The Impact of Contact Experiences on Personality and Mental Illness Stigma in the UAE

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This thesis is submitted in partial fulfillment of the requirements for the degree of Master of Science in Clinical Psychology

Under the Supervision of Dr. Brettjet Cody

June 2020

Declaration of Original Work

I, Michelle Maria Antonia Tomas Smigura, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this thesis entitled "*The Impact of Contact Experiences on Personality and Mental Illness Stigma in the UAE*", hereby, solemnly declare that this thesis is my own original research work that has been done and prepared by me under the supervision of Dr. Brettjet Cody, in the College of Humanities and Social Sciences at UAEU. This work has not previously been presented or published, or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my thesis have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this thesis.

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Abstract

Mental health illness is one of the most stigmatized diseases globally. Mental illness stigma continues to play an important role that shapes societal responses to individuals with mental illness. Owing to the negative consequences of stigma endorsed by the public and thereby internalized by the individual, better understanding is required to identify how these public negative attitudes develop towards people with mental illness. This study examined whether one's contact experiences with mental illness influenced the role that their personality plays on mental illness stigma. Participants (N = 203) completed the Social Distance Scale, 20-item short form of the International Personality Item Pool (Mini IPIP), and degree of contact experiences. Results suggested that Openness to Experience and Agreeableness personality traits reported the least amount of stigma and Neuroticism was observed to have the highest amount of stigma towards individuals with mental illness. Having close-contact experience was linked to a lower expression of mental illness stigma whereas, individuals having no previous contact were more likely to engage in greater stigma. No moderating effects of contact experiences on personality and social distance were observed. These findings suggest that certain personality traits may predict greater endorsement of stigma while personal contact experiences may reverse the amount of stigma expressed towards people with mental illness. Moreover, by increasing contact experiences, greater public awareness and acceptance may be achieved allowing for stigmatization towards people with mental illness to decline.

Keywords: Mental Illness, Stigma, Social distance, Personality, Contact Experiences, Moderation.

Title and Abstract (in Arabic)

تأثر خبرات التواصل الاجتماعي على الشخصية ووصمة الاضطرابات النفسية في دولة الإمارات العربية المتحدة

الملخص

يعد الاضطراب النفسي من أكثر الأمراض التي تلحق العار بالفرد على مستوى العالم. وتبقى وصمة المرض النفسي اللاعب الأكثر أهمية في تشكيل استجابة المجتمع للأفراد المصابين بالاضطرابات النفسية. ونتيجة للعواقب السلبية للوصم التي يدعمها المجتمع وبالتالي يشعر بها الفرد، يلزم ان يكون هناك تفهم أفضل لتحديد كيفية تطور هذه المواقف السلبية العامة تجاه الأشخاص الذين يعانون من الاضطراب النفسي. وقد ناقشت هذه الدراسة ما إذا كانت تجارب الاتصال بالمصاب بالاضطراب ا النفسي تؤثر على الدور الذي تلعبه شخصية الفرد في وصمة المرض النفسي. وقد أكمل المفحوصين (N = 203) "مقياس التباعد الاجتماعي"، ونموذج مختصر من مقياس "الماسح الدولي لعبارات الشخصية" (Mini IPIP) مكون من 20 سؤال، واستبيان درجة التواصل الشخصي. وقد أشارت النتائج إلى أن سمات الانفتاح على الأخرين أو التوافق مع الغير لا ينتج عنها سمة الوصم. أما العصابية فقد لوحظ أنها تساهم بأكبر درجة من الاتساق مع سمة الوصم التي تقاس بمدى درجة التباعد الاجتماعي تجاه الأفراد الذين يعانون من المرض النفسي. حيث لوحظ أن العصابية تساهم بأعلى قدر من التباعد الاجتماعي وبالتالي تؤدي إلى وصمة العار أكثر تجاه المصابين بالأمراض العقلية. أما الاتصال الوثيق بالمصابين بالاضطرابات النفسية الذي يعبر عنه بدرجة أقل من التباعد الاجتماعي تجاه المرض النفسي كان الأقل في درجة الوصم، في حين أن الأفراد الذين ليس لديهم اتصال سابق كانوا أكثر عرضة للمشاركة في وصمة العار بشكل أكبر. ولم يكن للتواصل الشخصي أي تأثير على عوامل الشخصية ودرجة التباعد الاجتماعي. فقد تشير هذه النتائج إلى أن سمات شخصية معينة قد تتنبئ بتأييد أكبر للوصم في حين أن تجارب التواصل الشخصي قد تعكس درجة الوصم التي يتم التعبير عنها تجاه المصابين باضطرابات نفسية من خلال زيادة التواصل الشخصي، وعليه فإن إنشاء وتنمية المزيد من الوعي والقبول للمصابين بالاضطرابات النفسية يقلل من الحاق سمة الوصم بالأشخاص المصابين بمرض عقلي.

مفاهيم البحث الرئيسية: المرض النفسي، الوصمة، والتباعد الاجتماعي، سمات الشخصية، خبرات التواصل الشخصي، التأثير.

Acknowledgements

Foremost, I would like to express my sincere gratitude to my advisor Dr. Brettjet Cody for her continuous support, sincerity, and motivation throughout my graduate studies and research. I am extremely grateful for everything she has offered me.

I would like to also thank my thesis committee members Dr. Zahir Vally, Dr. Mohammed Elhammoumi, and Dr. Solaiman Dowayraat for their invaluable guidance and insight throughout this research.

I am extremely grateful to my family and friends for their love, understanding, and continuing support to complete my research and graduate studies successfully.

I also would like to extend my sense of gratitude to one and all who, directly or indirectly, have lent their helping hand in this academic venture.

Dedication

To my beloved family and friends

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List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ANOVA	Analysis of Variance
HIV	Human Immunodeficiency Virus
IQ	Intelligence Quotient
Mini IPIP	International Personality Item Pool- Five Factor Model- 20 Item
SDS	Social Distance Scale
UAE	United Arab Emirates
WHO	World Health Organization

Chapter 1: Introduction

1.1 Overview

In 2001, the World Health Organization (WHO) estimated that more than 25% of all people would experience a mental health disorder during their lifetime and that approximately 450 million people worldwide are disabled as a consequence. It was also estimated that one in four families is likely to have at least one member with a mental disorder and that at any point in time, 10% of the adult population would be affected by a serious mental illness (WHO, 2001). Thus, based on these prevalence rates, most people at some point will be exposed to mental illness in some capacity whether it is through their own direct experiences or through interaction with others such as family, friends, significant others, coworkers etc. Given the overwhelming number of individuals that will have encounters with mental illness, it is important that significant attention is devoted to better understanding how the public views those suffering from mental illness. With wider understanding, better treatment options, awareness campaigns, improved national mental health literacy, and interventions may be developed towards reducing public stigma towards mental disorders.

Mental health illness is one of the most stigmatized diseases globally (Lauber et al., 2004; Qassim, Boura, & Al-Hariri, 2018). In 2008, the World Health Organization defined stigma as "a distinguishing mark establishing a demarcation between the stigmatized person and others attributing negative characteristics to this person". The perception and attitude towards mental illness is that an individual is undesirable, socially unacceptable, and ultimately flawed (Corrigan, 2004) thereby feeling the need to distance oneself socially from people with mental illnesses. Stigma has a negative impact on life domains through both anticipated and experienced

discrimination (Alexander & Link, 2003). Researchers have shown that individuals are treated poorly and continuously suffer distress, rejection, and discrimination (Qassim, Boura, & Al-Hariri, 2018). Consequences of discrimination include but are not limited to employment, being the first to be terminated, while in terms of housing, they are viewed as unwanted and unwelcome neighbors (Corrigan & Kleinlein, 2005; Alexander & Link, 2003; Link & Phelan, 2001). Furthermore, individuals facing discrimination for their mental illness tend to experience low self-esteem, low self-efficacy, and overall low satisfaction (Rüsch, Angermeyer, & Corrigan, 2005; Gaebel & Baumann, 2003).

There are two ways of distinguishing stigma: self-stigma and public stigma. According to Corrigan (2004), the perceptions of the individuals in a stigmatized group turn the commonly held prejudices and negative attitudes onto themselves causing self-stigma. These negative beliefs propagated by the public causes the individual to feel inferior, weak, inadequate, and unacceptable in regards to their presence in society (Rüsch, Angermeyer, & Corrigan, 2005; Vally et al., 2018). These individuals begin to accept these stereotypes and thereby start to believe that they are incompetent leading to negative emotional reactions. These emotional reactions result in lowering of self-esteem, self-efficacy, and help-seeking behaviors for their psychological diagnoses. Moreover, such stigmatized individuals create behavioral responses that strengthen their self-discrimination resulting in the failure of securing housing or employment (Corrigan, 2004; Rüsch, Angermeyer, & Corrigan, 2005).

