Predictors and Outcomes of Patient Stigma Perception Appraisal: Developing and Testing of a Dynamic Stigma Model of Mental Illness

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A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Nursing
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Abstract

Background
The psychosocial perspectives of stigma have been explored over the years. However, research that encompasses the study of stigma as a socio-cultural, religious, and moral phenomenon is lacking. This study aimed to develop and test a Dynamic Stigma Model of Mental illness (DYSMO) among a cohort of Outpatients receiving care in Ghana.

Methods
The study examined hypothesized relationships within a newly developed stigma model using structural equation modeling techniques. A non-probabilistic convenience sampling technique was used to recruit 330 participants at the Out-Patient Department of two psychiatric hospitals in Southern Ghana.

Results
Confirmatory factor analysis produced a final model with five latent variables and 17 indicators. Mediation analysis on the full structural model produced standardized fit indices that include the following: ($\chi^2$/df = 335.403 (105), p \leq .000; RMSEA = .08 (90% CI: .072 -.092; CFI = .921; SRMSR=.059; TLI = .90). While some of the standardized regression coefficients of the DYSMO were significant, others were not. The significant regression coefficients of the DYSMO include structural violence (SV) versus religiocultural beliefs (RCB) = .463, p \leq .000; stigma perception appraisal (SPA) versus SV = .698, p \leq .000; SPA versus RCB = -.185, p \leq .042; anticipated discrimination (AD) versus SPA = .448, p \leq .000; and social withdrawal (SW) versus AD = .661, p \leq .000). The following coefficients were however not significant: AD versus SV = -.147, p = -.147; AD versus RCB = .064, p = .494; SW versus SPA = -.047 p = .710; SW versus SV = .016, p = .904; SW versus RCB = .039, p = .619).
Conclusion

The study results revealed that religious, cultural, and structural violence perspectives can promote and damage mental health perceptions and increase stigma. It is imperative that all stakeholders, gain increased awareness and knowledge of the role religious and cultural beliefs play in the perpetuation and outcomes of mental illness stigma.

**Keywords:** Mental illness, stigma, structural violence, religiocultural beliefs, stigma perception appraisal, anticipated discrimination, social withdrawal, dynamic stigma model.
Summary for Lay Audience

Since the initial scientific work of Goffman (1963), various people have conducted research and have confirmed the existence of stigma. Not only does stigma affect persons with a mental illness, but also family relatives, and all who care for them. Stigma is currently regarded as a multifaceted phenomenon that is characterized by psychological, social, cultural, religious, and moral issues. There have been many studies on stigma over the years. However, researchers have a gap studying the stigma of mental illness as a sociocultural, religious, and moral phenomenon.

The purpose of this study was to develop and test a model named the ‘Dynamic Stigma Model of Mental illness (DYSMO)’ among a group of outpatients who were receiving care in Ghana. The cross-sectional study examined relationships within the newly developed stigma model using high level statistical analyses techniques. A convenience sampling method was used to recruit 330 of the outpatients coming for treatment in two psychiatric hospitals in Southern Ghana.

The statistical analysis produced a final model with five main components. All five dimensions of the stigma model had significant relationships in influencing how individuals with mental illness perceived stigma from members of their society. For instance, this study found that religious and cultural beliefs positively influenced extreme social injustice otherwise known as structural violence towards people with mental illness. The study also revealed that the extent to which a person appraised stigma as positive or negative was influenced by existing religious and cultural belief systems. The study further found that stigma perceptions of persons with mental illness influenced their anticipation of discrimination and subsequent social withdrawal especially when in public places.
The study results revealed that factors such as religious, cultural, and structural violence perspectives can promote and damage perceptions about individuals with mental health problems. It is necessary that all stakeholders including mental health practitioners, policymakers, and community members gain increased awareness and knowledge of the role religious and cultural beliefs play in the perpetuation and outcomes of mental illness stigma.
Authorship Statement

Gyamfi Sebastian conducted this research under the supervision of Dr Cheryl Forchuk. Dr Richard Booth and Dr Isaac Luginaah are committee members and co-authors of all publications from this dissertation.
Acknowledgement

My sincerest gratitude goes to my supervisor, Dr Cheryl Forchuk, Distinguished Professor, Western University, for the mentorship and opportunities you gave me over the period of my PhD journey and for taking it upon yourself to supervise my work. Thank you endlessly for your support, kindness and openness that encouraged me to successfully complete my work on schedule.

Similarly, I would like to thank the members of my research advisory committee, Dr Richard Booth, Associate Professor, and Dr Isaac Luginaah, Distinguished Professor, Western University, for your supervisory roles, reviews and useful comments that helped to immensely shape up my dissertation.

Relatedly, I would like to express my sincerest gratitude to Western University, the Faculty of Health Sciences, and the Arthur Labatt Family School of Nursing for believing in me and offering me the Western Graduate Scholarship that allowed me to study in one of the World’s best University. I am forever proud to associate with Western.

I would also like to thank the Irene Nordwhich Foundation, as well as the African Institute at Western University for supporting my fieldwork.

Finally, I would want to thank my family for their unending support throughout my studies in Canada. Together, we made it happen.
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CHAPTER ONE

Background of the Study

The World Health Organization [WHO] (2005; 2018) defines mental health as a state of well-being in which individuals become aware of their abilities, can cope with daily stresses of life, have the capacity to work productively, and contribute meaningfully towards their community. The concept of mental health goes beyond the absence of mental illness and that there is no physical health without mental health (WHO, 2018). Mental illness can disturb one’s mood, thought, or behavior and cause distress to the person or those around him/her, such that the individual may not function normally (Australian Government: Department of Health and Ageing, 2008). Mental illness could affect anyone, irrespective of age, gender, ethnic and socio-cultural status (Canadian Mental Health Association [CMHA], 2008).

Issues of mental health/mental illness are becoming serious issues with public health importance as current literature has established that there is a bidirectional relationship between mental illness and physical health outcomes (Kolappa et al., 2013; Linden et al., 2012; Pinquart, & Duberstein, 2010; Smith, 2015). For instance, Kolappa and colleagues (2013) assert that depression and anxiety play a major role in the outcomes of some physical conditions. For example, patients with type II diabetes mellitus (adult-onset or non-insulin-dependent diabetes), are two times more likely to experience depression compared to the rest of the general population (Cosgrove et al., 2008; Darwish et al., 2018). Numerous studies have underscored the close association between mental illness and physical illness (Kolappa et al., 2013; Linden et al., 2012; Pinquart, & Duberstein, 2010; Smith, 2015). Globally, mental health problems continue to increase affecting over 450 million people (WHO, 2011a). Currently, the top four mental
disorders account for about 433 million of the world’s population. Globally, an estimated 300 million people are affected by depression, one of the main causes of disability worldwide. Bipolar disorder affects about 60 million people worldwide, whiles Schizophrenia; a severe mental disorder, and dementia, respectively affect about 23 million and 50 million people respectively (WHO, 2018). Therefore, the promotion, protection and restoration of good mental health should be a vital concern of all (WHO, 2018).

It is estimated that mental health-related disorders account for about 32% of the global burden of noncommunicable diseases (Vigo et al., 2016; Whiteford et al., 2015). As of 2010, Bloom et al. (2011) calculated that the global financial mental health burden was about US$ 2.5 trillion; a figure likely to double by 2030. Yet the burden of mental disorders continues unabated. Despite the mounting burden of mental health problems and the consequential amount of distress for individuals and society, very little effort is made to address the issues at hand due to widespread stigma (Hoftman, 2017; Thyloth et al., 2016). Persons with mental illness (PWMI) continue to encounter stigma from the public with negative outcomes. It is therefore necessary to examine and identify the factors that fuel stigma towards PWMI for appropriate remedies.

**The Concept of Mental Illness Stigma**

Stigma is the undesirable and discrediting attribute that disqualify one from full social acceptance that motivate efforts by the stigmatized individual to hide the “mark” as much as possible (Goffman, 1963). Crabb et al. (2012) also describe stigma as that characterized by guilt, concealment, isolation, and segregation. Since the ground-breaking work of Goffman (1963), various studies have confirmed the existence of stigma, and that not only does it affect PWMI, but also close relatives and caregivers (Pryor et al., 2012; Van Der Saden et al., 2016). In effect,
being a PWMI or a close relative of a person with severe mental illness can create a particular difficulty and delicate position in society due to public stigma.

**Types of Stigma**

Arguably, there are several types of stigma, but the contemporary extant literature highlights four main types. These include public (felt stigma), self (individual, personal, internalized) stigma, stigma by association (associative, label avoidance stigma), and structural (enacted stigma) (Bos et al., 2013; Corrigan, & Bink, 2016; Gyamfi, 2016).

**Public Stigma.** Public stigma is the process through which individuals in the general population first endorse stereotypes of mental illness and then act in a discriminatory manner. Stereotypes are the culture-dependent negative evaluative labels or constructions about a person or group of persons (e.g., being dangerous, violent, unintelligent, criminal etc.). Discrimination is however the punitive behavioral consequence of prejudice, associated with restrictions and abuse of rights of a stereotyped person or group of persons. Public stigma is also known as social stigma.

**Self-stigma.** Self-stigma, otherwise known as internalized stigma, is the process by which a PWMI internalizes prejudice – the longstanding negative emotions and evaluations stemming from societal labels or stereotypes. Self-stigma is regarded as a product of the internalization of public stigma or stereotypes (Bathje, & Pryor, 2011; Corrigan, 2002; Corrigan, 2004; Corrigan, & Rao, 2012; Corrigan, & Rüsch, 2002; Corrigan & Watson, 2002; Latalova, et al., 2014). It is reported that the awareness, appraisal and subsequent endorsement of public stigmatizing attitudes and behaviors highly predict self-stigma (Bathje, & Pryor, 2011; Bradstreet et al., 2018; Evans-Lacko et al., 2012; Latalova et al., 2014). In the same vein, Corrigan, et al. (2009) have emphasized that self-stigma encompasses three steps, (1) awareness
of public stereotypes, (2) agreement with the stereotypes, and (3) applying the stereotypes to one-self. For example, when an individual with a mental illness accepts a public label such as ‘unintelligent’ as true and fitting, he/she turns it onto the self and internalizes it leading to self-stigma.

**Stigma by Association.** Stigma by association is the process by which certain individuals or group of persons are publicly labeled through association with a stigmatized person or participation in a mental health program or care. For example, some members of the public feel mental illnesses are contagious, therefore close relations including friends and professional caregivers are stigmatized due to the close interaction they have with these patients.

**Structural Stigma.** Structural stigma is the product of policies emanating from both private and governmental institutions that intentionally or unintentionally restrict the opportunities or options for PWMI. For instance, refusing someone a job or demoting him/her on grounds of having a history of mental illness. Notwithstanding the ratification and application of the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2008, PWMI continue to face discrimination in various facets of life on daily basis. According to the United Nations (UN), the inherent dignity, worth and equal rights of all human beings is the foundation of freedom, justice, and peace in the world (UN, 2008). The fact that mental illness stigma from the public negatively impacts on the wellbeing of patients, close relations, health care professionals and institutions that deal with PWMI (Knaak et al., 2017), makes it an issue warranting thorough study, discussion, and action.
Research Problem

Mental health issues hardly receive attention in health care policies in Ghana (Quarshie et al., 2021; Roberts et al., 2014). Data concerning mental health issues in Ghana are most often speculative, or anecdotal, and thus unreliable (Read & Doku, 2012). Empirical data concerning mental illness in Low- and Middle-Income Countries are not only limited but are mostly extrapolations from WHO which in a way affects strategic planning of the individual countries (Corrigan, 2012; WHO, 2005;). There is a general paucity of published literature concerning mental health stigma in Africa (Audet et al., 2017; Crabb et al., 2012; Okpalauwaekwe et al., 2017; Reta et al., 2016) including Ghana (Barke et al., 2011; Gyamfi, 2014; Gyamfi et al., 2018; Read & Doku, 2012; Tawiah et al., 2015). Published literature from elsewhere indicate that stigma directed towards PWMI by the public affects caregivers as well, leading to poor health outcomes. (Agyapong et al., 2015; Jack et al., 2015; Nxumalo, & Mchunu, 2017; Yannawar et al., 2015).

Stigma and its sequels usually occur in a socio-cultural (Ciftci et al., 2013; Guo et al., 2012; Kleinman, & Hall-Clifford, 2009) and moral contexts (Ahmedani, 2011; Kleinman, & Hall-Clifford, 2009). Stigma in contemporary times should be regarded as a multifaceted phenomenon characterized by psychological, social, cultural, religious, and moral processes. The psychosocial perspectives of stigma have been explored over the years. However, research that encompass the study of stigma as a socio-cultural, religious, and moral phenomenon is lacking. By ‘moral context’, the researcher is referring to the religiocultural and structural inequities in society that tend to subdue PWMI and thus justify the injustice against stigmatized persons. Recent stigma discourse points to power differentials as key in shaping or distributing stigma related to mental illness within social settings (Kleinman, & Hall-Clifford, 2009). Therefore, the
current study hopes to go beyond the psychosocial perspective of stigma and bring on board dimensions of socio-cultural, religious, and moral contexts that appear to feed both public and individual stigmatizing attitudes and behaviors.

Generally, public views about mental illness are disparaging, and with negative consequences (Li et al., 2018; Shrivastava et al., 2012). In Ghana, the situation is no different; people are socialized into dominant religious, cultural, and traditional belief systems (Hosny et al., 2020). These dominant systems appear to control and determine how people live and behave in society on daily basis. The exposure to such negative influential belief systems lead to stereotyping over time. With such dominant and negative sociocultural stereotypes individuals come to understand how others may perceive them after they have been diagnosed with a mental illness. Public behaviors of discrimination now become personally relevant leading to high level of perceived social injustice and subsequent withdrawal due to perceived status loss.

The perceived social injustice towards PWMI is known to exist both anecdotally and in documented discourses in the stigma literature such as in Link and Phelan (2001), Corrigan (2004; 2005), Kelly (2005; 2006), Sturgeon (2012), and Hoftman (2017). Perceived injustice may cause PWMI to face hardship or loss that could be temporary or permanent. The potential consequence of societal injustices (unfair treatment) towards PWMI may result in stigma and its sequels including low socioeconomic status, stress, low self-esteem, unemployment, homelessness, exclusion, and human rights abuse.

There have been countless studies about the linkages between stigma and the psychological and social influences on mental illness outcomes (e.g., Corrigan et al., 2010; Goffman, 1963; Link & Phelan, 2001; Major &O’Brien, 2005). Yet until date, the global stigma research (including the Ghana/African context) has not been able to empirically establish the role
of structural violence (i.e., the combined effect of socio-cultural, religious, moral, and political outlook of society) in the stigma process and subsequent appraisal (stigma stress perceptions) outcomes among PWMI. Additionally, a current review of the literature in six databases failed to identify empirical studies in relation to structural violence and mental illness stigma mechanisms; further proving that no published empirical studies exist in the domain of structural violence and mental illness stigma.

**The Context of Mental Health Care in Ghana**

Various forms of mental illnesses are managed by the health professionals including epilepsy and developmental handicap that in other countries may not be considered mental illnesses. The top five disorders commonly treated in the mental health facilities in Ghana, include schizophrenia, followed by mood disorders (depression and bipolar disorder), substance use disorder (alcohol, and cannabis), epilepsy and organic brain disorder (Gyamfi, 2016). Antipsychotic drugs (both typical and atypical drugs) are used in managing psychiatric problems usually based on affordability and availability. Psychotherapeutic interventions such as psychosocial therapy (client and family education), behavior modification, individual therapy, recreational therapy, therapeutic community, clinical counselling, and rehabilitation activities including occupational therapy are mostly used as adjuncts (Gyamfi et al., 2018).

In Ghana, the central government is the financier of mental health care and resource provision. However, a general lack of understanding and stigma have been cited to impact the allocation of resources and other support services (Gyamfi et al., 2018; Mfoafo-M’Carthy & Sossou, 2017), leading to neglect. The stigma attached to mental illness acts as a barrier to care delivery in Ghana, affecting families, friends, and mental health professionals alike. In Ghana, the treatment gap for mental illness is estimated to be over 98% (Roberts, et al., 2014; WHO,
In addition to existing lack of support from government, the mental health sector has difficulty recruiting, training, and retaining personnel seemingly due to stigma and the lack of recognition for mental health care professionals among the populace. It is reported that the mental health sector receives less than 2% of the overall health care budget (Eaton & Ohene, 2016). It is therefore not surprising that some primary health care providers in general hospitals refuse to provide services to PWMI in their facility.

Even though the belief systems of most Ghanaians are based on the spiritual causal and treatment model, a significant number seek orthodox care as well (Gyamfi et al., 2018). The unremitting neglect of mental health services by successive governments appear to motivate most people to patronize the services of traditional faith-based healers who are more accessible compared to caregivers in orthodox treatment centers (hospitals). Unfortunately, the treatment modalities of these faith healers seem to cause more harm than good. For instance, operators of these faith-based healing camps brand most PWMI as witches or being under a curse. Some flog or chain their clients to anything immovable and subsequently force them to confess any ‘wrongdoings’. While some are forced to fast, others are given ‘anointing oil’ or concoction to drink as a way of spiritual cleansing. All these treatment modalities deepen already existing stigmatizing attitudes and behaviors towards PWMI on their return to the community; and thus, creates a vicious cycle of negative events in the life of these people and their close relatives.

For about 40 years, mental health policies in Ghana were regulated under the Mental Health Decree (NRCD 30; 1972). The NRCD 30 encouraged strict institutionalization of PWMI. In 2012, the parliament of Ghana repealed the NRCD 30 and replaced it with the Mental Health Act 846. This new law was supposed to correct the shortfalls of the NRCD 30 by dwelling more on community care models which encourage de-institutionalization and primary health care at
(Regional and District) hospitals throughout the country. The Act 846 also seeks to protect the human rights of PWMI in relation to informed consent to care (where applicable), humane and dignified treatment modalities, including right to education, employment, housing, religious participation, cultural and political activities. The current Mental Health law (Act 846) again fosters collaboration between formal professional caregivers and traditional faith-based healers. The passing of the Act 846 also come with the establishment of the Mental Health Authority (MHA) to coordinate and implement policies enshrined in the new law. Seven years after passage of the Act 846, the MHA is still struggling to find its feet. The authority lacks financial capacity to operate due to lack of governmental support.

With the enactment of the new Mental Health Law, Act 846, 2012, Ghana appears to have one of the best legislative instruments backing mental health care in Africa. What we need now is the political commitment to support mental health services. After all, there is no health without good mental healthcare systems.

**Purpose of the Study**

The overall aim of the current study was to develop and test a model that examines the relationships between religiocultural beliefs (perceptions), structural violence perspectives, stigma perceptions appraisal, and related outcomes of anticipated discrimination and social withdrawal among PWMI in two public Mental Health Hospitals in Ghana.

**Significance of the Study**

Establishing the relationships between predictors of stigma has implication for health professionals in both mental and general practice, as well as policy makers to understand, and appreciate the outcomes of stigma perceptions among PWMI for necessary remedial measures. This will help to understand how stigma impacts the stigmatized in terms of personal and social
perspectives. The study findings will make available ongoing capacity building through community and institutional engagement by creating advocacy platforms to orient health workers, patients, and their caregivers to deepen public engagement in issues relating to mental health and mental illness. Documenting the findings from the study will also help discover more gaps for further studies, enrich mental health literature and thus make knowledge available for future reference and intervention studies. Findings from the study will also inform the Ministry of Health of Ghana to include the subject of stigma in mental health curriculum so that all students would be equipped with stigma issues that affect patients before they graduate.

Overall, the dissertation is divided into six chapters. Chapter one introduces the background of the study and comprises the concept of mental illness stigma, the research problem, the context of mental health care in Ghana, as well as purpose and significance of the study. Chapter two presents discussion of the conceptualization and development of the Dynamic Stigma Model of mental illness (DYSMO), while chapter three outlines a scoping review of the factors that contribute to the perpetuation of mental illness stigma among patient populations. Chapter four presents a regression analysis of rejection sensitivity and internalized stigma, anticipated discrimination, and structural violence perspectives of persons with mental illness in Ghana.

Chapter five presents the testing of the Dynamic Stigma Model of mental illness in relation to predictors of patient stigma perception appraisal and outcomes in an out-patient population in Ghana. Finally, chapter six summarizes the study results alongside implications and conclusion.
References


Evans-Lacko, S., Brohan, E., Mojtabai, R., & Thornicroft, G. (2012). Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. Psychological Medicine, 42(8), 1741-1752. https://doi.org/10.1017/S0033291711002558


http://dx.doi.org/10.1136/jech.2008.084277


https://doi.org/10.2471/BLT.12.115063


https://doi.org/10.1037/a0026270


https://doi.org/10.1371/journal.pone.0163103


Tawiah, P. E., Adongo, P. B., & Aikins, M. (2015). Mental health-related stigma and
discrimination in Ghana: experience of patients and their caregivers. Ghana Medical
Journal, 49(1), 30–36.

http://doi.org/10.4103/0971-9962.193208.

https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-
with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html

Van Der Saden, Pryor, Stutterheim, Kok, & Bos. (2016). Stigma by association and family
burden among family members of people with mental illness: The mediating role of
coping. Social Psychiatry and Psychiatric Epidemiology, 51(9), 1233–1245.
https://doi.org/10.1007/s00127-016-1256-x

illness. The Lancet Psychiatry, 3(2), 171-178. https://doi.org/10.1016/S2215-
0366(15)00505-2

burden of mental, neurological and substance use disorders: An analysis from the global
https://doi.org/10.1371/journal.pone.0116820

Practice. WHO: Geneva.


CHAPTER TWO

Factors that Contribute to the Perpetuation of Mental Illness Stigma: A Scoping Review of Perceptions of People with the Experience of Mental Illness

Abstract

Introduction: Mental illness stigma is noted to be one of the greatest barriers to recovery of persons with mental health problems. Globally, stigma issues have become a public health concern due to the harmful impact of the outcomes associated with mental illness.

Method: In the current review we applied a five-step scoping review framework by Arksey and O’Malley (2005) to examine evidence in the literature that suggests a relationship between perceptions, religious and cultural beliefs, and structural violence in perpetuating stigma against persons with a mental illness.

Results: Thematic content analysis of 28 included studies from six databases resulted in five main themes. These include perceptions about mental illness, perceptions about stigma and discrimination, forms of stigma perception, dealing with stigma and discrimination, and impact of mental illness stigma on individuals.

Conclusion: The stigma attached to mental illness is pervasive. Therefore, there is the need for everyone to play their part towards stemming this inequity and all the negative outcomes that go with it.

Keywords: stigma, review, mental illness, discrimination, perceptions, religious beliefs, cultural beliefs, structural violence
Background

Mental health conditions are the leading cause of Disability-Adjusted Life Years (DALYs) worldwide and account for about 31% of healthy life years lost from Non-Communicable Diseases (Wilson, 2016). Recent WHO reports show that the burden of mental disorders continues to grow with significant negative impact on health, socioeconomic services, and human rights consequences all over the world (WHO, 2018; WHO, 2022a).

Mental health plays a vital role in the physical health, and overall well-being of individuals. Yet global reports indicate that only a small group of people suffering from mental health problems have access to treatment (both in the community and health institutions) (Muhorakeye & Biracyaza, 2021; Nyblade et al., 2019; WHO, 2022b). For instance, in their recent report, the WHO observes that 1 in every 8 people lives with a mental illness (WHO 2022b). However, only 29% of people with psychosis (WHO, 2021) and only a third of people with depression receive formal mental health care (Moitra, et al., 2022).

Persons with mental illness (PWMI) face myriad of problems including impediments to equal access to quality care and social resources due to stigma. Link (2001) defines stigma as a concept that is characterized by five inter-related components of labelling, stereotyping (in the form of negative attributes), separation (of ‘us’ and ‘them’), status loss and discrimination that is underpinned by power relational difficulties between the powerful who see themselves as normal compared to the stigmatized.

Globally, stigma issues have become a public health concern due to the harmful impact of the outcomes associated with mental illness. The stigma associated with mental illness is noted to be one of the greatest barriers to the recovery of individuals (Knaak et al., 2017). For instance, research indicates that the social stigma associated with mental health problems acts as
a barrier and further reduces the acceptability of the persons with mental illness as well as accessibility for care (Muorakeye & Biracyaza, 2021; Nyblade et al., 2019; WHO, 2019). Service users are therefore reluctant to use these services except as a last resort. It is notable that policy makers have been unwilling in allocating resources towards the care of mental health problems. Mental healthcare receives the least of all annual budgetary allocations worldwide, receiving less than 1% of the healthcare budget assigned for health care in most countries (Rosenberg, 2017). This support is woefully inadequate to sustain effective mental health care activities. Again, health care providers have been found to be unwilling to screen or offer care to PWMI (Yang et al., 2017). Stigma against PWMI does not only affect the person experiencing the problem but also their immediate and extended families, friends, and caregivers as well (Ahmedani, 2011; Campo-Arias & Herazo, 2015; Goepfert et al., 2019; Koschorke et al., 2017).

Since Goffman’s pioneering work in 1963, mental health researchers have studied stigma in various ways using different methods. Stigma has been acknowledged as both individual and social orchestration that has overpowering impact on the social standing of marginalized persons in society. Goffman’s view on stigma as a discrediting characteristic that reduces the stigmatized individual from a complete and normal person to a second-rated human being in society is still relevant today.

In certain jurisdictions, stigmatizing behaviours and attitudes have been linked to the long-term influences of historical traditions that are underpinned by religious and cultural belief systems of the people. The lives of some PWMI are worsened by religious and cultural belief systems that inherently legitimize and justify the unequal social positioning of these persons with the illness. Stigma leads to public labelling, group stereotypes, prejudices, loss of social status
and self-worth, and attending negative implications for social relationships (Hatzenbuehler et al., 2013) and overall health and well-being.

The stigma of mental illness is reported to negatively mediate the social and care environments of sufferers, impacts their help-seeking behaviours, and adherence to treatment regimen (Stangl et al., 2019; Yang et al., 2017). According to Goffman (1963), stigma facilitates various forms of discriminatory behaviours and attitudes that deny a person or group from the full social acceptance or participation in communal activities, thereby reducing the individual’s birthrights and opportunities. The consequence of existing power differentials and the negative public misconception about mental illness is the inherent basis for the exclusionary attitudes and behaviours that society perpetuate against the PWMI. Interventions that encourage personal empowerment could therefore play a vital role in overcoming the stigma associated with mental illnesses.

The concept of stigma has been used in various studies involving persons who abuse substances (McGinty, & Barry, 2020; Yang et al., 2017; Zwick, 2020), persons with different sexual orientations (Hatzenbuehler, 2017; Stangl et al., 2019), families (Park, & Park, 2014; Koschorke et al., 2017; Zhou et al., 2018), the elderly (Herrmann et al., 2018; Holm et al., 2014; Hou et al., 2021; Xu, 2021), race or skin colour (Monk Jr, 2015; Priest et al., 2018; Taylor, & Richards, 2019; Tyler, 2018), obese people (Alleva et al., 2021; Hilbert et al., 2021; Ramos Salas et al., 2019), mental health problems (da Silva et al., 2020; Gyamfi et al., 2018; Koschork et al., 2014; Mantovani et al., 2017; Rüscht et al., 2015), and physical illnesses that include sexually transmitted diseases such as HIV and syphilis as well as other bodily illness involving tuberculosis, leprosy, cancer and COVID-19.
Aside stigma and its sequela, anecdotal documentation points to influences of sociohistorical factors such as religious, cultural, and structural violence perspectives of the public towards individuals with mental health problems. We argue that these factors impact persons with mental illness in relation to the intrapersonal, interpersonal, institutional, and systemic mechanisms that underpin the distribution of power, and resource disparities across lines of gender, economic and social class, as well as individual health status and group identity. Ultimately, these social inequities lead to structural violence (the social and psychological harms that result in permanent disability or death).

The factors that make up the root causes of stigma and the perpetuation of social and health inequity towards marginalized populations appear to be diverse, complex, interdependent, and dynamic (continuously changing). According to the National Academies of Sciences, Engineering, and Medicine (2017), the root cause of health inequity is the unequal allocation of power and resources that relates to the social determinants of health. The power and resources come in the form of goods, services, and societal attention that manifest as unequal social, economic, and environmental conditions to create and sustain stigma.

Even though there is substantial evidence of research relating to stigma in general, till date, there is no empirical research globally that maps the unique concepts such as religious, and cultural beliefs, as well as structural violence perspectives on stigma and mental illness. We therefore examined the extant literature to ascertain if there were any evidence(s) in the literature that suggests a relationship between perceived public attitudes, religious and cultural beliefs, and structural violence in perpetuating stigma against persons with a mental illness.
Methods

Scoping review processes assist the researcher to analytically reinterpret the existing literature. The concepts of religious and cultural beliefs and structural violence perspectives vis-à-vis stigma are emerging constructs in the field of mental health. Our initial gleaning of the extant literature gave us indications that there was a paucity of empirical research evidence on the subject matter. We therefore undertook this scoping review to examine the extent of research activity and to identify gaps in the existing literature. A scoping review was ideal because this method allowed us to incorporate a range of study designs, summarize data (including published and grey literature) to address our research questions, to generate and disseminate findings (Arksey & O'Malley, 2005), and to inform future research.

In the current review we applied a five-step scoping review framework by Arksey and O’Malley (2005). The steps include: (1) Identification of research question(s), (2) Identification of relevant studies, (3) Selection of included studies, (4) Data extraction, charting, and summarization, and (5) Data collating, summarizing, and reporting of results

Step 1: Identification of Research Questions

The review sought to address the overarching research question: Is there evidence in the literature that suggests a relationship between perceptions, religious and cultural beliefs, and structural violence in perpetuating stigma against persons with a mental illness? Specifically, the study was seeking to address the following three sub-questions:

a. What does the extant literature say about relationships between perceptions, religious and cultural beliefs, and mental illness stigma?

b. Is there any evidence about the relationships between structural violence and mental illness stigma?
c. What is the evidence about the relationships between religious, and cultural beliefs, and structural violence?

**Step 2: Identification of Relevant Studies**

The researcher widely and systematically conducted literature search from six databases including CINAHL, Ovid MEDLINE(R), ProQuest Dissertations & Theses Global, Sociology Collection, PsycINFO, and Sociological Abstracts. With the assistance of a librarian, the researcher initially identified search terms and their synonyms for all key concepts of the study topic. Search terms were modified for each database before search began. The key words and their synonyms that were used in the search include: Stigma (*Attitude to Mental Illness, Stereotyping, Prejudice, Discrimination, self-stigma, internalized stigma, social stigma, structural stigma, institutional stigma, associative stigma, stigma by association, family stigma health professional stigma*), Mental illness (*Mental Disorders, Psychiatric Disorder, Mental Patients, Mentally Challenged, Psychiatric Patients, persons with mental illness, people with mental illness*), Perception (*knowledge, attitude, awareness, social perception, individual perception*), religious and cultural beliefs (*Beliefs, Religious beliefs, Religious and cultural beliefs, Culture, Religion, Cultural beliefs, Practices*), Structural violence (*Violence, Institutional violence, Social injustice*).

During literature search, we exploded some key terms in the MEDLINE, and PsycINFO databases to direct the system to search on the given key terms in addition to all other more specific terms that were linked to the original term. Where applicable, we used boolean search operators (OR and AND) to broaden or narrow the search results appropriately. Where appropriate, Medical Subject Headings (MeSH terms) were used in the search process to optimize results.
We also conducted a manual search in google to ensure the review process was thorough in perspective. Peer reviewed, full text empirical studies including primary research, qualitative, quantitative, or mixed methods, and gray literature that were published in both health and non-healthcare databases from January 01, 2009 - May 03, 2012 were included in the review. Initial search in the six databases yielded 584 articles. Again, a check in the google search engine yielded 30 more additional articles. After removing duplicates, 553 articles remained for the next steps of title and abstract screening. Table 1 shows the five main concepts and their definitions of how we have conceptualized them in relation to the current review.

Table 1

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Stigma</td>
<td>An undesirable and discrediting attribute that disqualify one from full social acceptance that motivate efforts by the stigmatized individual to hide the “mark” as much as possible (Goffman, 1963)</td>
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<tr>
<td>Perception</td>
<td>The organization, identification, and interpretation of sensory information to represent and understand the presented information, or the environment one lives in (Schacter, 2011).</td>
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<tr>
<td>Religious beliefs</td>
<td>A collection of belief systems, cultural systems, and worldviews that relate humanity to spirituality (one’s innate character in relation to human existence) and sometimes, to moral values; the system of values or principles of uprightness (Asal, 1982)</td>
</tr>
<tr>
<td>Cultural beliefs</td>
<td>that which encompass the behavior patterns and lifestyle of society that is made up of shared symbols, artefacts, beliefs, values, and attitudes; that culture is expressed in rituals, customs, and laws and is perpetuated and reflected in sayings, legions, literature, art, diet, costume, religion, making preferences, child-upbringing, entertainment, recreation, philosophical thought, and governance (Sadock &amp; Sadock, 2007).</td>
</tr>
<tr>
<td>Structural violence</td>
<td>Social arrangements that systematically brings subordinate and disadvantaged groups of persons into maltreatment, further placing them in danger for various forms of suffering (Benson, 2008)</td>
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</table>
Inclusion Criteria

The review followed a standardized replicable process that involved a stepwise approach to study selection and exclusion criteria (Levac et al., 2010). A study was included in the review if it met the following criteria, 1) involved a population of people with mental illness (such as schizophrenia and related disorders, mood/affective disorders e.g., depression and bipolar disorders, substance-related disorders, and anxiety disorders) aged 18 and above. 2) included some or all these terms ‘public perceptions’, ‘mental illness’, stigma, ‘religious beliefs’, ‘cultural beliefs’, ‘structural violence’ and/or their synonyms. 3) was conducted anywhere in the world. 4) primary research, 5) published since 2009, and 6) was published in English.

We however excluded studies that had (i) populations other than people with mental illness, (ii) participants under 18 years, (iii) articles published outside the stated publication date, and in different languages other than English, and (iv) abstract only. Table 2 below gives further details of the set criteria for including papers in the study.

