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RESEARCH ARTICLE

Experiencing Mental Health when Treating Others

Experiences of Mental Health Workers in Relation to Mental Health Problems: Stigma, Perception, and Employment

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Introduction: Mental health problems are among the leading causes of disability, with one in four adults in the UK experiencing a mental health disorder. Even with the increasing knowledge concerning mental health disorders, two-thirds of those experiencing concerns are reluctant to disclose their condition and seek professional help. This perceived stigma has a strongly negative correlation with help-seeking behavior, and disproportionately affects healthcare professionals; 26% of mental health professionals in England are reported to be resigning due to a reduction of well-being.
Aims: This paper seeks to compare the effects of stigma perceived by mental health and non-mental health professionals, the barriers perceived, and the impact of specific disorders on this stigma.
Methods: Using a mixed-methods approach, a survey was conducted to determine the stigma levels and perceived barriers of 108 people; 50% of these participants were professionals working within mental health services. Two focus groups were conducted, one for mental health professionals and one for non-mental health professionals, with four participants in each group.
Results: The survey reported that mental health professionals had a lower level of stigma for specific disorders, although male mental health professionals working for less than five years reported a higher level of stigma and perceived barriers than did females with the same experience – with these then reducing after five years. The overarching focus group theme was "changes needed for disclosure", with each group having four subthemes.
Conclusions: Disclosure stigma remains an issue, with further research needing to be conducted to adapt to a minimally stigmatizing service for mental health professionals.

Keywords: stigma, employment, mental health, barriers, disclosure

Introduction

Within the UK, mental health has become a subject frequently highlighted and discussed across the media; however, there is an argument that while accurate representations of mental health disorders can lead to a reduction in stigma (Haddad & Haddad, 2015), this reduction is not so prevalent across all disorders and identified sections of society, particularly military personnel, and healthcare professionals (Angermeyer et al., 2013; Clement et al., 2015). With one in four adults and one in ten children experiencing mental health disorders in the UK, this has become a common issue (NHS England, 2019). The stigma of mental health reduces recovery rates, increases the time taken to access treatment, and heightens stress from perceived negative attitudes in social groups and employment (Clement et al., 2015; Oexle et al., 2018; Rüsch et al., 2005;). Globally, approximately 800,000 suicides occur every year, with another 16 million people attempting suicide; therefore, early identification and treatment are imperative to reducing these statistics (WHO, 2019).

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People often stigmatize mental health problems, thus preventing individuals from accessing the help they need because they feel they will be subject to prejudice and discrimination (Corrigan & Watson, 2002; Schauman et al., 2019). Both self (internalized) and social (public) stigma have a great impact on the support available for people experiencing mental health concerns (Corrigan & Watson, 2002). Self-stigma often increases when the stigma portrayed by the media and others in society becomes internalized, reducing self-esteem and enforcing the belief that they are defective and unable to recover (Corrigan & Watson, 2002). Social stigma is the public's negative social judgment that can also lead to rejection and even violence due to the perpetuating belief that all mental health patients are dangerous (Clarke, 2004). This has been evidenced through the public's reactions to stereotypes in media, where films depict people with mental health disorders as to be feared, portraying them to be unpredictable and violent (Byrne, 2009; Corrigan & Watson, 2002). Social stigma can vary depending on the disorder: for example, some people are unsympathetic to individuals having certain disorders such as anorexia, as people feel the disorder is self-inflicted; therefore, these people are undeserving of help (Stewart et al., 2006).

Brohan et al. (2012) conducted a systematic review on the disclosure of mental health problems in the workplace, revealing that mental health stigma can reduce career success and opportunities. Brohan et al. (2012) stated that employers would be less likely to hire a candidate with a mental health disorder than someone with a different issue, including a chronic physical disability or other long-term responsibilities (carers or single parents). Stigma can also lead to friendship losses and social rejection, reducing social support (Connolly et al., 1992). Most importantly, however, the stigma of mental health problems can delay treatment as there is a reduction in help-seeking behavior.

The reduction of stigma clearly remains a very important area of research within mental health. A negative correlation has been observed between high levels of internalized stigma, treatment stigma, and help-seeking behaviors (Clement et al., 2015), leading to further detrimental effects on the individual's mental health (Eisenberg et al., 2009). Barrett et al. (2008) argued that this leads to additional problems throughout the treatment process and an increased possibility of adverse outcomes alongside the challenges associated with accessing treatment – the result being that more intensive therapies are required, at greater cost to the provider. The Adult Psychiatric Morbidity Survey (2014) reported that 61% of people with a common mental health disorder in England did not seek help, with long-standing stigma and a reluctance to talk about mental health as a reason for the lack of help-seeking behavior (Lubian et al., 2016). It should be noted, however, that the manifestation of stigma can take many forms, with help-seeking barriers being mainly influenced by internalized stigma, treatment stigma, and disclosure stigma (Clement et al., 2015; Mojtabai et al., 2011).

Clement et al. (2015) conducted a systematic review that suggested help-seeking for mental health concerns is disproportionately affected by stigma in the populations of males, youth, ethnic minorities, military personnel, and healthcare professionals. Healthcare professionals reported more shame, embarrassment and negative social judgment than other groups (Clement et al., 2015). This finding is even more alarming, raising questions around the powerful nature of stigma, even amongst those who work as health professionals, as evidenced by Brohan et al. (2012); Corrigan and Watson (2002); Held and Owens (2012). Thus, considering that healthcare professionals are exposed to mental health information and anti-stigma interventions consistently – more so if they work within the mental health sector – it is important to investigate these differences.

Professionals within mental health services stand at the forefront of reducing stigma in their local community and can greatly impact how others perceive mental health. As previous studies have evidenced, the stigma experienced by mental health service users on a day-to-day basis can substantially affect their mental well-being recovery (Clement et al., 2015; Henderson et al., 2017; Kerby et al., 2008; Wahl, 1999). As mental health professionals are aware of this stigma, were they then to develop mental health problems themselves – they may struggle to separate their preferred self of being strong and competent with that of the stereotyped mental health patient that the media so often portrays as weak or crazy (Clement et al., 2015). This could be one explanation for health professionals' reluctance to seek support themselves.

Brohan et al. (2012) argued that within employment, a preference has existed for the non-disclosure of mental health concerns. Non-disclosure reduces support from employers and reduces help-seeking behavior. Clement et al. (2015) reported that health professionals were disproportionately deterred by the stigma of disclosure when compared to the general population with confidentiality issues and perceived negative social judgment serving as the main deterrents. A need exists to increase help-seeking and reduce disclosure concerns in order to aid mental health well-being and keep our health professionals healthy. To increase help-seeking behavior, the American Psychiatric Association argued that improvements should be made to provide confidential care, therefore reducing anxiety stemming from social stigma and the perceived possibility of losing employment (IBHI, 2010). Within the healthcare sector, the most reported barrier to help-seeking behavior remains disclosure stigma (Clement et al., 2015). BPS (2021) acknowledged that there are a number of key themes to improve Mental Wellbeing for healthcare professionals, including "Caring for the carers".

Preventing disclosure issues and stigma-related facilitators constitute the key factors in help-seeking behavior when in mental health employment. In Brohan et al. (2012), participants reported that they would not disclose concerns if they could "pass off as normal". These participants stated their reason for non-disclosure: the illness is private; they are already having natural adjustments in the job, or feeling that others do not want to know. Those participants, however, who would disclose mental health concerns, reported that this was due to the perceived benefit of gaining adjustments or support, to explain their behavior, or because concealing the disorder was too stressful. Banks et al. (2007) documented that participants remained less likely to disclose to their employer were they female, having a mood disorder rather than symptoms of psychosis, or should they not have any symptoms at work. Participants appeared more likely to disclose if they had the knowledge of legislation and should the employer be perceived to have a high level of emotional support (Brohan et al., 2012).

According to Ellison, Russinova, and MacDonald-Wilson (2003), mental health professionals have a higher disclosure rate than other health services, although the participants that had disclosed as they had reached a crisis point stood more likely to regret the decision than those that had done so under more favorable circumstances.

Clement et al. (2015) acknowledge a research gap in help-seeking within under-represented disorders, including bipolar, personality, and anxiety disorders. Schomerus et al.'s (2016) study argued that stigma against psychosis has increased and the media continues to portray psychosis as violent and aggressive; exacerbating negative stereotypes for this disorder (Klin & Lemish, 2008). Grambal et al. (2016) conducted a study that showed people diagnosed with borderline personality disorder suffered from a higher severity of self-stigma than other disorders.

Over one thousand mental health professionals completed a survey by Unison regarding various aspects of working within a mental health service: 42% of respondents stated they had been violently attacked at work, with verbal and physical abuse seen daily and the health professionals maintaining the belief that it "goes with the job" (UNISON, 2017). Previous research has shown that employment that has a high rate of dangerous incidents leads to a reduction in the mental wellness of staff (Anderson & West, 2011; De Looff et al., 2019; Karaffa & Koch, 2015). 74% of respondents stated they felt stressed at least once a week (UNISON, 2017). This, intertwined with a high level of mental health stigma, reduces help-seeking behavior in the given population and increases the recovery time required (Webb et al., 2016). With 50% of respondents stating they felt that their employer did not look after their mental health and well-being and 26% attributing wanting to leave the sector to their mental health and well-being suffering, this signifies how important caring for health professionals has become (UNISON, 2017).

The aforementioned research has demonstrated the impact of stigma on disclosure and help-seeking behavior regarding mental health disorders, not only for the general public but also for those who work as health professionals, specifically in mental health. The latter remains of significant concern and requires further investigation, especially considering the role of mental health professionals in supporting others while they themselves are less likely to seek help.

Consequently, this study's main aims were to:

1. Investigate the levels of stigma perceived when using the term "Mental Health", and to determine whether emerging mental health problems would be disclosed to employers to gain support at work or if the participant would seek professional involvement.
2. Investigate whether the level of stigma perceived is different when the symptomology of mental health disorders is used rather than the broad term of "Mental Health", and if this stigma was affected by the problems "recently developing" rather than "currently managed".
3. Investigate the barriers to help-seeking.

Through the employed research design and considering demographic factors including whether the participant was currently employed within Mental Health services, the findings will provide a direction in which further research may be required, information on practice, and offer a potential development of interventions to reduce stigma. The focus groups are intended to enhance the understanding of the results from the survey.

Methods

Sample and Procedure

A mixed-method design was implemented: Part 1 – A prospective self-reported online survey was created. Part 2 – Two focus groups were conducted that lasted approximately one hour each; this was in an office meeting room in an NHS hospital.

The survey remained open online for six weeks and took approximately 30 minutes to fill out. One-hundred and eight participants completed it, 71 women (mean age 36.56 ± 11.23 years) and 37 men (mean age 36.41 ±

10.28 years); their ages ranged from 19–60; they volunteered to participate in the prospective survey regarding stigma and barriers to help-seeking behavior. Fully 50% of the participants had worked in mental health services, whilst 77% of participants had cared for a person with mental health issues and 72% had friends or family that received a diagnosis regarding a mental health disorder, with 48% of the participants being diagnosed themselves. Also, 50% of mental health professional participants had worked in mental health for under five years. 90% of the participants resided in the UK, with the majority of participants (53%) from the North-East of England; 10% were international. The sample size was determined using G Power calculations for sufficient power to detect a moderate effect size (.15) with an alpha level of .05 (Erdfelder et al., 1996). Eight participants – five women (mean age 32.00 ± 12.41 years) and three men (mean age 35.67 ± 10.41 years), their ages ranging 21 to 53 – volunteered to participate in the focus group.

Participants were recruited via convenience sampling using social media, trust newsletters, trust research bulletins, and emails to the psychological distribution list. All participants completed the survey voluntarily. Before data was collected, the Newman Institutional Research Ethics Committee (2018-08-1501610/3747) granted ethical approval; the study was approved by the Research and Development department at the NHS trust (CNTWR&D-9/2/18).

The participants read the participant information sheet and informed consent was requested to progress on to the self-report survey and the focus group's commencement; a debrief screen appeared and a personal debrief was offered. Participants were aware of the ethical aspects of the study and that their survey answers remained anonymous. The focus group participants had been pooled from the participants in the survey who had requested to be in part two of the study, and who could attend. The focus group participants were aware that their results would be pseudonymized and cognizant of the confidentiality agreement. The participants were allocated to either focus groups for the mental health professionals (for those working in mental health services) or non-mental health professionals (those not working in mental health services).

Measures

An online survey was developed consisting of three validated surveys as well as further questions used in previous literature.

Demographics

Demographic information was collected from all participants (Table 1).