Conversely, public stigma in relation to mental illness stigma involves the public's negative beliefs about individuals suffering from mental illness. Common negative perceptions held by the public may be that persons with mental illness are viewed as dangerous (Star, 1955), incompetent, and not to be trusted (Corrigan, 2004;

Rüsch, Angermeyer, & Corrigan, 2005). Rüsch, Angermeyer, and Corrigan (2005) further elaborated that when the public starts to believe a negative stereotype, consequential negative reactions such as fear, dangerousness, and hatred (Angermeyer & Matschinger, 2003) are developed and inevitably lead to discrimination by avoiding a person with a mental illness. The effects of public stigma have a greatly significant impact on persons with mental illness. This is seen through their inability to secure adequate housing and find desirable employment (Corrigan, 2004; Link & Phelan, 2001; Corrigan & Kleinlein, 2005; Brown, 2012). Corrigan (2004) further illustrates public stigma's presence in world-wide justice systems, as individuals suffering from mental illness tend to be arrested and spend more time in jail thereby diminishing self-esteem and social opportunities.

Both self-stigma and public stigma tremendously affect individuals with mental illness. The stigma of mental illness acts as a barrier for persons with mental illness specifically interfering with their opportunities for education, employment, healthcare, or housing. When society creates or raises stigmatizing barriers that inhibit basic needs, the stigmatized individuals become increasingly reluctant to challenge stigma created by the public in turn harboring feelings of resentment and hopelessness which tend to exacerbate their mental illness. Moreover, it may be the fear of being publicly stigmatized that holds greatest impact. As suffers become unwilling to acknowledge the severity of their mental health problems due to the fear of being stigmatized, avoidance of seeking professional help and achieving personal or employment goals ensures causing unnecessary suffering in the individual to increase (Kearns et al., 2019; Vally et al., 2018).

Mental illness is viewed as a burden in both developed and non-developed countries. In the United Arab Emirates (UAE), traditional approaches of understanding

and treatment are still methods of choice (Al-Darmaki & Sayed, 2009; Haque & Kindi, 2015). Research has suggested that the local population's choice to consult traditional healers or beliefs that mental illness may stem from magic (Qassim, Boura, & Al-Hariri, 2018) may cause mental illness stigma to remain pervasive (Haque & Kindi, 2015). It has been suggested that a belief where mental illness is contagious also persists which deters the local population from seeking psychological services or joining the field of mental health (Haque & Kindi, 2015). Moreover, due to the public being less sensitized to mental health information and awareness, it was reported that psychological interventions are only sought as a final solution when all other options have failed and symptoms have become unmanageable (Al-Darmaki & Sayed, 2009). With the presence of this attitude, people become reluctant to seek professional psychological help for reasons related to stigma. As this stigma barrier continues to manifest among the public, education and the development of mental health awareness becomes inhibited and allows for mental illness stigma to persist.

Mental health literacy has been defined as "knowledge, and beliefs about mental disorders which aid their recognition, management, or prevention" (Wu et al., 2018; Qassim, Boura, & Al-Hariri, 2018; Kurumatani et al., 2004). Mental health literacy has been shown to increase knowledge about mental illness within countries through the development of awareness, supporting mental illness recognition, knowing how to seek professional help, and the knowledge about risk factors and causes that promote mental illness identification. As mental health literacy increases, stigmatization towards mental health tends to decrease. Mental health literacy has been shown to benefit both individual and public mental health where mental health consumers increase help seeking behaviors and the public endorse acceptance and understanding of mental health illness (Bjørnsen et al., 2017).

Regarding mental health literacy, a recent study examining public knowledge and attitude towards individuals with depression and schizophrenia was conducted in the UAE (Qassim, Boura, & Al-Hariri, 2018). Despite having a diverse population, a high level of stigma was found among respondents towards individuals with depression and schizophrenia. It was also identified that a poor mental health literacy was present within the UAE. Based on these negative attitudes towards individuals suffering from depression and schizophrenia, stigmatization and discrimination becomes inevitable thereby fortifying public disbeliefs and misunderstandings about mental illness. Such evidence suggests that in order to decrease stigmatization, modifications to mental health policies to increase mental health literacy and awareness is necessary. Through increasing awareness, recognitions, causes, and treatment of mental illness, negative social distancing resulting in the delay of help-seeking can be eliminated, especially in the UAE (Qassim, Boura, & Al-Hariri, 2018).

To better understand the relationship between mental illness, stigma, and how it affects individuals, a theoretical framework and conceptualization can be used to identify this connection. Labeling theory has been applicable to several deficiencies in members of society (Locke, 2010) ranging from those afflicted with HIV/AIDS and cancer patients (Fife & Wright, 2000), individuals labeled as deviants (Bernburg, 2019), homeless and poor persons (Phelan et al., 1997), and most relevantly individuals suffering from mental illness (Link & Phelan, 1999). Using labelling theory, the struggles faced by those with mental illness created through generalized negative psychiatric labels can be explained.

Goffman (1963) conceptualized the relation between stigma and mental illness through the assumption that society establishes the means of categorizing persons based on their complementing attributes felt to be ordinary and normal. When these

attributes become not "normal", a relationship between these non-normal attributes and a stereotype develop. As a result, eventual group differences arise between the "discredited" and the "discreditable" from normal others in society (Goffman, 1963). Goffman (1963) stated that social norms dictate what is acceptable and what is not and it is through these violations of societal norms that lead to subsequent labeling in the form of mental illness (Locke, 2010). Moreover, due to stigmatized persons becoming not "normal" until a certain point, those that are stigmatized find themselves living in society as a minority and find it increasingly difficult to accept their psychiatric diagnosis. Attempts to correct or cope with their situations usually result in shame, anxiety, and avoidance, especially around those that are perceived to be less understanding. Additionally, stigmatized individuals feel the need to not behave as their label dictates and blend in with society.

A major conceptualization of stigma is put forward by Link and Phelan (2001) where the main concept linking stigma and mental illness is convergence of social-cognitive components. According to the authors, stigma exists when elements of labelling, stereotyping, prejudice, and discrimination co-occur.

Labels and distinguishing characteristics are commonly used as cues to categorize people into groups. A majority of human differences are largely ignored and socially irrelevant and therefore do not lead to stigma (Link & Phelan, 2001). For example, the color of one's car or the size of one's feet do not matter to most individuals and are typically inconsequential. However, other human differences are highly salient in regards to social appearance, such as IQ, gender, and mental illness (Rüsch, Angermeyer, & Corrigan, 2005; Link & Phelan, 2001; Link 1987; Scheff, 1974). Labels have been used to infer mental illness and therefore lead to stigma. Link (1987) and Link et al. (1987) illustrated that labels may be obtained through others,

such as when a person has been diagnosed with a psychiatric disorder or obtained through association, by seeing a person leaving a mental health office. It is from these circumstances that cause society to label such individuals and thereby categorize them with having a mental illness.

The second component of stigma occurs when labelled differences are associated to stereotypes (Link & Phelan, 2001; Goffman, 1963). With reference to mental illness stigma research, stereotypes are found to be the most leading component negatively attributing to stigma (Corrigan, 2004; Link & Phelan, 2001; Rüsch, Angermeyer, & Corrigan, 2005). Link and Phelan (2001) identified that stigma involves both a label and a stereotype, where the label links the individual to a set of undesirable characteristics that form the stereotype. Stereotypes are often "automatic" and "efficient" allowing one to quickly make subconscious judgements without one's knowledge (Link & Phelan, 2001). It is due to this automatic nature of stereotyping that make them destructive toward individuals with mental illness. Common stereotypes of people with mental illness tend to view them as violent or dangerous, incompetent and not being able to work or live independently, and weak-willed (Corrigan, 2004). Moreover, it is this weak-willed stereotype that is most defeating where it is wrongfully believed that mentally ill persons are responsible for their illness (Rössler, 2016) and that onset of their illness could have been prevented but was unsuccessful due to their weak character (Corrigan, 2004).

Prejudice and discrimination compose as the third and last feature of the stigma process. Prejudiced individuals tend to believe negative stereotypes and as a result, consider them valid. By believing these negative stereotypes, negative emotional reactions are developed as a consequence. Corrigan (2004) and Link and Phelan (2001) illustrated this feature in people prejudiced against mental illness by believing negative

stereotypes ("They are all violent") and therefore create an emotional response ("I am afraid of all of them") (Rüsch, Angermeyer, & Corrigan, 2005; Corrigan, 2004). Due to prejudice being an affective and cognitive response, discrimination, a behavioral manifestation of prejudice, is likely to follow (Link & Phelan, 2001; Rüsch, Angermeyer, & Corrigan, 2005). Negative behaviors towards a discriminated group of individuals are manifested largely through avoidance (Phelan, Link, & Dovidio, 2008). Avoidant discriminatory behaviors include the unwillingness to socialize with, live near, or work with individuals with mental illness (Markowitz, 2005; Brown, 2012). Further to this, individuals with mental illness may encounter discriminatory behavior in employment opportunities acting as a major barrier towards improving finances and support. Furthermore, exclusion of individuals with mental illness are manifested within figures of authority, police and legal representatives (Hemmens et al., 2002), sharing discriminating attitudes towards those with mental illness thereby strengthening public-stigma and self-stigma within the discriminated individual alike (Brown, 2012).

It has been suggested that an explanation for why some people are more prejudiced than others is due to differences in people's personalities. It has been contended that prejudice is not a sole function of the social environment or social-group membership but rather a function of individual internal attributes (Ekehammar & Akrami, 2003). Based on this argument, Ekehammar and Akrami (2003) suggested that negative beliefs and prejudicial attitudes leading to stigma can be explained factors within an individual rather than characteristics of social context.