Table 2

Summary of Study Inclusion Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>People with mental illness aged 18 and above.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept</td>
<td>Study must include ‘public perception’ ‘mental illness’, stigma, ‘religious beliefs’, ‘cultural beliefs’, ‘structural violence’ and/or their synonyms.</td>
</tr>
<tr>
<td>Context</td>
<td>Global studies that cover a range of settings (including schools, communities, hospitals or clinics, places of worship, and workplace) regardless of country of study.</td>
</tr>
<tr>
<td>Date of publication</td>
<td>Published studies from 2009-2021</td>
</tr>
<tr>
<td>Source of research evidence</td>
<td>Peer reviewed, full text empirical studies including primary research, qualitative, quantitative, or mixed methods (published and unpublished thesis).</td>
</tr>
<tr>
<td>Languages</td>
<td>Full text papers that have been published in English.</td>
</tr>
</tbody>
</table>
Step 3: Selection of Included Studies

Having removed duplicates from the initial search results, two PhD students GS and JA independently checked the titles and abstracts of the papers in line with the set inclusion criteria. After the title and abstract screening of the 553 articles, the two researchers met and reconciled any discrepancies that each identified before arriving at the final set of articles for full text review. In the end, the researchers agreed to remove 500 articles based on various reasons including papers with non-patient populations, participants under 18 years, articles published before 2009, and in different languages, not full text, as well as participants’ diagnosis that did not meet the inclusion criteria of the current review. The two researchers further conducted full text review on the remaining 53 articles independently after which they met and resolved any conflicts related to the final set of articles each of them had chosen for data extraction. After the full text review, 26 articles were eliminated leaving 27 articles for the data extraction process. A manual search of the reference list of the selected articles yielded one more article. We conducted a manual search of the included studies to ensure that all possible articles related to the research question were identified. Therefore, the final list of articles selected for data extraction were 28. At the data charting stage, only one researcher GS performed all the data extraction procedure for the included papers with input from the rest of the research team. See figure 1 below for details of the article selection process as presented in the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) flow diagram (Moher et al., 2009).
Figure 1

PRISMA Flow Diagram Mapping out the Review Process

Step 4: Data Extraction/Charting, and Summarization

Before commencing data extraction, we first created a Microsoft spreadsheet with the following sub-headings: study number (#), author(s), publication year, country and title, objectives/hypotheses, study design, population (Sample size and characteristics), measurements, and main results. This helped us to organize our data and to aid subsequent summarization of the results. Table 3 summarizes the extracted study data below.
### Table 3

**Summary of Study Results**

<table>
<thead>
<tr>
<th>#</th>
<th>Author(s)</th>
<th>Country and title</th>
<th>Objectives/Hypotheses</th>
<th>Study design</th>
<th>Population (Sample size and characteristics)</th>
<th>Measurements</th>
<th>Main results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assefa et al., 2012</td>
<td>Ethiopia (Internalized stigma among patients with schizophrenia in Ethiopia: a cross-sectional facility-based study)</td>
<td>Determine, correlates of internalized stigma amongst outpatients with schizophrenia in Ethiopia.</td>
<td>Quantitative (Cross-sectional) survey</td>
<td>Data were collected from 212 outpatients aged over 18, who were mostly single (71.2%), unemployed (70.3%) and male (65.1%).</td>
<td>Outpatients with schizophrenia were recruited and assessed using an Amharic version of the Internalized Stigma of Mental Illness (ISMI) scale</td>
<td>Nearly all participants (97.4%) expressed agreement to at least one stigma item contained in the ISMI. They reported high internalized stigma. Persons who discontinued their treatment reported that they had done so because of perceived stigma, perceived discrimination, alienation, and stereotype endorsement, leading to social withdrawal. Caregiver stigma (formal and informal) were also common. There was evidence of an association between a history of suicide attempt and high internalized stigma score.</td>
</tr>
<tr>
<td>2</td>
<td>Barke et al., 2011</td>
<td>Ghana (The stigma of mental illness in Southern Ghana: attitudes of the urban population and patients’ views)</td>
<td>To examine attitudes of patients and the public towards mentally ill in Ghana.</td>
<td>Quantitative (cross-sectional) study</td>
<td>A convenience sample of 403 participants aged over 18 (210 men, mean age 32.4 ± 12.3 years) from urban regions in Accra, Cape Coast and Pantang answered the Perceived Stigma and Discrimination Scale. 105 patients (were 75 men, mean age 35.9 ± 11.0 years).</td>
<td>Researcher-administered interviews were carried out using the Community Attitude towards the Mentally Ill scale (CAMI). Perceived stigma was measured with the Perceived Devaluation and Discrimination (PDD) scale.</td>
<td>Patients reported high levels of stigma with secrecy. Perceived discrimination and devaluation Perceived stigma was high. PWMI were regarded by the public as inferior. The public will not accept them as close friends, will not hire them due to perceptions that they were unintelligent and not trustworthy. Their opinions were not also taken seriously by the community. The participants used concealment to cope.</td>
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<td>#</td>
<td>Author(s)</td>
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<td>3</td>
<td>Bifftu et al., 2015</td>
<td>Ethiopia (Perceived stigma and associated factors among people with epilepsy at Gondar University Hospital, Northwest Ethiopia: A cross-sectional institution-based study)</td>
<td>To assess the prevalence of perceived stigma and associated factors among people with epilepsy attending the outpatient department in Ethiopia</td>
<td>Quantitative (cross-sectional) study</td>
<td>408 outpatients with epilepsy. The participants were selected using systematic random sampling technique. All were aged more than 18 years.</td>
<td>Face-to-face interviews done using semi-structured questionnaire. Perceived stigma was measured using the modified Family Interview Schedule (FIS). Beck Depression Inventory (BDI-II) was used to assess depression. The Perceived Stress Scale was used to measure the perception of stress.</td>
<td>Overall, the prevalence of perceived stigma was found to be 71.6%. Marital status [single (AOR = 0.23, CI: 0.25, 0.90), widowed ( AOR = 0.37, CI: 0.15, 0.90) duration of illness [2-5 years (AOR = 4.38, CI:1.98,9.62, 6-10 years (AOR = 4.29, CI:1.90,9.64, ≥11 years (AOR = 4.31,CI:1.84,10.00) and seizure frequency of [1-11 per year (AOR = 2.34, CI:2.21,3.56), ≥1 per month (AOR = 5.63, CI:3.42,10.32]) were all associated with perceived stigma.</td>
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<tr>
<td>4</td>
<td>Bifftu &amp; Dachew, 2014</td>
<td>Ethiopia (Perceived Stigma and Associated Factors among People with Schizophrenia in Addis Ababa.)</td>
<td>Assess associated factors of perceived stigma among people with schizophrenia.</td>
<td>Quantitative (cross-sectional) study</td>
<td>Sample was select by systematic sampling techniques. 411 outpatients aged 18 and above, had schizophrenia and were studied using an Amharic version of the perceived devaluation and discrimination scale (PDD)</td>
<td>Perceived stigma was measured using the perceived devaluation and discrimination scale (PDD).</td>
<td>The prevalence of perceived stigma was found to be 83.5%. Education status (not able to read and write) (AOR = 2.64,95% CI:1.118,6.227), difficulties of adherence to antipsychotic drug (AOR = 4.49,95% CI:2.309,8.732), and duration of illness less than one year (AOR = 3.48,95% CI:2.238,5.422) highly associated with perceived stigma. Employment status and residence also mediated perceptions of stigma.</td>
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<td>#</td>
<td>Author(s)</td>
<td>Country and title</td>
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<td>5</td>
<td>Brohan et al., 2011</td>
<td>13 European countries (Self-stigma, empowerment, and perceived discrimination among people with bipolar disorder or depression in 13 European countries: The GAMIAN–Europe study)</td>
<td>Describes the levels of self-stigma, stigma resistance, empowerment and perceived discrimination reported people with a diagnosis of bipolar disorder or depression in 13 European countries.</td>
<td>Quantitative (Cross sectional survey)</td>
<td>1182 people with bipolar disorder or depression from 13 countries (Belgium, Croatia, Estonia, Finland, Greece, Italy, Lithuania, Macedonia, Malta, Poland, Romania, Spain, Sweden).</td>
<td>Participants completed mail survey measuring levels of self-stigma, stigma resistance, empowerment, and perceived discrimination. The measures included The Internalized Stigma of Mental Illness (ISMI) for self-stigma, the Boston University Empowerment Scale (BUES) for empowerment, The Perceived Devaluation and Discrimination Scale (PDD) for perceived discrimination.</td>
<td>Self-stigma was prevalent. However, there was moderate or high stigma resistance, 63% moderate or high empowerment, and 71.6% moderate or high perceived discrimination. Participants had the lowest scores for the stereotype endorsement subscale. Alienation was the most frequently endorsed subscale (39.3%), followed by social withdrawal (28.7%) and discrimination experience (22.7%). Empowerment, social contact, university education and being employed were all significantly associated with lower self-stigma scores.</td>
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<td>6</td>
<td>Brohan et al., 2010</td>
<td>Europe (Self-stigma, empowerment, and perceived discrimination among people with schizophrenia in 14 European countries: The GAMIAN-Europe study)</td>
<td>Describes the level of self-stigma, stigma resistance, empowerment and perceived discrimination reported by mental health service users with a diagnosis of schizophrenia or other psychotic disorder across 14 European countries</td>
<td>Quantitative (cross sectional study)</td>
<td>1229 people with schizophrenia in 14 European countries (Bulgaria, Croatia, Czech Republic, Estonia, Greece, Lithuania, Macedonia, Poland, Romania, Russia, Slovenia, Spain, Turkey, Ukraine site A)</td>
<td>Participants completed mail survey measuring levels of self-stigma, stigma resistance, empowerment, and perceived discrimination. The measures included ISMI for self-stigma, The Boston University Empowerment Scale (BUES) for empowerment, PDD for perceived discrimination.</td>
<td>Self-stigma was predominant. Participants had the lowest scores for the stereotype endorsement subscale. Alienation was the most frequently endorsed subscale (39.3%), followed by social withdrawal (28.7%) and discrimination experience (22.7%). Empowerment, social contact, university education and being employed were all significantly associated with lower self-stigma scores.</td>
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<td>7</td>
<td>Brouwers et al., 2016</td>
<td>35 countries (Discrimination in the workplace, reported by people with major depressive disorder: a cross-sectional study in 35 countries)</td>
<td>Assess if (1) people with MDD anticipate and experience discrimination when trying to find or keep paid employment;</td>
<td>Quantitative cross-sectional study</td>
<td>Participants purposively sampled (N=834), were over 18 years. Diagnosis of MDD in the past 12 months, from 35 countries. Twenty-five patients were recruited from each site. About half of participants were married or cohabiting. Two-thirds were women.</td>
<td>Participants were interviewed face-to-face using the Discrimination and Stigma Scale (DISC-12). Internalized stigma, was measured with the Internalized Stigma of Mental Illness Scale (ISMI) to assess the subjective experience of stigma.</td>
<td>About 63% of participants had anticipated and experienced discrimination in the work setting. Almost 60% of respondents had stopped themselves from applying for work, education, or training because of anticipated discrimination. Participants in countries with a very high HDI reported significantly more anticipated ($\chi^2=26.01$ (df=2), $p&lt;0.01$) and more experienced ($\chi^2=7.25$ (df=2), $p&lt;0.05$) discrimination than participants in countries with moderate/low HDI.</td>
</tr>
<tr>
<td>8</td>
<td>Dako-Gyeko &amp; Asuman, 2013</td>
<td>Ghana (Stigmatization and Discrimination Experiences of Persons with Mental Illness: Insights from a Qualitative Study in Southern Ghana)</td>
<td>Find out how PWMI are stigmatized and discriminated against by family members, public (friends and neighbors), employers and work colleagues.</td>
<td>Qualitative study (Phenomenology)</td>
<td>Purposive sampling of 10 persons with mental illness aged over 18 years. Eight PWMI had never married. Two were divorced. The PWMI were unemployed. Majority of respondents were Christians and belonged to different ethnic groups.</td>
<td>In-depth interviews using unstructured open-ended questions.</td>
<td>Findings showed that stigmatization and discrimination during interaction with own family members, association with friends and community members, contact with employers and work colleagues was common. Social distance and withdrawal from the affected family member was common. Some PWMI were ignored or neglected by their fathers on grounds that the illness was coming from the mother’s lineage. They no more shared common space such as same bed or eating together. Close friends and partners deserted them. Some neighbours ridiculed them. Some participants became unemployed due to the inability to find or keep their jobs even though they were competent. Employers described them as incapable to work.</td>
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<td>9</td>
<td>Farrelly et al., 2014</td>
<td>2014 UK</td>
<td>(experienced discrimination amongst people with schizophrenia, bipolar disorder, and major depressive disorder: A cross sectional study)</td>
<td>Establish associations of anticipated and experienced discrimination amongst people with schizophrenia and comparator (bipolar and major depressive disorders).</td>
<td>Quantitative (cross-sectional) study</td>
<td>202 individuals with mental illness aged over 18 were studied. 55% were female = 54% were White, while 62% were unemployed. All had some form of education. About 63% of the participants were single. Diagnosis from notes indicated Bipolar disorder (20.3%), Depression (32.2%), and Schizophrenia Spectrum (47.5%).</td>
<td>Researchers used instruments that include Discrimination and Stigma Scale (DISC), Questionnaire on Anticipated Discrimination (QUAD), The Brief Psychiatric Rating Scale (BPRS), Global Assessment of Functioning (GAF), Beck Hopelessness Scale (BHS), Internalized Stigma of Mental Illness Scale (ISMI), and Multigroup Ethnic Identity Scale (MEIM).</td>
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<td>10</td>
<td>Ghanean, 2013</td>
<td>2013 Iran</td>
<td>(Internalized stigma of mental illness in Tehran, Iran)</td>
<td>To investigate experiences of internalized stigma in mentally ill persons in Tehran, Iran using the Internalized Stigma of Mental illness scale (ISMI)</td>
<td>Quantitative (cross-sectional) study</td>
<td>About 138 outpatients with affective and schizophrenia spectrum disorders. 60% were males and majority had high-school diploma. Mean age of participants was 30 years. About 79% were unemployed. More females (55%) were</td>
<td>The Internalized Stigma of Mental Illness Questionnaire (ISMI) was used to measure internalized stigma</td>
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married. could have “a good fulfilling life” and “being able to live my life the way I want to”

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<td>11</td>
<td>Gyamfi et al., 2018</td>
<td>Ghana (Individual factors that influence experiences and perceptions of stigma and discrimination towards people with mental illness in Ghana)</td>
<td>To examine perceptions of stigma and discrimination and self-stigma in individuals diagnosed with a mental illness.</td>
<td>Qualitative study</td>
<td>Purposive sampling of 12 participants (9 males, 3 females). Majority were single (8/12), unemployed (8/12), lived with family members or friends (10/12), and endorsed a Christian faith (10/12). The duration of treatment ranged from 8 months to 18 years (mean treatment duration = 4.7 years). Their ages ranged between 18 and 50 years (mean age = 29.8 years). All participants had some form of education.</td>
<td>A single investigator interviewed all participants one-on-one in English.</td>
<td>Negative perceptions about stigma and experiences of discrimination were prevalent. Some lost their jobs, close friends, and partners after discharge from hospital. Their opinions were discounted, and decisions made for them. Some felt isolated and described themselves as ‘not being human anymore’. Self-stigma was also common. Family members and co-workers discriminated against them. Most participants considered or were told that the problem was a spiritual one and reflected both Christian and traditional thinking around spirituality. Some also attributed their illness to God’s punishment for previous poor behaviour. Many sought support from Christian churches. Those with a traditional view of being cursed or being invaded by evil spirits paid community healers to rid them of the curse or evil spirit. Eventually all sought hospital care, either on the advice of a close relation or the church. They also attributed social and biological causation to their illness. Some coped by quitting their job, concealing their illness. While some moved multiple times to avoid persons who knew about their illness. Others engaged in social withdrawal and self-isolation. Some also prayed.</td>
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<td>12</td>
<td>Hansson et al., 2014</td>
<td>Sweden (Perceived and anticipated discrimination in people with mental illness— An interview study)</td>
<td>To investigate perceived discrimination in a sample of users in contact with mental health services in Sweden</td>
<td>Quantitative (cross-sectional) study</td>
<td>156 outpatients were involved. Two-thirds of the whom were female. About 55% were living alone while nearly 74% were unemployed. The two major diagnostic subgroups were anxiety/depression (46.3%) and psychosis (38.5%). The mean number of years since first contact with psychiatric services was 15. Mean number of hospitalizations was five and around one-third of the participants had been involuntarily hospitalized.</td>
<td>Telephone interviews were conducted with 156 outpatients, asking for perceived and anticipated discrimination during the last 2 years. Background characteristics were also collected. The instrument used for the interviews was DISC-12.</td>
<td>Perceived discrimination was common. Family and caregiver stigma and discrimination was prevalent, including avoidance by people who knew about the mental illness. Most of those anticipating discrimination regarding job or education seeking or starting a close relationship had no prior experience of discrimination in these areas. Previous hospitalizations were associated with discrimination, as well as age with anticipated discrimination. Areas with the least perceived discrimination included religious practice, starting a family, and using public transport. Most participants coped by concealing their illness from others. They also stopped themselves from having close personal relationships, and from applying for work or education.</td>
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<td>13</td>
<td>Harangozo et al., 2014</td>
<td>21 countries: Bulgaria, Italy, Hungary, Lithuania, Poland, Romania, UK, Slovakia, India, Slovenia, Cyprus, Finland, France, Germany, Greece, Malaysia, Spain, Netherlands, Norway, Portugal, Switzerland)</td>
<td>To investigate whether people with schizophrenia experience discrimination when using health care services.</td>
<td>Quantitative (cross-sectional) study</td>
<td>About 777 participants with schizophrenia (62% male and 38% female) from inpatient, outpatient, home care, day care.</td>
<td>Face-to-face researcher-interviews. Data collection related to health care, disrespect of mental health staff, personal privacy, safety, and security, starting a family, pregnancy, and childbirth. Discrimination was measured by the Discrimination and Stigma Scale (DISC).</td>
<td>Participants experienced discrimination when treated for physical health problems and at the mental health hospitals. They were discriminated against in several life domains related to friendship, treatment by family, keeping a job, travel visas, welfare benefits and pension, opening a bank, account, voting in elections, religious practices, social life, treatment by the police, arranging payment for medical care, dental treatment. Even patients using home care services also felt discriminated against when wanting to start a family. Perceived disrespect was also high.</td>
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<td>14</td>
<td>Li et al., 2017</td>
<td>China (Stigma and discrimination experienced by people with schizophrenia living in the community in Guangzhou, China)</td>
<td>To investigate experienced stigma and discrimination and their associated factors in people with schizophrenia who live in the community in Guangzhou, China</td>
<td>Quantitative (cross-sectional) study</td>
<td>A total of 384 people aged between 18 and 50 with schizophrenia were randomly recruited from four districts of Guangzhou.</td>
<td>Participants completed self-reported questionnaires: Internalized Stigma of Mental Illness scale (ISMI), Self-Esteem Scale (SES), Discrimination and Stigma Scale (DISC-12), Brief Psychiatric Rating Scale (BPRS), PANSS negative scale, Global Assessment of Functioning (GAF) and Schizophrenia Quality of Life Scale (SQLS).</td>
<td>People with schizophrenia often experienced stigma and discrimination in the Chinese population. The public perceived them as dangerous. Participants were avoided or shun by the public. Participants concealed their illness. Most of the participants were also unemployed and unmarried.</td>
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<td>15</td>
<td>Lin, 2012</td>
<td>USA (Beliefs about causes, symptoms, and stigma associated with severe mental illness among ‘highly acculturated’ Chinese American patients)</td>
<td>To examine mental health beliefs among highly acculturated Chinese American patients with severe mental illness and serves to fill the gap in the literature of Chinese American mental health.</td>
<td>Qualitative study</td>
<td>About 29 persons aged 20-75 years. Twenty-six participants had high school education. Twenty-two were diagnosed with schizophrenia, schizoaffective disorder, and psychosis not otherwise specified (NOS). Six people were diagnosed with bipolar disorder type I; and one person with major depressive disorder recurrent type. They received health services on average of 13.9 years.</td>
<td>Semi-structured interviews conducted based on Kleinman’s explanatory model.</td>
<td>Causes of mental illness included biological factors, head trauma and personal losses. About 15 persons believed mental illness is hereditary, from neurotransmitter deficiencies, or brain abnormalities, while seven and six participants believed family losses and past negative interpersonal experiences and drug use respectively, caused the illness. Four participants also referred to head trauma as causative factor. Three participants also cited sexual abuse and psychological trauma. Additionally, two participants believed that their mental illness was caused by improper diet. Public stigma was also common; that some neighbors blamed them and described them as a disgrace to their families. However, some participants did not feel ashamed of their illness, and that they were going to go public about their illness to be role models to the many who were hiding their illness. Few participants spoke about traditional Chinese medicine when asked about treatment options.</td>
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<td>16</td>
<td>Lv et al., 2013</td>
<td>China ( Experienced stigma and self-stigma in Chinese patients with schizophrenia)</td>
<td>To investigate experienced stigma and self-stigma in patients with schizophrenia in mainland China.</td>
<td>Quantitative (cross-sectional study)</td>
<td>Ninety-five patients with schizophrenia, completed Chinese versions of two self-report questionnaires: the Internalized Stigma of Mental Illness (ISMI) scale and the Modified Consumer Experiences of Stigma Questionnaire (MCESQ). They also completed two other self-report questionnaires: the Social Support Rating Scale (SSRS) and the World Health Organization Quality of Life (WHOQOL-BREF) questionnaire. Patients were also assessed by a senior psychiatrist using the Scale for Assessment of Positive Symptoms (SAPS) and the Scale for Assessment of Negative Symptoms (SANS).</td>
<td>Nonprobabilistic sampling method was used to recruit 95 outpatients. About 61% were male. Participants mean age was 26.27 years. About 64% were employed. About 68% were single, married (27%), divorced (4%) About 68% completed high school. Duration (years) of mental illness, mean± (S.D) = 4.51±3.87. Family history of mental disorder Yes =19 (20.0%) No =73 (76.8%) Hospitalizations below 3 times = 69 (72.6%) ≥3 times = 26 (27.4%).</td>
<td>On the ISMI, the percentage of participants who rated themselves above the mid-point of 2.5 (i.e., high level of self-stigma) was 44.2% (n = 42) for alienation, 14.7% (n = 14), for stereotype endorsement, 25.3% (n = 24), for perceived discrimination, 32.6% (n = 31), for social withdrawal and 20.0% (n = 19). On the Stigma Questionnaire (MCESQ), the percentage of participants who rated themselves above the mid-point of 3.0 was 24.2% (n = 23) for stigma. Socioeconomic factors were related to the severity of psychiatric stigma. Some described themselves as looking strange and their life as 'spoiled', whiles others concealed their illness from family, friends, and the public.</td>
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<td>17</td>
<td>Oleniuk et al., 2013</td>
<td>Canada (The Impact of Stigma of Mental Illness in a Canadian Community: A Survey of Patients Experiences)</td>
<td>Examined how willing patients are to share details of their mental illness. And, to find out if individual characteristics have a role on stigma.</td>
<td>Quantitative (cross-sectional study)</td>
<td>41 persons agreed to participate. About 56% were male. About 51% completed a college diploma. Participants were diagnosed with schizophrenia, bipolar, depression and substance abuse. Twelve inpatients had been hospitalized first time, while 29 had one or more hospitalizations. Average length of illness was 19.5 years (SD = 14.4).</td>
<td>Face-to-face interviews were conducted to assess opinions using the Experiences with the Stigma of Mental Illness—Consumer Version.</td>
<td>Those who attended outpatient sessions, being previously hospitalized or younger suffered more stigma impact. Health professionals were rude and stigmatized them. This impacted recovery negatively because they lost trust in the professionals. Stigma also negatively influenced their health seeking. Participants feared or lost trust for community members. They could not ask for help from them; they felt safer staying away from the public due to the shame their illness brought unto them.</td>
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<td>18</td>
<td>Oshodi et al., 2014</td>
<td>Nigeria (Pattern of experienced and anticipated discrimination among people with depression in Nigeria: a cross-sectional study.)</td>
<td>The study evaluated the impact of stigma and discrimination among individuals with major depression in Nigeria.</td>
<td>Quantitative (cross-sectional study)</td>
<td>Person with major depression aged over 18. The mean age of the participants was 35.5 years.</td>
<td>Face-to-face Interviews were conducted with 103 participants using a socio-demographic questionnaire, the Discrimination and Stigma Scale, the Internalized Stigma of Mental Illness Scale, the Boston University Self-Empowerment Scale, and the Rosenberg Self Esteem Scale.</td>
<td>Participants were unfairly treated in dating or intimate relationships, while concealment of mental illness was the most common for anticipated discrimination. Younger people (less than 40 years) with higher level of education had high risk for experienced discrimination. Some also faced unfair treatment at work and therefore withdrew from their job. About 51% coped by making friends with people who did not use mental health services, while 36 % used personal abilities in coping with stigma. The greatest advantage was being positively treated by family (62.1 %), followed by positive treatment in religious activities (23.3 %). More than half of the respondents concealed their diagnosis from others. Self-esteem and self-efficacy were low. Patients with tertiary education compared with those with secondary or lower level of education showed experienced stigma.</td>
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<td>19</td>
<td>Quinn et al., 2015</td>
<td>USA (From Discrimination to Internalized Mental Illness Stigma: The Mediating Roles of Anticipated Discrimination and Anticipated Stigma)</td>
<td>Explored how experiences of discrimination relate to greater anticipation of discrimination, devaluation, and internalized stigma.</td>
<td>Quantitative (cross-sectional) study</td>
<td>Participants were 105 adults with mental illness self-reported their experiences of discrimination based on their mental illness, using laptops.</td>
<td>Experienced discrimination was common and resulted in increased anticipated discrimination and social stigma as well as greater internalized stigma. The most common types of discrimination reported were not getting hired for a job (26%), getting hassled by the police (23%), getting fired from a job (16%), and getting poorer medical treatment/service (13%). The degree to which participants anticipated some discriminatory experiences was not influenced by having experienced that event. Participants also reported not getting promoted for a job. They experienced discrimination from healthcare providers as well.</td>
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<td>20</td>
<td>Quinn &amp; Knifton, 2014</td>
<td>Uganda (Beliefs, stigma and discrimination associated with mental health problems in Uganda: Implications for theory and practice)</td>
<td>To understand beliefs, stigma and discrimination associated with mental health in Uganda from the perspectives of different stakeholders</td>
<td>Qualitative study</td>
<td>Purposive sampling of 40 participants i.e., Mental health activists (with lived experience) (they did not describe the sample in detail)</td>
<td>Key informant interviews in English and two focus groups discussions, each with 12 mental health activists in a language they could understand.</td>
<td>The public describe every mental health issue as ‘madness’. The public still hold unto traditional cultural explanations for mental illness, such as being possessed by evil spirits, as a punishment or curse. That the best way of treating mental illness was to seek traditional treatments or faith cures. They also believed in social and biological causes of mental illness. Whiles the participants stigmatized themselves, family and community members also discriminated against them. Participants were also discriminated against by health professionals, employers, and colleagues in the workplace. Negative media reportage was common; on TV, radio and newspapers.</td>
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<td>21</td>
<td>Rüsch et al., 2009</td>
<td>USA (A Stress-Coping Model of Mental Illness Stigma: I. Predictors of Cognitive Stress Appraisal)</td>
<td>Tested whether the level of perceived public stigma and personal factors such as rejection sensitivity, perceived legitimacy of discrimination and ingroup perceptions predict the cognitive appraisal of stigma as a stressor.</td>
<td>Quantitative (cross-sectional) study</td>
<td>85 outpatients with schizophrenia, schizoaffective or affective disorders took part in the study. Participants average age was about 45 years ($M = 44.8$, $SD = 9.7$), and were 68% male. More than half (58%) were African American and a third (34%) Caucasian, while a few reported Hispanic or Latino (5%) and mixed or other ethnicities (4%). On average, participants with mental illness were first diagnosed about 15 years ago ($M = 14.9$, $SD = 10.2$) and had been hospitalized in psychiatric institutions about nine times ($M = 9.2$, $SD = 13.1$).</td>
<td>Cognitive appraisal of sexism was used to measure cognitive appraisal of stigma-related stress. The Perceived Devaluation and Discrimination Questionnaire measured perceived level of stigma against PWMI. The Adult Rejection Sensitivity Questionnaire measured rejection sensitivity. The Social Cue Recognition Test measured social cognitive deficits that affect stigma perception.</td>
<td>Stress appraisal did not differ between diagnostic subgroups but was positively correlated with rejection sensitivity. Higher levels of perceived societal stigma and holding the group of people with mental illness in low regard (low group value) independently predicted high stigma stress appraisal. High group value was related to more perceived resources to cope with stigma. More rejection sensitivity was also associated with higher perceived stigma stress, and lower perceived coping resources. Group identification and entitativity were positively related to both perceived harm and to perceived coping resources. The findings support the model that public and personal factors predict stigma stress appraisal among people with mental illness, independent of diagnosis and clinical symptoms.</td>
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<td>22</td>
<td>Sanseeha et al., 2009</td>
<td>Thailand (Illness perspectives of Thais diagnosed with schizophrenia)</td>
<td>Explored the perceptions of 18 people diagnosed with schizophrenia from 1–10 years to uncover how they perceived themselves and their illness.</td>
<td>Qualitative, descriptive study that employed in-depth interviews and observations</td>
<td>18 outpatients with schizophrenia were purposively selected. All were over 18 years (24-57 years, mean = 35.6 years). Eight participants were single, six were married, and four were divorced. All were Buddhists. Seven were unemployed, three were employed in government services, and eight in private employment.</td>
<td>Data were collected using in-depth interviews and observations.</td>
<td>Participants felt their symptoms including physical, behavioral, cognitive, and emotional aspects were abnormal, chronic, and required continuous medication and treatment. They believed their symptoms were caused by supernatural powers, bad karma from the past, or biological factors. They blamed themselves for their illness, describing themselves as sinners and living a bad life that is why they got sick from karma. Participants felt discriminated by society. They were isolated leading to feeling of shame. They felt disrespected, distrusted, lost their self-confidence. Participants coped through encouraging themselves, seeking social support from relatives, and following ‘dharma’ or Buddhist morality teaching, practicing mindfulness or positive concentration, meditation (detachment), and praying.</td>
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<td>23</td>
<td>Shrivastava et al., 2011</td>
<td>India (Origin and Impact of Stigma and Discrimination in Schizophrenia - Patients’ Perception: Mumbai Study)</td>
<td>Assessed the perceptions of patients with schizophrenia regarding the stigma and discrimination they face in their lives.</td>
<td>Quantitative (cross-sectional) study</td>
<td>Convenience sample of 100 patients (74 males) with schizophrenia, who were attending outpatient psychoeducation in a hospital in Mumbai, India, were surveyed. Their mean age was 39.2 years (SD =7.9; range 22-58). All participants had a minimum of grade 12 education. They were living with families and belonged to the middle-class.</td>
<td>Opinions on various aspects of stigma were obtained using a semi-structured interview guide developed by a national working group for India by the World Psychiatric Association steering committee.</td>
<td>About 69% of the respondents experienced stigma in their personal lives. A lack of knowledge, the nature of the illness, and behavioral symptoms were the main cause of stigma and discrimination. Common effects of stigma were low self-esteem and discrimination in family and work settings. Providing care and treatment was identified as the most common method of combating stigma. The availability of effective treatment was thought to be the most important method of reducing stigma. The prevailing social stigma from family members, co-workers and health professionals resulted in low self-esteem of participants. Participants also reported problems coping with their marriage and not receiving proposals for marriage due to their illness.</td>
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<td>24</td>
<td>Sun et al., 2019</td>
<td>Five Asian countries; China, Korea, Malaysia, Singapore, and Thailand (Perception of Stigma and Its Associated Factors Among Patients with Major Depressive Disorder: A Multicenter Survey from an Asian Population)</td>
<td>To examine the level of perceived stigma and its associated factors in MDD patients in five Asian countries, including China, Korea, Malaysia, Singapore, and Thailand</td>
<td>Quantitative (cross-sectional) study</td>
<td>A total of 547 outpatients with MDD were enrolled from mainland China (114 cases), Taiwan (99 cases), Singapore (40 cases), Korea (101 cases), Thailand (103 cases), and Malaysia (90 cases).</td>
<td>Researchers used the Explanatory Model Interview Catalogue (EMIC) to assess stigma. The Montgomery–Asberg Depression Rating Scale (MADRS), Symptoms Checklist 90-Revised (SCL-90-R), Fatigue Severity Scale (FSS), Sheehan Disability Scale (SDS), 36-Item Short-Form Health Survey (SF-36), and the Multidimensional Scale of Perceived Social Support (MSPSS) to assess their symptoms, clinical features, functional impairment, health status, and social support.</td>
<td>The stigma scores of patients under 55 years old were significantly higher than those equal to or greater than 55 years old (P &lt; 0.001). The stigma scores exhibited significant negative correlation with age; MSPSS scores of family, friends, and others.</td>
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<td>25</td>
<td>Tawiah et al., 2015</td>
<td>Ghana (mental health-related stigma and discrimination in Ghana: experience of patients and their caregivers)</td>
<td>To provide evidence on the types of mental health stigma and discrimination, and challenges, coping and support strategies used by patients.</td>
<td>Quantitative (cross-sectional exploratory) study</td>
<td>Two hundred and seventy-seven patients were selected through simple random sampling and interviewed. About 55% were above 35 years. Nearly 62% of the patients were females and 65% were not married. Close to 45% were educated, while 93% were Christian.</td>
<td>Two research assistants carried out interviews face-to-face using structured questionnaire with (patients).</td>
<td>More females were stigmatized than males at the work/employment and educational levels. Various forms of stigma were observed at the economic, psychological, and social levels, whilst for discrimination it was only observed at the economic and social levels. Caregivers were also stigmatized and discriminated. The coping strategies adopted by the patients and their caregivers were also economic, psychological, and social in nature. The main reported cause of mental disorder was biological (45%), while 32% reported spiritual causes and curses. The preferred treatment of mental disorder was biomedical (79%) and faith-based (18%).</td>
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<td>26</td>
<td>Thornicroft et al., 2009</td>
<td>Global (Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey)</td>
<td>To describe the nature, direction, and severity of anticipated and experienced discrimination reported by people with schizophrenia in 27 countries</td>
<td>Quantitative study</td>
<td>732 outpatients with schizophrenia</td>
<td>face-to-face interviews with 732 participants with schizophrenia.</td>
<td>Rates of experienced discrimination were high and consistent across countries. Negative discrimination was experienced by 344 (47%) of 729 participants in making or keeping friends, by 315 (43%) of 728 from family members, by 209 (29%) of 724 in finding a job, 215 (29%) of 730 in keeping a job, and by 196 (27%) of 724 in intimate or sexual relationships. Positive experienced discrimination was rare. Anticipated discrimination affected 469 (64%) in applying for work, training, or education and 402 (55%) looking for a close relationship; 526 (72%) felt the need to conceal their diagnosis. Over a third of participants anticipated discrimination for job seeking and close personal relationships when no discrimination was experienced. Rates of both anticipated and experienced discrimination were high across countries among PWMI.</td>
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<td>27</td>
<td>Van Horn, 2019</td>
<td>United States The influence of structural stigma on mental illness: State level structural stigma and attitudes toward treatment seeking and quality of life</td>
<td>The influence of structural stigma on mental illness in relation to attitudes toward treatment seeking and quality of life</td>
<td>Quantitative (structural equation modelling)</td>
<td>787 adults with mental illness, aged 18 years or older. Majority of the sample is female 511 (64.86%), employed 412 (52.33%), white 554 (70.39%), and married or cohabiting with a partner 466 (59.15%).</td>
<td>Participants completed the scales and questionnaires: Satisfaction with Life Scale (SWLS), Attitudes toward Seeking Professional Psychological Help Scale-Short Form (ATSPPH-S), Perceived Devaluation and Discrimination Scale (PDD), Community Attitudes towards the Mentally Ill (CAMI), and the ISMI.</td>
<td>Higher levels of structural stigma were associated with lower quality of life (b = -.121, p = .024). higher levels of structural stigma were significantly associated with more negative attitudes regarding the treatment of mentally ill in communities (b = .736, p = .006). higher levels of experienced stigma negatively influence attitudes towards treatment seeking, higher levels of self-stigma negatively influenced attitudes toward seeking treatment. Individuals with higher levels of public stigma, also had higher levels of experienced stigma (b = .057, p = .012).</td>
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<td>Author(s)</td>
<td>Country and title</td>
<td>Objectives/Hypotheses</td>
<td>Study design</td>
<td>Population (Sample size and characteristics)</td>
<td>Measurements</td>
<td>Main results</td>
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<td>28</td>
<td>Ye Chen et al., 2016</td>
<td>Australia (Stigma and discrimination experienced by people living with severe and persistent mental illness in assertive community treatment settings)</td>
<td>Describe perceived experiences of stigma and discrimination among PWMI in assertive community treatment (ACT teams) settings in New South Wales, Australia.</td>
<td>Quantitative (cross-sectional) study</td>
<td>Fifty clients with schizophrenia or schizoaffective disorder aged 18 and above participated. Majority of participants were male (72%) with a median age of 52 years old (range = 40-58), a primary diagnosis of schizophrenia (86%) or schizoaffective disorder (14%).</td>
<td>The Discrimination and Stigma Scale (DISC) was used to explore and measure levels of negative, anticipated, and positive discrimination. Face-to-face interviews were conducted.</td>
<td>Participants experienced negative discrimination and unfair treatment including being avoided or shunned by neighbours and family. Participants were denied employment and even volunteering, once they disclosed their illness. These experiences impacted self-esteem and perception of self-stigma of participants. Participants also experienced discrimination from healthcare professionals when seeking physical health care including lack of respect, perceived as less intelligent irrespective of education level. Some also anticipated discrimination in relationships that was not linked with experienced discrimination. Participants overcame stigma through music, meditation, writing, avoidance, and acceptance of one’s illness.</td>
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Step 5: Data Collating, Summarizing, and Reporting of Results

This step entailed reporting the extracted evidence from the 28 included studies. We performed thematic content analysis on the extracted data drawing on Braun and Clarke’s (2006) framework. SG read through the initial data for familiarization. Upon a second reading, the investigator initiated open coding (developing and modifying codes along the process). The coded text was reduced by listing all key words, or ideas on a separate Microsoft sheet, after which all codes were defined into common groups (categories) and then into sub-categories (themes). The analyzed data was subsequently presented to the rest of the study team for review and validation. The emerging themes were integrated with their accompanying text, and then summarized into a narrative report. In all, five major themes emerged.

Results

Characteristics of the Included Studies

Considering the year and number of publications, the review identified 28 studies that were published between 2008 and 2021, and includes, 2009 = 3(10.71%); 2010 = 1(3.57%); 2011= (3(10.71%); 2012= 2(7.14%); 2013= 4(14.29%); 2014= 6(21.43%); 2015= 3(10.71%); 2016= 2(7.14%); 2017 = 1(3.57%); 2018= 1(3.57%); 2019 = 2(7.14%).

In terms of country and the number of studies, we observed that among the 28 included studies, 22 were conducted in single countries while five (5) were conducted in multiple countries and in multiple sites. The single country research sites include: Thailand =1 (Sanseeha et al., 2009); Uganda =1 (Quinn & Knifton, 2014); Ghana = 4 (Barke et al., 2011; Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Tawiah et al., 2015) United states of America [USA] = 4 (Lin, 2012; Quinn et al., 2015; Rüssch, et al., 2009; Van Horn, 2019), Canada = 1 (Oleniuk, et al., 2013), China = 2 (Li et al. 2017; Lv et al., 2013), Nigeria =1 (Oshodi et al., 2014), Australia = 1
(Ye Chen et al., 2016), Ethiopia = 3 (Assefa et al., 2012; Bifftu & Dachew, 2014; Bifftu et al., 2015); United Kingdom [UK] = 1 (Farrelly et al., 2014), India = 1 (Shrivastava et al., 2011), Sweden = 1 (Hansson et al., 2014), Iran = 1 (Ghanean, 2013). Aside two studies (Ghanean, 2013; Van Horn, 2019) that were conducted by single researchers, the rest of the included studies were conducted by two or more researchers.

In relation to included studies that were conducted in multi-country/multi-sites, the following five (5) studies were identified: Brohan et al. (2011), 13 European countries i.e., Belgium, Croatia, Estonia, Finland, Greece, Italy, Lithuania, Macedonia, Malta, Poland, Romania, Spain, Sweden; Brohan, et al. (2011), 14 European countries i.e., Bulgaria, Croatia, Czech Republic, Estonia, Greece, Lithuania, Macedonia, Poland, Romania, Russia, Slovenia, Spain, Turkey, Ukraine; Thornicroft, et al. (2009), 27 countries involving European, Asian, North, and South American i.e., Spain, India, Poland, Greece, Malaysia, Germany, Tajikistan, UK, Canada, Belgium, Italy, Switzerland, Netherlands, Austria, Norway, Slovenia, Lithuania, Bulgaria, Slovakia, Portugal, Romania, Turkey, Cyprus, Finland, France, USA, Brazil; Harangozo et al. (2014), 21 countries including, Bulgaria, Hungary, Lithuania, Poland, Romania, Slovakia, Slovenia, Cyprus, Finland, France, Germany, Greece, India, Italy, Malaysia, Netherlands, Norway, Portugal, Spain, Switzerland, UK; Brouwers, et al. (2016), 35 countries involving Belgium, Bulgaria, England, Finland, France, Germany, Greece, Hungary, Italy, Lithuania, Netherlands, Portugal, Romania, Scotland, Slovakia, Slovenia, Spain, Turkey, Australia, Brazil, Canada, Croatia, Czech Republic, Egypt, India, Japan, Malaysia, Morocco, Nigeria, Pakistan, Serbia, Sri Lanka, Taiwan, Tunisia, Venezuela; Sun, et al. (2019), five countries involving China, Korea, Malaysia, Singapore, and Thailand.
With regards to the area(s) of focus of the 28 studies, nine studies focused on perceptions (beliefs) of stigma and discrimination associated with a mental illness (Bifftu & Dachew, 2014; Bifftu et al., 2015; Gyamfi et al., 2018; Hansson et al., 2014; Quinn & Knifton, 2014; Rüsch et al., 2009; Shrivastava et al., 2011; Sun et al., 2019; Ye Chen et al., 2016), while three studies each examined internalized stigma (Assefa et al., 2012; Ghanean, 2013; Quinn et al., 2015), and severity of anticipated and experienced discrimination (Brouwers et al., 2016; Farrelly et al., 2014; Thornicroft, 2009) respectfully.

In another vein, two studies each concentrated on three areas. These include patient attitudes and perceptions about mental illness (Barke et al., 2011; Sanseeha et al., 2009), experienced stigma (Li et al., 2017; Lv et al., 2013), and stigma resistance and empowerment (Brohan et al., 2011; Brohan et al., 2010). The remaining research areas had one study each concentrating on them. These include, how persons with mental illness were stigmatized and discriminated against (Dako-Gyeke & Asuman, 2013), experienced discrimination (Harangozo et al., 2014), impact of stigma and discrimination (Oshodi, et al., 2014), coping with stigma and support strategies (Tawiah et al., 2015), as well as influences of structural stigma on mental illness in relation to attitudes toward treatment seeking and quality of life (Van Horn, 2019).

About 23(82.14%) of the studies used quantitative cross-sectional designs with self-reported questionnaire, while only 5(17.86%) of the articles used qualitative methods with in-depth one-on-one interviews to study participants. The overall population of participants who were involved in the 28 studies was 9069. All the 28 studies recruited both male and females. While 4409 (48.62%) were male, 4580 (50.50) were female. Only one (0.01%) participant reported being a transgender. We however note that 68 (0.75%) i.e., 18, 10, and 40 participants from Thailand, Ghana, and Uganda respectfully, did not indicate their gender.
participants who were either married or in a co-habitation relation was 2338 (25.78%). The rest were either single, divorced, separated, orwidowed. Regarding participant education and employment, 6335 (69.85%) had some form of education from primary to the university level, while 3038 (33.50%) of participants had some form of job including full time, part time and volunteer work respectively. The remaining participants were either retired, unemployed, or students. Out of the 28 studies, only 6 (21.43%) reported on the religious denomination of their participants. Participants diagnoses as indicated by the various studies included schizophrenia spectrum disorders, 3110 (34.39%), mood/affective disorders, 3331 (36.73%), neuropsychiatric disorder, 427 (4.71), substances use disorders, 34 (0.43%), anxiety disorders, 81 (0.89%), adult attention deficit/hyperactivity disorder, (0.154%), eating disorder, 7 (0.08%), and personality disorder, (0.03%). A few participants however, failed to indicate their diagnoses.

**Study Themes**

The current review examined the factors that contribute to the perpetuation of mental illness stigma among persons with mental illness in a global sense. Thematic content analysis of the 28 included studies resulted in five main themes. These include: (1) perceptions about mental illness, (2) perceptions about stigma and discrimination, (3) forms of stigma perception, (4) dealing with stigma and discrimination, and (5) impact of mental illness stigma.