Table 1. Participants' Demographic Information

Survey Participant Characteristic	*N*	Percentage
Gender		
Female	71	65.7
Male	37	34.3
Age		
Mean (SD)	36.61 (10.78)	
Range	19–60	
Ethnicity		
White	99	91.7
Asian	3	2.8
Black	4	3.7
Other	2	1.9
Location		
Scotland	9	8.3
North East England	57	52.7
North West England	10	9.3
South East England	9	8.3
South West England	2	1.9
Midlands	7	6.5
East Anglia	1	0.9
Northern Ireland	2	1.9
International	11	10.2
Education		
Currently Studying	11	10.2
GCSE/O level/Standards	13	12.0
A level/highers	5	4.6
HNC/HND	10	9.3
Degree	40	37.0
Postgraduate	24	22.2
None	5	4.6
Employment		
Nurse	15	13.9
Student	21	19.4
Other healthcare	30	27.8
Office-based	17	15.7
Self-employed	9	8.3
Non-healthcare professional	13	12.0
No employment	3	2.8
Length working in mental health		
0 years	54	50
Under 5 years	27	25
Over 5 years	27	25
Cared for someone with mental health		
Yes	83	76.9
No	25	23.1

(continued on the next page)

Table 1., continued

Survey Participant Characteristic	*N*	Percentage
Friend/family with mental health		
Yes	78	72.2
No	30	27.8
Diagnosed with mental health		
Yes	52	48.1
No	56	51.9
Focus group participants' characteristics	*N*	Percentage
Gender		
Female	5	62.5
Male	3	37.5
Age		
Mean (SD)	33.37 (11.07)	
Range	21–53	
Length in mental health services		
Mean (SD)	3.25 (1.71)	
Range	1–5	

Internalized stigma

A ten-item Internalized Stigma of Mental Illness [from the Brief version of the Internalized Stigma of Mental Illness (ISMI) scale; Boyd, Otilingam & DeForge, 2014; adapted with permission] measured the internalized stigma currently experienced, with a Cronbach's alpha of .75. Statements were used of negative stereotypes within mental health, with responses coded numerically and summed on a four-point Likert scale *(strongly disagree, disagree, agree, strongly agree)*. This was coded numerically and resulted in a total internalized stigma score between 10 (low stigma) and 40 (highly stigmatized).

Stigma within health services

Stigma expected when in health services was measured using the 16-item Mental Illness: Clinicians' Attitudes Scale [from Mental Illness: Clinicians' Attitudes Scale MICA-2 and from Development and responsiveness of a scale to measure clinicians' attitudes to people with mental illness (medical student version) MICAv4; Kassam et al., 2010] evaluated to have a Cronbach's alpha of .72. Responses were coded numerically and summed on a six-point Likert scale *(strongly disagree, disagree, somewhat disagree, somewhat agree, agree, strongly agree)*. This, coded numerically, resulted in a total stigma belief and attitude score between 16 (low stigma) and 96 (highly stigmatized).

Help-seeking and disclosure

Attitudes towards help-seeking and disclosure were assessed using the 15-item Opening Minds Stigma Scale for Health Care Providers [from the development and psychometric properties of a new scale to measure mental illness related stigma regarding health care providers: the Opening Minds Scale for Health Care Providers (OMS-HC); Kassam et al., 2012] was evaluated to have a Cronbach's alpha of .79. Responses to statements were numerically coded from a five-point Likert scale *(strongly disagree, disagree, neither agree nor disagree, agree, strongly agree)*. The total help-seeking and disclosure score ranged between 15 (low stigma) and 75 (highly stigmatized).

Barriers

The perceived barriers to treatment were assessed based on the 15 barriers in the Mohr et al. (2006) research, using a five-point Likert scale that was numerically coded and summed *(not difficult at all, slightly difficult, moderately difficult, extremely difficult, impossible)*. The total barrier score stood between 15 (low stigma) and 75 (highly stigmatized), and was evaluated to have a Cronbach's alpha of .79. There was one open-ended question for any other barriers perceived.

Stigma regarding specific disorders

A selection of case studies was presented for specific mental health disorders, these were symptoms of psychosis (Preda & Bota, 2018), bipolar affective disorder (Selvaraj, 2018), anxiety disorder (NICE, 2011), personality disorder (London Pathways Partnership, personal communication, February 1, 2018), depression (Psyweb, personal communication, February 1, 2018), obsessive-compulsive disorder (Cole, 2018), eating disorder (Langley, 2006), post-traumatic stress disorder (Psyweb, personal communication, February 1, 2018) and dementia (Jacob et al., 1999). An example of the case study for post-traumatic stress disorder was, "Your friend has recently been in a major car accident, following the accident, they have been plagued with nightmares, they now avoid getting into cars and are irritable and nervous all the time". There were four statements following from each case study, the first two statements served to determine the likelihood of the participant being willing to work with a person having a specific disorder, whether the symptoms were new or established. The second set of two questions served to determine whether the participants were experiencing these symptoms, if they would disclose to someone and seek help, again, whether new or established. The four statements were numerically coded and summed from a 6-point Likert scale *(extremely likely, likely, somewhat likely, somewhat unlikely, unlikely, extremely unlikely)*. The stigma perceived for each specific disorder was rated from 4 (low stigma) to 24 (highly stigmatized).

Focus groups

Semi-structured focus group interviews were conducted to promote consistency and discussion, a series of questions were prepared based on the survey. The focus group was conducted over one day on an NHS hospital site.

Questions put to the focus group covered aspects of barriers to disclosure and help-seeking in employment, any gender differences, and the relation to understanding stigma generally and specifically related to certain disorders. An example of a question in the focus group was, "Do you think it has become easier or harder to disclose to your employers? What do you think would improve disclosure?" Each focus group was audio-recorded and transcribed verbatim. Transcripts were then analyzed via a thematic analysis using the Braun and Clarke (2006) method; originally, in the open-coding stage, there were 13 conceptual labels in the non-mental health professionals' group and 13 in the mental health professionals' group. In the second phase (axial coding), the themes were combined where relevant and this left four subthemes for each group, the thematic analysis was then combined for the overarching theme of each group, and finally, the overall theme of both groups was combined (Braun & Clark, 2006).

Statistical analysis

The quantitative data was assessed using the "Statistical Package for the Social Sciences" (SPSS version 25). A two-way between-groups multivariate analysis of variance (MANOVA) was performed to investigate the differences between those working in mental health services (mental health professionals) and those not working in mental health services (non-mental health professionals). The results assessed the differences expressed when completing the validated surveys – MICAv4, ISMI, and OMS-HC (Boyd, Otilingam & DeForge, 2014; Kassam et al., 2010; Kassam et al., 2012) – also how the two groups differed in the experienced barriers to help-seeking behavior; whether any differences existed between new and established disorders, as well as whether any differences among symptoms of specific disorders were described in a case study and the level of stigma perceived. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations noted. There was no missing data. Subsequent analyses such as a *T* test and ANOVA were used to identify internalized stigma levels and demographic differences concerning barriers to help-seeking and stigma attitudes towards specific disorders. Partial eta squared (η_p^2) are reported to determine effect sizes; established guidelines indicate that effect sizes of $\eta_p^2 = .01$ are small, $\eta_p^2 = .06$ are medium, and $\eta_p^2 = .14$ are large (Cohen, 1988).

Results

Survey Results

Descriptive statistics

The participant sample's characteristics are detailed in Table 1. The participant sample consisted of 108 participants that included 71 women and 37 men. The mean age of the sample was 25.90 (*SD* = 10.87). The sample consisted of 50% mental health professionals and 50% non-mental health professionals, predominantly of white origin (92%) from North-East England (53%). Table 2 presents the mean and standard deviation of the variables measured.

Attitudes and beliefs towards the disclosure of mental health in employment

When using the umbrella term of *mental health,* the MANOVA revealed that no significant differences appeared in the attitude to stigma and the perception of barriers to help-seeking behavior $F(4, 103) = .97$, $p = .425$; Wilks' $\eta = .96$, $\eta_p^2 = .04$. Internalized stigma was also not statistically different between the mental health professionals

Table 2. Mean (SD) of survey results

Descriptive characteristic		ISMI Mean (*SD*)	MICAv4 Mean (*SD*)	OMS-vHC Mean (*SD*)	Barrier Mean (*SD*)	SPD Mean (*SD*)	BPD Mean (*SD*)	AD Mean (*SD*)	PD Mean (*SD*)	DN Mean (*SD*)	OCD Mean (*SD*)	ED Mean (*SD*)	PTSD Mean (*SD*)	DA Mean (*SD*)	Established Mean (*SD*)	New disorder-Mean (*SD*)	Combined disorder-Mean (*SD*)	Female (*N*)	Male (*N*)	Age Mean (*SD*)
Full sample	*N* = 108	19.95 (1.96)	35.30 (8.87)	18.42 (4.82)	39.36 (10.26)	10.02*** (2.98)	10.06** (3.26)	8.96 (2.96)	11.94 (4.00)	9.20* (3.37)	9.12* (3.09)	9.19* (3.40)	7.86* (3.18)	8.34* (3.45)	5.47** (1.85)	4.57 (1.74)	84.71* (23.27)	*N* = 71	*N* = 37	36.51 (10.87)
Employment																				
Non-mental health	*N* = 54	20.48 (5.30)	36.20 (9.17)	19.04 (4.75)	41.24 (10.05)	10.94 (3.03)	10.74 (3.52)	9.28 (3.22)	12.33 (4.61)	9.76 (3.82)	9.52 (3.65)	9.83 (3.81)	8.37 (3.53)	8.85 (4.06)	5.96 (1.96)	4.83 (1.70)	89.63 (27.03)	*N* = 38	*N* = 16	35.67 (11.12)
Mental health	*N* = 54	19.43 (5.39)	34.39** (8.54)	17.80 (4.85)	37.48 (10.21)	9.09 (2.64)	9.37 (2.90)	8.63 (2.73)	11.52 (3.42)	8.61 (2.90)	8.69 (2.50)	8.50 (2.99)	7.30 (2.83)	7.76 (2.86)	4.98 (1.61)	4.31 (1.75)	79.46* (18.47)	*N* = 33	*N* = 21	37.35 (10.65)
Gender																				
Female	*N* = 71	18.90** (5.67)	33.90* (8.58)	18.17 (4.93)	39.89 (10.92)	9.89 (2.97)	9.80 (3.45)	8.77 (3.18)	11.99 (4.21)	9.34 (3.42)	8.93 (3.02)	9.31 (3.50)	7.83 (3.29)	8.39 (3.44)	5.55 (1.83)	4.52 (1.72)	84.25 (24.04)	–	–	36.58 (12.47)
Male	*N* = 37	21.97** (4.02)	37.97* (8.91)	18.89 (4.64)	38.35 (8.90)	10.27 (3.02)	10.54 (2.92)	9.30 (2.58)	11.81 (3.80)	8.89 (3.45)	9.43 (3.38)	8.89 (3.44)	7.84 (3.15)	8.14 (3.76)	5.32 (1.92)	4.68 (1.78)	85.11 (23.04)	–	–	36.43 (12.76)
Age																				
19–29	*N* = 35	19.23 (5.97)	37.14 (9.51)	18.77 (4.54)	41.49* (10.10)	10.63 (2.82)	10.71 (2.79)	9.51 (3.11)	12.97 (3.67)	10.14 (3.41)	9.49 (2.47)	9.20 (3.20)	8.26 (3.26)	9.09 (3.31)	5.26 (1.78)	5.14 (1.90)	90 (19.19)	*N* = 25	*N* = 10	–
30–39	*N* = 32	20.44 (4.87)	35.28 (9.16)	19.72 (5.09)	40.78* (10.88)	10.06 (3.31)	10.19 (3.65)	8.91 (2.94)	11.69 (4.88)	8.97 (3.80)	9.63 (3.70)	9.28 (3.93)	7.59 (3.36)	7.78 (3.69)	5.50 (2.11)	4.38 (1.48)	84.09 (27.22)	*N* = 18	*N* = 14	–
40–49	*N* = 25	19.52 (5.59)	34.08 (8.79)	17.24 (4.96)	36.44* (10.24)	9.60 (2.69)	9.48 (3.60)	8.48 (3.04)	10.96 (3.77)	8.44 (3.08)	8.36 (3.33)	9.04 (3.21)	7.72 (3.29)	7.80 (3.25)	5.20 (1.68)	4.40 (1.92)	79.88 (23.98)	*N* = 16	*N* = 9	–
50–60	*N* = 16	21.25 (4.52)	33.19 (6.63)	16.88 (4.16)	36.44* (8.29)	9.25 (3.04)	9.25 (2.98)	8.56 (2.78)	11.63 (3.30)	8.69 (2.92)	8.37 (2.87)	9.06 (3.79)	7.56 (3.01)	8.44 (4.1)	6.31 (1.62)	4 (1.32)	80.81 (23.79)	*N* = 12	*N* = 4	–
Length of service																				
Under 5 years	*N* = 27	20.04 (5.98)	36.48 (9.34)	19.07 (4.65)	38.85* (11.16)	9.74 (2.67)	10.22 (2.98)	9.11 (3.95)	11.85 (3.95)	9.48 (3.29)	9.63 (2.63)	9.04 (3.57)	7.81 (3.27)	8.19 (3.43)	4.63 (1.80)	4.44 (1.74)	85.07* (20.51)	*N* = 18	*N* = 9	31.48 (6.22)
Over 5 years	*N* = 27	18.21 (4.77)	32.30 (7.23)	16.52 (4.79)	36.11* (9.17)	8.44 (2.50)	8.52 (2.61)	8.15 (2.20)	11.19 (2.84)	7.74 (2.18)	7.74 (1.99)	7.96 (2.21)	6.78 (2.24)	7.33 (2.11)	5.33 (1.33)	4.19 (1.78)	73.85* (14.47)	*N* = 20	*N* = 7	43.22 (11.01)

