

Running head: CONTACT, PERSONALITY AND PREJUDICE

An investigation of the relationship level of contact and personality traits have with
prejudice against ex-patients of psychiatric hospitals

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Abstract

Objective: While stigma against the mentally ill is a much-researched topic it is far rarer for studies to look at prejudice specifically. Additionally, most stigma and prejudice studies focus on the mentally ill, the author could find none which focused solely on ex-patients of psychiatric hospitals. In this study the author aims to address a gap in the literature by investigating what relationships prior contact and personality has with prejudice against ex-patients of psychiatric hospitals.

Methodology: 163 participants completed a 60-item survey which included a modified Level of Contact report, a modified Prejudice against People with Mental Illness scale and a mini-International Personality Item Pool scale.

Results: Pearson's correlation analysis revealed a significant negative relationship between level of contact and levels of prejudice towards ex-patients of psychiatric hospitals. Additionally, correlational analysis revealed a significant negative relationship between levels of prejudice and personality traits agreeableness and extraversion.

Discussion: Results from the present study suggest that levels of prejudice against ex-patients of psychiatric hospitals have a significant relationship with level of contact and the personality traits agreeableness and extraversion. These results have particular significance for anti-stigma and anti-prejudice interventions and educational programs. It is recommended that future research focus on expanding our understand of the causal influences of prejudice.

Keywords: prejudice, stigma, personality, level of contact

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Introduction

In her 1986 book on Gombe chimpanzees in Tanzania pioneering primatologist and anthropologist Jane Goodall noted that intergroup aggression by chimpanzees was far more violent and much more likely to be fatal than within-group aggression, seemingly caused by an inherent dislike or even hatred of strangers (p. 331). This extreme prejudice against members of other groups in primates has been repeatedly reported and seems to be a significant aspect of their social network structure (Glowacki et al., 2016). In order to understand our own formation of prejudices it we must look at our primate cousins and the light they shed on our own ancestral roots.

The cognitive and psychological processes which lead to the formation of prejudices very likely predates *Homo sapiens* (Park, 2012, p. 188). One of the factors which allowed for our evolution into modern day humans was our ability to form social groups. Social groups allowed for easier access to mates, more efficient exploitation of natural resources and provided protection for an individual and their offspring against predators and other individuals who wished to them harm. As such, within-group violence was likely discouraged as it threatened the benefits created by living in a group. Evidence suggests, however, that intergroup interactions were characterised by distrust, aggression and acts of violence (Crawford and Krebs, 2012, p. 402–403). Here we can see the beginnings of the psychological processes that brought about prejudice: in-group vs. outgroup thinking, the competition of resources and the ability to recognise another individual as not being part of your group.

From these historical roots we can look at prejudice in modern society and understand it a little better. Even today we are still territorial in nature, still belonging to

many different in-groups be these national, racial, cultural or ideological in nature. Intergroup violence has escalated from skirmishes between tribes that our ancestors fought in to wars across entire countries which can last for years and leave millions dead or displaced. Prejudice is often thought of as something other, more ignorant, people have but as our knowledge of explicit and implicit biases grow it becomes clear that prejudice is an evolutionary adaption that begins in childhood and that we all experience to some degree (Payne et al., 2017, p. 233-234). It has been shown that the outgroup an individual feels prejudice towards does not need to have actually committed any act of violence or pose any actual threat, they just need to possess a characteristic that the individual associates with a threat (Crawford & Krebs, 2012, p. 407) This can be seen in the prejudice people with mental illness face. Despite being much more likely to be the victim of a violent crime and no more likely to commit a violent crime than the general population there is still a very prevalent stereotype of people with mental illness being unpredictably violent (Markowitz, 2011, p. 36-38).

When looking at prejudice from a biological and evolutionary perspective the task of addressing and eradicating prejudice can seem daunting. The idea that we evolved to form prejudice and the fact that once an implicit fear-related bias is learned it produces a biological fight-flight response can lead an individual to believe that prejudice attitudes to outgroup members are inevitable. However, as prejudice is a learned response, it is therefore something we can unlearn (Crawford & Krebs, 2012, p. 406). To do this we need to expand our understanding of what factors influence prejudicial attitudes and use this knowledge to create effective intervention and education programs.

In order to understand prejudice and the factors that influence it in general, we must look at how it effects specific groups. The purpose of this study is to investigate the

factors which influence prejudice against a group which is often ignored and marginalised, ex-patients of psychiatric hospitals. Little to no research has been done on ex-patients of psychiatric hospitals and the prejudice they face upon discharge. In order to understand the nature of prejudice against ex-patients of psychiatric hospitals, we must first look at a related topic which has had far more studies done on it: stigma towards mental illness.

Stigma towards mental illness

The stigma towards mental illness, real or perceived, is a well-researched and documented phenomenon. While great strides have been made in recent years to address and educate the general public about the realities of mental illness, many negative stereotypes and implicit prejudices still exist (Angermeyer et al., 2013). Additionally, mental illness is often associated with traits such as dangerousness, unpredictability and the inability to care for one's self which can lead to social isolation and rejection (Feldman, 2007). This social rejection or isolation can affect the mental illness sufferer in both their personal and professional lives, making it difficult for them to become employed, form new friendships and receive the emotional support and acceptance they often need (Buizza et al., 2017). Consequently, there can be seen to be a strong relationship between stigma towards mental illness among the public and the self-stigmatising thoughts and behaviours experienced by mental illness sufferers. Research has shown that the more a person expects to be stigmatised against for their mental illness the more they will attempt to conceal their mental illness thus reducing their likelihood to seek effective and often much-needed treatment (Evans-Lacko et al., 2012).

Previous research has shown concretely that anti-stigma programs such as New Zealand's Like Minds Like Mine, Canada's Opening Mind, and Denmark's One of Us designed to educate the general public on mental health can significantly reduce the stigma attached to mental illness (Thornicroft et al., 2016). This highlights the need to consider anti-stigma interventions from both the perspective of what works for the public and for the sufferers of mental illness. Considering this, we should note the need to directly address the stigma faced by people suffering from mental illness in these programs in order to foster empathy, understanding and compassion towards the mental illness sufferers, as simply increasing public understanding of the biological correlates of mental illness does not change public attitudes towards the mentally ill (Schomerus et al., 2012). This suggests that novel approaches are needed to increase social tolerance for the mentally ill.

Attempts to get the public to view mental illness as being the same as physical illness have been generally unsuccessful. Schnittker (2008) found that attributing schizophrenia to genetic causes had no difference to attributing it to bad character and did nothing to curb people's fear of violence among schizophrenic populations. Relatedly, people with mental illness often experience stigma even when the symptoms of their mental illness are no longer present or they have been cured, illustrating a need to combat the stereotype of mental illness being untreatable or incurable (Sheehan et al., 2016). This inescapable stigma is one that is shared with ex-patients of psychiatric hospitals. Ex-patients of psychiatric hospitals have long spoken about the stigma associated with having spent time in a psychiatric hospital and being treated as though they had an existing mental health issue, regardless of the reason they were hospitalised or their current mental state (Singh et al., 2016). The issues faced by ex-patients are so great that an ex-patient

movement has been active in the USA since 2006 (Morrison, 2013). As such, there is a need to address the prejudicial attitudes faced by ex-patients of psychiatric hospitals.