**Perceptions about Mental Illness**

Perception influences awareness and ways of thinking (opinion formation) concerning issues in the environment (Hinton, 2017; Manstead, 2018). Such longstanding opinions may lead to the development of belief systems, attitudes, values, norms, and behavioral patterns in society. In relation to the current review, six of the included studies discussed about how persons with
mental health problems view their illness vis-à-vis public interactions (Gyamfi et al., 2018; Lin, 2012; Quinn & Knifton, 2014; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015). The subthemes relating to perceptions about mental illness include perceived nature of illness, perceived etiology/causality, and nature of treatment modalities for mental illness.

**Perceived Nature of Illness**

Three studies (Lin, 2012; Quinn & Knifton, 2014; Sanseeha et al., 2009) presented evidence on how some individuals described their illness. Some persons with mental illness felt that their symptoms were abnormal. There were some common symptoms among participants that increased their awareness of a potential mental illness. For instance, the Sanseeha et al. (2009) Thailand study found that most were usually aware of their symptoms. Participants felt their symptoms including physical, behavioral, cognitive, and emotional aspects were abnormal. They believed that the abnormality was a chronic condition (Lin, 2012; Quinn & Knifton, 2014; Sanseeha et al., 2009) and required continuous medication and treatment (Sanseeha et al., 2009). In Sanseeha and colleagues 2009 study it came out that even though some participants believed that their drugs helped to alleviate the symptoms, they still felt they might not be able to fully recover. Some openly said they were expecting to relapse and that they did not believe they would recover. In another vein, some participants disclosed that members of the public believed that mental illness is contagious (emphasizing on epilepsy), inheritable (going from generation to generation) and chronic (that PWMI do not recover from the illness). This belief limited the life chances of some of the participants, for example in marriage (Quinn & Knifton, 2014).

**Perceived Etiology/Causality**

Perceptions about the causes of mental illness were varied. Six studies (Gyamfi et al., 2018; Lin, 2012; Quinn & Knifton, 2014; Sanseeha et al., 2009; Shrivastava, et al., 2011; Tawiah
et al., 2015) identified some perceived causes of mental illnesses among PWMI. These factors included biological, psychosocial trauma, and religious, cultural, and traditional beliefs. Some participants were of the view that biological factors contribute to mental illness (Sanseeha et al., 2009; Lin, 2012; Tawiah, et al., 2015). Some of these biological factors include head trauma and neurotransmitter deficiencies through brain abnormalities (Lin, 2012), complications from drug use (Shrivastava et al., 2011; Lin, 2012), improper diet (Lin, 2012), and genetic inheritance (Sanseeha et al., 2009; Lin, 2012). Some patient participants disclosed that their relatives told them that their illness was passed on to them by their ancestors (grandparents through genetics) (Sanseeha et al., 2009; Lin, 2012).

Psychological and social distress were cited as key causes of mental illnesses. Perceptions (beliefs) about the causes of mental illness have been diverse. Some PWMI attributed their illness to negative personal losses including marital or family problems or other family losses (Lin, 2012). Others have cited the psychological trauma associated with the sexual abuse they experienced as a precursor to their illness (Lin, 2012). Several participants attributed the cause of mental illness to distress, anxiety, and overactive mind (Lin, 2012; Quinn & Knifton, 2014; Sanseeha et al., 2009). Some participants also mentioned poverty and loss of job as a cause of mental illness due to the distress associated with not being able to care for the self and family in terms of food, education, or even transport to the hospital to seek health care (Quinn & Knifton, 2014). A social causation was also mentioned. For instance, a few attributed their illness to specific events, such as a breakup of an intimate relationship (Gyamfi et al., 2018; Quinn & Knifton, 2014).

While some people had no idea about the cause of their illness (Tawiah et al., 2015), others expressed the conviction of what they think caused mental illness. Participants believed
that the causes of their illness were from supernatural powers such as black magic, bad karma from the past, evil spirits from ancestors and demons (Gyamfi et al., 2018; Sanseeha et al., 2009; Tawiah et al., 2015). Supernatural power (use of black magic) was believed to affect one’s psychological, or mental behaviours including emotions to deviate from normality. The participants believed this happen especially if someone disliked you or envied you for your success at work, among others. Most participants mentioned that the public still hold unto supernatural and traditional cultural explanations for mental illness such as being possessed by evil spirits, as a punishment or curse due to wrongdoing. They were also of the view that mental illness occurs due to curse, witchcraft or when clan spirits or social spirits get angry with someone (Quinn & Knifton, 2014; Sanseeha et al., 2009). Majority of participants considered or were told that the problem was a spiritual one and reflected both Christian and traditional thinking around spirituality. Some also attributed their illness to God’s punishment for previous poor behaviour (Tawiah 2015; Gyamfi et al., 2018).

**Nature of Treatment Modalities**

Despite evidence of people seeking orthodox treatment, influences of tradition and faith in treatment modalities were very pervasive among some studies mostly from the LMICs. Four studies including (Gyamfi et al., 2018; Lin, 2012; Quinn & Knifton, 2014; Tawiah et al., 2015) discovered some modes of treatment that PWMI sought in their community. There is no doubt that one’s belief system impacts their treatment choices. To some of the participants of this study, the best way of dealing with such problems was to seek for traditional treatments or faith ‘cures’ from faith healers including pastors (Gyamfi et al., 2018; Lin, 2012; Quinn & Knifton, 2014; Tawiah et al., 2015), imams, fetish priests, and herbal medicine practitioners (Quinn & Knifton, 2014). For instance, the Quinn and Knifton, Ugandan study in 2014 underscored the
fact that traditional beliefs often coexist with social, biomedical, and religious explanations in terms of cause and treatment seeking. For many participants in Christian and Muslim communities, mental health problems were having a religious cause, being attributed to sin or the ‘will of God’. Many sought for help from their Christian churches (Gyamfi et al., 2018; Lin, 2012; Quinn & Knifton, 2014; Tawiah et al., 2015). Those with a traditional view of being cursed or being invaded by evil spirits paid community healers to rid them of the curse or evil spirit (Gyamfi et al., 2018; Quinn & Knifton, 2014). Eventually all sought orthodox or hospital care, either on the advice of a close relation or the church.

**Perceptions about Stigma and Discrimination**

Public (social) stigma is widespread with associated negative attitudes from the society. All 28 included studies (Assefa et al., 2012; Barke et al., 2011; Bifftu & Dachew, 2014; Bifftu et al., 2015; Brohan et al., 2010; Brohan et al., 2011; Brouwers et al., 2016; Dako-Gyeke & Asuman, 2013; Farrelly et al., 2014; Ghanean, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Li et al., 2017; Lin, 2012; Lv et al., 2013; Oleniuk et al., 2013; Oshodi et al., 2014; Quinn & Knifton, 2014; Quinn et al., 2015; Rüscher et al., 2009; Sanseeha et al., 2009; Shrivastava et al., 2011; Sun et al., 2019; Tawiah et al., 2015; Thornicroft et al., 2009; Van Horn, 2019; Ye Chen et al., 2016) reported on how persons with a mental illness appraise public attitudes towards them. These evidence of stigmatization and discrimination were mostly observed during interactions with family members, with friends and community members, health professionals, and during contact with employers and work colleagues. Under this theme, we identified four subthemes that include, labelling and stereotyping, prejudice, public discrimination, and rejection sensitivity.
Labelling and Stereotyping

Eleven out of the 28 included studies reported on labelling and stereotyping. The 11 studies include (Assefa et al., 2012; Bifftu & Dachew, 2014; Dako-Gyeke & Asuman, 2013; Ghanean, 2013; Gyamfi et al., 2018; Li et al., 2017; Lin, 2012; Lv et al., 2013; Quinn & Knifton, 2014; Sanseeha et al., 2009; Shrivastava et al., 2011). The participants spoke about self labelling, public labelling, and the media labelling.

In terms of self labelling and stereotyping, some persons described their symptoms as unpredictable while others described themselves as violent (Ghanean, 2013). For instance, in Thailand, participants described their symptoms as ‘phee-kuow’ in Thai meaning, possessed, uncontrollable situation (Sanseeha et al., 2009). In Ethiopia, Bifftu and Dachew, 2014 also found that majority of their participants stereotyped themselves by agreeing with public perceptions that PWMI are dangerous and unpredictable. Some described themselves as looking strange and that their life was ‘spoiled’ (Lv et al., 2013).

In relation to the public or social labelling and stereotyping behaviours, some individuals reported public tagging attitudes in various jurisdictions. Some felt branded by neighbours through their actions (Lin, 2012). A section of the public described PWMI as different (Sanseeha et al., 2009). The public described them as “phee-bha” in Thai language (meaning, insane). In certain jurisdictions the public described every mental health issue as ‘madness’ (Gyamfi et al., 2018; Quinn & Knifton, 2014). Others describe them as ‘mad’ (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018). Public perceptions of dangerousness (Li et al., 2017; Quinn & Knifton, 2014), unpredictability (Dako-Gyeke & Asuman, 2013; Quinn & Knifton, 2014), being described as funny were also pervasive in the society (Gyamfi et al., 2018; Quinn & Knifton, 2014). Some members of the public also described PWMI as crazy (Dako-Gyeke & Asuman,
2013; Gyamfi et al., 2018), and violent (Dako-Gyeke & Asuman, 2013); as such, they would be scared and careful when dealing with them (Dako-Gyeke & Asuman, 2013).

The media also promoted negative publicity (media stereotyping) by using tags that were derogatory in describing PWMI. This largely contributed to the discrimination and subsequent stigma that some PWMI faced (Shrivastava et al., 2011; Gyamfi et al, 2018). Such public perceptions of dangerousness created social distance, isolation, and withdrawal, leading to a communication gap between the people with mental heal problems and the rest of society.

**Prejudice**

Four studies out of the 28 articles mentioned negative and unjustified public attitudes towards individuals with mental illness (Lin, 2012; Quinn & Knifton, 2014; Sanseeha et al., 2009; Shrivastava et al., 2011). Most PWMI were rejected on several occasions (Sanseeha et al., 2009; Shrivastava et al., 2011). The public distrusted them due to their illness (Sanseeha et al., 2009). PWMI were also blamed for their illness (Lin, 2012; Quinn & Knifton, 2014). Participants heard offensive comments from family and neighbours alike (Shrivastava et al., 2011). Some family members described their sick relatives as a disgrace to the families (Lin, 2012). The continued public branding and judgement increased perceived public (social) stigmatizing attitudes as well as the shame associated with having a mental illness. In some jurisdictions, the public believed patients might have committed a serious crime or sin that led to their predicament. These misperceptions were linked to religious and traditional cultural beliefs/explanations upheld by the public (Quinn & Knifton, 2014). The members of the public also perceived the patients as ‘figures of pity’ needing sympathy and special consideration (Quinn & Knifton, 2014).
Public Discrimination

Some participants experienced unfair treatment from others based on their illness. Out of the 28 studies, twenty of them identified discrimination from the public as a key factor that contributes to perceptions of stigma among PWMI (Assefa et al., 2012; Barke et al., 2011; Brohan et al., 2010; Brohan et al., 2011; Brouwers et al., 2016; Farrelly et al., 2014; Ghanean, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Li et al., 2017; Lv et al., 2013; Oshodi et al., 2014; Quinn, & Knifton, 2014; Quinn et al., 2015; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015; Thornicroft et al., 2009; Ye Chen et al., 2016). In some cultures, shame, guilt, embarrassment, and loss of respect (for both individuals and family) act as powerful factors that shape and influence how people feel and respond to stigma and discrimination. Rates of discrimination in the society, both anticipated and experienced discrimination were consistently high across countries (Barke et al., 2011; Brohan et al., 2010; Brohan et al., 2011; Brouwers et al., 2016; Farrelly et al., 2014; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Li et al., 2017; Oshodi et al., 2014; Quinn et al., 2015; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015; Thornicroft et al., 2009; Ye Chen et al., 2016). One of the most frequent items for experienced discrimination was being unfairly treated in dating or intimate relationships (Oshodi et al., Thornicroft et al., 2009; Shrivastava et al., 2011; Oshodi et al., 2014; Gyamfi et al, 2018), or being avoided or shunned by neighbours and family (Hansson et al., 2014; Li et al., 2017; Quinn & Knifton, 2014; Ye Chen et al., 2016).

In another vein, some of the included studies involving (Barke et al., 2011; Brohan et al., 2010; Brohan et al., 2011; Brouwers et al., 2016; Farrelly et al., 2014; Gyamfi et al., 2018; Hansson et al., 2014; Li et al., 2017; Oshodi et al., 2014; Quinn et al., 2015; Sanseeha et al.,
2009; Shrivastava et al., 2011; Tawiah et al., 2015; Thornicroft et al., 2009; Ye Chen et al., 2016) identified anticipated discrimination as a key factor that affects the life aspirations of some PWMI. Both experienced and anticipated discrimination were widespread. For instance, Brouwers et al. (2016) studied participants with major depression in 35 countries. Most of these participants encountered experienced and anticipated discrimination in the work setting. In very high developed countries, nearly 60% of respondents stopped themselves from applying for work, education, or training because of anticipated discrimination. Participants in countries with a very high Human Development Index [HDI] (i.e., higher standard of living) reported more anticipated, and experienced discrimination compared to participants in countries with moderate or low HDI. Two studies (Thornicroft et al., 2009; Ye Chen et al., 2016) however reported lack of negative treatment otherwise known as positive discrimination among some participants where they received various forms of special support from members of the public.

**Rejection Sensitivity**

Rejection sensitivity is a psychological response characterized by chronic anxious expectations of rejection that PWMI portray during social interactions. Rejection sensitivity acts as a coping method for some people to guard against potential threats in their social environments (Pachankis et al., 2014). Only two out of the 28 included studies reported on rejection sensitivity among PWMI (Gyamfi et al., 2018; Rüsch et al., 2009). Stigma and discrimination are not experienced equally by PWMI (Rüsch et al., 2009; Quinn & Knifton, 2014). Such differences may be due to existing public prejudice (Gyamfi et al., 2018), higher levels of perceived societal stigma stress appraisal among PWMI (Rüsch et al., 2009) and high level of experienced discrimination (Brouwers et al., 2016; Farrelly et al., 2014; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Li et al., 2017; Oshodi et al., 2014; Quinn et
al., 2015; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015; Thornicroft et al., 2009; Ye Chen et al., 2016).

**Forms of Stigma Perception**

Stigma and discrimination are not experienced equally (Rüsch et al., 2009; Quinn & Knifton, 2014). Stigma and discrimination are also experienced or perceived in different ways depending on who and what is involved in the process. In the current review, 14 of the included studies (Assefa et al., 2012; Brouwers et al., 2016; Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Li et al., 2017; Oshodi et al., 2014; Quinn et al., 2015; Quinn & Knifton, 2014; Shrivastava et al., 2011; Sun et al., 2019; Van Horn, 2019; Ye Chen et al., 2016) identified various ways in which stigma was portrayed among PWMI. The five subthemes under ‘forms of stigma perception’ include, family-orchestrated stigma and discrimination, structural/institutional stigma and discrimination, health professional stigma, associative stigma, and internalized/self stigma.

**Family-orchestrated Stigma and Discrimination**

People with mental illness experienced stigma and discrimination in various forms by their own family members. Some participants bemoaned the attitude of some family members as disturbing and was regarded as the most common source of discrimination, and stigma distress towards PWMI. Eight studies out of 28 (Assefa et al., 2012; Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Quinn & Knifton, 2014; Shrivastava et al., 2011; Sun et al., 2019) reported on this familial phenomenon. Some participants claimed their families blamed them for causing their own illness (Dako-Gyeke & Asuman, 2013; Quinn & Knifton, 2014). Some relatives also accused participants of falling sick because they associated themselves with bad friends (Dako-Gyeke & Asuman, 2013) while some
family members believed the sick relatives had sinned or offended some spirits and therefore their ancestors were punishing them for this (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Quinn & Knifton, 2014). Some studies also reported on how families abused the human rights of their sick relatives. For instance, the impending shame of having a relative with mental illness made some members to distance themselves by hiding, separating, or locking them away from social interactions (Dako-Gyeke & Asuman, 2013; Quinn & Knifton, 2014). In a similar context, some individuals revealed that their partners deserted them and went for new companions (Dako-Gyeke & Asuman, 2013). Even though perceived family-orchestrated stigma and discrimination were evident, some studies including (Hansson et al., 2014; Shrivastava et al., India 2011) found low stigmatizing attitudes from some extended family members towards PWMI in marital life including when trying to raise their own family.

**Structural/Institutional Stigma and Discrimination**

Institutional discrimination constitutes practices and policies within organizations (formal or informal) that systematically culminate in denying PWMI access to existing resources and opportunities. The participants (patients) observed various incidents of discrimination in their workplaces by employers and employees alike. Nine studies report that discrimination against PWMI was very common in the workplace (Brouwers et al., 2016; Gyamfi et al., 2018; Li et al., 2017; Oshodi et al., 2014; Quinn et al., 2015; Quinn & Knifton, 2014; Shrivastava et al., 2011; Van Horn, 2019; Ye Chen et al., 2016). PWMI had been denied employment and even in volunteering, once they disclosed their illness (Quinn & Knifton, 2014; Ye Chen et al., 2016; Van Horn, 2019). Negative media reportage about people with mental illness was common in certain jurisdictions, contributing to the creation and perpetuation of unfair institutional or
organizational policies. Two studies including (Gyamfi et al., 2018; Quinn & Knifton, 2014) reported on the influence of media pronouncements that contributed to the phenomenon.

**Health Professional Stigma**

Health professionals also contributed to the stigma process in several ways. There have been several reported cases of experienced discrimination during treatment seeking for PWMI in both physical and mental health care settings globally. Nine of the included studies reported on the behaviour of health professionals towards PWMI (Assefa et al., 2012; Brohan et al., 2010; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Oleniuk et al., 2013; Quinn et al., 2015; Shrivastava et al., 2011; Ye Chen et al., 2016). For instance, some patients reported how their doctors and nurses disrespected and looked down on them; by refusing to tell them what was wrong when the patients wanted explanation to their illness. These behaviours from health professionals contributed to the low health seeking behaviours among PWMI (Gyamfi et al., 2018; Oleniuk et al., 2013; Quinn & Knifton, 2014). According to Brohan et al. (2010) a lack of knowledge about one’s illness predisposes the individual to self-stigma than those who become aware of and accept their illness. Health professionals were also rude (Oleniuk et al., 2013) and disrespected their clients (Harangozo et al., 2014; Ye Chen et al., 2016). Some of the professionals perceived individuals with mental illness as less intelligent irrespective of their education level (Ye Chen et al., 2016). Despite the negative report on health professional behaviour, two included studies (Harangozo et al., 2014; Ye Chen et al., 2016) spoke positive in terms of the support that some health professionals gave to their clients during treatment seeking.

**Associative Stigma**

Some family members as well as health professionals had their fair share of negative public attitudes (Koschorke et al., 2021). For instance, some studies claimed neighbours
gossiped, ridiculed, and always pointed fingers at family caregivers and their children who suffered from mental illness. Only two of the included studies identified this experience (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018). Some families reportedly lost their close friends as well (Dako-Gyeke & Asuman, 2013). This is probably one of the reasons why some families either stay away or keep their sick relatives from the public. In most collectivist societies, community members play a huge role when it comes to choosing a partner. Due to the prejudice formed around mental illness, most close family members of PWMI reportedly found it difficult to get partners in their community (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018).

**Internalized/Self stigma**

Internalized or self stigma is a self-devaluation process that is characterized by awareness of public stereotypes, agreeing with these stereotypes, and applying them to the self (Corrigan et al., 2009). There is a high prevalence of perceived stigma that persons with mental illness usually direct at themselves. In this review, 15 studies reported about the existence of internalized or self stigma. The studies include (Assefa et al., 2012; Bifftu & Dachew, 2014; Bifftu et al., 2015; Brohan et al., 2010; Brohan et al., 2011; Ghanean, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Lv et al., 2013; Oleniuk et al., 2013; Oshodi et al., 2014; Quinn et al., 2015; Quinn & Knifton, 2014; Sanseeha et al., 2009; Van Horn, 2019).

Personal responses to discrimination may occur in several ways including self or internalized stigma processes. In the current review, some participants revealed they lost their self-confidence (Sanseeha et al., 2009), owing to the pervasive social discrimination, leading to feelings of inferiority (Sanseeha et al., 2009). Most PWMI frequently expressed feelings of shame (Lin, 2012; Quinn & Knifton, 2014), guilt (Quinn & Knifton, 2014; Bifftu et al., 2015), depressed (Bifftu et al., Ethiopia 2015), feeling of worthlessness (Quinn & Knifton, 2014) and
isolation (Gyamfi et al., 2018). Persons who experienced self-stigma also experienced some form of alienation, experienced discrimination, or social withdrawal (Brohan et al., 2011). It is worth noting however that some PWMI in some of the studies reported low levels of self-stigma in the presence of high stigma resistance and empowerment. The four studies that documented high stigma resistance include (Brohan et al., 2010; Brohan et al., 2011; Lin, 2012; Oleniuk et al., 2013).

**Dealing with Stigma and Discrimination**

Patients used various means to be able to live successfully with their illness in the society. Overall, 18 studies out of 28 reported on how individuals managed the negative impact of stigma and discrimination that they experienced. The 18 studies include (Assefa et al., 2012; Barke et al., 2011; Brohan et al., 2011; Brohan et al., 2010; Ghanean, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Li et al., 2017; Lv et al., 2013; Oleniuk et al., 2013; Oshodi et al., 2014; Quinn & Knifton, 2014; Rüsch et al., 2009; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015; Thornicroft et al., 2009; Ye Chen et al., 2016). In relation to ‘dealing with stigma and discrimination’, two subthemes were identified that include coping mechanisms, and strategies to reduce stigma and discrimination.

**Coping Mechanisms**

Coping involves the use of conscious and unconscious strategies to adjust or tolerate internal and external stressful situations an individual appraises as threatening to their self-image or survival. Eighteen studies reported on how persons with mental health problems deal with the stigma attached to the illness (Assefa et al., 2012; Barke et al., 2011; Brohan et al., 2011; Brohan et al., 2010; Ghanean, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Li et al., 2017; Lv et al., 2013; Oleniuk et al., 2013; Oshodi et al., 2014; Quinn & Knifton, 2014; Rüsch et al., 2009;
In categorizing the various coping mechanisms that individuals used to deal with the stigma attached to their health problems, we identified four main coping styles that participants of the included studies used. The identified mechanisms include psychological coping, social coping, economic coping, and religious/spiritual coping.

**Psychological coping** with stigma took the form of being positive (optimistic) and encouraging oneself that one would recover from their illness (Gyamfi et al., 2018; Sanseeha et al., 2009), by sticking to their treatment regimen (Gyamfi et al., 2018). Some individuals also coped by accepting their illness i.e., getting used to the illness and the stigma associated with it (Ye Chen et al., 2016). Some studies identified that participants who perceived and placed high value on other persons with mental illness (ingroup value or entitativity) were able to cope well (Rüsch et al., 2009; Tawiah et al., 2015). Other coping mechanisms that some participants used included, resisting stigma by engaging in aggressive reactions including arguing or attacking people who treated them unfairly (Brohan et al., 2011; Tawiah et al., 2015). Others engaged in substance abuse such as smoking marijuana, while some slept all day (Tawiah et al., 2015). Some two studies out of the 28 (Brohan et al., 2011; Brohan et al., 2010) identified empowerment of persons with a history of mental illness as significant in lowering perceived social or self-stigma.

**Social coping** involved participants adjusting their self-care activities and social behaviors (Sanseeha et al., 2009). Others engaged in social withdrawal or avoidance of social activities and close personal relationships (Assefa et al., 2012; Brohan et al., 2010; Ghanean, 2013; Hansson et al., 2014; Lv et al., 2013; Oleniuk et al., 2013; Tawiah et al., 2015; Ye Chen et
al., 2016) due to the accompanying feeling of shame and anticipated rejection. Secrecy or concealment of one’s diagnosis or mental illness from others due to expectations of rejection was one of the most common ways of dealing with stigma and its sequels including experienced and anticipated discrimination (Barke et al., 2011; Hansson et al., 2014; Li et al., 2017; Lv et al., 2013; Oshodi et al., 2014; Thornicroft et al., 2009; Ye Chen et al., 2016). Others coped by making friends with people who did not use mental health services (Hansson et al., 2014; Oshodi et al., 2014; Ye Chen et al., 2016). Some persons utilized social contact (Brohan et al., 2010), as well as socializing among themselves (ingroup identity and interactions) as a form of coping mechanism (Rüsçh et al., 2009; Tawiah et al., 2015). Some persons also coped through the support of their social networks that included family members, spouses, co-workers and church or group members (Brohan et al., 2010; Hansson et al., 2014; Sanseeha et al., 2009; Tawiah et al., 2015).

Economic coping comprised some people looking for formal employment, while others used their personal (creative) skills/abilities such as music, writing, or involving in farming activities such as animal rearing for economic survival and to help cope with stigma (Brohan et al., 2010; Hansson et al., 2014; Oshodi et al., 2014; Tawiah et al., 2015; Ye Chen et al., 2016). Meanwhile, only one study (Brohan et al., 2010) reported that some people engaged in higher education to lower the impact of the self-stigma they were experiencing.

Religious/spiritual coping however encompassed following or engaging in religious and morality teaching that provided directions for happy living by practicing mindfulness or positive concentration (Hansson et al., 2014; Sanseeha et al., 2009, meditation (Sanseeha et al., 2009; Ye et al., 2016), and praying (Gyamfi et., al., 2018; Sanseeha et al., 2009; Tawiah et al., 2015) to help one’s mind to be at peace to reduce the disorder’s negative impact on their life.
Strategies to Reduce Stigma and Discrimination

Effective social support has been found to mitigate some effects of stigma, whiles enhancing the social and psychological wellbeing among PWMI. This has been alluded to by several study findings among high income and low-to-middle-income countries respectfully. Five studies gave account of some approaches for lessening the effect of stigma among PWMI (Brohan et al., 2010; Gyamfi et al., 2018; Lv et al., 2013; Quinn & Knifton, 2014; Shrivastava et al., 2011). In other jurisdictions, some participants mentioned that social support and constant encouragement in the form of acceptance that they received from their family (Lv et al., 2013; Shrivastava, et al., 2011) and members of the public (Gyamfi et al., 2018; Lv et al., 2013; Quinn & Knifton, 2014; Shrivastava et al., 2011) helped to stem the anticipation of rejection in social interactions. Some participants also expected their government to initiate social interventions including increasing funding for drug therapies (Gyamfi et al., 2018; Shrivastava et al., 2011), financial support so that individuals could own businesses (Gyamfi et al., 2018; Lv et al., 2013; Shrivastava, et al., 2011). Some requested for support to display or market their goods, and housing in the form of group homes for those abandoned by their families (Gyamfi et al., 2018).

Similarly, some studies identified that encouraging social contact through increasing multimedia public messaging/educational programming on mental illness (Brohan et al., 2010; Gyamfi et al., 2018; Shrivastava et al., 2011), ensuring early identification, access, and encouraging people to seek medical treatment at onset of symptoms (Gyamfi et al., 2018; Shrivastava et al., 2011) as well as focussing on strengths rather than limitations of individuals (Gyamfi et al., 2018). Some people also called for legal actions by expressing views that those who displayed stigma or discriminated against persons with mental illness should be prosecuted, be sued in court to undergo jailed terms (Gyamfi et al., 2018).
Impact of Mental Illness Stigma

Stigma and discrimination affect individuals with mental health problems in so many ways. Fifteen out of the 28 included studies (Assefa et al., 2012; Brohan et al., 2010; Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Li et al., 2017; Lv et al., 2013; Oleniuk et al., 2013; Oshodi et al., 2014; Quinn & Knifton, 2014; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015; Van Horn, 2019) identified some ways in which stigma and discrimination affected those with mental health problems. Under the theme ‘Impact of mental illness stigma’, we identified two subthemes including, psycho-socioeconomic effects of stigma, and separation and status loss.

Psycho-Socioeconomic Effects of Stigma

The impact of stigma and discrimination took the form of economic, social, and psychological effects.

The economic impact of stigma occurred in the form of poverty (Tawiah et al., 2015), lack of access to food (Tawiah, et al., 2015), unemployment due to their inability to find or keep their jobs after admission or discharge (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Li et al., 2017; Quinn & Knifton, 2014; Shrivastava et al., 2011). Some persons experienced salary cuts, demotion, or dismissal (Dako-Gyeke & Asuman, 2013; Quinn & Knifton, 2014; Gyamfi et al., 2018). Even some self-employed individuals lost their workers as well as customers, after these people became aware of the illness (Dako-Gyeke & Asuman, 2013).

The psychological implications of stigma and discrimination were also varied and included the following: development of poor self-image (Quinn & Knifton, 2014), loss of self-esteem (Oshodi et al., 2014; Quinn & Knifton, 2014; Shrivastava et al., 2011; Tawiah et al., 2015) and low self-efficacy (Oshodi et al., 2014).
Socially, individuals were affected in ways that included; social isolation, verbal abuse, blaming (Tawiah, et al., 2015), being ignored by work colleagues (Dako-Gyeke & Asuman., 2013; Gyamfi, et al., 2018; Quinn & Knifton, 2014; Shrivastava et al., 2011), ridiculing or mocking in the form of making funny comments or jokes (Dako-Gyeke & Asuman, 2013; Quinn & Knifton, 2014; Gyamfi et al., 2018; Shrivastava et al., 2011; Tawiah et al., 2015), and social withdrawal (Quinn & Knifton, 2014). While some lost their partners due to rejection (Shrivastava et al., 2011), others claimed they were no more receiving proposals for marriage due to their illness (Li et al., 2017; Shrivastava et al., 2011). The anticipation of discrimination in seeking education and close relationships made some people to withdraw from social relationships altogether (Hansson et al., 2014). Others even experienced low libido due to the negative effects of rejection (Shrivastava et al., 2011). The higher levels of experienced stigma negatively influenced the unwillingness of some persons to continue with treatment seeking (Assefa et al., 2012; Van Horn, 2019), thus, contributing to low quality of life among some individuals (Van Horn, 2019).

Separation and Status loss

Nine studies reported on separation and status loss (devaluation) that participants experienced in relation to their illness (Assefa et al., 2012; Brohan et al., 2010; Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Hansson et al., 2014; Harangozo et al., 2014; Lv et al., 2013; Quinn & Knifton, 2014; Sanseeha et al., 2009; Shrivastava et al., 2011; Tawiah et al., 2015).

Separation took the form of alienation (Brohan et al., 2010). Seven studies mentioned incidents of separation in social interactions. Participants claim they were isolated leading to avoidance (Shrivastava et al., 2011) and a feeling of shame (Quinn & Knifton, 2014; Sanseeha et al., 2009). Individuals were therefore excluded from various activities in their locality such as the
church, or community activities (Quinn & Knifton, 2014). In some cases, close family or the patient’s own children who knew about the illness kept their distance (Hansson et al., 2014; Quinn & Knifton, 2014) and leading to isolation (Quinn & Knifton, 2014). In certain jurisdictions close friends and partners deserted individuals due to the illness (Dako-Gyeke & Asuman, 2013). Some PWMI also claimed that social groups they had been members of for many years before falling sick ignored and rejected them after the illness (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018). Most PWMI found it difficult to get partners as well (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018).

In another instance, five studies documented on issues of status loss (Dako-Gyeke & Asuman, 2013; Gyamfi et al., 2018; Harangozo et al., 2014; Quinn & Knifton, 2014; Sanseeha et al., 2009). Participants felt lookdown upon because of limitations due to symptoms of their illness (Sanseeha et al., 2009). Individuals were also viewed as incapable (Quinn & Knifton, 2014). Some persons lost their partners after discharge from hospital (Dako-Gyeke & Asuman, 2013; Quinn & Knifton, 2014; Gyamfi et al., 2018), as well as close social relationships with friends (Dako-Gyeke & Asuman, 2013; Gyamfi, et al., 2018). Once individuals had a history of mental illness, their close relations including members of their community ignored their opinions and decisions made for them. Members of the public will also not accept them as close friends neither will they hire them due to perceptions that they were unintelligent and not trustworthy (Barke et al., 2011; Gyamfi et al., 2018). Participants also reported that they were disrespected by the public (Gyamfi et al., 2018; Harangozo et al., 2014), while some felt undervalued by family, friends, and some members of the public leading to low self-esteem (Gyamfi et al., 2018). In the end some persons lost their occupational status with their employment (Gyamfi et al., 2018).
Discussion

Issues of mental illness, stigma and discrimination are complex in nature, and therefore need to be understood in relation to the cultural, social, and economic context of the society in which the affected person(s) live. Considering this, the current review was conducted to examine the extant literature to ascertain if there were any evidence(s) in the literature that suggests a relationship between perceived public attitudes, religious and cultural beliefs, and structural violence in perpetuating stigma against persons with a mental illness.

Perceptions of an individual influence their awareness and opinion formation concerning issues in the environment (Hinton, 2017; Manstead, 2018). Such longstanding opinions may lead to the development of belief systems, attitudes, values, norms, and behavioral patterns in society. The review brought to the fore that perceived influences of religious and cultural beliefs about the causation of mental illness is a well documented issue especially among most Low-to-Middle-income countries compared to the High-Income ones – revealing a strong underlying influence that traditional faith including religious and cultural values play in shaping perceptions and attitudes towards mental illness (Choudhry & Bokharey, 2013; Mjøsund et al., 2015). We emphasize however that people had varied perceptions about the nature, and cause of their illness. For instance, while some studies identified psychosocial and economic factors as triggers of mental illness, some acknowledged biomedical including physical and genetic causes. These mixed perceptions also informed the treatment modes that individuals and their families patronized first when sick. For example, while the European and American studies reported mainly on orthodox treatment, the Africa and Asian studies reported on the mix of traditional faith healing and orthodox health seeking. Despite the strong attributions of supernatural and traditional bases concerning incidences of mental illness, the role of biomedical and psychosocial
causes was evident in the extant literature of both Low-to-Middle-Income and High-Income countries. The ideological stance of most western countries leaning more towards the biomedical model in relation to causality and treatment further explains why none of the participants in the studies conducted in Europe and America made references to supernatural or spiritual causes. Generally, the western model of mental illness causality and treatment is incongruent with beliefs in supernatural causes. This is probably one of the reasons why most stigma frameworks do not inculcate religious and cultural perspectives to help explain stigma processes that are linked to mental illness.

Just as has been found in other reviews, findings from our study confirmed that public stigma and discrimination were widespread with consequential negative overall effect on PWMI and their close associates including family members, friends, community members, health professionals, and during contact with employers and work colleagues (Corrigan, 2012; Gaiha et al., 2020; Parcesepe et al., 2013; Ponzini, & Steinman, 2021). The review again confirmed existing literature that even though most PWMI experienced various forms of stigma, the nature of one’s illness in relation to behavioral symptoms contributed to the level of social stigma and discrimination that they encountered (Tan et al., 2020). The participants’ stigma perceptions included, family-orchestrated stigma and discrimination, structural/institutional stigma and discrimination, health professional stigma, associative stigma, and internalized/self stigma. Overall, individuals with higher levels of public stigma, were more likely to have higher levels of experienced stigma (Nugent et al., 2021).

The review highlights evidence of labelling and stereotyping, prejudice, public discrimination, and rejection sensitivity in relation to stigma and discrimination from the public. These negative attitudes and behaviours were mostly observed during interactions with family
members, with friends, community members, health professionals, and during contact with employers and work colleagues. As found in our study, the consequence of stigma and discrimination usually take various forms including economic, social, and psychological effects, leading to negative outcomes of social separation (distancing or exclusion) and status loss due to perceived devaluation from society relating to incapacity of the individual.

According to Link and Phelan (2001) mental illness stigma could be explained in five co-occurring components that include labelling, stereotyping, separation, status loss and discrimination. Link and Phelan further contend that labeling or tagging comes from social process of categorization that are underpinned by power differences. Else where, Corrigan et al. (2010) have also argued that labels such as ‘dangerous’, ‘violent’, and ‘unpredictable’ entrench stereotyping behaviours and paving the way for discrimination and other sequels of stigma to occur. Once the individual applies these stereotypes unto the self, they internalize and experience self-stigma leading to negative implications that include self-esteem problems, social withdrawal, job, and partner loss, low quality of life among others.

Upon encountering stigma, individuals use various means to be able to live successfully with their illness or problem in the society. In relation to the current review, study participants reportedly applied coping mechanisms alongside other social strategies to reduce the stigma and discrimination they were facing.

As found in our review, some individuals coped through social contact by engaging or interacting with the public on issues of mental illness and forming social networks (Corrigan et al., 2013; Forchuk et al., 2020), while others relied on the support of their social networks that included peers, family members, spouses, co-workers and church or group members (Corrigan et al., 2013). Some of our included studies identified that participants who recognized and placed
high value on their ingroup were able to effectively handle the negative impact of stigma
associated with their illness. Perceiving the group as coherent, valuable, and possessing similar
characteristics made the individuals to feel that they had sufficient resources to cope with the
stigma they were facing. Support from these social networks acted as social and psychological
refuge that empowered the individuals to face and live with the complexities of life.

In line with Lazarus and Folkman (1984) coping theory, appraisal is a subjective yet
cognitive process that people use to categorize events, with respect to their significance for well-
being. For instance, when one encounters a potentially harmful situation, the person appraises the
situation by first using primary appraisal mechanisms where the individual assesses the situation,
ascertains the enormity of the problem, and draws conclusions as to whether the situation is (1) a
threat to their self-esteem and well-being, (2) a loss (damage) that has occurred already, or (3) a
challenge (a situation) that offers an opportunity for growth (Lazarus & Folkman, 1984). Once
the individual evaluates the situation, they initiate a secondary appraisal to ascertain whether
they have resources (such as social networks; family and close friends, the knowledge, health,
energy, financial resources, or the self-esteem) to deal with the problem at hand (Lazarus &
Folkman, 1984). Lazarus and Folkman conclude that lack of appropriate resources for dealing
with social difficulties may lead to experiences of stress and low self-esteem or diminished
wellbeing, but if they have enough resource to deal with the problem, they may be able to
overcome, cope or reduce the impact of the situation at hand.

**Implications**

More than a decade ago, some authorities including Corrigan (2005), and Kelly (2005;
2006) argued that mental illness stigma was an issue of injustice that culminated in harm or death
of persons experiencing mental health problems, and as such, called for action towards
ameliorating this predicament. We therefore undertook the current review to ascertain whether there was empirical evidence in the literature that suggests a relationship between perceptions, religious and cultural beliefs, and structural violence in perpetuating stigma against persons with a history of mental illness. Even though review established substantial evidence of research relating to stigma as perceived by PWMI, there were no empirical research globally that mapped the unique concepts of structural violence, religious and cultural perspectives on mental illness stigma. This gap has implications for future stigma research. We believe that successful primary research in this area will create avenues for further evidence towards unique interventional studies that would stimulate enhanced social advocacy while streamlining change in anti-stigma policies and strategies.

Limitations

The current scoping review enabled the researchers to systematically search from various databases to analytically reinterpret the existing literature. Again, the scoping review method allowed us to incorporate a range of study designs, summarize data (including published and grey literature) to address our research questions. Despite these strengths, the review also had limitations. The fact that we limited the age of the study population to 18 years and above excluded other studies that had populations that were outside this age bracket leading to the lost of information that relates to children and adolescents who experience stigma due to their illness. Future reviews should examine the perspectives of children and adolescents in relation to stigma and its impact on this population. Again, the fact that we restricted the study to articles that were published in the English Language from 2009 to 2021 might have resulted in the exclusion of some relevant articles. That said, it was also relevant that we situated the review within a certain context and time frame of recency to inform future stigma research paths. In all, the effective
application of the five-step scoping review framework by Arksey and O’Malley (2005) allowed us to address our research questions to generate findings that could be vital to future primary research.

