; Ward, 2013). Additionally, the Bureau of Labor statistics data reported that 50 percent of workplace-related assault involved healthcare workers (BLS, 2018). Literature supports the need for healthcare staff to be educated in the essential knowledge and techniques for crises intervention to maintain a safer environment.

According to OSHA, general recording criteria 1904.7, the following must be reported: injuries resulting in death, injuries resulting in lost days away from work, restricted work or transfer to another job, and injuries requiring medical treatment beyond first aid or loss of consciousness. Also considered to meet general recording criterion, were cases that involved significant injury or illness diagnosed by a physician or any licensed health care professional even if these cases do not meet the first set of criteria aforementioned. Although death is the worst case scenario, most of the literature reviewed focused on injuries resulting in loss of work time, work restrictions, or treatment more significant than first aid as this qualifies and must be reported as OSHA recordable event. The Joint Commission (TJC) experts (Wyatt et al., 2016)

discussed the expectation of healthcare leaders and how leadership are held accountable under the 2016 Government Accountability Office report that recommends how workplace violence prevention in the healthcare setting must be addressed in the United States (GAO, 2016).

Literatures reviewed suggest that workplace violence is a significant occupational hazard because it causes injuries to healthcare workers and patients in the environment it occurs in. The Joint Commission (TJC) reviewed 33 homicides, 38 assaults and 74 rapes between the years 2013 and 2015. This report highlighted the need for health personnel to educate staff on how to anticipate and manage violence in the workplace (TJC, 2012). With these events, the failure modes and effects analysis (FMEA) came into existence. FMEA is performed in addition to Root Cause Analysis (RCA) to improve on work environment's safety (Roca et al., 2016). Therefore, works of literature support the notion that perceived adequate response time is vital to early detection, proper and timely deescalation to enhance a safer healthcare environment for all (Blando et al., 2013; Zicko et al., 2017). To detect behavioral problems early, knowledge is required.

Violence in the workplace makes the environment unsafe for both staff and patients. Many of the literatures reviewed discussed the need for change in organizational culture to improve and maintain a safer environment. It is important to adopt a non-punitive and collaborative problem-solving approach (Ercole-Fricke, Fritz, Hill, & Snelders, 2016). Also, organizational culture's safety need to support consistency and teamwork to improve continuum of care with better communication. Various works of literature buttressed that to maintain a culture of safety; healthcare workers must be proactive by intervening promptly and efficiently (Anderassy, 2016; Isaak et al., 2017).

Organizational leaders still have the challenge of economic constraints; yet, they need to select the right skill set mix to provide safe and quality care that is cost efficient. The climate of safety and its perception is a vital factor for mental health staff (Blando et al., 2013). One of the intervention programs used to enhance a safer climate with fewer aggressive and assaultive events was called "Return Home Safely" (Isaak et al., 2017, p. 414). The "Return Home Safe" program brought a sense of safety to a forensic psychiatric department which is in corroboration with the U.K.'s 1974's Health & Safety Work Act, which is similar to the U.S.' OSHA regulations — this encourages a safer, as well as absence risk at workplace (Health and Safety Executive, 1974; OSHA, 1904.7(a); Renwick et al., 2016).

Blando et al. (2013) did an extensive study on staff member's feeling and perception about safety. The survey was performed in New Jersey and California, in two different settings [psychiatric unit and emergency department (ED)] using the OSHA recording and reportable standards. Despite the amount of violence perpetrated toward psychiatric unit's staff, the staff in the psychiatric unit felt safer than the ED staff. Literature supports the suggestion that mental health literacy, and consistency of staff assigned to the same work location had an added advantage to the psychiatric unit's staff members feeling safe. In this study, the psychiatric staff were trained in de-escalation techniques which the ED group lacked. Nursing personnel in both settings perceived "safety" differently. Nevertheless, training was a critical issue. The staff in the psychiatric unit had the fundamental knowledge of how to handle crisis, which allowed them to perceive themselves as being safe in a volatile environment. Being familiar with their patients is not enough but having knowledge about mental illness and how to recognize behavioral crisis so as to make sound judgment and to act speedily for better outcomes was the key to maintaining a safe environment. Nonetheless, the authors felt that overconfidence may cause mental health

staff to miss a potential risk of violence which may cause more significant harm because psychiatric staff's perception may sometimes obscure a true risk. Therefore being complacent and overconfident may make staff more vulnerable to injury (Blando et al., 2013). Mental health literacy hones in on avoiding being complacent; it encourages alertness at all times in all healthcare settings (Isaak et al., 2017). Similarly, TeamSTEPPS emphasizes same (AHRQ, 2018).

Many of the literature reviewed suggest training on crisis intervention. Each discussed some form of early detection, and using de-escalation techniques before violence erupts. Also considered, is the need for building staff's confidence, how to identify escalating behaviors promptly and how to manage such behaviors appropriately (Blando et al., 2013; Hill et al., 2015; Isaak et al., 2017; Redknap et al., 2015; Renwick et al., 2016 Wyatt et al., 2016). There need to be a standardized training that all facilities will relative adhere to, there isn't any at this time.

Literature had specific goals for improving staff members safety, suggestions include: identifying key frontline staff and organizational leadership as stakeholders; getting the buy-in is vital for the implementation of knowledge to enhance practice change and encourage organizational cultural change. These goals align with the knowledge to action framework model that will be used to execute this project (White, Dudley-Brown, & Terhaar, 2016). Additionally, staff member's inclusion promotes their engagement and buy-in. Such inclusion may ultimately contribute to the success of implementation. Including these stakeholders open line of communication as an important perception for clarification of roles, empowerment of staff, and it gives staff a sense of value. Leadership has a direct or indirect effect on practice environment; acting as a vital predictor of standards for the delivery of care, dedication and commitment

(Redknap et al., 2015; Zicko et al., 2017; French-Bravo, & Crow, 2015; Godfrey et al., 2014; Isaak et al., 2017; and Andrassy, 2016).

In all workforces, especially healthcare, communication is essential. Wyatt et al. (2016), delineates that the most common causes of workplace violence are failures in communication. In addition to communication, is inadequate supervision; lack of observation or non-adherence to policies addressing workplace violence prevention and inadequate behavioral assault; identified aggressive tendencies; as well as, becoming desensitized to aggressive behaviors. All these affects the safety of a work environment. Also, these factors may contribute to the inability to act as expected (BLS, 2018). Other literature reiterates that early intervention and communication techniques prevent as well as manage disruptive behaviors well in advance to avoid injuries. (Renwick et al., 2016; Godfrey et al., 2014; Zicko et al., 2017; Hill et al., 2015; Andrassy, 2016).

Literature suggests, when some level of aggression is displayed, a prompt precautionary intervention must be taken. If not, the moment will be missed, and it can lead to injuries – possessing knowledge of mental health literacy (MHL) will help with easy recognition to react as require to maintain safety (Renwick et al., 2016; Hill et al., 2015; Jorm, 2012). The emphasis here is the importance of being cognizant of one's environment for quicker action to be taken, which will ultimately enhances a safer psychiatric environment, such recognition aligns with AHRQ's TeamSTEPPS situational monitoring/situational awareness and NCHS findings (AHRQ, 2018; NCHS, 2014; Olfson, 2016; Cherry, McCaig, & Albert, 2015).

Also, some literature suggests that psychiatric-mental health field is historically an unattractive carrier option because of the stigma associated to mental illness (Redknap et al., 2015). Such stigma makes retention of staff in a mental health setting a challenge. Nevertheless, with good educational program, stigmatization will be reduced. Bond et al. (2015) and Burns et

al. (2017), conducted similar studies within groups of healthcare students that produced results that showed statistically significant improvements in decreasing social distance, stigmatizing attitudes, increase confidence in helping people with mental illness, and recognition of mental disorders. Bond et al. (2015) study participants were nursing and medical students (292 nursing and 142 medical students). TeamSTEPPS revealed its ability to enhance knowledge, increased MHL and reduce stigma, related to individuals with mental illness, in a variety of populations and communities (Crawford et al., 2015; Jensen et al., 2015; Mohatt et al., 2017; Wong, Lau, Kwok, Wong, & Tori, 2017). A negative perception of practice environment may create disengagement of healthcare staff which may further affect safety of the healthcare setting (Harrison et al., 2017; Redknap et al., 2015; Unruh, & Ning, 2013).

AHRQ's TeamSTEPPS have been used to reach a wide capabilities in providing its participants with information and skills needed to successful engage individuals who may have any problems including mental health problems, and how to provide assistance to someone experiencing an acute mental health crisis.

AHRQ's evidence-based tools and resources are widely used by organizations nationwide to improve quality, safety, effectiveness, and efficiency of health care. The Agency's Impact Case Studies highlights these successes, describing the use and impact of AHRQ-funded tools by State and Federal policy makers, health systems, clinicians, academicians, and other professionals. Nationally, there are eighty (80) of such cases; nine (9) of which are from various healthcare settings in the state of New Jersey. The New Jersey healthcare settings have utilized AHRQ tool kits to improve safety and effectiveness. One healthcare system used it to reduce urinary tract infection, six NJ hospitals employed these tools for medication reconciliation, some used it for chronic care self-management program, NJ Department of health senior's services

used it to bolster patient safety act. All these are included in AHRQ published impact cases and may be accessed on their website (AHRQ web).

Therefore, the goal of this research study to use education to empower staff to become better aware of the population they serve and how they can be more proficient at meeting patients' needs which will ultimately lead to staff member's safety in this private practice. Literature suggests, healthcare environments with knowledge and consistency possess cohesion, better communication and positive perception about safety (Isaak et al., 2017; Hill et al., 2015; Blando et al., 2013; Jorm 2012).

Summary of Literature Review

Given the lack of knowledge observed in both the general public as well as in healthcare paraprofessionals, some professionals and healthcare students, the need for a program that will address these deficits is paramount (Isaak et al., 2017; Hill et al., 2015; Blando et al., 2013; Jorm 2012). Another factor is the currently lack of standardized method of maintaining safety in any healthcare setting (Feinstein 2014). All healthcare settings including psychiatric-mental health inpatient as well as private practice settings just reviews their needs and makes a selection, hoping that the selection will fit their need. Some settings re-evaluate and make changes as necessary if the selected intervention is not working, others do not re-evaluate, and they keep spinning the wheels at the same spot (NCHS, 2014; Olfson, 2016). This project will evaluate the effectiveness of TeamSTEPPS within the staff members in the physician's office population. Nevertheless, there is considerably significant evidence that TeamSTEPPS is a program with a capability of providing its participants the skills required to provide awareness and specific reaction expected in response to persons developing a mental illness, or exhibiting a mental

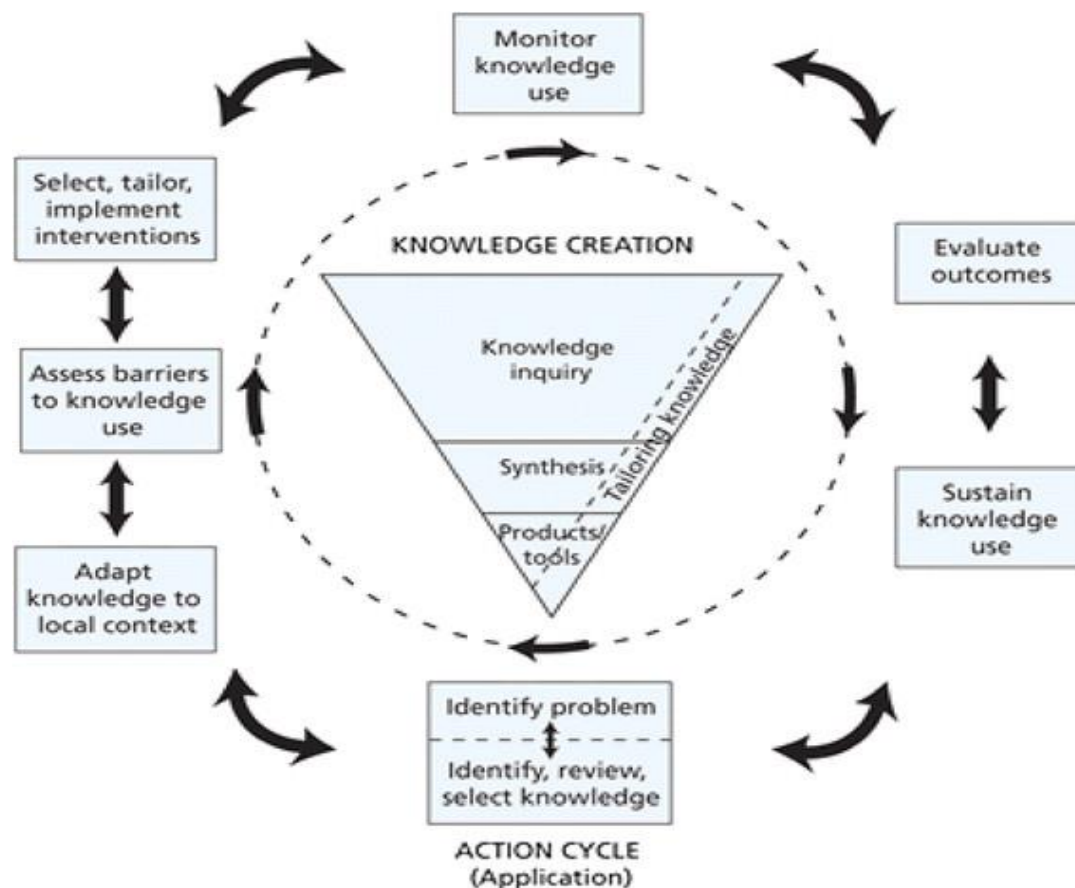
health crisis. Therefore, this project will introduce the AHRQ's TeamSTEPPS to the staff members of a private practice.

Limitations of the works of literature reviewed are vast and diverse; ranging from small sample size to lack of randomization and control group (Ercole-Fricke et al. 2016; Godfrey et al., 2014; Roca et al., 2016; Isaak et al., 2017). The use of convenience sampling, taking all samples from one location (Andrassy, 2016), may cause bias among responders (Hill et al., 2015; Blando et al., 2013). Some of these literatures are just a literature reviews (Redknap et al., 2015) or expert's opinion (Wyatt et al., 2016). Other literature reviewed fall into the gray area; these are statistics, acts, laws, and regulations. Nevertheless, the various literature reviewed, came to a similar conclusion; reiterating the importance of education staff to determine the need for early detection and early interventions as precursors for preventing workplace violence, as well as sustenance of a safer psychiatric behavioral health physician's office (Blando et al., 2013; Godfrey et al., 2014; Hill et al., 2015; Isaak et al., 2017; Renwick et al., 2016; and Roca et al., 2016).

THEORETICAL FRAMEWORK

The Knowledge to Action (KTA) model of evidence-based practice recommends integration of knowledge creation and knowledge application. Knowledge translation is described to be circular, linear and multidirectional. However, the knowledge-to-action framework is based on a cyclical pattern that is well engrained in the planned-action theories and frameworks (Bjørk et al., 2013). This framework presents the process of translating knowledge to action as a dynamic, complex, and a repetitive operation as it relates to the application and creation of knowledge (Graham et al., 2006). This process is represented by two concepts, knowledge creation and action cycle, which are each composed of ideal phases or categories.

KTA model funnels new knowledge through essential stages until it is adopted into practice (White, Dudley-Brown, & Terhaar, 2016).



Knowledge Creation

Knowledge creation is in stages of three generations which are represented in the center triangle within the inner circle known as the knowledge center. These phases are the knowledge inquiry, knowledge synthesis, and knowledge tool. All three play specific roles in the creation of the knowledge process; nevertheless, they are clearly difference in the types of knowledge each generational stage is comprised of (Bjørk et al., 2013). The knowledge centers on a downward funnel, symbolizing filtering and shaping of knowledge from broad to specific (Graham et al., 2006). The first level encompasses the knowledge inquiry which entails all knowledge that is available, and this is the least specific. Next is the knowledge synthesis and aggregation stage.

This second stage is more focused on knowledge generation than the first. This generation is mostly composed of meta-analysis and systematic reviews. The final stage focuses on knowledge tools. This stage provides specific knowledge that is available in the three generations, and it is utilized for the purposes of allowing the investigator to gather tools which may consist of guidelines or decision aids that creates user friendly knowledge formats (Bjørk et al., 2013).

Action Cycle

In the KTA, the outer circular ring consists of seven stages and encompasses the application of knowledge, this is known as the action cycle (Graham et al., 2006). These stages are unique because they represent a dynamic relationship that continually influences each other consistently through the discovery of new insight from the knowledge creation phases, which may rise to the bidirectional interactions between these stages. This will give directions to the educational program for the staff of the physician's office on MHL to increase their awareness, improve communication and provide a safer environment for all staff.

The first stage of the action cycle is to identify the problem that an individual or a group is interested in focusing on. An assessment of the issue at hand is completed to enable the creation of a knowledge gap analysis to determine the deficits or the context of the problems that needs to be addressed (Graham et al., 2006). Also, included in this step is critically appraisal of the research or project, and the data collected to determine validity and usefulness of the content. The next step in the action cycle is important for early success of the endeavor that is the focus and on the ability to adapt the intended knowledge to meet the needs of the identified deficit (Graham et al., 2006). The DNP student is cognizant that to ensure stakeholder support, maximum utility of the proposed intervention, the knowledge and evidence-based practices must be specifically incorporated to fit within the needs of the organization, and the guidelines of the

stakeholder's preference without compromising the reliability or validity of the intervention. The third step in the action cycle is the assessment of imminent barriers. In this step, the investigator/change agents need to assess potential barriers, identify and develop proactive strategies to overcome unforeseen obstacles that may arise. Another fundamental step within this phase includes finding supporters and facilitators that will help to positively steer the process in the right direction (Graham et al., 2006). The fourth step includes the dissemination of the proposed change strategies. In this step, the change agents will implement the evidence based strategies while promoting the awareness of the project being presented. After launching program or intervention, the DNP student must start monitoring the knowledge provided. In the fifth step is monitoring the knowledge used, what the change agent considers important to knowledge must be clearly well defined before this stage; otherwise, ability to measure gains, losses, or none significant movement of knowledge will be difficult to track (Graham et al., 2006). This stage transitions into the sixth step for the evaluation of outcomes. It is vital to evaluate correctly during the initial use of knowledge. Because, doing so will address the identified deficiencies in the proposed intervention to enable applying alternative strategies now or later in the future. Effective evaluation of knowledge is crucial to successful evaluation of outcomes. Alternate interventions will only be successful if thorough knowledge assessment of inadequate interventions are well evaluated (Graham et al., 2006). The last step is the knowledge sustenance phase. This step involves the continual assessment of the barriers that may prevent sustainability must be continually assessed, and altering of interventions to address barriers as they occur must be ongoing with evaluations of the initial knowledge used, and the prolonged knowledge use (Graham et al., 2006). This process allows for the systematic change between

various steps of the knowledge to action cycle with flexible improvement as new change gradually emerges with knowledge and awareness.

KTA Framework Application

Step 1: Identify a need or problem, search and appraise the literature critically before determining the strategic approach needed to effect change in practice

- The management team of behavioral health private practice was approached by the DNP student. At this meeting, the psychiatrist identified training need and knowledge deficit in relation to management of psychiatric mental health patients presenting with psychiatric emergencies/crisis while being examined by the doctor or while in the waiting area of the practice – he reported that, they already had two of such events in the past six months. The literature was searched by the investigator to address this concern.

Step 2: During this step, the investigator reviewed interventions that would be of value to the users in this private practice setting.

- The paraprofessional lack skills and knowledge in managing patients with primary mental illness and substance use disorder in the office setting. It was determined that the Agency for Healthcare Research and Quality (AHRQ)'s TeamSTEPPS. the acronym TeamSTEPPS stand for Team Strategies and Tools to Enhance Performance and Patient Safety, is an evidence-based safety tool that was agreed upon by the private practice' management and it would be a made available to the office staff members by the behavioral health administrative team.

Step 3: This step comprises the detailing description of both the stakeholders and champions.

Also, included in this phase are the pre-thoughts and assessments required to assist with identifying potential barriers and strategizing how to avoid or work around them.

- The Psychiatrist/Medical Directors and the office manager of the behavioral health private practice are the stakeholders, while the champions include RN's, and the receptionist. Barriers assessed include staff availability and vacations (program implementation will during one of their monthly staff meeting), management of the office during training, and staff resistant to change.

Step 4: This stage is about dissemination of the intervention; however, it is important to note that baseline knowledge assessment would be completed first.

- A background survey will be conducted to assess the baseline knowledge or lack thereof in the participants with regards to mental health literacy (MHL), which will be noted in the appendix upon completion of the project.

Step 5: This step relates to objectivity of intervention measures, precision and clarity of outcomes which is contingent upon the tools used in the implementation of the project.

- All information will be illustrated clearly in the appendix of the project

Step 6: Upon introduction of the intervention, evaluation of the expected changes will commence to determine the effectiveness of the teaching-learning experience on all sides, for the participants, the investigator and management/stakeholders – were the managements' and investigator's expectation met?

- This will be included in the appendix as part of the two week follow-up evaluation post implementation of the research study at the private practice office.

Step 7: This section requires that the investigator confirms that the implemented change process is engrained within this practice site. If change is not effectively incorporated as envisioned in the office staff, investigator have to go back to the drawing board, utilizing the feedback loop on

the KTA cycle to investigate and determine wherein the cycle did the interference occurred, what to do to rectify the problem, and how to achieve the targeted goal.

- The outcomes of the project will be reviewed using SWOT, which stands for Strengths, Weaknesses, Opportunities, and Threats; this will be used to evaluate the strengths, weakness, concerns and barriers with the stakeholders at the reporting out after the project is completed.
- Based on the outcome of the implementation, the office will be encourage to have a super trainer to include in their meeting agenda bi-annually (every sixth months) to remind existing employee and/or to introduce the concept to employees that are new to the practice, the importance of keeping each other safe to reduce work place violence and injuries at their practice location.

METHODOLOGY

The proposed research study is a convenient pre and posttest design. The purpose of this project is to educate the staff in a psychiatric private practice on the importance of recognizing mental health disorders and when patient deviates from baseline to enable staff maintaining a safe environment for themselves and their patient. Tools to be utilized are MHL to assess staff member's knowledge; and AHRQ safety tool - TeamSTEPPS framework for office-based setting, for situational monitoring, awareness and communication among team members to better care for patients in crisis. The project will be conducted at an out-patient private practice office.

Setting

The setting for this project is an outpatient private practice physician's office. This is a psychiatric-mental health subspecialty private practice office located in the southern part of the state of New Jersey (address is on the site agreement – Appendix F). This practice was

established in 2014 and sees patients throughout the lifespan; i.e. children, adolescents, adults and older adults are referred for psychiatric consultation and treatment. This private practice has a heavy caseload with a three-month waiting period at any given time for new consults or referrals. The cases referred includes the previously mentioned mental health and substance use disorders, as well as patients with attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), Disruptive Mood Dysregulation disorder (DMDD), anxiety, Autism Spectrum Disease (ASD), bipolar and other mood disorders, depression, schizophrenia spectrum and other psychotic disorders, borderline personality traits, obsessive compulsive disorders, post-traumatic stress disorder, suicide thoughts, hallucinations, delusions, and alcohol/opiate withdrawal symptoms. The population served in this office setting makes the educational program crucial for the staff members at this location. Furthermore, the management of the private practice reported having two crises within six months in 2018; one of which the psychiatrist sustained injury because the staff did not know how to intervene. Hence, highlighting the benefit of implementing this educational program that will be delivered using TeamSTEPPS communication to increase situational awareness and situational monitoring in this private practice to enhance safety. This is of utmost importance to the stakeholders and this Study investigator.

Study Population

The study population included a convenience sample of fifteen (15) participants. The inclusion criteria are staff members working a minimum of eight (8) hours per week at this psychiatric/behavioral health private practice located in the southern part of New Jersey. This population sample consisted of the two (2) Psychiatrists, one (1) Medical Director, four (4) Psychiatric-Mental-health Nurse Practitioners, no (0) registered nurses, one (1) Technical

Assistants, one (1) Social worker, (2) billing staff, two (2) receptionists, one (1) office manager and one (1) for credentialing and insurance verifications.

Inclusion and Exclusion Criteria

The inclusion criteria was for all staff that worked at the behavioral health private practice office setting either full-time, part-time or per diem. They must work for this behavioral health office for a minimum of eight hour per week including students, if any.

There were no exclusion criteria; any staff that works in this healthcare setting during the implementation period would be included in the project implementation if they are interested in participating. The primary language of the study and participants was the English Language.

Study Interventions

Mental health literacy includes both attributes and acquired knowledge that is consistent with the management, prevention, and recognition of mental health issues (Jorm et al., 1997). Therefore, the measurement of these qualities are essential to the evaluation a safety training program. TeamSTEPPS framework encompasses facilitation of broadening participant's knowledge, enhancing behaviors, empowering and building confidence to enable provision of specific interventions in the time of crises while decreasing mental health stigma (Burns et al., 2017). Other factors that was utilized to provide insight into MHL includes: Recognizing each specific disorders, having knowledge of existing and available assistance, using appropriate behaviors to seek assistance, knowledge of self-treatments, knowing how to seek mental health information, and having knowledge about risk factors, their causes and how to execute learned knowledge (O'Connor & Casey, 2015).