Note: ISMI = Internalized Stigma of Mental Illness Scale, MICA = Mental Illness: Clinicians Attitudes Scale, OMSvHC = Opening Minds Scale Version Healthcare, Barrier = barriers perceived to help-seeking, SPD = psychosis disorder, BPD = Bipolar disorder, AD = Anxiety disorder, PD = personality disorder, DN = Depression, OCD = Obsessive compulsive disorder, ED = eating disorder, PTSD = post-traumatic stress disorder, DA = Dementia, Established = disorder previously diagnosed, New = new symptoms of a disorder, combined = Overall values for the specific disorders

Within each descriptive characteristic category for each outcome, superscripts indicated significantly different scores (*sig at .050, **sig at .010, ***sig at .001) based on MANOVA results.

(*M* = 19.43, *SD* = 5.39) and non-mental health professionals (*M* = 20.48, *SD* = 5.30), *t*(106) = 1.03, $p = .307$ $\eta^2 = .01$.

However, when the specific symptoms of mental health conditions were described, the MANOVA revealed that significant difference did manifest between mental health and non-mental health professionals in the stigma level of the 9 conditions, $F(1, 106) = 5.21$, $p = .024$, $\eta_p^2 = .13$. Follow-up tests revealed that mental health professionals had significantly lower stigma levels than non-mental health professionals for symptoms of Psychosis ($p = .001$), Bi-polar ($p = .009$), Depression ($p = .014$), Obsessive-Compulsive Disorder ($p = .033$), Eating Disorder ($p = .011$), Post-Traumatic Stress Disorder ($p = .030$), and Dementia ($p = .045$). Stigma levels were not significantly different for Anxiety Disorder ($p = .139$) and Personality Disorder ($p = .076$).

Also, the MANOVA revealed a significant difference between mental health professionals and non-mental health professionals in the stigma level of the 9 conditions, depending on whether the condition was newly developing or previously established, $F(2, 105) = 4.19$, $p = .018$; Wilks' $\eta = .93$, $\eta_p^2 = .07$. Follow-up tests revealed that a significant difference existed for established disorders ($p = .005$) but no significant difference for newly developing disorders ($p = .121$).

Help-seeking behavior and barriers perceived

The MANOVA depicted that there was not a statistically significant interaction effect between mental health professionals and non-mental health professionals when assessing help-seeking behavior and barriers perceived, $F(2, 105) = 1.94$, $p = .149$; Wilks' $\eta = .96$, $\eta_p^2 = .04$.

Stigma and barriers perceived by gender

A statistically significant difference appeared in the level of stigma perceived between the full sample of male and female professionals, $F(3, 102) = 4.32$, $p = .007$; Wilks' $\eta = .89$, $\eta_p^2 = .11$. Follow-up tests revealed that women expressed a significantly lower level of stigma for ratings on the ISMI survey ($p = .005$) and the MICAv4 survey ($p = .020$), whereas the OMS-HC survey was not significant ($p = .546$). No significant difference was depicted in the interaction of gender and employment in the ANOVA, when assessing barriers to help-seeking behavior, $F(1, 104) = .48$, $p = .492$, $\eta_p^2 = .01$.

Nevertheless male mental health professionals reported a significantly higher stigma level (*M* = 39.31, *SD* = 2.13) than female mental health professionals (*M* = 31.78, *SD* = 1.40), $F(4, 40) = 5.17$, $p = .002$; Wilks' $\eta = .66$, $\eta_p^2 = .34$. Follow-up tests revealed statistically significant results for MICA ($p = .010$) but no significant differences for ISMI ($p = .180$), OMS ($p = .831$) and barriers ($p = .235$). There were no gender differences within the non-mental health professionals in relation to stigma level and barriers perceived $F(4, 44) = 2.34$, $p = .070$; Wilks' $\eta = .83$, $\eta_p^2 = .09$, as well as symptoms of specific disorders $F(9, 39) = 1.49$, $p = .187$; Wilks' $\eta = .75$, $\eta_p^2 = .20$.

No significant difference between female and male mental health professionals' stigma was experienced when assessing the stigma symptom level of specific disorders, $F(9, 35) = 0.82$, $p = .588$; Wilks' $\eta = .82$, $\eta_p^2 = .18$, or between the specific disorders stigma level and the length of service, $F(9, 35) = 0.62$, $p = .773$; Wilks' $\eta = .86$, $\eta_p^2 = .14$. However, the ANOVA revealed statistically significant differences when assessing the barriers perceived between women and men, and their length of service, $F(1, 50) = 5.40$, $p = .024$; $\eta_p^2 = .10$. Inexperienced male mental health professionals (< five years) have higher perceived barriers (*M* = 42.67) than inexperienced female mental health professionals (< five years; *M* = 36.94). This changes as male mental health professionals working over five years perceive fewer barriers (*M* = 30.14) than women working over five years (*M* = 38.20), showing a greater reduction of perceived barriers for help-seeking from men, reducing their perceived barriers as the experience of mental health increases.

Stigma and barriers perceived by age

The MANOVA depicted that no age differences appeared when assessing the stigma level between mental health and non-mental health professionals $F(9, 239) = .91$, $p = .520$; Wilks' $\eta = .92$, $\eta_p^2 = .03$. Nevertheless, a significant interaction effect was revealed from the ANOVA for the barriers perceived by age and employment, since the older the participant was, the fewer barriers were perceived – with non-mental health participants' mean reducing the mean level by 6.11, and mental health professionals' mean reducing the mean level by 2.67, $F(3, 100) = 2.79$, $p = .040$, $\eta_p^2 = .08$.

Stigma level and length of service for mental health professionals

There was a significant difference in the stigma level of the nine case studies between new employees (< five years) (*M* = 85.7, *SD* = 20.51) and experienced mental health professionals (> five years; *M* = 73.85, *SD* = 14.48), *t*(46.76) = 2.32, *p* = .025 η^2 = .09.

Barriers

Further barriers to help-seeking were provided by 20 participants (18.5%) with 50% of them being mental health professionals. These were collated into five main themes of *service barriers, previous experience working in services, negative lived experience of being in services, lack of mental health knowledge,* and *stigma.* (Table 3)

Table 3. Confidence intervals for survey results for the full sample

	95% Confidence Intervals	
	Lower bound	Upper bound
ISMI	18.93	20.97
MICA	33.60	36.99
OMS-HC	17.50	19.34
Barrier	37.39	41.32
SPD	9.45	10.59
BPD	9.43	10.68
AD	8.38	9.52
PD	11.15	12.69
DN	8.53	9.84
OCD	8.50	9.70
ED	8.50	9.83
PTSD	7.22	8.45
DA	7.63	8.98
Established disorder	5.12	5.83
New disorder	4.24	4.91
Combined	80.04	89.05

Note: ISMI = Internalized Stigma of Mental Illness Scale, MICA = Mental Illness: Clinicians Attitudes Scale, OMSvHC = Opening Minds Scale Version Healthcare, Barrier = Barriers perceived to help-seeking, SPD = Psychosis disorder, BPD = Bipolar disorder, AD = Anxiety disorder, PD = Personality disorder, DN = Depression, OCD = Obsessive compulsive disorder, ED = Eating disorder, PTSD = Post-traumatic stress disorder, DA = Dementia, Established = disorder previously diagnosed, New = New symptoms of a disorder, Combined = Overall values for the specific disorders

Qualitative Results

Combined themes

The overarching theme from the focus group was the *"Changes needed for disclosure"*. This incorporates the impact that society and stigma has on whether someone feels supported enough to seek help and be supported in their role in the future. The mental health group focused on the issues expected when wanting to disclose, and what would improve their disclosure; the non-mental health professionals discussed how they felt judged as well as the societal expectations of them.

Several subthemes emerged from the two populations (Table 4):

Table 4. Themes and subthemes generated from focus groups' transcripts

Mental health professionals	Non-mental health professionals
Lack of support – Pressure on the ward – Lack of management support – Lack of trusting relationships – Gender barriers when seeking support	*When to disclose* – Crisis-point/affecting work – Reduction/current in barriers – Whether trust has been established – To help yourself – Feel supported
Future after disclosing – Perceived punishment – Potential of losing employment – Gossip, culture, and confidentiality issues	*Perceived as needing to be strong* – Perceived as not capable of doing the job – Do not want to be a burden – Perceived as needing to be strong (dependent on generation/role/gender)
What affects someone' s decision to disclose – Personal characteristics – Crisis-point – Affecting work – Personal safety – Friends or family worrying	*What affects whether someone would disclose* – Perception of stigma – Gender stereotypes – Build-up of supportive relationships
Increasing knowledge to reduce stigma – Knowledge of terminology – Knowledge of disorders and treatment – Lived experience reducing stigma – Supportive colleagues with lived experience	*Normalized* – Disorder being normalized (anxiety) or not normalized (psychosis) – Training and policies – Incorrect use of terminology – Potential for abuse of mental health sickness policy – The pressure to help as prevalent

Mental health professionals' subthemes

Lack of support. Overall, this theme looked at the support available while working unsocial hours in a ward environment. One participant explained the pressure that one feels on the ward, where another felt that the lack of trusting relationships greatly affected the support available. The theme incorporated gender barriers perceived, as participants felt that society perceives men as being the stronger gender and that they should not discuss mental health concerns. Two participants, however, discussed their concerns of disclosing to a male manager who could potentially lack understanding concerning their issue. As they do not wish to be portrayed as weak, participants felt that without asking for support, mental health professionals put themselves under extreme pressure.

Future after disclosing. This theme encompasses how the participants perceived their future should they disclose a mental health concern. The current organizational culture, potential gossip, and an increase in sickness days ranked among reasons given for non-disclosure to employers.

What affects why someone chooses to disclose. The group discussed what different aspects would encourage someone to disclose their mental health concerns to their employer, including personal characteristics, family or friends worrying and their circumstances at work. All participants in the groups agreed that they would have to reach a crisis point in their mental health before disclosing, although disclosure must occur if the issues start to affect their therapeutic work with their patients or affect the professionals' safety.

Increase knowledge to reduce stigma. This theme was discussed through the participants' increased knowledge from their employment experience, reducing their perceived stigma. The participants discussed the issues with less common disorders that remain stigmatized in society due to the lack of general knowledge.

Non-mental health professionals' subthemes

When to disclose. In this theme, participants discussed when they would disclose to their employers; all the participants agreed that they would only discuss once they had reached a crisis point, or they had to take time away from work. This meant that they would not advise their employers or seek adjustments at work until the issue began to affect their work. They would disclose once they felt ready to help themselves and knew that the employer would be supportive. They discussed early disclosure if barriers were reduced; however, participants often lacked trust with colleagues and management within the employment, increasing the barriers to disclosure.

Perceived as needing to be strong. A recurring theme throughout the focus group involved the perception that certain people needed to be strong, and that disclosing mental health concerns manifested a sign of weakness. One participant advised that within the family, you must be strong and discussing mental health issues would lay a burden on others. Another participant countered this, who felt that by not talking about any issues, they were increasing the burden placed onto the family through their feelings of guilt.

The participants discussed the societal implications that men need to be seen as strong; this also extended to being strong depending on job role, with certain job roles being seen as masculine and, therefore, people in this type of role would not discuss mental health concerns. It was discussed that at the managerial level they must be perceived as strong persons, otherwise, they may be seen as incapable of doing their job, losing the respect of the team, having to take time off work and, potentially, losing their role.