**Conclusion**

Experiences of stigma among persons with a history of mental illness are pervasive in the extant literature with negative consequences that affect the individual’s public appeal and leading to problems of unemployment, low educational level, withdrawal, social distance, low self-esteem, and confidence, resulting in negative perceptions of the self or internalized stigma for certain people. The current review identified negative media reportage about mental illness as a common occurrence in certain jurisdictions on the television, radio, and newspapers as reinforcers of negative stereotypes through abusive language and negative labelling. Such sustained negative public views make PWMI develop negative attitudes towards themselves as well as other people in their community. Eventually stigma directed to the self prevent people from seeking help leading to further complications that fuel more public stigmatizing behaviours. There is the need for everyone to do their part towards stemming this inequity. After all no one is immune to mental illness.
References


https://doi.org/10.1186/s12888-019-2123-6


https://doi.org/10.1111/inm.12331


https://doi.org/10.1177/0020764013490263


https://doi.org/10.1080/15374416.2016.1247360


CHAPTER THREE

Conceptualizing a Dynamic Stigma Model of Mental Illness: The DYSMO

Abstract

**Introduction:** Stigma is a form of injustice that contributes to the worsening course of the symptoms associated with mental health problems, leading to delays in starting treatment, and other maladaptive coping behaviors. The purpose of this chapter therefore is to discuss the conceptualization and development of a dynamic theoretical model of stigma.

**Method:** Building on the findings of an initial scoping review that used only empirical papers, we reviewed additional research that included conceptual/theoretical, seminal, and thesis papers from various disciplines (both health and non-healthcare sources). After a thorough analysis and redefining the key concepts of interest, the researcher mapped them to develop a theoretical model of stigma known as the ‘Dynamic Stigma Model of Mental illness (DYSMO)’.

**Results:** Though subtle and sometimes hidden, stigmatized individuals can perceive and appraise the religiocultural and structural violence perspectives that are embedded in public stigmatizing viewpoints of labelling, stereotyping, prejudices, discrimination status loss, and other social exclusionary behaviours, and respond to them. These enduring inequities eventually contribute to increased social disadvantages, with subsequent anticipation of more discriminatory acts from members of the public with attending negative outcomes of social withdrawal.

**Conclusion:** Current models of mental illness stigma have gaps. It is time to have a relook at existing stigma frameworks and to fill these gaps that have existed over so many years for effective anti-stigma strategies.
**Key words:** Religiocultural beliefs, beliefs, structural violence, stigma, stigma perception appraisal, discrimination, anticipated discrimination, DYSMO
Dynamic Stigma Model of Mental illness 92

**Background**

Hoftman (2017) views stigma as a perspective of social injustice, otherwise described by Galtung (1969) as structural violence (SV). Hoftman believes stigma contributes to the worsening course of the symptoms associated with mental health problems due to social isolation, delays in starting treatment, heightened stress, and maladaptive coping behaviors. The purpose of this chapter was to examine underlying theories that informed the conceptualization and development process of a theoretical model of stigma by exploring public attitudes and behaviors that culminate into societal stigmatizing mechanisms that result in the internalization and subsequent appraisal outcomes. In the end, the implication of such negative social attitudes and subsequent appraisal of the perceived public stigma by PWMI has been discussed.

In this chapter, we further discuss relevant literature that supported the development of this contemporary model (the ‘Dynamic Stigma Model of Mental illness) in relation to how religious and cultural beliefs, and structural violence perspectives contribute to stigma perception and appraisal within marginalized groups (such as persons with mental illness). Having initially identified the key concepts through a previous qualitative study, term courses, and reading assignments, the researcher determined key attributes of the concepts and subsequently conducted a scoping literature review. After conducting an initial scoping review using empirical papers from six databases (see chapter two for details), it was revealed that there was no empirical research globally that mapped the unique concepts of structural violence, religious and cultural perspectives on mental illness stigma perceptions and subsequent appraisal. The chapter is further organized under the following topics: (1) Methods (2) Theoretical underpinnings of the Dynamic Stigma Model of Mental illness (3) Culture, religion and mental illness stigma, (4) Mental illness stigma perception and appraisal, (5) Self-esteem and stigma, (6) Outcomes of the
stigmatizing behaviors of the public, (7) Structural violence and public stigmatizing attitudes and behaviors, (8) Defining the key concepts, (9) Key Assumptions and Implications, and (10) Presentation of the proposed dynamic stigma model of mental illness.

Methods

To fill this gap that we identified after our initial scoping review, the researcher performed further analysis in the form of what we termed ‘theoretical review’ of the concepts of interest, (that is a purposive selection and review of additional papers from various disciplines including sociology and health anthropology and religious studies that comprised research and conceptual/theoretical papers, peer reviewed articles, published theses and dissertations. In addition, seminal and opinion/discussive papers were also reviewed irrespective of the year of publication to give better understanding of the historical perspective of some of the major concepts that were being studied. After the ‘theoretical review’ about the concepts of interest, the researcher reefined the key concepts and mapped them to develop a theoretical model of stigma known as the ‘Dynamic Stigma Model of Mental illness (DYSMO)’. See figure 2 below for a flow chart that guided the model development process. This flow chart has been codenamed ‘The CASTDEMADERET framework’, a name that was derived from the nine key steps of the DYSMO development process.
Figure 2

*The CASTDEMADERET Framework*

Figure 2: The CASTDEMADERET Framework that guided the model development process
Theoretical underpinnings of the Dynamic Stigma Model of Mental illness

Vygotsky’s Sociocultural Theory

Lev Vygostsky (1934) was one of the first psychologists to explain the role traditional, social, and cultural beliefs play in an individual’s nature (i.e., attitude, behavior). Vygotsky’s sociocultural theory (1962; 1978) posits that the acquisition of attitudes and behaviors occur within the confines of social processes that are immersed in culture. According to Vygotsky, social interaction primarily influences the development of one’s cognition (thought, perception, reasoning, and understanding). Vygotsky believed we acquire attitudes and behaviors through interactions with other people; the product of this interaction is then integrated into the person’s mental structure which ultimately informs their relationships with/towards others. Again, he put forward that all human thought processes were impacted by language used during social interactions (Vygotsky, 1987). Vygotsky asserted further that social language is a cultural tool that is used to promote and transmit ideas, thoughts, and belief systems in the society. Eventually, members of the public including children psychologically internalize the language they hear in association with other cultural tools, the symbolic systems, and practices.

Implications of Vygotsky’s sociocultural theory is that children imbibe and use these languages (negative or positive) that they hear on daily basis to spread cultural norms and values during social interactions. As children grow into adults (and parents), they use their internalized language to transmit cultural traditions and norms to their children; thus, maintaining a vicious cycle that helps to pass on and sustain societal beliefs from generations to generations. Social learning theories posit that people acquire attitudes and behaviors through repeated exposure (conditioning) to environmental stimuli. Therefore, the cultural and religious domains that
ultimately determine lifestyle in society could be described as learned behavior that could be unlearned or modified where necessary.

Religiocultural beliefs are a collection of religious and cultural systems that interrelate to influence and shape the worldview or perception of a group of people in society. Cultural and religious beliefs influence the way mental illness is appraised or recognized and even managed in society. The role of religious and cultural beliefs towards perception formulation and care should not be overlooked. It is therefore not surprising that the American Psychiatric Association (APA) has included cultural perspectives in its current fifth edition of the Diagnostic and Statistical Manual of Mental Disorders [DSM-5] (APA, 2013). According to the DSM-5, religion ought to be regarded as part of the cultural outlook of society when dealing with mental illness. In furtherance to this, the APA has included a section that deals with culture-related diagnostic issues across most mental disorders in the DSM-5. The APA believes that the cultural undertones present a framework for assessing information concerning cultural attributes of an individual’s mental illness and how it relates to the social, cultural, and historical context (APA, 2013). Again, the APA recognizes the impact of culture and its sequels on perceptions about mental illness, that clinicians may be able to assess and obtain information about the impact of culture on key aspects of a person’s clinical presentation so they could offer better care (APA, 2013).

**The Structural Violence Theory**

Norwegian sociologist Johan Galtung (1969) first introduced the concept of structural violence in his pioneering work about peace and violence. He described structural violence as psychological violence associated with indirect acts constraining human actions. Galtung also refers to structural violence as social injustice. In this study, however, the term 'structural violence' will be used to ensure consistency in understanding. Since Galtung’s seminal work,
many authors have defined structural violence in several ways. For instance, Mukherjee et al. (2011) define structural violence as the systematic exclusion of a group of people from available resources required to develop to their fullest potential. Kohrt and Worthman (2009) define structural violence as a process historically rooted in social institutions that selectively enhances or denies individuals of available resources due to their membership in a group. Benson (2008) also defines structural violence as a social arrangement that systematically brings subordinate and disadvantaged groups of persons into maltreatment, further placing them in danger of various forms of suffering.

Galtung's definition of structural violence expatiates that there is no identifiable 'actor' unlike physical violence, making it difficult to tackle as the source is not readily known. No human face tries to cause harm directly, and the violence perpetrated is incorporated into existing social structures, a source of 'unequal power' that gives rise to inequities such as found in resource allocation (Leatherman & Goodman, 2011). Because structural violence is stable over time and inherently built into the social system (Galtung 1969), it becomes difficult to challenge the status quo, especially in situations where injustice exists due to ignorance on the part of those with the power to make decisions for society. Structural violence may only become visible when a person or group becomes overly marginalized over a period, impacting the quality of life. Galtung suggests that "structural peace," the measures put in place to challenge and balance existing social disparities within the social structure, be earnestly undertaken.

**Stigma Theories**

Over the years, various studies have confirmed the existence of mental illness stigma that affects not only patients and their close relatives and caregivers (Pryor et al., 2012; Saden et al., 2016). Klarić and Lovrić (2017) define Mental illness stigma as negative
labelling, marginalization, and avoidance only due to suffering from a mental illness. For this study, we define mental illness stigma as the process by which socially entrenched labels (stereotypes) demean the social standing of PWMI, leading to reduced recognition and acceptance.

Over the years, stigma researchers have developed diverse theoretical approaches, including Goffman (1963), Link (1987; 2001), Corrigan (1998; 2000), and Major and O'Brien (2005), to address public stigma. Goffman (1963) categorizes stigmatized persons into two groups: (a) the discredited; and (b) the discreditible. The discredited are people whose stigmatized traits are physical and easily observable (e.g., individuals with albinism, those with congenital abnormalities such as cleft palate). At the same time, the discreditible possess hidden stigmatizing characteristics that are difficult to notice (such as mental illness or epilepsy). According to Goffman, persons with a discredited trait easily experience discriminatory public behaviors compared to the discreditible, who can conceal their characteristics significantly due to their shrouded nature.

Despite the ability to conceal their traits or illness, PWMIs appear to experience extreme forms of stigma compared to other groups of stigmatized persons. Due to this sustained oppression, PWMIs expend much energy daily in efforts geared toward concealing their illness from the public. Goffman (1963) further posits that despite one's ability to conceal his/her illness, the stigmatized person continues to hold the same convictions of "spoilt" and inhuman" labels held by the so-called "normals" (referring to the public). Goffman believes such public negative perceptions and shamefulness leads to internalizing mechanisms among PWMI. The consequence of concealment may also lead to heightened anxiety states and non-adherence to treatment modalities (Pedersen & Paves, 2014).
Goffman (1963) theorized stigma as a unidimensional concept associated with the social context, while Major and O'Brien (2005) conceptualized stigma from both social and psychological perspectives. They proposed the Identity Threat Model of mental illness stigma, arguing that both psychological and social effects of stigma on PWMI threatened their wellbeing in various facets of life, including health, education, and self-esteem. According to the Identity Threat Model, "stigma directly affects the stigmatized via mechanisms of discrimination, expectancy confirmation, and automatic stereotype activation, and indirectly via threats to personal and social identity" (Major & O'Brien, p. 393). Stigma-related stress predictors consist of public and personal factors (Major & O'Brien, 2005; Rüsch et al., 2009a; 2009b).

Public discriminatory attitudes restrict contact with significant life events, negatively impacting the status of stigmatized individuals in terms of psychological and physical wellbeing (Major & O'Brien, 2005). The Major and O'Brien framework also posits that individuals who experience stigma are at high risk for stress or identity threat. Again, the Major and O'Brien model conceives that the collective representations, situational cues, and personal characteristics influence the appraisal of a situation (identity threat). Reactions to identity threats could result in involuntary emotional, cognitive, physiological, and behavioral reactions like extreme anxiety states and increased working memory load or Voluntary (conscious) coping efforts to control emotional, cognitive, behavioral, physiological, and environmental responses to situations viewed as traumatic (Gabrys et al., 2018; Major & O'Brien, 2005). These may impact the person's life through responses or outcomes, including low self-esteem, poor academic achievements, health problems, frequent relapse, social distance, and shame.

Goffman's seminal work has influenced all stigma conceptualizations thus far, including Link and Phelan (2001), Major and O'Brien (2005), and Corrigan et al. (2010), all adding to our
understanding of stigma and subsequent personal responses and adverse public outcomes. Link and Phelan (2001) conceptualize mental illness stigma in five co-occurring components: labelling, stereotyping, separation, status loss, and discrimination. Link and Phelan further contend that labeling develops from the existing social process of categorizing PWMI and engenders their differences from others within society. Labels are cues, tags, or defining characteristics that depict the individual(s) using terms such as dangerous, violent, crazy, insane, criminal, and unpredictable (Corrigan et al., 2010). When society undesirably labels PWMI, the labels set them apart, paving the way for stereotypes to occur. Once labeling and stereotyping ensues, separation into the 'us' (normals) and 'them' (stigmatized) dichotomy occurs due to the perceived undesirable characteristics linked to mental illnesses by the public (Goffman, 1963). Once a person or group of persons are stigmatized, the public regards them as 'non-humans,' culminating in an intense reduction of the person's life chances. Stigmatized persons become distinct from others causing unequal power relations to develop that can determine the place of the 'stigmatized people' (the PWMI) within the society.

According to Link and Phelan (1987; 2001), every individual has a latent experience of how society devalues and discriminates against PWMI. Therefore, when a person eventually suffers from mental illness and society uses labels of 'mental patient' or 'mentally ill,' they apply the tags to themselves, leading to self-devaluation and the anticipation of discrimination, rejection, or exclusion. Discriminations towards PWMI create a longstanding negative emotive perception about the 'mentally ill' individual(s), leading to prejudice formation and denigrating acts such as disrespect, devaluation, and ostracization against the sick person(s) based [RGB2][g3] on the evolved stereotype(s). Such attitudes lead to stigmatizing behaviors that disqualify
the PWMI from full social acceptance and participation (Corrigan et al., 2010; Goffman, 1963; Link & Phelan, 2001).

Corrigan et al. (2010) conceptualized stigma from the perspectives of stereotypes, prejudices, and discrimination. Prejudice is an emotional evaluative attitude associated with fear, anger, distrust, and hostility that likely acts as a precursor to separation and status loss (Corrigan et al., 2010; Link et al., 2004). Social exclusions may emanate from separation and status loss (outcomes of societal prejudice towards a group such as PWMI). Link et al. (2004) expanded on the earlier conceptualization of stigma (Link, 2001) to add an element of public emotional reactions or prejudices that lead to attitudes of separation and subsequent status loss of the stigmatized. They eventually suggested that researchers pay more attention to the emotional evaluative outlook of the stigma development process and outcomes. In 2010, Corrigan et al. (2010) also corroborated the Link et al. (2004) assertions concerning prejudice's vital role in the stigma process.

Stemming from the assertions made by Link et al. (2004) and Corrigan et al. (2010), it appears prejudice acts as an anchor or precursor to incidences of separation and status loss; hence, in this study, the concepts of prejudice, separation, and status loss have been integrated and discussed. Within society, social, economic, and political power imbalances act as enablers of differences and distinct categorization before stigma can occur (Link & Phelan, 2001). Thus, the cognitive separation between the public and PWMIs creates enduring social disparities leading to unequal access to essential social services such as housing, employment, and health. These enduring social inequalities constitute what Galtung (1969) described as structural violence (the injustices PWMI face daily in the social setting).
From the theoretical conceptualizations explored thus far, we posit that mechanisms of labeling, stereotyping, prejudice, separation, status loss, and discrimination can act as both means and outcomes of public stigmatizing attitudes and behaviors. We also theorize that denigrating sociocultural dogma is characterized by unfair social interactions (which create further social disparities and lead to unequal access to essential social services such as education, housing, employment, and health care).

**Culture, Religion, and Mental Illness Stigma**

Culture and religion constitute complex social phenomena that sustain traditional systems of beliefs and governance via established social organizations. Culture and religion significantly determine society's beliefs, morals, customs, and behavior. As such, we should assess any adverse consequences of culture and religion for urgent remedies.

**Defining Culture and Religion**

Tuck and Harris (1988) define culture as the total body of beliefs, behaviors, actions, values, and goals that characterize the way of life of any group of people. However, Gorman and Cross (2011) see culture as multidimensional and includes how we dress, eat, and speak (language), including value systems, rituals, and the social control exerted through economics, politics, law, artifacts, technology, and health care practices. The American Psychological Association (2003) defines culture as a group of people's shared values, beliefs, and attributes that influence the customs, norms, and psychosocial processes (American Psychological Association, 2003). Similarly, Sadock and Sadock (2007) conceptualize culture as society's behavior patterns and lifestyle characterized by shared symbols, artifacts, beliefs, values, and attitudes. Culture expresses the rituals, customs, and laws, that reflect the sayings, legions,
literature, art, diet, costume, religion, making preferences, child upbringing, entertainment, recreation, philosophical thought, and governance.

Religion constitutes an organized system of beliefs, practices, rituals, and symbols designed to facilitate closeness to the sacred or transcendent God or a higher power (Moreira-Almeida et al., 2006). Geertz (1993) defines religion as a system of symbols that establishes powerful, pervasive, and long-lasting moods and motivations in humanity by formulating conceptions of a general order of existence with an aura of factuality such that the moods and motivations seem uniquely realistic. Similarly, Asal (1982) defines religion as a collection of belief systems, cultural systems, and worldviews that relate humanity to spirituality (one's innate character about human existence) and sometimes to moral values (the system of values or principles of uprightness). When people stand by the tenets of their religion, they are religious. In this respect, Pargament (1997) describes religiosity as an attitude characterized by adherence to a system of organized beliefs that reinforces the relationship between a person's philosophical stance (world view) and morality.

Saroglou and Cohen (2011) conceptualized the interrelationship between culture and religion in six ways: That is, (1) religion is part of culture, (2) constitutes culture, (3) includes and transcends culture, (4) influenced by culture, (5) shapes culture, or (6) interact with culture in influencing cognitions, emotions, and actions. Other authorities have similarly asserted that religion is a cultural variable embedded within a culture (Bryan, 2014; Caplan, 2019; Galtung, 1990; Geertz, 1973); that both religious and cultural values work synchronously (Caplan, 2019) to sustain one another. Both religious beliefs and cultural values influence every aspect of humanity (Abdulla, 2018; Agorastos et al., 2014; Edara, 2017; Koenig, 2012). Just like other religious anthropologists have posited, Abdulla, 2018, p. 102) argues that the "distinction
between culture and religion is not so distinct, with cultural practices becoming "religionized" and religious ideas and spaces becoming part of the culture.” Therefore, in this chapter, the term' Religiocultural beliefs' will be used interchangeably with 'religious and cultural beliefs' to represent the inseparability between the two terms.’

At this point, one can argue that Vygotsky's sociocultural theory permeates society and supports the standpoint that religion and culture not only shape behavior but also modifies the perceptions and attitudes of people in society. Traditional, religious, and cultural practices affect sociopolitical, educational, legal, and health systems in many ways. These universal factors uniquely impact individual, societal, and country development and belief systems throughout life—no wonder the understanding and interpretations of mental illness vary from culture to culture. Therefore, considering the cultural context of mental health problems is critical (Choudhry et al., 2016).

Religiocultural Beliefs and Public Perceptions

Religiocultural beliefs about mental illness promote negative public perceptions including stigma toward PWMI (Caplan, 2019; Caplan et al., 2011; Choudhry et al., 2016; Latalova et al., 2014; Mantovani et al., 2017; Wesselmann & Graziano, 2010). Negative societal attitudes and behaviors towards the stigmatized tend to be culturally governed (Rao et al., 2007). The beliefs attached to mental illnesses lead to the stigma that negatively impacts the availability of appropriate social support systems for persons with the disease (Park, & Park, 2014; Wesselmann et al., 2015; Wesselmann & Graziano, 2010). Religiocultural perspectives constitute aspects of the moral paradigm of society that works against PWMI and seeks to preserve and justify existing social disparities. Caplan (2019) asserts that religion has long
helped sustain society's moral values. Therefore, the contribution of religious ideology to moral judgments about the perceived causes of mental illness should be held paramount.

People have varied perceptions about mental illness. For instance, some experts posit that psychosocial and economic factors trigger mental illness. Again, some authorities acknowledge biomedical (physical and genetic) causes, while others support supernatural (spiritual) causes as the primary source of mental illness. The psychosocial factors include constant worry, stress, or unhappiness (Gyamfi et al., 2018; Quinn & Knifton, 2014; Sanseeha et al., 2009; WHO, 2019), low self-esteem, rejection, self-blame, and anxiety (Sanseeha et al., 2009) and conflicts in familial and other interpersonal relationships (Gyamfi et al., 2018; Lin, 2013; WHO, 2019). While socioeconomic factors include poverty and unemployment (Gyamfi, 2016; Quinn & Knifton, 2014; WHO, 2019), racial/ethnic discrimination (Bhui et al., 2018; Wong et al., 2016), and economic deprivation (Gyamfi, 2016; Martin et al., 2014; McLaughlin et al., 2012; WHO, 2019).

Ongoing stigma research suggests religious (spiritual and supernatural) and cultural (traditional) beliefs as major contributing factors to perceived origins and treatment course of mental illness. Most research articles identify mental illness with curses (Quinn & Knifton, 2014; Tawiah et al., 2015), punishment from God, and demonic or evil spirits possession (Gyamfi et al., 2018; Quinn & Knifton, 2014; Sanseeha et al., 2009; Tawiah et al., 2015) use of black magic to destroy one's mental health (Sanseeha et al., 2009). Conversely, some people attribute mental illness to blessings and spiritual connection with God (Choudhry & Bokharey, 2013; Mjøsund et al., 2015). Despite the strong attributions of supernatural and traditional bases concerning incidences of mental illness, the role of biomedical and genetic causes has been evident in the literature. For instance, people have linked mental illness to head trauma (Lin, 2012), genetic
inheritance (Lin, 2013; Quinn & Knifton, 2014; Sanseeha et al., 2009; Tawiah et al., 2015), neurotransmitter deficiencies (Gyamfi, 2016; Lin, 2012), complications from drug use (Lin, 2012; Shrivastava et al., 2011), and improper diet (Lin, 2013; Quinn & Knifton, 2014). In Ghana, a mix of beliefs about mental illness also exists (Gyamfi et al., 2018; Tawiah et al., 2015). Even though the Ghanaian public emphasizes supernatural causes, they also ascribe to influences of biopsychosocial domains of mental illness. The variability in the public conceptions of mental illness could also be due to the various treatment preferences among the populace.

Mental health issues continue to be neglected, especially in Low- and Middle-Income Countries (Choudhry et al., 2016; Gyamfi et al., 2018). Lack of appropriate knowledge concerning mental illness contributes to the rising neglect and subsequent stigma attached to PWMI (Tawiah et al., 2015). There is an urgent need for improved mental health literacy in terms of scaled awareness of unhelpful beliefs, improved knowledge about mental health issues in terms of causes, risk factors, and strategies for intervention and subsequent prevention, as well as improved treatment and help-seeking behavior. The new knowledge could significantly impact how individuals, health professionals, society, and the public deal with mental illness issues in contemporary times. There is the need, therefore, to examine religious and cultural domains of mental illness to ascertain how these concepts intersect with stigma perceptions among PWMI. Examining religious and cultural domains of mental illness is necessary due to deeply entrenched and rationalized societal concepts that espouse a moral philosophical basis for the etiology of mental illness. Opposing and unjustified societal viewpoints continue to promulgate the idea that mental illness results from moral or spiritual weakness, sinful acts, or demonic possession (Caplan, 2019; Scrutton, 2015). These viewpoints run parallel to the norms of society and therefore create a fertile ground for the public to perpetuate injustice towards
individuals with mental illnesses. Ghanaians express religious and cultural lineages (beliefs) in every aspect of their social life. It is challenging to delineate or separate religion and culture from the day-to-day drudgeries of the populace. Put, 'religion is culture, and culture is religion' in the life of the Ghanaian people. Therefore, one could imagine the impact of negative religious and cultural belief systems on PWMI in Ghana.

**Religiocultural Perceptions and Treatment Modalities for PWMI**

Global mental health studies continue to reveal the existence of multiple viewpoints concerning the incidence of mental illness. For instance, Choudhry et al. (2016) recently conducted a meta-synthesis to examine beliefs and perceptions about mental health issues. The final 15 articles identified participants' beliefs about the perceived causes of mental illness. The themes from the review included psychosocial and environmental factors, supernatural (spiritual) causes, and biomedical (physical and genetic) causes. The review also revealed that just as some people perceived multiple causes for mental illness, so did they engage in multiple treatment options for dealing with the disease. The identified treatment models included psychological and psychiatric treatment (involving psychotherapy, hospitalization, and medication) and spiritual treatment. Choudhry and colleagues concluded that providing services to PWMI was inundated with difficulties, including cultural and religious barriers of stigma and taboo. Lack of knowledge and awareness about mental illness treatment options/availability (access) and legal/policy hindrances were also evident in the literature.

Similarly, Leavey et al. (2016) results seem to corroborate earlier assertions by various researchers. Leavey and colleagues explored how 32 multi-ethnic clergies (from Christian, Muslim, and Jewish faith organizations) in the UK perceived mental illness. The participants attributed the cause of mental illness to a mixture of social and religious factors such as poverty,
unemployment, loss of spiritual values, and supernatural causes. The clergy believed that mental illness results from moral or spiritual failings, demonic possession, witchcraft, and occult practices. Research has established that societal misconceptions about mental illness play a key role in encouraging non-adherence to formal treatment (Lucca et al., 2015; Knaak et al., 2017; Stanford, 2007) by focusing on traditional religious-oriented treatment procedures, including praying and fasting (Breland-Noble et al., 2015; Choudhry et al., 2016; Stanford, 2007), spiritual exorcism (Hailemariam, 2015; Liu et al., 2015; Nolan et al., 2011; Thompson, 2009) and the administration of herbal concoction to PWMI (Choudhry et al., 2016).

In Ghana, societal misconceptions have led to various forms of treatment for mental illness. Most people visit or send their clients to Pentecostal Pastors in churches or prayer camps. In these religious settings, various treatment modalities are carried out, including chaining, flogging (for uncooperating clients), mandatory prayer and fasting, and deliverance from 'evil spirits' (exorcism). The increased religious treatment should not be a surprise, as religion has been the first point of contact for most PWMI (Stanford, 2007), including their families. No wonder most families and significant others choose to send their sick relatives to prayer camps or shrines before coming to the hospital as a last resort.

Societal, cultural, and religious beliefs significantly influence treatment preferences for PWMI (Stanford & Philpott, 2011). Wesselmann et al. (2015) studied 262 multi-ethnic University students in the United States of America about how religious beliefs about mental illness impact preferences for social support in society. The participants recommended secular (as in medication) and spiritual (i.e., prayer) support. The study also revealed that among highly religious groups, beliefs that mental illness results from immorality or sinfulness were held high and thus, form the basis for their preference for spiritual care/social support. In another vein,
research has identified differences in the level of endorsement of religious beliefs about mental illness. For instance, the Wesselmann et al. study in 2015 found that Evangelical Christians (Pentecostals) endorsed more beliefs that mental illnesses have a spiritual origin and therefore endorsed more preference for giving spiritual and social support than Protestants (including Methodist, Lutheran, Baptist) and Roman Catholic Christians. Social support has been defined as any verbal or nonverbal behavior a person or group of people undertake to help someone usually perceived as needing assistance (Burleson & MacGeorge, 2002). Social support is societal driven and may come from both traditional (professionals such as healthcare providers, lawyers, clergy, counselors) and informal sources (significant others such as family and friends). Social support may be material or immaterial. Material support comes from providing an individual with tangible goods such as food, money, clothes, and other services, including free hospital care and employment. However, immaterial support services take the form of emotional or empathic display of love and constant reassurance, giving helpful information that portrays the reality of existing situations while providing constructive and alternative ways of dealing with predicaments.

Effective social support systems facilitate recovery from mental illness (Chronister et al., 2015; Chronister et al., 2013; Wesselmann et al., 2015). Therefore, nurturing positive religious and cultural belief systems among societies may be a good resource of coping and social support for PWMI (Chronister et al., 2015; Chronister et al., 2013; Pargament et al., 2005; Wesselmann et al., 2015). However, highly denigrating religious and cultural inclinations among society could be detrimental to neglected groups such as PWMI if the belief systems encourage public attitudes or behaviors that nurture maladaptive coping and unproductive treatment preferences for PWMI. The paucity of empirical research about the relationship between religiocultural beliefs and
stigma attached to persons with mental illness makes the public health implications of this study reassuring and vital for future stigma interventions globally.

**Structural Violence, Public Stigmatizing Attitudes, and Behaviors**

Individuals diagnosed with a mental illness are among the category of persons regarded by society as inferior. Society must interrogate stigma from the perspectives of religiocultural and structural violence due to increasing societal disregard for PWMI. It is deducible from the literature reviewed so far, that structural violence could influence and perpetuate mental illness stigma, vis-à-vis the social machinery that fundamentally fuels the exploitation and oppression of these marginalized people. It is becoming increasingly clear that public stigma cannot exist without an underlining perspective of structural violence, a fundamental ancho upon which stigma thrives.

People with mental illness have suffered from structural violence more than anyone in history, as evidenced by the consistent low attention and investment in the mental healthcare sector (Mackenzie & Kesner, 2016; WHO, 2013). Some Governments and Non-governmental organizations are just not interested (Chambers, 2010; Mackenzie & Kesner, 2016), receiving the least of all annual budgetary allocations worldwide (Rosenberg, 2017). The relevance and role of good mental health should be a civic issue warranting attention on both social and political platforms. It is high time society began paying attention to mental health issues and treating them as a civic problem. After all, no one is immune to mental illness.

In some countries, including Ghana and the United States, health insurance coverage hardly includes PWMI (Leonard, 2015). These patients who need health insurance most do not get it. For instance, it is a common occurrence that PWMIs have difficulty accessing medications; the medications are either unavailable or in short supply. Patients and their families
must purchase these drugs by themselves. In a qualitative study in Indonesia, Tristiana et al. (2018) considered some barriers to mental health services among families of PWMI. The study findings revealed a chilling situation that most PWMIs in Indonesia encounter with mental healthcare. Patients queue for days waiting for their medication. The medicine counters for PWMI open twice weekly for a limited time of 4 hours, after which the patients have to go and come back another day. The Indonesian situation is no different from other Low-and Middle-Income Countries, including Ghana. Lack of human resources and disregard for quality care is pervasive. Psychiatric hospitals lack basic amenities to aid human physiological needs, such as water, food, beds, toilets, and bathrooms. This lack of resources could be attributed to public stigma and the disregard for the welfare of PWMI by governmental machinery responsible for policy decisions on health. It is important to note that national laws, health policies, and health spending decisions reflect societal values and beliefs. Therefore, the lack of attention to mental health care should concern everyone.

The influence of structural violence in the public domain is that it empowers existing social and cultural forces in legitimizing and justifying social inequalities and the disparities in the social order. Galtung (1990) describes cultural influences legitimizing social inequity as cultural violence. The culture of a people dramatically influences the public perceptions of mental illness and its associated stigma (Choudhry et al., 2016; Mannarini et al., 2018). We argue that historical, traditional, and religious antecedents (i.e., the demonological era where evil spirits or sin caused mental illnesses) continue to embolden structural violence. To this end,' cultural intervention,' (the opposing strategies that aim at questioning and taking steps in dealing with stigma and associated inequalities should be implemented.
Structural violence is a product of social and institutional stigma that fuels marginalizing policies of both private and governmental institutions that intentionally restrict and hinder the opportunities of PWMI (Corrigan et al., 2004). The outcome of such societal restrictions and unequal opportunities is the bedrock upon which self-stigma (the internalized negative public attitudes) thrives among PWMI. Just as Hofmann (2017) alluded, we also believe that stigma thrives on structural violence. We, therefore, add our voices to Corrigan's assertion that "The stigma of mental illness is first, foremost, and only an issue of social injustice. As such, we need to understand these concepts in the same light as the other forms of prejudice and discrimination that have hounded the modern world (including racism, sexism, and ageism), among others. As a social injustice, mental illness stigma is largely the responsibility of the societies that created it. Hence, it is up to the people and institutions that populate these societies to recognize the harm caused by stigma and embrace their duty to erase it" (Corrigan, 2005, p. 315).

**Outcomes of the Stigmatizing Behaviors of the Public**

Various public attitudes have reportedly contributed to bringing about mental illness stigma. Researchers have given several reasons for these attitudes from the public. The upcoming section, therefore, explores the components of stigma as outcomes under three major subheadings that comprise (1) labeling and (2) stereotyping behaviors, (3) prejudice, separation, and status loss, and (4) public discrimination.

**Labeling and Stereotyping from the Public**

Dudley (2000) defines public stigma as stereotypes or negative attributes towards a person or groups of persons when their characteristics or behaviors are different or inferior to the norms of society. The social reaction theory (Lemert, 2000) emphasizes the socially constructed nature of mental illness stigma, and that the public always tags PWMI, believing that they
behave or act in ways that are not in line with the norms of society. Once labels become entrenched in the social framework of the public, stereotypes develop, leading to prejudice. A stereotype is a generalized (fixed) image or characteristic that most people (usually the public) believe represents a person or group of PWMI.

Labeling is one of the critical determinants of mental illness stigma. For instance, in a systematic review of thirty-six articles in the United States, Parcesepe and Cabassa (2012) found public stigma widespread; Children and adults alike described PWMI as dangerous, incompetent, violent, and violent and criminals. Other authorities have made similar observations worldwide (e.g., Hansson et al., 2013; Igbinomwanhia et al., 2013; Schomerus et al., 2012; Sorsdal et al., 2012; Yuksel et al., 2013) about how negative the public perceive PWMI. The labeling and continual stereotyping of persons with mental illness have led the public to express that PWMI should receive treatment outside the community. Unsurprisingly, most psychiatric hospitals are far from the middle of town to pursue longstanding public opinions. For instance, in a cross-sectional study of 107 Christian and Muslim clergy in Nigeria, Igbinomwanhia and colleagues (2013) report on the attitudes of the clergy towards PWMI. A sizable number of the clergy (71%) felt that individuals diagnosed with mental illness were distinct from others. About 68% also believed that the public should treat persons with mental illness like kids. Most of the clergy (more than 80%) were unhappy staying in the same neighborhood with PWMI. The observations by Igbinomwanhia and colleagues represent longstanding public views stemming from public stereotyping of persons diagnosed with a mental illness. Despite the recent surge in stigma publications, there is a general paucity of published literature concerning mental health stigma in Africa (Audet et al., 2017; Okpalauwaekwe et al., 2017; Reta et al., 2016), including Ghana (Barke et al., 2011; Gyamfi 2014; Gyamfi et al., 2018; Read & Doku, 2012; Tawiah et al., 2015).
Our current conceptualization of stigma from a structural violence perspective would therefore widen the scope of literature and deepen the discourse for future research.

Some members of the public have espoused a theory that PWMIs are incompetent (incapable) of looking after themselves (Livingston, 2014; Corrigan, 2016); and that they are irresponsible (Abdullah, & Brown, 2011), childish and unintelligent (Madianos et al., 2012), and therefore, should be controlled. These negative perceptions have contributed to informal dictatorial regimes in both health and community settings, culminating in unwarranted interference and infringement on the UN convention on the human rights of most patients.

Society labels PWMIs who question such suppressive public behaviors as aggressive, relapsed, violent, destructive, or uncompromising due to generational carryover of public stereotypes of dangerousness, aggression, and unreasonableness about PWMI.

In most developing countries where large psychiatric hospitals still abound, assertive PWMI who challenge the status quo are quickly mobilized and sent to the hospital for readmission. For some, their close relations restrain them from taming or calming them down, all due to deeply entrenched public stereotyping. Again, due to existing labeling and stereotyping behaviors, members of the public are more likely to falsify charges of violent crimes against PWMI. According to Torrey (2011), the longstanding perception of violent behavior by PWMI is one of the factors that keeps fueling public stigma against them. McGinty and colleagues have also corroborated Torrey's 2011 assertions in a recent review of news items in the United States of America (McGinty et al., 2014 McGinty et al., 2016). In contrast to this public perception, Torrey and colleagues have also reported that effective treatment of PWMI decreases violent behavior. For instance, Talisman et al. report that evidence-based treatment modalities, increased collaboration and coordination between health professionals, and individualized treatment plans
with regularly reviewed and altered goals help improve clinical outcomes (Talisman et al., 2015). Therefore, all stakeholders must pay attention to and ensure that patients receive adequate treatment in community and hospital settings in our quest to deal with mental illness stigma effectively.

**Prejudice, Separation, and Status loss**

Prejudice is a negative evaluative attitude characterized by cognitive and emotional responses from the public domain that makes it possible for attitudes of separation and status loss to occur. Prejudices are mostly negative preconceived ideas within the public. Prejudice may not necessarily reflect the actual day-to-day behaviors of the PWMI. Klarić and Lovrić argued in their recent paper that insufficient knowledge about mental illness and related issues (e.g., myths and fear) are the bedrock of the continued negative public perceptions of PWMI. Such negative behaviors resulting from entrenched stereotypes are displayed in different ways, leading to various degrees of unjust actions toward PWMI (Klarić & Lovrić, 2017). For instance, prejudice in the form of anger may lead the public, including close relations, to become hostile towards PWMI (leading to physical violence or harm, neglect, or imprisonment). However, if the prejudice towards PWMI takes the form of fear or distrust, attitudes such as separation, social distance, avoidance, exclusion, and isolation may ensue, leading to status loss associated with unemployment, job loss or demotion in the workplace, pay cut, divorce, and ejection among others.

Parle's (2012) review reveals longstanding public aggression towards PWMI. This ongoing aggression is due to public prejudices likely fueled by ignorance, as espoused by Klarić and Lovrić (2017). For instance, neighbors and other community members may physically and verbally attack patients without legal sanctions against the perpetrators. Some PWMIs have
reportedly been barred from entering shops, pubs, and other places of socialization, while others have had their belongings destroyed by community members. It is not uncommon in most Low-and Middle-Income Countries, including Ghana, to see members of the public mock or beat up PWMI openly and with impunity on the streets without any legal sanctions. The shame associated with this abuse results in the collapse of relationships between these PWMI and their partners, family members, and close friends. Even though mental illness stigma is widespread, one finds it difficult to determine in this review whether the same level of abuse of PWMI exists among High-Income Countries.