Studies suggests, AHRQ tools including the TeamSTEPPS to safety has been shown to have excellent internal consistence, good reliability, excellent content validity, good error

measurement, excellent structural validity, and fair hypothesis testing throughout the nation (AHRQ, 2018). Similarly, the mental health literacy scale (MHLS) is a 35-item tool with the ability to comprehensively explore the concept of MHL critically against other previous scales that are not as in depth (O'Connor & Casey, 2015).

The study intervention was implemented in stages. The stages include obtaining consent, completing background survey, demographic questions and the pretest (appendices G, H, I and J respectively). The pretest is the official MHL that includes 35 questions on some mental health disorders. Discussed MHL and importance of a safe environment. A brief introduction of the educational program will discuss the AHRQ tool, TeamSTEPPS to safety, to be used for scanning the environment with situational monitoring, situational awareness and communicating as needed. TeamSTEPPS PowerPoint presentation (appendices L and M) are free online materials from the agency for healthcare research and quality (AHRQ) that can be modified and tailored to each users need. Also, include in this presentation is a one minute YouTube video clip titled “keeping your eyes opened in mental hospital.” A two-week follow-up was scheduled with the office staff for another 45 minutes to one hour session to assess retention of the knowledge acquired. At this point, the posttest was administered. The same PowerPoint was referred to for clarification and a brief discussion reiteration important aspects of the training. The educational program was completed by the DNP candidate. Below is a description of the stages the teaching/coaching sessions with staff:

- Stage 1 Obtain consent from voluntary participants interested in being involved in the research study (Appendix G) without penalty for not participating, and participants may withdraw from the project implementation at any time.

- Stage 2 All willing participants will complete the background survey, demographics, and pre-test. This baseline intervention is to be completed before the educational session (Appendices H, I and J respectively).
- Stage 3 The lesson and teaching plans (appendix D), will utilize the AHRQ's TeamSTEPPS framework to deliver mental health knowledge in a 45 minutes to one-hour face-to-face educational session (appendices L & M) highlighting the following:
- Explain the need for heightened awareness/sensitivity to recognize signs, symptoms and risk factors of common psychiatric-metal and substance use disorders including ADHD, ODD, DMDD, psychosis, mood disorders and substance use disorders, etc. (AHRQ, 2018; O'Connor & Casey, 2015)
 - Teach the importance of responding promptly to crises, knowing the strategies to assist an individual who may be experiencing a mental health crisis such as a violent tantrums, panic attack or suicidal thoughts or suicidal behavior; and how to assist such patients before violence erupts (Isaak et al., 2017; Hill et al., 2015; Blando et al., 2013; Jorm, 2012).
- Stage 4 A post-test survey (Appendix K – same as Appendix J) will be completed two weeks after the first session. This will evaluate knowledge retention.
- Stage 5 Four-week post implementation meetings to report findings to administrators
Exit meeting with administrators after reviewing findings to determine the effectiveness of the educational program or lack of it.

The investigator already completed the training with an AHRQ TeamSTEPPS trainer.

The training focused on utilizing communication to increase situational monitoring and

situational awareness to enhance safety by detecting early warning signs of violence presented in form of psychiatric mental health crises or substance use disorder, as well as how to interact with patient who present common mental health disorders such as hyperactivity, anxiety, mood dysregulation, psychosis, self-injurious behaviors or suicidal/homicidal ideations. AHRQ TeamSTEPPS is evidence based and is funded by the federal government in a collaborative effort between the Department of Health and the Department of Defense since 2006. This program encourages train the trainer (AHRQ, 2018). The staff at the physician's office may continue to train each other using the available AHRQ resources online. AHRQ gives authorization to all intended users to access as well as modify their resource materials to meet the purpose of each establishment's need (AHRQ, 2018). Participants, may go online to complete other trainings offered by AHRQ for safety.

Outcomes Measures

Project Success Measures

The research study assessed the process, success measures, and the outcomes of implementing the educational program.

- Did the program improve participants' readiness and willingness to provide active assistance to anyone experiencing active psychiatric-mental health crisis?
- Did the program increase participant's knowledge of mental illness, substance use disorders and their treatments?
- Did TeamSTEPPS empower participants to provide adequate support to patients when early warning signs of mental health disorders are noted?
- Did TeamSTEPPS increase positive feelings of safety, while reducing negative attitudes and stigma towards patients with mental health disorders?

Risks or Harms

The research study did not pose any known physical, psychological, emotional or economic harm to staff participating in the project. Neither did the educational program require any written consent or procedures outside of this investigation framework. Nevertheless, if a staff member had been previously injured during a workplace violence, and felt sad or depressed, rather than be re-traumatized, they could have declined participation. If any of the participants felt overwhelmed, anxious or sad at any point, such staff would have been excused at any time upon their request.

Subject Recruitment

Recruitment strategy included dissemination of flyers approved by the management and IRB. The approved flyers were distributed to staff in their mailboxes through the office manager. The flyers were also displayed in strategic areas for staff only, such as the receptionist office on the staff side (inside), as well as in the staff lounge (breakroom), high traffic hallways and the bulletin boards in the office areas for staff member's awareness of the training dates, which was planned to coincide with both office meetings in the month of June. Aspiring participants were provided the consent forms for completion and they were free to use initial or sign to signify their agreement to voluntarily participate. The staff members that were interested in participating who completed the consent forms were given the preliminary packet that included the background information to identify their baseline and mental health knowledge as well as their demographics. All participants were assured that the study team would maintain their confidentiality during this study. The documents given to each participant were issued with a code that ensured anonymity of the fifteen (15) participants.

Consent Procedure

Upon eIRB's approval, the DNP student briefly met with the stakeholders again to discuss the described recruitment process above, as well as to determine the implementation date. The introductory participation flyer for the event was posted around the private practice after the brief meeting. These flyers were only displayed in staff areas with the projected study implementation date as noted above. A copy of the letter of invitation in the form of the study consent form (Appendix G) was reviewed by the stakeholders. Prior to the implementation day, all documents had been anonymized, including the recruitment letter/informed consent. These were distributed to all participants. The first item in the packet was the consent form to obtain their voluntary willingness to participate in the study. All the anticipated participants in the DNP study were legally consenting adults and their participation in the research process was voluntary. Participants were made to understand that they were at liberty to withdraw their participation at any time during the study if they wished. Also, the participants were assured of their confidentiality. With the provision of these dynamics, the participants were encouraged to give their unequivocal consent to participate in the study if they felt comfortable with participating. Signing the consent document demonstrated staff voluntarily and willingly participated in this study without coercion. Staff were informed to leave the form uncompleted if they felt uncomfortable or unwilling to participate in this study. Such forms could be returned blank. Staff were told to place the forms face down once completed. The consent forms were placed in a box by the entrance face down upon completion or at the end of the session.

Other de-identified items in each participant's packet included, the outline of the implementation stages and the plan (appendix E); the OSHA background questionnaire

(Appendix H-1); the AHRQ – TeamSTEPPS background questionnaire (appendix H-2); the demographics (appendix I); and, the MHL pretest (appendix J).

Benefit/Risks

This DNP student anticipated that through the educational intervention that was provided to the clinicians, there were no risks at all to the participants engaged in the study. On the other hand, identified values and benefits of the project included a potential reduction or a possible avoidance of high costs associated with the management of exacerbated cases of metabolic syndromes and other comorbidities in psychiatric patients on antipsychotic medication.

Subject Costs and Compensation

The private practice office staff participants as well as stakeholders participated voluntarily. As a result, there was no monetary compensation involved in this DNP research study. The DNP candidate had anticipated providing snacks if approved by the office management. However, this was not necessary because the private practice's management provided food and beverages at each teach-learning session.

Project Timeline

The project's timeline was subject to change based on IRB approval and pending revisions of the project. Nevertheless, it was necessary to create an action plan that would reflect the need and details of the activities required to be carried out for the completion of the DNP investigation. The development of the plan of action, was instrumental in attaining the timelines to identify and plan for the needed activities. The activities identified for the completion of this project as outlined below were built sequentially; however, some activities occurred concurrently. This timeline is in accordance with the chart presented below.

S/N	Project Activity	Date
1	Search and review of Literature	Jan – Nov 2018
2	Development, submission and presentation of DNP proposal	Jan 2018 – Jan 2019
3	Review of draft with professor	Jan -March 2019
4	Submission of DNP Proposal to IRB for approval	March – May 2019
5	Site approval	October 2018
6	Pre-research meeting, recruitment of desired study sample and implementation	May – June 2019
7	Data collection, analysis and presentation of findings	July 2019
8	Writing, submission and review of dissertation draft	July 2019
9	Revision and submission of final dissertation	August 28, 2019
10	Final approval of project and IRB Closure	September 4, 2019

Resources Needed/Economic Consideration

The office manager honored the request made to provide a space for conducting the educational activity. The conference room provided by the private practice office location where the meetings and educational sessions were held was the most important resource needed for the research project. Also, a budget of \$1,000 was earmarked for this research study to cover stationery supplies, making copies of questionnaires, printing flyers, traveling back and forth for meetings at the private practice during the research study implementation. This budget also covered evaluating sustainability of the post-test after the research study implementation and the final exit meeting with the administrators.

EVALUATION PLAN

Data Maintenance and Security

Considering the fact that information provided by the participants may be sensitive, the DNP student ensured that all information collected at the primary research site from participants were carefully handled and secured safely to promote their confidentiality. All the completed surveys were anonymous. Before the survey commenced, the survey materials were distributed de-identified by assigning a numerically code from 001 – 015. All data including, the original hard copy of the survey questionnaires and written consents were securely scanned and entered into a password-protected computer with secure encryption. Therefore, as an exemplary promotion of data maintenance and security, all data gathered were only available to this DNP student and the study team. Additionally, the findings from the research were presented in the final report with ultimate anonymity and respondents were coded numerically (participant P1 – P15). The participants were informed that their information would be locked in a safe cabinet that was accessible to the study team only and retained at Rutgers University for a minimum of six (6) years after the completion of the study. Upon completion of project publication and 6-year retention period, the documents will be destroyed.

Data Analysis

Institute of Medicine (IOM) Recommendation # 8, noted that when building an infrastructure for the collection and analysis of inter-professional health care workforce data is imperative (IOM, 2010). Gurzick and Kesten (2010) agreed that data collection and analysis enhances continuous quality improvement in accordance to best practice guidelines for better clinical pathways. Therefore, executing a valid process that is flexible through periodic evidence-based practice revision is essential. Such revisions are mostly made possible with data collection,

analysis, and interpretation to effect the needed changes to improve healthcare. Using a pre-test and post-test study design, this study employed the Paired-Samples T-test to compare and determine whether there was statistical evidence that knowledge about mental health substance use disorder would help staff identify clients in crisis, to make the workplace safer for staff. The MHL questionnaire was used as the pretest to identify staff baseline knowledge about mental illness and substance use disorder; the same test was used for the as posttest. The equivalent non-parametric Wilcoxon signed rank test was also used to test the hypothesis. These analysis along with descriptive statistics for baseline characteristics were carried out using IBM Statistical package for Social Sciences (IBM-SPSS). The computations and data analysis involved in this study were led by an expert statistician. DNP actively worked with expert to inform the context of analysis and interpretation of results.

Prior to the research conclusion, the DNP student anticipated that there would be a notable difference for staff members at this private practice as a result of the intervention in the design research study. The expectation was that AHRQ - TeamSTEPPS and MHL trainings provided at this setting would yield results similar to those conducted at other training sites. The goal of such training programs include an increase in knowledge of mental health risk factors and causes, knowledge about available professional help/resources, determining how and when to seek mental health information, ability to recognize specific disorders, a decrease in social distancing and personal stigma, ability to use communication to increase situational monitoring and situational awareness so as to ensure early detection of warning signs of violence before it erupts in order to maintain a safer environment (AHRQ, 2018; Jorm, 2012; NAMCS, 2015).

Research question

The question is: *“will mental health literacy and AHRQ-TeamSTEPPS raise awareness and increase the safety of staff in this private practice?”*

Assumption

The study assumed that while there had been some setback in the implementation of EBP in the management of psychiatric patients presenting to this office, there had been few patient crisis, incidents, and injuries. Also, it was assumed that there may be some lack of knowledge in how to effectively manage these populations of patients by some frontline caregivers who were the first point of contact with mental health patients in this private setting. The framework therefore initiated a pre and posttest on the same group of participants before and after an educational intervention by the study investigator.

Intervention

The intervention was used to determine if and to what extent a formal educational program would increase the level of understanding of staff about psychiatric mental health and substance use disorder patients in association with workplace violence reduction in this healthcare setting.

The instrument was a pretest–posttest design administered to fifteen (15) staff participants. The process of implementation to complete required documents and the survey questionnaire were as follows:

- 1) The de-identified packages were distributed to all fifteen participants. The documents in each package had an assigned numerical number. Participants were instructed to be cognizant of the numbers in the packets they had selected. Because, they will have to

select a posttest with the same de-identified numerical number for the posttest two weeks later.

- 2) The consent forms were first completed. All willing participants read and completed the last page of the consent form with the flexibility of signature or initials. Upon completion, the last page was detached and placed face-down in the provided box to maintain confidentiality.
- 3) Next, the demographics, the OSHA and AHRQ-TeamSTEPPS background surveys questionnaires were completed by all willing participants, instructions included add **“NO NAME OR INITIALS ON THESE THREE FORMS.”**
- 4) Followed by the completion of a structured Mental Health Literacy (MHL) pretest by all participants. The pretest comprised of a five Likert scale, thirty-five questions with a maximum score of 160 and a minimum score of 35.
- 5) A short video about vigilance in any patientcare area was played
- 6) A PowerPoint presentation training from AHRQ-TeamSTEPPS on situational awareness, situational monitoring and effective communication; with a focus on workplace safety and guidelines on the management of escalating mental health patients in crisis.
- 7) Two weeks after the teaching intervention, the structured MHL five-Likert scale questionnaire with thirty-five questions was administered as a post-test to the same fifteen participants. This was to evaluate the impact of the training on the participant’s understanding. It also served to review if the integration of knowledge creation and knowledge application occurred as purported by the Knowledge to Action (KTA) framework model (White, Dudley-Brown, & Terhaar, 2016; Bjørk et al., 2013).

- 8) A computer-based package for data analysis was used to measure the quantitative data derived from the pre and posttest using the Statistical Package for Social Sciences (SPSS) software to delineate significance and relationships between the different variables described under the data collection parameters.

The entire training lasted for four hours, within a span of four weeks. All tests were administered to fifteen participants (providers/professionals and non-professionals). The scope of the training covered the importance and effectiveness of mental health literacy and maintaining a safe environment for staff when mentally ill patients are in crisis.

Finally, there was a week four post implementation meeting to review study findings with the administrators and stakeholders to determine the effectiveness of the educational program. There was also a discussion of the teaching and learning process, and the need for continual educational program such as this to provide education to new staff. According to the internal data, this private setting has a quick staff turnover among their non-professionals as evidenced by most of them working less than five (5) years. The turnover may be an indication that staff are uncomfortable carrying out their responsibilities or need further training to continue to excel in their field.

FINDINGS

Demographics

The majority of the participants self-identified as female, accounting for 67% of the sample, and the remaining 33% of the sample self-identified as male. The mean age range of study participants was 41 – 50 years old. The age ranged from 18 to 70 (Table 1). Ethnicity composed of five groups in which Caucasians made up a larger portion of the participants (60%), followed by African Americans (26.7%), Hispanic (13.3), while there were no Asian or other

mixed races present in the convenient sample. This study also contained a large population of individuals with some higher-level of college education. These included (53.3%) with a postgraduate degree, (13.3%) with bachelors, another (13.3%) with associate degree, (20%) with diploma or some form of college.

Employment Status revealed that the majority of study participants were full time employees (53%), part-time (33.3%) and rest were per diems (13.4%). Years of employment at this office ranged from >1 to 14 years, with only (20%) of the study sample falling within the range of less than one year.

There were nine different job titles within this study's sample. The majority of study participant's (by official job title) were advanced professional healthcare providers. Therefore, this study created two categories of participants consisting of professionals and non-professionals. Professional staff included the healthcare providers and the nonprofessionals are the support staff in one office function or the other. This is further explained in the cross-tabulation model section.

Table 1**Characteristics of the Demographic Sample**

	n = 15	
	Frequency	Percentage
Gender		
Male	5	33%
Female	10	67%
Age		
18-24	2	13.3%
25-40	5	33.3%
41-50	6	40%
51-60	2	13.3%
61-70	0	0
Ethnicity		
African American	4	26.7%
Asian	0	0
Caucasian	9	60%
Hispanic	2	13.3%
Others/ Mixed Race	0	0
Educational Level		
High School	0	0
Diploma	3	20%
Associate Degree	2	13.3%
Bachelors	2	13.3%
Masters	3	20%
Doctoral	5	33.3%
Job Title		
Advance Nurse Practitioner	4	26.7%
Billing	2	13.3%
Credentialing/Ins Verifier	1	6.7%
Front Desk /Scheduler	2	13.3%
Medical Doctor (Medical/Psychiatrist)	3	20%
Nursing Assistant	1	6.7%
Office Manager	1	6.7%
Registered Nurse	0	0
Social Worker	1	6.7%
Length of Employment		
Less than One year	3	20%
>1/<5 years	6	40%
Greater than Five years	6	40%
Employment Status		
Full-time	8	53.3%
Part-time	5	33.3%
Per-diem	2	13.3%

Baseline Data

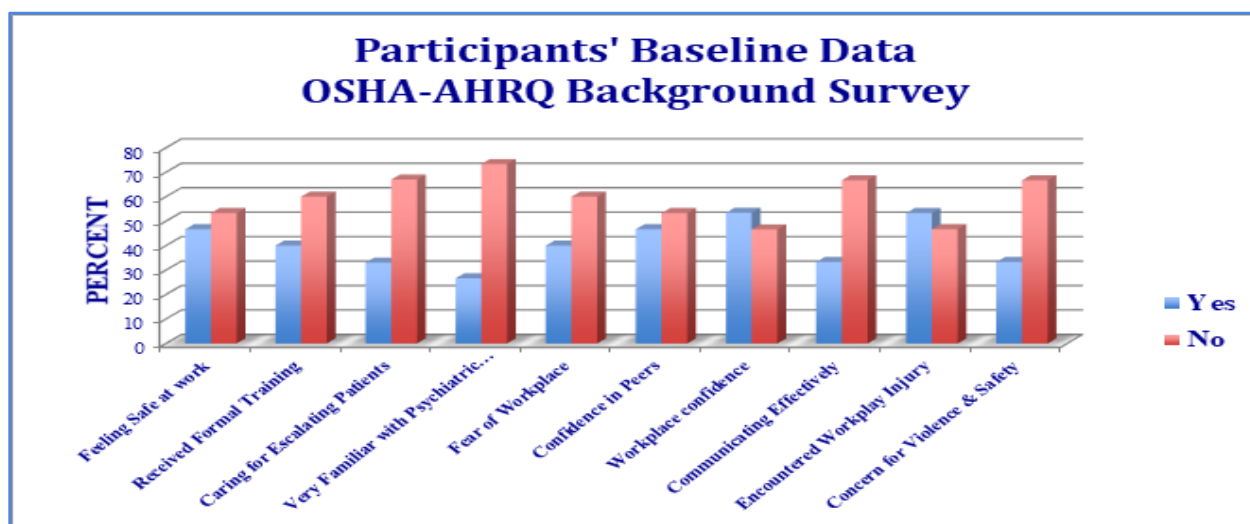
Fifteen participants were administered the OSHA and the AHRQ – TeamSTEPPS background surveys (See appendix). The table below is a ten-item extract from the participants' responses:

Table 2: Participants' Baseline Data

Extract From OSHA & AHRQ TeamSTEPPS Background Survey

SURVEY ITEM		YES	NO
1	Feeling Safe at work	46.7%	53.3%
2	Received Formal Training	40.0%	60.0%
3	Caring for Escalating Patients	33.0%	67.0%
4	Very Familiar with Psychiatric Patients	26.6%	73.3%
5	Fear of Workplace	40.0%	60.0%
6	Confidence in Peers	46.7%	53.3%
7	Workplace confidence	53.4%	46.6%
8	Communicating Effectively	33.3%	66.7%
9	Encountered Workplace Injury	53.3%	46.7%
10	Concern for Violence & Safety	33.3%	66.7%

The information in the table above is represented by the bar chart below:



(Figure 1: Background surveys for need assessment)

The background questionnaires were part of the determining factors for the educational need. While the administrators reported a few incidents of patient escalation in 2018 which led to injuries of staff including the psychiatrist, the background questionnaire revealed the fear of some of the staff working in this setting; they reported not feeling safe and their lack of awareness.

Of the ten sample items in the baseline surveys, more than half of the fifteen participants did not answer eight items in the affirmative, as shown in the chart. The following revelations at baseline were noteworthy in the private clinic:

- a) Over 73% of the participants were not “very familiar with psychiatric patients”.
- b) 67% of participants were concerned about caring for escalating psychiatric patients
- c) Over 53% of participants did not feel safe at work
- d) Over 53% of participants did not have confidence in their peers
- e) Over 66% of participants were concerned about violence and safety at work

The DNP therefore surmised that an educational program given to these participants may positively change their assertions.

Pretest-Posttest Analysis

Participants’ raw scores were collected, collated, and tabulated as primary data (see appendix). Derived scores were analyzed and presented in tables as secondary data. The Pretest-Posttest design was used to measure change in the participants’ understanding of the subject matter based on their experiential background/previous knowledge and the knowledge they gained after the intervention. The pretest was administered before the intervention phase while the effect of the intervention was measured after the administration of the post-test. The MHL was used for the pre-test and post-test phases on the same participants. Student's t-test statistic applied, established a significant difference between the means of participants’ performances in both the pretest and posttest.

Hypotheses Testing

The assumption made was that there would be no significant difference between the mean performance of participants in the pretest and the posttest. A null hypothesis (H_0) and an alternative hypotheses (H_1) were stated to obtain statistical evidence if any, from the same set of questions administered on the participants as follows:

$H_0: \mu_0 = \mu_1$ {that is, $\mu_0 - \mu_1 = 0$ }

$H_1: \mu_0 > \mu_1$ {that is, $\mu_0 - \mu_1 > 0$ }

Therefore, this study rejects the null hypothesis that there is no increase in posttest scores compared to pretest scores.

Scoring: Assessment for Pretest and Posttest

Total grade points were obtained by summing up the respective scores for each participant in the pretest and posttest, respectively. This was in line with the Mental Health Literacy (MHL) scoring protocol. The MHL –scales allow a maximum score of 160 points and a minimum score of 35. Table 3 and Table 4 below, present the pretest and posttest scores, respectively. For comparison purposes, percentages and means are presented accordingly.

Table 3 below represents the pretest scores per participant. Presenting a minimum score of 69 points (43.1%) and a maximum score of 131 points (81.9%) with a range of 62 points. The table shows an average of 108.5 points out of 160 (or 67.8%).

Table 4 presents the posttest scores per participant. The minimum score of 127 points (79.4%) and a maximum score of 152 points (95%) giving a range of 25 points. The table shows an average of 140.3 points scored out of 160 points (87.7%). These averages of the pretest data (108.5) and posttest data (140.3) points were used as the means for the statistical analyses.

TABLE 3 – Pretest Score Per Participant

Participant	Pretest Score	Percentage Score (%)
P1	125	78.1
P2	119	74.4
P3	128	80.0
P4	130	81.3
P5	118	73.8
P6	131	81.9
P7	113	70.6
P8	141	88.1
P9	120	75.0
P10	119	74.4
P11	108	67.5
P12	69	43.1
P13	69	43.1
P14	70	43.8
P15	68	42.5
Average	108.53	67.8

TABLE 4 – Posttest Score Per Participant

Participant	Posttest Score	Percentage Score (%)
P1	143	89.4
P2	144	90.0
P3	146	91.3
P4	154	96.3
P5	143	89.4
P6	145	90.6
P7	140	87.5
P8	152	95.0
P9	141	88.1
P10	143	89.4
P11	138	86.3
P12	128	80.0
P13	132	82.5
P14	127	79.4
P15	128	80.0
Average	140.27	87.7

In Table 5 below the posttest data was arranged and grouped in a descending order. The median score was 143 points, with an interquartile range of 13 (that is 145 – 132).

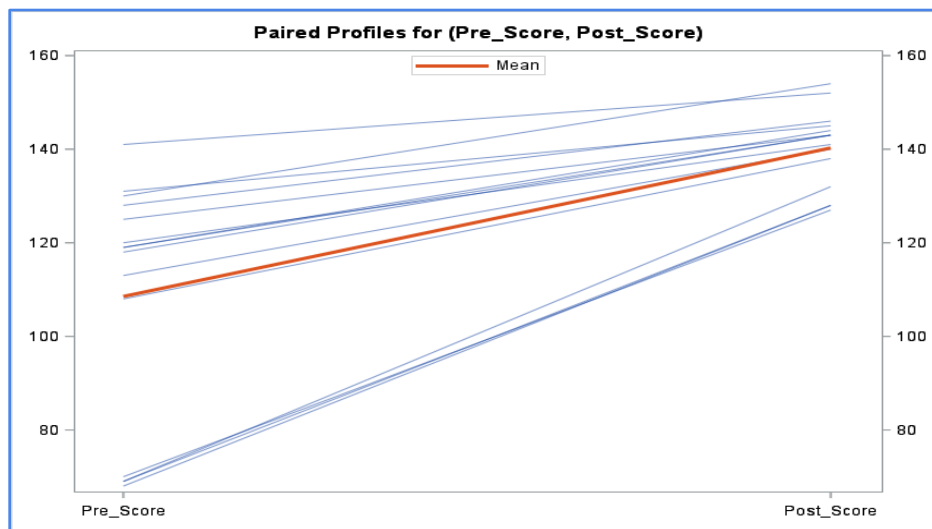
Table 5: Cumulative Frequency Table of Posttest Scores

Score	F	CF	
154	1	15	
152	1	14	
146	1	13	
145	1	12	Upper Quartile
144	1	11	
143	3	10	Median
141	1	7	
140	1	5	
138	1	5	
132	1	4	Lower Quartile
128	2	3	
127	1	1	

Statistical Analysis¹

The chart below represents pre- and post-test scores graphically for each individual participant as well as for the mean pre- and post-score. As the chart shows, all 15 participants increased their score in the post-test.

