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A look back, a path forward: Revisiting the mental health and well-being research and practice models and priorities in sub-Saharan Africa

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ABSTRACT

Despite the enthusiasm to promote mental health in Ghana, and sub-Saharan Africa more generally, the models and frameworks that underpin research and practice in these settings have focused exclusively on understanding and treating mental disorders, to the neglect of the mental health needs of the general, non-clinical population. We discuss the limitations of the bipolar and biomedical models as frameworks for (mental) health research and practice in the current paradigm. Using Ghana as a case example, we identify gaps in the mental health research priorities in sub-Saharan Africa, and discuss the limitations of the revised Mental Health Policy of Ghana in ensuring a mentally healthy population. Drawing on a consilience of evidence from the literature, we contend that although important and laudatory, the current research approach and priorities, which remain overwhelmingly fixated on alleviating and treating symptoms of mental disorders, are insufficient to buffer against psychopathology and bolster *positive* mental health. We argue for the adoption of more global and empirically-tested frameworks and population-based approaches to complement clinical approaches to reduce the population burden of mental health problems.

1. Introduction

The bipolar model of mental health is premised on the assumption that mental health and mental illness are emplaced at the opposite ends of a single continuum, with individuals making gains in mental *health* as they move away from the mental *illness* pole of the continuum. Although this model offers a theoretical foundation for research and practice in clinical psychology and psychiatry, it remains untested, with questionable philosophical validity (Iasiello et al., 2020; Keyes, 2005). Underpinned by the supposition that absence (or amelioration) of clinical symptoms of psychopathology implies the presence of mental health, the bipolar and biomedical models have shaped the mental health research priorities and practice in sub-Saharan Africa, channelling all efforts and resources to exploring and developing treatments for various mental disorders (Deacon, 2013; Patel & Saxena, 2019). This feat, however, has important research and practice implications – the failure, although unintentionally, to bolster the mental health and well-being of the general population, particularly vulnerable groups (i.e., those who are languishing or experiencing moderate mental health) who do not show symptoms or episodes of mental disorders at present. One reason for this, we contend, is that the frameworks and research and practice priorities of many developing nations, including Ghana, have been dictated by the bipolar and biomedical models, which have shifted and weighted these priorities on the side of psychopathology, to the neglect of the mental health and well-being of the general population. The solid evidence base that has emerged in recent years regarding the inadequacy of the bipolar and biomedical models as frameworks for understanding, treating, and preventing mental disorders and promoting positive mental health, calls for the adoption of more global frameworks to guide research and practice and help drive efforts to ensuring a mentally healthly population in sub-Saharan Africa.

The overarching goal of the current review is to highlight the limitations of, and the overemphasis on, the bipolar/biomedical models as frameworks for (mental) health research and practice in sub-Saharan Africa, and to propose the adoption of more global and empirically-tested frameworks and population-based approaches to complement clinical approaches to mental health research and practice in sub-Saharan Africa. This goal has been completed with several specific aims. First, we discuss, albeit briefly, the historical goals of psychology, recounting the events that reshaped the research interest and practice of psychologists and the implications therein. Second, we highlight the limitations of the biomedical and bipolar models of (mental) health as

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frameworks for conceptualizing, diagnosing, preventing, and treating mental ill-health, and promoting mental health. To address these limitations, we argue for the adoption of a more broad-ranging framework, such as Keyes' model of mental health (i.e., dual-continua model), to guide researchers and practitioners in conceiving, diagnosing, and promoting (positive) mental health, with particular reference to the sub-Saharan African context. Third, we discuss a relatively more recent discipline (or sub-discipline of psychology), namely, positive psychology – providing a brief review of selected positive psychology (PP) themes and how they can be adapted to advance mental health, build resilience, and enhance the well-being and the human development index in sub-Saharan Africa. We argue that PP and strengths-based interventions can complement and facilitate the promotion of positive mental health and prevention of psychopathology in the general population. Next, a brief narrative review of the scope and priorities of mental health research in Ghana (and sub-Saharan Africa) is provided, highlighting the skewed nature of the priorities and outputs towards the disease model. Further, the limitations and primacy of the revised Ghana Mental Health Policy on psychopathology are discussed, with suggestions to broaden its scope to include policies and strategies to promote positive mental health, which inherently, buffer against psychopathology. In the last section, we argued that PP and strengths-based interventions, generated and evaluated using more global frameworks, such as the dual-continua model of mental health, can act as a conduit for meeting the mental health needs of the sub-Saharan African peoples, giving their theoretical assumptions and operational principles. We present a consilience of evidence from seemingly independent sources (i.e., models, frameworks, research outputs, and policies) from the Ghana and sub-Saharan African literature to inform and support our conclusions and propositions.

1.1. The historical goals of psychology

Psychology as a science emerged more than a century and a half ago when trailblazers in philosophy, physiology, and psychiatry took a philosophical interest in the human mind and behavior and searched for clues to the origins of human thoughts and mental processes (Boring, 1929; Wertheimer & Puente, 2020). The contributions of pioneers to the development of the discipline, dating back to ancient civilization, have been well chronicled (Schwarz & Pfister, 2016; Wertheimer & Puente, 2020). From the outset, pioneers, such as Ferdinand Ueberwasser, Gustav Fechner, Wilhelm Wundt, Hermann Ebbinghaus, William James, Ivan Pavlov, Sigmund Freud, John B. Watson, B. F. Skinner, Abraham Maslow, Michael W. Fordyce, Carl Rogers, Charles Snyder, Carol Ryff, C. A. Rapp, R. J. Goscha, and several others, sought to inform practice by examining the structure or characteristics of the mind and the basis and inter-relationships between thoughts, emotions, and actions or behavior, using empirical and observational approaches. Wilhelm Wundt's psychological laboratory, established in 1879 for research in Leipzig, Germany, and his seminal work, *Principles of Physiological Psychology*, published in 1873, were regarded as eminently fundamental, foundational, and transformational that, together with contributions of several other pioneers, propagated the field of psychological science (Wertheimer & Puente, 2020).