Prejudice

While stigma has been widely studied in relation to mental illness, prejudice tends to be researched only in studies of racism or xenophobia. The difference between prejudice and stigma is subtle and the two terms are often used interchangeably. Some researchers consider prejudice and stigma to be the same concept however, there are differences between them: stigma can be understood to be caused by norm enforcing ideologies to prevent perceived unusual or harmful behaviours such as believing that people with mental illness should behave 'normally' or that non-heterosexual couples should not have the same rights as heterosexual couples while prejudice is considered to be an attitude towards a certain group (Phelan et al., 2008). While prejudice is certainly part of stigma as a broader concept, it is also its own distinct phenomenon and is often not considered or reflected in studies on stigma (Kenny et al., 2008). For the purpose of this study we will consider prejudice to be a negative attitude towards an outgroup which is based in ignorance of said group such as racism or xenophobia against nationalities or cultures that an individual has little or no knowledge or experience of.

Prejudice can be considered an attitude towards an outgroup with no goal in mind, the individual just has a negative attitude towards individuals within this group but often has had little contact with any individuals in the outgroup. The mentally ill are one such outgroup as are ex-patients of psychiatric hospitals. It is a very common prejudice that everyone who has been in a psychiatric hospital is mentally ill, regardless of their current

mental state or their reasons for being in the psychiatric hospital. There is a need to address prejudice, as part of or separate to stigma, in order to modify negative attitudes and the harmful behaviours created by them (Kenny et al., 2018). In order to address the prejudice faced by ex-patients of psychiatric hospitals first we must investigate the factors which influence an individual's prejudicial attitudes using valid measures.

PPMI Scale

The scale used to measure prejudice against ex-patients of psychiatric hospitals is based upon the Prejudice against People with Mental Illness scale (PPMI), a 28-item measure. While many scales exist to examine negative attitudes or stigma towards the mentally ill, the PPMI scale was the only valid measure which focused solely on prejudice. This measure also investigated the multidimensional nature of prejudice across four subscales: fear/avoidance (fearing people with mental illness and wanting to be distanced from them), unpredictability (believing that the behaviour of mentally ill people is not predictable), authoritarianism (believing that people with mental illness need to be controlled) and malevolence (believing that people with mental illness are inherently inferior and have little or no sympathetic feeling for them). For the purpose of this study the scale was modified to focus on ex-patients of psychiatric hospitals rather than people with mental illness.

The authors of this scale Kenny et al., 2018 have shown that age and nationality can affect the levels and types of prejudice shown by the general population. This study showed significantly higher levels of prejudice against people with mental illness among US participants than their Canadian or UK counterparts. Age was also found to influence

people's attitudes towards the mentally ill. Younger people were found to be more malevolent towards the mentally ill while older people perceived the mentally ill to be more unpredictable than younger people did (Kenny et al., 2018).

Personality & Prejudice

Gunningham (2018) and Kenny et al. (2018) found that certain personality traits have a significant influence on prejudice attitudes towards the mentally ill. Empathy, agreeableness and openness to experience were all shown to be negatively correlated with feelings of prejudice towards the mentally ill. This suggests that personality play a large part in prejudice attitudes and that a more empathetic or open-minded person is less likely to form prejudice opinions against the mentally ill. This suggests that stereotyping plays a significant role in prejudicial attitudes. Given the strong association people have between the mentally ill and patients of a psychiatric hospital, this correlation is likely applicable to prejudice against ex-patients of psychiatric hospital. This study also found that low levels of empathy and agreeableness were correlated with high levels of prejudicial attitudes. A limitation of this study is that the framework was largely hypothetical due to the lack of research done into prejudice as opposed to stigma. Similarly, more research is needed to create effective interventions to combat prejudice attitudes.

Similarly, Gunningham (2018) and Kenny et al. (2018) found that people with lower levels of prejudice towards the mentally ill were also likely to have lower levels of prejudice towards other outgroups such as homosexual people, other races and people of other faiths. Notably, Gunningham found that attitudes towards people with depression showed less evidence of prejudice. This may indicate that the more an outgroup is in the

public consciousness (as depression could be considered the poster child of mental illness in recent years) the less likely it is to provoke prejudicial attitudes. This is worth considering as it highlights what previous research has indicated; that public awareness campaigns can be effective in combating negative attitudes towards certain outgroups.

Ekehammar and Akrami (2003) and Ekehammer et al. (2004) found that prejudice in a person for one outgroup such as prejudice against the mentally ill, made other forms of prejudice much more likely in the person such as racism and sexism. This suggests that prejudice has less to do with the outgroup themselves and more to do with the attitudes, ideals and personality of the person. Ekehammar and Akrami (2003) and Ekehammer et al. (2004) also found that, as with previously mentioned research, agreeableness and openness to experience in the Big Five Factor model correlated negatively with prejudice attitudes. These studies also noted that higher levels of conventionalism, authoritarian submission, and authoritarian aggression are associated with higher levels of prejudice attitudes. These qualities tend to be associated with strong in-group thinking and behaviours and are likely to drive the mistrust and negative feelings towards different cultures that cause prejudice attitudes. For this study the mini-International Personality Item Pool was used to measure personality traits agreeableness, extraversion, conscientiousness, neuroticism and intellect/imagination. It should be noted that people who score higher on personality traits agreeableness and openness then to be more social and, as such, are more likely to have had contact with mentally ill person.

Contact & Prejudice

All previous research seems to indicate that the more contact a person has had with a certain outgroup, the less prejudice they are likely to feel towards them. This is likely due to the difficulty of stereotyping a group of people when you know the individuals with their separate personalities and qualities (Hill et al., 2017). Similarly, the more contact you have with a person the more empathy you are likely to feel towards them making discrimination much less likely. A person who has had significant previous contact with the mentally ill is less likely to have more discriminatory feelings towards the mentally ill. Gunningham (2018) found that mental health professionals had lower levels of prejudice towards the mentally ill than the general population, further emphasising that contact with an outgroup reduces prejudice attitudes. Similarly, the more close-minded a person is and the less contact they have had with the mentally ill, the more like they are to feel negatively towards them. This suggests that past experiences and previous contact can have significant influence on prejudicial attitudes. For this study a Level of Contact report was used to measure participants past experience with ex-patients of psychiatric hospitals.

The Current Study

However, one limitation of all previous research on prejudice is that it is largely hypothetical and may not be applicable to the population as a whole. People with higher levels of empathy and acceptance are more likely to develop relationships with members of outgroups and, as such, have higher levels of contact with outgroups. The tendency for more close-minded people to have non-specific prejudicial attitudes and behaviours may indicate that education is not be enough to address this, that understanding the root of a

person's prejudicial attitudes is necessary in order to address them. This study seeks to understand how the personality and contact influence prejudicial attitudes and to address a gap in the literature regarding the attitudes a patient of a psychiatric hospital may face upon discharge and to expand our understanding of the factor which influence these attitudes. The author also hopes to highlight the need for further research into people's prejudice attitudes in order to create effective interventions and to explore a possible need for education, understanding and consciousness-raising around the circumstances of ex-patients of psychiatric hospitals.

Rationale

The scientific rationale for this study is that there is a gap in the literature regarding factors related to prejudice towards ex-patients of psychiatric hospitals. While there is a lot of research on stigma associated with mental illness as well as a little regarding prejudice towards people with mental illness, the author could not find any study that focused on the prejudice an ex-patient of a psychiatric hospital may face upon discharge.