Individual Paired Measures of Pre- and Post-Scores



(Figure 2: Pre and post paired scores)

To determine if the differences in the pre and post-test scores were statistically significant, a Paired T-test was performed on the mean pre- and post-test difference. The Paired T-test is a statistical procedure used to determine whether the mean difference between the two sets of dependent observations is zero. The formula for the Paired T-test is:

$$t = \frac{\bar{d} - 0}{S_d / \sqrt{n}}$$

where $\bar{d}$ is the sample mean of the differences, S_d is the sample standard deviation of the differences, and n is the sample size.

¹ Statistical analysis was performed in SAS v9.4, SAS Institute Inc., Cary, NC, USA.

The hypothesis tested is:

H₀: the mean performance of participants is not greater in the post-test compared to pre-test after administering mental health literacy and AHRQ TeamSTEPPS

H_a: the mean performance of participants is greater in the post-test compared to pre-test after administering mental health literacy and AHRQ TeamSTEPPS. Therefore, there is a difference in mean pre- and post-test scores.

Table 6 shows a positive difference between posttest score and pretest scores. A pair-wise observation of the participants' scores indicates that each posttest score was an improvement over the pretest by a minimum of 11 Points and a maximum of 60 points. This gives a differential range of 49 points.

Findings

Data and results were presented using tables and charts to analyze and substantiate:

- 1) The pretest and posttest scores of the fifteen participants
- 2) The effect of the intervention on each questionnaire item
- 3) The respective impact of components of the training material on participants' performance.

Table 6 - PRETEST-POSTTEST ANALYSIS BY TOTAL SCORE

Participant	Pretest	Posttest	Difference	D-Squared
One	125	143	18	324
Two	119	144	25	625
Three	128	146	18	324
Four	130	154	24	576
Five	118	143	25	625
Six	131	145	14	196
Seven	113	140	27	729
Eight	141	152	11	121
Nine	120	141	21	441
Ten	119	143	24	576
Eleven	108	138	30	900
Twelve	69	128	59	3481
Thirteen	69	132	63	3969
Fourteen	70	127	57	3249
Fifteen	68	128	60	3600
MEAN	108.53	140.27	31.73	1315.73

Result

The intervention was to determine if, and to what extent a formal training would increase participants' awareness of the issues they face in private practice. Since the same tests were administered on the same participants, the t-test scores and p-values were obtained using the one-tail procedure. The following statistics were derived (Table 6):

T-score:	3.28515046
T-critical:	1.94
Standard Deviation:	9.37
Alpha value:	0.05
Degree of Freedom:	95%
P-value:	0.0000515046 (or 5.15046×10^{-5})

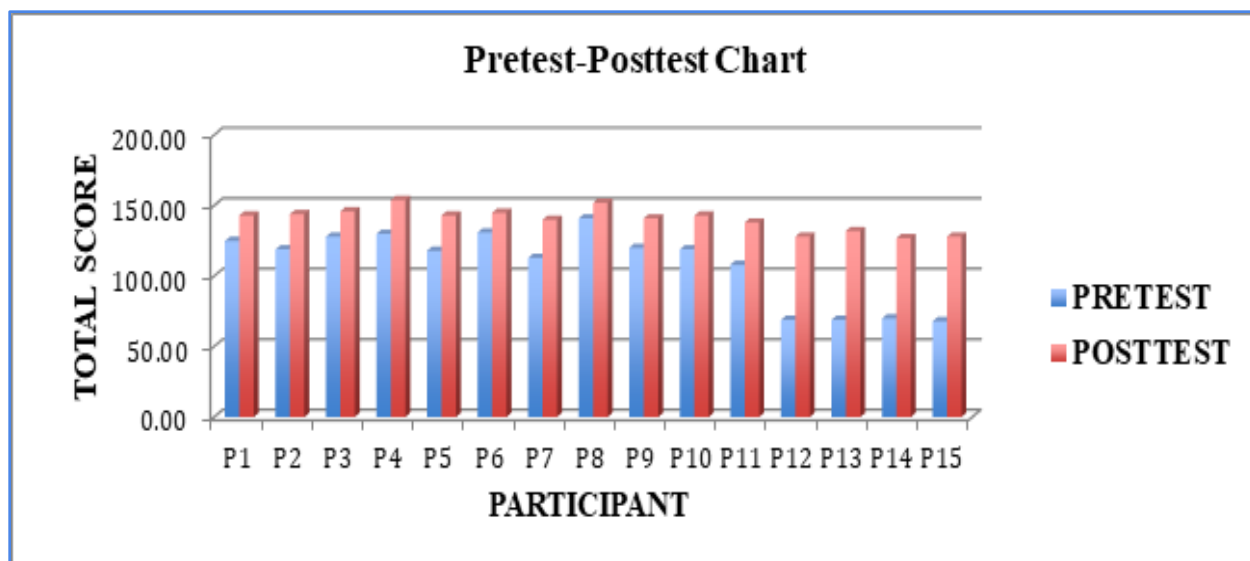
Statistic

The following statistically significant conditions were met:

- 1) $t_{\text{calculated}} > t_{\text{critical}}$ ($3.29 > 1.94$) and
- 2) $P\text{-value} < \text{Alpha value}$ ($0.00052 < 0.05$)

Since the calculated t is greater than the critical t , and the P -value is less than the Alpha value, we reject the null hypothesis. Hence, there is a significant difference between the mean performance of participants in the pretest and posttest.

The Posttest and Pretest data were further presented by means of a bar chart as indicated in the chart below (figure 3):



(Figure 3: Bar chart comparing pre and posttest scores)

From the above chart, the preponderance of the posttest over the pretest cannot be overemphasized.

TABLE 7 – Pretest-Posttest Relational Analysis per Questionnaire Item

ITEM	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Posttest Total	59	57	59	56	60	54	60	59	49	50	59	48
Pretest Total	40	41	42	42	43	41	47	42	32	38	46	26
ITEM	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
Posttest Total	56	58	53	72	74	71	72	68	67	73	43	70
Pretest Total	44	42	40	62	67	58	63	49	51	55	37	55
ITEM	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	
Posttest Total	52	69	68	75	48	58	58	63	50	55	61	
Pretest Total	51	56	58	61	41	42	49	49	36	39	43	

Pretest-Posttest Correlation

The pre and posttest data for each of the thirty-five questionnaire items are presented in Table 7, above. The Pearson product moment correlation statistic was used in this analysis to determine whether there was statistical evidence for a linear relationship between the performance data on both the pre and posttest. The Pearson correlation coefficient (r), defined as a numerical representation of the strength, and direction of this relationship was calculated; r , is a dimensionless index that ranges from -1.0 to 1.0 inclusive, and reflects the extent of a linear relationship between two data sets. From the analysis, the Pearson correlation coefficient, $r = 0.8894701$ (approximately $r = 0.9$). This implies a very high positive correlation between the pretest and posttest.

Below are the results of the Paired T-test. The mean change in overall test scores was an increase of **31.73 (std dev 18.19)**. The Paired T-test indicates that the change in test scores was statistically significant ($t = -6.76, p < 0.0001$).

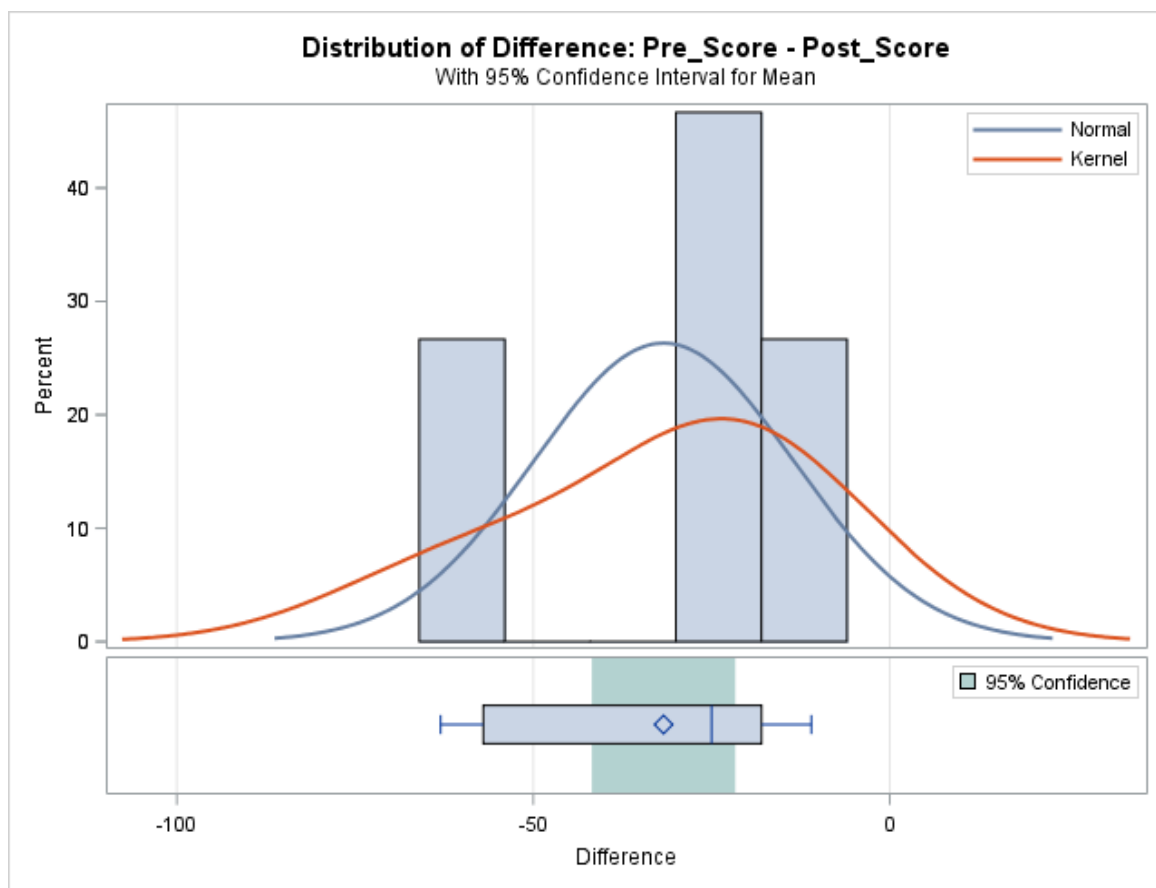
Table 8: Paired T-test Results: Pre_Score minus Post_Score

n	Mean	Std Dev	Std Err	DF	t Value	Pr > t
15	31.73	18.19	4.70	14	-6.76	<.0001

Although the Paired T-test results in a statistically significant change in test scores, a t-test may not be the most appropriate test for this data based on the small sample size. A visual inspection of the paired test score differences reveals that the differences may not be normally distributed. The relative frequency and box and whisker plots below show a possible negative skew. Further, the QQ-Plot below also shows possible non-normality of the paired differences in test scores. These visual plots of the paired differences indicating non-normality provide some evidence that the Paired T-test may not be appropriate to determine statistical significance.

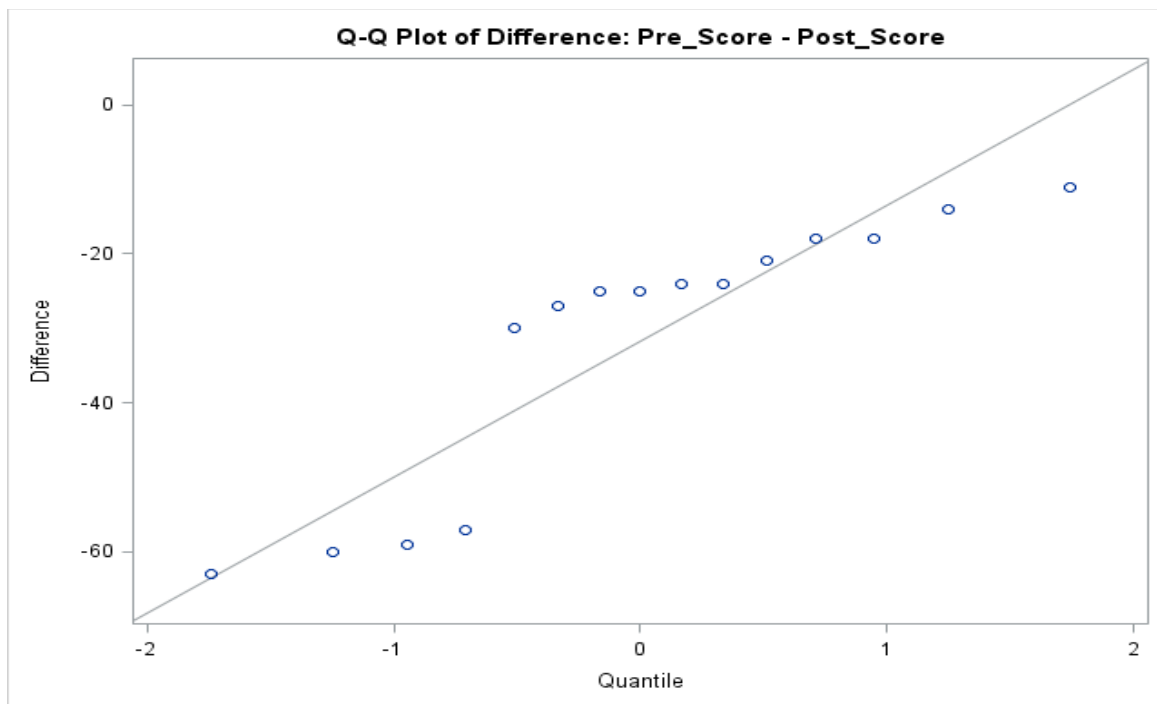
Additionally, the sample size is small ($n=15$). Therefore in an effort to be conservative, the Wilcoxon Signed Rank Test was also conducted to determine statistical significance. The Wilcoxon Signed Rank Test (a non-parametric test) is appropriate to test significance when the data are not normally distributed and/or when the sample size is small. As with other non-parametric tests, the Wilcoxon Signed Rank Test requires no assumptions regarding the distribution of the data or the underlying population; therefore, there is a lower possibility of reaching an incorrect conclusion and as such, it is considered a conservative method.

Relative Frequency: Box and Whisker Plot of Differences



(Figure 4: Relative Frequency using box and whisker plot of differences)

QQ-Plot of Differences

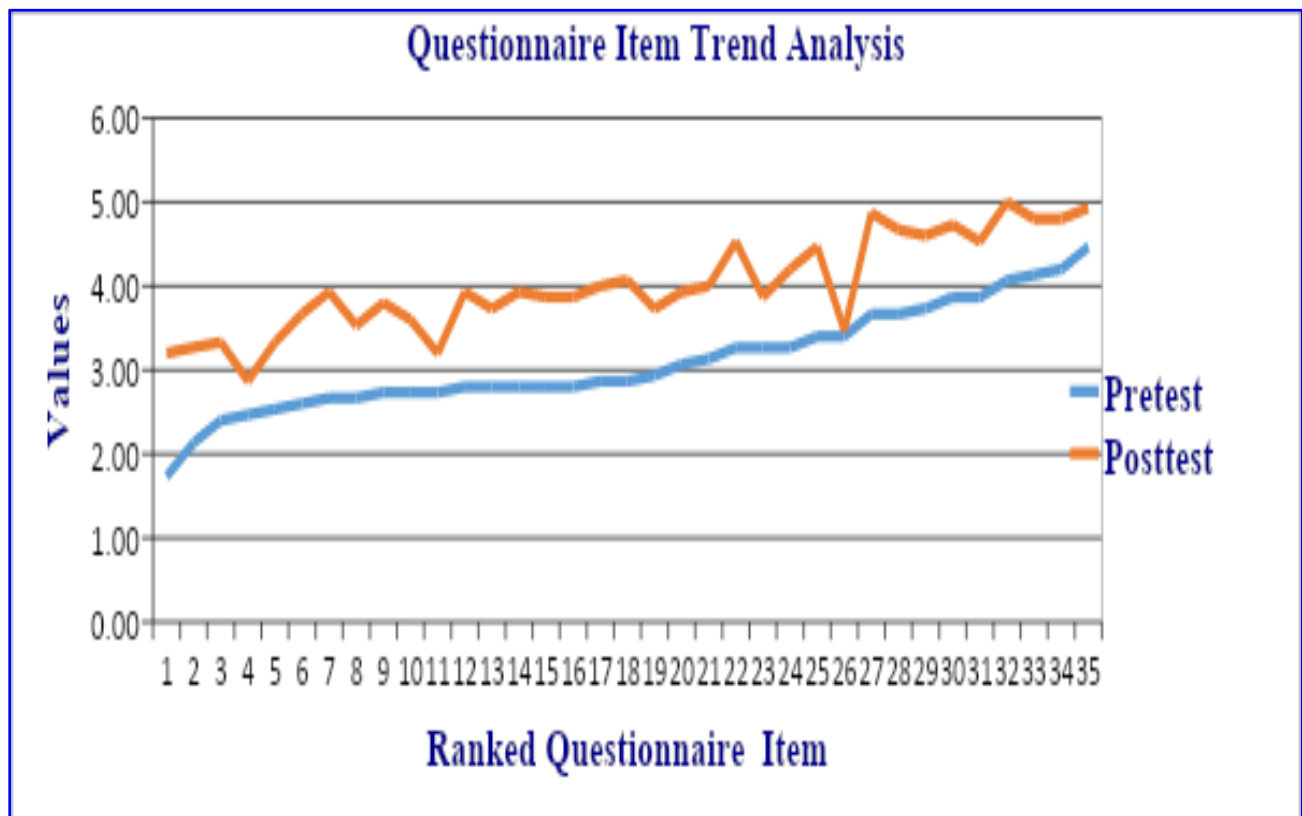


(Figure 5: QQ - Plot of Differences)

In this analysis, the Wilcoxon Signed Rank Test statistic is $S = -60$, resulting in a statistically significant p-value ($p < 0.0001$). These results further suggest that there's a statistically significant increase in the overall post-test scores compared to the pre-test scores, signifying that the Safety Awareness educational program was successful. Nonetheless, there are likely other factors that might have contributed to the positive outcomes. For example, both professionals and nonprofessionals may have a heightened awareness of safety protocols due to incidents occurring at the practice, their perception of mental health patients and stigmatization might have changed. There may be additional confounding reasons which requires further research.

Pretest-Posttest Trend Analysis

A Trend Analysis model was further used to examine the relationship between the pre and posttest scores. First, the questionnaire items were ranked in ascending order based on their level of rigor. Pretest scores were used as basis for ranking. Ranked questionnaire items (Horizontal axis) were plotted against their corresponding scores for the pretest (blue curve). Similarly, the same ranked questionnaire items (Horizontal axis) were plotted against corresponding scores in the posttest (red curve) as shown below. The chart indicates that as pretest values increased, the posttest values also increased. Participants who scored low in pretest questions also scored low in posttest assessment for the same questions. This was the same trend for participants who scored high. Thus the trend underscores the validity and reliability of the evidence-based training, MHL and AHRQ-TeamSTEPPS.



(Figure 6: Trend of analysis)

1. The values are consistently higher in post-tests than pre-test (with the exception of questionnaire item 26 - which was a discussion talking point)
2. In both pre and post-tests, subjects seem to have lower values in the first 20-25 question items than the last question items.

IMPACT OF DNP TRAINING ON POSTTEST SCORES

INTERVENTION DOMAINS

The intervention was to determine if, and to what extent, an educational program given to participants in a private-practice setting would:

- a) Increase the level of staff's understanding of patients with mental health and substance use disorder.
- b) Motivate their readiness and willingness to provide professional assistance and treatment to anyone exhibiting active psychiatric-mental health crisis
- c) Equip them with skills to reduce injuries and forestall potential workplace risks.

The thirty-five questions were grouped into three domains addressing:

1. **DISORDER RECOGNITION:** Recognizing each specific disorder, having knowledge of available assistance, and using appropriate therapy.
2. **ASSISTANCE/TREATMENT:** Giving assistance, knowledge of various treatments, ability to seek alternative mental health information.
3. **UNDERSTANDING RISK FACTORS:** Ability to analyze risk factors and potential workplace risks and injury-prone situations.

Table 9 presents the impact analysis of the posttest on the pretest. The aggregate score represents the sum of the values of the posttest over the respective values of the pretest in each

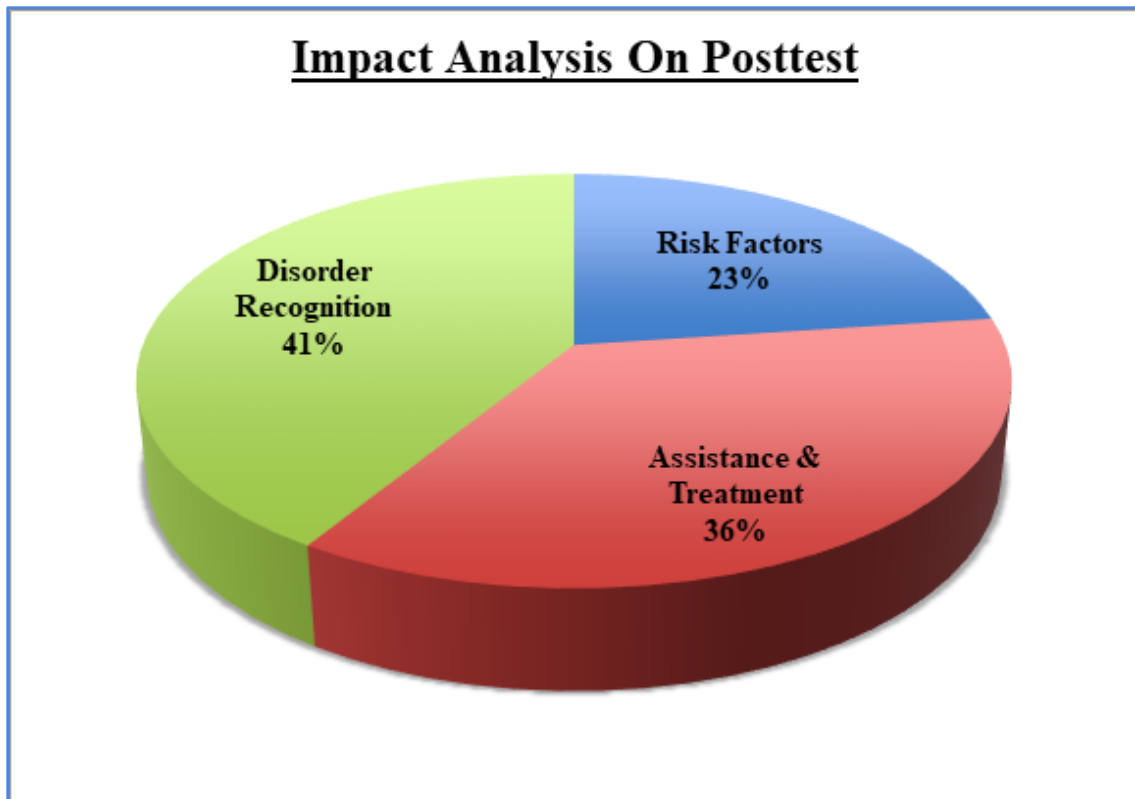
domain. This was obtained by summing up all the differences between corresponding posttest scores and pretest scores (See Appendix on *Impact of DNP Training on Posttest Scores*)

Table 9: Impact Analysis by Domain

DOMAIN		AGGREGATE SCORE	PERCENT
1	Risk Factors	7.25	22.86%
2	Assistance & Training	11.4	35.95%
3	Disorder Recognition	13.06	41.19%
Total		31.71	100%

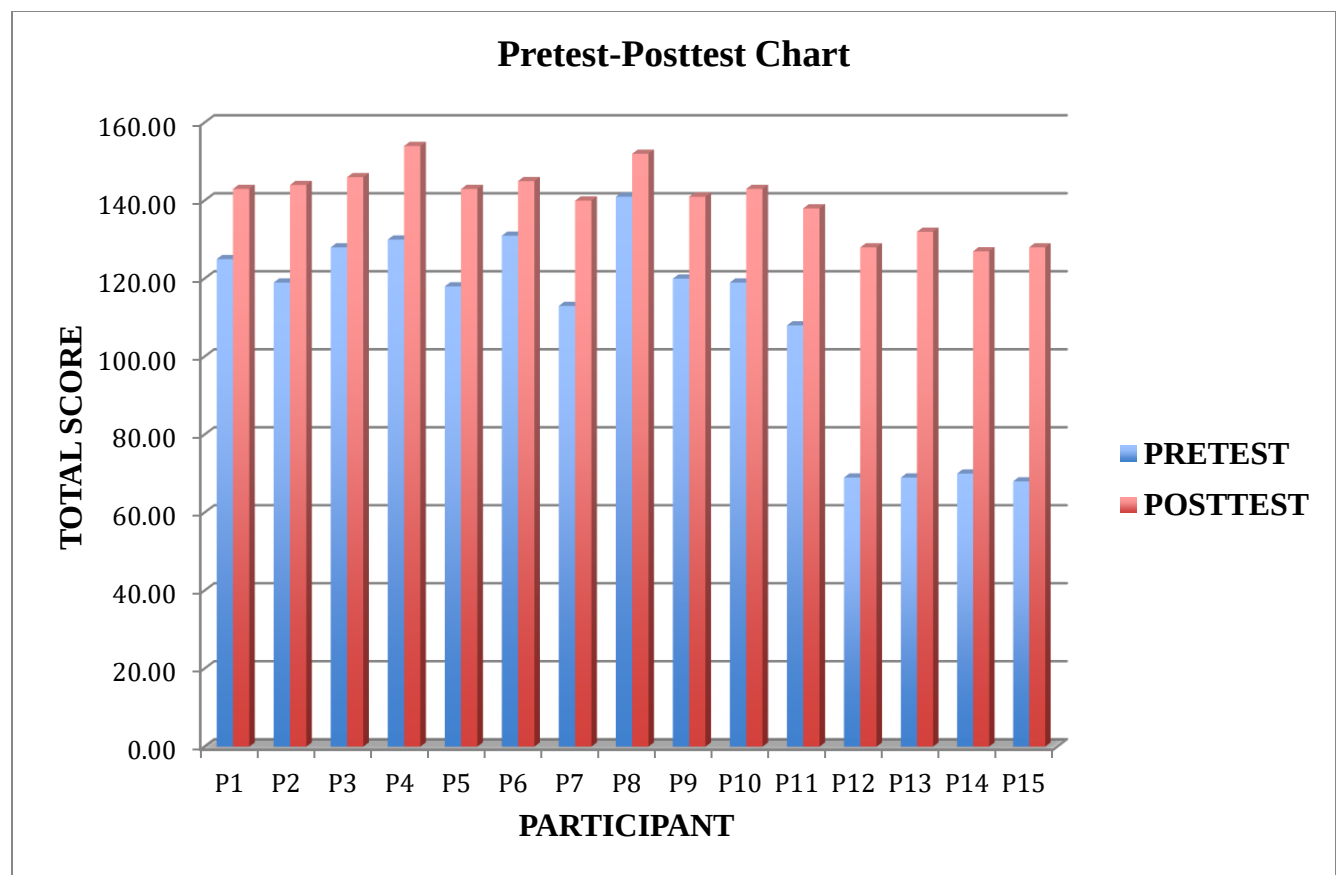
The chart below is a representation of the extent to which the educational program given by the DNP student to participants in the selected private-practice impacted them. It suggests that “Disorder Recognition” has the greatest influence (41%) followed by “Assistance and Treatment” (36%). “Understanding Risk Factors” has the least impact (23%) on the participants’ overall performance.