Based on the classical approach of authoritarian personality theory (Adorno et al., 1950), generalized prejudice towards individuals from various out-groups can be explained by personality factors within an individual. These factors include

conventionalism, authoritarian submission and aggression, and power and toughness (Adorno et al., 1950). Drawing from and confirming the authoritarian personality theory, Altemeyer (1981, 1988, 1998) developed his theory of right wing authoritarianism and confirmed that attitudes or prejudice to various out-groups can be derived from one or more personality traits. Right wing authoritarianism is composed of conventionalism, authoritarian submission, and authoritarian aggression indicating that individuals with high right wing authoritarianism favor traditional values, are submissive to authority figures and act aggressively towards out-groups (Altemeyer, 1981; Sibley & Duckitt, 2008). Therefore, due to individuals high in right wing authoritarianism viewing social out-groups as inferior, Altemeyer (1998) referred to right wing authoritarianism as an effective predictor of prejudice (Sibley & Duckitt, 2008).

Heaven and Bucci (2001) compared the relation between right wing authoritarianism and higher-order Big Five personality factors. Despite the Big Five personality factors being conceptually distant from prejudice, it was noted that right wing authoritarianism had some alignment with the Big Five personality factors. Individuals with less general prejudice and right wing authoritarianism were higher in Openness to Experience and Agreeableness. In regards to mental illness stigma, such individuals would be less likely to discriminate people with mental illness due to their more prosocial, compassionate, altruistic, and emotionally stable personality traits. Conversely, Heaven and Bucci (2001) identified a relation between right wing authoritarianism and the Big Five factor Neuroticism. Individuals with Neuroticism personality traits tend to be more insecure, nervous, and lack overall confidence. Based on the relation between Neuroticism and right wing authoritarianism, like individuals high in right wing authoritarianism, people with Neuroticism traits are more likely to

be more prejudiced and possibly contribute to public stigma of mental illness. Against the background outlined above, it is proposed that personality traits are related to prejudice and stigma. A predictive nature may exist between personality traits and stigma where some personality traits may be able to predict the likelihood of a person endorsing negative stereotypic beliefs and engage in public stigma. Based on this predictive power, prejudice may be predicted but more interestingly, personality may possibly precede prejudice and overall stigmatization.

Stemming further from Altemeyer's (1981) authoritarian personality approach is the direct link between personality and prejudice and social dominance orientation. Unlike right wing authoritarianism's aggressive orientation and more threatening inclination (Dion, 1990), social dominance orientation is seen as a general hierarchical orientation towards intergroup relations. Individuals high in social dominance orientation tend to rank social groups in a superior-inferior hierarchy (Altemeyer, 1998). Like right wing authoritarianism, social dominance orientation elicits patterns of prejudice and social attitudes against out-groups and minorities such as individuals with mental illnesses. It is also argued that based on these patterns of prejudice, social dominance orientation is more effective than right wing authoritarianism in predicting enduring negative attitudes and beliefs rather than behaviors linked to prejudice (Altemeyer, 1988; Altemeyer, 1998; Sibley & Duckitt, 2008).

Regardless of how stigma is created or manifested, the consequences are overwhelmingly negative for mental health consumers and the general public. There are various beliefs on how to reduce stigma including contact experiences. Contact experiences is defined in the research literature as placing oneself in direct personal contact with the stigmatized group (Couture & Penn, 2003; Corrigan & Penn, 1999). These experiences are believed to be beneficial for reducing prejudice (Pettigrew &

Tropp, 2006) and also outlines attitudes towards mental illness. An individual's previous contact with persons with mental illness has been identified as an important influence on personal attitudes and beliefs about individuals with mental illness (Brown, 2012). A plausible explanation for the reduction in stigma towards mental illness through contact experiences may be that such experiences help others understand the feelings and views of the stigmatized group (Pettigrew et al., 2011). As a result, empathy towards individuals with mental illness is enhanced therefore reducing prejudice and overall stigma (Pettigrew et al., 2011). Furthermore, Corrigan et al. (2001a) suggested that higher previous contact with individuals suffering from a mental illness reduces negative perceptions that people with mental illness are dangerous and also lowers authoritarian personality beliefs towards them. Moreover, it has also been argued that some individuals already possess favorable attitudes towards people with mental illness resulting in the initiation of deliberate contact experiences thereby reducing stigmatizing beliefs (Link & Cullen, 1986).

It is apparent that research and complete understanding of stigma related to mental illness is not as simple as expected. Mental illness stigma comprises of several components all affecting the mental health consumer and the public alike. From stigma, negative consequences are created and held by the public which affect individuals with mental illness in many debilitating ways. It is obvious that reducing stigma and sensitizing the public to mental illness is important. By increasing education of mental illness via contact experiences, it is suggested that many individuals of the public, despite their personality, would be able to alter their negative beliefs and reduce stigmatization.

1.2 Statement of the Problem

Mental illness stigma continues to play an important role that shapes societal responses to individuals with mental illness. Owing to the negative consequences of stigma endorsed by the public and thereby internalized by the individual, better understanding is required to identify how these public negative attitudes develop towards people with mental illness.

While many studies have investigated the concept of stigma towards mental illness, only a limited number have explored the role of personality and contact experience as a potential moderator, especially within the UAE.

The main objective of this study is to explore the effects of personality and contact experiences on mental illness stigma. A secondary objective involves exploring whether contact experiences has a moderating effect on personality differences and stigma towards mental illness. By conducting this study, results may contribute to the existing literature and lend support to future research being conducted within the UAE and overall stigma interventions.

1.3 Relevant Literature

1.3.1 Personality and Mental Health Stigma

Various studies have explored the association between personality and prejudice where certain personality traits have a certain impact on prejudice. The relationship between the Big Five personality traits and generalized prejudice (based on different prejudice scales such as racial prejudice, sexism, attitudes towards mentally disabled people, and attitudes towards homosexuals, lesbians, and gay men) was explored by Ekehammar and Akrami (2003). Consistent negative relationships

were identified between Openness to Experience and Agreeableness personality traits with generalized prejudice.

Further support for this finding was achieved when Sibley et al. (2011) validated a new version of the Big Five personality measure and rationalized that individuals scoring higher in Openness to Experience and Agreeableness tend to be more open-minded and tolerant, respectively, and may extend towards people with mental illness. Following this, Sibley et al. (2011) further rationalized that such individuals possessing Agreeableness and Openness personality traits tend to be more empathetic and therefore would be less likely to stigmatize individuals with mental illness. Costa and McCrae (1992) go further to support this by suggesting that individuals who are more open tend to be more willing to question authority and are more prepared to entertain new social ideas thereby endorsing less stigma towards people with mental illness.

Added evidence for the relationship between personality and mental illness stigma was provided in a study conducted on final year university students in Turkey (Arikan, 2005). Narcissistic defense mechanisms based from Narcissistic personality traits such as omnipotence, devaluation, projective identification, and denial were studied among students who had the tendency to stigmatize. By assessing defense mechanism psychological characteristics from narcissistic personality, Arikan (2005) provided evidence that individuals with increased narcissistic defenses were strongly associated with holding negative stigma towards people with mental illness. Moreover, it was found that individuals scoring higher in narcissistic defenses perceived people with mental illness as dangerous thereby enhancing the process of stigmatization (Arikan, 2005).

Social appraisal of adults with Attention Deficit Hyperactivity Disorder among undergraduate students was investigated (Canu et al., 2008). The authors attempted to determine whether Big Five personality traits predicted appraisals of affected individuals. Findings indicated that participants exhibited significantly less desire to engage with individuals with Attention Deficit Hyperactivity Disorder compared to controls. Furthermore, it was suggested that individuals with Agreeableness, Extraversion, and Conscientiousness were all significantly associated with more positive appraisals of people with Attention Deficit Hyperactivity Disorder. Based on these findings, Canu et al. (2008) further suggested that such negative appraisals and bias towards affected individuals contributed to public-stigma such as rejection particularly in work and academic situations. More importantly, the findings shed light on how peer personalities have a significant effect on appraisals of individuals with Attention Deficit Hyperactivity Disorder and when negative, cause affected people to endure a life time of stigma (Canu et al., 2008).

Adding to the literature based on the relationship between personality and stigma, Sims (2016) conducted a study assessing whether Big Five personality traits predict emphatic listening and communication skills. Findings suggested that individuals with Agreeableness, and Openness to Experience significantly predicted better active emphatic listening skills which in turn might enable such individuals to gain more understanding on the feelings towards people being stigmatized for having a mental illness.

A meta-analysis and theoretical review on personality and prejudice (Sibley & Duckitt, 2008) was conducted with the intention of reviewing personality constructs such as right wing authoritarianism and social dominance orientation and their relationships with Big Five personality dimensions. After assessing 71 studies, it was

found that prejudice is primarily predicted by low Openness to Experience and low Agreeableness. Moreover, based on theoretical perspectives, social dominance orientation was associated with both low Openness to Experience and Agreeableness whereas right wing authoritarianism was associated with low Agreeableness but high Conscientiousness. Based on these findings, Sibley and Duckitt (2008) concluded that right wing authoritarianism and social dominance orientation not only serve as models for personality conceptualization but also act as moderators for predicting prejudice within personality traits. More interestingly, cross-cultural difference consistencies in prejudice, specifically Conscientiousness and Neuroticism, were observed after comparing Western and Eastern societies. It was found that Western societies give more importance to mastery (ambition), values of hierarchy (wealth, social power), and affective individualism (personal happiness) (Sibley & Duckitt, 2008) indicating that individuals who scored higher in Neuroticism tend to endorse more negative attitudes towards out-groups and minorities, such as individuals with mental illnesses. On the other hand, Eastern societies tend to prioritize egalitarianism and intellectual autonomy over hierarchy and social order causing individuals to strongly adopt and express social attitudes favoring order, structure, and personal security thereby scoring higher in Conscientiousness. By endorsing higher Conscientiousness personality traits, the researchers further suggested that the tendency to be higher in both right wing authoritarianism and social dominance orientation tend to be likely (Sibley & Duckitt, 2008).