Psychology, prior to World War II, had three main goals – to treat or ameliorate mental disorders; to explore human strengths and design strengths-based programs to help people live fulfilling and productive lives; and to identify and nurture high talents (Seligman & Csikszentmihalyi, 2000; Wertheimer & Puente, 2020). Beginning in 1946, institutional reform policies in the United States led to the establishment of mental health research agencies, including the National Institute of Mental Health, which were tasked to conduct research to understand, prevent, and treat mental disorders, particularly among veterans (Seligman & Fowler, 2011; Wertheimer & Puente, 2020). With heightened prestige – and in response to the research funding made available for this course, psychologists fixated their attention exclusively on studying and developing treatment modules for mental disorders, to the neglect of the other two goals (Schwarz & Pfister, 2016; Seligman, 2002; Seligman & Csikszentmihalyi, 2000).

The explicit commitment to inquiring and curing mental illness broadened our understanding of mental disorders, and led to the development of several theories and models to advance the conceptualization, diagnosis, and treatment of mental disorders, including post-traumatic stress disorders which were common among veterans after the war. This pursuit continued for over five decades, until in 1998, when Seligman, in his presidential address to the American Psychological Association, questioned the skewed scope of psychological research and practice towards mental illness and advocated for the expansion of the research priorities to also include efforts to understand and build those factors that promote human capacity and strengths. Inspired and compelled by empirical research findings that suggest that people with mental disorders also possess strengths, hope, grit, and happiness in the midst of their adversities, Seligman and his colleagues cautioned researchers that unless the positive side of human experience is taken into account, research and practice efforts focused on only the amelioration of psychopathological symptoms may be inadequate in buffering against mental disorders, bolstering mental health, or building capacities, strengths, and positive processes that support individuals, communities, and institutions to thrive and flourish (Seligman, 2002, 2016, 2018; Seligman & Csikszentmihalyi, 2000; Seligman et al., 2005). Until Seligman's vociferous calls, researchers and practitioners, informed by the bipolar and biomedical models, have conceptualized and equated mental health to the absence of mental illness.

The efforts expended by Seligman and other pioneers to engage scholars to expound on the scope of their research to examine and build people's strengths and capacities is a historic novelty that align with the historical goals of psychology. Seligman and colleagues argued that this seemingly religious devotion to identifying and repairing what is wrong with people is a flawed strategy of preventing mental ill-health and promoting mental health at the individual and group levels (Seligman & Csikszentmihalyi, 2000; Seligman et al., 2005; Seligman, 2016, 2018). These propositions resonated well with several researchers and practitioners, and since 2000 there has been a gradual shift from the complete emphasis on deficit-focused orientations (Mrazek & Haggerty, 1994) toward a competence enhancement model (Botvin & Griffin, 2015) that targets the promotion of strengths and well-being. While acknowledging the importance and necessity to search for psychosocial treatments for mental disorders, these scholars highlighted the limitations of the deficit-focused model and demonstrated the theoretical and practical values of promoting human strengths and virtues, by generating evidence from empirical research and translating them into activities and programs to promote mental health and well-being (Seligman & Csikszentmihalyi, 2000; Seligman et al., 2005; Wertheimer & Puente, 2020).

In recent years, there has been an increasing interest in the fields of mental health research and practice to explore, generate, and implement interventions that go beyond the amelioration of psychopathological symptoms of individuals and groups (Carr et al., 2020; Weiss et al., 2016). Although some efforts, such as assessing and identifying groups who are languishing and providing them with appropriate psychosocial supports, are already in widespread practice, this level of research and scope of practice is lacking in Ghana, and sub-Saharan Africa more generally. This is because mental health research and practice in these settings have subscribed to the bipolar and biomedical models, with scholars and practitioners fixating their attention, efforts, and resources to exploring and developing treatments for various mental disorders. Yet, in other settings, contemporary psychological science remains cardinal in promoting health behavior changes and positive mental health in clinical and non-clinical population groups (Bolier et al., 2013; Carr et al., 2020; Parks & Titova, 2016; Weiss et al., 2016). In the following sections, we discuss some limitations of the bipolar and biomedical models as frameworks for preventing and treating mental disorders and promoting mental health in the current paradigm. We

propose theoretical expansions to include more embracing frameworks, such as the dual-continua model of complete mental health, which have been empirically tested to guide the conceptualization, diagnosis, prevention, and treatment of mental disorders, as well as the promotion of mental health.

1.2. The bipolar and biomedical models of (mental) health

The frameworks and models for conceptualizing, diagnosing, treating, and preventing (mental) ill-health, and for promoting health, more generally, have evolved over the century. For several decades, the bipolar model of mental health, which is akin to, and evolved from, the biomedical model, underpinned clinical psychology and mental health research and interventions (Keyes, 2005, 2007). The bipolar model postulates that mental health and mental illness operate along the opposite ends of a single continuum, with gains in mental health as one 'moves' away from the mental illness end of the pole on the continuum (Antonovsky, 1979; Trent, 1992). Although cogent, scholars have criticized the theoretical, philosophical, and practical principles of the model. For instance, it is difficult to determine the point at which mental health transitions to mental ill-health. The model also fails to recognize the roles and influence of gender and cultural factors on mental health and well-being (Herron & Trent, 2000; Iasiello et al., 2020). In 1958, Jahoda and other scholars begun to explicitly criticize and challenge the bipolar model, particularly its conceptualization and definition of mental health. Jahoda (1958) argued that the formulation of mental health as the absence/loss of illness is an inadequate benchmark for conceptualizing and defining mental health and suggested six conditions associated with the presence of mental health: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-actualisation.

Previously, scientists and researchers who adopted the biomedical model of health held the view that the origin of mental illness lies solely within the individual and that mental health interventions should be directed at treating bodily symptoms (Deacon, 2013; Deacon & McKay, 2015). Although the biomedical model offers mental health patients important explanations and assurance that mental ill-health is similar to other treatable health problems, recent research findings show that a multiplicity of *biopsychosocio-spirito-cultural* factors can precipitate and exacerbate mental illness (Hatala, 2013; Saad et al., 2017), that the absence of mental disorders does not necessarily imply the presence of mental health (Keyes, 2005), and that positive mental health can be promoted (Weiss et al., 2016). Acknowledging the limitations with the biomedical model, Engel (1977) advocated for a more expansive approach that takes into account the influence of psychosocial and environmental factors as causative factors of mental illness. Engel (1977, 1997) argued that contemporary mental health research and practice should extend beyond the assessment, diagnosis, and treatment of diseases (i.e., biological factors) to also evaluate the social, psychological, and behavioral factors contributing to ill-health. Engel proposed a more holistic framework – the *biopsychosocial* model – that takes into account the roles of biological, psychological, and social factors in determining the cause, manifestation, and outcome of wellness and disease (Engel, 1977, 1997). Although the biopsychosocial model is widely used for research, teaching, and practice, and provides a broader view of health (e.g., guides clinicians to understand patients' presenting problems and drive the formulation of treatment plans), recent developments in cross-cultural research have heightened the need to further broaden the scope to also include the role and influence of spirituality on health outcomes, particularly in highly religio-cultural and more collectivistic social settings (Saad et al., 2017). In these settings, spirituality wields significant influence on people's conceptualization of (mental) health and their health-seeking behavior (Appiah, 2020; Janse van Rensburg et al., 2014).