This finding suggests that participants would have performed better or maximally, if more questions were centered on “disorder recognition” only. On the other hand, it suggests that the participants’ scores would have been worse if the questions had measured understanding “risk factors” factor only.



(Figure 7 Impact analysis of posttest)

The impact analysis revealed the importance of knowledge. The MHL thirty-five question 5 Likert scale questionnaire is technically divided into three sections as delineated below. In both the pre and posttest, the professionals who have ample knowledge of psychiatric mental health patients performed well, while the non-professionals struggled in the pretest and did better in the posttest. Nevertheless, the risk factor remains a challenge for both categories of staff as demonstrated below in figure 8.



(Figure 8: Risk factors)

CROSSTABULATION MODEL

A cross tabulation analysis was necessary in finding underlying relationships within the survey results based on data from Participants' Demographic Profile. Participants were classified into professionals and non-professionals based on their job titles. Professionals included one **Medical Director**, four **Advanced Nursing Practitioners**, two **Psychiatrists** and one **Social worker**. The non-professionals comprised participants drawn from the support and office administrative staff. Each participant's questionnaire was deliberately assigned a number code for de-identification purpose. Extracts from the demographic sample were presented in aggregate to see how the performance of participants interrelate with the scores from the pre and posttest data, subject to their background. Table 9a presents the Pretest-Posttest totals and averages for

professionals and non-professionals in the respondents' sample. The range in the combined scores reveals a broad gap of 77 scores (145 – 68) for the non-professional participants, and 36 points (154 – 118) for the professional participants. The narrow gap for the professional participants underscores the relevance of background across staff in hospitals and healthcare establishments. Additionally, the wide gap in the range for the non-professionals is attributable or suggestive of their “lack of professional knowledge” in the psychiatric mental health field. Hence there is a need for intermittent training and professional development for non-professional staff in the private-practice settings.

Table 9a: Pretest-Posttest Scores by Background

PROFESSIONALS			NON-PROFESSIONALS		
PARTICIPANT	PRETEST	POSTTEST	PARTICIPANT	PRETEST	POSTTEST
P1	125	143	-	-	
P2	119	144	P6	131	145
P3	128	146	P7	113	140
P4	130	154	P11	108	138
P5	118	143	P12	69	128
P8	141	152	P13	69	132
P9	120	141	P14	70	127
P10	119	143	P15	68	128
AVERAGE	125	146	AVERAGE	89.7	134
MAX	160	160	MAX	160	160

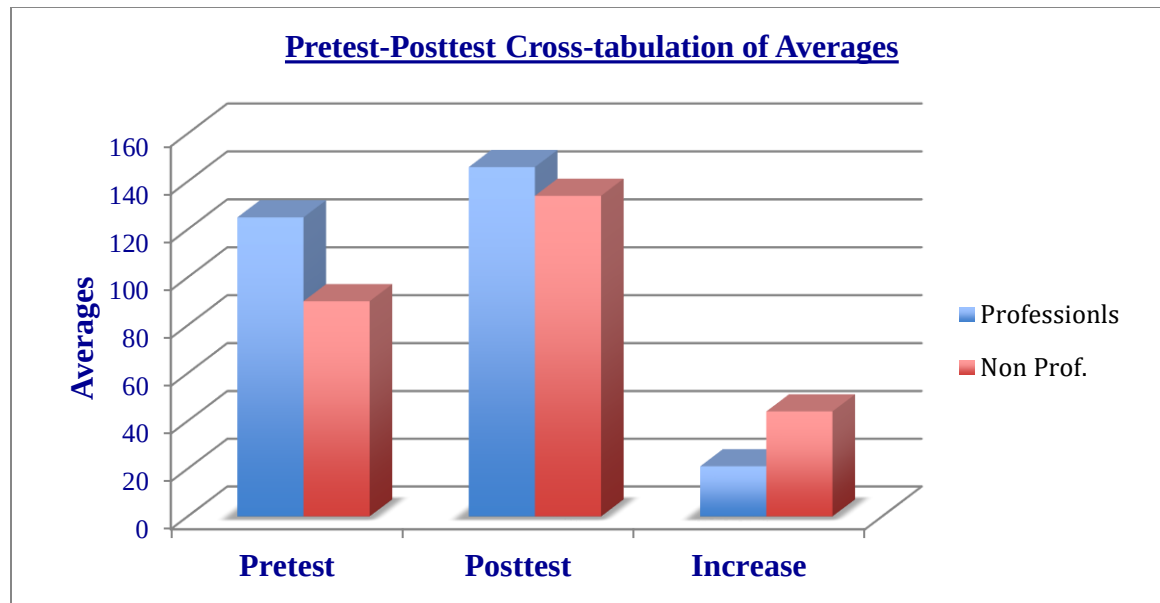
Table 9b: Pretest-Posttest Cross-tabulation of Averages

Participants		PERFORMANCE		Percent Increase (%)
		Pretest Mean Score	Posttest Mean Score	
BACKGROUND	Professionals	125 (78.1%)	146 (91.3%)	13.2%
	Non-Professionals	89.7 (56.1%)	134 (83.8%)	27.7%
Difference (%)		22%	7.5%	14.5%

The above cross tabulation and the supporting bar chart below reveal the following:

- 1) **Relevance of background and previous knowledge:** Professionals outperformed the non-professional in both pretest and posttest. Suggesting the importance of training, communication, alertness, and awareness needed to successfully function safely in psychiatric-mental health and substance use disorder setting.
- 2) **Effects of Educational Training:**
 - a) Professionals' average moved from 78% to over 91%.
 - b) Non-professionals average moved from 56% to over 83%, an increase of nearly 28%
 - c) If the non-professionals were trained before the pretest, they might have out-performed the professionals by nearly 6%
 - d) The bar chart below reveals that the increase in performance as a result of the training was more obvious among the non-professional group.

The significant increase across sections explains the importance of training and continuous professional development and workshops for practitioners.



(Figure 9: Cross-tabulation of average)

Recommendations and Discussion

Implementing this DNP study at this behavioral private practice revealed that there has been an observed and undisputed increase in the occurrence of violence in this workplace perpetrated by patients. This has led to frequent turnover of the front-line staff. The primary focus of the study was to present a framework for the implementation of evidence-based assessment and management of a safer environment for staff in this setting. Additionally, it was noted that the first point of any treatment or diagnosis of all patients is with the primary care physician/provider (PCP)'s setting before patients are referred to various specialists (Olfson, 2016, Feinstein, 2014; NCHC, 2014). According to much of the literature reviewed, the majority of initial healthcare encounters, begin with the PCP. Furthermore, this implementation site had two incidents last year where psychiatric patients acted out while in crisis. The township's police were notified immediately. However, the psychiatrist was injured on one of these occasions before the police arrived. This was one of the determining factors used in identifying the need for this educational program at this site. There was also the need to empower the nonprofessional

staff on the course of actions necessary in the clinical management of escalating patient. To recognize deviation from patient's baseline, one needs to understand what the baseline should be; hence the need for the mental health literacy training. To this end, this DNP investigator anticipated that the study will outline not only the recommendation for a formal guideline but also the significance of monitoring and ensuring safety to reduce the occurrence of workplace violence, and to ensure staff returns home unharmed (Isaak et al., 2016; Hill et al., 2015).

As demonstrated by the results of the initial baseline assessment, the knowledge gap identified suggested that indeed some staff do not possess the knowledge about mentally ill patients (AHRQ, 2018; Jorm, 2012; NAMCS, 2015). TeamSTEPPS is a safety initiative that assists in meeting the National Patient Safety Goals as well as enhances the ability to observe and identify patients in crisis to stop the cycle (AHRQ, 2018). Therefore, this educational program was designed to meet the needs of staff, effectively managing and monitoring patients in any healthcare settings. Awareness based on the education provided may ensure a safer environment when staff are empowered with training (Zicko et al., 2017; AHRQ, 2018).

The pre-assessment findings suggest that there is a need to proactively heighten the awareness of providers, especially the nonprofessional. Also, there is a need to put infrastructure and guidelines in place for staff to be able to identify the potential for any occurrence of violence. Such guidelines will make the staff more effective in monitoring, recognizing, and managing crises as they occur as well as know how and when to intervene (Zicko, et al. 2017; Isaak, et al. 2017).

The limitations of this study include; the small sample size of 15 participants, which limited the statistical power of the results. Secondly, this is a convenient sample from the same site which might have created or increased bias. Therefore, results may not be generalizable

because of this reasons. Results may be more statistically significant in a larger sample size in future studies.

In conclusion, a significant suggestion from this study is that it outlined some of the tools from TeamSTEPPS that staff may utilize for situational awareness, situational monitoring, improved communication, working effectively and cohesively together to ensure safety while reducing workplace violence. Secondly, it presents a course of action that may guide and allow for retraining staff to reduce the staff turnover at this site. The “quick turnover” begs the question, WHY is there a quick turnover among the non-professional staff, but not the professionals? Will continuous training empower staff to remain longer at this establishment? A third suggestion is for the management to incorporate MHL and AHRQ TeamSTEPPS trainings in their quarterly meetings. It is worthwhile to note, although the frontline staff are well educated; however, not in psychiatric mental health (NAMCS, 2015; Cherry, Albert, & McCaig, 2018). Therefore, such tools are needed in private practice settings to keep the momentum going. Both of these resources are available online.

According to Mello et al., 2016, many of the initial contacts in an office setting lacks knowledge about the mental health or training to provide initial care for this population when they are encountered. Furthermore, such tools may help with the retention of staff. Literature suggests that training enhances staff perception and reduces stigmatization towards this population. As stigmatization hinders knowledge acquisition in mental illness (Bodner et al., 2015; Hill et al., 2015; Wei et al., 2015). Perhaps, if the nonprofessional staff are comfortable around the mentally ill patients they may build the confidence to work with such clientele longer (Blando et al., 2013).

Finally, the research study presents useful evidence-based recommendations for further investigations about the management of psychiatric patients being treated in an office setting since literature supports that PCPs are the first contact for all patients before being referred to a specialist (Olfson, 2016; National Center for Health Statistics [NAMCS], 2015; Feinstein, 2014). Hence, the need for staff to be well aware of psychiatric patients' needs, the signs and symptoms of crisis to assist with improving care provided at all levels (Yifeng, McGrath, Hayden, & Kutcher, 2016). All these reasons for further research.

Economic/Cost Benefit

Improving a population's health outcome is of utmost importance for any economy. When high rates of workplace violence in healthcare is experienced in a population, it may increase the cost of healthcare, as well as diminish the quality of healthcare which may lead to poor outcomes. Additionally, injuries to care givers cause a domino effect. Once staff is injured and unable to function, they have to be replaced. Therefore, a significant reduction in workforce; as well as the high costs associated with the management of healthcare workers' injuries indirectly affects the national economy. Maintaining a healthy workforce reduces the cost of healthcare nationally (OSHA, 2018). According to the National Ambulatory Medical Care Survey (NAMCS), the National Center for Health Statistics (NCHS) research data of 2012–2014, an estimated annual average of 30 million mental health-related physician office visits were made by adults aged 18 and over (NCHS, 2014; NAMCS, 2015; Cherry et al., 2015; Olfson, 2016).

Impact on Healthcare Quality and Safety

Quality healthcare must be safe for both patients and the care providers to achieve best patient outcomes. Patients must be able to access services that will improve their quality of life.

Staff providing care must be equally comfortable around their clients to give the best care. Staff should not come to work in fear because they are not certain of returning home safely (Isaak et al., 2017). Nevertheless, to achieve quality and safe healthcare, evidence-based best practices and interventions must be applied and implemented. Best practice and interventions in healthcare are sometimes based on tested, proven guidelines and procedures, with outcomes predictability Gurzick and Kesten (2010). Therefore, in line with the objectives and the findings of this study, three key components continue to be relevant in all healthcare systems--the presented framework for the implementation of evidence-based assessment, management of mental health awareness, and providing a safer environment to reduce injury of staff.

Policy Implications

The implications of this research study for both the nursing practice and at policy levels is that the acquisition of these fundamental knowledge may assist with improving healthcare productivity, reduce stigmatization about mental illness and in turn improve healthcare outcomes of psychiatric patients when staff are able to truly care for such patients, as well as recognize crisis before it erupts. Nonprofessional providers are empowered to be vigilant and closely monitor clients utilizing the AHRQ-TeamSTEPPS tools for safety; utilizing situational awareness, situational monitoring and timely communication to enhance safety. Additionally, the use of mental health literacy (MHL) tool to continuously educate and remind all staff of the expected and unpredictability of psychiatric patients and what may be involved in caring for this population. Policy and protocol needs to be developed in the research study site.

Translation

In relation to the findings of the research study, the researcher made recommendations of the translation of the study to a larger audience to overcome the relative limitation of the small

sampling experienced in this setting. Further studies are needed to enable this research study replication for validity. The findings of this study may be translated and replicated in any provider's setup across the lifespan, including those that may be caring for pediatric, adolescents, middle age, or geriatric mental health patients in all specialties. As previously noted, most often, mental illness is first presented to the Primary Care Provider's office (NCHS, 2014; NAMCS, 2015; Cherry et al., 2015; Olfson, 2016). Therefore, maintaining vigilance and safety is paramount in all healthcare settings from private practice offices to larger hospitals, as well as state psychiatric facilities. It is imperative for leaders in health care settings to provide such educational programs to staff routinely; empowers staff to work better with each other, increase and ensure staff member's ability to monitor and manage escalating patients safely as well as appropriately.

Dissemination

Upon the completion of the report, the researcher made a copy of the report available to the administrator of the private practice where the research was implemented. In addition, a report is available at Rutgers School of Nursing. Finally, all research participants may access all provided materials through the faculty's library.

Professional Reporting

After the completion of this DNP investigation, the project report was published on the university's repository to be accessible to others for review. The repository is located on the Rutgers University's website. The research study was displayed during the School of Nursing Poster Day presentation. Additionally, the researcher is considering preparing a smaller version of the report in a journal format to be submitted for peer review. If successfully accepted, a journal publication may be a possibility in the future.

SPSS Data Appendix – Questionnaire Administration:**Participant Raw Score by Question – Pretest**

Q #	PARTICIPANT														
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	3	3	3	3	2	3	4	4	4	3	3	2	1	1	1
2	3	3	3	3	2	4	3	4	4	3	3	2	1	1	2
3	3	3	3	3	3	3	4	4	4	3	3	2	1	1	2
4	4	3	3	3	3	4	3	4	4	3	3	2	1	1	1
5	4	3	3	3	3	4	3	4	3	4	3	2	2	1	1
6	4	3	3	3	3	4	3	4	3	3	3	2	1	1	1
7	3	3	3	4	4	4	3	4	3	3	3	3	3	2	2
8	3	3	3	3	4	3	4	4	3	3	3	2	2	1	1
9	3	3	2	3	4	2	1	3	1	2	3	2	1	1	1
10	1	2	3	2	3	3	3	3	3	3	3	2	2	3	2
11	4	3	4	3	4	4	4	3	4	2	3	2	2	2	2
12	2	2	1	2	2	1	1	2	1	3	2	1	2	2	2
13	4	4	3	4	4	3	2	4	4	3	3	2	2	1	1
14	4	4	2	3	4	4	2	3	3	4	3	2	2	1	1
15	3	3	3	3	3	3	2	3	4	3	3	2	1	2	2
16	5	5	5	5	3	5	4	4	5	5	4	3	3	3	3
17	5	5	5	5	4	5	4	5	5	5	4	3	4	4	4
18	4	5	5	5	3	5	4	5	5	4	4	2	2	2	3
19	5	5	5	5	4	5	4	4	5	5	4	3	4	2	3
20	4	4	4	5	5	2	3	3	3	4	4	2	2	2	2
21	4	4	2	4	5	4	3	5	3	4	4	2	1	3	3
22	4	4	5	4	5	3	4	5	3	5	4	2	1	3	3
23	3	3	4	3	3	4	3	3	2	3	2	1	1	1	1
24	4	4	5	4	4	4	5	5	4	4	3	2	1	3	3
25	4	3	5	4	3	5	4	4	3	4	2	2	2	3	3
26	4	4	5	4	4	5	4	5	4	4	3	2	3	2	3
27	4	4	5	5	3	5	4	4	4	4	4	3	4	3	2
28	5	4	5	4	3	5	4	4	5	4	4	4	3	4	3
29	3	3	3	4	3	3	3	3	4	3	3	1	2	2	1
30	3	3	4	4	3	4	3	4	2	3	3	1	2	2	1
31	4	4	5	4	3	5	3	5	3	3	3	1	2	2	2
32	4	4	4	4	3	4	3	5	4	3	3	1	2	3	2
33	3	2	2	4	3	2	3	5	2	2	2	1	2	2	1
34	2	2	4	4	3	4	3	5	3	2	2	1	2	1	1
35	3	2	4	4	3	3	3	5	3	3	2	2	2	2	2

Appendix – Questionnaire Administration:**Participant Raw Score by Question – Posttest**

Q #	PARTICIPANT														
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
1	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4
2	4	4	4	4	4	4	4	4	4	4	4	3	3	4	3
3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4
4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3
5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
6	4	4	4	4	3	3	4	4	4	4	4	3	3	3	3
7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
8	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4
9	3	4	4	4	3	3	3	4	3	3	3	3	3	3	3
10	3	4	4	4	3	4	3	4	3	3	3	3	3	3	3
11	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4
12	3	3	3	4	4	4	3	3	3	3	3	3	3	3	3
13	4	3	4	4	4	3	3	4	4	4	4	4	4	3	4
14	4	4	4	4	4	4	3	4	4	4	4	4	3	4	4
15	4	4	4	4	4	3	3	4	3	4	4	3	3	3	3
16	5	5	5	5	5	5	5	5	5	5	5	4	5	4	4
17	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
18	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4
19	5	5	5	5	5	5	5	5	5	5	5	4	5	4	4
20	5	5	5	5	5	5	4	4	5	4	4	5	4	4	4
21	4	5	5	5	4	4	5	5	5	5	4	4	4	4	4
22	4	5	5	5	5	5	5	5	4	5	5	5	5	5	5
23	3	3	3	4	3	5	3	3	3	3	2	2	2	2	2
24	5	5	4	5	5	5	5	5	5	5	4	4	4	5	4
25	3	4	3	5	3	5	3	4	3	4	3	3	3	3	3
26	5	4	5	5	4	5	5	5	5	5	4	4	4	5	4
27	4	5	5	5	4	5	5	5	5	5	4	4	5	3	4
28	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
29	4	3	4	3	3	3	3	3	4	3	3	3	3	3	3
30	5	4	4	4	4	4	4	4	3	3	4	3	4	4	4
31	5	4	4	4	4	4	4	5	3	4	4	3	4	3	3
32	4	4	4	5	4	4	5	5	4	4	4	4	4	4	4
33	3	3	3	4	4	3	4	5	3	3	3	3	3	3	3
34	3	3	4	5	5	3	3	5	4	4	4	3	3	3	3
35	4	4	4	5	4	4	4	5	4	4	4	4	4	4	3

Appendix: Performance Analysis by Average Questionnaire Item

Questionnaire Item	Pretest	Posttest	Difference	Percent
1	2.67	3.93	1.26	47.00
2	2.73	3.80	1.07	39.00
3	2.80	3.93	1.13	40.00
4	2.80	3.73	0.93	33.00
5	2.87	4.00	1.13	39.00
6	2.73	3.60	0.87	31.00
7	3.13	4.00	0.87	27.00
8	2.80	3.93	1.13	40.00
9	2.13	3.27	1.14	53.00
10	2.53	3.33	0.80	31.00
11	3.07	3.93	0.86	28.00
12	1.73	3.20	1.47	84.00
13	2.93	3.73	0.80	27.00
14	2.80	3.87	1.07	38.00
15	2.67	3.53	0.86	32.00
16	4.13	4.80	0.67	16.00
17	4.47	4.93	0.46	10.00
18	3.87	4.73	0.86	22.00
19	4.20	4.80	0.60	14.00
20	3.27	4.53	1.26	38.00
21	3.40	4.47	1.07	31.00
22	3.67	4.87	1.20	32.00
23	2.47	2.87	0.40	16.00
24	3.67	4.67	1.00	27.00
25	3.40	3.47	0.07	2.00
26	3.73	4.60	0.87	23.00
27	3.87	4.53	0.66	17.00
28	4.07	5.00	0.93	22.00
29	2.73	3.20	0.47	17.00
30	2.80	3.87	1.07	38.00
31	3.27	3.87	0.60	18.00
32	3.27	4.20	0.93	28.00
33	2.40	3.33	0.93	38.00
34	2.60	3.67	1.07	41.00
35	2.87	4.07	1.20	41.00

Appendix: Questionnaire Item Correlation by Rigor

Questionnaire Item	Pretest	Posttest	Difference	Percent
Q#12	1.73	3.20	1.47	84.00
Q9	2.13	3.27	1.14	53.00
Q33	2.40	3.33	0.93	38.00
Q23	2.47	2.87	0.40	16.00
Q10	2.53	3.33	0.80	31.00
Q34	2.60	3.67	1.07	41.00
Q1	2.67	3.93	1.26	47.00
Q15	2.67	3.53	0.86	32.00
Q2	2.73	3.80	1.07	39.00
Q6	2.73	3.60	0.87	31.00
Q29	2.73	3.20	0.47	17.00
Q3	2.80	3.93	1.13	40.00
Q4	2.80	3.73	0.93	33.00
Q8	2.80	3.93	1.13	40.00
Q14	2.80	3.87	1.07	38.00
Q30	2.80	3.87	1.07	38.00
Q5	2.87	4.00	1.13	39.00
Q35	2.87	4.07	1.20	41.00
Q13	2.93	3.73	0.80	27.00
Q11	3.07	3.93	0.86	28.00
Q7	3.13	4.00	0.87	27.00
Q20	3.27	4.53	1.26	38.00
Q31	3.27	3.87	0.60	18.00
Q32	3.27	4.20	0.93	28.00
Q21	3.40	4.47	1.07	31.00
Q25	3.40	3.47	0.07	2.00
Q22	3.67	4.87	1.20	32.00
Q24	3.67	4.67	1.00	27.00
Q26	3.73	4.60	0.87	23.00
Q18	3.87	4.73	0.86	22.00
Q27	3.87	4.53	0.66	17.00
Q28	4.07	5.00	0.93	22.00
Q16	4.13	4.80	0.67	16.00
Q19	4.20	4.80	0.60	14.00
Q17	4.47	4.93	0.46	10.00
	108.53	140.27	31.74	29.00