Despite there being evidence that certain personality traits may act as a link or potential predictor in the development of stigma towards individuals with mental illness, current and up-to-date studies on the relationship between personality traits and mental illness stigma are limited and none conducted within the UAE.

1.3.2 Contact Experiences, Personality, and Mental Health Stigma

Literature has shown that contact experiences proves to be beneficial for reducing prejudice. A systematic review was conducted in order to provide evidence for effective interventions to reduce mental health related stigma and discrimination (Thornicroft et al., 2016). Based on the review of short-term and long-term interventions, it was found that social contact experiences tend to be the most effective type of intervention to improve attitudes towards individuals with mental illness and increase stigma-related knowledge (Thornicroft et al., 2016). It was also evidenced that social contact experiences are more effective in the short-term and weaker in long-term. More specifically, when used in target groups such as students, contact experiences are seen to achieve short-term attitudinal improvements but less clearly if beneficial during long-term (Thornicroft et al., 2016).

Contradictory findings provide some support to the aforementioned research in another systematic review of effective interventions to reduce mental health related stigma in the medium and long-term (Mehta et al., 2015). Anti-stigma containing social contact (direct or indirect) were found not to be more effective than mental illness stigma interventions that did not. Despite this finding, Mehta et al. (2015) did find that anti-stigma interventions do have a modest effect in reducing stigma but only through interventions of increasing knowledge. By providing knowledge about mental illness, mental-illness based stigma and discrimination were reduced. No evidence was provided to support the view that social contact experiences was an effective type of intervention for reducing mental illness stigma in both medium-term and long-term outcomes (Mehta et al., 2015).

The contribution of previous contact and personality traits to severe mental illness stigma was conducted by Brown (2012). After college students completed

measures of personality traits, previous contact, social distance, and perceived dangerousness, it was found that individuals with less previous contact were associated with higher stigmatization and higher perceptions of dangerousness. More specifically, individuals who had experienced close contact with an individual with a mental illness in one's personal life resulted in lesser social distance and aspects of stigma compared to occasional non-close contact experiences. Furthermore, when Brown (2012) controlled for contact experiences, lower Openness to Experience and lower Agreeableness were associated with more stigmatization towards people with mental illness.

In an older study (Corrigan et al., 2001b), the relationship between familiarity, social distance, and stigmatizing attitudes about mental illness was examined. Individuals of the public familiar with mental illness were less likely to perceive individuals suffering from a mental illness as dangerous which also corresponded with less fear of persons with mental illness. Moreover, individuals who had greater previous contact and familiarity was associated with less social distance. Corrigan et al. (2001b) discussed that familiarity surrounding mental illness, based on having greater knowledge or contact experiences, influenced members of society to stigmatize less in terms of decreased dangerousness stereotypes.

Link and Cullen (1986) also reported similar results after examining perceptions of how dangerous the mentally ill are and whether contact with those suffering from a mental illness reduces such negative beliefs. A significant inverse relationship was found indicating that as contact experiences increase, perceptions of dangerousness decreases. It was also noted that increased contact reduced fear towards those who are mentally ill in both men and women, educated and less educated, and all ages (Link & Cullen, 1986). From this study, it can be deduced that when the

general public reduces social distance through contact with individuals with a mental illness, fear is reduced in addition to stigmatized perceptions of dangerousness.

Direct and moderating effects of personality on stigma towards mental illness was conducted by Yuan et al. (2018). Stigmatization of mental illness defined by social distance was found to be positively associated with higher scores on Conscientiousness and Neuroticism personality traits therefore endorsing higher levels negative attitudes towards individuals with mental illness. Upon examining contact experiences, both personal and non-personal contact were linked to more positive attitudes towards mental illness. The authors aimed to determine a moderating effect of personality on contact experiences and found that only Agreeableness moderated relationships of personal close-contact on social distance. It was argued that contact experiences of a more voluntary and personal nature seem to be most effective in reducing stigma towards out-group individuals but seemly only with personality traits that are more willing to tolerate mental illness, such as Agreeableness. Moreover, due to a lack of further moderation of personality traits between contact experiences and stigma, it was suggested that at times close contact may increase negative attitudes in regards to relatives having a mental illness. In this case, having a relative with a mental illness may increase involuntary contact due to family members being unable to avoid contact with such individual. Due to this involuntary contact, negative effects and prejudice may unwillingly arise thus increasing social distance attitudes. When involuntary contact experiences are taken together with personality traits, lack of moderation may have resulted.

1.4 Research Questions

Research Question 1: Is there an association between personality traits (Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) and mental illness stigma, as measured by social distance, among the four conditions (major depressive disorder, schizophrenia, obsessive compulsive disorder, and panic disorder)?

Research Question 2: Does contact experience (Close contact- 'Has anyone in your family or close friends ever had problems depicted in the vignette?' and 2) Non-close contact- 'Have you had any experiences (e.g. volunteering, working) in dealing with a person who had problems depicted in the vignette?) effect mental illness stigmatization as measured by social distance?

Research Question 3: Does contact experience have an effect on personality traits and mental illness stigma measured by social distance?

Chapter 2: Methods

2.1 Participants

Following institutional review board approval, a total 203 participants were recruited via convenience sampling living in the in the UAE. The participants consisted of 129 females (63.5%) and 74 males (36.5%) above 18 years old. The majority of the sample indicated that they were 30 years old and above (55.2%) followed by aged between 27 and 29 years old (21.7%), aged between 24 and 26 years old (16.7%), aged between 21 and 23 years old (3.9%), and aged between 18 and 20 years old (2.5%). Table 1 shows the distribution of the participants gender and age ranges.

Table 1: Descriptive Statistics of Gender and Age of Participants

	n	%
Gender		
Male	74	36.5%
Female	129	63.5%
Total	203	100%
Age		
18-20 years	5	2.5%
21-23 years	8	3.9%
24-26 years	34	16.7%
27-20 years	44	21.7%
30+ years	112	55.2%
Total	203	100%

Data was collected from participants from 29 different countries; the majority of respondents were from the Philippines (11.8%, *n* = 24), followed by India (9.9%, *n* = 20), United Kingdom (7.4%, *n* = 15), Palestine (7.4%, *n* = 15), Egypt (6.4%, *n* = 13), Jordan (6.4%, *n* = 13), UAE (5.9%, *n* = 12), Canada (5.4%, *n* = 11), Syria (4.4%, *n* = 9), Lebanon (3.9%, *n* = 8), Oman (2.5%, *n* = 9), United States of America (2.5%, *n* = 5), South Africa (2.5%, *n* = 5), Greece (2.5%, n = 5), Australia (2%, *n* = 4), Russia (1.5%, *n* = 3), Serbia (1%, *n* = 2), Romania (1%, *n* = 2), Pakistan (1%, *n* = 2), Spain (1%, *n* = 2), and Turkey (1%, *n* = 2), The remaining respondents chose to not disclose their nationality (8.9%, *n* = 18) or only one individual responded from their country. (See appendix A for pie chart representation of total sample nationalities).

Regarding highest level of completed education, the majority of participants indicated that they had achieved a bachelor's degree (*n* =137*)* as their highest level of completed education followed by master's degree (*n* = 32), doctoral or professional degree (*n* = 20), and lastly, high school degree (*n* = 11).

Based on the participants responses, the largest portion of the sample, 53% (*n* = 108) currently resides in Dubai, followed by Abu Dhabi (25%, *n* = 51), Sharjah (16%, *n* = 32), Ras Al Khaimah (4%, *n* = 9), and Ajman (2%, *n* = 3).

Table 2 shows the frequency and percentage of highest level of education completed and Emirate of the participants' current residence.

Table 2: Descriptive Statistics of Education Level and Current Emirate of Residence

	n	%
Education Level		
High School Degree	11	5.4%
Bachelor's Degree	137	67.5%
Master's Degree	32	15.8%
Doctoral/Professional Degree	20	9.9%
I am not sure/Don't Know	3	1.5%
Total	203	100%
Emirate		
Dubai	108	53.2%
Sharjah	32	15.8%
Abu Dhabi	51	21.1%
Ras Al Khaimah	9	4.4%
Ajman	3	1.5%
Fujairah	0	0%
Umm Al Quwain	0	0%
Total	203	100%

2.2 Instruments

The participants were asked to complete a total of four questionnaires: International Personality Item Pool-Five Factor Model (20 items), Section 1, Social Distance Scale (7 items), Section 2, Contact Experiences (2 items), Section 3, and Demographic Information Form (5 items), Section 4.