It is becoming increasingly difficult to ignore empirical research findings in other settings that suggests that *positive* psychological-based interventions can have positive impacts on the mental health of individuals with and without mental disorders (Waters et al., 2021). In particular, interventions founded on strengths-based, pro-positive theories and approaches have demonstrated positive impacts in high income countries (Bolier et al., 2013; Carr et al., 2020; Chakhssi et al., 2018; Weiss et al., 2016). To the extent that calls have being made for mental health to be included in the Sustainable Development Goals and subsequent international development targets (Izutsu et al., 2015; Patel et al., 2018), assessment of the evidence base and feasibility of interventions that attempt to explore and promote *positive* mental health among individuals in low-income settings are urgently warranted. To be able to build resilience, promote psychological well-being, and provide economic empowerment for this vulnerable population group, research and interventions are needed that address not only the social causes of poor mental health and disabilities that are a consequence of mental illness, but that which also examine individual, group, and contextual factors to enhance positive developments and achievements. Such endeavors would require adoption of alternative methodologies, such as Keyes' dual-continua model of mental health, to address the current limitations with the bipolar/biomedical models and offer insights and broader perspectives that can enhance research and practice in mental health, more broadly.

1.3. Keyes' dual-continua model of mental health

Based on new empirical research findings that contrast the principles of the bipolar and biomedical models, Keyes (2005) proposed the dual-continua model of mental health. The dual-continua model of mental health contends that positive mental health correlates with, but is distinct from, mental illness (Keyes, 2005; Westerhof & Keyes, 2010). Accordingly, an individual can present with symptoms of mental illness, such as depressive episode, and simultaneously, also experience components of positive mental health. Within this paradigm, an optimal, complete state of mental health is achieved when an individual displays high levels of positive mental health in the absence of symptoms of mental illness (Keyes, 2002, 2005), rather than only the absence of pathological symptoms of mental disorders. Keyes' dual-continua model is represented by a vertical axis that depicts the presence of positive mental health at one end of the continuum and absence of mental health at the other end, and a horizontal axis that also shows the presence of mental illness and absence of mental illness, respectively, at each end of the continuum. Each of the resulting four quadrants describes the four possibilities of an individual's overall mental status at a given point – with an admixture of symptoms of mental health and mental illness in each quadrant. For instance, individuals who present with absence or low levels of mental well-being (called languishing) do not, necessarily, have a mental disorder or show symptoms of it (see Keyes, 2002, 2005; Lamers et al., 2015). Empirical research investigating this model has shown that the presence of positive mental health with low levels of mental illness (i.e., flourishing mental state) protects against psychopathology, such as anxiety and depression (Lamers et al., 2015; Schotanus-Dijkstra et al., 2017) and reduces incidence of suicidal ideations and suicide (Keyes et al., 2012).

The dual-continua model of mental health represents a more comprehensive and complex conception of human well-being that extends the categorization of mental health as opposing ends of a single wellness–illness continuum, to a more encyclopaedic classification that takes into account the presence or absence of psychological distress, together with the presence or absence of psychological well-being. In a recent review of studies evaluating the model across contexts and populations, researchers found significant degree of variety in the methodology of the studies conducted across Western and non-Western contexts, suggesting that the model has universal utility (Iasiello et al., 2020). Another study finds that up to 36% of participants who were flourishing also showed some degree of psychopathological symptoms, such as depression (Venning et al., 2013). Insights from the

dual-continua model have inspired and guided the design of research and interventions with broad appeal by emphasizing the assessment of mental health with a broader focus, as well as diagnosing and categorizing the presence of (positive) mental health. Keyes et al. (2008) developed the 14-item Mental Health Continuum-Short Form to assess the presence or levels of (positive) mental health – and its three dimensions of well-being: psychological, emotional, and social.

1.4. Positive psychology and positive mental health

Borrowing from earlier theories including Erikson (1968), Maslow (1962), Rogers (1961) and others, Ryff (1989) explored the concept of optimal human functioning and made significant contributions in understanding the concept of positive psychological health. In a similar effort, Seligman and colleagues also drew insights from previous works of positive subjective experiences, positive traits, and positive institutions to examine and advance the factors that allow individuals and communities to thrive (Seligman & Csikszentmihalyi, 2000; Peterson & Seligman, 2004). Around this period, Wissing and Van Eeden (2002) also conceptualized and nurtured a new domain of research, *"psychofortology"*, which examines the nature, manifestations, patterns, origins, dynamics, and enhancement of strengths at the individual, group and community levels. These efforts, together with seminal contributions from several other scholars, established a new movement of research and practice – positive psychology – focused on examining and advancing the conditions and processes that contribute to optimal functioning (i.e., flourishing) of individuals, groups, and institutions (Keyes, 2013; Seligman, 2002). Positive psychology (PP) embraces the nature and dynamics of psychological well-being and strengths (Parks & Titova, 2016; Seligman & Csikszentmihalyi, 2000).

With its overarching emphasis on enhancing the capacities of individuals, groups, and societies to achieve positive developmental outcomes, PP has generated a growing interest in the search for personal strengths and positive social systems in the enhancement of well-being. There are currently a wealth of research and frameworks for translating well-being research into applied efforts to promote positive human development. For instance, PP interventions (PPIs) have been designed and tested to increase gratitude in adults. Gratitude, a feeling of appreciation for the receipt of a valuable benefit from another person, has been found to strengthen interpersonal relationships (Algoe & Stanton, 2012), to promote people's subjective well-being (Chakhssi et al., 2018), and to enhance individual and group mental well-being (Weiss et al., 2016). PP researchers and practitioners increase gratitude by helping people to: count their blessings by reflecting on the things in their lives that they are thankful or grateful for, and writing them in their daily gratitude journals (Emmons & McCullough, 2003); reflect and write down three good things that people have experienced in each day of the week (Chan, 2010; Seligman et al., 2005); or write and deliver a letter to show appreciation to a person they were thankful (Lyubomirsky et al., 2011).