Social distance and subsequent avoidance of PWMI have been widely reported (Hansson et al., 2013; Igbinomwanhia et al., 2013; Schomerus et al., 2012; Sorsdal et al., 2012; Yuksel et al., 2013) with severe consequences for the stigmatized individuals. A deliberate effort is to avoid and subsequently exclude PWMI from day-to-day social interactions. PWMI have reportedly become socially isolated and lonely due to rejection, a 'left behind' syndrome that emanates from the entrenched 'us-them dichotomy' (Corrigan et al., 2010), a posture that leads to sustained discrimination. For instance, in some Low-and Middle-Income Countries in Ghana, mental illness is perceived by a large proportion of the population as a curse caused by evil spirits or as a punishment from God for evil deeds. This negative public attitude can be so extreme that all family members of the lineage of the stigmatized person are isolated from the rest of society. It is not uncommon for the women from such families to face difficulties with marriage and even with their private enterprises such as trading. In the end, most PWMIs feel worthless and condemned. A feeling of loneliness characterized by psychological pain and longstanding unhappiness holds PWMI captive, making them stick to the self within the confines of hopelessness. Consequently, they resort to suicide, the only way out of an unceasing state of
helplessness that has led to the loss of so many precious lives due to the inability to cope with mental illness stigma experiences (Warrell, 2018).

**Public Discrimination of People with Mental Illness**

Discrimination constitutes putting a person or a group of persons in a less favorable position based on mental illness. PWMI experience discrimination due to separation and status loss (unequal outcomes) associated with social, economic, and political dynamics of power inequality in the public domain (Link & Phelan, 2001). One may infer that the devaluation, rejection, and exclusion from socially oriented activities that PWMI experience stems from deeply entrenched structural prejudices. Link and Phelan (2001) have argued that structural discrimination impacts negatively on persons diagnosed with mental illness in several ways, including low funding for mental health care. It is not surprising that mental healthcare receives the least budgetary allocation worldwide, receiving less than 1% of the healthcare budgets in most countries (Rosenberg, 2017).

Discrimination due to stigma affects the social status, psychological wellbeing, and physical health of PWMI. Various studies, including Major and O'Brien (2005), report that stigmatized persons are discriminated against in several jurisdictions, including education, housing (issues with renting, homelessness, and vagrancy), healthcare, job search, workplace issues, the criminal justice system, and decision-making in social and political activism (Gaetz et al., 2013; Hulchanski et al., 2009; Munn-Rivard, 2014; WHO, 2010). Major and O'Brien's framework on identity threat posits that public stigma and discriminatory attitudes against PWMI restrict contact with significant life events, negatively impacting their status in the community. Based on their encounter with the stereotyping behaviors of society, PWMI come to share and accept the public point of view about their position in society (collective representation) and thus
acknowledge the ongoing devaluation and discrimination. Parle (2012) reviewed twelve articles and revealed that PWMI are discriminated against in their job search by being refused employment. Those who manage to get a job face maltreatment in the workplace through bullying, ridicule, and sometimes demotion or pay cut. Fear of social rejection with associated ridicule, discrimination, and judgment leads a lot of PWMI not to share their problems with others.

It is clear from the evidence gathered so far that ignorance and lack of social support reduce the stigma threshold for public stigma to occur. Therefore, effective anti-stigma programs in the community should first ensure knowledge acquisition. Primarily, educating the public from the biological perspective of mental illness causation is likely to generate an understanding within members of society that may likely rally support for the PWMI, and thus act as a precursor for defeating stigmatizing behaviors by the public.

**Appraising Mental Illness Stigma**

Perception involves the organization, identification, and interpretation of information from one's environment (Schacter, 2011). Perception constitutes the physical or chemical stimulation of the individual's sensory system, shaped by experiences, memory, expectations, and the level of attention given to the stimuli (Bernstein, 2010).

An appraisal is, however, the evaluation of the emotions attached to one's experiences, memory, expectations, and the level of attention given to the experiences encountered (Aronson et al., 2005; Scherer et al., 2001; Smith & Kirby, 2009). One cannot appraise without perceiving (Berjot, 2011; Isaksson, 2017; Major & O'Brien, 2005; Rüsch et al., 2009a) or a history of 'experience' (Wondra, & Ellsworth, 2015). The concept of perception and appraisal are therefore synonymous and may complement each other on a continuum of stigma evaluation.
The identity threat model of stigma (Major & O'Brien, 2005) posits that perceived public attitudes (discrimination) and personal factors determine the extent to which people with mental illness perceive and appraise stigma as stressful, independent of diagnosis and clinical symptoms (Berjot & Gillet, 2011; Rüsch et al., 2009a; Rüsch et al., 2009b). Appraisal is a subjective yet cognitive process that stigmatized persons encounter day-in-day-out.

According to Lazarus and Folkman, a cognitive appraisal embodies the "process of categorizing an encounter and its various facets, with respect to its significance for wellbeing" (Lazarus & Folkman, 1984, p. 31). When one encounters a potentially stigmatizing situation, he or she appraises the situation in two ways. First, by using primary appraisal mechanisms where the individual assesses the situation, ascertains the enormity of the problem, and concludes as to whether the situation is (1) a threat; likely to negatively affect the self-esteem and wellbeing, (2) a loss; damage that has occurred already, or (3) a challenge; that which can offer an opportunity for growth (Lazarus & Folkman, 1984; Major & O'Brien, 2005). After the individual evaluates the situation, he then initiates a secondary appraisal to determine whether he has the resources (such as social networks; family and close friends, the knowledge, health, energy, financial resources, or the self-esteem) to deal with the problem at hand (Lazarus & Folkman, 1984; Major & O'Brien, 2005).

**Stigma, Self-esteem, Anticipated Discrimination, and Social Withdrawal**

Stigma is a common social phenomenon rooted in social relationships and shaped by the culture and structure of society (Goffman, 1963). Despite scientific explanations of the etiology of mental illness, negative attitudes toward PWMI have increased (Macedo et al., 2017). Like any other stigmatized group, stigma affects PWMIs in several ways.
The impact of stigma and discrimination influences patients' self-esteem profoundly. Several studies, including Rüsch et al. (2009b), have alluded to this negative influence on self-esteem. Other studies reviewed so far reveal a unique relationship between stigma and self-esteem. Stigma increases depressive symptoms leading to low self-esteem, adverse outcomes related to recovery, poor quality of life, and low levels of empowerment (Rüsch et al., 2013). The resultant loss of self-esteem negatively affects patients' adherence to treatment and socialization (Yuksel et al., 2013). According to Parle (2012), this reduction in self-esteem predisposes PWMI to many physical health problems, including cardiovascular diseases, diabetes, obesity, respiratory problems, and untimely death.

(Re)defining Key Concepts of the DYSMO

After thorough analysis of existing definitions and theories concerning the constructs of interest, we (re)defined these key concepts to reflect the context in which they have been used. We define religiocultural beliefs, structural violence, and stigma as follows:

1. Religiocultural beliefs are the complex social phenomena that create and sustain traditional systems of values, morals, and sacred practices that uphold peculiar perceptions, attitudes, and behaviors of a people towards one another through governance and other established social organizations.

2. Stigma is the product of historically rooted public attitudes and behaviors (i.e., religiocultural and structural violence perspectives) that characterize labeling, stereotyping, prejudice, cognitive separation, status loss, and discrimination that lead to responses of stress and esteem-related appraisal of experienced, anticipated, perceived or personal endorsement of societal actions due to existing power relational differences.
(3) Structural violence is the effect of historically rooted power differences (visible or invisible) embedded in religious, cultural, and political systems that enable and justify public stigmatizing behaviors toward marginalized persons, skewing their life chances and denying them of existing social services (including employment, access to education, and health services) in favor of persons regarded as ‘superior’ in society.

Key Assumptions and Implications for Health Care, Advocacy, and Research

The literature review reveals a significant amount of research on the stigma concerning people diagnosed with mental illness in Europe and the United States of America, with few studies in Sub-Saharan Africa. Most of these studies used quantitative methods (cross-sectional designs) involving patients and the public; and used structured questionnaires, vignettes, surveys, and systematic reviews to elicit responses. Despite negative public attitudes, the literature demonstrated personal characteristics as critical determinants for stigma. The lack of appropriate resources for dealing with social difficulties may lead PWMI to experience stress, low self-esteem, or diminished wellbeing. We emphasize, however, that no two persons experience, perceive, or appraise stigma the same way due to an existing individual, cultural, and religious differences (Bracke et al., 2019; Gopalkrishnan, 2018; Mannarini, & Rossi, 2018;). Based on these perceptual differences among PWMI, it is only appropriate that care providers begin to institute individualized interventions that are user-driven and collaborative at the same time. After all, the health service user is also an expert whose resources care providers and other policymakers could tap for their empowerment and optimum care outcomes. Adequate knowledge of the impact of these predictive factors on stigma stress perception and appraisal could aid advocacy for health policy direction that upholds the rights of PWMI and safeguard their interests. Identifying the impact of religiocultural factors and structural violence
perspectives on perpetuating stigma would help shape future research efforts in mental healthcare in Ghana and the world. We believe that both religiocultural beliefs and the structural violence outlook of the public influence the stigma stress perception appraisal through the internalization of negative societal attitudes that culminate into rejection concerns and future anticipated discrimination outcomes (Fox et al., 2018; Hing & Russell, 2017; Masuch et al., 2019; Quinn et al., 2015; Schauman et al., 2019) that lead to social withdrawal and self-esteem challenges among PWMI.

At this point, we theorize that: (1) public stigma leads to sustained self (internalizing) attitudes and behaviors among PWMI (2) public stigma directed at PWMI constitutes a 'violence' and 'infringement on human rights that is likely to affect the family and professional caregivers alike, and who may potentially displace the threat of perceived stigma onto the PWMI. (3) religiocultural belief systems, structural violence perspectives, and stigma attitudes and behaviors are learned and socially transferred onto the offspring over time. Therefore, they can be unlearned if society wants to. (4) we also believe that there is an existing stigma cycle (stigma web) that is underpinned by invisible power differentials that forces close friends, relatives, intimate partners, and formal and informal caregivers to displace public stigmatizing attitudes onto the individual with a mental health problem, leading to the perpetuation of stigmatizing tags towards PWMI, which ultimately affect care outcomes. (5) the concept of ‘stigma’ is dynamic; therefore, stigma processes may evolve over time.

**Presenting the Dynamic Stigma Model of Mental Illness**

Recent stigma discourse points to hidden power differentials as key in shaping or distributing stigma related to mental illness within social settings (Corrigan, 2005; Link, 2001; Kleinman & Hall-Clifford, 2009). After gleaning various theoretical conceptualizations, one can
assert that society's cultural and moral contexts influence stigma and its outcomes. Again, society should regard contemporary stigma as a multifaceted phenomenon characterized by psychological, social, cultural, religious, and moral processes.

Even though researchers have explored the psychosocial perspectives of stigma over the years, theoretical models that encompass stigma as a socioreligiocultural and moral phenomenon are lacking. By 'moral context,' the researcher refers to the religiocultural and structural inequities in society that tend to subdue PWMI and thus justify the injustice against stigmatized persons. Therefore, the current model goes beyond the psychosocial perspective of stigma and brings on board dimensions of sociocultural, religious, and moral contexts that appear to feed public and individual responses to stigmatizing attitudes and behaviors. Though subtle and sometimes hidden, stigmatized individuals can perceive and appraise the religiocultural and structural violence perspectives embedded in public stigmatizing viewpoints of labeling, stereotyping, prejudices, discrimination, status loss, and other social exclusionary behaviors and respond to them.

Individuals more sensitive to ongoing injustices may readily perceive the devaluation, rejection, and exclusion (discrimination) that accompanies their social interaction but may feel powerless in challenging these unfair treatments. These enduring inequities may eventually contribute to increased social disadvantages, with subsequent anticipation of more discriminatory acts from the public and leading to further loss of social status (real or perceived) with attending adverse outcomes of social withdrawal. Below (Figure 3) is the proposed stigma model (inspired by the sociocultural theory; Vygotsky (1934), structural violence theory; Galtung (1969), and stigma theories (Corrigan et al., 2010; Goffman, 1963; Link, 2001; Major & O'Brien, 2005).
Figure 3

The Proposed Dynamic Stigma Model of Mental Illness

Conclusion

Efforts towards reducing the stigma of mental illness will require the concerted effort of all in society. Such efforts should involve the microsystems (individual, family), meso systems (interpersonal relationships, school, workplace, clinics and hospitals, churches, and chiefs), and the macro or higher institutional systems (e.g., media, advocacy groups, governmental policymakers, new legislation, hospital management). The truth remains that current models of mental illness stigma have gaps. It is time to relook at existing stigma frameworks and fill these gaps that have existed for many years. The current model (the DYSMO) therefore addressed some of these gaps by ascertaining the role religiocultural factors play in influencing structural violence towards perpetuating stigma perceptions and outcomes among PWMI in the contemporary society.
References


https://doi.org/10.1192/bjp.2018.148


https://doi.org/10.1080/13674676.2015.1056120


https://doi.org/10.1177/1540415319828265


http://dx.doi.org/10.1136/jech.2008.084277


https://doi.org/10.5402/2012/278730


https://doi.org/10.1007/s12402-018-0274-9


Quinn, D. M., Williams, M. K., & Weisz, B. M. (2015). From discrimination to internalized mental illness stigma: The mediating roles of anticipated discrimination and anticipated


Dynamic Stigma Model of Mental illness

https://doi.org/10.1016/j.ijnss.2017.12.003


http://dx.doi.org/10.1037/a0039252


CHAPTER FOUR

Correlates of rejection sensitivity: Examining influences of anticipated discrimination, internalized stigma, and injustice experiences among persons with mental illness in Ghana

Abstract

Introduction: Rejection sensitivity acts as a barrier to healthcare and leading to poor mental health outcomes. Perceived rejection is moderated by a person’s coping orientations and sensitivity to discriminatory behaviours that are embedded in stigma and unfair treatment within the social space. The current study therefore examined the extent to which internalized stigma, anticipated discrimination, and structural violence influence rejection sensitivity of persons with mental illness.

Methods: A non-experimental predictive cross-sectional study was conducted to examine the extent to which anticipated discrimination, internalized stigma and injustice experiences influence rejection sensitivity among 330 outpatients in Sub-Saharan Africa.

Results: Hierarchical multiple linear regression results demonstrate non-significant relationship between anticipated discrimination and rejection sensitivity ($\beta = .015$, $p = .775$, 95% CI: -.789 - 1.057). However, the relationship between internalized stigma, and rejection sensitivity ($\beta = .148$, $p = .029$, 95% CI: .119 - 2.146), and structural violence and rejection sensitivity ($\beta = .165$, $p = .015$, 95% CI: .014 - .134) were significant.

Conclusion: While social interactions may act as threat to the existence of high rejection sensitive persons, supportive social interactions act as agents of inclusion and social empowerment for persons with a mental illness. Our study findings have further implications for health care and social welfare policy.
Key words: rejection sensitivity, anticipated discrimination, internalized stigma, structural violence, mental illness, injustice experiences, Ghana
Background

The sense of belongingness is a fundamental human need (Allen, et al., 2021; Maslow, 1958). The quest to avoid or prevent social rejection is not only universal, but security, self-esteem, and wellbeing issue that is inherently part of human behavioural response for survival. However, individual differences exist in how we perceive and react to incidences of actual or potential rejection cues (Downey & Feldman, 1996; Zangl, 2013). According to Zangl (2013), perceived rejection influences the way one thinks about the self, vis-à-vis others within the social paradigm and can lead to radical change in how one organizes information about their social world. Again, Zangl adds that even though a person’s reaction to perceived rejection may vary in terms of intensity, nevertheless, most people experience emotional withdrawal, negative affect, jealously, hostility and dejection. The perception and anticipation of rejection in social interactions constitutes rejection sensitivity. Rejection sensitivity acts as a barrier to healthcare seeking (Downey & Feldman, 1996; Zimmer-Gembeck, 2015), and leading to poor mental health outcomes (Bondü et al., 2017; Garthe, 2020; Minihan et al., 2021).

Rejection Sensitivity and Stigma

Rejection sensitivity (RS) is defined as a cognitive-affective processing disposition of anxious expectation in which people readily perceive and react to rejection cues (Downey, & Feldman, 1996). According to Downey, et al. (1997) who first used the term ‘rejection sensitivity’, prior experience with rejection situations makes people easily anticipate rejection in most social interactions leading to social withdrawal (Downey et al., Khouri, & Feldman 1997; Rosenbach & Renneberg, 2014; Schaan et al., 2020), and aggression (Ayduk et al., 2008; Jacobs & Harper, 2013; Silvers et al., 2012; Waisbrod et al., 2012).
Literature has also cited that previous rejection experiences tend to increase one’s expectation of rejection from the public and therefore increases the possibility of being rejected by these out-group (Ayduk et al., 2001; De Rubeis et al., 2017; Downey et al., 1997). Perceived rejection is moderated by a person’s coping orientations (Link et al., 1989; 2002) and sensitivity to discriminatory behaviours (Downey & Feldman, 1996; Innamorati et al., 2014) that are embedded in stigma and unfair treatment within the social space. Stigma make people to lose their status and acceptance especially within social settings (Goffman, 1963). Perceptions of stigma may result in certain coping methods characterized by guilt, concealment, isolation, and segregation (Crabb et al., 2012) in the individual as they strive to deal with threats to the self. The consequence of failed coping and heightened sensitivity to discriminatory acts may result in withdrawal from public interactions as another form of coping to protect one’s self-esteem and to reduce associated stress. In all, withdrawal helps stigmatized persons to limit social interaction with those who may have knowledge of their illness.

Secrecy and withdrawal may also be a behavioural response of the internalization (self-stigma) of negative public behaviours including rejection perceptions. Therefore, perceived rejection will be measured in this current study with the rejection sensitivity scale. Link et al. (2015) expanded their modified labelling theory. They posited that negative labelling experiences likely induce what they termed ‘symbolic interaction stigma’; where stigmatized persons scrutinize the reactions of other people for potential signs of prejudice so they could plan towards curtailing possible rejection. Even though, secrecy and withdrawal may be used as coping mechanisms for perceived/anticipated public rejection, heightened secrecy and withdrawal are harmful (Oexle et al., 2017) and are associated with increased cognitive and emotional distress (Oexle et al., 2017; Wong et al., 2018), feelings of guilt, shame, helplessness,
sadness hopelessness (Carpiniello, & Pinna, 2017; Oexle et al., 2017) and low self-esteem (Wade et al., 2015; Singh et al., 2016). In all, rejection sensitivity affects the self-esteem (Leary 2015; Richman & Leary, 2009), social withdrawal (Abrams et al., 2011) and increases the person’s stigma stress perception appraisal (Quinn et al., 2015; Zangl, 2013). Recent research findings are also pointing to personality traits as well as some demographic characteristics such as sex (gender), age, educational and income level among others, as factors that influence the impacts of rejection sensitivity. Even though there is not enough research evidence that link the influences of demographic variables such as gender and age, on the rejection sensitivity of persons with mental illness, a few studies have cited gender as a factor that affects the stigma perception and rejection sensitivity of stigmatized individuals (De Rubeis et al., 2017; Downey & Feldman; 1996; Lesnick, & Mendle, 2021; Schaan et al., 2020).

So far, results continue to be mixed in relation to the association between some demographic variables and rejection sensitivity. While some studies claim a relationship, others think otherwise. For instance, Garthe (2020) recently found that race/ethnicity, level of education, income level, significantly influenced rejection sensitivity (especially those with high education (degree) and low income) while age, sex, (gender), area of residence (rural or urban) did not significantly influence a person’s rejection sensitivity. In a recent systematic review and meta-analysis, Foxhall, et al. (2019) found that childhood trauma i.e., emotional abuse and neglect were linked with rejection sensitivity as well as adult illness of borderline personality disorder. Similarly, Nacak et al. (2021) studied 65 persons with somatoform pain disorder and found that individuals with history of childhood adversities and repeated traumatic life events expressed high levels of rejection sensitivity alongside severe depressive symptoms.
Other studies have also found type of symptoms to mediate one’s level of rejection sensitivity (Bungert et al., 2015; De Rubeis et al., 2017; Rosenbach, 2014; Staebler et al., 2011). For instance, after comparing rejection sensitivity in individuals suffering from anxiety disorder, and depression, Staebler and colleagues observed that the participants with borderline personality disorder experienced higher levels of rejection sensitivity compared to their counterparts with anxiety disorder and depression. Even though Rosenbach and Renneberg (2014) also confirmed this assertion in a study in Berlin, Germany, it is still inconclusive as to the extent to which demographic variables impacts one’s rejection sensitivity in relation to appraising social interaction as favorable or not.

**Rejection Sensitivity and Structural Violence**

Rejection sensitivity is an anxiety provoking outcome of sustained stigma and discrimination. To counteract rejection, there is the need to encourage social acceptance (a strong, supportive, and trusting social relationships from professional caregivers and community members alike. As indicated by Weeks (2011), the power of forming strong, and healthy supportive relationships with high rejection sensitive persons improve their well-being in a positive way. Individuals with more satisfying social relationships are more likely to experience a decrease in rejection sensitivity over time, compared to persons who report with less satisfying relationships.

According to Leary (2010), social acceptance gives signal to rejection sensitive individuals that members of their community wish to include them in their groups and relationships. Rejection sensitivity is positively associated with duration of treatment of illness (Bungert et al., 2015; De Rubeis et al., 2017; Mueller, 2016; Ng & Johnson, 2013), as it has been found to predict the course and severity of symptoms. This prolonged treatment course could be
due to the associated distress linked to the pain and depression of feeling unsupported and rejected which subsequently acts as a barrier to treatment seeking (Ng, & Johnson, 2013), and resulting in further relapse (De Rubeis et al., 2017).

In another vein, Bungert et al. (2015) studied relationships between social rejection sensitivity and symptom severity in 257 people diagnosed with borderline personality disorder. The results revealed that increased symptom severity, and low self-esteem correlated positively with higher rejection sensitivity for both acute and remitted borderline personality disorder patients. This finding suggests that even for individuals who have recovered from their illness, cues of rejection are key determinants of their recovery and wellbeing. Therefore individual, family, and cognitive behavioral therapies could be of significance for empowering such individuals.

Recent research evidence shows a strong link between social rejection, rejection sensitivity, justice sensitivity, and the internalization of negative outcomes of mental illness in relation to pervasive unfair treatment that persons with mental illness experience in the public space (Bilgin et al., 2021; Bondü et al., 2020; Bondü et al., 2017). The enduring negative and unfair treatment of individuals with mental illness leads to social suffering and harm due to the loss of one’s social status and opportunities. The enduring harms that individuals experience due to their illness constitute structural violence (Galtung, 1969). In the next section, we would discuss how structural violence (social injustice) may contribute to the origin and sustenance of rejection sensitivity among persons with mental illness.

Structural violence perspectives so far appear to remotely trigger rejection sensitivity through stigma and rejection experiences. Justice sensitivity, that is, the tendency to perceive and negatively respond to alleged injustice or unfair treatment (Schmitt et al., 2005) is an outcome of
ongoing structural violence perspectives in the social domain. Perceptions of rejection experiences in social relationships may tend to have their roots in historical and sociocultural models that contribute to the development, and maintenance of social norms. An individual’s expectations of rejection or acceptance may be influenced by the social context in which they interact, vis-à-vis the social experiences, and changing social relationships in terms of support/networks over the life trajectory. Burgeoning injustices against individuals with mental illness not only diminish their chances of equity, equal opportunity, and self-actualization, it also deepens the power gap while enabling unfair social control in favor of the so-called ‘normals’ (other members of society).

The negative implications brought about by ongoing structural violence perspectives cause harm or even death among the marginalized due to sustained lack of opportunity and neglect by those in the helm of social policy and implementation, thereby leading to greater internalization of social stigmatizing attitudes over time, including rejection. Rejection sensitivity has been shown to develop as consequence of traumatic life experiences (Bungert et al., 2015; Erozkan 2015; Foxhall et al., 2019; Nacak et al., 2021), especially if the rejection was by close social relations such as one’s parents (Rosenbach & Renneberg, 2014) and peers (Pachankis et al., 2015; Rosenbach & Renneberg, 2014). According to Horney (1937) the anxiety associated with maltreatment develops overtime through early rejection experiences. Due to previous life experience, people with mental health problems become hypersensitive to social exclusion (Foxhall et al., 2019; Gratz et al., 2013; Renneberg et al., 2012). Such prior experiences predispose the individual to any future rejection and associated pains regardless of how slight the rejection would be, and leading to rejection sensitivity, which subsequently contributes to the development of mental disorders and related negative perceptions and sequels.
of social stigma. Victim justice sensitivity (where the individual perceives injustice towards the self by other people) (Bondü & Elsner, 2015; Bondü et al., 2017; Schmitt et al., 2005) occurs through subtle and sometimes hidden structural violence perspectives that are embedded in stigmatizing viewpoints of labelling, stereotyping, prejudices, discrimination status loss, and other social rejection/discrimination outlooks of ostracism and exclusion that thrive in the presence of power differences.

Injustice sensitive people may easily perceive the devaluation, rejection and exclusion that accompanies structural violence perspectives, but may feel powerless in challenging these unfair treatments. These enduring inequities may eventually contribute to more social disadvantages, leading to further loss of social status with attending negative outcomes including rejection sensitivity. People may experience stigma and discrimination differently due to their cultural background (Koschorke et al. 2014; Mascayano et al., 2020). Literature shows that anticipated discrimination leads people to stop themselves from social activities such as applying for employment, training/education, or initiating close relationships (Ucok et al., 2012). Experienced discrimination acts as a precursor to internalized stigma (Asrat et al., 2018), while internalized stigma leads to future anticipated discrimination (Quinn et al., 2015; Masuch et al., 2019; Schauman et al., 2019).

The rejection sensitivity model (Downey, et al., 1997), proposes that prior exposure to rejection and associated pain heighten biological and neurological responses that lead individuals to become sensitized to both current and future rejection in social/interpersonal interactions. The rejection sensitivity framework also asserts that individuals high in rejection sensitivity were more likely to have pre-existing expectations for rejection that readily triggers how they make sense of ongoing social interaction cues (Downey & Feldman, 1996; Downey et al., 1998).
Based on this assertion, we would argue that experiences of rejection/discrimination are more likely to lead individuals to anticipate discrimination in social relationships.

So far, the link between rejection sensitivity and persons with mental illness seem to center on individuals with depression, personality disorders, somatoform disorders, anxiety, and eating disorders. It appears persons with schizophrenia and mania have not been studied in the rejection sensitivity literature. That notwithstanding, underlining stigma and structural violence theories have established that there is a close association between mental illness and social rejection perspectives. It is also worth noting that most of the studies on rejection sensitivity were conducted with Western populations. To the best of our knowledge, this is the first study that examined rejection sensitivity among populations with mental illness in an African setting. Therefore, we examined the relationships that structural violence, internalized stigma, and anticipation of discrimination have with rejection sensitivity among 330 outpatients in Ghana.

**Research Question**

To what extent does anticipated discrimination, internalized stigma perspectives, and harmful injustice experiences (or perceptions) influence the rejection sensitivity of persons with mental illness?

**Purpose of the Study**

To examine the extent to which internalized stigma, anticipated discrimination, and structural violence influence rejection sensitivity of persons with mental illness.
Hypotheses

**H1:** A person’s anticipation of discrimination from the public positively predicts their rejection sensitivity outlook in their community.

**H2:** The internalization of public stigma by PWMI positively influences their rejection sensitivity perspectives.

**H3:** Injustice experiences of persons diagnosed with a mental illness positively predict their rejection sensitivity perceptions.

Methods

**Design of the Study**

This non-experimental predictive cross-sectional study examined the extent to which anticipated discrimination, internalized stigma and injustice experiences influence rejection sensitivity of persons with mental illness. Cross-sectional designs are a type of observational study designs capable of surveying large populations within a limited time frame (one point data collection) and with a reasonably inexpensive budget (Munnangi & Boktor, 2021; Setia, 2016; Thiese, 2014). Non-experimental design was appropriate and convenient for this study due to the human participants involved.

**Research Setting**

The study was conducted in Southern Ghana. Ghana is a Low-Middle-Income Country located in West Africa; along the Gulf of Guinea and Atlantic Ocean with a total land area of about 239,000 square km. Ghana is a multilingual country with several ethnic groups speaking more than 100 languages. The official language of Ghana however is English. In 2015, adult literacy rate for Ghana was reported at nearly 80% (UNESCO Institute For Statistics, 2018). The 2016 census report indicated that Ghana had a little over 28 million people with an average life
expectancy of nearly 63 years (WHO, 2019). There are three large Psychiatric Hospitals, all situated in the Southern part of the country (along the coast). Two of these hospitals are in Accra; the capital city, and the other located in the Central Region of Ghana (about 100 miles away from the capital). The total bed capacity of the three hospitals amount to about 1500 (averagely, 5.5 beds per 100,000 population). Despite the few beds available, each hospital can admit up to about 1200 patients (Jack et al., 2013).

In recent times, care outside the three major psychiatric hospitals is being encouraged to bring care to the doorstep of individuals who need it in terms of access and to help reduce stigma. The number of health professionals working in mental health facilities per 100,000 population is about 7.82. In their survey of 5000 households in Ghana, Canavan et al. (2013) found that about 21% of Ghanaians had psychological distress. In another vein, the WHO (2013) estimates that about 13% of Ghanaian adults suffer from mental illness (Saxena et al., 2013). As at 2014, the total annual health expenditure was 3.6% of GDP (2014), with a total per capita expenditure of about US$ 149 (2014). Some of the services offered in the three hospitals include psychotherapy, occupational therapy, electroconvulsive therapy, outpatient, and inpatient services with community care gaining grounds in recent times. Overall, mental health care is offered by varied professionals including psychiatrists, psychiatric nurses, clinical mental health officers, psychologists, community psychiatric nurses, community psychiatric officers, social workers, occupational therapists, and other health assistants.

**Sampling**

This aspect of the methodology consists of the target population, sampling technique and sample size.
Target population

For this study, the target population was outpatients in two hospitals in Southern Ghana. Outpatients are mostly individuals who live in the community, have to a larger extent recovered from severe symptoms of mental illness, and are seeking ongoing reviews and further treatment (rehabilitation) at the Outpatient Department. Because outpatients mostly live in the community and go about their day-to-day activities, they interact with a wider population of the public. Therefore, they have a depth of experiences to share compared to in-patients who are mostly on admission, not stable, and likely to be presenting with severe psychotic symptoms.

Inclusion Criteria. Criteria for the selection of participants included the following: the individual must be able to articulate his/her perceptions and experiences in response to research questions. The participant must be an outpatient coming for review in any of the two participating hospitals. Eligible participants were expected to be able to speak or understand English. Participants expected to be adults aged 18 years and above. According to the 1992 constitution of Ghana, these cohort are active adults, who can live or have lived independent lives, and therefore were likely to have a higher level of interaction and responsibility as well as varied experiences in their day-to-day interactions with society. The individual should have been diagnosed with a mental illness and should be receiving care on outpatient department (OPD) basis. Participants included individuals currently receiving outpatient care who were relatively stable in mental health status (i.e., not experiencing an exacerbation of their underlying psychosis). In the end, individuals who offered informed consent were recruited for the study.

Exclusion Criteria. First time visitors to the OPD with mental illness and Outpatients who were experiencing an exacerbation of their underlying illness and coming back for treatment
at the OPD were not involved in the study, since they were more likely to be in acute distress at the time.

**Sampling Method**

Non-probabilistic convenience sampling technique were used to recruit 330 participants for the study at the OPD of two major psychiatric hospitals. This helped the investigator to select available outpatients who had suffered from mental illness before but had their symptoms remitted and were now living in the community. The research team (i.e., the researcher and research assistants [RAs]) collaborated with the health care providers at the outpatient departments (OPDs) in the two settings to recruit participants. Recruitment took two forms. First, the researcher sent information letters containing the researcher’s name, phone number and email address to the charge nurses at the OPD along with flyers so that interested persons could contact the research team delegated to coordinate the recruitment and data collection processes at the specific settings. Secondly, the researcher(s) contacted health care providers at the OPD to assist with the recruitment of the participants.

The care providers initiated the contact process by informing participants about the research, and if the individual expressed interest to participate in the study, the designated care provider offered the person with details about how to contact the research team delegated to coordinate the recruitment and data collection processes at the specific settings for further interaction and information. Individuals were included in the study after they had clearly understood the content of the information sheet and consented to it. Several studies have already used this sampling technique in both High Income and Low-Middle income countries to study PWMI including outpatients (Brohan et al., 2013; Corker et al., 2013; Esan et al., 2016; Li et al., 2017; Sampogna et al., 2017). The convenience sampling technique was appropriate for this
study due to the absence of a sample frame for outpatients in the hospitals which is needed for a random sampling technique to be applicable.

**Data Collection**

Data collection will be made up of data gathering tools, and data collection procedure.

**Data Collection Procedure**

The researcher received permission from the Western University Research Ethics as well as the Research Ethics Committees of the Pantang and Ankaful hospitals respectively. Once permitted, the study started in accordance with the protocol of each of the hospitals. Primary data were collected from the recruited outpatients once, using questionnaire that were administered by the researcher and a trained research assistant each from the two settings. Even though self-reports from PWMI in the form of interviews have the potential to engender socially desirable responses (Seinfed et al., 2018), interviews give participants a voice (empowerment) in relation to stigma issues. The researcher and RAs first met and obtained their verbal consent after giving them verbal explanation about the purpose of the study. Interviews were conducted in the hospital in a safe place of the participant's choice that promoted optimum participation and privacy. Just before data collection started, a description of the risks and benefits of the study were clearly explained to the participant and given the opportunity to ask questions. The researcher again made the participant aware that they had the liberty to withdraw from the study at any time or could refuse to answer any questions at will.

Just before the interview commenced, the participant signed a formal written consent after reading of the contents of the information section by self or the researcher. Once the participant signed the consent form, data collection began. The researcher first collected socio-
demographic data and followed with the questionnaires in other sections. The data collection process for each participant was expected to be up to 90 minutes.

**Measures**

**Injustice Experiences Questionnaire**

In 2008, Sullivan, and colleagues published a 12-item Injustice Experience Questionnaire (IEQ; alpha =.92) to appraise feelings of unfair treatment in the workplace among individuals with musculoskeletal injury. The IEQ is a 5-point Likert scale instrument that ranges from 0 = never, 1 = rarely, 2 = sometimes, 3 = often, and 4 = all the time. The IEQ has two subscales, namely, the severity/irreparability of loss scale and blame/unfairness scale (Sullivan et al., 2008).

After a series of studies that applied the 12-item IEQ, Sullivan et al. (2016) developed a simplified version of the IEQ; known as the Injustice Experiences Questionnaire – Short Form (IEQ-SF) from the original data set from which the researchers developed the 12-item IEQ. The IEQ-SF (Sullivan et al., 2016) has 5-items with a 3-point Likert scale that ranges from 0 = never, 1 = sometimes and 2 = often. After formulating the IEQ-SF, Sullivan and group examined the psychometric properties of the new instrument by administering it to individuals diagnosed with chronic musculoskeletal conditions (MSK); N=88) and those with major depressive disorder (MDD); N = 87). After analysis, the internal consistency of the IEQ-SF for the MSK and MDD groups were 0.82 and 0.75 respectively. The item-total correlations for the MSK group, and MDD group ranged from 0.55 to 0.68, and 0.47 to 0.67 respectively. The current study however used the 12-item IEQ due to its high alpha coefficient. The fact that the instruments is a 6-point, 2-subscale instrument makes it a better option to use in this study. Even though, Yamada et al. (2016) recently validated the IEQ in Japan (alpha= .90) to produce a 3-factor structure of the instrument that included, Severity/irreparability, Blame/unfairness, and Perceived lack of
empathy, this study stuck with the original 2-factor instrument to measure perceived structural violence (social injustice).

**Interpretation of scores.** To calculate total score of the scale, add up all 12 items (the total score of the 12 IEQs is 48). Total scores for IEQ subscales may be computed by summing up responses under the scale. High score means high levels of perceived injustice. Once total scores have been computed, scores can be interpreted in terms of percentile equivalents. Descriptors for different ranges of scores and percentile scores are presented as follows: 34-48 (85th percentile and above) = very high range of perceived injustice; 30-34 (75th to 85th percentile) = high range of perceived injustice; 23-29 (60th to 74th percentile) = moderate to high range of perceived injustice; 14-22 (40th to 59th percentile) = average range of perceived injustice; 8-13 (25th to 39th percentile) = low to average range of perceived injustice; 5-8 (15th to 24th percentile) = low range of perceived injustice; and 0-4 (Less than 15th percentile)- very low range of perceived injustice. In our study, the internal consistency of the IEQ items was strong (α = .84).

**The Questionnaire on Anticipated Discrimination (QUAD)**

Anticipated discrimination was assessed using the Questionnaire on Anticipated Discrimination (QUAD). The Questionnaire on Anticipated Discrimination (QUAD) is a 14-item, 4-point Likert scale that ranges from 0 (strongly disagree) to 3 (strongly agree). The tool was developed and validated from previous versions of the Discrimination and Stigma Scale (DISC) after studying 117 outpatients in an online survey in England. The QUAD assesses the extent to which people with mental health problems anticipate discrimination across various contexts (Gabbidon et al., 2013). The psychometric properties of the QUAD are good and include the following: internal consistency (alpha = 0.86); test re-test reliability (r = 0.81). A
cross-replication in an independent sample further indicated good internal consistency (alpha = .88). The two subscales of the tool have moderate correlation (r = 0.54), with good internal consistency (alpha = .82; anticipated discrimination from institutions/services), and (alpha = .76; anticipated discrimination in interpersonal/professional relationships) respectively. The QUAD scale is a reliable, valid, and acceptable measure which can be used to identify key life areas in which people may personally anticipate discrimination.

**Scoring and interpretation of the QUAD.** A mean score is calculated for the QUAD in addition to a count score of the number of areas of life in which individuals expect anticipated discrimination. To calculate (i) Mean scores, a mean score (range 0-3) is calculated by adding each item score (0, 1, 2 or 3) and dividing by the number of answered items in the scale. No items are reverse coded. (ii) Count score – A count score is calculated by counting the number of items for which the participant scores 2 (agree) or 3 (strongly agree) within the 14-item scale. Items which are scored as 0 (strongly disagree), 1 (disagree) or (missing) are not included in this count. This will give the number of areas of life in which individuals expect anticipated discrimination. High scores indicate a strong anticipation of discrimination. The interpretation of scores will be as follows; 0.00-1.50 = minimal to no anticipated discrimination, 1.51-2.00 = mild anticipated discrimination, 2.10-2.50 = moderate anticipated discrimination, and 2.51-3.00 = severe anticipated discrimination. In this study, the internal consistency of the QUAD items was good (α = .76).

**Rejection Sensitivity**

The Adult Rejection Sensitivity questionnaire (A-RSQ) measures a person’s sense of rejection to actual or perceived rejection (Berenson, et al., 2009; 2013) in social, cognitive, and affective terms as defined by Downey and Feldman (1996). The A-RSQ was developed by
Berenson and colleagues in 2009 after studying adults (n = 685) in an internet survey. The ARSQ is an 18-item bifactor instrument (Innamorati et al., 2014) that is rated on a 6-point Likert scale ranging from 1, (very unconcerned) to 6 (very concerned) for the rejection concern/anxiety portion and from 1 (very unlikely) to 6 (very likely) for the rejection expectancy portion. The psychometric properties are as follows; mean score, M = 8.6, SD= 3.6, range = 1.0–24.2, alpha = .70 (Berenson, et al., 2009; 2013) and .78-.82 (Innamorati et al., 2014). The strength of the ARSQ lies in its ability to detect meaningful differences in rejection sensitivity across diverse groups of adults including people with mental illness in situations where fear of rejection is high (Berenson et al., 2009; 2013).