2.2.1 International Personality Item Pool-Five Factor Model Measure- 20 Item (Mini-IPIP)

Personality traits were measured using the 20-item short form of the 50-item International Personality Item Pool-Five Factor Model measure (Mini-IPIP) (Goldberg, 1999) (Appendix G). Four items measure each of the 'Big Five' personality traits (i.e. Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism). Items on the Mini-IPIP are both positively and negatively phrased and rated on a 5-point Likert scale ranging from '1 = Very Inaccurate to' 5 = Very Accurate. Examples of the Mini-IPIP items include "I am the life of the party" and "I keep in the background". An average score was calculated for each personality trait; with a higher score representing a higher endorsement of the personality trait. The Mini-IPIP has displayed good test-retest reliability, convergent, discriminant, and criterion-related validities in a previous study (Donnellan et al., 2006).

2.2.2 Social Distance Scale (SDS)

The Social Distance Scale (Link et al., 1987; Link et al., 1999) (Appendix F), a measure of mental illness stigmatization, was used to assess participant's self-reported willingness to contact or interact with a person with a mental illness. The Social Distance Scale uses vignettes to allow better recognition and to assess the amount of social distance desired. The original vignettes were slightly modified by the researcher to answer the respective research questions and to update symptoms to meet Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition (DSM-5) criteria. A total of four vignettes were used in the current study; major depressive disorder (Appendix B) and schizophrenia (Appendix C) were adapted from those used in previous studies (Link et al., 1999; Yuan et al., 2018) while those on panic disorder

(Appendix D) and obsessive compulsive disorder (Appendix E) were developed by the researcher. Seven questions using a 4-point Likert scale varied from '1 = Definitely willing' to '4 = Definitely unwilling' were used to rate social distance based on the description of the vignette. Question examples include "How would you feel about renting a room in your home to someone like Jim?" and "How would you feel having someone like Jim as a neighbor?". The scores of all seven items were summed to create a total score. The summed scores were between 7 and 28. Higher scores (i.e., 21-28) indicated higher social distance whereas lower scores (i.e., 7-14) reflected less social distance. Content and face validity is acceptable in addition to internal consistency reliability ($\alpha = 0.92$) (Link et al., 1987).

2.2.3 Contact Experiences

The contact experiences questionnaire was previously developed by Yuan et al. (2018) to measure respondents' level of contact with the described mental illness (Appendix H). The questionnaire was used in the current study to measure contact experiences among major depression, panic disorder, obsessive compulsive disorder, and schizophrenia. Contact experiences were measured using two different questions after reading their assigned vignette: 1) Close contact- 'Has anyone in your family or close friends ever had problems depicted in the vignette?' and 2) Non-close contact- 'Have you had any experiences (e.g. volunteering, working) in dealing with a person who had problems depicted in the vignette?'. The participants were asked to indicate their level of contact experiences via "Yes" or "No" answer choices.

2.2.4 Demographic Information

A demographics survey was developed by the researcher (Appendix I). Socio-demographic information included gender, age, nationality, highest level of completed education, and the current Emirate in which the participants currently reside.

2.3 Research Design

The present study used a post-test only experimental study where participants were randomly assigned to one of four vignette groups illness (Major Depression, Panic Disorder, Obsessive Compulsive Disorder, and Schizophrenia). Statistical Package for Social Sciences (SPSS) was used to analyze the data. Demographic information was analyzed using Descriptive Statistics whereas scores from the Social Distance Scale, IPIP- 20 item, and contact experiences were analyzed using mean comparisons and One-Way Analysis of Variance (ANOVA).

2.4 Procedure

United Arab Emirates University Ethical Committee and Internal Review Board approvals were gained prior to the commencement of data collection. Participants were recruited from different public locations via convenience sampling. Both male and female participants were recruited within the UAE.

The participants were approached and asked if they were interested in participating in the current study about stigma and personality. Some deception about the title of the study was necessary because it was assumed that explaining the true nature of the study would jeopardize and distort the results. The participants were given the option to complete the questionnaires online using Survey Monkey or physically in-person. It was mentioned that participation was completely voluntary

and they need not feel coerced or obligated to participate. Additionally, participants who wished to withdraw from the study may do so at any time. The participants were given the opportunity to ask any questions before starting the questionnaires. The questionnaires, paper and online versions, were all randomly assigned to each participant.

2.4.1 Paper Version of the Questionnaires

If individuals stated that they were interested in participating in the current study, and confirm that they are at least 18 years old, a packet of questionnaires was given to the participants containing a consent form, Mini International Personality Item Pool-Five Factor Model measure (Mini-IPIP), Social Distance Scale, Contact Experiences, and Demographic Information survey. The consent form described the purpose, risks, and benefits of the study. The participants were required to provide a signature indicating that they had given consent to participate in the study. After the participants had completed the questionnaires, a debriefing form was provided explaining the true nature of the study and were thanked for their participation.

2.4.2 Online Version of the Questionnaires

If individuals stated that they were interested in participating in the current study, and confirm that they are at least 18 years old, the participants were guided to the questionnaires on Survey Monkey. A statement describing the purpose, risks, benefits, and consent to participate in the study. After reading the statement, if participants consented in participating in the study, they were instructed to continue onto the survey questions. Following consent, the Mini International Personality Item Pool-Five Factor Model measure (Mini-IPIP), Social Distance Scale, Contact

Experiences, and Demographic Information survey were completed. Once the questionnaires were completed, a debriefing statement was provided which included information regarding the nature of the study and to thank the individuals for their participation.

2.4.3 Privacy and Confidentiality

Participants were informed on the consent form or statement that their responses would be kept confidential and during the analyzing process, all data would be deidentified to maintain anonymity. All data would be triple locked and only the researcher would have access to the data.

2.4.4 Potential Risks

It was possible that participants might find answering certain questions about their willingness to interact with a person with a mental illness slightly unpleasant when filling out the questionnaires. In the consent form, participants were informed that they may withdraw from the survey at any time without facing any penalty. Despite this potential risk, all risks are kept to a minimal where participating in this study was strictly voluntary and would not cause psychological or physical harm.

Chapter 3: Results

The purpose of the study aims to 1) determine whether personality traits have an effect on mental illness stigma measured by social distance 2) identify whether contact experiences have an effect on social distance, and 3) to examine whether contact experience has a moderating effect on personality traits and stigma towards mental illness measured by social distance. A total of 203 participants participated in the study. Data collected from the participants was analyzed using SPSS.

Vignettes depicting mental illness included major depression ($n = 50$), schizophrenia ($n = 50$), obsessive compulsive disorder ($n = 52$), and panic disorder ($n = 51$). Preliminary analyses of social distance among the different mental illnesses (Major Depression, Panic Disorder, Schizophrenia, and Obsessive Compulsive Disorder) were conducted. The levels of social distance among the different mental illnesses presented in the study were analyzed. Case summaries of the mental illnesses provided observations regarding the differences in social distance towards each mental illness. It was found that individuals expressed the least amount of social distance towards individuals with obsessive compulsive disorder ($M = 15.23$, $SD = 4.38$). Conversely, individuals had less favorable attitudes towards individuals with schizophrenia which resulted in the greatest amount of social distance ($M = 21.54$, $SD = 5.79$).

Means of vignettes and social distance were calculated to observe differences in social distance between each mental disorder depicted in the vignettes as seen in Table 3.

Table 3: Case Summary of Mean Differences and Standard Deviations of Vignette
and Social Distance Variables

Vignette	n	M	SD
Major Depressive Disorder	50	16.88	5.25
Panic Disorder	51	17.65	5.32
Obsessive Compulsive Disorder	52	15.23	4.39
Schizophrenia	50	21.54	5.79
Total	203	17.80	5.66

Note. Dependent variable = Social Distance

An Analysis of Variance (ANOVA) (Table 4) was used to test for social distance differences within the different mental illnesses depicted in the vignettes. There was a significant effect of the different mental illnesses on social distance for the four mental illness vignettes, $F_{(3,199)} = 13.37$, $p = 0.000$.

Table 4: One-Way Analysis of Variance of Social Distance by Mental Illness

	SS	df	MS	F	p
Between Groups	1086.14	3	362.04	13.37	0.000*
Within Groups	5388.58	199	27.08		
Total	6474.72	202			

Note. * p < 0.05

Post hoc comparisons using Bonferroni test indicated that pairwise comparison for major depression and schizophrenia was significant, $p = 0.000$ in addition to pairwise comparison of panic disorder and schizophrenia, $p = 0.001$, and schizophrenia and obsessive compulsive disorder, $p = 0.000$. Taken together, these results suggest that different mental illness have an effect on the amount of stigmatization measured by social distance. Specifically, the current results suggest that the amount of social distance expressed towards individuals with schizophrenia is the highest ($M = 21.54$, $SD = 5.79$) compared to major depression, panic disorder, and obsessive compulsive disorder (Refer back to Table 3 for vignette mean differences).

3.1 Personality Traits and Mental Illness Stigma

Descriptive statistics were conducted on personality trait means to identify differences in social distance among the different traits. Mean differences were present between each personality trait and social distance. Mean differences indicated that individuals with Openness to Experience personality trait reported the least amount of social distance ($M = 15.03$, $SD = 5.64$) followed by Agreeableness ($M = 16.56$, $SD = 5.25$), Extraversion ($M = 18.09$, $SD = 5.11$), and Conscientiousness ($M = 19.39$, $SD = 5.46$). Neuroticism was observed to have the highest amount of social distance ($M = 20.24$, $SD = 5.66$).