Several PPIs have been designed to optimize human functioning and well-being, generally, and to specifically promote meaning and purpose in life (Shin & Steger, 2014), enhance empathy (Conoley et al., 2015), increase patience and well-being (Schnitker, 2012), support people to cope with stress (Harzer & Ruch, 2015), increase mindfulness and self-compassion (Neff & Costigan, 2014), promote and maintain courage (Pury & Saylors, 2018), develop and strengthen inter-personal relationships (Antoine, Andreotti, & Congard, 2020), and to increase people's positive experiences at work (i.e., job satisfaction, pleasure, engagement, and meaning) (Giannopoulos & Vella-Brodrick, 2011). Of note, the majority of these PPIs originate from Western countries, were developed from Western perspectives, standardized with predominantly Western samples, and assumed individualistic cultural orientation and value systems (Hendriks et al., 2018; Wissing, 2013).

Generally, the benefits of promoting *positive* mental health have important implications beyond mental well-being that extend to economic well-being of the individual, family, or society. One study in Ghana suggests that 18.7% of Ghanaians suffer from either a moderate or severe mental disorder (Sipsma et al., 2013). Another study finds that the presence of mental distress causally impacts lack of employment which, in turn, increases the prevalence of mental depression and poor mental health. Further, this study suggests that the lost productivity associated with psychological distress translates to approximately 7% of Ghana's gross domestic product (Canavan et al., 2013). There is evidence to suggest that interventions that set out to promote mental health or health behavior change also lead to improved economic outcomes (Isham et al., 2020), thus yielding a cycle of increasing returns. Yet, only a few studies were retrieved that set out to develop strengths-based intervention programs in Ghana. We note the recent work by Appiah et al. (2021a) that developed and pilot-tested a 10-session multicomponent PPI (mPPI; the *Inspired Life Program* ILP]) aimed at promoting mental health, building resilience, and increasing vocational productivity in a rural Ghanaian adult sample. The team also evaluated the ILP within a quasi-randomized controlled trial (Appiah et al., 2020b), using a battery of questionnaires translated and validated into the native dialect of participants (Appiah et al., 2020c), and explored the experiences and views of the ILP program participants (Appiah et al., 2021b). Overall, the findings suggest that carefully conducted, context-appropriate mPPIs have the potential to boost mental health in rural Africa, as evidenced by the statistically and practically significant effects of the ILP intervention and the increase in the proportion of flourishers at post-intervention and follow-up assessments.

At the basic research level, assessment of the prevalence of positive mental health in individuals and groups provides a snapshot of the mental health functioning of the group. The data also serves as a valuable resource to identifying groups that may need psychological interventions and support. Presently, studies that explore the concept of (positive) mental health in its strictest sense are limited in Ghana. Most available studies employed proxies in their measurement of mental health. For instance, Tsai and Dzorgbo (2012) assessed subjective well-being by measuring individual's household size and income received through remittances rather than how they feel about their overall life. Presently, only three studies were retrieved that assessed the presence of positive mental health in a general adult population and in a small clinical sample in Ghana. In one study evaluating the effectiveness of a 10-session mPPI among a sample of rural adults, researchers found statistically significant increase in positive mental health from 25.0% at baseline to 77.5% three months after participating in the group-based ILP intervention program, compared to the 21.4% at baseline and 38.1% gains at post-intervention, respectively, in the control group (Appiah et al., 2020b). Another recent study that examines the prevalence of positive mental health in an adult sample also found a quarter (25.5%) of the sample ($n = 444$) experiencing high levels of mental health (flourishing), with a higher proportion experiencing moderate mental health (41.4%) and about a third also experiencing low or absence of *positive* mental health (languishing; 31.1%) (Appiah et al., 2020b). Only one study was retrieved that measured the prevalence of mental health in a small clinical sample of adults with sickle cell disease (Appiah, Tutu, et al., 2020). The researchers found a strikingly high level of positive mental health in their clinical sample (66% flourishing), with a significant proportion also experiencing moderate mental health (26%). Surprisingly, only a small proportion was languishing (8%), with no significant difference between the genders.

In interpreting their findings, Appiah et al. (2020b) compared the gains in the intervention group with the control group and concluded that adults dwelling in rural, socioeconomically disadvantaged settings are better off with *any form* of psychosocial (mental health promotion) intervention than nothing at all, suggesting that it is feasible and important to promote mental health of adults dwelling in rural, socioeconomically disadvantaged settings in Ghana, and sub-Saharan Africa more generally. Amongst the sample with sickle cell disease, the researchers ascribed the high level of positive mental health to the collectivistic social orientation and the synergistic characteristic of the

Ghanaian peoples (Appiah, 2020; Gyekye, 2013), also suggesting that cultural and familial support systems can be harnessed to support individuals with long-term health problems, which can, inherently, protect them from developing mental health problems. Gains in positive mental health have also been reported among program participants in other parts of sub-Saharan Africa, particularly in South Africa (e.g., Bonthuys et al., 2011; Rugira et al., 2015; Teodorczuk et al., 2019; Van Zyl & Rothmann, 2012; Wissing & Temane, 2013). Presently, there is a growing list of meta-analyses and systematic reviews from the Western and European contexts that suggest that PPIs can be effective in enhancing subjective well-being and psychological well-being, as well as in helping to reduce depressive symptoms and negative affect, more generally (Bolier et al., 2013; Carr et al., 2020; Hendriks et al., 2018; Weiss et al., 2016).

Research evidence suggests that people experiencing mental health problems also possess some positive traits, or are capable of experiencing joy, enthusiasm, and hope in spite of the high reported levels of worry, sadness, and anger (Cantarero & Potter, 2014), suggesting that individuals – in spite of their mental health state – have some positive characteristics that can be explored and promoted, beyond efforts to remit their psychopathological symptoms. Impliedly, mental health interventions that adopt positive, strengths-based approaches have a high utility for all populations groups, particularly for individuals in socio-economically disadvantaged settings, which, in itself, is a risk factor for poor mental health. Another theoretical reason why strengths-based and PPIs might be effective in reducing the population burden of mental disorders is that it could improve the aspirations of individuals in low-income settings and support them to develop behavioral and life skills that can help them to advance their personal developmental goals. For example, it could be that some individuals living in extreme poverty lack the inherent belief that they are able to make a difference in their lives. In this regard, participating in positive interventions and acquiring psychosocial and life skills could helped them to build their self-belief and personal growth.