What affects someone's decision to disclose. This theme encompassed the group's perspective as to why some people choose to disclose. Societal expectations affect this such as the older generation feeling that they are unable to share their concerns. The group felt that their perceptions of mental health disorders are influenced by media sources and previous experience thereby influences their disclosure stigma. Their lived experience also influenced men's unwillingness to discuss mental health concerns.

Normalized. Participants felt that by normalizing mental health concerns, they were more likely to disclose if their disorder was prevalent in society; this was improved by the training and policies that support the employees in disclosing mental health. However, this greater awareness also increased one participant's expectation of needing to be observant of these disorders in their colleagues, unnecessarily increasing their own stress.

The participants expressed concern that the normalization and prevalence of mental health concerns could allow people to abuse the system by taking unnecessary time-off. This was elaborated on in terms of how the general population may use incorrect terminology such as stating that they have anxiety when they feel they are experiencing a momentary stressful situation (Table 5).

Table 5. Quotes to support each theme generated from focus group transcripts

Theme	Mental Health Professionals	
	Quotes	
Lack of support	Betty: *I'm the band 5 [Qualified Nurse] on the ward and I'm on my own on the ward and I've got say, I don't know, three of the nurse assistants on that ward … It's not really good, me, like being an anxious melt on the floor when I'm going to be the one that they come to for help.*	Laura: *I think it just depends on how you get on with everyone at work, 'cause some people, I just wouldn't be able to tell them*
	Ruby: you've got to be strong… because you are there to try and help people with mental health issues and if you kind of got them yourself you kind of viewed as if you're bit of a weakness.	Betty: *you're terrified of letting them [colleagues] know because 'oh, yeah, Feyre, she shouldn't really be working in mental health because she's mentally unwell herself'*
Future after disclosing	Ruby: *sometimes when you work on the ward you've got some people that are, kind of, less than professional and will… discuss your sickness with people on the ward. And then you… feel as if when you return to work everyone will know your problems.*	Betty: *the sickness policy… I think that could be a big barrier as well… what if I go and seek help and if I'm off work… and you're going to start thinking about dismissal… do you want to disclose XY because I could have, but I just keep it to myself so I can get on*
What affects why someone chooses to disclose	Feyre: *I suppose if it would start to affect your work, how you would react to the certain patients or if you can feel yourself getting, like, if you felt that you were going to be a danger to someone.* Betty: *it really comes down to personal characteristics rather or not it would be disclosed or not.*	Feyre: *My mum said she's more worried about it than me, she keeps saying oh God she's going to have a relapse, and always asking "Are you ok?"*
Increase knowledge to reduce stigma	Feyre: *I did have to say… I'm having therapy for this and it was out there, and people did react better than I thought*	Betty: *in my past jobs it was probably a little bit more stigma compared to now, now that I work in mental health services… people have more knowledge on mental health.*
	Laura: *I've heard someone… say, ADHD is just for bad behaved people*	When discussing eating disorders: Ruby: *there's a lot of people that still don't understand it and it might just be why don't they just eat! Oh, like you know…* Feyre: *They say "Just give them a steak".*
Theme	Non-mental Health Professionals	
	Quotes	
When to disclose	Kevin: *I'd wait until it was at a point where it would affect … To be honest I don't think I'd wait until it affected what I did. I'd wait until the point where it affected what other people did.*	Doris: *if you've worked there a long time, they know what you're like and whether you're helping yourself, to cope with it rather than, like, say, not take medication or not take counseling. So, I think they'd be more supportive if you're already employed. Not a new employee.*
	Doris: *you can just simply bump into them [mental health first aiders] in the corridor, but you would know if you'd ask to speak to them, they would.*	Jim: *I know far too much about people's mental health at work, and I work with the accounting team, but I've got nothing to do with managing advisors, and I hear about it. And it's like, I know I shouldn't.*
		Carlos: *It's the minimum amount of people who you can trust.*
Perceived as needing to be strong	Jim: *So that's mental health issues as well, and if I had them I wouldn't want to put them onto them [family] or let them know about them. I wouldn't want to.* Doris: *But they'd [family] still need to know, so they know it's not them that's causing say, you being sad all the time or you being angry. If sometimes people don't know, they blame themselves.*	Jim: *Yeah because as a husband or a parent you're expected to be the strength, and that's a very ordinary way of looking at it.*
	Kevin: *If someone says "Are you OK?" I just kind of do the general probably quite bloke-y thing of sort of pushing off and go "Yeah, I'm alright."*	Kevin: *I mean, if you're a mechanic and you work in the garage, regardless of age you're less likely to have that conversation.*

(continued on the next page)

Table 5, continued

Theme	Non-mental Health Professionals	
	Quotes	
Perceived as needing to be strong	Jim: *I think I'm with Doris, where it can be seen as a sign of weakness. Depends on what position you're in as well. So, if you manage a team or anything like that and it's showing your competence...* Doris: *Yeah, especially if you're somebody in authority.*	Jim: *If you started to get depressed and struggling with it, that they'd see that as if you're not capable of doing your role?* Carlos: *Yeah, I think so… I think people think "Oh, I don't want to say anything because they'll sign me off work and that's it."*
What affects whether someone would disclose	Doris: *people think that you're barmy or 'round the bend, as people put it, if you report it.*	Kevin: *I've watched a few films. And when people have got a personality disorder, it tends to be the one that is always the serial killer.*
	Jim: *I think that from a male perspective, for me and my friends, we rarely talk about anything that would lead into mental health.* Carlos: *I think males are less likely to speak out.*	Jim: *the younger generation is willing to talk a lot more about mental health than, yeah, my generation*
Normalized	Kevin: *So, yeah, I think if you're in an organization where it's more policy-driven, where they're more aware, where they've got a higher level of training around mental health, you feel more open to that.*	Doris: *And I said I'm worried in case the person next to me is depressed, and I'm not picking it up, because I feel as if I should.*
	Jim: *It's become more acceptable isn't it, to discuss anxiety, depression has become where I think personality disorder, I don't know anybody with one.*	Kevin: *So, I think there's something, to be honest, needed around workplaces and making sure there is terminology that people understand. Because I talk about stressed if I'm late. I talk about depressed if I've just really watched a crappy episode of EastEnders and something's happened.*
	Carlos: *I think if I had a personality disorder I would be less likely to come and tell someone, whereas if I had, like, anxiety, depression I would be ...* Jim: *It's so rare I think you tend to keep it in where anxiety and depression, it's very common now to be open about it.*	Carlos: *I think sometimes we don't know enough about them. It's like if I worked with someone and they said to me one day "I've got schizophrenia." It would be like, well I personally, it wouldn't bother me. But some people would look on and think "Oh, I don't want to spend much time with them if they're schizophrenic."*
Common Themes	Mental Health Professionals	Non-mental Health Professionals
	Quotes	
Lack of knowledge	Betty: *"I think it's like that with anxiety and personality disorder. Because you can get someone who, likes, say, "I'm really anxious about that", but when you look at them, when I look at them, I think well, you're not giving out any anxiety-like, indicators to me, they just say "I'm anxious about that"*	Kevin: *I think the general impression is that a personality disorder's also more dangerous to the people around you,*
	Betty: *"I know it's quite big on like personality disorders, just again, "it's just bad behavior, just bad behavior kicking off for no reason what so ever". So, I think there's still a lot of, even though there's more information and more stuff out there, there is still deep down there is still a lot of stigma about a lot of mental health conditions".*	
Gender differences and seeking female support	Feyre: *I think it would be really hard for a man to tell someone that they were having to struggle with the mental health. They'll probably just "man up". Well, see it as "man up" and just deal with it.*	Jim: *I would generally more open up to a female* Carlos: *Yeah. I think I would as well.* Jim: *Again, the sort of the weakness thing, I think. The male pride* Doris: *I think that, it's 'cause women are seen, or deemed, to be more approachable, you know what I mean? It's not always true*
	Betty: *I'd feel more comfortable telling a female…. some things I just feel like I don't really want to share with a male because. I don't know really* Ruby: *sometimes that impression that they [Male management] might not understand, kind of if it was something to do with women problems. You kind of feel like those just wouldn't be able to relate.*	Doris: *"Because men are supposed to be the leader and things like that. And it's like a chink in the armor. Like I never, ever saw my dad talk about anything like that, 'cause as you said it was a generation that just didn't talk about it."*
Abuse of system	Betty: *Because people could ring up, have sickness related to… drinking the night before but then decide to have a week off but then they'll go through exactly the same protocol as if someone who is genuinely ill and poorly and needs time off, to you know, get better again, I don't think, personally, that, that's fair.*	Kevin: *If someone came into me or to our organization and said "I've got an eating disorder. I need to have Tuesdays off from now onwards, there'd still be a skepticism in my head that goes "Have you? Maybe you're just looking for Tuesdays off."*

Discussion

This study's purpose was to investigate the levels of perceived stigma concerning the disclosure of mental health concerns within employment when using the term "Mental Health", and whether this is different when using the symptomology of mental health disorders. The study also aimed to investigate the perceived barriers to help-seeking behavior, with a focus on mental health professionals versus non-mental health professionals. Both aspects of the survey were assessed in terms of employment, age, and gender, and regarding the mental health professionals, also in terms of the length of service.

The survey's key findings indicated that mental health professionals do not have significantly higher levels of perceived stigma or barriers to help-seeking than non-mental health professionals. Inexperienced male professionals had a higher level of perceived stigma than both inexperienced and experienced women. Male mental health professionals' level of perceived stigma reduces significantly once they garner experience in the field. Disorders that are established and diagnosed, as well as symptoms relating to specific disorders, remain significantly less stigmatized amongst the mental health professionals than amongst the non-mental health professionals; thereby showing that although working in the mental health profession can increase the number of dangerous situations the participant faces, this does not lead to an increase in stigma. Findings show that there is a decrease in stigma towards those with mental health problems, with men initially being affected more by stigma than are women, with this stigma reducing as they gain more experience, whereas the social influences that the non-mental health professionals experience still significantly affect their stigmatization of certain disorders.

The overarching theme for the focus groups remained the "changes needed for disclosure", with the mental health group laying the focus on improvements needed, while the non-mental health discussion focused on the pressures from societal expectations leading to being judged. The participants reached the conclusion that changes are required in government legislation, company policies, and anti-stigma campaigns in order to improve openness and reduce the judgment of mental health concerns.

Stigma in Healthcare

An important aspect of help-seeking behavior is the reduction of stigma. Previous research has documented that the reduction of stigma is not prevalent across healthcare professionals (Angermeyer et al., 2013; Clement et al., 2015); the results of this study showed that, concerning mental health professionals, the levels of stigma are not significantly different from those of the non-mental health professionals' group. The results focus on professionals working in mental health – which would not be generalizable to other areas of healthcare, as mental health professionals are more aware of mental health disorders and the effect this has on the lives of the service users – this could also be influenced by training received whilst working in mental health.

Generally, demographic aspects have little influence on stigma and barriers. An interesting area within the mental health analysis involved stigma reduction in mental health professionals, as once the professional becomes experienced (over five years in employment) a reduction of perceived stigma results. This could be due to the experience of working with mental health service users, as this was evident across the different ages. This stigma reduction occurred more in men professionals than women. This possibly derives from men having a higher level of stigma compared to women when they start employment within mental health.

Stigma with Specific Disorders

Stewart, Keel, and Schiavo (2006) argued that certain mental health disorders can be more stigmatized if they are portrayed as self-inflicted. The findings must be considered with caution as the survey respondents were not representative of the general population or the target group previously researched. Our research does not support this argument as personality disorders, symptoms of psychosis, and bi-polar disorder were the most stigmatized in this survey, significantly more so by non-mental health professionals. This indicates that a lack of the understanding of etiology for a disorder served as a closer indicator of an increased stigma level than preconceived assumptions.

This study found that mental health professionals' level of stigma stood significantly lower than with the non-mental health professionals when assessing the symptomology of mental health disorders. As the case study of each disorder provided a narrative of the symptoms, rather than stating the name of the disorder, the social desirability bias lessened. A person without any experience of a specific disorder may feel that they would not express or perceive stigma; however, when asked if they would work alongside an individual with this mental health issue, the stigma was more likely to become evident. Working in mental health has, however, allowed the person to understand different disorders and how they affect people; therefore, they would be more understanding and less likely to stigmatize.

Mental health professionals participating in the focus group evidenced more understanding of specific disorders than the non-mental health professionals, leading them to understand the effects of stigma more fully. This could also be related to the potential for the non-mental health professionals focusing on anxiety and depressive disorders when completing the MICAv4, ISMI and OMS-HC surveys, and so produce a lower stigma score since they did not consider other disorders such as psychosis or bipolar disorder. When the case study described different disorders, therefore, the non-mental health professionals generated a higher stigma level. It is interesting to note that although mental health professionals had lower stigma levels than non-mental health professionals for the symptomology of disorders, no differences existed between the two groups if the symptoms were newly developing rather than already being managed. This may be linked to the experiences that mental health professionals have of service users being successfully treated and thus the stigma levels are reduced by their belief in the mental health services and the support these services offer.