Table 5: Case Summary of Mean Differences and Standard Deviations of Personality
Traits and Social Distance Variables

Personality Trait	n	M	SD
Extraversion	23	18.09	5.11
Agreeableness	66	16.56	5.25
Conscientiousness	49	19.39	5.46
Neuroticism	34	20.24	5.66
Openness to Experience	31	15.03	5.64
Total	203	17.80	5.66

Note. Dependent variable = Social Distance

Based on the mean differences observed in Table 5, an ANOVA was conducted to determine the presence of a main effect between personality traits and social distance and to identify which personality traits were statistically significantly different from each other. A main effect between personality traits and social distance was observed and statistically significant, $F_{(4,198)} = 5.675$, $p = 0.000$ as seen in Table 6.

Table 6: One-Way Analysis of Variance of Social Distance by Personality Trait

	SS	df	MS	F	p
Between Groups	665.92	4	166.48	5.68	0.000*
Within Groups	5808.80	198	29.33		
Total	6474.72	202			

Note. * $p < 0.05$

Consequently, Bonferroni test was used to compare pairs of group means to assess differences. Neuroticism ($M = 20.24$), $p < 0.05$, was associated with having statistically significantly higher differences than both Agreeableness ($M = 16.56$), $p < 0.05$ and Openness to Experience ($M = 15.03$), $p < 0.05$ but did not differ significantly from Extroversion and Conscientiousness. Moreover, it was also observed that Conscientiousness ($M = 19.39$), $p < 0.05$, was statistically significantly higher than Openness to Experiences indicating that individuals with a conscientious disposition tend to express more social distance towards individuals with mental illness.

An eta test was conducted due to scores being coded as categorical and continuous to determine the effect size of the association between personality factors and social distance. The eta value of 0.321 ($\eta^2 = 0.10$) indicated a weak effect size in the association between personality factors and mental health stigma in the study sample.

3.2 Contact Experiences and Social Distance

The effect of contact experiences on social distance was analyzed using one-way ANOVA as seen in Table 7.

Table 7: One-Way Analysis of Variance of Social Distance by Contact Experiences

	SS	df	MS	F	p
Between Groups	1397.09	3	465.70	18.25	0.000*
Within Groups	5077.63	199	25.52		
Total	6474.72	202			

Note. * $p < 0.05$

Differences in means between type of contact experiences and social distance were presented on a graph to visually illustrate stigma differences in Figure 1.
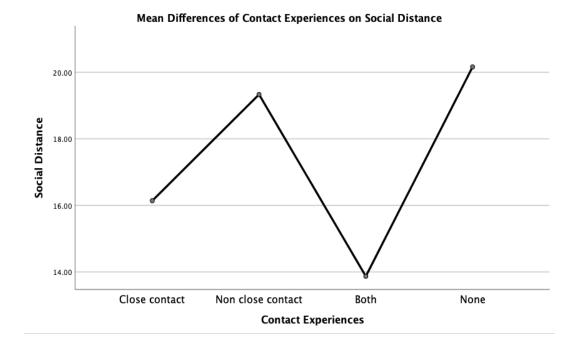

Figure 1: Mean Differences of Contact Experiences on Social Distance

There were statistically significant differences between groups, $F_{(199,3)} = 18.25$, $p = 0.000$. Statistically significant differences were found among certain groups. Specifically, statistically significant differences were found between close contact ($M = 16.14$, $SD = 5.28$) and no contact ($M = 20.16$, $SD = 4.85$) indicating that individuals who had previous close or personal contact with mental illness tended to endorse less social distance. Furthermore, a statistically significant difference was present for non-close contact ($M = 19.33$, $SD = 5.28$) and those who have had both close and non-close contact ($M = 13.87$, $SD = 5.13$) illustrating that individuals with previous contact, being both personal or non-personal or non-close, expressed lower social distance than those with non-close contact alone. Lastly, another statistically significant difference was found between no contact and both close and non-close contact groups. Individuals with no previous contact were statistically higher in social distance than individuals who had both close and non-close previous contact.

3.3 Moderating Effect of Contact Experience on Personality and Social Distance

Based on the independent variables being nominal, an ANOVA was used to seek for moderator effects in the data (Refer to Table 8). The effect of contact experiences as a moderator for personality traits and social distance was conducted. A moderator effect through the interaction of personality traits and contact experiences was not found. Figure 2 illustrates the interaction of personality traits and contact experiences on social distance. Despite the data indicating main effects on social distance and personality traits, $F_{(4,183)} = 2.43$, $p = 0.049$ and social distance and contact experiences, $F_{(3,183)} = 13.49$, $p = 0.000$, there was no statistically significant interaction effect of personality traits and contact experiences, $p = 0.492$. The lack of interaction

in the data indicates that contact experiences does not moderate the relationship between personality traits and endorsed social distance.

Table 8: ANOVA Summary giving Significance Levels for the Effects of Personality
    Traits and Contact Experiences on Social Distance

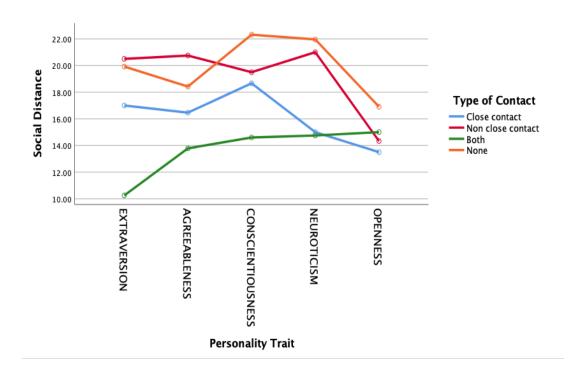| Source	SS	df	MS	F	p
Personality Traits	232.93	4	58.23	2.43	0.049*
Contact Experiences	969.80	3	322.27	13.49	0.000*
Interaction	275.08	12	22.92	0.956	0.492
Error	4386.37	183	23.96		

Note. * $p < 0.05$

Figure 2: Interaction of Personality Traits and Contact Experiences on Social
    Distance

Chapter 4: Discussion

The current study aimed to explore the role of personality, mental illness stigma, and the moderating effects of contact experiences in the UAE. Using the vignette-based approach, four different mental illnesses (Major Depressive disorder, Panic disorder, Schizophrenia, and Obsessive Compulsive disorder) were used to measure mental illness stigma through social distance. Univariate and subsequent post-hoc analyses found statistically significant differences between each mental illness. A statistical difference was found between obsessive compulsive disorder and schizophrenia. This finding suggests that individuals would be the most willing to interact with persons with obsessive compulsive disorder and the least willing to form relationships with persons with schizophrenia. The order from lowest to highest social distance was obsessive compulsive disorder, major depression, panic disorder, and schizophrenia. These results are partially aligned with previous studies examining vignettes which have mostly found that schizophrenia to be the most stigmatized of all mental disorders. Finding that individuals with obsessive compulsive disorder as the least stigmatized was somewhat contradictory due to previous research having found that major depressive disorder is mostly associated with the lowest social distance and therefore more favorable.

Insight into the rationale behind these findings may lie through the use of vignettes. When symptoms of mental illnesses are described and presented in vignettes, richer descriptions are presented allowing for the characterization of mental illnesses to be created in the public view. The presentation of mental illness in a vignette fashion allows for the participant to examine symptoms and behaviors of particular mental illnesses rather than a simple diagnosis. Consistent with past

research, schizophrenia was found to be stigmatized the most in this study. In line with Star (1955), when mental illnesses are presented, public fears are dramatically increased. Usual labels that have been attached to schizophrenia are feelings of fear and dangerousness thus causing a desire to maintain more social distance (Angermeyer & Matschinger, 2003). Despite there being no mention of any violence within any vignette, it is suggested that public stereotypes of schizophrenia fall in line with previous research suggesting that the general public tends to associate schizophrenia with violence and fear resulting in stigmatization and increased social distance than other mental illnesses even in the UAE. On the other hand, a greater acceptance and less stigmatization of obsessive compulsive disorder was a surprising find. Once more, the use of vignettes may allow the public to view symptoms and behaviors of individuals suffering from obsessive compulsive disorder which could manifest better understanding of the diagnosis. Compared to schizophrenia, obsessive compulsive disorder tends to shine is a less violent light where the consumer gives into excessive hand washing. Due to hand washing being associated with a non-violent and widely performed public behavior, those suffering from obsessive compulsive disorder, specifically fear of germs resulting in compulsive hand washing, are possibly less feared and perceived to be less dangerous to the public.

Major depressive disorder received less social distance than panic disorder possibly due to depression becoming more common and widely accepted within individuals therefore reflecting less fear and more sympathy from others. Panic disorder was observed the second highest amount of social distance behind schizophrenia which is somewhat unusual. Panic disorder has been seen to have higher levels of social acceptance (Locke, 2010) compared to other mental illnesses due to being a more common disorder gaining wider social acceptance. Reasoning for this is

unclear however, a possible lack of understanding or previous recognition of panic disorder symptoms, such as "feeling of losing control and going crazy", may have been a key aspect towards a higher amount of expressed social distance and perceived dangerousness linked to stigmatization.