There is still something of a taboo surrounding the topic of someone going into a psychiatric hospital. People often feel uncomfortable discussing the details of their own mental health and this can lead to the people around them speculating, often inaccurately. Often, we may become aware that a friend, colleague, neighbour or even family member has been admitted to a psychiatric hospital, but we are ignorant of the specific reasons why.

People from all walks of life enter psychiatric hospitals when they are feeling mentally unwell. They may be suffering from a temporary bout of anxiety or depression, they may be struggling with a lifelong mental illness, they could be dealing with substance abuse issues or they may just be feeling overwhelmed in their life. The admission to a psychiatric hospital should be considered the same as to a regular hospital, a place for a person to have an illness treated. However, a great many people still believe that people who spend time in a psychiatric hospital must suffer from a lifelong mental illness or that they are 'crazy'.

The rationale for this study is the need to explore the factors which influence prejudice attitudes among the general public towards ex-patients of psychiatric hospitals, the possible need for further education of the public and the possible need for open

conversation around why an average person might admit themselves to a psychiatric hospital.

Research Aim

To investigate the factors which may cause an ex-patient of a psychiatric hospital to face prejudice upon discharge.

Hypotheses

1: That level of contact with ex-patients of psychiatric hospitals will correlate negatively with levels of prejudice towards ex-patients of psychiatric hospitals

2: The higher levels of the personality traits agreeableness and extraversion will be associated with lower levels of prejudice towards ex-patients of psychiatric hospitals

Methods

Participants

The sample for this current study consisted of 164 participants with 54.6% being female (n=89), 42.9% being male (n=70), 1.8% preferring not to share their gender (n=3), 0.6% identifying as non-binary (n=1) and 1 participant being excluded due to withholding consent to use their data. All participants fully completed the survey. Participants were recruited through convenience sampling using online psychology forums, social media such as Facebook and word of mouth. Requirements for the participants was that they be over 18 and complete every question in the survey. The ages of the participants ranged from 18 to 62 with the mean age being 29.76. Five participants choose not to disclose their age but confirmed that they were over the age of eighteen.

All data from this survey was collected anonymously with the only demographic information asked of participants being age and gender. Participation in this study was strictly voluntary with no reward or compensation offered. At the beginning of the survey it was explained what the data was being collected for and how it would be used. It was also explained that as the data was collected anonymously it would be impossible to delete an individual's data once it had been submitted. Informed consent and confirmation of being over 18 were required before a participant could begin the survey. Once the survey was completed each participant was debriefed and provided with information of resources that may be helpful should they feel distressed (see Appendix 9). Finally, participants were asked once again to give their consent for their data to be used before submitting their survey.

Measures

Three questionnaires were used to make up this survey: A level of contact questionnaire (LOC) (see Appendix 4), a prejudice against people with mental illness questionnaire (PPMI) (see Appendix 3) and a mini-international personality item pool (IPIP) (see Appendix 6). The level of contact and prejudice against people with mental illness scales were modified to apply to ex-patients of psychiatric hospitals rather than people with mental illness. The data from these surveys was collected anonymously in order to encourage completely honest answers as participants may have felt uncomfortable reporting their true attitudes otherwise.

The modified level of contact is a 12 item yes-no check the box report (see Appendix 2). It measures the level of contact participants have had with ex-patients of psychiatric hospitals. The original measure was created by Holmes et al, 1999 as part of a measure to change attitudes towards schizophrenia. This measure was modified by the author to change the term mentally ill to ex-patient of psychiatric hospitals in order to measure prejudice against patients of ex-patients of psychiatric hospitals.

The modified prejudice against people with mental illness is a 28-item questionnaire with four sub-scales: fear/avoidance, malevolence, authoritarianism and unpredictability (see Appendix 1). All items are rated on a 9-point Likert scale ranging from -4 (very strongly disagree) to 4 (very strongly agree). The PPMI scale was modified to measure prejudice against ex-patients of psychiatric hospitals rather than mental illness by replacing the term 'mental illness' with 'ex-patient of psychiatric hospital'. The PPMI scale is designed to specifically measure prejudice attitudes as opposed to stigma.

The mini-international personality item pool is a 20-item scale used as a short form measure of personality traits agreeableness, conscientiousness, extraversion, neuroticism and intellect/imagination created by Donnellan et al, 2006. The mini-IPIP employs a 5-point Likert scale (1 = Very Inaccurate, 2 = Moderately Inaccurate, 3 = Neither Inaccurate nor Accurate, 4 = Moderately Accurate, 5 = Very Accurate). This scale is used as a quick measure to accurately gauge a participant's big factor five traits.

Design

The design of the current study was a quantitative survey design. Participants completed a three-questionnaire survey online only; no physical copies of the survey were made available. The research design was cross-sectional correlational within-subjects based upon the two hypotheses explored within the study. This design was employed for the purpose of examining the effects of level of contact and personality traits agreeableness and extraversion on levels of prejudice towards ex-patients of psychiatric hospitals.

Data Analysis

The data collected for this research project was analysed using SPSS software (Statistical Package for the Social Sciences). The data collected from the 163 participants was input into SPSS and initially frequency, descriptive and normality tests were run. Bivariate correlational analyses were done to examine the relationship between level of contact and personality traits agreeableness and extraversion with levels of prejudice against ex-patients of psychiatric hospitals. Cronbach's alpha was performed on the modified level of contact questionnaire, the mini-international personality item pool's traits

agreeableness and extraversion and the four subscales of the modified prejudice against people with mental illness questionnaire as report in Table 1 below.

Table 1.

Cronbach's Alpha Coefficients for the modified LOC Scale, modified PPMI Subscales & Mini-IPIP Agreeableness & Extraversion

Scale	Cronbach's Alpha	Cronbach's Alpha	
		Based on Standardized Items	N of Items
Level of Contact	.668	.665	10
PPMI – Fear/Avoidance	.732	.637	8
PPMI – Malevolence	.836	.790	8
PPMI – Authoritarianism	.550	.607	6
PPMI – Unpredictability	.783	.788	6
IPIP – Agreeableness	.745	.746	4
IPIP – Extraversion	.872	.873	4

Procedure

This research began with the intention of addressing a gap in the research; what factors influence prejudicial attitudes that ex-patients of psychiatric may face? Once the two hypotheses were formed three appropriate scales were chosen, the LOC, the PPMI and the mini-IPIP. The LOC and PPMI scales were modified to measure level of contact

and prejudice relating to ex-patients of psychiatric hospitals instead of mental illness. These surveys were put together using google forms. A participant information sheet (see Appendix 6) explaining the reasons for the study and how the data would be collected, stored and used was created as well as an informed consent form (see Appendix 7) ensuring that participants were over 18 and understood what they were agreeing to by completing the survey. These two forms preceded the three questionnaires and required that participants give informed consent before they could continue. Once the survey was complete a debriefing sheet which included information for mental health organisations Aware, Pieta House and the Samaritans was presented before the final page where participants submitted their data (see Appendix 8). Information about the researcher and the organisation were also provided, as well as contact details for the researcher and their supervisor.

Once ethical approval was obtained from the Psychology ethics committee of National College of Ireland a pilot study was run with eight of the author's friends and family to ensure that there were no issues with the data collection and that all items in the survey were clear. Participants were recruited through convenience and snowball sampling as well as word of mouth. Several groups on Facebook dedicated to survey sharing were used as well as word of mouth and online psychology forums on Reddit. The questionnaire took approximately ten minutes to complete. A G power analysis suggested a sample size of 323 participants. Once the data was collected the survey was closed. The data was recoded to reflect negatively scored questions before being input into SPSS as well as missing values inputted. Descriptive statistics were run first to look at frequencies before inferential statistics were run using bivariate correlation analysis was run to look at the relationship between the variables.