This research evidenced that mental health professionals reported barriers not significantly different from the non-mental health professionals, thus indicating even with the increase in knowledge, experiences and a reduced level of stigma towards other people, the powerful nature of self-stigma within mental health and demonstrates that this issue needs urgent rectification to reduce help-seeking barriers.

Disclosure Stigma in Employment

Disclosure stigma was evident throughout the focus groups, as all participants advised they would need to reach a crisis point before disclosing due to the fear of their colleagues' perception and believing the culture of the organization to be one of gossip. The non-mental health professionals would not disclose at an interview stage, stating they would seem weak; this supports Brohan et al. (2012). Although established disorders were less stigmatized in mental health services, the participants in this group still would not disclose until the symptoms were affecting their work or safety. Further research would be interesting to explore perceptions of the crisis point, whether it would vary from the first instance of someone else noticing any changes or would the professional need to have something more substantial occur such as a panic attack during work.

Interestingly, participants from both groups, both male and female participants, advised that they would be more comfortable disclosing mental health concerns to a female colleague rather than a male – the belief being that women are perceived more understanding, or men more likely to believe mental health issues are a weakness. Men may perceive that talking to another man would make themselves more vulnerable than were they to talk to a woman.

Reasons for Disclosure

There are many reasons to disclose to an employer. Brohan et al. (2012) theorized that the main reasons for disclosure were to gain adjustments, explain behavior, or because concealing remains stressful. All participants in the focus groups advised they would disclose a mental health concern once they had reached a crisis point and they needed to attend therapy or appointments during working hours. They explained that the barriers to disclosure were complex and varied for each person: this ranged from having the right person to speak to, to having a trusting colleague, their own perception of stigma, and the support they received from their employer. The participants also advised on ways that could improve their disclosure, including having designated people they could speak to that would be non-judgmental, having policies that support disclosure, and reduction of perceived punishment. Mental health professionals may be more aware of what services and self-help options are available; therefore, able to seek help outside of employment more readily. Due to the nature of their employment, mental health professionals in the focus group advised that they would find concealing the disorder stressful.

Reasons for Non-Disclosure

When people experience mental health concerns, they are sometimes reluctant to seek help (Lubian et al., 2016). Mental health professionals reported less difficulty across each barrier in the survey than the non-mental health group, although this was not significantly different. Other reasons for non-disclosure, generated by the focus groups, were being perceived by society as weak or incompetent when in a leadership role.

The research by Brohan et al. (2012) advised on the various reasons why people would not disclose. This research supported some of the reasons; for example, a participant in the non-mental health group advised they would not disclose at an interview as there was no trust built-up and they felt they would be discriminated against. Within the mental health group, the participants were concerned that they would worry about being treated unfairly, believing their anxiety would increase should they disclose, regardless of the actual outcome. Both groups remained concerned about losing credibility and the culture of gossip amongst their colleagues.

Brohan et al. (2012) evidenced that women would be less likely to disclose, although many previous studies generate these findings, as different methodologies are used with different measurement tools – this must be taken into account when comparing the findings. This study revealed no significant gender differences for barriers or the perception of stigma. However, gender differences were discussed in the focus groups with participants believing that men would be less likely to disclose or seek-help; although, this was contradicted by a participant who felt that men would disclose if in the right environment. Both groups discussed that certain disorders increase their disclosure stigma, including an eating disorder, personality disorder, or psychosis, due to the high level of stigma attached to the diagnosis in society. Participants would be more likely to disclose should they have anxiety or depression, as society has these more normalized. This is then affected by the use of the terminology in everyday life, participants advised that the incorrect use of terminology often occurs, thereby undermining the severity of both anxiety and depression. This could stem from a lack of knowledge about the disorders and a lack of accurate associations in the media.

Stigma Reduces Help-Seeking Behavior

Previous research has shown that working in healthcare increases internalized stigma and this then leads to reduced help-seeking behavior (Clement et al., 2015; Hawke et al., 2013). The current research does not support this, as ISMI results present no significant difference between the groups. This research shows that mental health professionals do not have a higher level of internalized stigma than people that do not work in these services, although when gender is analyzed, a significant difference manifests regardless of employment.

Policy Issue

In the non-mental health group, the discussion addressed a potential mental health policy for sickness, and should time away from work be given for mental health issues, then this policy could be abused. Within the mental health focus group, however, the participants discussed how the policy for physical health sickness was already being abused, whereas someone who is genuinely mentally unwell can face discipline if the problem is chronic. This difference between the two groups is important. It shows the development of understanding mental health and the impact this has on policies. It highlights the impact and power that support – and appropriate training – can have, as well as their impact on stigma, employment, and other areas.

Strengths and Limitations

These findings must be taken in the context of the study's limitations. This survey's limitation involves the homogenous demographics as 54% were based in England's North-East, and so the results may not be generalizable to other areas. A national study may provide differing results regarding the perspective of both mental health and non-mental health professionals' attitudes towards stigma. Furthermore, by using vignettes rather than statements, a more valid response could be generated, as vignettes help the participant to imagine themselves in the situation better than statements. This could be improved by using a retrospective design one that assesses what participants have previously experienced when they accessed mental health treatment; the stigma associated with it would be more beneficial than what they are perceiving their stigma and barriers to be in the present.

Conclusion, Implications and Future Directions

Stigma continues to be an issue with mental health professionals avoiding disclosure, and policymakers must make changes within this sector to create a better service that reduces the anxiety of disclosing mental health concerns. It is a must to create a research base to establish a minimally stigmatizing service. Mental health professionals who want to disclose for different reasons, however, still feel unable to do so; this can be improved by having the correct services and policies in place. Improvements regarding interventions tailored to mental health service professionals can increase help-seeking behavior and enhance mental well-being.

Areas for future research include developing a less stigmatized service and reducing the barriers experienced in mental health services. This could be improved upon by exploring the retrospective accounts of barriers faced by people that have sought help. Future research could be conducted on interventions to increase discussion and help-seeking behaviors, as well as enhancing the effectiveness of these interventions.

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Author contributions

Sarah WEATHERSTONE: conceptualization, design, methodology, investigation, project administration, data management, formal analysis, interpretation, supervision, writing original draft, writing review and editing.
Lorna DODD: conceptualization, design, methodology, supervision, writing review and editing.
All authors gave their final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of interest statement

The authors have no conflicts of interest to disclose.

Ethical statement

This manuscript is the authors' original work.
The study was reviewed and approved by the Newman University Research Ethics Committee, license number 2018-08-1501610/3747.
All participants engaged in the research voluntarily and anonymously, providing their written informed consent to participate in this study.
Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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RESEARCH ARTICLE

Experiential Knowledge of Mental Health Professionals

Service Users' Perceptions

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Introduction: Nowadays the Western mental health system is in transformation to recovery-oriented and trauma informed care in which experiential knowledge becomes incorporated. An important development in this context is that traditional mental health professionals came to the fore with their lived experiences. From 2017 to 2021, a research project was conducted in the Netherlands in three mental health organizations, focussing on how service users perceive the professional use of experiential knowledge.

Aims: This paper aims to explore service users' perspectives regarding their healthcare professionals' use of experiential knowledge and the users' perceptions of how this contributes to their personal recovery.

Methods: As part of the qualitative research, 22 service users were interviewed. A thematic analysis was employed to derive themes and patterns from the interview transcripts.

Results: The use of experiential knowledge manifests in the quality of a compassionate user-professional relationship in which personal disclosures of the professional's distress and resilience are embedded. This often stimulates users' recovery process.

Conclusions: Findings suggest that the use of experiential knowledge by mental health professionals like social workers, nurses and humanistic counselors, demonstrates an overall positive value as an additional (re)source.

Keywords: health care professionals' lived experience, experiential knowledge, service users' perceptions, trauma informed care, recovery

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Introduction

Personal and social recovery from serious mental illnesses has been subject to study over the past 30 years. A commonly used definition of recovery remains "That it involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of mental illness" (Anthony, 1993, p.527). Recovery-oriented care contributes to the acknowledgement, support, and development of identity and autonomy (Wilken, 2010). This affects both an individual level; e.g., gaining control and developing one's identity, and a social level, such as being part of the society. Recovery can be enhanced by learning from personal experiences; e.g., on how to cope with stress and stigma.

During the transformation of mental health care in the Western countries towards recovery-oriented care, a group of established professionals came to the fore with their personal experiences involving mental health distress and trauma (Karbouniaris et al., 2020). This concerned especially nurses and social workers who became inspired after having worked alongside peer-support workers who became part of the workforce. Many of them actually primarily chose their profession due to their own history of suffering from mental health problems (Straussner et al., 2018). The use of experiential knowledge by professionals seems to fit well into the transformation towards recovery-oriented care, and might be considered as a new (re)source, alongside methodological/clinical and theoretical knowledge (Weerman, 2016).

Nevertheless, a professional use of such experiences often goes beyond the purview of traditional medical professionalism and is therefore contested. Mental health professionals' readiness to disclose lived experiences may in fact be significantly affected by (historical) prohibitions. This stands also influenced by different views on mental health professions and related standards of care. Professional frameworks of social workers and nurses show more openness towards incorporating experiential knowledge than those of psychiatrists and psychologists (Leemeijer & Trappenburg, 2016). The evolvement of lived experiences to experiential knowledge is defined as "The truth learned from personal experience with a phenomenon rather than truth acquired by discursive reasoning, observation, or reflection on information provided by others" (Castro et al., 2019, p. 308.). These professionals being "out and proud" might help increase recovery and social inclusion for service users more generally (Holttum, 2017). However, they often have not been trained on how to harness their lived experience appropriately or effectively for the benefit of service users (Byrne et al., 2022).

Concurrently, a second large transformation in mental health care has been the awareness of relational trauma (maltreatment, neglect, abuse, inconsistent caregiving, discrimination) as an important, but underestimated, cause of mental distress, as well as the evidence that the current mental health system can re-traumatize people (Butler et al., 2011). This led to the concepts of "trauma informed care" and "Trauma Informed Recovery Oriented Care" directing specific attention to the relationship, minimizing distress and maximizing autonomy by trusting in healing potential (Marsman, 2021; Reeves, 2015; Sahmsa, 2014). It requires a system to make a paradigm shift from asking, "What is wrong with this person?" to "What has happened to this person?" (Harris & Fallot, 2001).

Table 1. Retraumatization (Institute on Trauma and Trauma-Informed Care, 2015)

What Hurts?
A. System (Policies, procedures, "the way things are done")
Having to continually retell their story
Being treated as a number
Procedures that require disrobing
Being seen as their label (ie., addict, schizophrenic)
No choice in service or treatment
No opportunity to give feedback about their experience with the service delivery
B. Relationship (Power, control, subversiveness)
Not being seen/heard
Violating trust
Failure to ensure emotional safety
Noncollaborative
Does things for rather than with
Use of punitive treatment, coercive practices and oppressive language

Accordingly, the intention of trauma informed care is to provide support services in a way that remains accessible and appropriate to those who may have experienced trauma, modifying system procedures (a) and attuning relationally (b) (see Table 1).

Trauma-informed recovery is considered to bring together the best of both worlds by prioritizing self-agency, empowerment, and creating atmospheres for recovery that embody consistency and confidentiality, minimizing the possibilities of triggering past trauma, and integrating users in service evaluation (Huntington et al., 2005). On a par with recovery and the use of experiential knowledge, trauma-informed approaches search for sensemaking among service users. All these approaches originate from the notion that self-inquiry and understanding the trauma can help users to come to grips with their situation and history, and to create a meaningful life.

Theoretical Lens and Background

The claim of recovery oriented and trauma-informed models calls into question how users perceive the way professionals use experiential knowledge. Our study stands grounded in a relational perspective on care, signaling the importance of relationships.