It was predicted that differences in social distance would be present among the Big-Five personality traits assessed in the current study. Findings indicated that there were statistically significant differences between certain personality traits where some traits showed an inclination to stigmatize mental illness more than others. Individuals with Neuroticism traits were observed to endorse the most social distance and therefore tend to stigmatize persons suffering from a mental illness the most. Neuroticism traits were also seen to engage in the greatest social distance compared to Agreeableness and Openness to Experience traits statistically. Neuroticism personality traits displaying engagement in more stigmatization is supported by previous research (Arikan, 2005; Brown, 2012; Yuan, 2018). Individuals endorsing Neuroticism personality traits tend to experience more insecurity, nervousness, and lack in confidence which may cause such individuals to engage in premature prejudice towards mental illnesses. Furthermore, based on Altemeyer's (1988, 1998) right wing authoritarianism, individuals higher in Neuroticism tend to base their attitudes on conventionalism and therefore may act out aggressively towards social out-groups who may be considered unconventional.

On the other hand, individuals who scored highest in Openness to Experience showed the least amount of social distance in the study resulting in the tendency to stigmatize individuals with mental illness less. Individuals with an Openness to Experience disposition tend to be more open to unconventional ideas and tend to endure greater levels of social support and comfort. Based on these attitudes, it can be

rationalized that being more open to experience allows such individuals to suspend emotional and premature judgment towards individuals with mental illness and feel greater empathy and willingness to accept mental illness consumers. This finding coincides with previous research (Brown, 2012; Costa & McCrae, 1992) indicating that through less negative emotions and the willingness to accept deviations from social norms, individuals who are more open in personality are the least to distance themselves and stigmatize persons suffering from any mental illness. Individuals higher in Agreeableness personality traits were also seen to have less social distance. Again, individuals scoring higher in Agreeableness possess high empathy and willingness to help others. With high empathetic attitudes, higher tolerance and cooperation towards others, such individuals are more likely to engage with others in more positive and proactive manners thereby accepting mental illness consumers based on emotional understanding and wider public acceptance.

An interesting finding was found where individuals possessing conscientious personality traits were seen to endorse high levels of social distance that did not differ significantly from Neuroticism. A vast number of research had found that individuals with Conscientiousness personality traits showed more willingness to engage with mental illness consumers and participate in less social distance. Reasoning for this contradictory finding may lie within the personality trait itself. Individuals possessing conscientious traits are found to be organized, with preference for structure and order. Based on the prejudice theory focusing on social dominance orientation, individuals with conscientious personality traits tend to extend orderliness into society where the expression of social attitudes favoring structure, order, and security within society causes them to be high in both right wing authoritarianism and social orientation dominance therefore leading to higher prejudice and stigmatization (Sibley & Duckitt,

2008). In light of mental illness, when such individuals pose a threat to orderliness of in-group structure or security of the public, persons with Conscientious personality traits endorse negative attitudes and prejudice towards individuals with mental illnesses thereby enhancing stigmatization. Furthermore, individuals scoring high in Conscientiousness accounted for almost a quarter of the current study sample and scored high in social distance towards persons with mental illnesses. This may be supported by the UAE embracing more traditional and moralistic goals causing a large number of individuals to score higher in Conscientiousness. As a result, such individuals may view deviations from societal order as threats therefore increasing prejudice and stigmatization of mental illness and its consumers alike.

Consistent with previous research, Agreeableness and Openness to Experience scored low in social distance showing more willingness to form relationships with individuals with mental illnesses, specifically Openness to Experience being the lowest. Being open to experience allows one to be more open-minded and more likely to accept new ideas. Having these openness traits may allow for greater perspective taking and empathy towards those suffering from mental illnesses (Sibley et al., 2011; Brown, 2012; Yuan et al., 2018). Individuals scoring higher in Agreeableness possess a more good-natured attitude and tend to be more tolerant and cooperative. Combined together, these qualities contribute to a greater empathy towards others, including those with a mental illness. As the differences between Agreeableness and Openness to Experiences had no statistical significance, it can be deduced that being either open or agreeable tends to result in fewer negative emotions and resulting less stigmatization towards mental illness. Through this prosocial approach, agreeable and open individuals have higher amounts of empathy and willingness to interact with

members of society thereby not acting on premature stereotyping beliefs and discriminating behaviors that could eventually transfer into stigmatization.

The effects of contact experiences on social distance was investigated in the current study. Contact experiences ranging from personal or close-contact (friend or relative), non-personal or non-close contact (such as volunteering or working), having both personal and non-close contact, or no contact at all with mental illness. Individuals who had previous personal close contact endorsed less social distance and lesser stigmatization than no contact at all. Through personal close-contact, greater empathy and possibly greater amount of experience are expected to contribute to perceptions of dangerousness or lack of understanding. Having personal contact allows one to increase interaction and formulate relationships with sufferers of mental illnesses aiding in mental illness consumers to be seen as equals in society. By having no contact with individuals with mental illnesses, a lack of understanding and experiences may cause higher perceptions of disproportionate dangerousness and uncertainty to manifest distancing attitudes and greater stigmatization. This rational may be extended to the other findings within the study. Those that had both previous close and non-close contact expressed the least amount of stigma compared to individuals who only have non-close contact or no contact at all. Despite previous non-close contact having statistically higher social distance than individual with only personal contact or no contact at all, having been able to experience a mental illness through a personal tie such as a friend or relative may strongly influence the amount of social distance endorsed by an individual. This is highly evident in individuals with both personal and non-personal contact experiences. Non-close contact experiences, despite possibly being multiple in number within a professional or training for a career, may lack a personal element. Interacting with patients in formal settings may cause

one to develop more occupational curiosities rather than empathy in addition to more occasional interactions. On the other hand, personal or close-contact may increase empathy due to personal level experiences and an increased amount of informal interaction allowing for interpersonal relationships to prosper. Having both types of contact experiences resulted in the lowest amount of stigmatization, greater than close-contact and non-close contact individually. Again, based on the quality of experience gained from having a relative or close friend with a mental illness tends to influence the amount of willingness to accept and include mental illness sufferers as a regular member of society free from prejudice and stigma.

No moderating effects of contact experiences were found for personality traits and mental illness stigma which is inconsistent with previous research. Statistically significant main effects were found between stigma and personality and between stigma and contact experiences but no interaction was present. Despite personality having a significant effect on stigma, contact experiences did not moderate or influence feelings of social distance based on different personality traits. There may be a variety of reasons as to why a lack of moderation was present. Preexisting variables such as personality, levels of mental health literacy and culture within the UAE may play a role in the absence of moderation. Some specific suggestions for this finding infer that stigma towards mental illness may be a direct effect of either personality dispositions or contact experiences as separate variables rather as an interaction of both. Personality traits have been seen to strengthen and become unmoving with aging thus causing personal beliefs and attitudes related to stigma to be impervious to other factors. Moreover, contact experience may be a crucially influencing or predicting factor on stigma; contact experiences alone are efficacious enough to dictate the amount of stigma and willingness to accept persons with mental

illnesses. There may be another suggestion as to why there was no moderating effect of contact experience in this current study. When looking at the quantity of social distance expressed within all personality traits, the amount of social distance can be interpreted as high. Despite Openness to Experience and Agreeableness personality traits having the least amount of social distance, the means observed may be considered as leaning more towards probably unwilling to form relationships with such individuals. Research (Link et al., 1999) has shown that social distance scores and greatest willingness to engage with mental illness consumers range from 7 to 14 and greatest unwillingness ranging from 21 to 28. Scores in the current study have shown means ranging from 15.03 being the lowest to 20.24 being the highest indicating that individuals within the study tended to feel more probably unwilling than willing towards individuals with mental illnesses. Based on these findings, it can be suggested that due to social distance scores being reported outside the willingness range, contact experiences may not have a moderating effect on stigma and personality traits due to individuals not feeling completely comfortable and willing to engage with individuals with mental illness and therefore may be endorsing stigmatization. Additionally, due to the lack or minimal amount of mental health literacy available in the UAE, the amount of awareness through public knowledge and acceptance may be insufficient thus promoting negative beliefs and stereotypes resulting in consequential stigmatization.

4.1 Limitations

Several limitations were present in the current study and should be noted. As the study was based in the UAE, using a more localized population would have

increased validity into measuring the amount of social distance towards mental illness among the local population.

A convenience sample was used due to the difficulty in gaining an accurate sampling frame for adults in the UAE. As a result, gathering data from respondents within all the Emirates could not be achieved. Based on this, findings from the current study can only be generalized to the sample and not the population of the UAE.

The sample size of the study was small in relation to many other studies that examined stigma, personality traits, and contact experiences. Increasing the sample size would have increased statistical power possibly allowing for moderating effects to be observed. Furthermore, with increased statistical power, smaller undetected differences within the stigma scale and its relationship with personality traits or contact experiences may have been detected.

Another limitation that was unexpectedly unforeseen was participants unwillingness to disclose their nationality. During data collection, it was noticed during face-to-face interactions that participants almost certainly from the UAE chose to keep their nationality undisclosed. Although within their ethical rights to privacy to keep their nationality private, this effected the distribution of frequencies sample population nationalities causing the researcher to abandon the potential discussion of stigma endorsed by nationalities comprising majority of the sample.

A major limitation that cannot be ignored is the likelihood of social desirability among participants. The self-report format of all questionnaires (social distance scale, personality inventory, and contact experiences) may have resulted in social desirability bias where participants preferred to be seen in a more desirable light. Due to the fact that the Social Distance scale assesses attitudes and beliefs rather than behaviors linked to stigmatization, alteration of their social distance attitudes may have taken place to

be seen as more desirable and to hide unwillingness and true negative beliefs of individuals with mental illnesses.