2. Mental health research in Ghana and sub-Saharan Africa

An outgrowth of over half a century of mental health research in Ghana and in most sub-Saharan African countries converge on a set of psychopathological purviews that feature prominently in previous studies. Studies on mental health from the early 1950s (see Field, 1958; Tooth, 1950) to date reveal a high degree of consistency and primacy on psychopathology (i.e., the understanding, diagnosing, and treatment of mental illness), rather than on the factors that promote positive mental health or advance well-being, more generally. Largely, mental health research in Ghana is predominated by, and based on, the bipolar and biomedical models of health, with the majority of research outputs reporting on the prevalence of mental illness or the manifestation of psychopathological symptoms in the hospital and community settings. Although an exhaustive review of mental health research in Ghana is beyond the scope of this paper, we provide a brief narrative review to illustrate the skewness towards the deficit-model, and discuss some challenges with this direction of research interest – as well as some recommendations. We acknowledge that this overview is limited in scope and does not claim to exhaust all available literature on mental health research in Ghana.

On the basis of data from three available reviews (see Anum et al., 2020; de-Graft; Aikins, 2018; Read & Doku, 2012) that provide and describe mental health research from the early 1950s through to 2020, we find that mental health research in Ghana has been heavily weighted on understanding and generating treatments for psychopathological symptoms. Generally, these studies, dating back from 1955, have largely focused on examining the prevalence of psychiatric conditions, including depression, schizophrenia, substance abuse, suicide, as well as mental health correlates of physical illnesses, such as HIV/AIDs and non-communicable diseases. We acknowledge that some more recent studies (e.g., Addy et al., 2021; Ofori et al., 2021) may not have been discussed in these reviews.

This deficit-focused pattern of research is seen in other parts of Africa. In Botswana, a recent semi-systematic scoping review found that mental health research is confined to exploring the mental health aspects of HIV/AIDS, neurotic and stress-related disorders, substance abuse, depression, work-related mental health issues, and gender-based violence (Opondo et al., 2020). Findings from a mapping project that examined the research capacity for mental health in low- and middle-income countries, including 31 African countries, found that factors such as burden of disease, personal interest, and availability of funds have shaped the priority of mental health research in Africa (see Sharan et al., 2009). The study further revealed that the mental health research themes in the majority of African countries (e.g., Botswana, Ghana, Kenya, Nigeria, South Africa, Zimbabwe) are mostly centered on mental disorders, including psychoses, depression/anxiety, substance use disorders, child and adolescent mental disorders, dementia, epilepsy, personality disorders, learning disorders, eating disorders, and suicide. Noting the primacy of a focus on deficits, the study cautioned member states to critically appraise their research priorities to also include the study of essential psychosocial and environmental factors at the individual, familial, and community levels, and macroeconomic policies that significantly impact on mental health and well-being of their citizenry (Sharan et al., 2009).

Although studies that focus on mental disorders, in no small way, are important advances that have shed insights into the precipitating factors, trajectory, and treatment of common mental disorders, with important research and practice implications for healthcare, there are three reasons to believe that the current priority of mental health research and practice in Ghana – and the models that underpin them - are *insufficient* to prevent or minimize the incidence of mental disorders or promote positive mental health. Firstly, the focus on psychopathology (based on the deficit-model) is parochial since only a section of the population of a society presents with mental ill-health. At any given point, the majority of the people are either experiencing moderate mental health or are languishing (Keyes, 2012), and are at risk of developing mental disorders. Secondly, related to the first limitation is the assumption that only what is broken must be fixed – and that individuals, groups, or societies that do not show psychopathological symptoms do not require support with their mental health. Yet, a wealth of research concludes that the absence of mental illness does not, necessarily, imply the presence of mental health (see Iasiello et al., 2020; Keyes, 2012). Bolstering mental health is also a prevention strategy to lower the risk of development of psychopathology. Thirdly, although the search for psychiatric treatments for mental disorders has been the global trend since early 1946, there is presently a shift towards a more diversified approach of psychological research and practice. Over the decades, psychological science has transitioned from the biomedical model (Deacon, 2013; Deacon & McKay, 2015), which focuses on understanding, diagnosing, and treating physical and mental illness, through the biopsychosocial model (Engel, 1977) that considers the role of biological, psychosocial, and environmental factors in mental ill-health, to more recent approaches that examine and promote the psychological competencies and optimal functioning of individuals, groups, and institutions (Keyes, 2005; Keyes & Martin, 2017). A growing number of nations have recognized the substantial economic burden of poor mental health on society and national development and have acknowledged that economic measures alone cannot completely expedite a nation's progress and well-being. Presently, several countries, including Bhutan, Ecuador, Germany, India, New Zealand, United Arab Emirates, and Venezuela have instituted agencies responsible for the well-being (and happiness) of their citizenry. Consistently, research reports show that improved (mental) well-being leads to a decrease in healthcare utilization and expenditure and increased productivity and employee retention (Keyes, 2007; Keyes & Grzywacz, 2005; Roy et al., 2019; Sears et al., 2013).

Nonetheless, in Ghana, we find a small, but growing number of researches, particularly in more recent studies, that also examined the factors that promote mental health, rehabilitation, or flourishing (e.g., Addy et al., 2021; Appiah, 2020; Appiah, Tutu, et al., 2020; Dey & Amponsah, 2020; Wilson & Somhlaba, 2016), set out to build the resilience of individuals or groups (e.g., Oppong Asante, 2019a, 2019b), and facilitate posttraumatic growth amongst vulnerable groups after traumatic experiences (Agyei, 2017; Agyei, 2018; Dziwornu, 2019). A recent study also developed a group-based mPPI to promote positive mental health and build resilience of adults in the rural, socioeconomically disadvantaged contexts of Ghana (e.g, Appiah et al., 2020b; Appiah et al., 2021a). In spite of growing efforts, more studies are needed that apply stringent methodologies – such as randomized controlled trials (RCTs), quasi-RCTs, or cluster RCTs – to evaluate outcomes of their intervention programs. We urge researchers to adopt study designs and evaluation approaches that provide high levels of evidence to determine the level of effectiveness of intervention programs.