Appendix: Impact of DNP Training on Posttest Scores

DOMAIN	Pretest	Posttest	Difference	Total	Percent
UNDERSTANDING RISK FACTORS	3.40	3.47	0.07	7.25	22.86%
	2.47	2.87	0.4		
	4.47	4.93	0.46		
	2.73	3.20	0.47		
	3.27	3.87	0.60		
	4.20	4.80	0.60		
	3.87	4.53	0.66		
	4.13	4.8	0.67		
	2.53	3.33	0.80		
	2.93	3.73	0.80		
	2.67	3.53	0.86		
	3.07	3.93	0.86		
ASSISTANCE & TREATMENT	3.87	4.73	0.86	11.4	35.95%
	2.73	3.60	0.87		
	3.13	4.00	0.87		
	3.73	4.60	0.87		
	2.40	3.33	0.93		
	2.80	3.73	0.93		
	3.27	4.20	0.93		
	4.07	5.00	0.93		
	3.67	4.67	1.00		
	2.60	3.67	1.07		
	2.73	3.80	1.07		
	2.80	3.87	1.07		
DISORDER RECOGNITION	2.80	3.87	1.07	13.06	41.19%
	3.40	4.47	1.07		
	2.80	3.93	1.13		
	2.80	3.93	1.13		
	2.87	4.00	1.13		
	2.13	3.27	1.14		
	2.87	4.07	1.2		
	3.67	4.87	1.2		
	2.67	3.93	1.26		
	3.27	4.53	1.26		
	1.73	3.20	1.47		
TOTAL	108.53	140.27		31.71	100%

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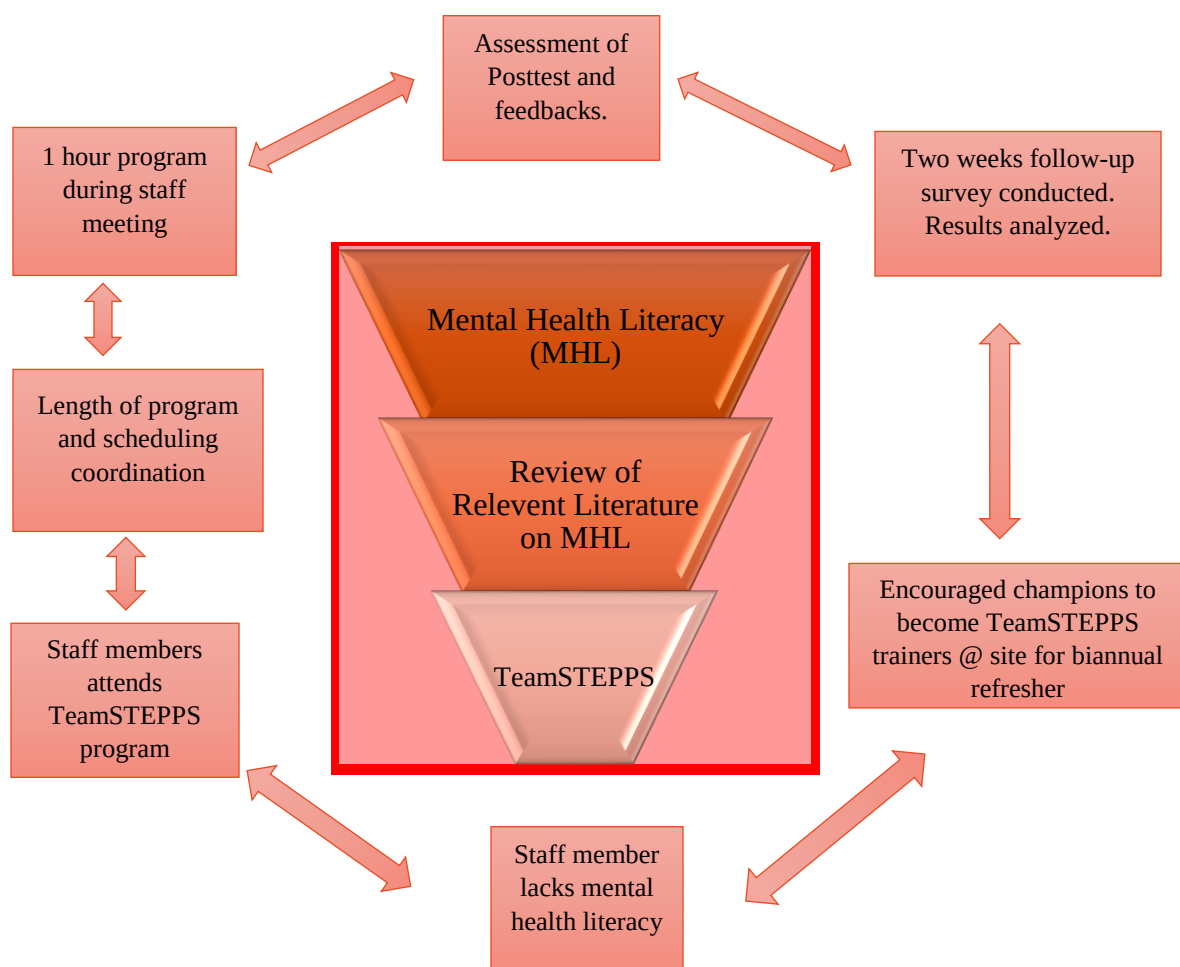
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APPENDICES

Rutgers School of Nursing
Stanley S. Bergen Building
Rutgers, The State University of New Jersey
65 Bergen Street
Newark, NJ 07101-1709

Appendix A**Knowledge to Action Theoretical Framework**

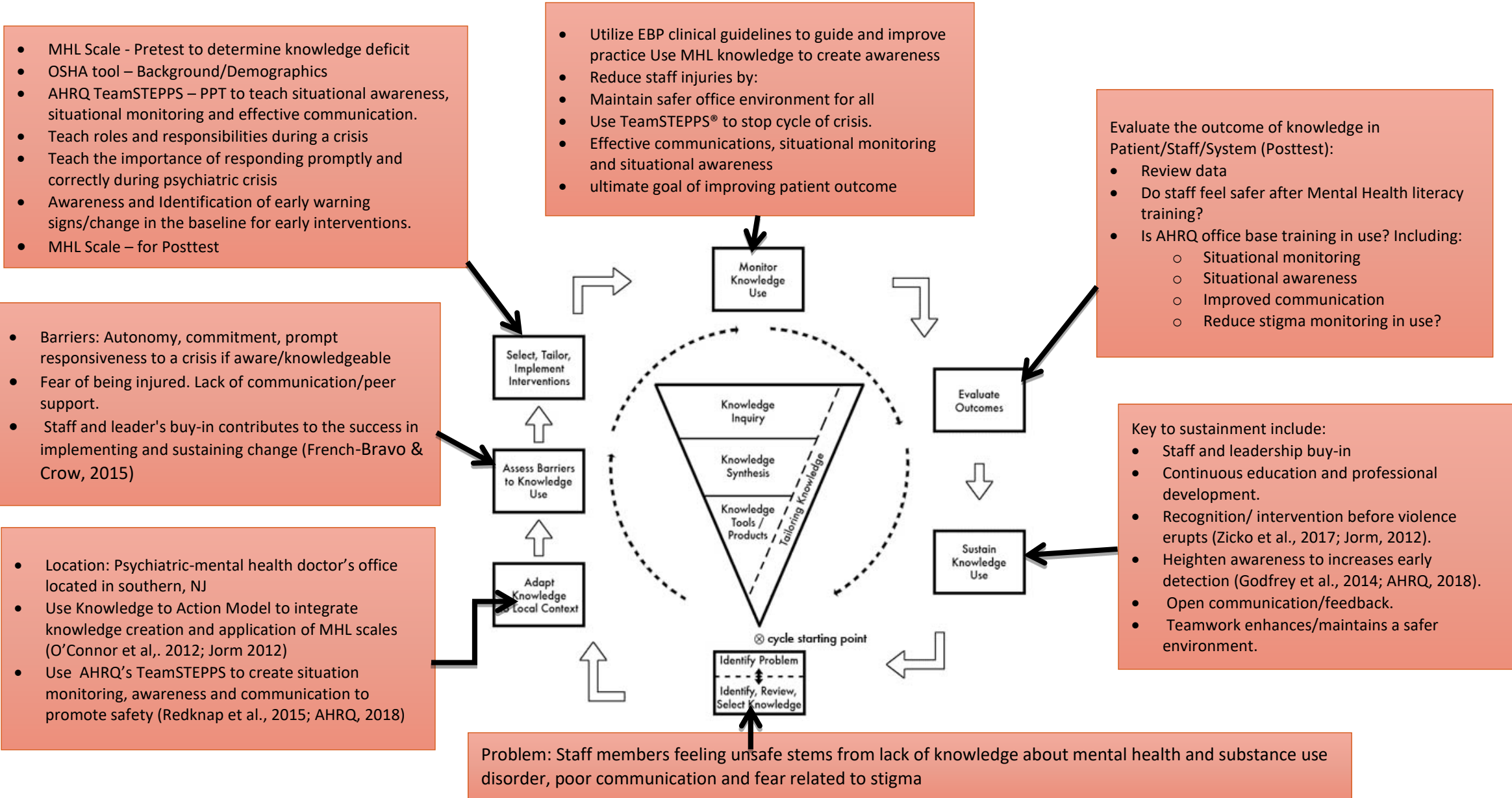
Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: time for a map? *J Contin Educ Health Prof*, 26(1), 13-24. doi:10.1002/chp.47



Appendix B

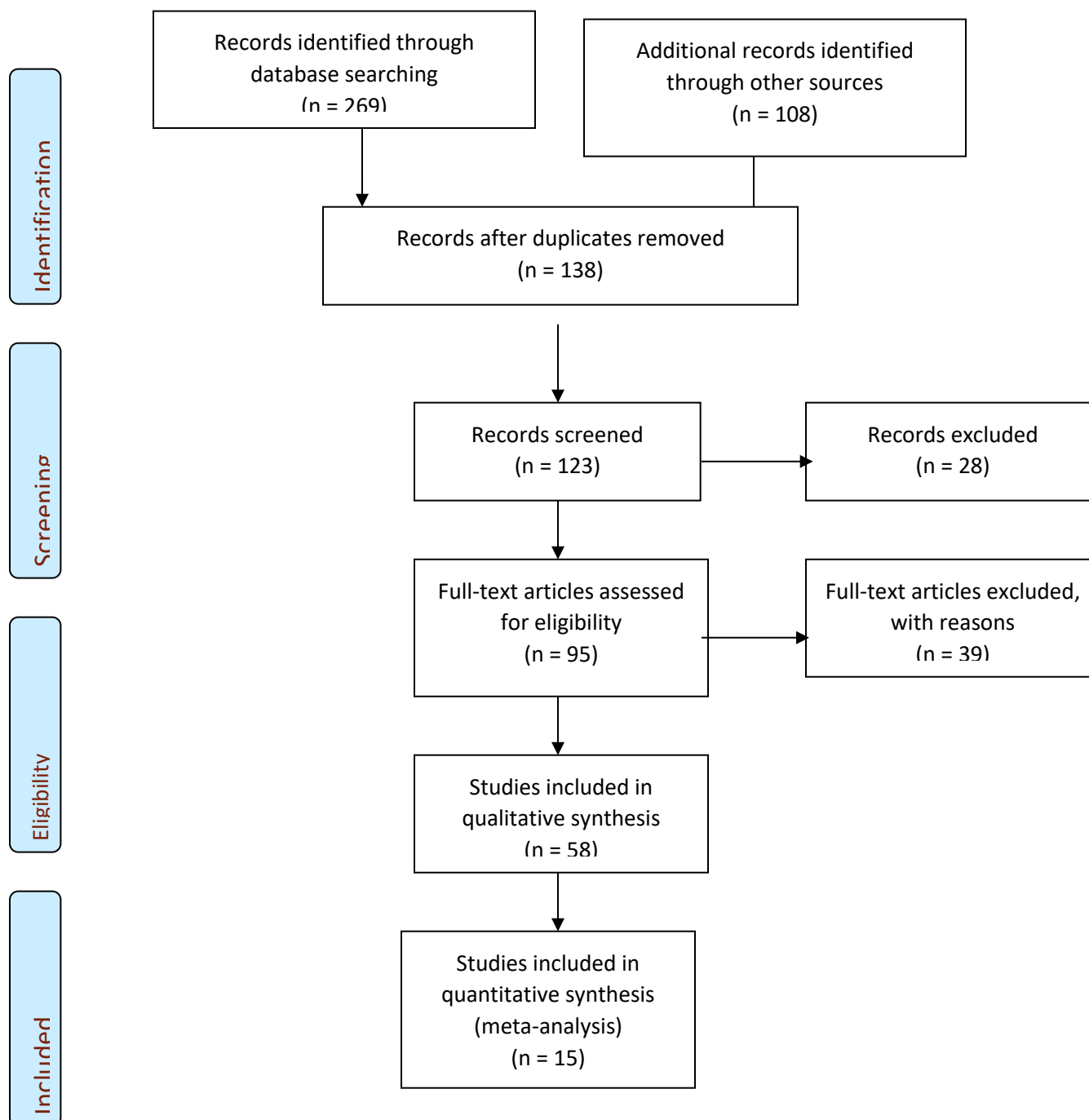
Concept Map: Knowledge to Action Model

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Appendix C

PRISMA Flow Diagram



Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Bmj*, 339(Jul21 1). Doi:10.1136/bmj.b2535



Appendix D

THE EVIDENCE TABLE

Rutgers School of Nursing
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 65 Bergen Street
 Newark, NJ 07101-1709

EBP Question: Will raising staff awareness through educational program reduce injuries to staff in a psychiatric-mental health outpatient setting?

Article #	Author & Date	Evidence Type	Sample, Sample Size, Setting	Study findings that help answer the EBP question	Limitations	Evidence Level & Quality
1	Andrassy (2016)	Quantitative approach	Psychiatric setting	How seclusion and restraint events have the potential of causing injuries to both patient and staff. It may re-traumatize or even cause death. Early intervention is the key.	Small sample size, conveniently taken from one location	II
2	Blando et al. (2013)	Cross-Sectional Survey	Randomly selected 457 nurses – 314 from ED and 143 from a psychiatric hospital	Compared violence in ED and psychiatric environment	Bias among respondents Time-frame evaluated	I
3	Bond, et al. (2015).	Non-Experimental	Convenience sampling method of 434 participants with a pre and posttest design.	The study showed that both online and face-to-face training have the potential to improve positive outcomes.	Small sample size.	III
4	Crisanti, A. S., Li, L., McFaul, M., Silverblatt, H., Pyeatt, C., & Luo, L. (2016).	Non-Experimental	cross-sectional design with secondary data from the National Council of Behavioral Health's MHFA Database, which includes course-specific feedback from 12-hour,	MHFA resulted in high confidence ratings in the ability to apply various skills and knowledge related to MHL	Convenience sampling, personal opinion could have influenced the findings. Only 20 states made up 88% of sample, which may affect generalizability.	Level III

			in-person MHFA training participants N = 36,263.			
5	Ercole-Fricke et al. (2016)	Quantitative study utilize comparative quasi-experimental design	Psychiatric setting	How culture change, development, and implementation of non-punitive behavior modification program may improve behavior outcomes	Small sample size, no control group	II
6	Feinstein (2014)	Qualitative and quantitative education program	Psychiatric Setting	Effectiveness of training outpatient staff to situational awareness	None identified, however, inconclusive, inability to demonstrate effectiveness	II
7	Godfrey, et al. (2014)	Experimental	State Psychiatric Hospital	Teaches identification and signs of escalating behavior and strategies for avoiding power struggles while setting limits.	No control group. Hospital merged with another psychiatric hospital during phase 1 of the experiment	II
8	Happell & Gaskin (2013)	Systematic Review	The literature reviewed – ranking nursing specialties	Recruitment/retention of nurses and how it affects continuum of care	Reporting and interpretation of effect size	IV
9	Hill et al. (2015)	Experimental	Psychiatric setting	Quality improvement initiative with a focus on staff injury reduction on specialized in-patient psychiatric unit.	Ability to convert the hours or number of staff worked as a ration to the number of injuries. Lacks random assignment and control group	II
10	Isaak et al. (2017)	Qualitative - Experimental	Psychiatric Hospital (Forensic setting) with 112 pre/85 post surveys	How workplace safety climate contributes to decreasing patient violence towards hospital workers	Small sample size, no control group and the time lag between intervention and post-	II

					intervention questionnaires	
11	Jorm, A. F., Kitchener, B. A., O'Kearney, R., & Dear, K. B. (2004).	Experimental	753 participants in the trial: 416 in the 8 trained group and 337 in the 8 control group.	Training produced significant recognition for mental health disorders, decreased social distance, and increased confidence in providing help to people with mental illness.	Curriculum adherence data was not totally collected, most instructors had 100%, while one scored 81%.	Level II
12	Kitchener, B. A., & Jorm, A. F. (2004).	Experimental	Data reported over 301 participants randomized to participate immediately in a course or to be wait-listed for 5 months before undertaking the training. The participants were employees in two large government departments in Canberra, Australia, conducted during participants' work time.	Benefits include greater confidence in providing help to others, Advocating for people to seek professional help, in concordance with preventive treatments, and decreased stigmatizing attitudes.	The instructor was one of the original developers of the course, workplace limits generalizability.	Level II
13	Redknap et al. (2015)	Qualitative-Descriptive	General/mental health setting	How practice environment affects the safety	Only literature reviews, no sampling of any kind done	V
14	Roca et al. (2016)	Case Report	In-patient psychiatric unit	Improving process of care may enhance safety when caring for a potentially violent patient.	Not identified One case study	III
15	Subedi, P., Li, C., Gurung, A.,	Non-Experimental	Uncontrolled pre and post-test design. Provided training 30	Participants showed great improvements between in recognition of symptoms of depression and expressed beliefs about	Young, males and well educated samples. Training materials were	Level III;

	Bizune, D., Dogbey, M., Johnson, C. C., & Yun, K. (2015).		people in a four classrooms at Temple University in Harrisburg, PA. N = 120	treatment that was concordant with those of mental health professionals. Nevertheless, the negative attitudes towards people with mental illness did not decrease.	in English only - cultural differences might be missed in the training.	
16	Svensson, B., & Hansson, L. (2014).	Experimental	The randomization of the 406 after obtaining informed consent resulted in experimental group of 199 participants and control group of 207 participants, conducted in a western part of Sweden	The intervention group improved more in knowledge on action to take when mental health patient is in crisis, and increased confidence in providing assistance as needed.	Not a true representation of the general public because they possessed higher level of education and were mostly females.	Level II
17	Wyatt et al. (2016)	Expert opinion	Healthcare settings	Government regulations and suggests violent prevention program	Opinion/viewpoint	V
18	Zicko et al. (2017)	Experimental	Med-Surg & Mental Health units	BERT used to improve patient and staff safety. Encouraged teamwork and early de-escalation before violence erupts	Not identified Lacks random assignments/control group	II



Appendix E

LESSON PLAN:

Rutgers School of Nursing
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Lesson Duration: 45 minutes **Preventing Injuries on the Psychiatric Unit**

Before the lesson starts, Consents, background information and Demographics will be completed: 15 minutes

OBJECTIVES	CONTENT (Topics)	TEACHING METHODS	OUTCOMES/ EVALUATION	TIME FRAME
<i>List the learners' objectives in behavioral terms.</i>	<i>Provide an outline of the content for each objective. It must be more than a re-statement of the objective.</i>	<i>Describe the teaching methods, strategies, materials, and resources for each objective</i>	<i>List expected learning outcome(s) for each objective.</i>	<i>State the time frame for each objective.</i>
The participant will: 1. Understand current literature and the need for staff education and awareness on MHL 2. Be familiar with the impact of safety on staff performance and patient safety	Brief description of current research and national data	Handouts Power point presentation	Will be knowledgeable about impact of staff injuries on staff performance and patient safety	10 minutes
3. Review current clinic practices to prevent violence and injuries	Discuss current practice and expectations to prevent work place injuries	Case scenarios or situations from the clinic	Provide guidance on developing a clinic protocol.	5 minutes
4. Discuss MHL and TeamSTEPPS Communication, situational monitoring & awareness	Definition of situational MHL, awareness based on AHRQ definition Team concepts	Handouts Power point presentation Sample case scenario Coaching tools	Pre-test results Post-test results	20 minutes
5. Recognize patient presentation that may lead to violence	Patient Assessment and Interventions Timely response to crisis and escalation procedures	Handouts Power point presentation Sample case scenario	Staff injuries Rate of unintended absences due to injuries Post Test results	10 minutes



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Appendix E2

Continuation of Lesson Plan

Outline of implantation stages

Lesson Plan: "teach on reducing injuries to staff in an office setting."

Learning Objectives: Staff will be able to discuss the importance of being safe and Identify barriers to safety.

Implementation Steps:

Stage 1	Obtain consent from participants who voluntarily wish to be involved in the research study (Appendix G)
Stage 2	All willing participants will complete the background survey, demographics, and pre-test before the teaching session (Appendices H, I and J respectively).
Stage 3	The lesson and teaching plans (appendix D), will be used to focus the on educational program using appendices L & M to highlight the following:
Stage 4	Two-week post intervention evaluation and completion of the post-test survey (Appendix K – same as Appendix J)
Stage 5	Four-week post implementation meetings to report findings to administrators Exit meeting with administrators after reviewing findings to determine the effectiveness of the educational program or lack of it.

Supplies Needed:

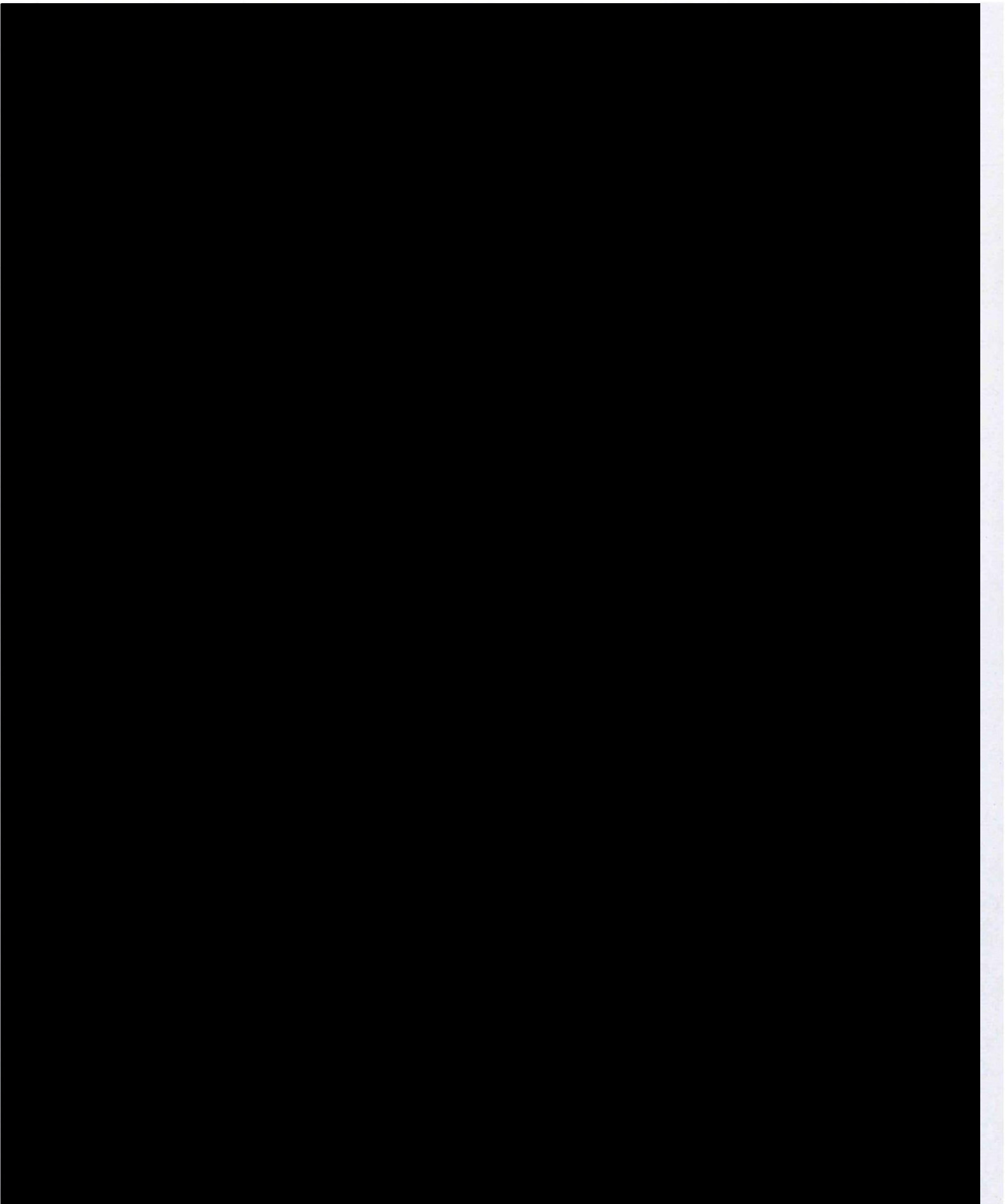
- -Conference Room Reservation
- -Printed Materials: Rubric
- -Pencils/Pen
- -Clipboards