Available research involving service users's perceptions raises questions about the nature of power in provider-user encounters and stresses the emphasis on relational work. Experts have emphasized the importance of using the relationship as a vehicle to understand and resolve relational difficulties, often associated with early trauma and attachment wounding (Cronin et al., 2014). Bordin's tripartite conceptualization of the working alliance dates back to 1979, yet it already addressed the agreement on goals, tasks, and developing an affective bond between professional and user (Bordin, 1979). Findings from a narrative study amongst users support the relevance of relational contact with professionals, who provide hope and also play an important role in social recovery as being the reconnection to the outside world (Wilken, 2010). A meta-ethnography of the perspectives of persons with severe mental illnesses underlines that a positive relationship between provider and user rests on an interpersonal relationship, allowing a transgression of professional boundaries (Ljungberg et al., 2015). On the contrary, pessimistic and uncaring professionals who acted paternalistic and disrespectful were perceived as non-helpful, especially in a context where discontinuity, insufficient time, and coercion pertained (Ljungberg et al., 2016). These types of relationships leave no space for negotiating the relationship and hinder development, contributing to further suffering and hopelessness (Ljungberg et al., 2016).

Relational and care ethics scholars have emphasized the importance of respect and openness for the world of the person via practicing good ethics in every encounter. The professional's presence, seeing and listening to the user's needs in a reflective and sensitive way, is a necessity emphasized over and over again in this tradition (Arman et al., 2015; Baart, 2004; Wilken, 2010). The constituents of such relationships lie both in the attitudes and behaviors of the concerned professionals, next to factors related to the organizational context (Ljungberg et al., 2016). In this regard, also lived experiences of professionals are presumed to increase empathy, understanding, and the ability to hold hope for users, thereby countering stigma (Richards et al., 2016; Vos et al., 2016).

In order to contribute to the knowledge about the value of professionals' experiential knowledge, we conducted an empirical study investigating both the perspectives of professionals and of service users. This article aims to provide an in-depth understanding of the latter. Another part of our study, focusing on the perspectives of these professionals, already demonstrated that – thanks to professional proximity – a strong working relationship can be established (Karbouniaris et al., 2021).

Methods

Research Setting

This study took place in three mental health organizations in the North-Eastern region of The Netherlands. All three organizations were committed to professionalize the use of experiential knowledge that health care professionals possess. Approximately ten professionals in each organization followed a one-year post-bachelor training in working with the experiential knowledge of health care professionals. This training consisted of 16 training days focusing on narrating health care professionals' recovery stories, collective discussions and reflections on impacting the entire organization (see Appendix C). The participating professionals with lived experiences were invited to share and harness experiential knowledge while working with users and colleagues.

Design

This study was embedded in a larger participatory action research project that started in 2017 as a joint programme of different (mental) health care organizations and three universities. A team of researchers, with two of them having lived experiences (author 1 and 3), initiated it, and patient advocacy services of the involved organizations supported it. For this part of the study, a qualitative design with reflexive thematic analysis was used to specifically voice the users who were involved in the professionalization process of professionals using experiential knowledge.

Our design was inspired by the tradition of responsive evaluation that favors personal experiences and draws upon the ordinary ways people perceive quality, by listening to their stories and mutual learning through an open dialogue (Abma et al., 2016; Abma et al., 2020). This plurality requires that the "research design" gradually emerges in the conversation with as many stakeholders as possible (Abma et al., 2017). Relevant stakeholders who were engaged in the research from the start have been: service users and peer support workers, professionals with and without lived experiences, and their supervisors. They were engaged in the training of the professionals using experiential knowledge.

The study's main section consisted of in-depth interviews and a focus group collecting user experiences. For this purpose, two topic lists were designed (see Appendix A and B).

With the actual involvement of service users, the insiders' voice was articulated, even though it remained limited to the aforementioned set-up project design. To stimulate participation, all users also received personal invitations to participate in annual project-conferences and regular project meetings. Some of the users presented the themes discussed in this study from a personal stance, not only to the involved professionals but also to students, researchers, managers, directors and the broader public, as the conferences had an open and dialogical character.

Participants and Data Collection

Service users were pre-invited by professionals and ultimately selected by the research team according to the following inclusion criteria:

- Service users had to be in regular contact (at least on a weekly basis) for at least six months with a professional (social worker, nurse or humanistic counselor) who attended the post-bachelor training "professional use of experiential knowledge". Appendix C includes more information about the training and competences.
- The mental health provision took place in a (recovery oriented) mental health setting.
- Participating service users had to have the ability to reflect and express themselves verbally well in Dutch language.
- To capture a broad range of experiences, we included a variety of participants with regard to gender, age, and mental health care setting.

Between 2018 and 2020, a group of 22 service users, 15 women and seven men with ages varying from 22 to 70 years (M = 45.5), was interviewed by the first author. This group had been receiving care from in total ten different professionals who all had been trained to use their experiential knowledge. The majority of this service user group reported being in care for an extended period of time, often starting from young adulthood. Reported mental health problems differed from trauma, (complex) post-trauma stress disorder, adverse childhood experiences, depression, bipolar disorder, dysthymia, psychosis, schizophrenia, autism, eating disorder, borderline personality disorder, attention deficit hyperactivity disorder, addictions, obsessive compulsive disorder, anxiety disorder and burn-out (Table 2).

All interviewed participants were receiving mental health care either via a daycare program, a Flexible Assertive Community Treatment (FACT)-team, an outpatient therapy setting

Table 2. Participant characteristics (N = 22)

Respondent	Gender	Age category	Mental health setting	Professional
P1	F	36–45	Daycare	Professional A
P2	F	46–55	Outpatient	Professional B
P3	F	36–45	Outpatient	Professional C
P4	F	56–65	Supported living	Professional D
P5	F	36–45	Outpatient	Professional C
P6	F	46–55	Supported living	Professional D
P7	M	56–65	FACT team	Professional D
P8	M	26–35	Supported living	Professional E
P9	M	26–35	Supported living	Professional E
P10	F	26–35	Daycare	Professional A
P11	M	56–65	Daycare	Professional A
P12	F	46–55	Daycare	Professional F
P13	F	56–65	Daycare	Professional F
P14	F	26–35	Daycare	Professional F
P15	M	20–25	Supported living	Professional G
P16	F	36–45	Supported living	Professional H
P17	M	46–55	Supported living	Professional H
P18	F	66–75	Daycare	Professional I
P19	F	46–55	FACT team	Professional I
P20	M	46–55	FACT team	Professional J
P21	F	26–35	FACT Team	Professional J
P22	F	36–45	FACT Team	Professional J

and/or a supported living setting. Next to the professional with lived experiences, the participants remained in contact with one or more other professionals who didn't explicitly use such resources, such as a psychiatrist or (psycho)therapist.

Each interview had a duration of 60 to 75 minutes and took place either at the mental health care institute or at the participant's home, depending on individual preference. The first author disclosed her background as a service user of mental health herself in the interviews, making her personal interest in the subject explicit. Even though some seemed surprised to be interviewed by a researcher with lived experiences, this seemed to instantly deepen the connection between researcher and participant.

All in-depth interviews were first transcribed, then summarized and returned to the individual participant to check the credibility (member check). Relevant information with regard to the research question was captured in the summary. Participants were asked to comment on the summaries, in order to validate and enrich the understanding. Some of them shared that they benefited from the written summary, because it structured (a part of) their narrative in a supporting way. To further trialogue, both participants and related professionals were then also invited to share possible new insights with each other and the researcher.

After the first validation, service users were invited to a focus group meeting in September 2020 for additional sense-making and mutual learning. Five of the interviewed participants joined this focus group, as it took place in between the first and second COVID-19 wave in the Netherlands. A topic list was used to structure the meeting (Appendix B). To introduce themselves, participants were asked to bring an object that symbolizes their relationship with a professional using experiential knowledge. One of them carried a small golden pig representing the transformation supported by his practitioner in saying goodbye to his work as a former farmer. Another participant took a drop spindle to symbolize the fine attuned balance and proximity in the contact with her practitioner. Findings from all the interviews were presented and discussed as part of a member-check.

Analysis

Braun & Clarke's (2006) thematic analysis approach was used in order to identify, analyze and reflect on possible patterns or themes. Braun & Clarke (2006) differentiate between passive and active thematic analysis, with passive analysis being when themes emerge from the data. By using an active analysis, the researcher acknowledges his/her role in identifying patterns, selecting those of interest and choosing how to report them. The analysis started by reading the interview transcripts and summaries thoroughly line by line. Themes recurring from the interview-data were coded and categorized (open coding) with Atlas Ti software, and a cross-case analysis was performed (axial coding). Then the retrieved codes were condensed to themes without losing their intended meaning (condensed meaning units). The analyses were discussed with an advisory board to achieve consensus on emerging themes and to increase the credibility of findings (Barbour, 2001; Meadows & Morse, 2001). Emerging themes were also discussed and refined during a focus group with users. Participants confirmed findings and supplemented them with new examples. In order to establish transparency in the analysis procedure, Table 3 illustrates the analytic process of abstraction from condensed meaning units to themes. Initial findings were compared to the existing literature on recovery, trauma-informed care, and experiential knowledge.

Quality Procedures

In line with the qualitative nature of this study, we used credibility criteria (Frambach et. al., 2013; Lincoln & Guba, 1985). The first researcher (author 1) joined three professionals in their daily work-setting in order to gain an in-depth understanding of the context (prolonged engagement). Users were asked in which context they felt most comfortable being interviewed to build up rapport. Researchers visited some users at home, for example, where the researcher had to adjust to the users' domestic conditions, such as taking a break to smoke or showing pictures and sharing memories of important moments in their recovery process. The data collection procedure stopped when saturation was reached: the point where patterns are repeated. After the interview, users received a summary of the interview-transcript with the question whether they recognized it and had any additional reflections (member check). Most of the users responded positively and stated they felt the researcher had "seen and heard" them. Some of them had additional remarks that they wanted to add. Next to the interviews, participant observations and a focus group were held for triangulation purposes.

Findings were discussed and presented during several conferences to a wider public of mental health professionals. This fostered the transferability of findings.

Table 3. Illustration of analyzing scheme

Condensed meaning units	Codes	Themes
The moment I saw her was the moment I knew we would fit well together.	*First contact*	User-professional relationship
I sometimes look at him as a Big Friendly Giant. *We laughed a lot together, we ate together, other times we would sit together and say nothing in each other's presence.*	*Recognition and identification*	,,
It's a way of leveling and I appreciate this authentic contact.	*Reciprocity*	,,
He immediately knew what I meant when I felt immensely isolated as a human, I have felt left out in this community, totally lost.	*Lived experiences as an additional source*	Learned lessons on distress and resilience
He resonated with the desperateness and hopelessness of that felt sense.	*Well attuned use*	,,
My professional helped me with my considerations to disclose about my depression upon returning to my workplace.	*Practical insights*	,,
She is like a source of inspiration to me, the way she navigates life.	*Positive role model*	Stimulating users' recovery
He helped me in resolving a part of the shame, because he made clear that it happened to me.	*Stigma reduction*	,,
Once she came to me and told me that I am not my depression, even though I suffer from depression. She just flipped my perspective, it was such an eye-opener to me!	*Creative openings*	,,

The first researcher kept a journal consisting of raw data and field notes in which important steps and changes were reported with regard to the communication with stakeholders, the interviewing and analyzing process. Reflections were shared with the research-team to sharpen the analysis.

Ethical Considerations

According to the Medical Ethics Review Committee of VU University Medical Center (registered with the US Office for Human Research Protections as IRB00002991; FWA number: FWA00017598), the Medical Research Involving Human Subjects Act did not apply to our research. Approval was also obtained from the ethical commission of the participating organizations for the activities and the publication involving findings. The Dutch code of conduct for research integrity (VSNU, 2018) as well the research code of VUmc, have been taken into account. In conformity to European privacy regulations (General Data Protection Regulation), all data has been stored in a protected environment. Sensitive data (such as the written summaries) amongst participants and researchers has been transferred by email with encryption. In addition to informed consent and confidentiality, various ethical principles were taken into consideration, such as mutual respect, participation, active learning, making a positive change, contributing to collective action, and personal integrity (Abma et al., 2019; Banks & Brydon-Miller, 2018). Ethical guidelines as well as dedicated time within our research team meetings and conversations with critical friends and peers were helpful in discussing issues of power, ethics, and responsibilities.

The research team recognized the needs of individual participants. For example, while all participants were able to read the 1-to-2-page summary, some of them preferred to be guided through the text via a phone call with the researcher. Also, the researchers respected the participants' boundaries. One example: some participants did not want to take part in the focus-group (in 2020) because they already said goodbye to their professional and did not want to be reminded about that specific period of their lives. Another example: a participant asked whether it was okay to bring her buddy for emotional support during the interview. The researchers respected this wish. They also wanted to make sure every participant had the ability to travel to the campus site where the focus-group was organized. Travel expenses were covered. One of the participants asked for personal guidance on her way from the station to the campus, which is why the researcher accompanied her during that part of her journey.

Results

The study's main finding is that the use of experiential knowledge manifests itself in the quality of the user-professional relationship in which personal disclosures of the professional's distress and resilience are embedded, often stimulating users' recovery process.