Results

Descriptive Statistics

The current study is comprised of 163 participants. Table 2 breaks these participants down by gender, providing both the number and percentage relevant to the study. This shows that the study had a strong representation of both male and female volunteers.

Table 3 displays the range, minimum, maximum, mean and standard error of significant variables. The descriptive statistics show a range of 44 years with a mean age of 29.76 years old. Tests of the confidence intervals showed no suggestion of violation of the data due to outliers and indicate that the sample of participants for this study is reasonably representative of the general population.

In order to more effectively present the data and results several graphs have been included below. Scatterplot graphs were done to highlight the relationship between prejudice against ex-patients of psychiatric hospitals (PEPH) and LOC, personality trait agreeableness and personality trait extraversion. A histogram was created to look levels of contact by gender. These showed no significant difference between genders.

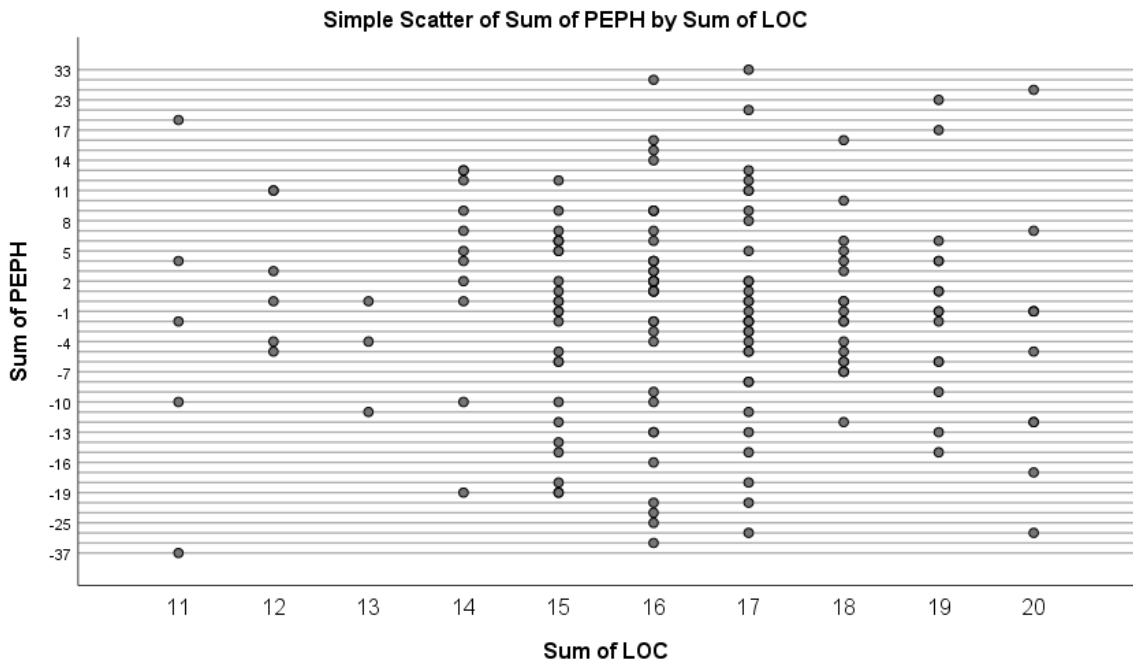
Table 2. Frequencies with gender as the variable

Gender	Frequency	Valid Percentage
Female	89	54.6
Male	70	42.9
Prefer not to say	3	1.8
Non-Binary	1	0.6

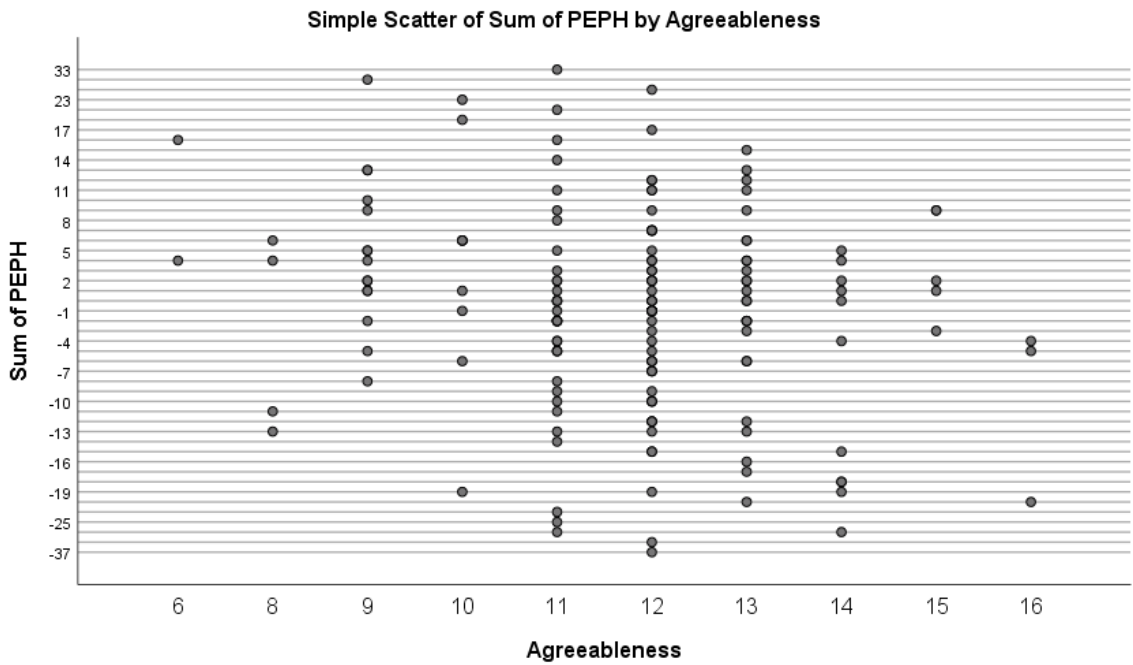
Table 3. Descriptive statistics of variables

	N	Range	Minimum	Maximum	Mean	Std. Error
Age	158	44	18	62	29.76	.842
Sum of LOC	163	9	11	20	16.30	.163
Fear/Avoidance	163	33	-20	13	-.53	.397
Malevolence	163	28	-14	14	.89	.383
Authoritarianism	163	29	-13	16	-.84	.327
Unpredictability	163	30	-16	14	-.47	.336
Extraversion	163	9	8	17	12.47	.135
Agreeableness	163	10	6	16	11.69	.136