The scale is scored by calculating a score of rejection sensitivity for each situation by multiplying the level of rejection concern in question ‘a’ by the reverse of the level of rejection expectancy; the response to question ‘b’. The formula is: rejection sensitivity = (rejection) * (7-rejection expectancy). To obtain the overall (total) rejection sensitivity score, you take the mean of the resulting 9 scores (Berenson et al., 2009; 2013), that is mean = arsq1, arsq2, arsq3, arsq4, arsq5, arsq6, arsq7, arsq8, arsq9. The total score will be expected to be between 1 and 36. In the current study, the internal consistency of the items was good (α = .78).

The Internalized Stigma of Mental Illness Scale (ISMI)

This version of the ISMI scale comprised four subscales in a 24-item, self-completed 4-point Likert scale that ranges from 1 (strongly disagree) to 4 (strongly agree). The tool is used to assess patients’ experiences of internalized stigma (Ritsher et al., 2003). The four subscales include, Alienation (6 items), Stereotype endorsement (7 items), Perceived discrimination (5 items), Social withdrawal (6 items). The internal consistency and test–retest reliability for each of the subscales are as follows; alienation = 0.79, 0.68; stereotype endorsement = 0.72, 0.94;
discrimination experience = 0.75, 0.89; social withdrawal = 0.80, 0.89. The ISMI scale has
strong internal consistency and a high test–retest reliability. It is suitable when one wants to
measure subjective stigma, perceived discrimination, self, or internalized stigma. The ISMI was
therefore be used to appraise social stigma perceptions in the study.

**Scoring key of the ISMI.** Each score is calculated by adding the item scores together and
then dividing by the total number of answered items. If any items are not answered, the total
number to be divided by is reduced. The resulting score should range from 14. For example, if
someone answered 5 of the 6 Alienation items, the Alienation score was produced by adding
together the 5 answered items and dividing by 5. The internal consistency of the original version
of the ISMI has an excellent alpha (α) = 0.90 (n = 127), and a test–retest reliability coefficient of
r = 0.92, (n = 16, P < 0.05). In the current study, the internal consistency of the ISMI was also
good (α = .89).

**Interpretation of scores.** Using the 4-category method (following the method used by
Lysaker, et al., 2007): 1.00-2.00: minimal to no internalized stigma 2.01-2.50: mild internalized
stigma 2.51-3.00: moderate internalized stigma 3.01-4.00: severe internalized stigma

**Data Analysis Plan**

**Data Preparation and Screening**

To ensure the quality of data, the researcher checked for completeness by randomly
sampling from the data set to check for response sets against the scales for patterns of responses.
The researcher also checked for missing values or pages as well as the consistency and accuracy
of responses by conducting logical checks with the demographic data and range checks with the
Likert response categories as provided in the questionnaire. Open ended questions in the
demographic data were categorized and each given an appropriate code before they were entered
into SPSS for analysis. All missing values were given a code of -99 to be able to account for them during analysis. Data was entered by one of the RAs, after which the principal investigator validated the entered data separately. This helped to reduce any errors.

In this study, both descriptive and inferential analyses were done using the Statistical Package for the Social Sciences (IBM SPSS v.28.0, 2021).

**Results**

**Participant Characteristics**

The purpose of this study was to examine the extent to which internalized stigma, anticipated discrimination, and structural violence influence rejection sensitivity of persons with mental illness. Means, standard deviations, skewness and kurtosis values were calculated to determine the general characteristics of the variables and to also assist the researcher to assess the assumptions of the multiple linear regression for possible redress should there be any form of unfavorable skewness or Kurtosis; as skewness could affect regression coefficients associated with the model (Malehi et al., 2015). Descriptive statics of participant and study variables are presented in tables 4 and 5 respectively.

In this study, all participants (n = 330, 100%) reported their demographic characteristics, with most being Christian (270, 81.8%), and with mean age 37.11 years (SD =10.9). Majority of the participants were male (n =185, 56.1%). In relation to marital status, most participants were unmarried (n = 244, 74%). In terms of living situation most (276, n = 83.6%) lived with someone (i.e., friends, family, or partner). About 154 (46.7%) were employed in either government, self, or private employment, while 132 (40%) said they were unemployed. All participants had some form of formal education with about 266 (80.6%) having secondary or tertiary educational background. Out of the 196 (59.4%) who expressed knowledge of their illness, most had
schizophrenia (91, 46.4%), followed by substance use disorder (57, 29.1%), mood disorders i.e., depression and bipolar (43, 22%). The rest of the diagnoses included post-traumatic stress disorder (3, 1.5%), Epilepsy (1, 0.5%), and dementia (1, 0.5%). Majority of the participants 138 (70.4%) who expressed knowledge of their illness agreed with their current diagnosis. In all, the average treatment duration of participants’ illness was about 6.94 years (SD = 3.0). Details of the participant demographic characteristics are reported in Table 4.

Table 4

Sociodemographic Characteristics of Study Participants

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Variable estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (standard deviation)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>▪ Male</td>
<td>185 (56.1)</td>
</tr>
<tr>
<td>▪ Female</td>
<td>145 (43.9)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>▪ Single</td>
<td>187 (56.7)</td>
</tr>
<tr>
<td>▪ Married</td>
<td>86 (26.0)</td>
</tr>
<tr>
<td>▪ Divorced</td>
<td>23 (7.0)</td>
</tr>
<tr>
<td>▪ Separated</td>
<td>24 (7.3)</td>
</tr>
<tr>
<td>▪ Widowed</td>
<td>10 (3.0)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>37.11 (SD=10.9)</td>
</tr>
<tr>
<td>Have children</td>
<td></td>
</tr>
<tr>
<td>▪ Yes</td>
<td>155 (47.0)</td>
</tr>
<tr>
<td>▪ No</td>
<td>175 (53.0)</td>
</tr>
<tr>
<td>Living situation</td>
<td></td>
</tr>
<tr>
<td>▪ Alone</td>
<td>54 (16.4)</td>
</tr>
<tr>
<td>▪ Living with others</td>
<td>276 (83.6)</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
</tr>
<tr>
<td>▪ Employed</td>
<td>154 (46.7)</td>
</tr>
<tr>
<td>▪ Unemployed</td>
<td>132 (40.0)</td>
</tr>
<tr>
<td>▪ Student</td>
<td>35 (10.6)</td>
</tr>
<tr>
<td>▪ Retirement</td>
<td>9 (2.7)</td>
</tr>
<tr>
<td>Type of employment</td>
<td></td>
</tr>
<tr>
<td>▪ Government services</td>
<td>69 (43.4)</td>
</tr>
<tr>
<td>▪ Private</td>
<td>24 (15.1)</td>
</tr>
<tr>
<td>▪ Self-employed</td>
<td>66 (41.5)</td>
</tr>
<tr>
<td>Educational background</td>
<td></td>
</tr>
<tr>
<td>▪ Primary</td>
<td>15 (4.5)</td>
</tr>
<tr>
<td>▪ Junior high school</td>
<td>46 (13.9)</td>
</tr>
<tr>
<td>▪ Technical/Vocational/Senior</td>
<td>126 (38.2)</td>
</tr>
</tbody>
</table>
High school
- Tertiary 140 (42.4)
- Other 3 (0.9)

Religion
- Christian 270 (81.8)
- Islam 47 (14.2)
- Traditional 7 (2.1)
- Other 6 (1.8)

Knowledge about diagnosis
- Yes 196 (59.4)
- No 134 (40.6)

Known diagnosis
- Schizophrenia 91 (46.4)
- Substance used disorder 57 (29.1)
- Post Traumatic Stress Disorder 3 (1.5)
- Depression 18 (9.2)
- Bipolar disorders 25 (12.8)
- Epilepsy 1 (0.5)
- Dementia 1 (0.5)

Agreement with diagnosis
- Agree 138 (70.4)
- Disagree 29 (14.8)
- Not sure 29 (14.8)

Duration of treatment (years) 6.94 (SD=3.0)

Assessing Assumptions of the Multiple Regression

The output from the descriptive statistical analysis of key measures was used to assess if data was normally distributed by assessing for skewness (degree to which a variable distribution was asymmetrical (i.e., Sk>0 if positively skewed, and Sk<0 if negatively skewed) and kurtosis (measure of the peakedness of the distribution). Establishing normality helped the researcher to determine whether the sample recruited for the study was a true representation of the outpatients being studied. In the event of data skewness or kurtosis, the researcher planned to fix it by performing a square root transformation of the data (to help reduce skewness to acceptable levels). However, normality Q-Q plots of the variables (RSQ, IEQ, ISMI and QUAD) indicated reasonable straight lines on their respective Q-Q plots. Again, normality test using stem and leaf,
and histogram also indicated that the dependent variable (RSQ) and the other continuous independent variables (IEQ, ISMI and QUAD) were normally distributed as the skewness/standard error ratio for each variable was less than 2. For instance, for the IEQ, skewness of \( .256/SE (.134) \) was = 1.91, while the ISMI, QUAD and RSQ yielded 0.31, and 0.18 respectively. See table 5 below for details.

**Table 5**

*Descriptive Statistics on Total Scores of Key Measures*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean (SD)</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEQ</td>
<td>26.57 (8.274)</td>
<td>0.256</td>
<td>0.121</td>
</tr>
<tr>
<td>ISMI</td>
<td>2.60 (0.476)</td>
<td>-0.188</td>
<td>0.629</td>
</tr>
<tr>
<td>QUAD</td>
<td>1.78 (0.430)</td>
<td>-0.042</td>
<td>1.260</td>
</tr>
<tr>
<td>RSQ</td>
<td>14.13 (3.741)</td>
<td>0.024</td>
<td>-0.495</td>
</tr>
</tbody>
</table>

The investigator also determined if there was any form of multicollinearity between the variables by performing a bivariate correlation analysis. Apart from the QUAD that appeared not to have a significant relationship with the RSQ (\( .003, p = .962 \)), the IEQ significantly but moderately correlated with the RSQ (\( IEQ = .252, P = .000 \)) indicating absence of any form of collinearity among the measures. See table 6 below. In addition to the correlation, a more robust test for collinearity was done by calculating the variance inflation factor (VIF) = 1/1-\( R^2 \) of each independent variable. Each variable however had a VIF \( \leq 10.00 \), indicating absence of multicollinearity among the predictors.
**Table 6**

*Correlation Matrix of Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>IEQ</th>
<th>QUAD</th>
<th>RSQ</th>
<th>ISMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEQ</td>
<td>1.00</td>
<td>-.113*</td>
<td>.252**</td>
<td>.568**</td>
</tr>
<tr>
<td>QUAD</td>
<td>-.113*</td>
<td>1.00</td>
<td>.003</td>
<td>.050</td>
</tr>
<tr>
<td>RSQ</td>
<td>.252**</td>
<td>.003</td>
<td>1.00</td>
<td>.227**</td>
</tr>
<tr>
<td>ISMI</td>
<td>.568**</td>
<td>.050</td>
<td>.227**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

**Testing the Study Hypotheses**

We conducted a multiple linear regression analysis to determine the extent to which anticipated discrimination (AD), internalized stigma (IS) and structural violence (SV) relate with rejection sensitivity (RS). The variables were subjected to hierarchical multivariate linear regression analysis, to determine the most appropriate model that could explain the effects of the independent variables on rejection sensitivity.

Even though there is not enough research evidence that link the influences of demographic variables such as sex (gender) and age, on the rejection sensitivity of persons with mental illness, a few studies have cited these variables as factors that affect the stigma perception and rejection sensitivity of stigmatized individuals (De Rubeis et al., 2017; Downey & Feldman; 1996; Lesnick, & Mendle, 2021; Schaan et al., 2020). To ascertain whether sex and age confound relationships between the predictors and rejection sensitivity, sex and age were first entered into the initial model. The model was not significant (F- test (2, 327) = 1.354, p = .250, $R^2 = .008$, indicating that per our study, demographic variables (age and sex) did not play any role in the rejection sensitivity perspectives of participants.
In the second stage, the overall score on QUAD was entered into the model. The QUAD together with age and sex did not significantly predict rejection sensitivity in any way (F-test (3, 326) = .900, p = .441, $R^2 = .008$, indicating that anticipating discrimination within the social space does not necessarily predict rejection sensitivity.

At the third stage of the model building, the overall score on ISMI was entered into the model. The ISMI in addition to the age, sex and QUAD variables explained about seven percent of the variance in rejection sensitivity (F-test (4, 325) = 5.949, $p \leq .001$, $R^2 = .068$).

The fourth step comprised entering the IEQ into the model. The $R^2$ was = .085. Taken as a set, (i.e., age, sex, and QUAD, ISMI, and IEQ) the overall regression model was significant and explained about nine percent of the total variance in rejection sensitivity (F-test (5, 324) = 6.026, $p = .015$, $R^2 = .085$).

Out of the four models, the fourth (final) model was chosen due to the following: current research evidence, significance of the model, the amount of variance explained by the model, and the effects of predictor variables on the dependent variable. In all, only predictors; internalized stigma (ISMI) and structural violence (IEQ) positively correlated and predicted rejection sensitivity (RSQ) to some extent (see table 7 below).
Table 7

Summary of Multivariate Linear Regression Results Depicting Effects of Independent Variables on Rejection Sensitivity

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Beta (β)</td>
</tr>
<tr>
<td>Constant</td>
<td>10.132</td>
<td>1.533</td>
<td>6.610</td>
</tr>
<tr>
<td>Biological sex</td>
<td>-.632</td>
<td>.402</td>
<td>-.084</td>
</tr>
<tr>
<td>Age in years</td>
<td>-.006</td>
<td>.018</td>
<td>-.018</td>
</tr>
<tr>
<td>QUAD</td>
<td>.134</td>
<td>.469</td>
<td>.015</td>
</tr>
<tr>
<td>ISMI</td>
<td>1.132</td>
<td>.515</td>
<td>.148</td>
</tr>
<tr>
<td>IEQ</td>
<td>.074</td>
<td>.030</td>
<td>.165</td>
</tr>
</tbody>
</table>

**Note:** Dependent variable: rejection sensitivity = Overall score on RSQ
Predictors in the Model = Age in years, biological sex, overall score on QUAD, overall score on ISMI, and overall score on IEQ

Relationship between Anticipated Discrimination and Rejection Sensitivity

Anticipated discrimination did not demonstrate any significant effect on rejection sensitivity and therefore could not explain any significant variance in the dependent variable even after controlling for age and sex (β = .015, p = .775, 95%, CI: -.789 - 1.057).

Effects of Internalized Public Stigma on Rejection Sensitivity

Model results demonstrate a significant relationship between internalized stigma and rejection sensitivity, and that internalize stigma predicts a person’s rejection sensitivity (β = .148, p = .029, 95%, CI: .119 - 2.146). The results show that for every unit increase in internalize stigma, there is a .148 increase in rejection sensitivity having controlled for age, sex, and QUAD.

Influences of Structural Violence on Rejection Sensitivity

The association between structural violence and rejection sensitivity was significant (β = .165, p = .015, 95%, CI: .014 - .134). Standardized coefficients indicate that for every unit
increase in perceived structural violence, there is a .165 (standard deviations) increase in rejection sensitivity. See table 8 below for a summary of results after the hypothesis testing.

Table 8

*Summary Presentation of Findings after Hypotheses Testing*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong>: A person’s anticipation of discrimination from the public positively predicts their rejection sensitivity outlook in their community.</td>
<td>No significant relationship exists ( (p = .775) )</td>
</tr>
<tr>
<td><strong>H2</strong>: The internalization of public stigma by PWMI positively influences their rejection sensitivity perspectives.</td>
<td>Positive significant relationship ( (p = .029) )</td>
</tr>
<tr>
<td><strong>H3</strong>: Injustice experiences of persons diagnosed with a mental illness positively predict their rejection sensitivity perceptions.</td>
<td>Positive significant relationship ( (p = .015) )</td>
</tr>
</tbody>
</table>

Discussion

The study examined the relationships between structural violence, internalized stigma, anticipation of discrimination and rejection sensitivity in a cohort of outpatients in Ghana. The study results show that both structural violence and internalized stigma predict rejection sensitivity among individuals with mental illness. We also found that age and sex did not demonstrate any significant effect on rejection sensitivity. This outcome adds to the ongoing debate concerning the role of sex and age and confirming recent findings by Garthe (2020) that rejection sensitivity has no significant relationship with the age and sex of a person.

Ng and Johnson (2013) studied 53 persons with bipolar I. They also found no significant correlations between rejection sensitivity and the demographic variables of participants. Several reasons could account for this finding. For instance, the sample population comprised mainly of adults 18 years and above largely homogenously young. In terms of gender, there were more males (56%) than females. The results may probably have differed if the sample included a
combination of young people (below 18 years) and adults, as well as with equal distribution of sex among the participants. It may also be that males and females do not differ in their perceptions of rejection.

According to Downey and colleagues (1997) who first used the term ‘rejection sensitivity’, they posited that prior experience with rejection situations make people easily anticipate rejection in most social interactions leading to social withdrawal (Downey et al., 1997; Rosenbach & Renneberg, 2014; Schaan et al., 2020) and aggression (Ayduk et al., 2008; Jacobs & Harper, 2013; Silvers et al., 2012; Waisbrod et al., 2012).

Literature has also cited that previous rejection experiences tend to increase one’s expectation of rejection from the public and therefore increases the possibility of being rejected by these out-group (Downey et al., 1997; Ayduk et al., 2001; De Rubeis et al., 2017. Perceived rejection is moderated by a person’s coping orientations (Link et al., 1989; 2002) and sensitivity to discriminatory behaviours (Downey & Feldman, 1996; Innamorati et al., 2014).

Fundamentally, the rejection sensitivity model (Downey et al., 1997) proposes that prior exposure to rejection and its associated pain together with a person’s heightened biological responses lead individuals to become sensitized to both current and future rejection in social/interpersonal interactions. Therefore, individuals high in rejection sensitivity were more likely to have pre-existing expectations for rejection that readily triggers how they make sense of ongoing social interaction cues (Downey & Feldman, 1996; Downey et al., 1998). Based on this assertion, we hypothesized that rejection sensitivity was positively associated with anticipated discrimination among persons with mental illness. However, our hypothesis was not supported.

We are aware that more experiences of stigma and discrimination lead to greater anticipation of discrimination, devaluation, and internalized negative public behaviors in the
future (Quinn et al., 2015). Social interactions act as agents of support and acceptance. At the same time, social interactions may act as threat to the existence of the individual, depending on the outcomes of how the individual perceives and responds to their social relationships (Berenson et al., 2009; Downey et al., 1997; Laura, 2021). We know that increased anticipated discrimination mediates internalized stigma. Even though, there is no known study that has so far mapped anticipated discrimination to rejection sensitivity, we were expecting that once social rejection mediates rejection sensitivity, anticipated discrimination was likely to have a similar association with rejection sensitivity. The fact that anticipated discrimination did not have any significant relationship with rejection sensitivity could be attributed to factors that make us believe that probably the communal system of living in Africa and for that matter Ghana might be a good resource for social support and empowerment for the participants of this study. We argue further that the individual coping abilities of the participants might have reduced the anticipation of discrimination even when perceived rejection was present.

Rejection sensitivity is a social, emotional, and psychological/cognitive response to discrimination and stigmatizing behaviours that is characterized by chronic anxious expectations of rejection that individuals portray during social interactions. In our current study, internalized stigma was found to positively predict rejection sensitivity. This confirms findings from two studies in Africa and America (i.e., Gyamfi et al., 2018; Rüsch et al., 2009) that have identified persons with mental illness reporting on rejection sensitivity in relation to feeling stigmatized by their society. Higher levels of perceived societal stigma stress appraisal (Rüsch, et al., 2009) and high level of experienced discrimination (Brouwers et al., 2016; Gyamfi et al., 2018; Li et al., 2017; Ye Chen et al., 2016) may have potentiated this relationship among the study participants.
Rejection sensitivity is not only an outcome, but also a predictor of further stigma and rejection/exclusion as well as a coping method for some people to guard against potential threats in their social environments (Pachankis et al., 2014). This finding calls for an expansive public education and enhanced social support to empower those who feel marginalized in society.

The study again found that structural violence positively influences rejection sensitivity among persons with a mental illness. This unique finding is novel and significant towards filling gaps in the mental illness stigma literature. Establishing the positive relationship between structural violence and rejection sensitivity has implication for long term stigma research as this widens the scope and adds further evidence to the stigma discipline in relation to treatment of mental illnesses at the meso (institutional level) and policy formulation at the macro (national or global) levels. Based on our study findings, we are able to assert that structural violence is rooted in historical antecedents that influence rejection sensitivity through incidents of social stigma that creates internalized stigma and justice sensitivity viewpoints. According to Schmitt et al. (2005), justice sensitivity constitutes the tendency to perceive and negatively respond to alleged injustices or unfair social treatment. We further explain that the indirect outcomes of structural violence cause people to experience low self-esteem. Once these individuals experience low self-esteem, they become more sensitive to direct social exclusionary attitudes (of social stigma and discrimination), which contributes to heightened feelings of rejection and subsequent rejection sensitivity.

Having gleaned the rejection sensitivity literature so far, one is able to assert that not only do people anxiously expect rejection due to perceived injustice (justice sensitivity) (Bondü, & Elsner, 2015; Giovannelli et al., 2018), but they also experience the stress of rejection that is underpinned by stigma outcomes of labels, stereotypes, prejudices, discrimination, isolation,
social status loss, alienation/rejection, ostracism, and social exclusionary behaviours or attitudes that contribute to rejection sensitivity in the long run. Per the tenets of the social-cognitive learning theory (Bandura 1961; 1986), existing negative social contexts make individuals to learn to expect rejection in social relationships. The learned anticipated consequences make the individual develop biases and cues that enforce the person’s rejection sensitivity (the anxious expectations of rejection in future interactions with others) and leading to a cycle of negative events that reinforce each other in the individual’s life domains.

Implications

The current findings have implication for both formal (health professionals) and informal (family) caregivers. As suggested by Ng and Johnson (2013), high rejection sensitive persons are more likely to view ambiguous interpersonal cues as signals of rejection regardless of the state of their symptom remission and are therefore more likely to respond intensely when rejection occur. Health professionals are therefore more likely to gain the trust and cooperation of their clients by understanding the social-interpersonal-cognitive dimensions of rejection and applying certain tenets of therapeutic relationships where the clients would be involved in decisions concerning their own care. Involving clients in their own care planning (in hospital and home) gives them a voice. It is also empowering and demonstrates recognition and acceptance for continued engagement with their significant others.

Feeling insecure in social relationships as faced by persons with mental illness tend to negatively influence the attachment behaviors of individuals leading to or worsening both physical and mental health status as well as the social support, they receive from their significant others due to weak relationships that insecure attachment brings. Therefore, we encourage close relations and health professionals to demonstrate empathy, attention, understanding and
continued support as persons with a history of mental illness strive to integrate in society. As reducing perceptions of rejection is likely to encourage people to remain and engage with their caregivers while sticking to their treatment protocols without coercion. The fact that cognitive-affective responses have strong links with perceived rejection, health professionals and significant others should use less stereotyping or discriminatory language to motivate the clients to express their views during interactions. Again, care givers should be aware of their facial expressions when interacting with persons with heightened rejection sensitivity in order not to create wrong and unintended impressions to them.

The fact that rejection sensitivity negatively impacts the living situation and well-being of persons with mental illness, makes it prudent for researchers to initiate studies that use a combination of public education and social contact as an intervention. This way, individuals’ perspectives of self-esteem, autonomy and self-efficacy would increase to aid their social integration efforts.

**Strengths and Limitations**

To the best of our knowledge, this was the first study that examined correlates of rejection sensitivity among an African population, and thus, make the study unique and novel. While the findings may be valuable, results should be interpreted within the confines of cross-sectional designs where one is unable to make causal relationships. Therefore, future longitudinal studies would be necessary in providing more causal relationships and to also help confirm the findings or otherwise. Again, the fact that we used self-reporting measures in our data collection process could have led to response bias among participants, which may affect the final outcomes of the study even though we used a face-to-face researcher driven technique to collect data.
Rejection sensitivity also affects young children and adolescents under 18 years (Bondü et al., 2017; Zimmer-Gembeck, 2021). However, the current study examined only adults from 18 years and above, making it impossible to make general statements that includes young persons with mental illness in the context of the study demography. The fact that we examined only outpatients coming for routine review in the mental health hospital also prevents us from making generalized statements that include all persons with mental health problems vis-à-vis the correlates of rejection sensitivity. Future studies should therefore broaden the scope of recruitment to involve both in-and outpatients including those receiving services in primary healthcare settings.

Conclusion

This study explored the relationships that exist between structural violence, internalized stigma, anticipated discrimination, and rejection sensitivity of individuals with a mental illness. Based on our findings, we believe that rejection sensitive people who live with a significant other such as partner, friends, and family face a myriad of social inequities that are rooted in historical perspectives of structural violence. Structural violence causes more harm to persons with mental illness through enabling environments of social stigma and discrimination in ways that make them feel unsupported, undermine their trust, satisfaction, and commitment, and leading to estranged social relationships. Such feelings of inequality and exclusion make individuals with mental illness become hypersensitive to any cues of descent, leading to negative behavioural responses.
References


Esan, O., Osunbote, C., Oladele, O., Fakunle, S., Ehindero, C., & Fountoulakis, K. N. (2016). Bipolar I disorder in remission vs. schizophrenia in remission: Is there a difference in
burden? Comprehensive Psychiatry, 72, 130-135.

doi.org/10.1016/j.comppsych.2016.10.009


https://doi.org/10.1007/s11211-017-0299-9


https://doi.org/10.3389/fpsyt.2021.602981


https://doi.org/10.1016/j.socscimed.2013.10.005


https://doi.org/10.1037/prj0000136
Dynamic Stigma Model of Mental illness


Zanl, J. (2013). *Rejection sensitivity as mediator between stigma and romantic relationship satisfaction.* Graduate College Dissertations and Theses. 244. https://scholarworks.uvm.edu/graddis/244

CHAPTER FIVE

Predictors of Patient Stigma Perception Appraisal: Testing a Dynamic Stigma Model of Mental Illness

Abstract

Background: Stigma in contemporary times should be regarded as a multifaceted phenomenon characterized by psychological, social, cultural, religious, and moral processes. The psychosocial perspectives of stigma have been explored over the years. However, research that encompass the study of stigma as a socio-cultural, religious, and moral phenomenon is lacking. The purpose of this study was to test a Dynamic Stigma Model of Mental illness (DYSMO) among a cohort of outpatients who were receiving care in Ghana.

Methods: The cross-sectional study examined hypothesized relationships within a newly developed stigma model using structural equation modelling techniques. A non-probabilistic convenience sampling technique was used to recruit 330 participants for the study at the Out-Patient Department of two psychiatric hospitals in Southern Ghana.

Results: Confirmatory factor analysis produced a final model with five latent variables and 17 indicators. All standardized coefficients of the final model were good, as all factor loadings were significant at p≤ .05). Mediation analysis on the full structural model produce standardized fit indices that include the following: (χ²/df = 335.403 (105), p≤ .000; RMSEA = .08 (90% CI: .072 -.092; CFI = .921; SRMSR =.059; TLI = .90). While some of the standardized regression coefficients of the DYSMO were significant, others were not. The significant regression coefficients of the DYSMO include structural violence (SV) versus religiocultural beliefs (RCB) = .463, p≤ .000; stigma perception appraisal (SPA) versus SV = .698, p≤ .000; SPA versus RCB
Dynamic Stigma Model of Mental illness

= -.185, p≤.042; anticipated discrimination (AD) versus SPA = .448, p≤.000; and social withdrawal (SW) versus AD = .661, p≤.000). The following coefficients were however not significant: AD versus SV = -.147, p = -.147; AD versus RCB = .064, p = .494; SW versus SPA = -.047 p = .710; SW versus SV = .016, p = .904; SW versus RCB = .039, p = .619).

Conclusion: The study results revealed that religious, cultural, and structural violence perspectives can promote and damage perceptions about mental health. It is imperative that all stakeholders including mental health practitioners, policy makers and community members gain increased awareness and knowledge of the role religious and cultural beliefs play in the treatment and recovery process of persons with mental illness.

Keywords: Mental illness, stigma, structural violence, religiocultural beliefs, stigma perception appraisal, anticipated discrimination, social withdrawal, DYSMO.
Background

The concept of mental health goes beyond the absence of mental illness. Without good mental health, there would be no stable physical health (WHO, 2018). Globally, mental health problems continue to increase, affecting nearly 800 million people (Dattani et al., 2021). As of 2017, mental health-related disorders accounted for about 5-10% of the global disease burden (Dattani et al., 2021). Despite the mounting burden of mental health problems and the substantial amount of distress for individuals and the public, society appears to make minimal effort to address the issues due to widespread stigma (Hoftman, 2017). Stigma is characterized by unfavourable attitudes and behaviours that prevent certain people from social acceptance and participation in communal activities (Goffman, 1963). According to Dudley (2000) the negative stereotypes that society ascribes to certain persons make them feel different and inferior to other members of society. Therefore, this study explains how public perceptions influence religiocultural and structural violence perspectives in predicting patient stigma perceptions and outcomes of anticipated discrimination and social withdrawal behaviors among PWMIs.

Description of the DYSMO Constructs

Religiocultural Influences

Both religious beliefs and cultural values influence every aspect of the Ghanaian people. 'Religiocultural beliefs' constitute complex social phenomena that create and sustain traditional systems of values, morals, and sacred practices that uphold peculiar perceptions, attitudes, and behaviors of a people towards one another through governance and other established social organizations.

Religiocultural beliefs about mental illness significantly promote negative public perceptions, and attitudes, of stigma towards persons with a mental illness (Caplan, 2019;
Wesselmann & Graziano, 2010). Rao et al. believe that negative societal attitudes and behaviors towards the stigmatized are culturally governed (Rao et al., 2007). These beliefs attached to mental illnesses (if predominantly negative) lead to the stigma that adversely impacts the availability of appropriate social support systems for persons with the disease (Wesselmann et al., 2015). Religiocultural perspectives constitute aspects of the moral paradigm of society that works against PWMI and seeks to preserve and justify existing social disparities. According to Vygotsky (1934), acquisition of attitudes and behaviors happen within social processes immersed in culture and socio-religious practices of society. In all, Vygotsky's sociocultural theory supports the view that religion and culture influence and modifies the perceptions and attitudes of community members.

**Structural Violence Perspectives of Stigma**

Galtung (1969) named and described structural violence as psychological violence associated with indirect acts constraining human actions in society. In this study, ‘structural violence’ has been defined as the effect of historically rooted power differences (visible or invisible) embedded in religious, cultural, and political systems that enable the justify public stigmatizing behaviors toward marginalized persons, skewing their life chances and denying them of existing social services (including employment, access to education, and health services) in favor of persons regarded as ‘superior’ in society

Society regards persons with a mental illness as inferior (Ahmedani, 2011; Barke, 2011). For this reason, contemporary researchers should discuss stigma from a perspective of structural violence. It is deducible from the literature reviewed so far, that structural violence could influence and perpetuate stigma through the social machinery that fuels the exploitation and oppression of these marginalized people. It is becoming increasingly clear that stigma cannot
exist without an underlining perspective of structural violence, a fundamental enabler upon which stigma thrives.

Even though Galtung describes structural violence as largely silent, invisible, and somewhat inherent in the social structure, Chopra (2014) identifies factors such as recognizable institutions, existing ideologies, relationships, discriminatory laws, classism, gender inequality, and racism as being among the forces that shape structural violence in the social order. Chopra Anayika argues further that even though social power affects everyone within a social structure, those at the bottom end, for example, PWMIs suffer most in terms of disease, death, unemployment, lack of education, homelessness, inaccessibility to healthcare, and poverty. One is likely to trace the marginalizing power of social institutions to ideological inclinations that promulgate discriminatory laws with a direct or indirect constraining effect on the abilities of marginalized groups such as PWMI. Therefore, the consequence of structural violence could embody social suffering and accompanying inequality, an oppressive regime associated with unending pain in the psyche of PWMI.

Structural violence negatively impacts PWMI as it empowers existing social influences to legitimize and justify social inequalities and other disparities in the social order. According to Galtung (1990), cultural influences legitimizing social inequity constitute cultural violence. Structural violence may only become visible when a person(s) become marginalized over a period such that it impacts negatively on the quality of life and wellbeing. Galtung suggests that 'structural peace,' the measures or structures one could implement to challenge and balance existing social disparities within the social structure should be deemed necessary.
Stigma and Mental Illness

Stigma is an outcome of historically rooted negative societal attitudes and behaviors that come in the form of discriminatory acts that are embedded in religiocultural and structural violence perspectives, leading to responses of stress and esteem-related appraisal of experienced, anticipated, perceived or personal endorsement of societal actions due to existing power relational differences. These stigma outcomes are characterized by:

1. labeling (tagging),
2. stereotyping behaviors (attribution and categorization based on tags),
3. prejudice (negative cognitive and emotional evaluative attitudes),
4. separation and status loss, and
5. social exclusion (setting one aside from social events/activities).

Mental illness-related stigma may exist in various forms. These include (1) public stigma (society's endorsement of mental illness stereotypes and prejudices), (2) self-stigma (product of internalized public stereotypes and prejudices), (3) stigma by association (public labeling and stereotyping due to one's close relationship with a stigmatized person), (4) structural stigma (the product of discriminatory policies from both private and governmental institutions that restrict the opportunities or options for PWMI) and (5) family-orchestrated (familial) stigma (the labeling, and stereotyping from client's own family). In recent years, various studies have confirmed the existence of mental illness stigma that affects patients and their close relatives and caregivers (Pryor et al., 2012; Saden et al., 2016). Varied theoretical approaches to addressing public stigma with PWMI have been put forward over the years, including Goffman (1963), Link (1987; 2001), Corrigan (1998; 2000), and Major and O'Brien (2005).
Mental Illness Stigma Perception and Appraisal

Perception involves the organization, identification, and interpretation of information from one's environment (Schacter, 2011). Appraisal is, however, the evaluation of the emotions attached to one's experiences, memory, expectations, and the level of attention given to the experiences encountered (Scherer et al., 2001; Smith & Kirby, 2009). One cannot appraise without perceiving (Isaksson, 2017; Rüsch et al., 2009a) or a history of 'experience' (Wondra & Ellsworth, 2015). The concept of perception and appraisal are therefore synonymous and may complement each other on a continuum of stigma evaluation.

The identity threat model of stigma (Major & O'Brien, 2005) posits that perceived public attitudes (discrimination) and personal factors determine the extent to which people with mental illness perceive and appraise stigma as stressful, independent of diagnosis and clinical symptoms (Rüsch et al., 2009a; Rüsch et al., 2009b). Appraisal is a subjective yet cognitive process that stigmatized persons encounter day-in-day-out. According to Lazarus and Folkman, a cognitive appraisal comprises the "process of categorizing an encounter and its various facets, with respect to its significance for wellbeing" (Lazarus & Folkman, 1984, p. 31). When one encounters a potentially stigmatizing situation, he or she appraises the situation in two ways. The first is by using primary appraisal mechanisms where the individual assesses the situation, ascertains the enormity of the problem, and draws conclusions as to whether the situation is (1) a threat; likely to negatively affect the self-esteem and wellbeing, (2) a loss; damage that has occurred already, or (3) a challenge; that which can offer an opportunity for growth (Lazarus & Folkman, 1984; Major & O'Brien, 2005). Second, after the individual evaluates the situation, they then initiate a secondary appraisal to determine whether they have the resources (such as social networks;
family and close friends, the knowledge, health, energy, financial resources, or the self-esteem) to deal with the problem at hand (Lazarus & Folkman, 1984; Major & O'Brien, 2005).

The lack of appropriate resources for dealing with social difficulties may lead PWMI to experience stress, low self-esteem, or diminished wellbeing. However, it appears that no two stigmatized persons experience, perceive or appraise stigma the same way, perhaps due to individual and cultural differences (Bracke et al., 2019; Gopalkrishnan, 2018).

**Anticipated Discrimination and Social Withdrawal**

People experience stigma differently due to differences in cultural background (Koschorke et al., 2014). Established literature shows that anticipated discrimination leads people to stop themselves from applying for employment, training, or education or making close relationships (Ucok et al., 2012). However, one may also argue that it is never possible to anticipate without a history of (an) experience. Anticipated discrimination is not the same as experienced discrimination (Gabbidon et al., 2013). For instance, while experienced discrimination usually acts as a precursor to internalized stigma (Asrat et al., 2018), internalized stigma appraisal leads to rejection concerns and to future anticipated discrimination outcomes (Kane et al., 2019; Masuch et al., 2019; Quinn et al., 2015; Rivera et al., 2021; Schauman et al., 2019) that lead to social withdrawal and self-esteem challenges. Below (figure 4) is a proposed stigma model of mental illness that was tested among a population of Out-patients in Ghana using structural equation modeling techniques.
Rationale for the Study

Stigma against mental illness is a community issue, wrongly approved by society towards those who suffer from the disease. Stigma is a crucial stressor for many people with a mental illness and emanates from public and personal attitudes, with a potentially destructive impact on individuals, their families, and national development (Gyamfi et al., 2018). Personal encounters with discriminatory acts affect the psychosocial and physiological activities of the stigmatized in several ways, including self-esteem and academic and health problems (Major et al., 2018; Stangl et al., 2019).

Mental health issues hardly receive attention in health care policies in Ghana. Research in mental illness is limited. Data concerning mental health issues in Ghana are most often speculative or anecdotal and thus unreliable (Read & Doku, 2012). Empirical data concerning mental illness in Low- and Middle-Income Countries (LMICs) are not only limited but are
mostly extrapolations from WHO which in a way affects strategic planning and policy implementation strategies of the individual countries (WHO, 2005; Corrigan, 2012).

There is a general paucity of published literature concerning mental health stigma in Africa (Audet et al., 2017; Okpalauwaekwe et al., 2017; Reta et al., 2016), including Ghana (Barke et al., 2011; Gyamfi, 2014; Gyamfi et al., 2018; Read & Doku, 2012; Tawiah et al., 2015). Published literature indicates that the public's stigma toward people with mental illness also affects caregivers, leading to poor health outcomes (Agyapong et al., 2015; Jack et al., 2015; Nxumalo & Mchunu, 2017; Yannawar et al., 2015).

Despite international conventions and declarations that seek to eliminate violence and discrimination against persons with disabilities (United Nations, 2008), PWMIs in Ghana continue to experience discrimination, violence, and abuse daily due to stigma. These ongoing human rights abuses have led to poor health-seeking behaviors among patients (Garapati et al., 2018; Knaak, 2017) and increased relapse (Hoftman, 2017; Rasmussen et al., 2019), and a growing global burden of disease. Cultural and religious beliefs mediate public perceptions, treatment protocols, and behaviors toward mental illness in various jurisdictions (Caplan, 2019; Mantovani et al., 2017), including Ghana.

So far, a recent scoping review of the literature reveals that no stigma model (both globally and in Ghana) has examined the influences of religiocultural beliefs and structural violence in predicting patient stigma perceptions. Therefore, we developed and tested a theoretical stigma model that explains and establishes mental illness stigma as a violence-related phenomenon that originates from the public.
**Research Objective**

The current study sought to test a model that examined the relationships between religiocultural beliefs (perceptions), structural violence perspectives, stigma perceptions appraisal, and related outcomes of anticipated discrimination and social withdrawal through a lens of underlining rejection concerns and expectancy, among people with mental illness in two public mental health hospitals in Ghana.

**Study Hypotheses**

The study tested the following hypotheses to ascertain whether:

1. Religiocultural beliefs about PWMI have a significant relationship with societal structural violence behaviours towards PWMI.

2. Religiocultural beliefs have a relationship with stigma perception appraisal among PWMI.

3. Structural violence is positively related to stigma perception appraisal among PWMI.

4. a. Stigma perception appraisal is positively related to anticipated discrimination and social withdrawal behaviour among PWMI.

   b. Stigma perception appraisal is positively related to social withdrawal behaviour among PWMI.