We note an emerging stream of research in some parts of Africa, particularly in South Africa, that examines the factors that advance mental health, and some efforts to translate existing and emerging theories and insights into context-appropriate mental health and behavior change interventions to promote human strengths and mental well-being (e.g., Bonthuys et al., 2011; Rugira et al., 2015; Teodorczuk et al., 2019; Van Zyl & Rothmann, 2012; Wissing & Temane, 2013). For instance, the *Well-Being Research in South Africa* book, edited by Wissing (2013), is, to our knowledge, the first to catalogue basic and applied research on positive mental health (well-being) in the South African context, including contributions from several research groups and individuals. The contributions include seminal works that explore local factors that support mental health, and local interventions and strategies designed to promote mental health. Another book, *Towards Flourishing: Embracing Well-Being in Diverse Contexts*, also co-edited by Wissing et al. (2020) (a revised second edition of *Towards Flourishing: Contextualizing Positive Psychology*, 2014), covers a magnitude of topics related to meaningful and purposeful living, optimal functioning, and the promotion of mental health of individuals, families, communities, and institutions. The handbook edited by Irma Eloff, *Handbook of Quality of Life in African Societies* (Eloff, 2019), which provides insights on quality-of-life from a variety of scientific perspectives and across several domains of human endeavors in Africa, is also noteworthy. A more recent work, *Embracing Well-Being in Diverse African Contexts: Research Perspectives*, which is edited by Schutte, Guse, & Wissing (2022), include contributions on theory, measurement, manifestations and dynamics, and the promotion of mental health and well-being across sub-Saharan Africa. *The International Handbook of Positive Psychology* by Chang et al. (2021) covers 17 main regions in the world including African sub-regions and shows how PP research, assessment, and practice initially developed and progressed in these areas and what the importance of these contributions are to human well-being. We hasten to add that most schools, departments, and units of basic and applied health sciences and social sciences in the universities across the sub-region are involved in some research that implicitly and explicitly promote mental health, build resilience, or increase the well-being of specific population groups. Nonetheless, a significant number of these studies employ proxies in their conceptualization and measurement of positive mental health and well-being. To the extent that the scope, priorities, and resources for mental health research and practice at the national and institutional levels in sub-Saharan Africa are partly dictated by (mental) health policies of the state (Read & Doku, 2012; Sharan et al., 2009), health policies guiding mental health research and practice need to be founded on broader, well tested frameworks in order to optimize their formulation, implementation, and impacts.

2.1. The mental Health Policy 2019–2030 of Ghana

Developed in 1994, and subsequently revised in 1996 and 2018, the overarching aim of the *Mental Health Policy 2019–2030* of Ghana (Government of Ghana, 2018) is to ensure a mentally healthy Ghanaian population. The Policy postulates several principles and strategies to facilitate the promotion of mental health, as well as the prevention of mental illness, disability, and preventable deaths associated with mental disorders in all age groups. Although the Policy claims to be underpinned by the biopsychosocial model and adopts a multi-disciplinary approach, we contend that the general assumption underlying the Policy is inappropriately narrow, that the Policy heavily relies on the biomedical model – which is insufficient for the prevention and management of mental disorders and the promotion of mental health and well-being in the current context. Our contention is based on the evidence that mental health is best conceptualized as a complete state where individuals display the characteristics of *positive* mental health as well as the absence of symptoms of mental disorders (Keyes, 2002, 2014; Wertheimer & Puente, 2020; Westerhof & Keyes, 2010), rather than just the absence of psychopathological symptoms. We argue for the inclusion of policy objectives and strategies that advance positive mental health of individuals, groups, and institutions. Firstly, as was articulated in the Policy, a significant, but small number of the global population suffers from mental health problems. Although the proportion of people with mental disorder differs across countries, often larger than the global rate of 3%, research shows that about 14–16% of the population may be afflicted with mental illness (Huppert, 2009; Rehm & Shield, 2019). A slightly lower proportion (between 12 and 14%) may be languishing (i.e., absence of positive mental health), with the majority of the people experiencing moderate mental health. An equal number, often slightly higher than those with mental disorders, also experience optimal mental health (i.e., flourishing) (Huppert, 2005, 2009; Keyes, 2002b). Keyes (2007) argued the importance of mental health promotion apart from, and next to, the prevention and treatment of mental illness by highlighting the emotional, physical, cognitive, relational, work-related and economic benefits of flourishing versus languishing or moderate mental health.

Notably, most of the outlined objectives in the current Mental Health Policy of Ghana are inclined towards the provision of psychiatric interventions for the group diagnosed with mental disorders or experiencing symptoms of psychopathology. Drawing on insight from clinical epidemiology that shows that new cases of disorder emerge when only a targeted approach is applied, we highlight the benefits of identifying and providing interventions for people who do not presently show symptoms of mental illness but are at a greater risk of developing same (i.e., those in the languishing and moderate mental health categories). Of note, the majority of the people who develop mental illness in the cumulative year are from the languishing group, who were previously non-clinical, but vulnerable (Keyes, 2005, 2012). As postulated by Rose (1981, 1992), Rose et al. (2008), and Huppert (2005) some three decades ago, the better way to minimize the prevalence of common mental illness (e.g., depression) in the long term is to identify and intervene at the general, non-clinical population level. Huppert (2009), in providing support for this hypothesis, likened it to the empirical evidence relating the prevalence of common health problems (e.g., hypertension, heart failure, substance abuse etc.) to the prevalence of the risk factors or symptoms of these health conditions in the general population. There is abundance of literature to support population-based approach (e.g., Mackenbach et al., 2013; Purtle et al., 2020), but we chose to prioritize older references to demonstrate how stagnated some of the policies and strategies outlined in the Policy document are.