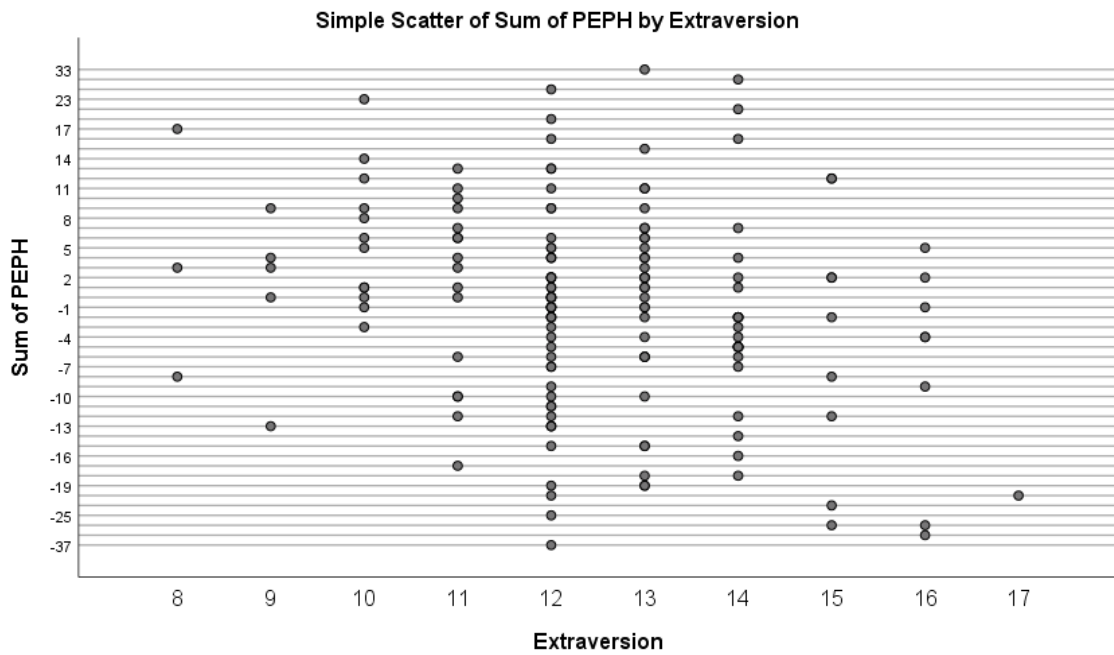
Graph 1. Scatterplot depicting the relationship between PEPH and LOC



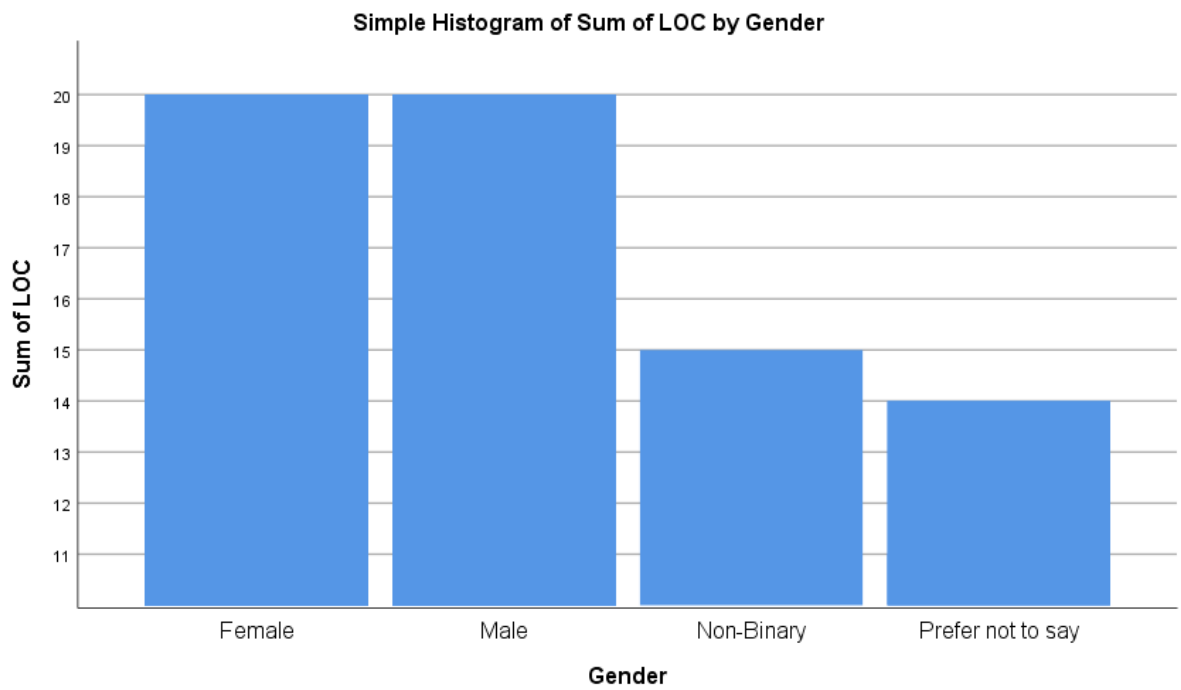
Graph 2. Scatterplot depicting the relationship between PEPH and Agreeableness



Graph 3. Scatterplot depicting the relationship between PEPH and Extraversion



Graph 4. Histogram depicting levels of contact by gender



Inferential Statistics

Zero-order correlations of the PPMI subscales, the LOC scale and the mini-IPIP scale were run to test the proposed hypotheses. Table 4 displays the results of the Pearson's correlation investigating if level of contact with ex-patients of psychiatric has a significant relationship with prejudice towards ex-patients of psychiatric hospital. Table 5 displays the results of the Pearson's correlation investigating if personality traits as measured by the mini-IPIP have a significant relationship with prejudice towards ex-patients of psychiatric hospital

The data presented in Table 4 supports hypothesis one, that higher levels of contact with ex-patients of psychiatric hospitals would be associated with lower levels of prejudice. The correlational analysis showed that level of contact is significantly negatively related with the subscale malevolence.

The correlational analysis presented in Table 5 supports hypothesis two, that higher scores of extraversion and agreeableness would be associated with lower levels of prejudice. The data shows a significant negative relationship between levels of PPMI and scores of extraversion and agreeableness.

There was no meaningful relationship found between demographic information provided, age and gender, and levels of prejudice reported in the PPMI.

Table 4. Pearson Correlational investigating LOC with PEPH subscales

		PEPH	Fear.	Mal.	Auth.	Unpred.
Sum of LOC	Pearson Correlation	-.014	.012	-.224**	.098	.109
	Sig. (2-tailed)	.861	.876	.004	.213	.166
	N	163	163	163	163	163

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

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

(Fear. = Fear/Avoidance, Mal. = Malevolence, Auth. = Authoritarianism and Unpred. = Unpredictability)

Table 5. Pearson Correlational investigating PEPH with mini-IPIP traits

		Extra.	Aggr.	Con.	Neur.	Innt.
Sum of PEPH	Pearson Correlation	-.236**	-.201*	.007	-.070	-.088
	Sig. (2-tailed)	.002	.010	.933	.377	.263
	N	163	163	163	163	163

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

(Extra. = Extraversion, Aggr. = Agreeableness, Con. = Conscientiousness, Neur. = Neuroticism and Innt. = Intellect/Imagination)

Partial correlation was used to explore the relationship between reported PEPH and LOC while controlling for personality traits agreeableness and extraversion as shown in Table 6 and the relationship between reported PEPH and personality traits agreeableness and extraversion while controlling for LOC as shown in Table 7. The results presented in

table 6 suggest a slight but insignificant effect of agreeableness and extraversion on the relationship between prejudice and malevolence. The results in table 7 suggest that LOC has no effect on the relationship between personality traits agreeableness and extraversion and levels of prejudice. These results suggest that variables LOC, agreeableness and extraversion all have an independent relationship with PEPH.