5. Religiocultural beliefs are positively related to anticipated discrimination among PWMI.

6. Structural violence is positively related to social withdrawal behaviour of PWMI.

7. Anticipated discrimination positively relates to social withdrawal behaviour of PWMI.

(See figure 5 below for details)
Figure 5

*Hypothesized Regression Paths of the Dynamic Stigma Model*

Figure 5 shows regression relationships (paths) between religiocultural beliefs, structural violence, stigma stress perception appraisal, anticipated discrimination, and social withdrawal. Note that H1 expresses the regression effect of Religiocultural beliefs (RCB) on Structural violence (SV); H2 defines the regression effect of RCB on Stigma Perception Appraisal (SPA); H3 denotes the regression effect of SV on SPA; H4 signifies mediation effect of SPA on Anticipated discrimination (AD) and social withdrawal (SW); While H5 and H6 represent direct effects of RCB and SV on AD and SW respectively, H7 signifies a direct regression effect of AD on SW.

**Methods**

This section includes the research design, setting of the study, sampling method, data collection tools (instruments), data analysis, and human rights issues.

**Design of the Study**

This study was a cross-sectional design that examined predictors of mental illness stigma perceptions appraisal among participants by testing hypothesized relationships within a dynamic stigma model developed by the scientist. Using a cross-sectional design enabled the researcher to test relationships among large number of variables among a large population within a limited time frame (one-point data collection) and with a reasonably inexpensive budget (Munnangi & Boktor, 2021; Setia, 2016; Thiese, 2014).
Research Setting

The study was conducted in two public Psychiatric Hospitals in Southern Ghana. Ghana is a Low-Middle Income Country located in West Africa, along the Gulf of Guinea and Atlantic Ocean with a total land area of about 239 000 square km. Ghana is a multilingual country with several ethnic groups speaking more than 100 languages. The official language of Ghana however is English. There are three Psychiatric Hospitals, all situated in the Southern part of the country (along the coast). Two of these hospitals are in Accra; the capital city, and the other located in the Central Region of Ghana (about 100 miles away from the capital). The total bed capacity of the three hospitals amount to about 1500 (averagely, 5.5 beds per 100 000 population). Despite the few beds available, each hospital can admit up to about 1200 patients (Jack et al., 2013). In Ghana, mental health care is offered by psychiatrists, psychiatric nurses including clinical mental health officers, psychologists, community psychiatric nurses, community psychiatric officers, social workers, occupational therapists, and health assistants.

Sampling

This comprised of the target population, sampling technique and sample size.

Target Population

For this study the target population was out-patients in two psychiatric hospitals in Southern Ghana (namely, the Ankaful Hospital and Pantang Hospital). Outpatients are mostly individuals who live in the community, have to a larger extent recovered from severe symptoms of mental illness, and are seeking ongoing reviews and further treatment (rehabilitation) at the Outpatient Department.

Inclusion Criteria. To be part of the study, individuals were expected to be out-patients aged 18 years and above, who could articulate their perceptions and experiences in English.
Participants who were stable in mental health status who offered informed consent were recruited for the study.

**Exclusion Criteria.** Outpatients who were experiencing an exacerbation of their underlying mental illness (relapsed) were not involved in the study.

**Sampling Method**

Non-probabilistic convenience sampling technique was used to recruit participants for the study at the OPD of the two psychiatric hospitals. The research team (i.e., the researcher and research assistants [RAs]) collaborated with the health care providers at the outpatient departments (OPDs) in the study settings to recruit participants. Individuals were included in the study after they had clearly understood the content of the information sheet and consented to it. In all, 330 participants were recruited for the study. To achieve the set sample size, the two hospitals were weighted equally because each hospital has a bed capacity of about 500. Therefore, an average of 165 PWMI were recruited from each hospital resulting in a proposed sample of \( n = 330 \) participants.

**Data Collection**

Data collection consisted of data gathering tools, and data collection procedure.

**Data Collection Procedure**

The researcher received ethics approval from the Western University Ethics Review Board as well as the Ethics Review Committees in Pantang Hospital and Ankaful Hospital respectively. Once permitted, the study started in accordance with the protocol of each of the hospitals. Primary data were collected from the recruited out-patients once, using questionnaire that were administered by the researcher and trained RAs. The researchers first collected socio-
demographic data and followed with the questionnaires in other sections. The data collection process for each participant took about 90 minutes.

**Instruments**

In this study data were gathered using structured questionnaires consisting of closed ended questions in Likert scale format. The close ended questions allowed the researcher to elicit appropriate and situation-specific answers from the participants in the shortest possible time.

**The Morality/Sin Scale.** Beliefs about the causes of mental illness have been found to determine treatments preferences among the public (Mathison, 2016; Wessellmann & Graziano 2010). In 2010, Wessellmann and Graziano published the Religious Beliefs about Mental Illness (RBAMI) scale to measure perceived public beliefs and prejudiced attitudes towards PWMI. Confirmatory factor analysis (CFA) yielded two independent subscales, namely the morality/sin scale (MS) and the spiritually oriented causes and treatments scale (ST). The RBAMI is a 16-item instrument that was originally rated on a 9-point Likert-scale from 1 (strongly disagree) to 9 (strongly agree); $\alpha = .88$. The MS has nine items whiles the ST has seven items A recent validation among university students in the United States, Mathison (2016) rated the RBAMI on a 4-point Likert scale. The results yielded acceptable Cronbach’s alpha of .89 for the MS, and .80 for the ST respectively. The current study however used the MS scale of the RBAMI to measure perceptions of PWMI about the extent to which society applies belief systems in explaining mental illness. The MS items include the following: ‘Moral weakness is the main cause of mental illness’, ‘People suffering from mental illnesses are not going to their places of worship enough’, ‘Mental illnesses result from an immoral or sinful lifestyle’, ‘People suffer from mental illnesses because they are not sorry for their sins’, ‘A person suffering from a mental illness is not relying on their faith or religious values like they should’, ‘A person suffering from a mental
illness is not praying enough’, ‘People have mental illnesses because someone else sinned against them’, ‘Mental illnesses are a result of Original Sin’, ‘A person’s relationship with God has nothing to do with their suffering from a mental illness’. In the present study the scale had a good internal consistency (α = .86).

The Blame/Unfairness Scale. In 2008, Sullivan, and colleagues published the Injustice Experience Questionnaire (IEQ) to appraise feelings of unfair treatment in the workplace among individuals with musculoskeletal injury. The IEQ is a 5-point Likert scale instrument that has two independent subscales namely, the severity/irreparability of loss scale and blame/unfairness scale that ranges from 0 = never, 1 = rarely, 2 = sometimes, 3 = often, and 4 = all the time. (Sullivan et al., 2008). In this study we used the blame/unfairness scale of the IEQ to measure the structural violence perspectives of participants. ranging from 0 = never, 1 = rarely, 2 = sometimes, 3 = often, and 4 = all the time. The scale items include the following: ‘I am suffering because of someone else’s negligence’, ‘It all seems so unfair’, ‘Nothing will ever make up for all that I have gone through’, ‘I feel as if I have been robbed of something very precious’, ‘I am troubled by fears that I may never achieve my dreams’, ‘I can’t believe this has happened to me’. In the current study the blame/unfairness scale had a good reliability (α = .81).

The Alienation Scale. The Internalized Stigma of Mental Illness Scale (ISMI) is a 29-item, self-completed 4-point Likert scale that ranges from 1 (strongly disagree) to 4 (strongly agree). The tool is used to assess patients’ experiences of internalized stigma (Ritsher et al., 2003). Confirmatory factor analysis has established five independent subscales; that include, Alienation (6 items), Stereotype endorsement (7 items), Perceived discrimination (5 items), Social withdrawal (6 items) and stigma resistance (5 items).
In the present study, we used the Alienation sub-scale of the ISMI (Ritsher et al., 2003) to measure participants’ subjective experiences of feeling different from other members of society due to their mental health problem. The alienation scale consists of 6-items, rated on a 4-point, Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). The scale items comprise the following: ‘I feel out of place in the world because I have a mental illness’; ‘having a mental illness has spoiled my life’; ‘people without mental illness could not possibly understand me’; ‘I am embarrassed or ashamed that I have a mental illness’; ‘I am disappointed in myself for having a mental illness’ and ‘I feel inferior to others who don’t have a mental illness’. Higher total mean scores indicate strong feelings of alienation. The internal consistency of the original scale was .79 (Ritsher et al., 2003). In the current study, the reliability of the scale was very good (α = .92).

The Anticipated Discrimination in Interpersonal/Professional Relationships Scale:
The anticipated discrimination in interpersonal/professional relationships scale (ADIPR) was developed by (Gabbidon et al., 2013) as part of the Questionnaire on Anticipated Discrimination (QUAD). The ADIPR is a 4-point 6-item Likert scale that ranges from 0 (strongly disagree) to 3 (strongly agree). The tool was developed and validated from previous versions of the Discrimination and Stigma Scale (DISC) after studying 117 outpatients in an online survey in England. The scale assesses the extent to which people with mental health problems anticipate discrimination across various social contexts based on how they appraised perceived stigma (Gabbidon et al., 2013). The scale items consist of the following: ‘If a person I want to date or have an intimate relationship with knows I have a mental health problem they will treat me unfairly’, ‘If people in my neighbourhood know I have a mental health problem they will treat me unfairly’, ‘If children and teenagers in the community know about my mental health problem
they will treat me unfairly’, ‘If work colleagues know I have a mental health problem they will
treat me unfairly’, ‘If friends know about my mental health problem they will treat me unfairly’,
‘If my family knows about my mental health problem they will treat me unfairly’. The scale had
a good reliability of ($\alpha = 0.66$).

**The Social withdrawal Scale:** Ritsher et al. (2003) developed the social withdrawal
scale as part of the ISMI. It is a self-completed 4-point Likert scale that ranges from 1 (strongly
disagree) to 4 (strongly agree). The scale includes 6 items and measures the situation where a
person avoids social or public interactions as a response to actual or expected negative behaviour
of the public. The scale consist of the following items: ‘I don't talk about myself much because I
don't want to burden others with my mental illness’, ‘I don't socialize as much as I used to
because my mental illness might make me look or behave ‘weird’, ‘Negative stereotypes about
mental illness keep me isolated from the normal world’, ‘I stay away from situations in order to
protect my family or friends from embarrassment’, ‘Being around people who don't have a
mental illness makes me feel out of place or inadequate’, ‘I avoid getting too close to people who
don't have a mental illness to avoid rejection’. Higher scores on the social withdrawal scale
meant high social withdrawal behaviour by participants. In this study the internal consistency of
the social withdrawal scale was good ($\alpha = 0.90$).

**Operationalization (Adaptation) of Instruments**

In Ghana public stigma against persons with mental illness is dictated by cultural,
spiritual, and religious inclinations (Gyamfi, 2014; Gyamfi et al., 2018). The instruments were
used to assess the study variables in the following ways: 1) The morality/sin scale of the RBAMI
was used to measure Religiocultural beliefs (RCB). 2) The blame/unfairness scale of the IEQ
was used to measure structural violence (SV) perspectives of the participants. 3) The Alienation
scale of the ISMI was used to measure stigma perceptions appraisal (SPA) of participants. 4) The anticipated discrimination in interpersonal/professional relationships scale of the QUAD was used to measure anticipated discrimination of participants, and 5) The Social withdrawal scale of the Internalized Stigma of Mental Illness Inventory (ISMI) was used to measured social withdrawal behaviour of the participants. Areas of the scales that were not likely to suit the cultural context of the participants in Ghana were modified (reworded). For instance, ‘If a person I want to date or have an intimate relationship with knows I have a mental health problem they will treat me unfairly’ was reworded to read, ‘If a person I want to date or marry knows I have a mental health problem they will treat me unfairly’. The researcher computed the mean responses in each instance (every subscale). The researcher measured the internal consistency of all scales to ascertain the reliability of the scales across culturally distinct settings and populations. Any adapted scales were assessed by the researcher’s committee of experts (who are already involved in research at the highest level) to ascertain their suitability in the Ghanaian context. Collecting data by the same researcher, has the potential of inflating the interrelationship (reliability between items. Therefore, the researcher recruited and trained 4 RAs to help with data collection. All interviews were conducted in English (since English is the lingua franca of Ghana).

**Data Analysis**

Structural equation modelling (SEM) involves model specification, identification, data preparation and screening, estimation, evaluation of fit, and modification.

**Data Preparation and Screening**

To ensure the quality of data, the researcher checked for completeness by randomly sampling from the data set to check for response sets against the scales for obvious patterns of responses. The researcher also checked for missing values or pages as well as the consistency
and accuracy of responses by conducting logical checks with the demographic data and range checks with the Likert response categories as provided in the questionnaire. Open ended questions in the demographic data were categorized and each given an appropriate code before they were entered into SPSS for analysis. All missing values were given a code of -99 to be able to account for them during analysis. Data was entered by one of the RAs, after which the principal investigator validated and cleaned the entered data separately. This helped to reduce any errors. In this study, statistical analyses were done using two statistical packages; the Statistical Package for the Social Sciences (IBM SPSS v.26.0, 2019) for descriptive analysis, whiles inferential analyses related to the structural regression model was performed using Mplus 8.5 (Muthén & Muthén, 2020).

**Confirmatory Factor Analysis and Model Estimation**

Model estimation involves determining the value of the unknown parameters and the error associated with the estimated value using SEM software programs. Confirmatory factor analysis (CFA) can estimate latent variables (Byrne, 2013; Kline, 2015), based on correlated variations of a dataset in terms of associations (relationships) and can reduce data dimensions, standardize a scale with multiple indicators, and as well account for correlations inherent in a dataset (Byrne 2013). Therefore, CFA techniques were used to analyze and determine the model structure of the hypothesized relationships between religiocultural beliefs, structural violence, stigma, stigma perceptions appraisal, anticipated discrimination, and social withdrawal (Muthén, & Muthén, 2017). The CFA process was completed in two steps. Firstly, we focused on the measurement of the latent variables and their observed variables (indicators), and secondly, followed with an investigation of the structural model which is essentially a set of regression hypotheses between the latent variables.
Determining Model Fit and Interpretation

In this study, model fit was determined using chi-square ($\chi^2$), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR) and Tucker–Lewis Index (TLI). Each modification was done stepwise (i.e., one modification at a time) guided by predicted post Hoc improvement indices in the Mplus output. Having achieved fit for the measurement model, the model was converted to include hypothesized pathways so we could measure the relationships between religiocultural beliefs, structural violence, stigma stress perception appraisal, anticipated discrimination, and social withdrawal.

Results

The purpose of this study was to test a hypothesized Model of the Dynamic Stigma Model of Mental illness (DYSMO) among 330 Outpatients in Ghana. Statistical analyses were done using two statistical packages (the SPSS v.26.0 for descriptive analysis whiles inferential analyses related to the structural regression model was performed using Mplus software.

Descriptive Statistics of Observed Variables

Means, standard deviations, skewness and kurtosis values were calculated to determine the general characteristics of the variables and to also assist the researcher to assess the assumptions of the structural regression model for possible redress should there be any form of unfavorable skewness or Kurtosis; as skewness may affect regression coefficients associated with the model (Malehi et al., 2015). Descriptive statics of the variables are presented in table 9 below.
Table 9

Descriptive Statistics of Observed Variables

<table>
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<tr>
<th>Variables</th>
<th>Mean (SD)</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
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<tr>
<td>RBM8</td>
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<tr>
<td>RBM9</td>
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</tr>
<tr>
<td>IEQ7</td>
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</tr>
<tr>
<td>IEQ8</td>
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<tr>
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<td>IEQ11</td>
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<tr>
<td>IEQ12</td>
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<td>ISMI5</td>
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<td>ISMI8</td>
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<td>ISMI13</td>
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<td>ISMI16</td>
<td>1.46 (0.310)</td>
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<tr>
<td>ISMI17</td>
<td>1.40 (0.318)</td>
<td>0.220</td>
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<tr>
<td>QUAD9</td>
<td>1.43 (0.278)</td>
<td>-0.055</td>
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<tr>
<td>QUAD10</td>
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<tr>
<td>QUAD11</td>
<td>1.31 (0.260)</td>
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<tr>
<td>QUAD12</td>
<td>1.38 (0.256)</td>
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<td>QUAD13</td>
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</tr>
<tr>
<td>QUAD14</td>
<td>1.08 (.869)</td>
<td>0.518</td>
<td>-0.346</td>
</tr>
</tbody>
</table>

Note: RBAMI = Religious Beliefs about Mental Illness; IEQ = Injustice Experience Questionnaire; ISMI = Internalized Stigma of Mental Illness Scale; QUAD = Questionnaire on Anticipated Discrimination
Assessing Assumptions of the Structural Regression Model

The output from the descriptive statistical analysis was used to assess if data was normally distributed by assessing for skewness (degree to which a variable distribution was asymmetrical (i.e., Sk>0 if positively skewed, and Sk<0 if negatively skewed) and kurtosis (measure of the peakedness of the distribution). Establishing normality helped the researcher ascertain whether the sample recruited for the study was a true representation of the Out-patients being studied. In the event of data skewness or kurtosis, the researcher fixed it by performing a square root transformation of the data (this helped to reduce skewness to acceptable levels). The investigator also determined if there was any form of multicollinearity between the variables by performing a correlation analysis. Before the initial correlational analysis, we proposed that all items that (1) had coefficients equal or above .8 would be removed. (2) items that had coefficients below .3 will also be removed. (3) items that correlated strongly with other items that belonged to different instruments or scales would be removed. We took this decision because we believe that multicollinearity could affect the precision of the estimated regression coefficients as well as the model fit. After performing correlational analysis on all items, the following items were removed before performing CFA: ISMI2, ISMI3, ISMI4 and ISMI24 were removed due to high correlations with own items. However, RBM1, RBM2, RBM7, RBM9, IEQ11, IEQ12, QUAD13 and QUAD14 were removed due to low correlation with own items. Again, IEQ9 and QUAD9 that had high correlations with the ISMI items were removed. See table 10 for a detailed correlation matrix of items used in the initial CFA of the DYSMO.

All missing values were assigned a value of -99 and were handled within the analysis model using Full Information Maximum Likelihood (FIML) as a default in Mplus. Since, this was the first time most of the instruments were used among a culturally different sample, EFA
was performed to ascertain the factor structure of these instruments. The EFA revealed that most of the instruments retained their original structure, therefore they were used in their original form in the CFA of the DYSMO. See table 10 below for details.
Table 10

Correlation Matrix of Observed Variables used in the Model

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<tr>
<th></th>
<th>RBM3</th>
<th>RBM4</th>
<th>RBM5</th>
<th>RBM6</th>
<th>RBM8</th>
<th>IEQ7</th>
<th>IEQ8</th>
<th>IEQ10</th>
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<th>ISMI5</th>
<th>ISMI6</th>
<th>ISMI19</th>
<th>ISMI20</th>
<th>ISMI21</th>
<th>ISMI22</th>
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<th>QUAD11</th>
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<tr>
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<td>.01</td>
<td>-.03</td>
<td>.02</td>
<td>.10</td>
<td>.24</td>
<td>.16</td>
<td>.33</td>
<td>.23</td>
<td>.33</td>
<td>.32</td>
<td>.37</td>
<td>.41</td>
<td>.29</td>
<td>.56</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>QUAD12</td>
<td>.16</td>
<td>.11</td>
<td>.09</td>
<td>.13</td>
<td>-.06</td>
<td>.03</td>
<td>.12</td>
<td>.17</td>
<td>.25</td>
<td>.14</td>
<td>.34</td>
<td>.33</td>
<td>.46</td>
<td>.46</td>
<td>.28</td>
<td>.45</td>
<td>.49</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>
The Measurement Model of the Dynamic Stigma Model of Mental Illness

Testing the Psychometric Properties of the Original Hypothesized Model

To test the hypothesized model, a confirmatory factor analysis (CFA) was performed on the first model that had five latent variables (RCB, SV, SPA, AD and SW) that contained 19 indicators in total, with subsequent model modification to assess a best fit. Covariances between the five latent variables ranged from -0.02–0.63, indicating that they were all separate and independent constructs.

The standardized factor loadings of the original model include: RCB by RBM1 (.732), RBM2 (.786), RBM3 (.824), RBM4 (.818), RBM5 (.825), RBM6 (.812), RBM8 (.617). SV by IEQ7 (.838), IEQ8 (.739), IEQ10 (.669). SPA by ISMI1 (.650), ISMI5 (.906), ISMI6 (.735). AD by QUAD10 (.684), QUAD11 (.759), QUAD12 (.685). SW by ISMI19 (.774), ISMI20 (.768), ISMI21 (.814), ISMI22 (.851), ISMI23 (.643). All standardized factor loadings were statistically significant (different from 0.00) at \( p = .000 \). Results of the original model include: \( \chi^2/df = 926.621 \) (220), \( p \leq .000; \) RMSEA = .099 (90% CI: .092 -.105; CFI = .838; SRMSR=.074; TLI = .814).

The fit indices of the original model show that none of the statistics for the model provided sufficient indices for a well-fit model, indicating that model fit was not achieved (see table 11 below). Therefore, a revision was made to improve and get a better fit.

Modifying the Hypothesized Model

To modify the model, the RBM8 indicator was removed from the RCB factor. Deleting led to significant improvement in fit indices, with the Chi-Square value dropping (from 926.621 to 810.917). Despite improvement in fit indices, the model fit was not satisfactory. A second modification was therefore conducted by correlating the residuals of IEQ8 with IEQ7. This
modification also reduced the $\chi^2$ value marginally and improved the CFI (from .838 to .858). A third model modification was performed by removing ISMI23 from the SW variable. The ensuing fit indices showed further improvement in model fitness (i.e., $\chi^2 = 692.421$, CFI = .868), yet warranted additional modification. A fourth modification was done by allowing the ISMI20 and ISMI19 residuals to correlate. This modification improved the indices further ($\chi^2 = 540.685$, CFI= .885). Despite achieving satisfactory SRMR of .064, there was the need for further modification to achieve an improved fit. A fifth modification was done by allowing the residuals of ISMI21 and ISMI20 to correlate, with a resultant CFI = .890.

**Final Fit Indices, Factor Structure and Standardized Parameter Estimates of the Measurement Model**

With a CFI = .90 (when rounded), one could argue that at this point the model fits the data. Despite this significant improvement in the model indices, a sixth modification was performed by correlating residuals of RBM5 with RBM6. The standardized factor loadings of the final measurement model were significant at $p \leq .000$, and ranged from moderate to high. These include: RCB by RBM3 (.87), RBM4 (.88), RBM5 (.75), and RBM6 (.73). SV by IEQ7 (.65), IEQ8 (.58), and IEQ10 (.81). SPA by ISMI1 (.65), ISMI5 (.91), and ISMI6 (.73). AD by QUAD10 (.68), QUAD11 (.77), and QUAD12 (.68). SW by ISMI19 (.73), ISMI20 (.67), ISMI21 (.82), and ISMI22 (.89). The final model had five latent variables with 17 indicators in total. Covariances between the latent variables ranged from .06 – .65, indicating that all five latent variables (i.e., RCB, SV, SPA, AD, and SW) were all separate and independent constructs.

While some standard factor covariances were significant (SV with RCB = .46, $p \leq .000$; SPA with RCB = .14, $p \leq .025$; SPA with SV = .61, $p \leq .000$; SW with SPA = .21, $p \leq .001$; AD with SV = .16, $p \leq .041$; AD with SPA = .37, $p \leq .000$; AD with SW = .65, $p \leq .000$), others such as
Dynamic Stigma Model of Mental Illness

(SW with RCB = .08, p ≤ .211; SW with SV = .11, p ≤ .111; AD with RCB = .06, p ≤ .397;) were not significant (See figure 6 below for details).

**Figure 6**

*Factor Structure of the Final DYSMO with Standardized Loadings*
The resulting final (sixth) model fit indices were as follows: \( \chi^2/df = 335.403 \) (105) \( p=.000; \) RMSEA=0.080 (90% CI: 0.072 - 0.092; CFI = 0.921; SRMSR=0.059; TLI = 0.897). At this point, all the fit indices had met the standard thresholds for a good model fit. Therefore, no further modifications were done (see Table 11 below for all modification details). The model fit indices of both the original and revised models of the DYSMO are also presented in Table 11 below.

**Table 11**

*Summary of the Model Fitness Indices of the Original Hypothesized Model and Modifications*

<table>
<thead>
<tr>
<th>Model</th>
<th>Summary of Modification</th>
<th>( \chi^2 \text{(df)} )</th>
<th>( \Delta \chi^2 )</th>
<th>RMSEA</th>
<th>CFI</th>
<th>SRMR</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original</td>
<td>N/A</td>
<td>926.621 (220)</td>
<td>-</td>
<td>0.099</td>
<td>0.838</td>
<td>0.074</td>
<td>0.814</td>
</tr>
<tr>
<td>Modification 1</td>
<td>Removed RBM8 from RCB</td>
<td>810.917 (199)</td>
<td>115.704</td>
<td>0.097</td>
<td>0.852</td>
<td>0.073</td>
<td>0.828</td>
</tr>
<tr>
<td>Modification 2</td>
<td>Correlated residuals of IEQ8 with IEQ7</td>
<td>785.819 (198)</td>
<td>25.098</td>
<td>0.095</td>
<td>0.858</td>
<td>0.070</td>
<td>0.834</td>
</tr>
<tr>
<td>Modification 3</td>
<td>Removed ISMI23 from SW</td>
<td>692.421 (178)</td>
<td>93.398</td>
<td>0.094</td>
<td>0.868</td>
<td>0.068</td>
<td>0.844</td>
</tr>
<tr>
<td>Modification 4</td>
<td>Correlated residuals of ISMI20 with ISMI19</td>
<td>540.685 (140)</td>
<td>151.736</td>
<td>0.093</td>
<td>0.885</td>
<td>0.064</td>
<td>0.859</td>
</tr>
<tr>
<td>Modification 5</td>
<td>Correlated residuals of ISMI21 with ISMI20</td>
<td>521.350 (139)</td>
<td>19.335</td>
<td>0.091</td>
<td>0.890</td>
<td>0.064</td>
<td>0.865</td>
</tr>
<tr>
<td>Modification 6</td>
<td>Correlated residuals of RBM5 with RBM6</td>
<td>335.403 (105)</td>
<td>185.947</td>
<td>0.080</td>
<td>0.921</td>
<td>0.059</td>
<td>0.897</td>
</tr>
</tbody>
</table>

**Note:** \( p \leq 0.05; \) \( \chi^2 \) values are based on Maximum likelihood in Mplus.
The Full Structural Regression Model and Mediation Analyses

The current study sought to test a model that examined the relationships between negative religiocultural beliefs (perceptions), structural violence perspectives, stigma perceptions appraisal, and related outcomes of anticipated discrimination and social withdrawal through a lens of underlining rejection concerns and expectancy, among people with mental illness in two public Mental Health Hospitals in Ghana.

Having established the psychometric properties and model fit for the measurement part of the DYSMO, a mediation analysis was performed to test hypothesized relationships of the latent constructs (i.e., between the predictors; RCB, SV and outcomes AD and SW through SPA) of the full structural model using the Maximum Likelihood default and bootstrap (10000) resampling technique to correct for possible bias and to calculate the confidence intervals of all coefficients, including mediated/indirect effects. Fit indices of the full model indicated that the data fits the model. The standardized values of the full model include the following: ($\chi^2$/df = 335.403 (105), $p \leq .000$; RMSEA = .08 (90% CI: .072 - .092; CFI = .921; SRMSR =.059; TLI = .897).

While some of the standardized regression coefficients of the DYSMO were significant, others were not. The significant coefficients include: (structural violence (SV) versus religiocultural beliefs (RCB) = .463, $p \leq .000$; stigma perception appraisal (SPA) versus SV = .698, $p \leq .000$; SPA versus RCB = -.185, $p \leq .042$; anticipated discrimination (AD) versus SPA = .448, $p \leq .000$; and social withdrawal (SW) versus AD = .661, $p \leq .000$). The following coefficients were however not significant: AD versus SV = -.147, p = -.147; AD versus RCB = .064, p = .494; SW versus SPA = -.047 p = .710; SW versus SV = .016, p = .904; SW versus RCB = .039, p = .619).

(See figures 7 and 8 for details).
Figure 7

The standardized Full Structural Model with all Regression Paths (significant and non-significant)

Figure 7 shows the standardized full structural model with all regression paths of the predictors (RCB, SV), mediator (SPA), and outcomes (AD), and (SW).
Analysis of the path from RCB to AD, and RCB to SW indicated that the total effects for the two paths were not significant at (.058, 95% CI= -.080 – .195, p= .411) and (.078, 95% CI= -.045 – .197, p= .205) respectively, as all the confidence intervals included 0.0 within the range of (-2.5% to 2.5% at the 95% CI). In another vein, analysis of the path from SV to AD, and SV to SW indicated nonsignificant total effects at (.166, 95% CI= -.058 – .346, p= .107), and (.093, 95% CI= -.099 – .267, p= .317) respectfully. Meanwhile, the total indirect effect from RCB to
AD, SV to AD, and SV to SW were significant at (.145, 95% CI= .050 – .293, p= .022), (.313, 95% CI= .130 – .559, p= .004), and (.207, 95% CI= .079 – .420, p= .019) respectively. The total indirect effects of RCB to AD, RCB to SW, and SV to SW were all not significant. Details of all the paths including the specific effects are presented in table 12 below).

### Table 12

**A Summary of the Mediation Analysis of the DYSMO**

<table>
<thead>
<tr>
<th>Model</th>
<th>Path analysis</th>
<th>$\chi^2$</th>
<th>df</th>
<th>Effect size</th>
<th>95% CI</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mediation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>RCB $\rightarrow$ AD</td>
<td>335.403</td>
<td>105</td>
<td>.058</td>
<td>.080</td>
<td>.195</td>
<td></td>
</tr>
<tr>
<td>Specific indirect</td>
<td>RCB $\rightarrow$ SV $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>-.068</td>
<td>.263</td>
<td>.069</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RCB $\rightarrow$ SPA $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>-.083</td>
<td>-.221</td>
<td>-.004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RCB $\rightarrow$ SV $\rightarrow$ SPA $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>.145*</td>
<td>.050</td>
<td>.293</td>
<td></td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td>RCB $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>.064</td>
<td>-.101</td>
<td>.267</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>SV $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>.166</td>
<td>-.058</td>
<td>.346</td>
<td></td>
</tr>
<tr>
<td>Specific indirect</td>
<td>SV $\rightarrow$ SPA $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>.313*</td>
<td>.130</td>
<td>.559</td>
<td></td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td>SV $\rightarrow$ AD</td>
<td></td>
<td></td>
<td>-.147</td>
<td>-.506</td>
<td>.165</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>RCB $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.078</td>
<td>-.045</td>
<td>.197</td>
<td></td>
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<tr>
<td>Specific indirect</td>
<td>RCB $\rightarrow$ SV $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.008</td>
<td>-.112</td>
<td>.148</td>
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<tr>
<td></td>
<td>RCB $\rightarrow$ SPS $\rightarrow$ SW</td>
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<td>.009</td>
<td>-.038</td>
<td>.082</td>
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<tr>
<td></td>
<td>RCB $\rightarrow$ AD $\rightarrow$ SW</td>
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<td></td>
<td>.042</td>
<td>-.066</td>
<td>.193</td>
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<tr>
<td></td>
<td>RCB $\rightarrow$ SV $\rightarrow$ SPA $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>-.015</td>
<td>-.118</td>
<td>.061</td>
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<tr>
<td></td>
<td>RCB $\rightarrow$ SV $\rightarrow$ AD $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>-.045</td>
<td>-.160</td>
<td>-.003</td>
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<tr>
<td></td>
<td>RCB $\rightarrow$ SPA $\rightarrow$ AD $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>-.055</td>
<td>.031</td>
<td>.216</td>
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<tr>
<td></td>
<td>RCB $\rightarrow$ SV $\rightarrow$ SPA $\rightarrow$ AD $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.096</td>
<td>.031</td>
<td>.216</td>
<td></td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td>RCB $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.039</td>
<td>-.123</td>
<td>.189</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>SV $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.093</td>
<td>-.099</td>
<td>.267</td>
<td></td>
</tr>
<tr>
<td>Specific indirect</td>
<td>SV $\rightarrow$ SPA $\rightarrow$ SW</td>
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<td></td>
<td>-.033</td>
<td>-.246</td>
<td>.123</td>
<td></td>
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<tr>
<td></td>
<td>SV $\rightarrow$ AD $\rightarrow$ SW</td>
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<td></td>
<td>-.097</td>
<td>-.377</td>
<td>.106</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SV $\rightarrow$ SPA $\rightarrow$ AD $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.207*</td>
<td>.079</td>
<td>.420</td>
<td></td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td>SV $\rightarrow$ SW</td>
<td></td>
<td></td>
<td>.016</td>
<td>-.231</td>
<td>.307</td>
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</table>

**NOTE:** * denotes significance at $p \leq .05$
Discussion

The current study sought to test a model that examined whether religiocultural beliefs (perceptions), structural violence perspectives, predicted stigma perceptions appraisal, and related outcomes of anticipated discrimination and social withdrawal among PWMI in two public Mental Health Hospitals in Ghana.

A final model with five latent variables and 17 indicators (was more parsimonious and fit the data better than the preceding models that were tested. All standardized coefficients of the final model were generally good, as all factor loadings were significant at p ≤ .05). While some standard factor covariances including (SV with RCB; SPA with RCB; SPA with SV; SW with SPA; AD with SV; AD with SPA; and AD with SW), were significant, others such as (SW with RCB; SW with SV; and AD with RCB) were not significant.

The relatively high loadings on the latent variables could be attributed to (1) The fact that items with low correlation coefficients were removed before conducting CFA. (2) Several modifications were done to achieve model fit. (3) The fact that most items were operationalized by rewording them to suit the cultural perspectives of the participants could have influenced responses and subsequent indicator loading problems on latent variables. (4) It is noteworthy also that some indicators had items that were negatively worded. Even though these items were reversed coded, it is possible that the negative wording influenced participant responses during data collection. Being the first model of its kind that sought to study whether religiocultural beliefs and structural violence perspectives predict stigma perceptions and appraisal, future research may consider replicating the study among different samples of outpatients with mental illness.
Even though, Hu and Bentler (1999) suggested a cut-off RMSEA value of < .05 for a good fit, Browne and Cudeck (1993), and Jöreskog and Sörbom (1993) argue that an RMSEA value up to .08 suggests an acceptable model–data fit. Again, most authorities have recommended that to obtain a reasonably well fit model, the CFI, and TLI must be ≥.90 to demonstrate reasonable fitness (Hooper et al., 2008; Maydeu-Olivares & García-Forero, 2010; Sun et al., 2012; Zhao et al., 2014). Based on these assertions, one can conclude that the DYSMO fits the data to acceptable levels as the standardized values of the full model include, RMSEA = .08 (90% CI: .072 -.092; CFI = .92; SRMSR=.059; TLI = .90).

Having achieved acceptable model fit for the measurement model, a full structural model analysis was performed in Mplus to test hypothesized relationships between religiocultural beliefs (RCB), structural violence (SV) stigma perceptions appraisal (SPA), and related outcomes of anticipated discrimination (AD), and social withdrawal (SW) among PWMI in Ghana. The study determined the following: whether (1) Religiocultural beliefs about PWMI have a significant relationship with societal structural violence against PWMI. (2) Religiocultural beliefs have a relationship with stigma perception appraisal of PWMI. (3) Structural violence is positively related to stigma perception appraisal of PWMI. (4) Stigma perception appraisal is positively related to anticipated discrimination and social withdrawal. (5) Religiocultural beliefs are positively related to anticipated discrimination among PWMI. (6) Structural violence is positively related to social withdrawal behaviour of PWMI, and (7) Anticipated discrimination positively influences the social withdrawal behaviour of PWMI in any way.

Standardized regression coefficients of the structural model were generally significant. These include: (structural violence (SV) versus religiocultural beliefs (RCB); stigma perception appraisal (SPA) versus SV; SPA versus RCB; anticipated discrimination (AD) versus SPA; and
social withdrawal (SW) versus AD). The following coefficients were however not significant: AD versus SV; AD versus RCB; SW versus SPA; SW versus SV; SW versus RCB).

Again, path analysis of the structural model from RCB to AD, and RCB to SW indicated that the total effects for the two paths were not significant, as all the confidence intervals included 0.0 within the range of (-2.5% to 2.5% at the 95% CI). In another vein, analysis of the path from SV to AD, and SV to SW indicated nonsignificant total effects. Meanwhile, the total indirect effect from RCB to AD, SV to AD, and SV to SW were significant while the total indirect effects of RCB to AD, RCB to SW, and SV to SW were all not significant. Out of the eight hypothesized relationships, only three (i.e., H4b: Stigma perception appraisal is positively related to social withdrawal behaviour among PWMI; H5: Religiocultural beliefs are positively related to anticipated discrimination among PWMI, and H6: Structural violence is positively related to social withdrawal behaviour of PWMI, were not significant.

Cultural and religious beliefs influence the way mental illness is appraised or recognized and even managed in society (American Psychiatric Association [APA], 2013). The APA believes that the cultural undertones present a framework for assessing information concerning cultural attributes of an individual’s mental illness and how it relates to the social, cultural, and historical context of a people.

In Ghana, the sociopolitical, educational, legal, and health systems are influenced by traditional, religious, and cultural practices. These factors intersect to impact individuals’ development and belief systems throughout life. No wonder the understanding and interpretations attached to mental illness vary from culture to culture. It should be noted therefore that how one interprets their culture might also influence their appraisal and response to stigma cues. While admitting that some positive religiocultural beliefs such as praying for the
sick person, giving them support among others tend to lessen the obvious presence of stigma and subsequently reducing the stigma perceptions and appraisal among PWMI, the fact remains that existing religiocultural factors (positive or negative) influence and strengthens structural violence against individuals with mental illness. It is also worth noting that once PWMI normalize their societal religious and cultural belief systems (Vygotsky, 1934), they no more feel directly affected by these belief systems (negative or positive), and therefore may be unlikely to perceive and appropriately appraise the obvious impact of religiocultural beliefs on their stigma perceptions. No wonder that among our Ghanaian participants, religiocultural beliefs were negatively associated with the stigma stress perceptions and appraisal of PWMI. This finding though significant, considering the role cultural and religious contexts play in the treatment of mental health problems in Ghana, and the fact that there is no known study concerning religiocultural beliefs and stigma perception appraisal among PWMI, there would be the need for further research in this area in future studies.

Some contemporary research including (Gyamfi et al., 2018; Tawiah et al., 2015; Mjøsund et al., 2015) have cited spiritual, supernatural, and cultural (traditional) beliefs as key contributors to perceived origins and treatment protocols of mental illness in certain jurisdictions. Despite strong attributions of supernatural and traditional bases of mental illness, researchers have also alluded to the role of biopsychosocial causal domains of mental illness (Gyamfi 2016; Lin, 2012; Quinn & Knifton, 2014; Shrivastava et al., 2011; Tawiah et al., 2015). In Ghana, the mix of beliefs about mental illness also exist (Tawiah et al., 2015; Gyamfi et al., 2018). All of which could impact stigma stress perception appraisal.

In the current study, Hypotheses (H1: Religiocultural beliefs about PWMI have a significant relationship with societal structural violence against PWMI, H2: Religiocultural
beliefs have a relationship with stigma perception appraisal of PWMI and H3: Structural
to stigma perception appraisal of PWMI were all supported.