Secondly, although the Policy sought to create general awareness of mental health, to build resilience to manage the stresses of daily life, and to promote help-seeking behavior of the citizenry towards mental health care, it failed, in our opinion, to distinguish between the strategies necessary to treat mental disorders at the clinical level, prevent mental

illness or relapse at the individual and community levels, and promote mental well-being among the general, non-clinical population group, that is, those languishing or experiencing moderate mental health, or even flourishing. For instance, the Policy's main objective to thwart the abuse of alcohol and other substances is to "… *prevent/minimize harm associated with substance use* …". Among others, the strategies outlined to achieve this include, to "… *engage training institutions to include the management of substance-related disorders in their curriculum* …" and to "… *establish links with schools, youth centers and work places for referral pathways*" (page 48). Again, we find this objective to be more reactive rather than proactive and the strategies more centered on management rather than on prevention. The current research evidence suggests that substance abuse as a problem behavior often begins from the Junior and Senior High School levels of education in Ghana (Appiah et al., 2017; Oppong Asante, 2019a, 2019b). There is need for tailored psycho-educational programs and activities that educate students about the biopsychosocial and economic effects from abusing illicit substances, support them to develop healthy coping strategies to manage stress and trauma, and provide psychosocial support for students with substance use disorders. Students at these levels – and all other levels – are often faced with relationship struggles, performance pressure, family trauma, existing mental illness, or developmental challenges with adverse implications for their mental health functioning, which can, itself, be exacerbated by the psychosocial demands of current Covid-19 pandemic. We recommend that the Mental Health Authority collaborates with the Ministry of Health, the Ghana Psychological Association, and the Ghana Education Service to institute a policy for Junior and Senior High schools to observe a *mental health day* in each academic term – and have psychologists and mental health experts engage students on mental health discourses, screen at risk students, and offer the required psychological support.

Thirdly, we strongly recommend that the research agenda of the Policy be revised to also prioritize research that explores and advances the psychosocial and cultural factors that facilitate positive mental health, considering that the factors that promote mental health often differ from those that drive mental illness (Keyes, 2005, 2012). For instance, when a psychiatrist or psychologist intervenes and reduces the depressive symptoms of a client from say, - 4 to 0 (i.e., absence of depressive symptoms), this gain does not necessarily imply the presence of positive mental health – which is characterized by high levels of psychological, emotional, and social well-being. It is our considered view that we might, inherently, be reducing the incidence of mental disorders when we adopt strategies and efforts that promote positive mental health in the general, non-clinical population, in addition to the traditional agenda of diagnosing and treating psychopathology, instead of focusing exclusively on the latter. This has been shown to be the case in Western contexts (e.g., Bolier et al., 2013; Greenawalt et al., 2019).

2.2. Research, practice, and policy recommendations

Several methodological and practical challenges could possibly hinder efforts to embrace and utilize more encyclopaedic models, such as Keyes' dual-continua model of mental health, for research and practice in the sub-Saharan African context. We reflect on some of these challenges and provide some recommendations to inform the redevelopment of a more comprehensive and dynamic mental health research, practice, and policy agenda. Firstly, although there have been significant advances in mental health research in the past decades in Ghana and other parts of Africa, what is lacking is research that critically explores and evaluates existing mental health theories (whether African- or Western-based) and research findings and translate them into context-appropriate, practicable, and relevant activities and programs tailored to the needs, capacities, and circumstances of specific target population. Although this research trend and priority may emerge with time – naturally – there is a constant press for immediate action to support people with mental disorders who are struggling in the present moment. Of note, recent efforts at advancing mental health align with the competence enhancement model, which focuses on building strengths, competencies, and resources (Barry, Clarke, & Petersen, 2019), rather than exclusively with the risk-reduction model (Mrazek & Haggerty, 1994).

We surmise that there are currently adequate findings from basic psychological research in Ghana (as also the case in other parts of Africa) with potential relevance and applicability in the African context that can be translated into viable mental health and behavior change intervention programs to promote positive mental health and build resilience in the general, non-clinical population. There is an urgent need to also generate and test new context-appropriate psychological theories to facilitate the development of health and behavior change intervention programs, or adapt existing intervention programs to fit the cultural diversities, circumstances, and needs of the African peoples (Hinton & Jalal, 2014). Research evidence suggest that sociocultural factors could engender differences in the understanding, conceptualization, and behavioral expression of (mental) health between more individualistic (e.g., Western) and more collectivistic (e.g., African and Asian) social orientations (de Kock et al., 2013), necessitating the need to adapt interventions developed in Western contexts before they are applied in non-Western settings (Appiah et al., 2020c; Appiah, Wissing, Wilson Fadiji, & Schutte, 2022). In this regard, the efforts of African-based scholars (e.g., Lateef, 2021; Oppong, 2013, 2020; Ratele, 2018) that set out to explore, generate, and evaluate African-centered psychological theories, or to culturally adapt exisitng ones, are noteworthy.

Secondly, it is no longer enough for researchers and practitioners to only administer measures that assess deficits (e.g., depression) and equate low levels or absence of psychopathological symptoms to the presence of *positive* mental health. In the current paradigm, measures of *positive* mental health and well-being need to be administered as separate or complementary outcome measures to ensure a comprehensive assessment of mental health. Winzer et al. (2014) accentuate that assessing, interpreting, and inferring mental health status from positive items of mental illness questionnaires is an invalid methodological approach. In the midst of local, national, and global crisis, such as the Covid-19 pandemic, researchers, practitioners, and institutions may be interested in examining the effect of the pandemic on the mental health functioning of clients and their families – say university students and parents/guardians. Whereas a significant proportion of participants may not necessarily score high levels of psychopathological symptoms needed for clinical diagnosis of anxiety disorder or depression, an inclusion of measures of positive mental health such as the Mental Health Continuum-Short Form (Keyes et al., 2008), can reveal their level of vulnerability by identifying groups who are languishing and who need psychosocial support as a preventive measure.

Presently, most existing mental health and well-being measures being used for research and practice in Ghana (and in most sub-Saharan African countries) were developed and validated in Western societies, which are of more individualistic context comparable to the more collectivist African context (Appiah et al., 2020c). Owing to vast cultural differences between Western and African societies, it is important that measures that were developed and validated in one cultural context are validated in other cultural contexts before they are administered (de Kock et al., 2013; Woody et al., 2015). Although a few assessment measures have been translated and validated in the local Ghanaian language (see Appiah et al., 2020c; Appiah et al., 2022) or in their original English versions (e.g., Adjorlolo et al., 2020), we highly recommend that researchers explore the psychometrics of their assessment tools, at least in the target population, before they are administered. We strongly urge researchers and practitioners to include well-validated measures of mental health and well-being in their battery of questionnaires when conducting epidemiological surveys to facilitate the identification of subgroups, who may be invisible when only deficit-focused measures are used. There is also a growing need to expand the methodological approaches to include more qualitative

components (or mixed methods) to facilitate inquiry into more contextual, often under-researched areas of mental health.