The value of experiential knowledge can be captured in the following themes: user-professional relationship, learned lessons on distress and resilience, and stimulating users' recovery process.

User-Professional Relationship

Basically all participants attribute the quality of the relationship to their professional's used experiential knowledge. Even though the majority did not ask explicitly for a professional bringing in this type of knowledge, participants vividly recalled the first time they met their professional with lived experiences.

> I longed for someone who could be like a parent to me, someone who really engages in my life and someone who would not let me down. Definitely not a newbie. The moment I saw her was the moment I knew we would fit well together. (P21)

Participants shared how they (to some extent) recognize themselves in their professional, provoking feelings of proximity and reciprocity.

> I sometimes look at him as a Big Friendly Giant. We laughed a lot together, we ate together, other times we would sit together and say nothing in each other's presence. It's a way of leveling and I appreciate this authentic contact. (P17)

The key element in this relationship consists of the experienced "togetherness" which for some participants was a clear difference from the power-imbalances they experienced during earlier encounters in mental health care.

> I also visited a therapist in the past who hardly had any time nor empathy for me. I have felt very small in front of such professionals. Maybe I should not say this, because they were probably just doing their best, but something was lacking. My professional with lived experiences bridged that lack by staying in touch with me and showing some of his struggles in the past, in order to support me. (P14)

Participants emphasize that they felt supported and resourced by their professional with lived experiences which gave them the felt sense of "acceptance"; they sometimes relate to these professionals as peer or parent. "He is very approachable, very open. He accepts me the way I am and actually has a relativizing impact on everyone here. Last week he shared that he had an 'off-day', showing a real human side!" (P13)

However, one participant also expressed concern about the way professionals with lived experiences may become personally involved, while perhaps being unable to assess the situation from a distance.

> I have been addicted to hard drugs for one year. I totally crashed. I didn't take care of myself, didn't wash myself, wore the same clothes. I was chatting and cheating, because my focus was only on the next shot. I kept my professional out of this reality for a long time and told her I found a job and that I was doing fairly well. She didn't see it, she was blind, until I got arrested! I don't blame her for anything, she cares about me. (P20)

Some participants warned about purposelessly disclosing personal information which may result in a user thinking that he/she needs to take the feelings of the professional into account. "Professionals should, in no case, just start sharing personal stuff. It has to contribute to a goal. I need to have the feeling that somebody really is there, for me." (P1)

Additionally, some service users mentioned they'd become wary when knowing that a professional had experienced certain distress. More specifically, an expressed concern was a possible shift of focus from the service user to the professional. "I can see the risk of using lived experiences. I could start thinking: 'Oh God, he has experienced this or that so I should not say that I have similar difficulties." (P21)

By way of contrast, participants also gave examples of contra-productive concealments, in which professionals who don't work with experiential knowledge kept relevant personal information hidden. This led to interesting comparisons between professionals using their lived experiences in a professional context versus professionals who do not overtly share personal information.

> I have seen professionals who leave out their personal background completely when meeting service users and I consider that to be risky because they might unconsciously project things on service users and end up in a role of a rescuer or prosecutor. (P1)

Altogether, the use of experiential knowledge manifests in a compassionate working relationship, colored by recognition, proximity, reciprocity and acceptance. Provided that these are well-balanced and well-timed, users report benefits from these relational elements.

Learned Lessons on Distress and Resilience

The majority of the participants shared that their professional worked with professional disclosures often captured in a recovery-story or metaphor. Participants offered interesting insights into experiential knowledge used by their professionals, especially referring to the lessons learned on distress and resilience.

Some participants specifically valued the existential and/or spiritual insights of their professional with lived experience. "He immediately knew what I meant when I felt immensely isolated as a human, I have felt left out in this community, totally lost. He resonated with the desperateness and hopelessness of that felt sense." (P5)

Professional disclosures concerned specific details of coping with mental health issues such as depression, psychosis, addiction or trauma, but also concerned emotional and practical insights based on general experiences in the recovery process; e.g., knowing how difficult it can be to return home after having spent months in an inpatient setting. "My professional helped me with my considerations to disclose about my depression upon returning to my workplace." (P10)

In the latter case, disclosures aimed to provide insights on how to practically adapt one's living and/or aimed to provide emotional support. "She once drove me to a doctor's appointment, which was absolutely against policy. She however showed me how much she cares for me, because she knew I was super nervous." (P19)

To summarize, participants divided the use of experiential knowledge in dosed disclosures into existential, spiritual, emotional and practical insights.

Stimulating Users' Recovery Process

Participants appreciated the way recovery stories of their professional stimulated them to construct their own narrative, find meanings and arrive at deeper insights about themselves. They spoke about their professionals as a positive and hope-providing role-model since he or she had experienced mental distress and yet found a path to personal and social recovery. "She sometimes says: 'You may consider me to be your mom', which I really liked because I didn't have a real parent when I was young. She is like a source of inspiration to me, the way she navigates life." (P22)

The professional's obtained balance appeared as an inspiration to service users. They valued seeing both the strengths and the vulnerable sides of the professional because it then also led to self-acceptance and a decrease in self-stigma and shame.

> He helped me in resolving a part of the shame, because he made clear that it happened to me. (...) I felt less of a burden, seeing how he also had his struggles. He gave me tips on how to prepare answers that I could use in social encounters. (P6)

Some participants shared that they believe professionals with lived experiences embrace reality as it is, emerging in a direct, sometimes even humorous communication-style.

> Whenever I have a shitty day, she comes to me and asks how I am doing. I often used to answer "just kill me!" after which she starts to laugh and says "Hey, you don't want others to have to clean all that mess!". (P8)

In this way, professionals sometimes overtly discussed fixed beliefs that recur in the public about people with a mental ill health history.

> My practitioner discussed the implications of returning to work with me. What advantages and disadvantages can one think of when opening up your story towards a supervisor at work? She really contributed to solving my dilemma and stimulated me to think about my future and how I wanted it to be. (P4)

Also, participants felt that their professional tried to search for new and creative openings to move forward. Of particular interest was "out of the box thinking" that was said to be particularly helpful in the recovery process of users, facilitating hope and empowerment. "Once she came to me and told me that I am not my depression, even though I suffer from depression. She just flipped my perspective, it was such an eye-opener to me!" (P9)

Participants shared how their professionals were keen on promoting users' agency.

> She continuously left it up to me to direct and guide my own process. Of course she would ask how things are evolving but she did not predominate in any kind of way. She held a lot of trust in me. Actually she was also calling off her colleagues to not cling to diagnoses and to look beyond those labels. (P11)

Furthermore, participants appreciated that their professionals regularly postponed judgments and some gave interesting examples of "positive risk taking" in which professionals balanced risk and recovery. "Of all therapies and treatments, I mostly benefited from the conversations with my professional having lived experiences because he did not judge me. Not even influenced me when I expressed a wish for euthanasia." (P16)

Participants also suggested that the use of experiential knowledge always should be accompanied by sufficient professional knowledge and skills, enabling it to be appropriately used. In summary, participants felt stimulated and inspired in their recovery process, by their professionals with lived experiences.

Discussion

This qualitative study describes users' perceptions on the use of experiential knowledge by professionals with lived experiences.

The first theme emphasizes the importance of a warm, compassionate relationship in which disclosures and insights from professionals' with lived experiences are well embedded. From this study, we have seen that users appreciate the personal perspective from their professional, integrated in a core profession as a nurse or social worker. Findings elucidate that employing experiential knowledge seems to enhance the working relationship – as long as the professional does not become too personally involved or imposes on users. Although trauma-informed literature does not explicitly plead for the use of experiential knowledge by professionals, a more equal relationship can be considered beneficial for service users (MacNeil & Mead, 2005). Professionals who are impacted by trauma themselves could reasonably be more profoundly attuned and relatable, thereby engendering a sense of "connectedness" (Leamy et al., 2011). This can help service users feel more comfortable and empowered to discuss and prevent new traumatic experiences (Reeves, 2015; Stanford et al., 2017). While both recovery-oriented and trauma-informed approaches aim to strengthen users' independence, the strong rapport and sometimes (counter) transference feelings between professional and user also may possibly lead to blurring the relationship's boundaries. A positive risk-taking stance in this dilemma is becoming more prominent in novel trauma concepts, whereas traditional clinical practice used to focus on the risks, such as re-enactments (West, 2017). Therefore, a user-focused intention on professional disclosure, paired with a reflexive dialogue to evaluate interactions between user and professional, seem paramount.

The second theme indicated that professionals' insights were rooted in both the experience of distress and the resilience in dealing with such. For some, this did not necessarily concern an explicit verbal encounter. Interestingly, an embodied consciousness, also considered as "tacit or implicit experiential knowledge" of the professional seemed to resonate with users' suffering. Participants in this study often felt themselves seen and understood on a deeper level. They felt heard by their professional, whose aim it was to stay present and endure, rather than offer, a cure. Even while in many cases the lived experiences of the professional differed significantly, there was a resemblance of its felt sense; e.g., the hurt or the (self) rejection. Realizing that professionals who have "established lives", may yet also be affected by grief, loss and social exclusion, remains crucial. Yalom supports this, stating that should there be therapist's growth and healing, the user's healing and effective therapy is likely to happen (Yalom, 2002).

The third theme clarified that users felt inspired by their professional contributing to a reconstruction of life and self. Consistent with the literature, mental health issues often lead to a fragmentation of the identity and loss of relationships with others (Fisher, 2017). Recent attachment theories show that earned-secure attachment can be cultivated through healthy meaningful relationships later in adolescence and adulthood; e.g., through the vicarious experience of parenting one's own children or through an attuned friendship (Feinberg, 2015; Fisher, 2017). Participants in our study referred to their professional as "peer" or "parent", which may indicate they attained such a reparative relationship. Professionals also served as a positive and hope-providing role model in having found ways to move forward. According to the study's participants, this also contributed to self-acceptance, self-agency, and a decrease in shame and self-stigma. Findings from trauma-literature show that impactful experiences can be surrounded by silence and conspiracy that communities and the immediate social context often maintain (Cavanagh et al., 2015). This study shows that participants felt stimulated to break the silence and construct new recovery narratives.

Strengths and Limitations

This study is based on a qualitative analysis and describes the perspectives of service users in three Dutch mental health care organizations, individuals who had been in regular contact with a professional with lived experiences. In the process of transformation, these mental health care services employed professionals who pay attention to working in a relational way in order to support personal recovery. The included participants involved merely a small sample of people living in The Netherlands. It's uncertain whether the results of this study can be generalized or transferred to other countries and/or more traditional contexts.

Since the number of professionals who use experiential knowledge professionally remains still limited, it seemed logical to reach service users by inviting them through these professionals. This, however, also has limited its representativeness. Participants may have given socially desirable answers about their professional, even though the researcher who conducted the interviews tried to reassure participants that given answers would not affect their professional's status, nor the provided service. We reasoned that disclosing the researcher's personal background with mental distress stimulated authentic responses.

Another limitation: due to the COVID-19 measures, only five participants were able to participate in the focus group discussion after the interview rounds, even while working in a small group facilitating an in-depth exchange.

Bearing these limitations in mind, we experienced that findings were recognized and supported throughout the different project-groups and they substantiate other findings from studies on recovery-based and trauma-informed care.

Conclusion, Implications and Future Directions

Findings suggest that service users positively value the use of experiential knowledge by social workers, nurses, and humanistic counselors as an additional (re)source. It contributes to their process of recovery through a relationship that they perceive as supportive and empowering because the mental health worker's personal experiences show resilience in coping with distress, providing hope and encouragement. Insights from this study support findings from other researches about trauma informed care and recovery oriented care, thereby strengthening the body of evidence on helpful relationships.

The study's results underline the relevance of integrating lived experiences in the practice of mental health professionals. In order to further explore its meaning for users, we provide some implications and give suggestions for future research and practice.

First of all, it is important to raise awareness among mental health professionals about the relevance of experiential knowledge for the quality of their services. Secondly, for those who desire to use their personal lived experiences, training opportunities and ongoing peer consultation should be accessible, in order to add competences to their body of knowledge.

Thirdly, it is noted in this study that mainly professionals with a social work or nursing background came to the fore with the desire to integrate personal experiences. However, as an effect of this research project, academic professions such as psychiatrists and psychologists also started to express interest in the subject. It became clear that their current professional codes of conduct emphasize the risks of bringing in lived experiences, and form a barrier to harnessing experiential knowledge. Since the further development of trauma-informed recovery-oriented care requires all mental health professionals to share a common ground, we recommend exploring how the academic professions can also integrate experiential knowledge into their work.

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Author contributions

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All authors gave their final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of interest statement

The authors have no conflicts of interest to disclose.