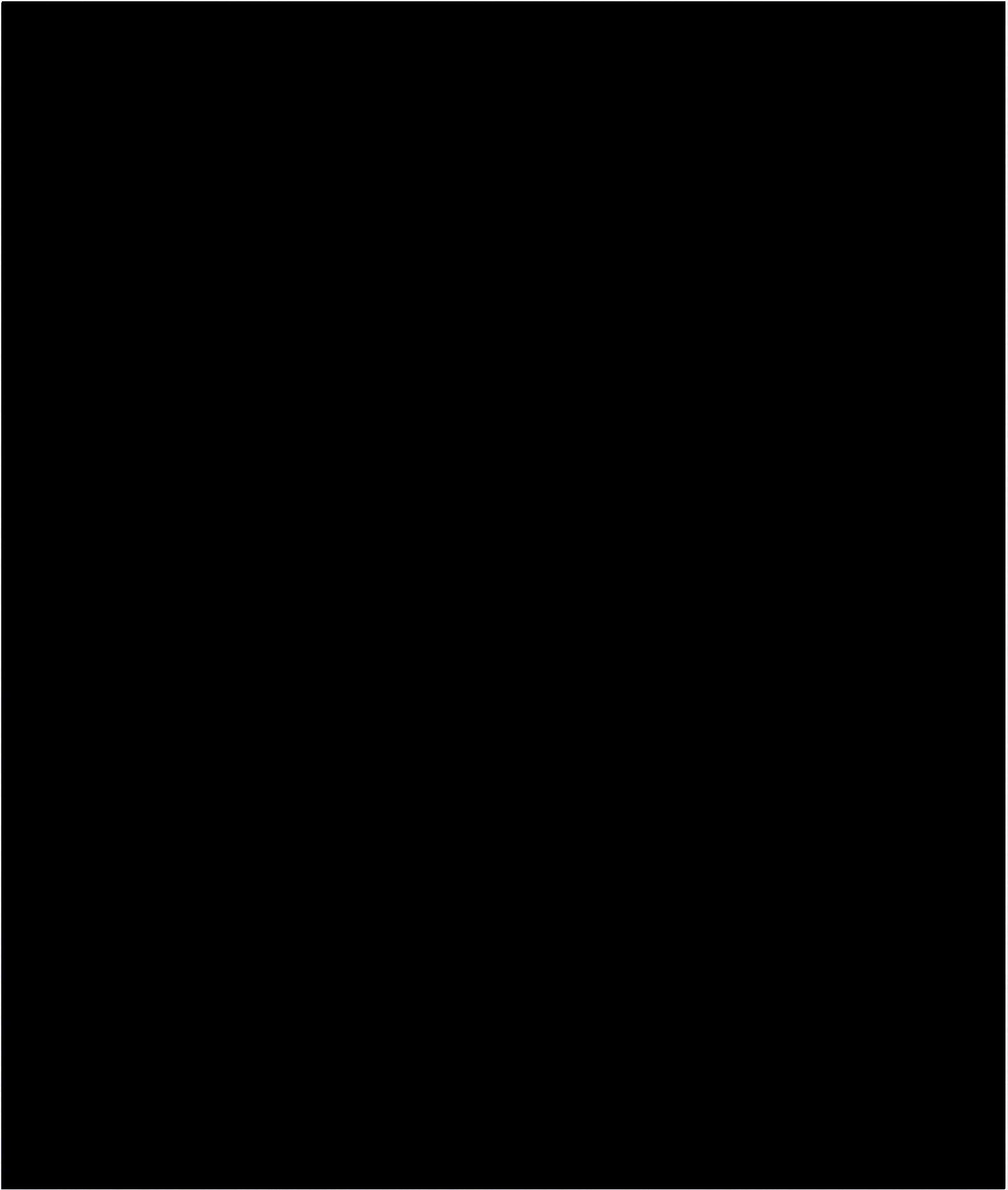


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Appendix F



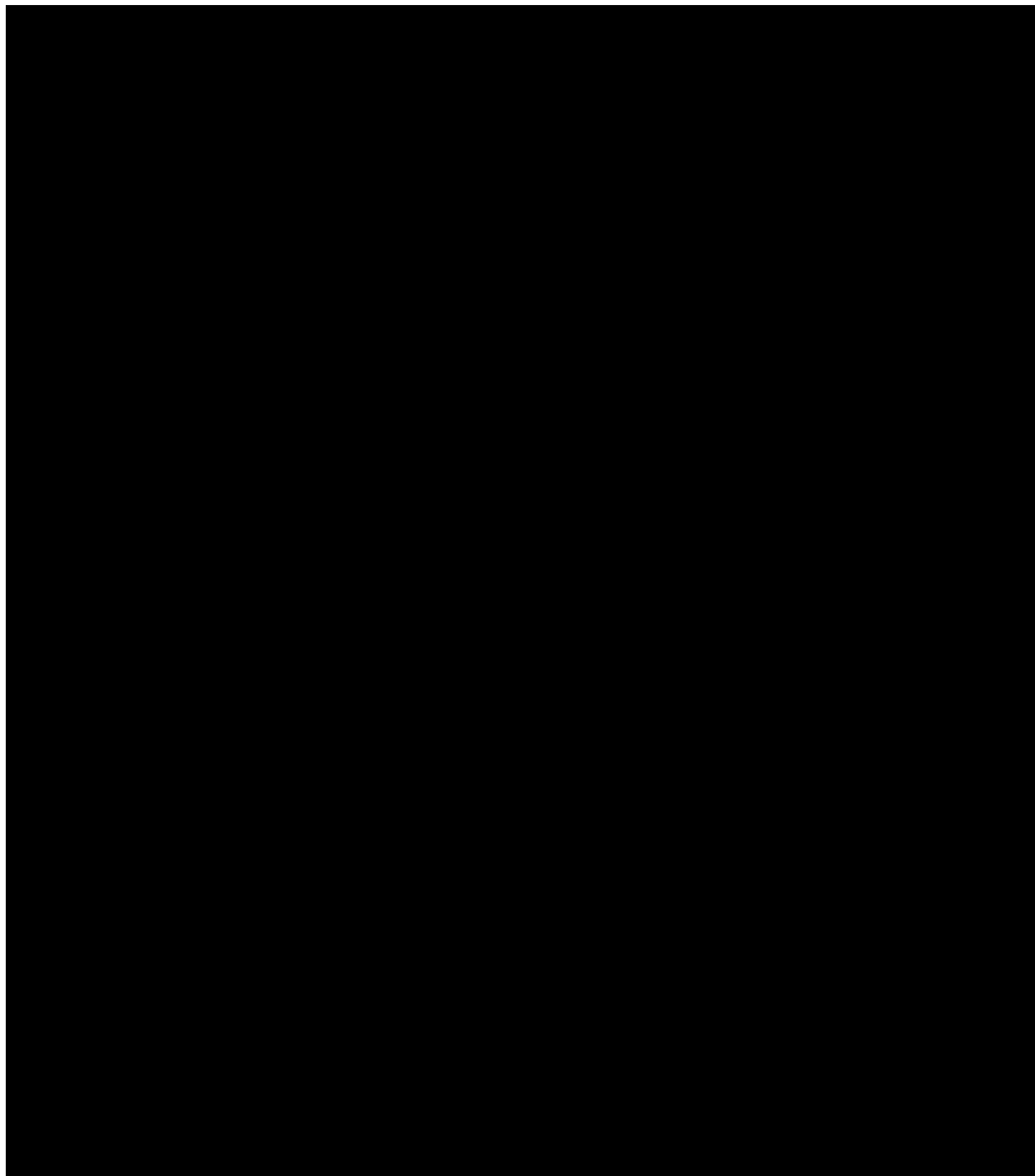


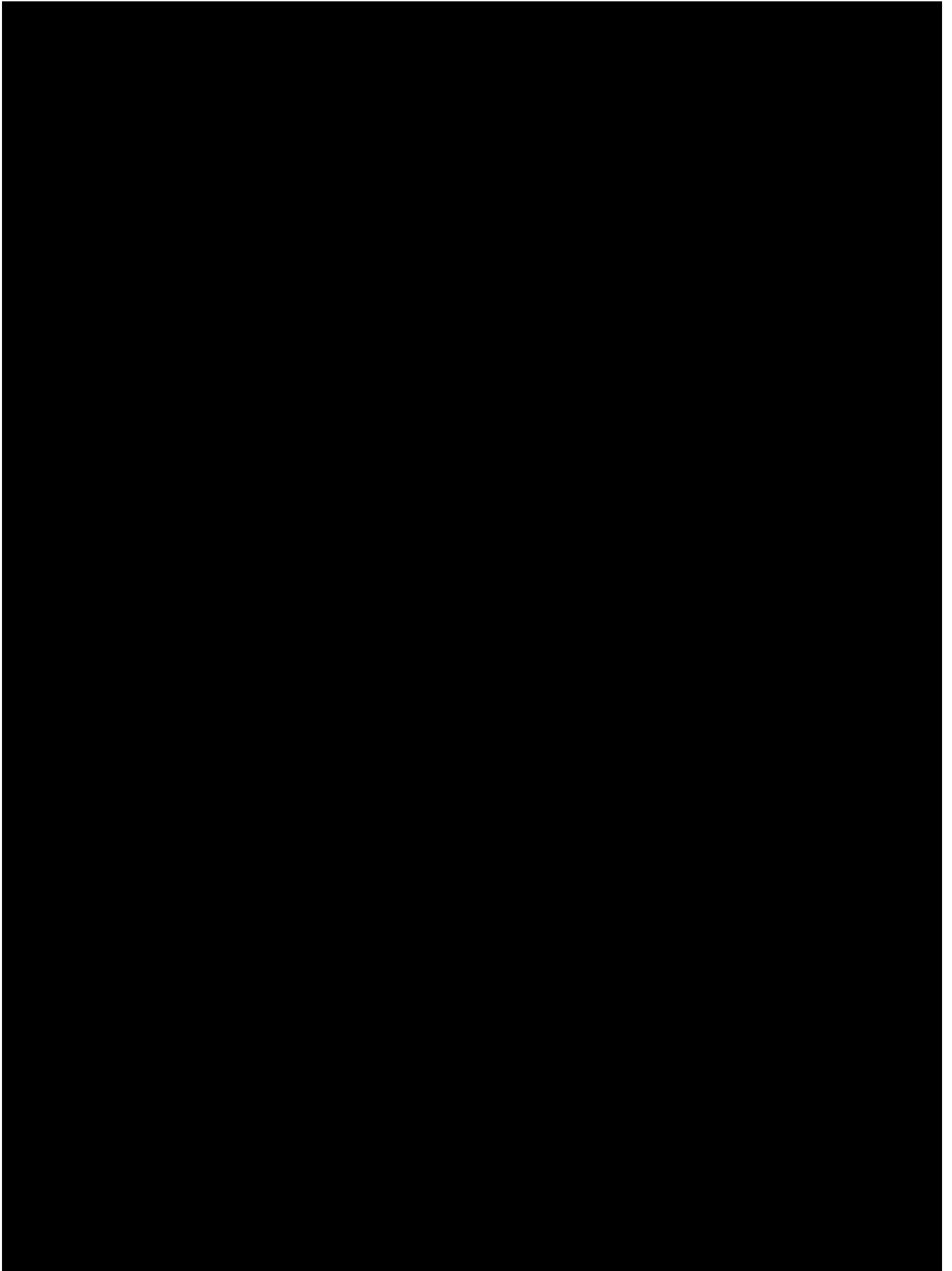


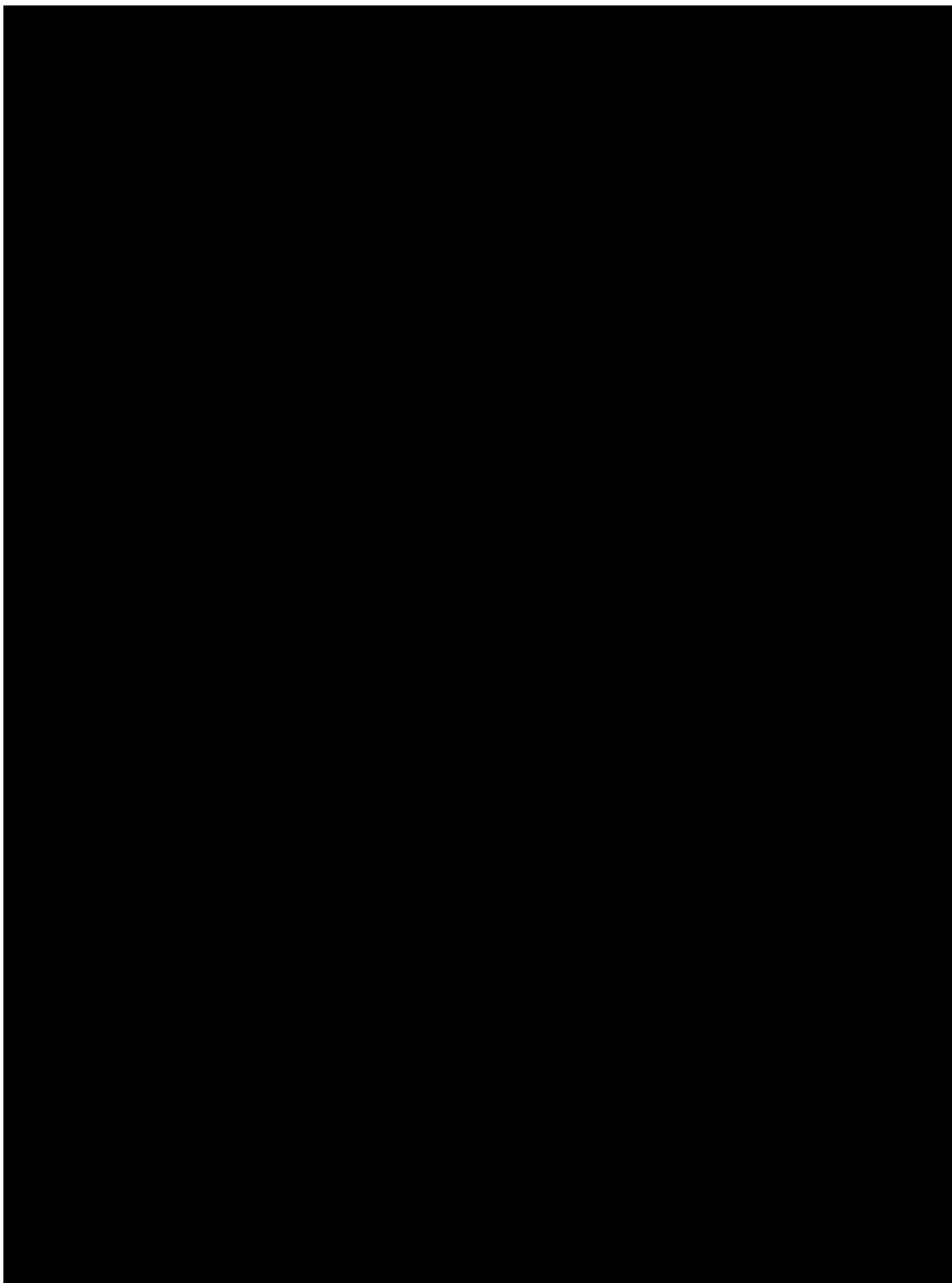


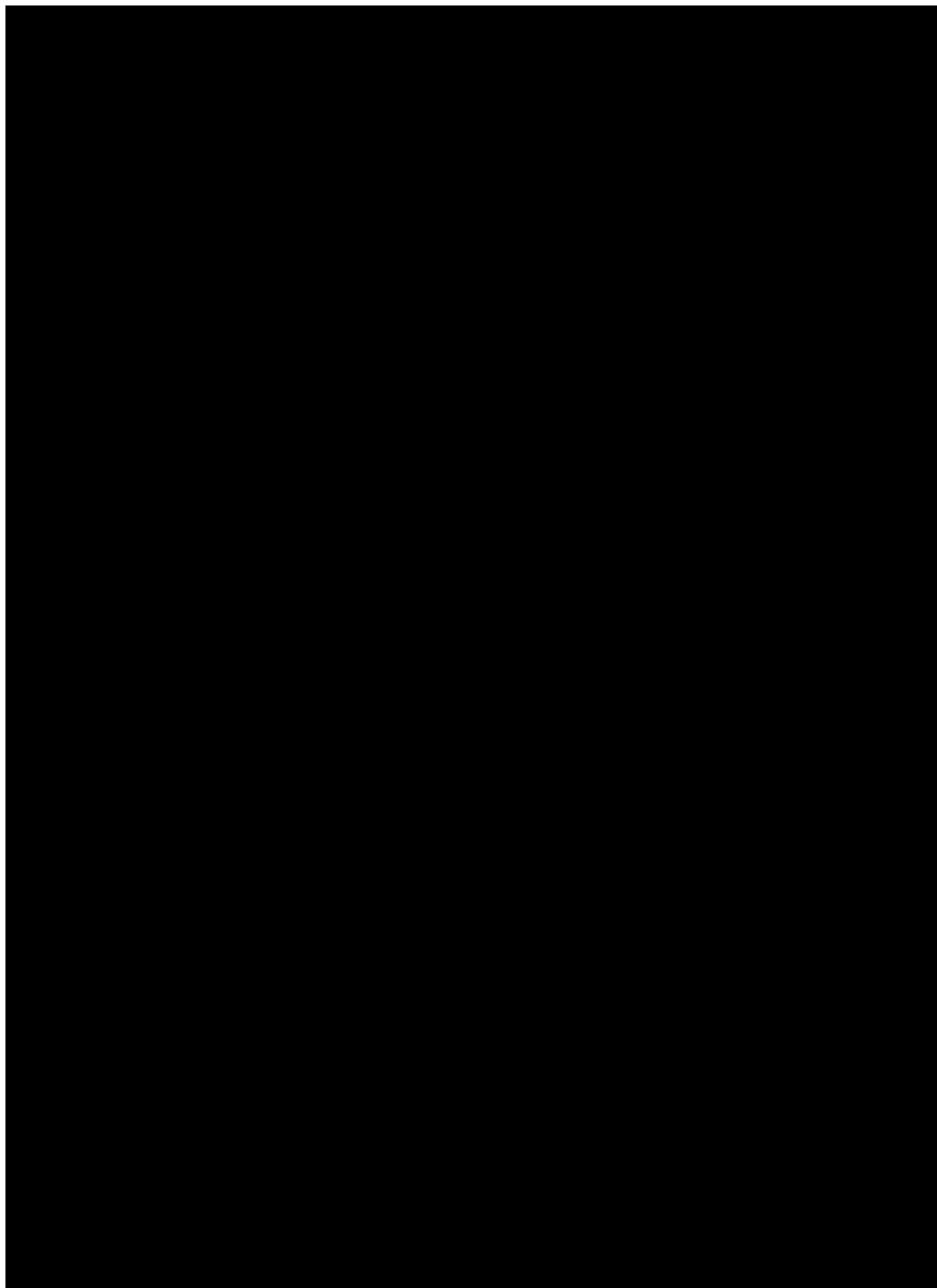
Appendix G
Informed Consent Form

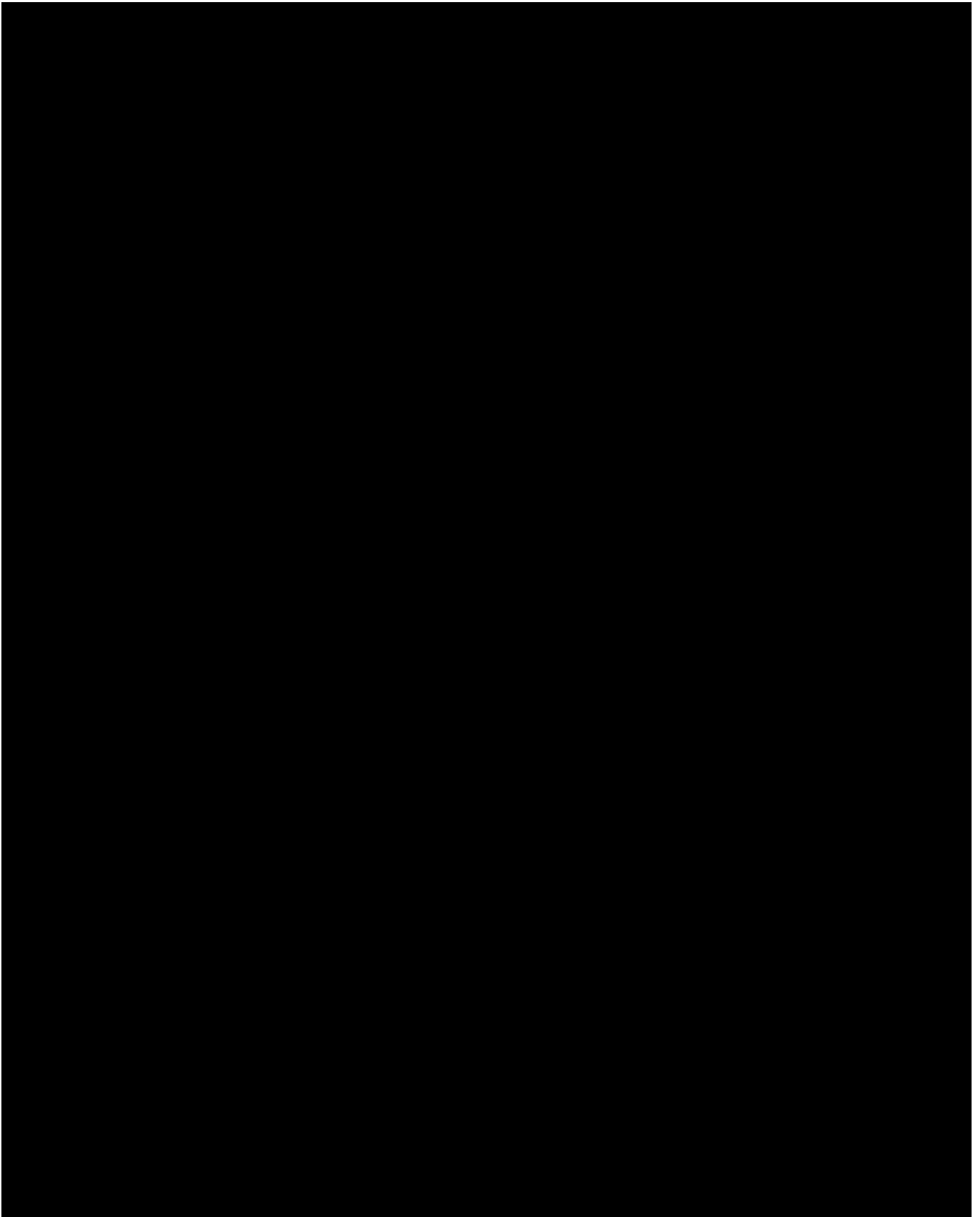
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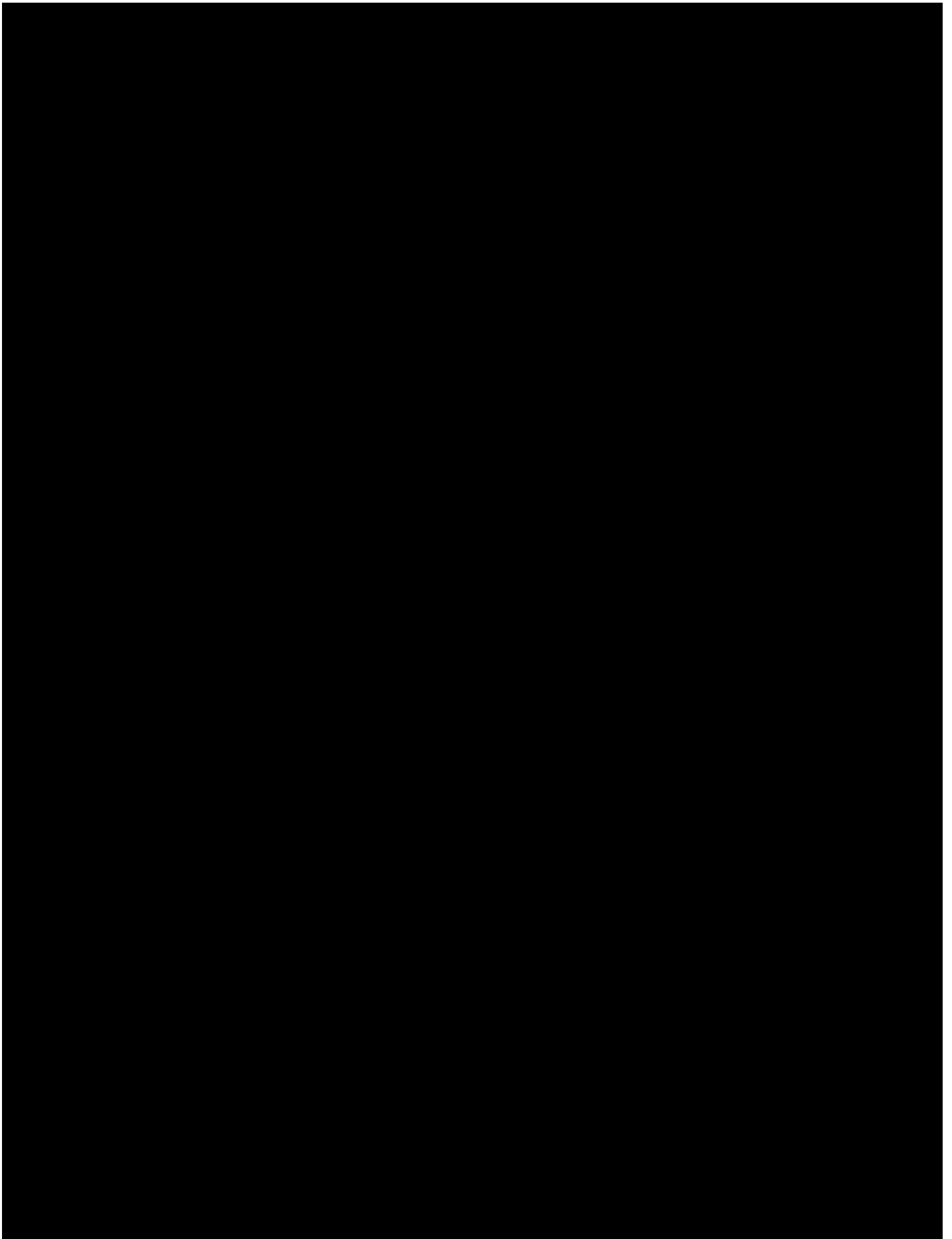