Thirdly, we postulate that the adoption of a broad-based model and theory testing in the context of strengths-based interventions will impose a complementary shift in the methodological approaches to evaluating mental health – that is, a shift from the entirely psychopathological symptoms to include the assessment and promotion of strengths of individuals and groups. The dual-continua model of mental health, for instance, delineates and categorizes mental health into four groups: flourishing without (symptoms of) mental illness; flourishing with (symptoms of) mental illness; languishing with (symptoms of) mental illness; and languishing without (symptoms of) mental illness. The majority of conventional assessment approaches, however, categorize and merge the groups who are flourishing without (symptoms of) mental illness as well as those languishing without (symptoms of) mental illness into a single group of "no mental illness", thus ignoring the vulnerability of the latter group. Iasiello et al. (2020) argue that for a comprehensive assessment of mental health, measures of mental health and mental ill-health are needed to increase the explanatory power of drivers and outcomes of mental health, and to permit the identification of vulnerable groups. Further, PPIs modelled on Keyes' dual-continua model of mental health, for instance, are based on selected PP constructs and principles and often require a multifaceted approach, where a set of intervention sessions are designed to promote positive mental health, with others also targeting the reduction of psychological distress. The design and implementation of such multicomponent, context-appropriate intervention programs can be time consuming, expensive, and often require the contributions of field experts. Nonetheless, an impressive body of evidence also exists to suggest that, overall, PPIs that integrate models that target different components of mental health functioning are more beneficial than those designed to target a more specific component of functioning (Page & Vella-Brodrick, 2013; Weiss et al., 2016).

Fourthly, while it is of clinical and economic importance to generate new strategies to understand, diagnose, and treat mental disorders, it is equally essential to emphasize that, across contexts and populations, the majority of individuals do not show symptoms of, or experience mental disorders, but instead, may be at risk of psychopathology, depending on the interplay of biological, psychological, and environmental factors. We recommend that the scope of target populations of mental health research and practice be broadened beyond the clinical population to also include non-clinical but vulnerable populations from different ethnicity, culture, and socio-economic status. Psychosocial, strengths-based interventions are needed to prevent mental disorders, and promote positive mental health at the group and community levels, particularly for remote, rural, and socioeconomically disadvantaged population groups. We encourage researchers, graduate students, and practitioners to extend their 'psychological gowns' and research efforts to people dwelling in remote, socioeconomically disadvantaged settings (i.e., rural, peri-urban, small communities) – who are also in dire need of mental health support and where mental health is often highly stigmatized.

Fifthly, given the inadequate resources and shortage of workforce to provide mental health services to all persons in need of mental healthcare in Ghana (see Agyapong et al., 2016; Anum et al., 2020) and elsewhere in sub-Saharan Africa (Oleribe et al., 2019), we strongly recommend that, for the long-term benefits, health policies, including the *Mental Health Policy 2019–2030* of Ghana, should be designed to include proactive, preventive, and strengths-based programs that specifically support individuals to develop psychosocial and life skills, build their resilience, and enhance their coping strategies to equip them to buffer against the effects of traumatic and chronic stressors, particularly amongst children and young adults. This approach is supported by evidence (see Arango et al., 2018; McDaid et al., 2019; Purtle et al., 2020; Sandler et al., 2014). By proactive, preventive, and strengths-based programs, we mean mental health promotion programs and activities that are developed to promote mental well-being, build resilience, and teach healthy coping skills in school children and young adults, parents, older adults, workplaces, and in communities. A wealth of evidence exists in other settings that demonstrates the effectiveness of group-based positive intervention programs in promoting mental health in various population groups and contexts (Bolier et al., 2013; Carr et al., 2020; Weiss et al., 2016). Yet, in a recent study examining and quantifying PPIs in non-Western contexts (see Hendriks et al., 2018), only one study was retrieved from Africa (i.e., Eloff et al., 2014) that utilized empirical, pure or cluster RCT approach in its implementation and evaluation. The majority of the strengths-based interventions that were generated and implemented in Africa do not provide detailed description of the development process of the intervention programs, do not utilize or specify a theoretical framework, or were primarily developed to ameliorate symptoms of psychopathology in a clinical sample (cf. Appiah et al., 2021a; Hendriks et al., 2018). Further, the majority of existing studies that set out to examine or promote mental health in sub-Saharan Africa are often characterized by small sample sizes, lack follow-ups after initial post-tests, and lack stringent design approaches, such as RCTs (cf. Appiah et al., 2021a; Hendriks et al., 2018). Because the overarching goals of psychological science include the promotion and bolstering of the mental health and well-being of all people, there is an urgent need to evaluate the methodologies, frameworks, and priorities that define our research and practice, and search for alternatives that have the potential to facilitate the mental health promotion agenda.

3. Conclusions

While we believe that efforts expended at exploring and generating treatment modules for mental disorders are, in general, important and laudatory, we contend that an exclusive focus on the biomedical and bipolar approaches to mental health research and practice, and the primacy of focus on psychopathology, are ineffectual approaches of preventing psychopathology and promoting mental health in Ghana and sub-Saharan Africa more generally. Although we acknowledge the valuable contributions of the biomedical and bipolar models in guiding research and practice in psychiatry and other areas of cognitive psychology research, we posit, based on a consilience of evidence from the literature, that the adoption of more extensive models or approaches, beyond the traditional foci of understanding and treating mental illness, is required to advance mental health and its associated positive impacts at the individual and societal levels. We urge scholars and practitioners to re-evaluate and expand their research priorities and scope and to adopt frameworks and models that have been empirically validated across cultures in their research and practice efforts.

We argue that although advances in the treatment of mental disorders dramatically improve the lives of patients and their families, there is need to complement clinical approaches to mental health with population-based approaches to reduce the population burden of mental health problems. However, in order to translate these vision and agenda to action, it is imperative that we broaden our research priorities and methodological approaches into inform our understanding, diagnosis, prevention, and treatment of mental disorders, and the promotion of positive mental health. We do not intend for this discussion to exhaust this important subject in a complete way. Instead, our overarching aim is to engage African-based mental health researchers and practitioners to reflect upon the limitations with the current research and practice models and priorities, which only limit our genuine quest to effectively treat and prevent mental disorders and bolster the mental health of everyone.

Declaration of competing interest

The author declares that there were no conflicts of interest with respect to the authorship or the publication of this article.

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