Table 6. Partial Correlational investigating PEPH with LOC controlling for Agreeableness and Extraversion

Control Variables		Malevolence	
Agreeableness & Extraversion	Sum of LOC	Correlation	-.217
		Significance (2-tailed)	.006
		df	159

Table 7. Partial Correlational investigating PEPH with Agreeableness and Extraversion controlling for LOC

Control Variables		Agreeableness	Extraversion
Sum of LOC	Sum of PPMI	Correlation	-.201
		Significance (2-tailed)	.010
		df	160

Discussion

The purpose of this study was to address a gap in the literature regarding prejudice against ex-patients of psychiatric hospitals. Hypothesis 1 was that level of contact with ex-patients of psychiatric hospitals will correlate negatively with levels of prejudice towards ex-patients of psychiatric hospitals. Hypothesis 2 was that higher levels of the personality traits agreeableness and extraversion will be associated with lower levels of prejudice towards ex-patients of psychiatric hospitals. This study successfully proved both these hypotheses with level of contact being shown to be negatively correlated with levels of prejudice. Similarly, the personality traits agreeableness and extraversion were shown to be negatively associated with the malevolence subscale of the PPMI scale. These results suggest that personality and past experiences have a significant association with prejudice attitudes. They also propose that prejudice is a multi-dimensional variable, suggesting that prejudice should be looked at based on the subscales of the PPMI measure. This could significantly improve future prejudice research and deepen our understanding of the nature of prejudice.

The PEPH scale demonstrated the ability to successfully measure prejudice against ex-patients of psychiatric hospitals. The 28-item scale measures prejudice across four subscales; Fear/Avoidance, Malevolence, Authoritarianism and Unpredictability.

The LOC scale was successfully modified to measure contact with patients of psychiatric hospitals rather than mental illness. The implication of this is that the original LOC scale can be modified to measure levels of contact with all sorts of people.

The mini-IPIP scale was used to measure the variables agreeableness and extraversion as well the personality traits conscientiousness, neuroticism and

intellect/imagination. The results from this measure indicates that personality plays a significant role in the formation of prejudicial attitudes.

The data collected in this study also indicated that attitudes towards ex-patients of psychiatric hospitals are similar to attitudes towards the mentally ill. Previous research using the PPMI scale to look at prejudice in the general population (Gunningham, 2018; Kenny et al., 2018) found the same factors had a relationship with prejudice towards the mentally ill as were found to be associated with prejudice against ex-patients of psychiatric hospitals in this study. This provides further evidence that there is a prevalent prejudicial attitude that ex-patients of psychiatric hospitals suffer from an untreatable mental illness and that their reasons for being in the psychiatric hospital and their current mental state are often overlooked.

The demographic information collected, age and gender, were shown to have no significant relationship with prejudicial attitudes towards ex-patients of psychiatric hospitals. This is contrary research on prejudice against people with mental illness where it was found where age was found to be a significant variable with younger people scoring higher in malevolence towards the mentally ill while older people scored higher in the unpredictability subscale (Gunningham, 2018; Kenny et al., 2018). This discrepancy could be due to a low mean age among the participants of this study with average age being 29.76. Interestingly, when the PEPH results are broken down by gender only authoritarianism is significant for females and only malevolence is significant for males. However, once the P value was adjusted neither of these results are significant anymore.

Major Implications

The results of this study had significant impact on the areas of prejudice and stigma. The findings of this research show that variables level of contact and personality traits agreeableness and extraversion have a significant relationship with levels of prejudice against ex-patients of psychiatric hospitals.

Hypothesis 1 results show that there is a significant association between higher levels of contact and lower levels of prejudice. This result implies that a higher level of contact with ex-patients of psychiatric hospitals leads to lower levels of prejudice. For future research into anti-stigma and anti-prejudice interventions this result is important as it highlights the need for these interventions to target people who are more likely to have prejudicial attitudes and encourage empathy with people who are ex-patients of psychiatric hospitals. Partial correlation suggested that this result is significant regardless of levels of agreeableness and extraversion. This needs to be considered as people who have higher levels prejudice against ex-patients of psychiatric hospitals are likely to have lower levels of contact due to their prejudicial attitudes. Anti-prejudice and anti-stigma interventions could use this information to address prejudice in the general population by encouraging and facilitating contact between ex-patients of psychiatric hospitals and people who have prejudices towards them.

Hypothesis 2 was successfully proved, showing that higher levels of agreeableness and extraversion were associated with lower levels of prejudice against ex-patients of psychiatric hospitals. These results imply that personality, significantly agreeableness and extraversion, is an indicator of how likely a person is to be prejudice towards ex-patients of psychiatric hospitals. Partial correlation suggested that this result is significant regardless

of levels of contact implying that it is not simply that people who are high in these personality traits are more likely to have higher levels of contact with ex-patients of psychiatric hospitals. This agrees with previously mentioned research by Ekehammar and Akrami (2003) & Ekehammer et al. (2004) that prejudice attitudes have more to do with the individual themselves than the outgroup they are prejudice against. This suggests that future anti-prejudice interventions may need to find a novel way to reach the individuals whose personality traits make them more likely to have general prejudicial attitudes.

The results of the study suggest that the PEPH scale and LOC scale were successful in measuring prejudice against ex-patients of psychiatric hospitals. The implications of these results suggest these scales can be modified to measure prejudice and contact in relation to all sorts of people. As well as this, the PEPH scale suggests that prejudice is a multi-dimensional variable and needs to be investigated as such. This suggests that prejudice and stigma related research, as well as anti-prejudice and anti-stigma interventions, may need to consider the multi-dimensional nature of prejudice. The results from this study could be used to address limitations in anti-stigma interventions which, while successful, have been shown to only have a small effect and are in need of more efficient programs (Griffiths et al, 2014).

Limitations

The author of this research recognises that there are several limitations to the study. Firstly, as this study only looked correlations with levels of prejudice, causation cannot be implied. This means that while this study has investigated the factors which influence prejudice against ex-patients of psychiatric hospitals it did not look at what factors cause

the prejudice in the first place. Secondly, while this research looked at how the factors of personality and level of contact correlate with levels of prejudice it did not investigate if these variables caused prejudice against ex-patients of psychiatric hospitals.

A further limitation of this study is that it did not consider a participant's ideological beliefs or cultural biases that may influence the prejudice they feel towards ex-patients of psychiatric hospitals. Furthermore, it was not investigated if a participant's level of prejudice caused or influenced real world discriminatory behaviour, an outcome which can be considered extremely important. Additionally, this test was only taken once by each participant and as such was not assessed for test-retest reliability.

The low Cronbach's alpha score of two of the scales could be considered a minor limitation as could the sample size which was significantly lower than recommended by the G power analysis. The modification of the LOC and PPMI scales could potentially be seen to compromise the reliability and validity of the scales despite the necessity for modification in order correctly order prejudice. Finally, the short-form IPIP scale was used for participant's comfort rather than the longer 50-item scale. While the short-form scale is valid and reliable it only provided four items for each trait.

Future Recommendations

Based on the findings and limitations reported in this study the author has several recommendations for future research. Firstly, the measures could be implemented in future studies with larger sample sizes to ensure validity in measuring prejudice and similarly be used in longitudinal studies to measures changes in levels of prejudice over time. Secondly, future research could benefit from investigating the causal factors associated

with prejudice against ex-patients of psychiatric hospitals as well as investigating if the LOC and personality traits investigated in this study caused prejudice attitudes.