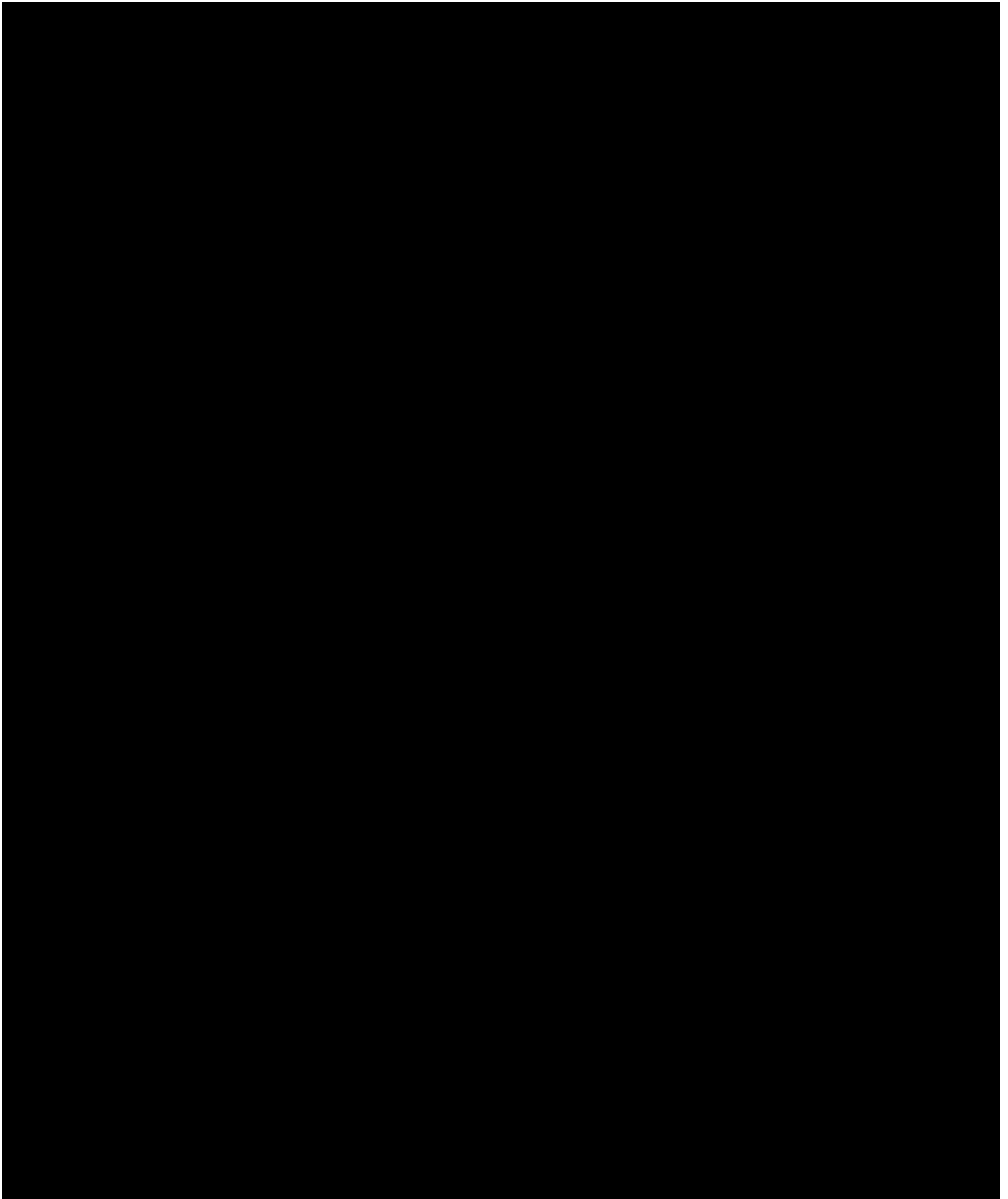


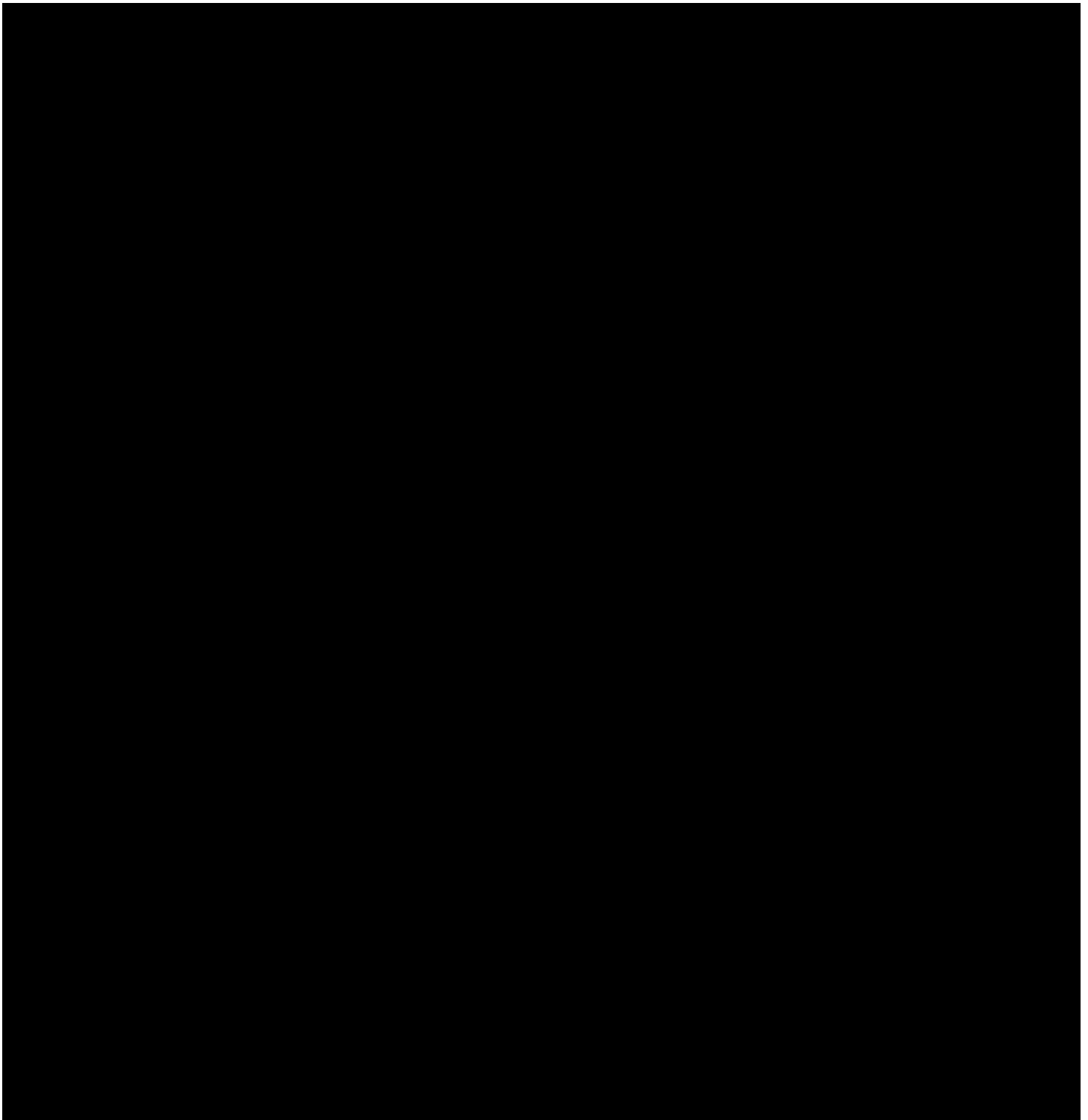








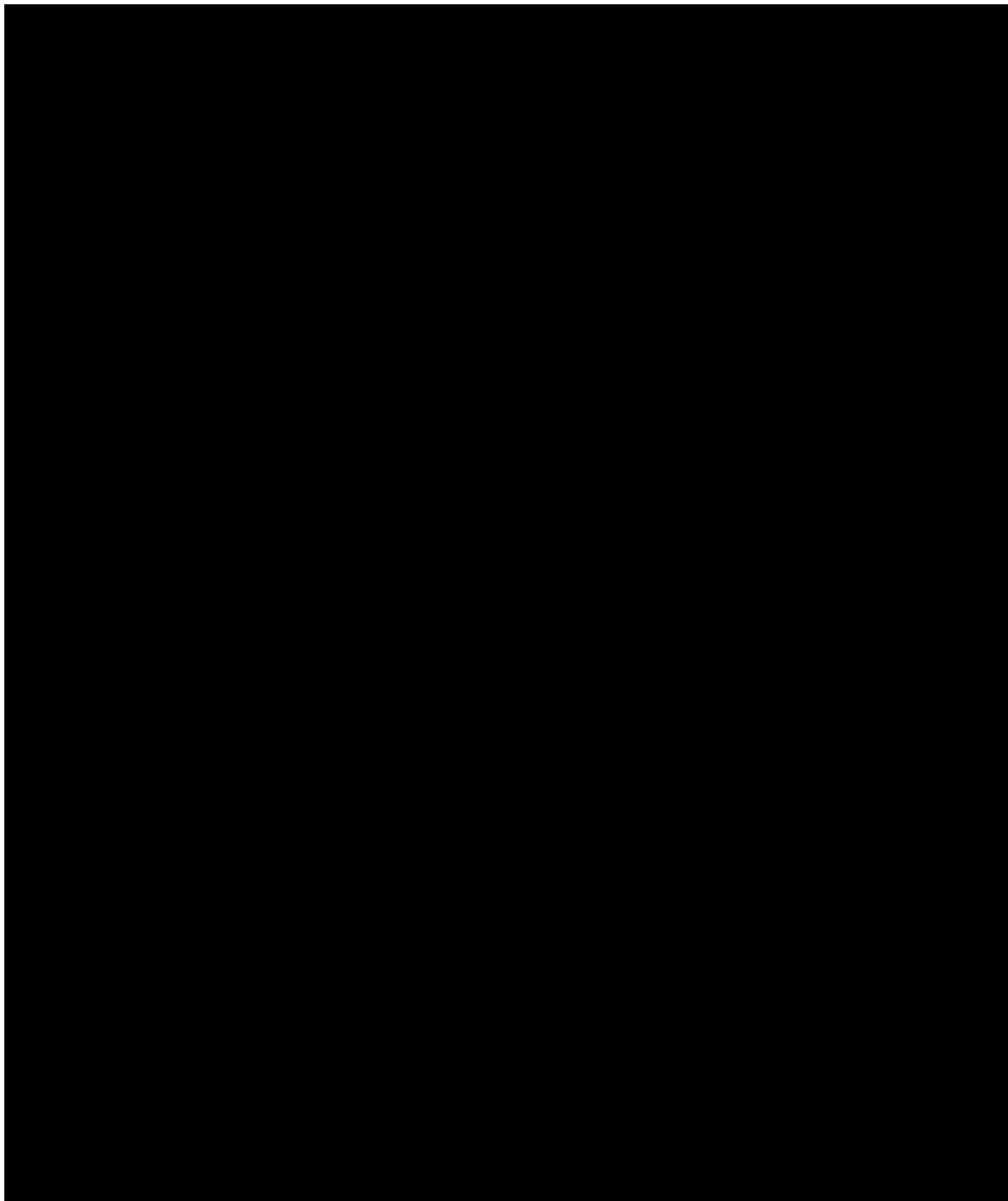


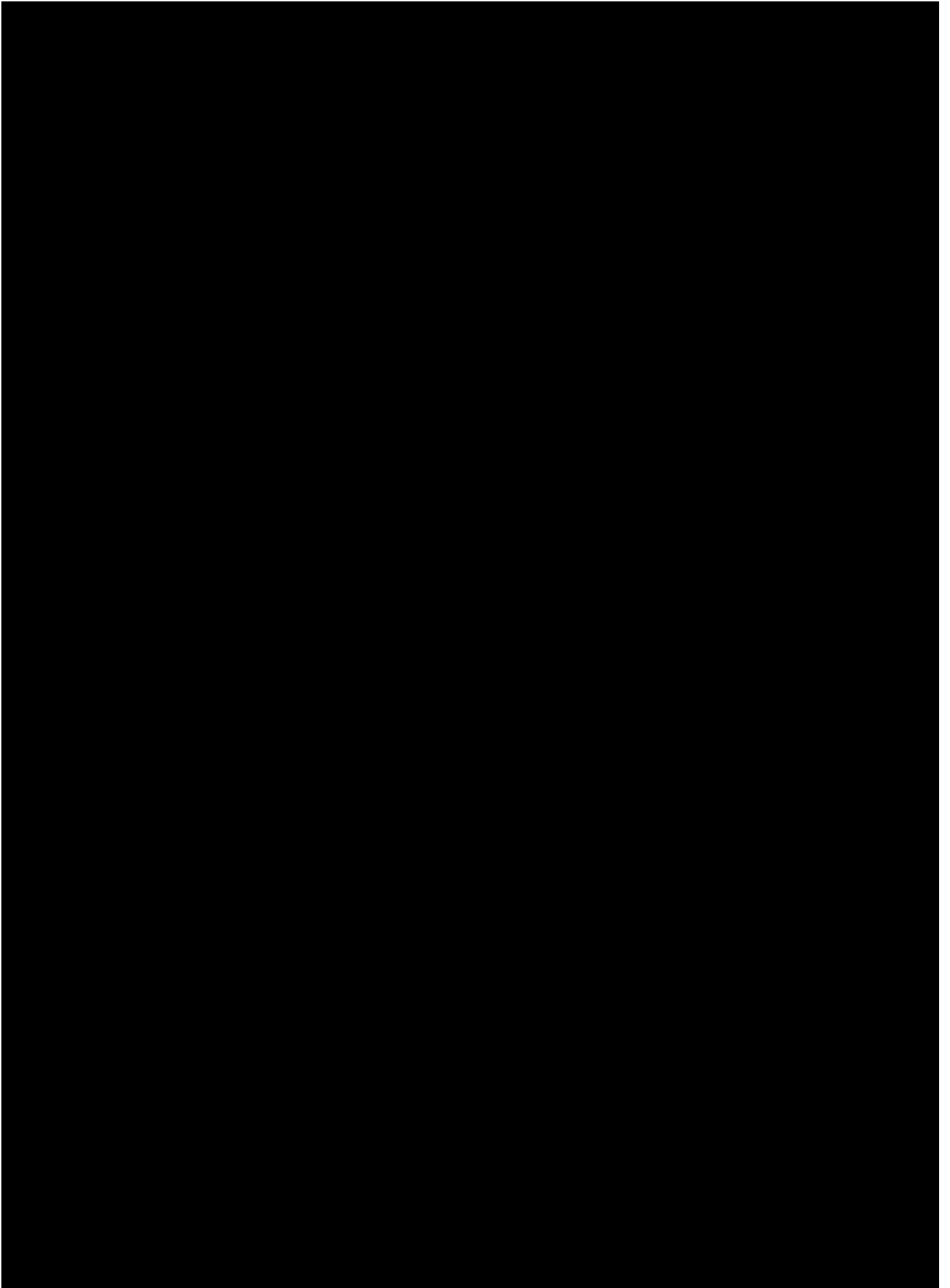


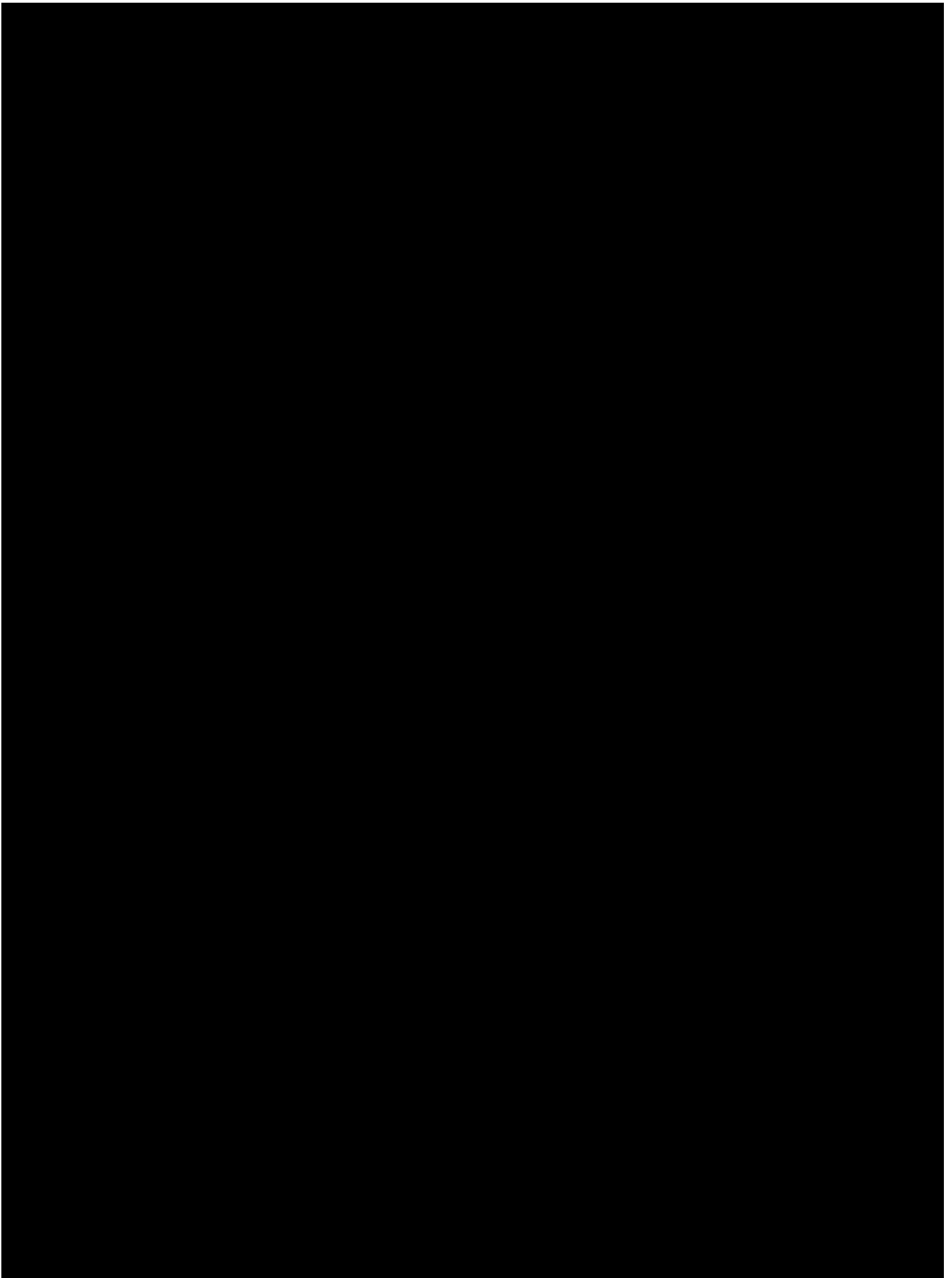


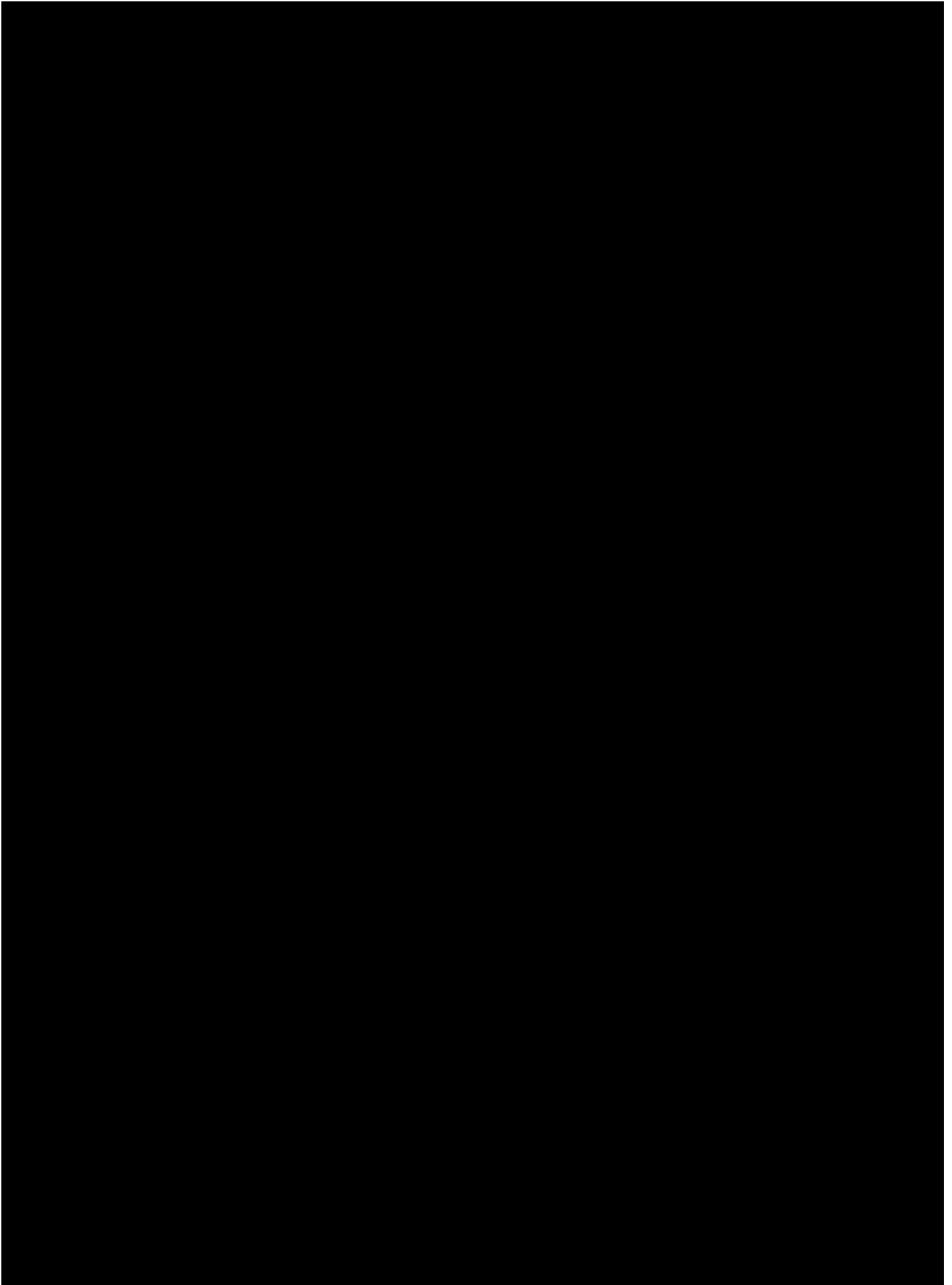
Appendix G2
Consent Form

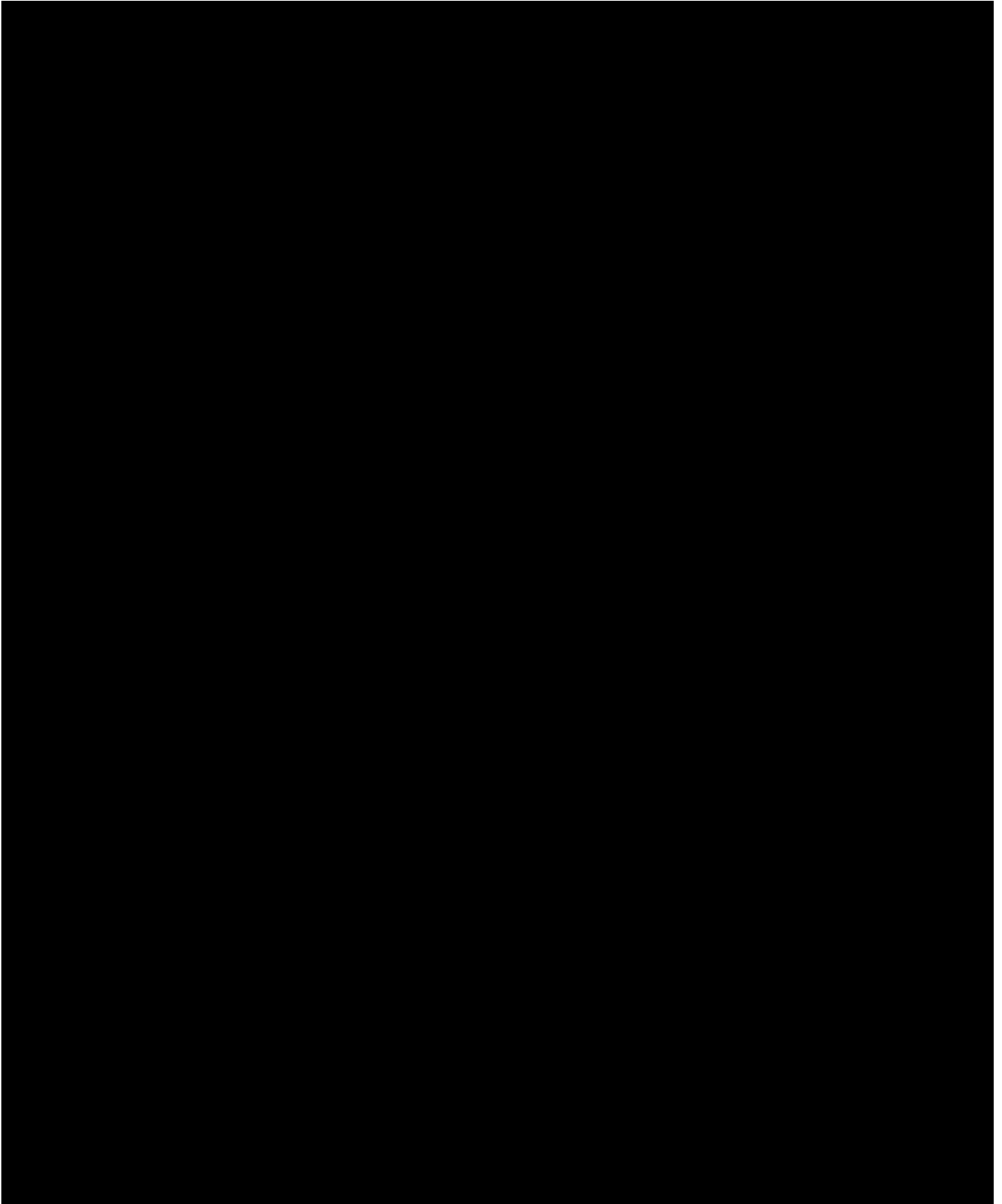
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[REDACTED]