4.2 Implications

The current study, to the best of the researcher's knowledge, may be the first study in the UAE to explore the role of mental illness stigma, personality, and contact experiences. Additionally, this study aimed to seek moderating effects of contact experiences on personality traits and contact experiences within the UAE. By conducting the study in the UAE, findings from Western populations can be extended onto the region and allow for differences in stigma effects to be observed and compared.

This study has contributed to the present literature and research in regards to stigma interventions. The current study has given evidence that contact experiences, especially close-contact, allows for the reduction of stigma and increases the willingness to form relationships with others suffering from mental illnesses.

It can be implied from this study that the vignette-based approach is beneficial towards providing more accurate and up-to-date information on mental illness and through a variety of diagnoses. Instead of participants being asked to rate their attitudes on a "mental illness", a richer and more detailed view into primary symptoms is provided which may allow for more honest and precise responses related to stigmatization.

4.3 Future Suggestions

It may be beneficial if future studies were to focus only on the local population of the UAE. Taking this recommendation would allow a different insight into the

amount of stigmatization endorsed by the local population towards individuals with mental illness. As previous research has commented on the UAE taking a more traditional approach to mental illness (Haque & Kindi, 2015), it would be interesting to observe current levels of social distance within the local community.

Another suggestion for future studies could be to include a scale to measure social desirability. By adding a social desirability scale, it would be interesting to explore whether certain personalities endorse higher social desirability bias after completing the social distance scale.

4.4 Conclusion

It is widely known that stigmatization presents with devastating consequences that negatively impact mental illness suffers. Stigma is very complex and it is unclear as to why stigmatization occurs however personality-based approaches allow light to be shed on how public stigma is developed and maintained.

This study provides information about the effects of personality and contact experiences on mental illness stigma within the UAE. Findings in this study support previous research where different personality traits endorse different levels of stigma. Specifically, Neuroticism and Conscientiousness personality traits tend to have the most social distance and the unwillingness to interact with individuals with mental illness. In comparison, persons scoring higher in Openness to Experience and Agreeableness tend to cooperate and accept unconventional ideas and situations which may be extended to social out groups such as mental illness sufferers.

Insight into an effective intervention to reduce stigma was found via contact experiences. Persons with previous contact experiences, especially personal or close-contact tended to express lesser social distance towards mental illness consumers

indicating that they were inclined to stigmatize the least. Based on these findings, through the increase of contact, awareness and acceptance may be achieved which would increase mental health literacy. With increased mental health literacy, knowledge and unbiased negative beliefs would eventually close that harmful gap that separates the public from members of the stigmatized mental illness out-group.

In conclusion, public stigma towards mental illness may reside within an individual's personality trait. Moreover, increasing contact experiences may allow for stigma towards mental illness to be reversed. By increasing contact experiences, it may be possible for members of the public to decrease negative social distancing despite individual personality traits. By implementing awareness and providing mental health knowledge to the public, preconceived negative beliefs and attitudes would be curbed allowing for mental illness suffers to be more accepted and not misunderstood.

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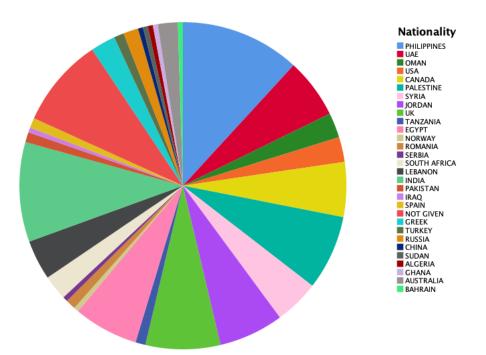
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Appendices

Appendix A

Pie chart of nationalities within the sample

Appendix B

Major Depressive Disorder Vignette

Jim, a 40-year-old man, has been diagnosed with major depressive disorder for the past 10 years. Jim has been feeling severely depressed and feels worthless most of the time. He wakes up in the morning with a flat heavy feeling and sticks with him all day. Jim doesn't enjoy things he normally would. In fact, nothing gives him pleasure. Even when good things happen, they don't seem to make Jim happy. He finds it hard to concentrate on anything and he always feels out of energy. Even though Jim feels tired, he has difficulty sleeping. Jim has pulled away from his family and friends and doesn't feel like talking. Jim has lost 10 kilograms from not feeling like eating.

Appendix C

Schizophrenia Vignette

Jim, a 40-year-old man, has been diagnosed with schizophrenia for the past 10 years. He has been having hallucinations of seeing objects that are not really there. He thinks people around him are making disapproving comments and talking behind his back. Jim is convinced that people are spying on him and they can hear what he is thinking. Jim has stopped participating in his usual work and family activities; he spends all his time alone in his room. Jim is also hearing voices even though no one else is around. These voices tell him what to do and what to think.

Appendix D

Panic Disorder Vignette

Jim, a 40-year-old man, has been diagnosed with panic disorder for the past 10 years. He has been having frequent and unexpected panic attacks that causes him to feel intense fear and discomfort lasting only a few minutes at a time. During these panic attacks, Jim experiences sweating, nausea, feelings of choking, and pounding heart. At times, Jim is worried he will have a heart attack and die. As a result, Jim has persistent worries about having more panic attacks and stays away from unfamiliar places and makes excuses to stay home whenever possible. Jim feels he may be losing control and is going crazy.

Appendix E

Obsessive-Compulsive Disorder Vignette

Jim, a 40-year-old man, has been diagnosed with obsessive compulsive disorder for the past 10 years. Jim continually experiences intrusive thoughts about contracting an illness by coming into contact with things in the environment such as door handles or seats in public places. His intense fear of germs has resulted in repetitive hand washing. Jim feels some brief relief after hand washing but fears contamination will keep returning so he must wash his hands every hour. Jim's hands are red, raw, and cracked. He had to leave his job because of his fear of sitting down in a public space. Although Jim is aware that his thoughts and behaviors are irrational, he finds it very difficult to resist his impulses to engage in these rituals.

Appendix F

Social Distance Scale

The following statements are about how close you would be willing to be with Jim, the man in the vignette. Please answer based on how willing you would be to each of the following:

1. How would you feel about renting a room in your home to someone like Jim?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

2. How about as a worker on the same job as someone like Jim?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

3. How would you feel having someone like Jim as a neighbor?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

4. How about as the caretaker of your children for a couple of hours?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

5. How about having your children marry someone like Jim?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

6. How would you feel about introducing Jim to a young woman you are friendly with?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

7. How would you feel about recommending someone like Jim for a job working for a friend of yours?

Definitely Willing   **Probably Willing**   **Probably Unwilling**   **Definitely Unwilling**

Appendix G

Mini International Personality Item Pool

Instructions:

Using the scale below as a guide, circle the number beside each statement to indicate how true it is.

1 = Very Inaccurate   **2** = Slightly Inaccurate   **3** = Neutral

4 = Slightly Accurate   **5** = Very Accurate

1. I am the life of the party.	1	2	3	4	5
2. I sympathize with others' feelings.	1	2	3	4	5
3. I get chores done right away.	1	2	3	4	5
4. I have frequent mood swings.	1	2	3	4	5
5. I have a vivid imagination.	1	2	3	4	5
6. I don't talk a lot.	1	2	3	4	5
7. I am not interested in other peoples' problems.	1	2	3	4	5
8. I often forget to put things back in their proper place.	1	2	3	4	5
9. I am relaxed most of the time.	1	2	3	4	5
10. I am not interested in abstract ideas.	1	2	3	4	5

11. I talk to a lot of different people
at parties. 1 2 3 4 5

12. I feel others' emotions. 1 2 3 4 5

13. I like order. 1 2 3 4 5

14. I get upset easily. 1 2 3 4 5

15. I have difficulty understanding
abstract ideas. 1 2 3 4 5

16. I keep in the background. 1 2 3 4 5

17. I am not really interested in others. 1 2 3 4 5

18. I make a mess of things. 1 2 3 4 5

19. I seldom feel blue. 1 2 3 4 5

20. I do not have a good imagination. 1 2 3 4 5

Appendix H

Contact Experiences

Instructions: Please circle the response that most accurately describes your experience

1. Has anyone in your family or close friends ever had problems depicted in the vignette?

YES   NO

2. Have you ever had any experiences (such as volunteering, working etc.) in dealing with a person who had problems depicted in the vignette?

YES   NO

Appendix I

Demographic Form

Instructions: Read the items below and indicate the answer that best describes you or fill in the blank with an appropriate response where applicable.

1. Gender:
    a. Male
    b. Female

2. How old are you?

    a. 18-20 years
    b. 21-23 years
    c. 24-26 years
    d. 27-29 years
    e. 30+ years

3. What is your nationality?   _____

4. What is the highest level of education you have completed?

    a. High school Degree
    b. Bachelor's Degree
    c. Master's Degree
    d. Doctoral/Professional Degree
    e. I am not sure/Don't know

5. What Emirate do you currently live in:
    a. Dubai
    b. Sharjah
    c. Abu Dhabi
    d. Ras Al Khaimah
    e. Ajman
    f. Fujairah
    g. Umm Al Quwain