Another recommendation for future research is to incorporate the measures and results from this study into future anti-stigma studies and programs. Additionally, as the measures of LOC and PPMI were adapted to measure prejudice against ex-patients of psychiatric hospitals, future research could test if the scales could be modified to measure other kinds of prejudice and contact. Finally, the nuanced measure of prejudice looked at four different subscales of prejudice which could be incorporated into future research into prejudice and stigma.

Conclusion

In this study we highlighted the negative relationship between the variables, level of contact and personality traits agreeableness and extraversion, and levels of prejudice against ex-patients of psychiatric hospitals. Additionally, the author presented evidence that the modified PPMI and LOC scales could be effectively used to measure prejudice and levels of contact with ex-patients of psychiatric hospitals. This research highlights the importance of investigating the prejudice ex-patients of psychiatric hospitals may encounter and the factors which influence that prejudice. This study successfully addresses a gap in the literature regarding prejudice patients of psychiatric hospitals may face upon discharge and the factors influencing this. While the current research has several limitations, it represents an important beginning in research about prejudice towards ex-patients of psychiatric hospitals and a step forward for prejudice and stigma research in general.

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Appendices

1. Modified Prejudice towards People with Mental Illness Scale
2. Modified Level of Contact Report
3. Original Prejudice towards People with Mental Illness Scale
4. Original Level of Contact Report
5. Mini-International Personality Item Pool
6. Participant Information Sheet
7. Informed Consent Form
8. Submission Form
9. Debriefing Information

Appendix 1: Modified Prejudice towards People with Mental Illness Scale

PsycTESTS Citation:

Kenny, A., Bizumic, B., & Griffiths, K. M. (2018). Prejudice towards People with Mental Illness Scale [Database record]. Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/t70320-000>

Instrument Type:

Inventory/Questionnaire

Test Format:

The modified PPMI Scale consists of 28 items and four subscales. All items are rated on a 9-point scale ranging from -4 (very strongly disagree) to +4 (very strongly agree).

Source:

Reproduced by permission from: Kenny, Amanda, Bizumic, Boris, & Griffiths, Kathleen M. (2018). The Prejudice towards People with Mental Illness (PPMI) scale: Structure and validity. BMC Psychiatry, Vol 18.

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Item

Fear/Avoidance

I would find it hard to talk to someone who is an ex-patient of a psychiatric hospital

I would be less likely to become romantically involved with someone if I knew they were an ex-patient of a psychiatric hospital

It is best to avoid people who are an ex-patient of a psychiatric hospital

I would feel unsafe being around someone who is an ex-patient of a psychiatric hospital

I would be just as happy to invite a person who is an ex-patient of a psychiatric hospital into my home as I would anyone else*

I would feel relaxed if I had to talk to someone who is an ex-patient of a psychiatric hospital *

I am not scared of people who are an ex-patient of a psychiatric hospital *

In general, it is easy to interact with someone who is an ex-patient of a psychiatric hospital *

Malevolence

People who are ex-patients of a psychiatric hospital are avoiding the difficulties of everyday life

People who are ex-patients of a psychiatric hospital should support themselves and not expect handouts

People who are ex-patients of a psychiatric hospital are genetically inferior to other people

People who are ex-patients of a psychiatric hospital do not deserve our sympathy

We, as a society, should be spending much more money on helping people who are ex-patients of a psychiatric hospital *

People who are ex-patients of a psychiatric hospital are not failures in life*

We need to support and care for people who are ex-patients of a psychiatric hospital *

Under certain circumstances, anyone could become a patient of a psychiatric hospital*

Authoritarianism

People who are ex-patients of a psychiatric hospital need to be controlled by any means necessary

Those who are ex-patients of a psychiatric hospital should not be allowed to have children

People who are ex-patients of a psychiatric hospital should be forced to have treatment

People who are ex-patients of a psychiatric hospital should be free to make their own decisions*

People who are ex-patients of a psychiatric hospital should be allowed to live their life any way they want*

Society does not have a right to limit the freedom of people who are ex-patients of a psychiatric hospital *

Unpredictability

The behaviour of people who are ex-patients of a psychiatric hospital is unpredictable

People who are ex-patients of a psychiatric hospital often do unexpected things

In general, you cannot predict how people who are ex-patients of a psychiatric hospital will behave

The behaviour of people who are ex-patients of a psychiatric hospital is just as predictable as that of people who are mentally healthy*

People who are ex-patients of a psychiatric hospital behave in ways that are foreseeable*

I usually find people who are ex-patients of a psychiatric hospital to be consistent in their behaviour*

Note. All items are rated on a 9-point scale ranging from -4 (very strongly disagree) to +4 (very strongly agree). * = item was reverse-scored.

Appendix 2: Modified Level of Contact Report

1. I have watched a movie or television show in which a character depicted a person who was an ex-patient of a psychiatric hospital.
2. My job involves providing services/treatment for persons who are ex-patients of a psychiatric hospital.
3. I have observed, in passing, a person I believe may have been an ex-patient of a psychiatric hospital.
4. I have observed persons who are ex-patients of a psychiatric hospital on a frequent basis.
5. I am an ex-patient of a psychiatric hospital.
6. I have worked with a person who was an ex-patient of a psychiatric hospital at my place of employment.
7. A friend of the family is an ex-patient of a psychiatric hospital.
8. I have a relative who is an ex-patient of a psychiatric hospital.
9. I have watched a documentary on the television about ex-patients of a psychiatric hospital.
10. I live with a person who is an ex-patient of a psychiatric hospital.

Questionnaire is a yes/no survey modified to measure the participants level of contact with ex-patients of psychiatric hospitals.

Appendix 3: Original Prejudice towards People with Mental Illness Scale



Prejudice towards People with Mental Illness Scale

PsycTESTS Citation:

Kenny, A., Bizumic, B., & Griffiths, K. M. (2018). Prejudice towards People with Mental Illness Scale [Database record]. Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/t70320-000>

Instrument Type:

Inventory/Questionnaire

Test Format:

The PPMI Scale consists of 28 items and four subscales. All items are rated on a 9-point scale ranging from -4 (very strongly disagree) to +4 (very strongly agree).

Source:

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Prejudice towards People with Mental Illness Scale

Item
Fear/Avoidance
I would find it hard to talk to someone who has a mental illness
I would be less likely to become romantically involved with someone if I knew they were mentally ill
It is best to avoid people who have mental illness
I would feel unsafe being around someone who is mentally ill
I would be just as happy to invite a person with mental illness into my home as I would anyone else*
I would feel relaxed if I had to talk to someone who was mentally ill*
I am not scared of people with mental illness*
In general, it is easy to interact with someone who has mental illness*
Malevolence
People who are mentally ill are avoiding the difficulties of everyday life
People with mental illness should support themselves and not expect handouts
People who develop mental illness are genetically inferior to other people
People with mental illness do not deserve our sympathy
We, as a society, should be spending much more money on helping people with mental illness*
People who become mentally ill are not failures in life*
We need to support and care for people who become mentally ill*
Under certain circumstances, anyone can experience mental illness*
Authoritarianism
People who are mentally ill need to be controlled by any means necessary
Those who have serious mental illness should not be allowed to have children
People who are mentally ill should be forced to have treatment
People who are mentally ill should be free to make their own decisions*
People who are mentally ill should be allowed to live their life any way they want*
Society does not have a right to limit the freedom of people with mental illness*
Unpredictability
The behaviour of people with mental illness is unpredictable
People with mental illness often do unexpected things
In general, you cannot predict how people with mental illness will behave
The behaviour of people with mental illness is just as predictable as that of people who are mentally healthy*
People with mental illness behave in ways that are foreseeable*
I usually find people with mental illness to be consistent in their behaviour*

Note. All items are rated on a 9-point scale ranging from -4 (very strongly disagree) to +4 (very strongly agree). * = item was reverse-scored.