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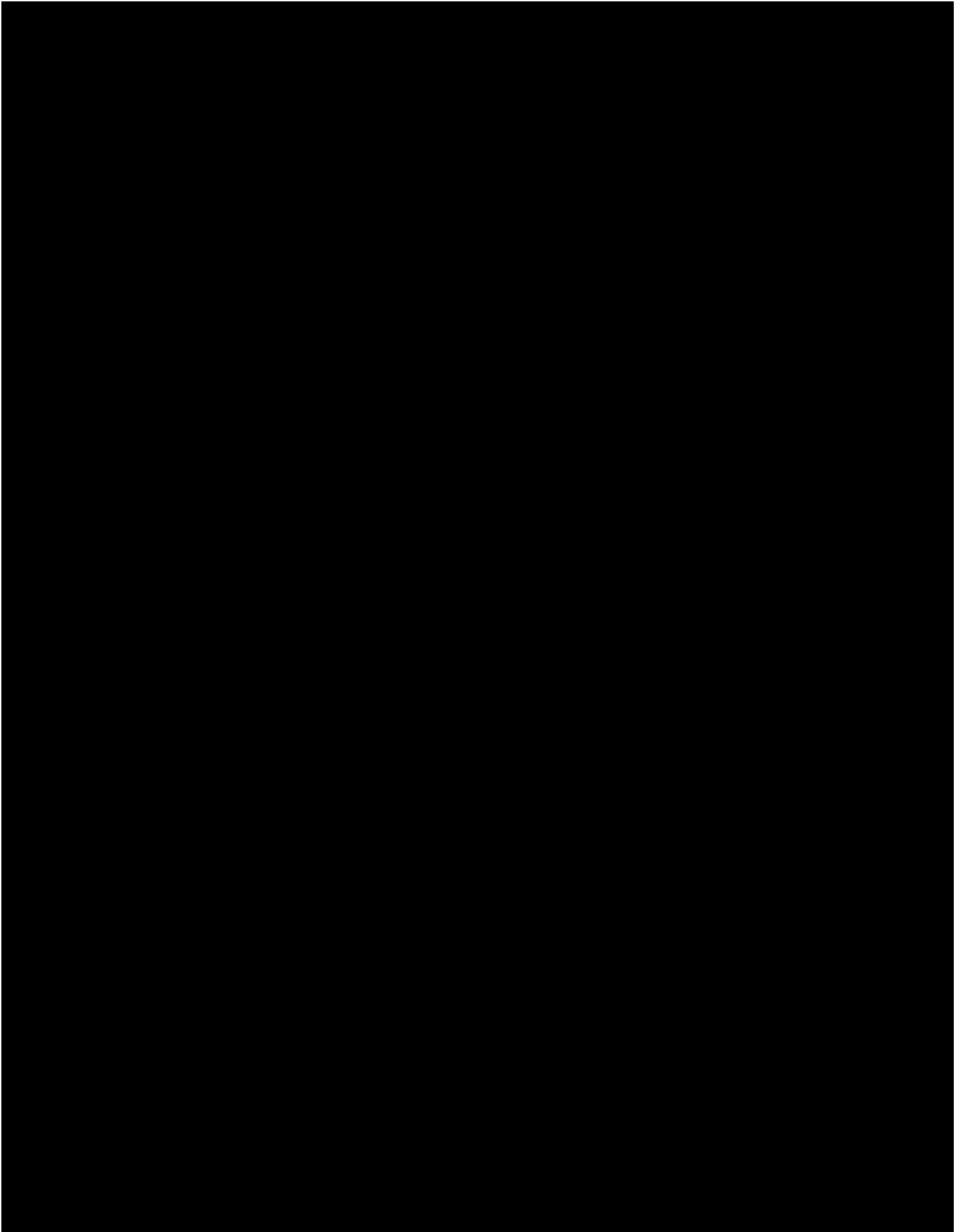
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Appendix H-1
OSHA Background Survey

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ID Code: _____

Date _____

Office Safety:

Question #	Question	Inclusion Rationale
1	Q: What is your age? Choices: 18-24 yr 25-40yr 41-50yr 51-59 yr 60-65 yr 65-or older	To identify generational learning preference
2	Q: How long have you worked in this office? Choices: < 1 year >1 year < 5 year >5year	To distinguish how much experience the staff has with psychiatric patients
3	Q: Describe what concerns you most about being safe. Open-ended _____ _____	To allow staff free expression of their concerns and to later identified themes among the group.
4	Q: Do you have clinical training on deescalation techniques? Choices: Yes, (if yes, Explain below) No _____ _____	To validate barriers
5	Q: How familiar are you with the patients with mental illness or substance use disorder? Choices: 0-10 Not Familiar to Very Familiar	The baseline of familiarity with mental illness
6	Q: Have you ever been injured by a patient? Choices: Yes No Unsure	The baseline of exposure as a teaching intervention



Appendix H-2
AHRQ Background Survey

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ID Code: _____

Date _____

Questions	Yes (1)	No (0)	Unsure (2)
Job Experience >5years			
Perception of safety and violent experience Feels safe in the office			
Training Training for handling violent patients is adequate			
Situational Awareness Know the concept of AHRQ's situational awareness			
Situational Monitoring Can describe process for situational monitoring			
Communication Can communicate effectively if patient is acting up			
Patient Care Confident in caring for patients in this office			
Afraid of caring for patients in this office			
Confident in caring for patients exhibiting disruptive, threatening or acting out behaviors			
Teamwork Confident that you will get support from peers/other staff members, if needed			

Adopted from:

- <https://www.regulations.gov/document?D=OSHA-2016-0014-0001>
- <https://www.cdc.gov/niosh/docs/2002-101/pdfs/2002-101.pdf>
- <http://www.ahrq.gov>



Appendix I
DEMOGRAPHICS

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ID Code: _____

Date _____

1. Sex: ☐ Male ☐ Female ☐ Transgendered ☐ Other
2. Age _____
3. Ethnicity: ☐ Asian ☐ Black ☐ Caucasian ☐ Hispanic ☐ Other: _____
4. Highest level of education: ☐ High School ☐ Vocational school ☐ Associate Degree
☐ Diploma ☐ Bachelors ☐ Masters ☐ Doctorate
5. Position at the facility X: _____
6. Status: ☐ full-time ☐ part-time ☐ per-diem
7. Length of employment: _____

Adopted from:

- <https://www.regulations.gov/document?D=OSHA-2016-0014-0001>
- <https://www.cdc.gov/niosh/docs/2002-101/pdfs/2002-101.pdf>
- <http://www.ahrq.gov>



Appendix J

PRE-TEST TOOL

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Mental Health Literacy Scale

The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health. When responding, we are interested in your degree of knowledge.

Therefore, when choosing your response, consider that:

Very unlikely = I am certain that it is NOT likely

Unlikely = I think it is unlikely but am not certain

Likely = I think it is likely but am not certain

Very Likely = I am certain that it IS very likely

1

If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was humiliating or feel embarrassed, then to what extent do you think it is likely they have Social Phobia

Very unlikely

Unlikely

Likely

Very Likely

2

If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalised Anxiety Disorder

Very unlikely

Unlikely

Likely

Very Likely

3

If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder

Very unlikely

Unlikely

Likely

Very Likely

4

To what extent do you think it is likely that Personality Disorders are a category of mental illness

Very unlikely

Unlikely

Likely

Very Likely

5

To what extent do you think it is likely that Dysthymia is a disorder

Very unlikely Unlikely Likely Very Likely
6

To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations where escape may be difficult or embarrassing

Very unlikely Unlikely Likely Very Likely
7

To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood

Very unlikely Unlikely Likely Very Likely
8

To what extent do you think it is likely that the diagnosis of Drug Dependence includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)

Very unlikely Unlikely Likely Very Likely
9

To what extent do you think it is likely that in general women are MORE likely to experience a mental illness of any kind compared to men

Very unlikely Unlikely Likely Very Likely
10

To what extent do you think it is likely that in general, men are MORE likely to experience an anxiety disorder compared to women

Very unlikely Unlikely Likely Very Likely

When choosing your response, consider that:

- Very Unhelpful = I am certain that it is NOT helpful
- Unhelpful = I think it is unhelpful but am not certain
- Helpful = I think it is helpful but am not certain
- Very Helpful = I am certain that it IS very helpful

11

To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)

Very unhelpful Unhelpful Helpful Very helpful
12

To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions

Very unhelpful Unhelpful Helpful Very Unhelpful

When choosing your response, consider that:

- Very unlikely = I am certain that it is NOT likely
- Unlikely = I think it is unlikely but am not certain
- Likely = I think it is likely but am not certain
- Very Likely = I am certain that it IS very likely

13

To what extent do you think it is likely that Cognitive Behaviour Therapy (CBT) is a therapy based on challenging negative thoughts and increasing helpful behaviours

Very unlikely

Unlikely

Likely

Very Likely

14

Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

If you are at immediate risk of harm to yourself or others

Very unlikely

Unlikely

Likely

Very Likely

15

Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

if your problem is not life-threatening and they want to assist others to better support you

Very unlikely

Unlikely

Likely

Very Likely

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
16. I am confident that I know where to seek information about mental illness					
17. I am confident using the computer or telephone to seek information about mental illness					

Please indicate to what extent you agree with the following statements:

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
18. I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the PCP)					
19. I am confident I have access to resources (e.g., PCP, internet, friends) that I can use to seek information about mental illness					
20. People with a mental illness could snap out of it if they wanted					
21. A mental illness is a sign of personal weakness					
22. A mental illness is not a real medical illness					
23. People with a mental illness are dangerous					
24. It is best to avoid people with a mental illness so that you don't develop this problem (contagious)					
25. If I had a mental illness I would not tell anyone (Stigma)					
26. Seeing a mental health professional means you are not strong enough to manage your own difficulties					
27. If I had a mental illness, I would not seek help from a mental health professional					
28. I believe treatment for a mental illness, provided by a mental health professional, would not be effective					
29. How willing would you be to move next door to someone with a mental illness?					
30. How willing would you be to spend an evening socialising with someone with a mental illness?					

Please indicate to what extent you agree with the following statements:

	Definitely unwilling	Probably unwilling	Neither unwilling or willing	Probably willing	Definitely willing
31. How willing would you be to make friends with someone with mental illness?					
32. How willing would you be to have someone with a mental illness start working closely with you on a job?					
33. How willing would you be to have someone with a mental illness marry into your family?					
34. How willing would you be to vote for a politician if you knew they had suffered a mental illness?					
35. How willing would you be to employ someone if you knew they had a mental illness?					

Scoring

Total score is produced by summing all items (see reverse scored items below). Questions with a 4-point scale are rated 1- very unlikely/unhelpful, 4 – very likely/helpful and for 5-point scale 1 – strongly disagree/definitely unwilling, 5 – strongly agree/definitely willing

Reverse scored items: 10, 12, 15, 20-28

Maximum score – 160

Minimum score - 35



Appendix K

POST-TEST TOOL

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Mental Health Literacy Scale

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Very unlikely

Unlikely

Likely

Very Likely

2

If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have Generalised Anxiety Disorder

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If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Disorder

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Very Likely

4

To what extent do you think it is likely that Personality Disorders are a category of mental illness

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5

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if your problem is not life-threatening and they want to assist others to better support you

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Likely

Very Likely

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20. People with a mental illness could snap out of it if they wanted					
21. A mental illness is a sign of personal weakness					
22. A mental illness is not a real medical illness					
23. People with a mental illness are dangerous					
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33. How willing would you be to have someone with a mental illness marry into your family?					
34. How willing would you be to vote for a politician if you knew they had suffered a mental illness?					
35. How willing would you be to employ someone if you knew they had a mental illness?					

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Reverse scored items: 10, 12, 15, 20-28

Maximum score – 160

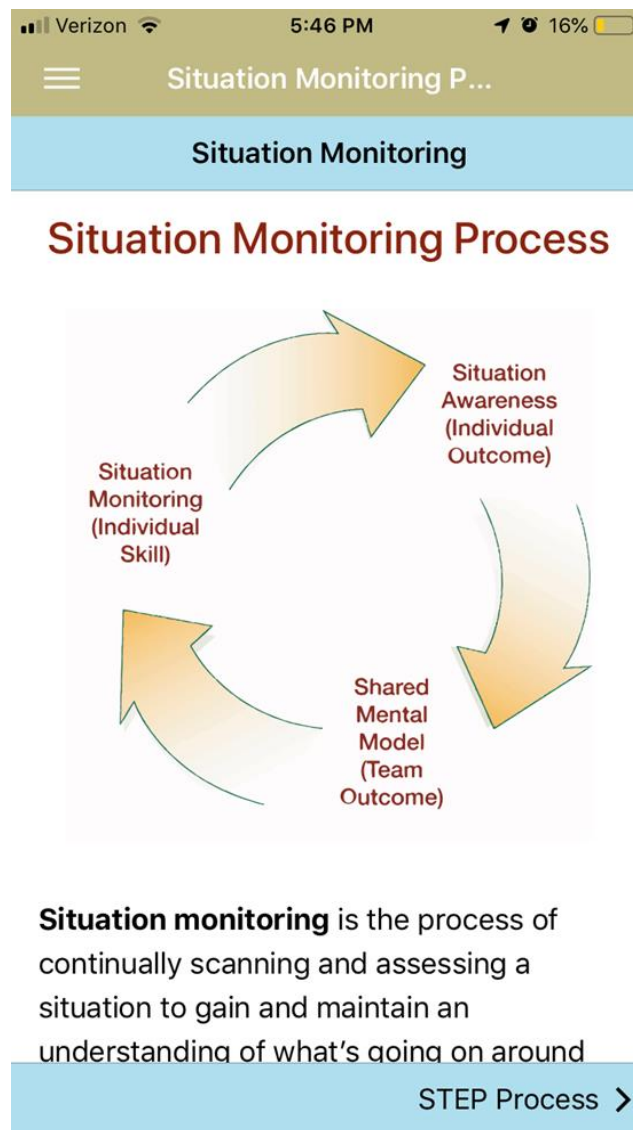
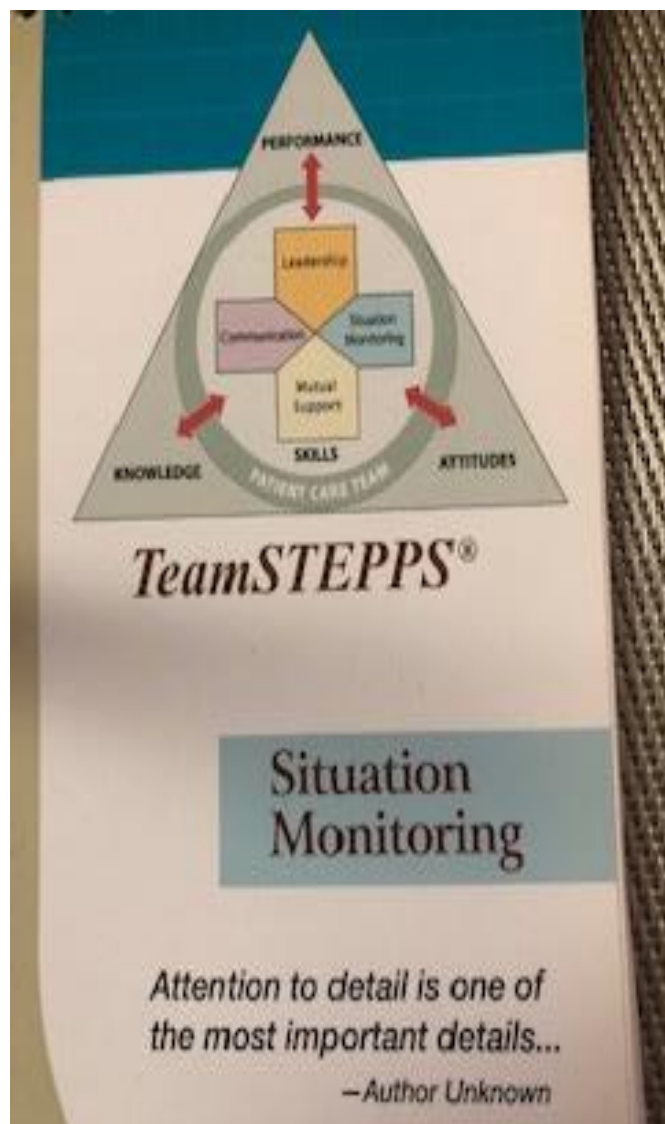
Minimum score - 35



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Appendix L

AHRQ: Team STEPPS FRAMEWORK



Available at: <http://www.ahrq.gov>



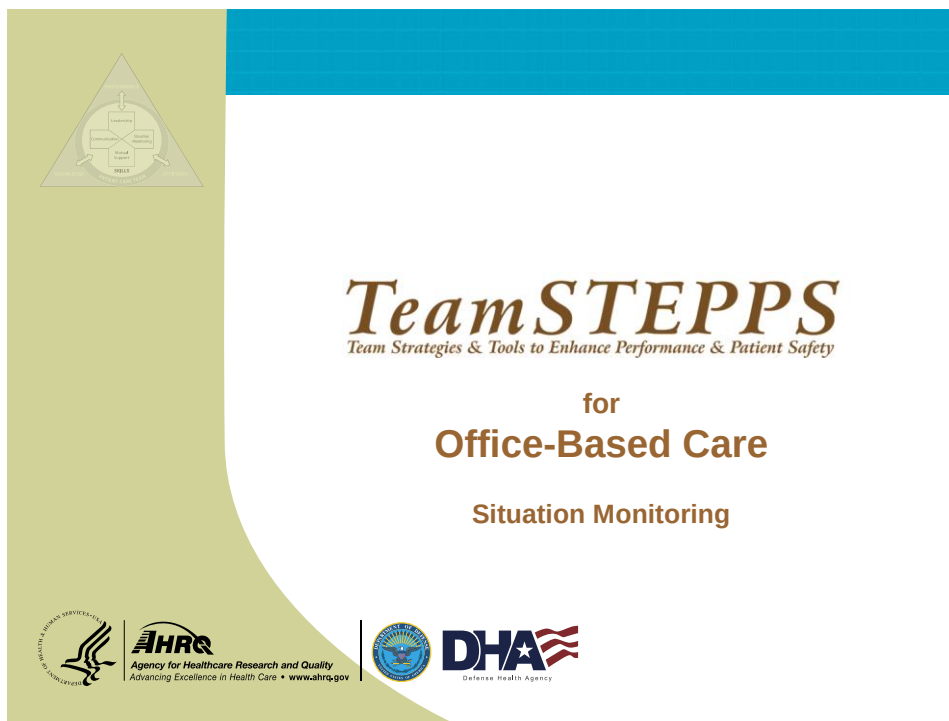
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Appendix M

AHRQ: PowerPoint teaching Slides

12 PowerPoint slides selected from AHRQ Team STEPPS for office based care, Available at: www.ahrq.gov. Also, included in teaching is a short video adopted from <https://www.gif.vif.com>

Click below to see slides and video





Appendix N

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PROJECT TIMELINE

Proposed Timeline pre and post-approval of Research study

#	Project Activity	Dates
1	Submitted Project Proposal to Chair	April 2018
	Revised and Re-submitted Project Proposal to Chair	October 2018
2	Signed DNP Site Approval	October 2018
3	Meet with office administrators	October 2018
4	Submit Project Proposal to Chair and Committee	February 2019
5	Feedback and revisions of DNP Proposal to DNP team	March 2019
6	Approval of DNP Proposal by DNP team for submission to IRB	March 26, 2019
7	Submit IRB application for DNP Proposal	March 31, 2019
8	IRB Approval with conditions	May 8, 2019
9	Resubmit corrections to IRB	May 2019
10	Implementation of DNP Project	June/July 2019
11	Sustainability meeting with Champions	July 2019
12	Data analysis, result, and conclusion	August 2019
13	Write conclusion, submit to Chair and committee	August 2019
14	Final project presentation to DNP Team	August 28, 2019
15	DNP Project approval and IRB closure	September 4, 2019



Appendix O

DNP Team Signatures

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Appendix P
PARTICIPATION FLYER

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65 Bergen Street
Newark, NJ 07101-1709



You are Invited to Participate in a

Doctor of Nursing Practice (DNP) Project On:

Raising Mental Health Awareness to Increase Safety

In a Private Practice Setting

By Fola Ajayi

This research study is being conducted by a DNP student from Rutgers University School of Nursing for the staff employed by this physician office. The purpose of this project is to teach mental health literacy to increase staff member awareness, and to utilize AHRQ's, TeamSTEPPS as a safety framework to improve safety in a psychiatric - private practice setting. This study will take 6 weeks starting in March 2019.

The DNP project will be implemented at the psychiatric private practice in the Southern part of New Jersey. Teaching will be conducted during staff meetings and will take 45 minutes. All participants must be 18 years or older and participation is voluntary. The DNP student will make consent form available to each participant. No personal information or identifiers will be obtained for this project. There is no cost to the participant and no educational pamphlets will be given to participants.

If you have any concerns or questions about this project, please contact the DNP student [REDACTED].





**St. Remi Behavioral Health
750 NJ-73, Evesham Township,
NJ. 08053**

**Rutgers School of Nursing
Stanley S. Bergen Building
Rutgers, The State University of New Jersey
65 Bergen Street
Newark, NJ 07101-1709**

PARTICIPATION FLYER

**You are Invited to Participate in a
Doctor of Nursing Practice (DNP) Project On:
Raising Mental Health Awareness to Increase Safety
In a Private Practice
By
Fola Ajayi**

This research study is being conducted by a DNP student from Rutgers University School of Nursing for the staff employed by this private practice. The purpose of this study is to teach mental health literacy to increase staff member's awareness, and to utilize AHRQ's, TeamSTEPPS as a safety framework to improve safety in a psychiatric - private practice setting. This study will take 6 weeks starting in June 2019.

The research study will be implemented at the psychiatric private practice in the Southern part of New Jersey. Teaching will be conducted during staff meetings and will take 45 minutes. All participants must be 18 years or older and participation is voluntary. The DNP student will make consent form available to each participant. No personal information or identifiers will be obtained for this project. There is no cost to the participant and no educational pamphlets will be given to participants.

If you have any concerns or questions about this project, please contact the DNP student Fola Ajayi at [REDACTED]

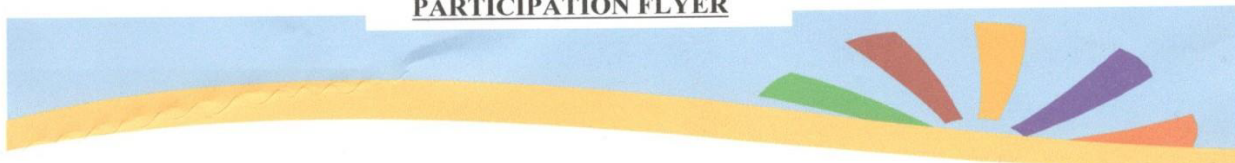
Version 2



St. Remi Behavioral Health
750 NJ-73, Evesham Township,
NJ. 08053

Rutgers School of Nursing
Stanley S. Bergen Building
Rutgers, The State University of New Jersey
65 Bergen Street
Newark, NJ 07101-1709

PARTICIPATION FLYER



You are Invited to Participate in a
Doctor of Nursing Practice (DNP) Research Study On:
Raising Mental Health Awareness to Increase Safety
In a Private Practice

By

Fola Ajayi

This research study is being conducted by a DNP student from Rutgers University School of Nursing for the staff employed by this private practice. The purpose of this study is to teach mental health literacy to increase staff member's awareness, and to utilize AHRQ's, TeamSTEPPS as a safety framework to improve safety in a psychiatric - private practice setting. This study will take 6 weeks starting in June 2019.

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Version 3

1st Session:
6/12/19 @ 10am
2nd Session:
6/25/19 @ 9:30am