In the study, RCB marginally and negatively correlated with SPA. Several factors could have accounted for this outcome among the participants. (1) Some people see mental illness as a blessing and spiritual connection with God (Choudhry & Bokharey, 2013; Mjøsund et al., 2015). (2) Increased knowledge and acceptance of Biopsychosocial etiology/contemporary Biomedical and genetic treatment courses. (3) Individual cultural and religious differences appear to influence how PWMI experience, perceive or appraise stigma stress. Proponents of the identity threat models of stigma (Major & O’Brien, 2005; Rüsch et al., 2009a; 2009b) have posited that perceived public discriminatory attitudes and personal factors influence the extent to which PWMI perceive and appraise stigma as stressful, regardless of existing diagnosis or symptoms. The extant literature has also corroborated and established that no two stigmatized persons experience, perceive or appraise stigma the same way due to existing individual and cultural differences (Bracke et al., 2019; Gopalkrishnan, 2018; Mannarini, & Rossi, 2018;). (4) Available personal resources. Persons who believe they have enough resources to deal with the challenges of life may likely cope better and effectively deal with any forms of discrimination that come their way. However, the lack of certain resources including social networks; family and close friends, the knowledge, health, energy, and financial resources or a threat to self-esteem and wellbeing may potentiate perceived stigma stress appraisal in the individual (Lazarus & Folkman, 1984; Major & O’Brien, 2005). (5) Some PWMI believe and uphold the traditional/religious oriented therapeutic procedures that include praying and fasting (Breland-Noble et al., 2015; Choudhry et al., 2016; Stanford, 2007), spiritual exorcism and deliverance from ‘witchcraft’ and ‘evil spirits’ (Hailemariam, 2015; Liu et al., 2015; Nolan et al., 2011) and
the administration of herbal concoction to PWMI (Choudhry et al., 2016) as a form of spiritual/social support (Wesselmann et al., 2015) and coping for the individual (Chronister et al., 2015; Wesselmann et al., 2015). Persons who hold their belief systems dear, may normalize these practices and therefore are more likely to be less affected in a negative way. Pastwa-Wojciechowska et al. (2021) have asserted that religious and spiritual issues can both promote and damage perceptions about mental health. This has implications for our findings. Christians often incorporate spiritual and theological concepts into their understanding and meaning-making of mental illness (Lehmann et al., 2021; Pastwa-Wojciechowska et al., 2021).

In their recent study, Lehmann et al. (2021) investigated cultural and theological appropriate pathways towards hospitality in the church in terms of potential resources (such as beliefs, perspectives, practices) within churches as well as the facilitators or barriers towards PWMI. They observed that their Christian participants recognized the PWMI in their church and acted lovingly towards the sick members by showing compassion, accepting them, and including them in church activities. The fact that the church members showed respect and were also nonjudgmental towards the PWMI in the church made them feel a strong sense of belonging in the social setting. In the end, Lehmann and colleagues asserted that the joy associated with the hospitality in some Christian organizations in relation to the support the church gives to members who are sick from mental health problems play a key role in helping them to normalize the negative perceptions about their illness and to cope with the stigma associated with ‘being sick from mental health problems’.

Notwithstanding the marginal and inverse direct effect of RCB on SPA, it is apparent that RCB indirectly influence SPA through the mediation effect of SV (which is the aggregation of social injustices and the harms that society inflict on PWMI).
Our findings also revealed that SPA positively relates to anticipation of discrimination among PWMI. That said, it also came up that there is no direct relationship between SW and SPA per our hypothesis (stigma perception appraisal is positively related to social withdrawal behaviour among PWMI). It however became apparent that AD mediates the effect of SPA on SW as an outcome. This was proven by a significant specific indirect effect from SV to SW. Even though a prediction of positive direct relationship between SV and AD was not supported, the fact that the indirect effect of SV to AD was significant indicates that the concept of structural violence remotely relates with anticipation of discrimination through the mediation effect of stigma perception appraisal. In other words, heightened levels of stigma stress perception leads to increased anxiety and sensitivity to discrimination behaviours from the public.

Structural violence constitutes a psychological form of violence that is associated with indirect acts from society that constraint and undermine the human rights of certain groups of persons that the society regard as different. Structural violence constitutes an injustice within social arrangements that systematically brings subordinate and disadvantaged groups of persons into maltreatment, and further placing them in danger for various forms of suffering (Benson, 2008). It must be noted that there is no identifiable perpetrator in structural violence unlike physical violence, making it difficult to tackle as the source is not readily known. There is no human face seen trying to directly cause harm, and that the violence perpetrated is incorporated in existing social structures; a source of ‘unequal power’ that gives rise to inequities such as found in resource allocation against PWMI and mental health care institutions in Ghana and elsewhere (Leatherman & Goodman, 2011).

Structural violence is characterized by inequality and perceived discriminatory attitudes from society. Perceived discrimination is often associated with stress and anxiety (Cuevas, et al.,
Stigma stress perception appraisal results from sustained anxiety and self-stigma that leads to continued anticipation of discrimination (Hansson et al., 2014) and subsequently to negative outcomes of social withdrawal which in a way acts as both a reaction to negative societal attitudes and as a coping mechanism to reducing further stigmatization (Corrigan, & Rao, 2012; Holubova et al., 2016; Tam, 2019). As posited by the stress and coping model (Lazarus & Folkman, 1984), once an individual perceives that their coping resources are unable to stand against the potential harms caused by public stigmatizing attitudes and behaviours (stigma stress appraisal), they may experience negative outcomes that worsens their symptoms and ultimately affect their self-esteem, education, job search, starting or keeping close relationships and overall wellbeing. Therefore, enacting policies that have the potential of reducing exposure to societal discrimination could reduce stigma and its sequels for improved social integration and mental health at the communal and individual levels.

Implications of the Study

The study found that structural violence empowers existing social influences (including religiocultural belief systems) against stigmatized persons in legitimizing and justifying inequalities in the social order. This finding is significant for social and advocacy policy development for lessening social stigma especially among religion and culture-oriented societies. Culture possesses a great influence on public perceptions about mental illness and associated stigma among members of the society (Choudhry et al., 2016; Mannarini et al., 2018). Cultural influences that legitimize social inequity constitute cultural violence (Galtung, 1990). Cultural violence toward PWMI may probably be due to deeply entrenched historical and religious antecedents inherited from the dark ages; the demonological era where mental illness was believed to be caused by evil spirits. To this end ‘cultural intervention’; an equally opposing
strategy aimed at questioning and taking steps in dealing with stigma and associated inequalities should be implemented.

Caregivers including patient family ought to be aware of existing negative cultural practices and how they likely impact the therapeutic pathway of their clients so that they could put appropriate remedial measures in place. Having realized that religious and spiritual issues can promote and damage perceptions about mental health, it is imperative that mental health practitioners gain increased awareness and knowledge of the role religious and cultural beliefs play in the treatment and recovery process of PWMI. Authorities have observed that the faith of the individual, and their involvement in religious practices are a source of hope and strength in fighting against the illness, giving meaning to the illness and, ultimately, leading to better outcomes of treatment (Dyga & Stupak, 2018; Lehmann et al., 2021).

Effective measures may safeguard the therapeutic process for utmost outcomes towards patient recovery and stigma reduction in the society; a perspective from which social responsibility, global advocacy and action towards stigma mechanisms should be assessed and addressed. Structural violence is a product of both social and institutional stigma that fuel marginalizing policies of both private and governmental institutions that intentionally restrict and hinders the opportunities of people with mental illness (Corrigan et al., 2004). The outcome of such societal restrictions is the bedrock upon which perceived self and public stigma appraisal thrive among PWMI.

According to Corrigan, “The stigma of mental illness is first, foremost, and only an issue of social injustice. As such, it needs to be understood in the same light as the other forms of prejudice and discrimination that have hounded the modern world: racism, sexism, and ageism, to name a few. As a social injustice, mental illness stigma is largely the responsibility of the
societies that created it. Hence, it is up to the people and institutions that populate these societies to recognize the harm caused by stigma and embrace their duty to erase it” (Corrigan, 2005, p.315). Though largely invisible, the consequence of structural violence embodies long standing social inequality and psychological pain otherwise known as social suffering.

The fact that structural violence positively relates to religiocultural beliefs and stigma perception appraisal is refreshing and significant contribution to the literature, even though its direct relationship with anticipated discrimination and social withdrawal was not significant. It must be noted however that this is a novel study, and the fact that the data fitted the model, is an achievement that could prepare the ground for future longitudinal studies using multiple sites to test the DYSMO. That said, the concept of structural violence and its relationship with religiocultural beliefs and stigma perception appraisal among persons with mental illness as established by this current study should be of concern to all.

Limitations of the Study

Even though cross-sectional studies are useful for planning, monitoring, and evaluation of issues of public health importance, because the researcher recruited available Out-patients using convenience sampling techniques, it is likely these participants possessed characteristics that were inherently different from the entire population of Out-patients. This could affect the generalizability of the research findings across all Out-patients diagnosed with a mental illness. Also, the results may probably have differed if the sample included a combination of young people (below 18 years) and adults, as well as with equal distribution of sex among the participants. The fact that some of the instruments in this study were adapted to suit the cultural context of the study population has the potential of undermining the validity and reliability of the study findings. Another limitation of this study was because data was collected with self-
reporting measures. It is known that employing self-reported measures to collect data related to sensitive topics such as stigma has the possibility of producing biased responses, thereby impacting findings. Even though most of the hypotheses were supported, it must be noted however that this study was an exploratory work that would require further investigation from multiple settings and in different populations of persons with mental illness to validate the DYSMO in future.

Conclusion

This study examined predictors of stigma perception appraisal in relation to religiocultural beliefs and perceived structural violence perspectives. Findings from this study will contribute to global evidence on stigma and how people perceive and appraise it vis-à-vis existing public attitudes and behaviours.

The model fit indices of the study suggest an acceptable model that fits the data. The study findings will also prepare the grounds for ongoing capacity building through community and institutional engagement. The findings would also help to inform and create unique advocacy platforms to begin questioning the status quo, while finding innovative ways of addressing cultural and religious specific stigma-related behaviours in the community. Again, documenting the findings from the study will help to fill gaps whiles enriching mental health literature in Ghana and to make knowledge available. Making such novel ideas available will form the foundation of substantive evidence for future health debates and reference, healthcare policy review and the conduct of further longitudinal and interventional studies in stigma research to help reduce the ongoing social harms that PWMI face on daily basis.
References


https://doi.org/10.1371/journal.pone.0188433


https://doi.org/10.1007/s11089-021-00982-1


https://doi.org/10.29245/2578-2959/2021/2.1235


http://dx.doi.org/10.1016/j.schres.2015.05.027


https://doi.org/10.1016/j.schres.2009.01.005

https://doi.org/10.1016/j.schres.2009.01.006


https://doi.org/10.1037/prj0000131.


https://doi.org/10.1521/jscp.2010.29.4.402


https://www.who.int/mental_health/in_the_workplace/en/


CHAPTER SIX

Summary of Results, Implications, and Conclusion

Summary of Results

The results of this thesis have been presented in four independent papers. These include a scoping review, a theoretical paper, and two primary research articles.

The review used a five-step scoping review framework by Arksey and O’Malley (2005) to examine evidence in the literature that suggests a relationship between perceptions, religious and cultural beliefs, and structural violence in perpetuating stigma against persons with a mental illness. Thematic content analysis of 28 included studies from six databases resulted in five main themes. The review themes include perceptions about mental illness, perceptions about stigma and discrimination, forms of stigma perception, dealing with stigma and discrimination, and impact of mental illness stigma on individuals. However, no empirical literature was found in relation to structural violence perspectives towards individuals with a mental illness.

The second paper (i.e., chapter three) comprises discussion of the conceptualization and development of a model of stigma named ‘Dynamic Stigma Model (DYSMO) of mental illness that explores attitudes and behaviors that culminate into societal stigma processes that lead to negative outcomes for individuals. Having established the theoretical underpinnings of the DYSMO, the paper further establish stigma as a form of social injustice, and outlines how religious, and cultural beliefs, as well as structural violence perspectives enable stigma perception and appraisal within marginalized groups and contributing to the harm and sometimes death that persons with mental illness face within the social space.
In the third paper (i.e., chapter four), the section presents findings from a cross-sectional study that used multiple linear regression analysis to examine the extent to which internalized stigma, anticipated discrimination, and structural violence influence rejection sensitivity of persons with mental illness. Hierarchical multiple linear regression results demonstrate age and sex of persons with a mental health problem have no influence on their rejection sensitivity. The findings again indicate a non-significant relationship between anticipated discrimination and rejection sensitivity ($\beta = .015, p = .775, 95\%, CI: -.789 - 1.057$). However, the relationships between internalized stigma and rejection sensitivity at ($\beta = .148, p = .029, 95\%, CI: .119 - 2.146$), as well as structural violence ($\beta = .165, p = .015, 95\%, CI: .014 - .134$) were significant. Thus, the study findings imply support for the hypothesis that structural violence influences rejection sensitivity through negative public attitudes and leading to a cycle of responses from the stigmatized individual.

The fourth paper (i.e., chapter five) reports on hypothesized relationships within a dynamic stigma model that examined predictors of patient stigma perception appraisal in an outpatient cohort who were diagnosed with mental illness in Ghana. Confirmatory factor analysis produced a final model with five latent variables and 17 indicators. All standardized coefficients of the final model were good, as all factor loadings were significant at $p \leq .05$). Mediation analysis on the full structural model produce standardized fit indices that include the following: ($\chi^2/df = 335.403 (105), p \leq .000$; RMSEA= .08 (90% CI: .072 -.092; CFI = .921; SRMSR=.059; TLI = .90). While some of the standardized regression coefficients of the DYSMO were significant, others were not. The significant regression coefficients of the DYSMO include: (SV ON RCB = .463, $p \leq .000$; SPA ON SV= .698, $p \leq .000$; SPA ON RCB= -.185, $p \leq .042$; AD ON SPA= .448, $p \leq .000$; and SW ON AD = .661, $p \leq .000$). The following coefficients were however
Implications of the Study

Unfair treatment within the social space causes harm and sometimes death for individuals with a mental illness (Mfoafo-M’Carthy, & Huls, 2014; Shrivastava et al., 2012; WHO, 2014). Predictors and outcomes of perceived stigma have serious implications for the recovery and wellbeing of persons with mental health problems. This section therefore discusses the implications of such unfair social treatments in relation to (1) Professional knowledge development and practice, (2) Education and policy, and (3) Research and policy.

Implications for Professional Knowledge Development and Practice

The implication of structural violence for mental illness stigma and discrimination is that it empowers existing cultural influences in legitimizing and justifying social inequalities and other disparities present in the social order. According to Galtung (1990) the cultural influences that legitimize social inequity constitute cultural violence. We know that culture possess great influence on public perceptions toward mental illness and associated stigma among members of the society. Cultural violence may become possible due to deeply entrenched historical and religious antecedents inherited from the dark ages; the demonological era where mental illness was believed to be caused by evil spirits. To this end ‘cultural intervention’ (cultural literacy); an equally opposing strategy aimed at questioning and taking steps in dealing with stigma and associated inequalities should be deemed necessary and imminent. Caregivers including patient family and health professionals ought to be aware of existing negative cultural practices and how they likely impact the therapeutic pathway so that appropriate remedial measures are put in place to safeguard the therapeutic process for utmost outcomes towards patient recovery and stigma.
reduction; a perspective from which social responsibility, global advocacy and action towards individuals should be assessed and addressed. Certain individuals may still hold trust for the informal care centers such as the prayer camps, and shrines. To help these individuals to navigate their care in confidence, it is suggested that health care providers collaborate with traditional and faith-based healers including churches and other religious groups in this regard. This way health professionals could team up, train, and educate these informal caregivers to offer humane treatment to persons who access care from these jurisdictions.

Not only does public stigma affect clients with mental illness, but also affects their family and health professionals with far reaching consequences. For instance, health professionals with mental illness may fail to disclose their problem or seek help due to fear of ostracization and judgement from fellow health professionals, leading to negative consequences such as suicide (Knaak, 2017). A well-informed health professional will likely make well informed decisions in patient care, that enhances therapeutic processes in both community and health settings that empowers people with mental health problems from an emancipatory perspective. It is expected that other health professionals will reflect on this write up and scrutinize their own acts that (actively or passively) contribute to perpetuating stigma against their clients.

Chin and Kramer's (2008) emancipatory knowing perspective has positive implications for current research, knowledge translation and effective integration of such knowledge into practice for marginalized persons seeking care. Health care should involve an ontological inquiry laden with actions that appreciate the situational context of the individual patient in relation to theory, evidence, and practice. The significance of the interconnection between theory, evidence and practice lies in the difference it makes in the everyday actions in which health professionals engage as they seek to promote health and healing for their clients. This way health care would
fit the demands of clients, empower those who patronize the services in the health settings by maximizing care outcomes.

The interconnection between theory, evidence, and practice vis-à-vis epistemology and ontology of healthcare are inseparable; and should influence every action especially when caring for persons with mental health problems. The relevance of the concepts of culture/social context, personal meaning, social justice, and collaborative relational practice in mental healthcare cannot be overemphasized. Power relations between professionals and those with illness is a problem in practice, ‘fracturing’ therapeutic relationships and derailing care outcomes. A more collaborative model of care, where both patients and clinicians regard each as knowledgeable with shared power that is aimed at achieving health outcomes empowers the patient even more in areas that they fall short. Patients should be encouraged to be active participants in their own care. They are experts with invaluable knowledge that if harnessed will contribute to positive health outcomes and help give them a ‘voice’ in society.

According to the tenets of the Patient-Centered Culturally Sensitive Health Care model (PC-CSHC), healthcare should be driven by the patient’s culture (Tucker et al., 2007). Culturally sensitive care constitutes the awareness of one’s belief systems, biases, values, and cultural practices while given care that is adaptive, individualized and meets the social, cultural and religious needs of the receiver. According to Tucker and colleagues, cultural-driven care helps deal with disparities and cultural breeches of the patient. It is worth recognizing that health care in general has always been driven by both patient and caregiver culture to a large extent. Health providers however need to do more by initiating culturally informed care protocols as part of the initial phase of the therapeutic relationship. Arguing from an emancipatory point of view, health professionals are expected to rise above culture, especially to question cultural practices that are
marginalizing and stigmatizing. These negative social-constructed boundaries ought to be blurred and eschewed especially when dealing with marginalized individuals.

The centrality of health care affords professionals the opportunity to lead a subtle yet focus transformational agenda that alters the course of existing socio-politically oppressive systems against persons with mental illness. It is amid this critical questioning that new individualized care strategies could be formulated to address patients' needs in a contextualized needs-specific care environment. This may only be possible and effective if health professionals acquire the appropriate knowledge, attitudes, and skills that support and influence healthy practices between them, the public and those with mental health problems.

**Implications for Education and Policy**

Schools of nursing and medicine should as a matter of urgency develop curricula that have stigma as a central theme. Stigma is a very broad area of study with multi-dimensional concepts that affect a wider spectrum of illnesses including mental health problems. Therefore, imbibing in students the required knowledge concerning existing social inequities alongside other anti-stigma initiatives will not only enhance the care provider-patient interaction and care outcomes, but will also act as a precursor for advocating for, and empowering the stigmatized persons and their close relations in the public domain. Both health professionals and the rest of society need a clear understanding of what structural violence entails. Therefore, school curricula that focus on critical theory should be encouraged alongside collaborations with other sectors such as the judicial system, the police, traditional and religious systems, and Non-Governmental Organizations (NGOs). This will enable effective public education machinery that will ultimately ensure equity and emancipation for stigmatized persons with mental health problems; and to urge them to stand up to be heard and get supported by policy makers in their communities.
Again, Clinicians ought to deal with their own prejudices towards people with mental illness; this way the care provider could deal with negative attitudes and other aspects of the self in action. Negative preconceptions are likely to engender negative clinical outcomes. Educators therefore need to cultivate skills that could help students identify their possible biases whiles in training so that they could deal with such prejudices before entering clinical care and community settings. Such skills will not only assist in identifying biases, but also help students to know what to say and what to do during caregiver-patient-public interactions.

Mental health literacy lessons and other health promotional activities such as transformational educational activities, routine health talks and volunteer programs will expose students and other young children early in their studies in relation to issues of mental health concerns whiles promoting social contact with individuals with mental illness. Such framework of social contact could be helpful in fighting stigma starting from the schools and transcending into the public domain to effect a supportive ecological change amongst the people. Social contact affords caregivers and the public the opportunity to interact with persons diagnosed with mental illness where these people may act as resource persons or educators with first-voice testimonies of their lived experiences and recovery pathway within the healthcare system and society. The social contact approach also acts as a key strategy for improving interprofessional educational methods towards public stigma reduction (Knaak et al., 2016; Maranzan, 2016). It is again envisaged that conducting regular action-oriented anti-stigma workshops for key stakeholders such individuals in the health professionals, legal systems, governmental and non-governmental organizations have the potential to enhance their knowledge base and to improve their skill set for optimum patient care or social policy formulation. This knowledge in action
will engender behavior change and help eschew attitudes that epitomize marginalization during social interactions and caregiver-patient therapeutic processes.

**Implications for Research and Policy**

Current research, knowledge translation, and integration of such knowledge into practice should involve ontological inquiry, with actions that appreciate the situational context of the individual in tune with theory, evidence, and practice. A clear interconnection between theory, evidence, and practice has the potential of making a difference in everyday actions that health care professionals engage in.

Based on the study findings, we propose that health research could be conceived as a political endeavor that is undertaken in a power relational context aimed at informing and transforming the way of thinking and acting of patients, health professionals, policy makers and the public. Social oppressions are tenable in the eyes of the public; they are created by unequal power relations with political undertones embedded in language and social discourses. Therefore, research should aim at reversing possible negative public language (labelling) and other negative social contexts that perpetrate unequal access to health and other social opportunities such as housing, education, and employment.

Research that can evaluate and question existing social structures vis-à-vis patient, public and health professional contexts is likely to unearth the socio-political forces in society that continue to support the inequities experienced by persons with mental illness. It is often admissible to blame political and administrative decision-making bodies for the marginalization of individuals with mental illness. But what is not certain is the contribution of the public, the person’s family, health professionals, and the individuals themselves in the stigma discourse. Therefore, research that can clearly delineate between these contexts (public, family, health
professionals, and individuals experiencing mental illness) will contribute immensely, not only to minimizing stigma but also effective care and outcomes in both community and health care settings. Identifying the health and other socio-political forces that shape mental illness stigma and equitable health distribution will act as a precursor for deeper self-reflection on the part of caregivers whiles enhancing evidence-informed actions towards emancipation for stigma reduction.

This is the first study that examined and successfully mapped and tested the concepts of ‘structural violence’, ‘religiocultural beliefs’, ‘mental illness stigma appraisal’, ‘anticipated discrimination’ and ‘social withdrawal’ in a dynamic stigma model using structural equation modelling techniques. In addition, we successfully mapped and examined relationships between the concepts of ‘structural violence’, ‘internalized stigma’, and rejection sensitivity using multiple linear regression analysis. These areas have not been explored from a mental health/mental illness perspective. With these exploratory studies, not only have we contributed to filling gaps in the stigma discipline, but we have also widened the scope and raised new questions for future studies to investigate. Therefore, research that considers these concepts in relation to the perpetuation of mental illness stigma is likely to impact more positively on anti-stigma strategies towards mental health problems. In all, good communication between researchers, and policy makers should be encouraged; a partnership that can open new doors for researchers and governmental policy making departments to recognize and support mental health research as well as knowledge uptake and translation at the societal, institutional, and national levels. This way, we can change the status quo.
Conclusion

We recognize that the historical, social, and institutional embeddedness of mental illness stigma could make it difficult for society and other social institutions to ensure equity for all within the social space of unequal power. The concepts ‘mental illness stigma’ and ‘structural violence’ have been explored in this PhD thesis, in part due to the widening health inequalities and inequities towards mental health /mental illness around the world. To ensure equity for the marginalized, private, public/governmental partnerships with health professionals would be key. The centrality of health care professionals in service provision places a lot more responsibility on these caregivers in ensuring social justice for individuals with mental health problems.

In recent times, health professionals and other health scholars have developed research methods stemming from the critical paradigm (i.e., intersectionality, feminist, postcolonial theories, among others). Despite the numerous attempts all aimed at representing and giving ‘voice’ to the marginalized in society, persons with mental illness continue to face stigma and discrimination due to longstanding structural injustices. According to Cuthill (2016), in seeking to explore structural violence, three challenges may be encountered. These may include (1) lack of a robust political theory, (2) institutional/ professional constraints and (3) an absence of skills to engage with the politics of social (in)justice. Health professionals and other social advocates are therefore encouraged to develop practical political skills of engagement with both institutional and societal structures that perpetuate public stigma in relation to mental illness. Awareness about the extent to which stigma affects individuals with mental illness could assist in sensitizing all stakeholders into strategic planning activities that have the potential to enhance the wellbeing of those who are marginalized, whiles empowering and allowing their voices to be
heard. This way, we could enhance the self-esteem of the individuals and support them to stand up and confront the stigmatizing attitudes in society.
References


https://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809_eng.pdf
APPENDICES

Appendix A

Participant Demographic Data

1. Sex: 1 – Male  
   2 – Female

2. Age (years)  
   1 – (18-29)  
   2 – (30-45)  
   3 – (46-55)  
   4 – (56-65)

3. Marital Status  
   1 – Single  
   2 – Married  
   3 – Divorced  
   4 – Separated  
   5 – Widow

4. Do you have children?  
   1 – Yes  
   2 – No

5. Living situation  
   1 – Alone  
   2 – With partner  
   3 – Family  
   4 – Friends

6. Employment status  
   1 – Employed  
   2 – Unemployed  
   3 – Student  
   4 – Retirement

If employed…, Are you employed in…
1 – Government services
2 – Private employment
3 – Self-employed

7. Educational background
   1 – Primary
   2 – Junior High School (JHS)
   3 – Technical/Vocational/Senior High School (SHS)
   4 – Tertiary
   5 – Others (Please specify): ...........................................

8. Religion
   1 – Christian
   2 – Islam
   3 – Traditional
   4 – Others (Please specify): ...........................................

9. Diagnosis

   Do you know your condition?
   1 – Yes
   2 – No

   IF YES… what is your diagnosis?...........................................

   How far do you agree with your diagnosis?
   1 – Agree
   2 – Disagree
   3 – Not sure

   Duration of treatment (in years)
   1 – less than one year
   2 – 1- 4 years
   3 – 4 - 8 years
   4 – 8 -12 years
   5 – 12 and above
Appendix B

Instruments

Religious Beliefs about Mental illness scale (RBM)

<table>
<thead>
<tr>
<th>Morality/Sin</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Moral weakness is the main cause of mental illness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. People suffering from mental illnesses are not going to their places of worship enough.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Mental illnesses result from an immoral or sinful lifestyle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. People suffer from mental illnesses because they are not sorry for their sins.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. A person suffering from a mental illness is not relying on their faith or religious values like they should.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. A person suffering from a mental illness is not praying enough.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. People have mental illnesses because someone else sinned against them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Mental illnesses are a result of Original Sin.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. A person’s relationship with God has nothing to do with their suffering from a mental illness.*</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Spiritually-oriented causes and Treatments: public beliefs that demonic or evil spirits are responsible for occurrences of mental illness.

<table>
<thead>
<tr>
<th>Morality/Sin</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Demons are NOT responsible for causing the symptoms of mental illness.*</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Compared to a religious leader, a counsellor/therapist would be much better at helping someone with a mental illness.*</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Persons suffering from mental illness are being tormented by the Devil.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Mental illnesses should be healed by having people pray for the afflicted person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Prayer is NOT the only way to fix a mental illness.*</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. God’s healing is all a person suffering from a mental illness needs—nothing else should be relied on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. It is superstitious to believe a person suffering from mental illness is possessed by demons*</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Injustice Experiences Questionnaire (IEQ)

<table>
<thead>
<tr>
<th>Items</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Severity/Irreparability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Most people don’t understand how severe my condition is.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. My life will never be the same.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. No one should have to live this way.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I just want to have my life back.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I feel that this has affected me in a permanent way.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I worry that my condition is not being taken seriously.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Blame/Unfairness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I am suffering because of someone else’s negligence.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. It all seems so unfair.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Nothing will ever make up for all that I have gone through.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I feel as if I have been robbed of something very precious.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I am troubled by fears that I may never achieve my dreams.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I can’t believe this has happened to me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Overall Total score =**
## Internalized Stigma of Mental Illness Inventory (ISMI)

### Alienation: talks about your experiences of feeling different from other members of society due to your mental illness

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel out of place in the world because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I am embarrassed or ashamed that I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I feel inferior to others who don’t have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I am disappointed in myself for having a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Having a mental illness has spoiled my life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. People without mental illness could not possibly understand me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Stereotype Endorsement: This is about the degree to which one believes that stereotypes (negative descriptions or labels) about people with mental illness are true or apply to you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Mentally ill people tend to be violent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Mentally ill people shouldn’t get married</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. People with mental illness cannot live a good, rewarding life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. People can tell that I have a mental illness by the way I look</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Because I have a mental illness, I need others to make most decisions for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I can’t contribute anything to society because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Stereotypes about the mentally ill apply to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Discrimination Experience: Refers to the extent to which a person with mental illness feels he or she is treated differently from other members of society

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Agree (3)</th>
<th>Strongly agree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. People discriminate against me because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. People often patronize me, or treat me like a child, just because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. People ignore me or take me less seriously just because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. Nobody would be interested in getting close to me because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. Others think that I can’t achieve much in life because I have a mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Social Withdrawal: This refers to the situation where a person avoids social or public interactions as a response to actual or expected negative behaviour of the public.
<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.</td>
<td>I avoid getting close to people who don’t have a mental illness to avoid rejection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>I don’t socialize as much as I used to because my mental illness might make me look or behave “weird”</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21.</td>
<td>I don’t talk about myself much because I don’t want to burden others with my mental illness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22.</td>
<td>Negative stereotypes about mental illness keep me isolated from the “normal” world</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23.</td>
<td>Being around people who don’t have a mental illness makes me feel out of place or inadequate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24.</td>
<td>I stay away from social situations in order to protect my family or friends from embarrassment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### Questionnaire on Anticipated Discrimination (QUAD)

<table>
<thead>
<tr>
<th>Institutions/Services (IS)</th>
<th>Strongly disagree (0)</th>
<th>Disagree (1)</th>
<th>Agree (2)</th>
<th>Strongly agree (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If benefit officials know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. If physical health staff (e.g., GP, Nurse, Dentist) know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. If teachers, lecturers or tutors know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. If religious officials or the community (e.g., at church, mosque, or temple) know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. If housing officials or landlords know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. If transport drivers and officials (e.g., bus driver, ticket inspector, taxi driver) know about my mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. If the police know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. If employers know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total for Institutions/Services (IS) =**

### Interpersonal/Professional Relationships (IPR)

<table>
<thead>
<tr>
<th>Interpersonal/Professional Relationships (IPR)</th>
<th>Strongly disagree (0)</th>
<th>Disagree (1)</th>
<th>Agree (2)</th>
<th>Strongly agree (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. If a person I want to date or marry knows I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. If people in my neighbourhood know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. If children and teenagers in the community know about my mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. If work colleagues know I have a mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. If friends know about my mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. If my family knows about my mental health problem they will treat me unfairly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total for Interpersonal/Professional Relationships (IPR) =**

**Overall total for QUAD =**
## Rejection Sensitivity RS-Adult Questionnaire (A-RSQ)

<table>
<thead>
<tr>
<th><strong>a. Rejection concern/anxiety</strong></th>
<th><strong>very unconcerned</strong></th>
<th><strong>Unconcerned</strong></th>
<th><strong>Slightly unconcerned</strong></th>
<th><strong>Slightly concerned</strong></th>
<th><strong>Concerned</strong></th>
<th><strong>Very concerned</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. You ask your parents or another family member for a loan to help you through a difficult financial time.</td>
<td>How concerned or anxious would you be over whether or not your family would want to help you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2a. You approach a close friend to talk after doing or saying something that seriously upset him/her.</td>
<td>How concerned or anxious would you be over whether or not your friend would want to talk with you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3a. You bring up the issue of sexual protection with your significant other and tell him/her how important you think it is.</td>
<td>How concerned or anxious would you be over his/her reaction?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4a. You ask your supervisor for help with a problem you have been having at work.</td>
<td>How concerned or anxious would you be over whether or not the person would want to help you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5a. After a bitter argument, you call or approach your significant other because you want to make up.</td>
<td>How concerned or anxious would you be over whether or not your significant other would want to make up with you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6a. You ask your parents or other family members to come to an occasion important to you.</td>
<td>How concerned or anxious would you be over whether or not they would want to come?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7a. At a party, you notice someone on the other side of the room that you'd like to get to know, and you approach him/her to try to start a conversation.</td>
<td>How concerned or anxious would you be over whether or not the person would want to talk with you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8a. Lately you've been noticing some distance between yourself and your significant other, and you ask him/her if there is something wrong.</td>
<td>How concerned or anxious would you be over whether or not he/she still loves you</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
and wants to be with you?

9a. You call a friend when there is something on your mind that you feel you really need to talk about.

How concerned or anxious would you be over whether or not your friend would want to listen?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Rejection expectancy

1b. You ask your parents or another family member for a loan to help you through a difficult financial time.

How likely would you expect that they would agree to help as much as they can?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>1b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2b. You approach a close friend to talk after doing or saying something that seriously upset him/her.

How likely would you expect that he/she would want to talk with you to try to work things out?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3b. You bring up the issue of sexual protection with your significant other and tell him/her how important you think it is.

How likely would you expect that he/she would be willing to discuss possible options without getting defensive?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4b. You ask your supervisor for help with a problem you have been having at work.

How likely would you expect that he/she would want to try to help you out?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5b. After a bitter argument, you call or approach your significant other because you want to make up.

How likely would you expect that he/she would be at least as eager to make up as you would be?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6b. You ask your parents or other family members to come to an occasion important to you.

How likely would you expect that they would want to come?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7b. At a party, you notice someone on the other side of the room that you'd like to get to know, and you approach him or her to try to start a conversation.

How likely would you expect that he/she would want to talk with you?

<table>
<thead>
<tr>
<th></th>
<th>very unlikely</th>
<th>Unlikely</th>
<th>Slightly unlikely</th>
<th>Slightly likely</th>
<th>likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8b. Lately you've been noticing some distance between yourself and your significant other, and you ask
him/her if there is something wrong.

<table>
<thead>
<tr>
<th>How likely would you expect that he/she will show sincere love and commitment to your relationship no matter what else may be going on?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
</table>

9b. You call a friend when there is something on your mind that you feel you really need to talk about.

<table>
<thead>
<tr>
<th>How likely would you expect that he/she would listen and support you?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
</table>
Appendix C

CURRICULUM VITAE

Sebastian Gyamfi

Skills and Expertise

Curriculum/Module development, Mental Health Stigma Research, Psychopathology, Psychological Assessment and interventions, Therapeutic relationships, Homelessness, Mental Health Promotion, and Model development.

EDUCATIONAL HISTORY

2017-2022 PhD, Western University, London Ontario, Canada
2012-2014 Mphil, University of Ghana
2013 Qualitative Research Practicum, University of Alberta, Canada
2006-2009 BSc, University of Ghana

OTHER CERTIFICATES

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution</th>
<th>Certificate</th>
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<tr>
<td>2022</td>
<td>Western University</td>
<td>Supporting Disclosures of GBSV at Western</td>
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<td>2022</td>
<td>Western University</td>
<td>Housing Insecurity among Older Adults</td>
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<td>2019</td>
<td>Western University</td>
<td>Epidemiology and Biostatistics 2019 Summer Workshop Series</td>
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<td>2017</td>
<td>Western University</td>
<td>Mental Health</td>
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WORK HISTORY

2009 – 2017 – College of Community Health Nursing (CCHN), Ministry of Health, Ghana

2016-2017 – University of Cape Coast, Ghana: Lecturer, Mental Health Promotion, Psychopathology, Mental health Ethics

2015-2017 – BIMAKS College, Ghana: Lecturer, Psychology

2013-2014 – West End University College, Ghana: Lecturer, Psychiatry

2003-2009 – Pantang Hospital, Clinical appointment, Ghana Health Service

GRADUATE TEACHING AND RESEARCH FELLOWSHIP

2022 (Fall) Graduate Teaching Assistantship – Course: Introduction to Health Informatics within Nursing, N2240F/G - NRSG7064: School of Nursing, Western University, London Ontario, Canada (September 1, 2022 – December 31, 2022).

2022 (Winter) Graduate Teaching Assistantship – Course: Introduction to Health Informatics within Nursing, N3340: School of Nursing, Western University, London Ontario, Canada (January 1, 2022 – April 30, 2022).

2020 (Fall) Graduate Teaching Assistantship – Course: Introduction to Health Informatics within Nursing, N2240F/G - NRSG7064: School of Nursing, Western University, London Ontario, Canada (September 1, 2020 – December 31, 2020).

2019 (Fall) Graduate Teaching Assistantship – Course: Introduction to Health Informatics within Nursing, N2240F/G - NRSG7064: School of Nursing, Western University, London Ontario, Canada (September 1, 2019 – December 31, 2019).

2018 (Fall) Graduate Teaching Assistantship – Course: Introduction to Health Informatics within Nursing, N2240F/G - NRSG7064: School of Nursing, Western University, London Ontario, Canada (September 1, 2018 – December 31, 2018).

2018 (Winter) Graduate Teaching Assistantship – Course: Ways of Knowing: Research, N2250b/NRSG-7063: School of Nursing, Western University, London Ontario, Canada (January 1, 2018 – April 30, 2018).

SEPTEMBER 2017-DECEMBER 2022 – Graduate Research Fellow, Parkwood Institute of Research, London Ontario, Canada.
SCHOLARLY PUBLICATIONS

BOOKS

BOOK CHAPTERS


RESEARCH ARTICLES


MODULES AND BEST PRACTICE MANUALS
2022 – Volunteer: Equity, Diversity, Inclusion and Decolonization (EDID) module at Western University, Ontario Canada.

2019 – The Mental Illness Stigma Module. A 3 credits hour graduate course content for the Mental Health Nursing Fellowship Program. Ghana College of Nursing and Midwifery (GCNM), Accra.

2017 – Addiction studies Module Child mental health Module: Mental Health Nursing Fellowship Programs. Ghana College of Nursing and Midwifery (GCNM), Accra.

SCHOLARSHIP AWARDS AND OTHER ACHIEVEMENTS

2022 – Western Graduate Bursary recipient
2021-2022 – Helen Fasken Graduate Bursary
2018-2021 – Western Graduate Scholarship
2020-2021 – Helen Fasken Graduate Bursary
2019 – Africa Institute Graduate Student Research Fund (AIGSRF) Award
2019 – Fellow, Ghana College of Nursing and Midwifery (FGCNM) – 2019 class
2019 – Irene Nordwich Foundation Graduate Award for academic and professional excellence
2017 – Western Doctoral Student Scholarship for outstanding academic record

REVIEWER ROLES

2021 – JOURNAL: International Journal On Homelessness (IJOH)
2020 – JOURNAL: Health Promotion International (HPI), Oxford University Press.

ACADEMIC MEMBERSHIP

2019 – Sigma Theta Tau International
2017 – Society of Graduate Students (SOGS), Western University
2017 – Public Service Alliance of Canada (PSAC 610; Graduate Teaching Assistants (GTAs) and Postdoctoral Associates (PDAs), Western University

EXTRACURRICULAR AND VOLUNTEERING ACTIVITIES

- **FEBRUARY – 2022** Volunteer for the development of the Equity, Diversity, Inclusion and Decolonization (EDID) module at Western University, Ontario Canada.
- **MAY 2019** – Walk for Alzheimers; Participant and fundraiser: London Ontario, Canada.
- **June 2018** – PSAC Mental Health Committee, volunteer Western University, London Ontario, Canada.