Appendix 4: Original Level of Contact Report



Level-of-Contact Report

PsycTESTS Citation:

Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. A. (1999). Level-of-Contact Report [Database record]. Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/t12470-000>

Test Format:

The Level-of-Contact Report utilizes a check-the-box response format.

Source:

Holmes, E. Paul, Corrigan, Patrick W., Williams, Princess, Canar, Jeffrey, & Kubiak, Mary Ann. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, Vol 25(3), 447-456. doi: <https://dx.doi.org/10.1093/oxfordjournals.schbul.a033392>

Permissions:

Contact Corresponding Author.



doi: 10.1037/t12470-000

Level-of-Contact Report

Items

Please read each of the following statements carefully. After you have read all the statements below, place a check by the statements that best depict your exposure to persons with a severe mental illness.

3. I have watched a movie or television show in which a character depicted a person with mental illness.
8. My job involves providing services/treatment for persons with a severe mental illness.
2. I have observed, in passing, a person I believe may have had a severe mental illness.
5. I have observed persons with a severe mental illness on a frequent basis.
12. I have a severe mental illness.
6. I have worked with a person who had a severe mental illness at my place of employment.
1. I have never observed a person that I was aware had a severe mental illness.
7. My job includes providing services to persons with a severe mental illness.
9. A friend of the family has a severe mental illness.
10. I have a relative who has a severe mental illness.
4. I have watched a documentary on the television about severe mental illness.
11. I live with a person who has a severe mental illness.

Appendix 5: Mini-International Personality Item Pool



Mini-IPIP

PsycTESTS Citation:

Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). Mini-IPIP [Database record]. Retrieved from PsycTESTS. doi: <https://dx.doi.org/10.1037/101795-000>

Instrument Type:

Rating Scale

Test Format:

20-item scale; subjects rate how well each statement describes them on a 5-point scale.

Source:

Donnellan, M. Brent, Oswald, Frederick L., Baird, Brendan M., & Lucas, Richard E. (2006). The Mini-IPIP Scales: Tiny-yet-effective measures of the Big Five Factors of Personality. *Psychological Assessment*, Vol 18(2), 192-203. doi: <https://dx.doi.org/10.1037/1040-3590.18.2.192>

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doi: 10.1037/t01795-000

Mini-IPIP

Items

- 1 Am the life of the party.
- 2 Sympathize with others' feelings
- 3 Get chores done right away.
- 4 Have frequent mood swings.
- 5 Have a vivid imagination.
- 6 Don't talk a lot. (R)
- 7 Am not interested in other people's problems. (R)
- 8 Often forget to put things back in their proper place. (R)
- 9 Am relaxed most of the time. (R)
- 10 Am not interested in abstract ideas. (R)
- 11 Talk to a lot of different people at parties.
- 12 Feel others' emotions.
- 13 Like order.
- 14 Get upset easily.
- 15 Have difficulty understanding abstract ideas. (R)
- 16 Keep in the background. (R)
- 17 Am not really interested in others. (R)
- 18 Make a mess of things. (R)
- 19 Seldom feel blue. (R)
- 20 Do not have a good imagination. (R)

(R) = Reverse Scored Item.

Appendix 6: Participant Information Sheet

Project Information Form

Project Title:

An Investigation of Prejudice towards Ex-Patients of Psychiatric Hospitals.

You are being asked to take part in a research study designed to explore possible prejudice attitudes towards ex-patients of psychiatric hospitals. This study will look at possible prejudicial attitudes towards ex-patients of psychiatric hospitals and if prior contact with ex-patients influences these attitudes. This research is being conducted by Conor Sherlock, an undergraduate psychology student at the School of Business, National College of Ireland.

The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student.

Specific Criteria for Participation:

This study requires ONLY participants that are over 18 years of age.

In this study you will be asked some two demographic questions: age and gender. This will then be followed by the Level of Contact Report and the Prejudice toward Ex-Patients of Psychiatric Hospitals scale. The study typically takes 10 to 15 minutes to complete.

You may decide to stop being a part of the research study at any time without explanation and any data you have supplied up to that point will be automatically withdrawn. However, due to the nature of data collection via online survey and the fact that the data provided will be stored anonymously means that when the survey is completed and submitted an individual's specific file will be unidentifiable for withdrawal purposes (or for any other).

You have the right to omit or refuse to answer or respond to any question that is asked of you.

You have the right to have your questions about the procedures answered. If you have any questions as a result of reading this information sheet, you may ask the researcher before the study begins on the contact information provided below. There are no known benefits or risks for you, and your participation in this study is voluntary.

The data we collect do not contain any personal information about you except that of age and gender. All data will be stored anonymously in an encrypted file on a password protected laptop, this will be in the sole possession of the author of the study. The data will be destroyed within 5 years in accordance with NCI policy.

The data obtained will be used in the submission of a final year thesis and may be used in presentation at conferences or in publications. All data will be unidentifiable.

CONTACT, PERSONALITY & PREJUDICE

If you want to find out more information before beginning please contact me on x15008339@student.ncirl.ie, you may also contact if you are interested in the final outcome of the study.

Appendix 7: Informed Consent Form

Informed Consent Form

In agreeing to participate in this research I understand the following:

This research is being conducted by Conor Sherlock, an undergraduate psychology student at the School of Business, National College of Ireland.

The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student. It is, however, the above-named student's responsibility to adhere to ethical guidelines in their dealings with participants and the collection and handling of data.

If I have any concerns about participation, I understand that I may refuse to participate or withdraw at any stage (other than after answers have been submitted).

I have been informed as to the general nature of the study and agree voluntarily to participate. There are no known expected discomforts or risks associated with participation. All data from this study will be treated confidentially. The data from all participants will be compiled, analysed and submitted in a report to the Psychology Department in the School of Business. No participants data will be identified by name at any stage of the data collection, analysis, or in the final report.

At the conclusion of my participation, any questions or concerns I have will be fully addressed. I may withdraw from this study at any time by not submitting answers, however due to data anonymity I will be unable to withdraw after final submission of survey answers as my data will be unidentifiable.

**This is a required question

* 1. I verify that I am over 18 years of age and that I agree to participate in the research study. I understand the purpose and nature of this study and I am participating voluntarily. I understand that I can withdraw from the study at any time, without any penalty or consequences.

Yes

No

* 2. I grant permission for the data generated from this interview to be used in the researcher's publications on this topic.

Yes

No

Appendix 8: Submission Form

Submission Form

By ticking the below box, I confirm that I have understood all the questions asked in this study and I am agreeing to submit my data for use by the author

Submit

Appendix 9: Debriefing Information

Debriefing Information

Should you feel that any of the topics mentioned in this survey have affected you in a negative way, or if you just want more information regarding mental illness, several mental health charities and their information have been listed below.

Samaritans Ireland

Helpline for anyone who needs to talk

116 123

<https://www.samaritans.org/?nation=ireland>

Aware

Support for Depression, Anxiety and Bipolar Disorder

1800 80 48 48

<https://www.aware.ie/>

Pieta House

Prevention of self-harm and suicide

(01)6010000

<https://www.pieta.ie/>