Ethical statement

This manuscript is the authors' original work.
The study was reviewed and approved by the Medical Ethics Review Committee of VU University Medical Center (registered with the US Office for Human Research Protections as IRB00002991; FWA number: FWA00017598).
All participants engaged in the research voluntarily and anonymously, and provided their written informed consent to participate in this study.
Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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Appendix A: Topic List Interviews

Opening

- Aim and estimated duration of the interview
- Consent about audio recording
- Member check procedures

Introduction

- Could you please tell me something about yourself?
- How long have you been in care here?
- What's the main reason for seeking professional help?

Professional with lived experiences

- How long have you been in contact with a professional with lived experiences?
- How did you get in touch with him/her?
- How does he/she help you? Did you notice any changes with regard to the help over time?
- Your professional was involved in a project and training on how to use his/her lived experiences. In what way, if at all, has this been a topic in your conversations? Did your professional share any insights regarding her/his personal recovery process? What did you learn or understood from that?
- What is the meaning of being helped by a professional with lived experiences for you?
- When is it helpful to receive help from such a professional? Are there times when you would rather not receive his/her help? When?

Recovery

- What does experiential knowledge contribute to care as usual? What is it based on? Could this be offered by another/regular professional? Why?
- In what way might professional disclosure be related to your recovery process?
- Do you currently have any contact with other practitioners who don't work with experiential knowledge? How are they involved? To what extent does their approach differ from that of your professionals with lived experiences?
- Do you currently have contact with experts having lived experiences? How are they involved? To what extent does their approach differ from that of your professionals with lived experiences?
- How would recovery-oriented care ideally be organized? What are your thoughts on the recruitment of more lived-experience professionals?

Appendix B: Topic List Focus Group Interview

Opening:

- Aim and estimated duration of this focus group
- Consent about audio recording
- Introduction of all participants

Presentation of findings from interviews:

- How do findings resonate with participants? Additional insights?
- Please provide a follow up: how's your current condition? Are you still in contact with the professional? What symbolizes/symbolized the contact with him/her?
- How does your recovery process evolve, with regard to personal recovery, social, clinical recovery?
- In what way did your professional with lived experiences contribute to your current condition?

Appendix C: Professional Use of Experiential Knowledge Training

This 1-year post-bachelor training consists of 16 training days focusing on professionals' recovery stories, and collectively reflecting on key themes, such as shame, stigma, vulnerability and resilience. It is open to professionals who hold a bachelor's or master's degree in Social Work/Nursing/Humanistic Counseling. The training offers directions on how to profit from experiential expertise in a professional context (Weerman & Abma, 2018).

Competences for professionals who use their lived experiences as an additional expertise (Weerman et al., 2019, p. 79):

- Has an open attitude to others and uses personal lived experiences in an appropriate fashion
- Is able to connect ones' personal lived experience anchored in recovery while working
- Is able to share the personal narrative in a socially relevant manner
- Is able to put personal experiences into perspective
- Is able to provide hope as a positive role model
- Is able to provide an entrance to experiential knowledge stemming from recovery, stigma and empowerment
- Is able to recognise, strengthen and stimulate users' strengths
- Is an expert in dealing with distress and recovery by using dialogue and reflection techniques
- Is competent in attuning to felt nuances, details and experiences of people living with distress or who learn to live with a disability or vulnerability
- Offers hope and holds confidence that recovery is possible
- Realizes that recovery takes sometimes place by taking small steps which may be invisible for the outside world

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RESEARCH ARTICLE

Exploring Care Management for Older Adults with Illnesses as Family Members' Responsibility.

The need for Social Workers' Support Services in Nigeria

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Introduction: Aging oftentimes comes with health-related issues. Usually, family members are obliged to provide care management for older adults. They must perform this task despite their limited knowledge of their patients' health conditions. Hence, securing care management for older adults with illnesses becomes a dilemma for consideration.
Aims: Older adults require support in managing health conditions. This study hopes to promote the following: First, provide understanding of how family members perceive caregiving. Second, provide insight into family members' management of health care challenges. Third, explore the need for geriatric support services in providing care for older adults.
Methods: The study employed a qualitative research method. Focus Group Discussion was utilized to elicit data from 24 participants admitted to four health care facilities at Enugu-North, Nigeria.
Results: Findings indicated that participants perceived care management for the older adults as a filial responsibility that should be provided till their demise. However, the majority experienced difficulties to this effect, other major concerns found include age and the older adult's attitude, financial challenges, the changing contemporary society, and caregiving stress due to the care recipient's health status. While many of the participants indicated a preference for traditional medicine as an alternative to rapidly increasing health service charges owing to lagging geriatric support; others were less reliant on the governmental welfare support services.
Conclusions: With the government implementing aging and health care policies, Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) in collaboration with geriatric social workers can help develop care-aid programs for older adults' healthy wellbeing.

Keywords: caregivers, care management, family members, older adults, social workers

Introduction

Health is every individual's fundamental right irrespective of age. This is aptly captured in the United Nations Department of Economic and Social Affairs (UNDESA, 2016) Sustainable Development Goal (SDG) 3: "To ensure healthy lives and promote wellbeing for all at all ages". Since the 21st century, a significant demographic trend globally consists in people living longer lives owing to improved living standards, advancements and break-

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throughs in the area of medicine, and the development of new effective drugs and vaccines (UNDESA, 2017; UN, 2012;). However, in the next 30 years, the number of older adults is projected to triple (He et al., 2016; UN, 2019); with the world's population of persons aged 60 and older to double by 2050 (WHO, 2015). Along with this come the problems of disorders and illnesses associated with aging that require care, as well as their attendant care management issues which are sources of concern to family members.

Care management involves a patient-centered approach designed to assist patients and their support system (family members) in managing medical conditions more effectively (Agency for Healthcare Research and Quality, 2018). It also encompasses those care coordination activities needed to help manage chronic illness. Nevertheless, Mcgregor et al., (2018) rightly observed that most health outcomes associated with aging are often chronic illnesses, including cancer, diabetes, and osteoarthritis among others. Older adults experiencing such infirmities are at greater risk of developing an illness like Parkinson's disease, Alzheimer's, and Dementia; with a decline or disability of receptors. If the disease or illness is serious or at an advanced stage, a tendency of experiencing restrained mobility appears, which may prompt expanded mortality (Barham et al., 2019).

However, the pattern and pace of aging populations vary in different settings. Many High-Income Countries (HICs) already have sizeable older populations while most Low and Middle-Income Countries (LMICs), including Nigeria, remain relatively young (Sudharsanan & Bloom, 2018). The UNDESA Population Division projected the global aging population (60 years and older) to grow from 9.2 million in 2017 to 2.1 billion by 2050 (UNDESA, 2017). While Adebowale (2016) reported that the proportion of this age group in Nigeria is up to 20%, the National Bureau of Statistics (2018) stated that the country's population of older adults has increased from 8,741,292 in 2013 to 9,622,056 in 2016, with an expected growth in years to come. The increasing older population comes with an increase in health care demands. This is of concern to family members who oftentimes play an active role in providing care management for older adults with illnesses (Wolff et al., 2020). Though not officially gazetted, they remain key players in the care of older adults in hospitals. In addition to helping with household and activities of daily living, family caregivers assist with care activities, including managing medications, coordinating care, or attending medical encounters (Wolff et al., 2013).

Nigerian culture regarding the Igbo ethnic group where the study is domiciled does not support the institutionalization of older adults, offering restricted social security packages for them consequent upon the conviction that care for older adults should be filial and managed till death (Adisa, 2019). According to literature, caregivers often participate in the exchange of patients' information and medical decision-making (Laidsaar-Powell et al., 2013; Wolff & Roter, 2011); thereby necessitating their interaction with health care personnel. It then follows that assistance with care management, finance, mobility, and other activities are provided by caregivers who might be spouses, children, and nephews among other younger family members (Okoye 2012; Oladeji, 2011). However, they may have other family obligations, with limited knowledge of patients' health conditions and priorities (Kitiko et al., 2015; Silveira et al., 2010); making their involvement and interaction with health personnel at times difficult. Consequently, the poor care management for older adults with illnesses by their family caregivers might be responsible for many health outcomes associated with aging.

In contrast to this view, it has been reported that the Nigerian government runs a National Health Insurance Scheme (NHIS) that cares for only federal public servants (Dokpesi, 2017); thereby neglecting many older adults. More so, health expenditure as of 2014 was 3.7% of Gross Development Product (GPD) (WHO, 2014). Worrisome is the increasing number of older adults requiring care management while the number of geriatricians has remained abysmally low. Usman posits that there are seven geriatricians serving over nine million aged persons, with the indication that the aging population suffers constrained access to quality health care ("Nigeria has only 7 geriatrics to cater for over 9m aged persons", 2018).

Scholars recently have reported that older adults aged 60 years and older in LMICs utilize an excessively enormous allotment on health resources (Dokpesi, 2017) and so tend to be the most financially vulnerable (Adisa, 2019; Ebimgbo et al., 2020). Economic vulnerability in the face of changing contemporary Nigerian society may prevent them from seeking adequate care management for healthy wellbeing. The bulk of health care expenditure is financed through out-of-pocket payments often made by family members, particularly for older adults with chronic illnesses (Okoye, 2014). Such payment covers the direct cost of laboratory tests, doctors' consultation fees, drugs, and other indirect costs, such as managing their health outcomes and loss of manpower for the older patient and their caregivers. Managing these adverse effects, however, becomes a concern for family caregivers. The report expresses the concern that a rapidly increasing health service charge is occurring in most health institutions with the adoption of traditional medicine as a potential alternative in contemporary Nigeria (Dokpesi, 2017; Schnabel et al., 2014); and this is the gap this study hopes to fill.

In this study, therefore, the authors make an endeavor to determine concerns in care management for older adults with illnesses regarded as family members' responsibility. This becomes significant against the background that despite the attachment bonds that exist among members (Bretherton, 1992), family caregivers oftentimes experience stress, guilt, and burden while caring; and this affects their ability to provide adequate care management services for older adults with illnesses (Faronbi & Olagun, 2017; Wojujutari, 2016). They may not have substantial knowledge or training in geriatric health care, are not professional health care providers, and may neglect to provide their older adults with essential health management strategies (Olson, 2012; Potyraj, 2016). This may result in a decline in body functioning, affect the opportunity to exercise, regular hospital visitation, and may lead to the development of aging-related illnesses without effective intervention by professionals (Okafor et al., 2017). One type of these professionals is geriatric social workers.

In Nigeria, geriatric social work practice stands very much in its early stage of development. Against that backdrop, it is evident that the availability of trained geriatric social workers in Nigeria to work with caregivers remains grossly inadequate coupled with structural failures to give these professionals the platform to do their job (Okoye et al., 2017). It is envisaged that collaboration with geriatric professionals will provide effective therapeutic and intervention services, follow up and assist governmental, Non-Governmental Organizations, and Civil Society Organizations to venture into providing adequate care management and healthy wellbeing for older adults. This study, therefore, is reasonable as it seeks to contribute to the integral role of geriatric professionals and encourage family caregivers to continue to provide care management for their older adults afflicted with illnesses. With insufficient attention from the Nigerian government, securing care management for older adults' healthy well-being appears to be a dilemma that needs to be addressed. The justification is that since older adults are vulnerable to illnesses, their health management should be at the fore of development discourses. Hence, a start-point consists in understanding concerns on care management for older adults by family members and adopt such concerns into policy and programmatic actions. Thus, the following research questions informed this study:

1. How do family members perceive their caregiving role in the care management of older adults with illnesses?
2. What are the major impediments family members face in the care management of older adults with illnesses?
3. How can geriatric social workers assist family caregivers in providing care management for older adults with illnesses?

Theoretical Framework

The attachment theory developed by Bowlby and Ainsworth in the 1930s (Bretherton, 1992) was employed as a theoretical explanation for the care management for older adults with ill health. The theory provides a comprehensive framework on how close relationships shape the manner in which caregivers deal with stressors and strains including emotionally high or low management styles in the health needs of older adults. According to Erik (2015), theories can be tested through three main methods; namely surveys, controlled experiments, and field observation. The attachment theory utilized in this theoretical framework was tested through the survey (opinion sampled from caregivers) and field observation. Caregivers opined that care management provided for older adults in the study locality was based on family attachment (filial association), and this has been observed by Okoye (2012). Hence, older adults depend on their children and extended family relations for care and sustenance.

Attachment theory is conceptualized as a biological-based innate system that protects older adults via uncompromisingly keeping them close to family caregivers amidst their health needs (Simpson & Rholes, 2017). These needs are associated with the importance of family caregivers in identifying their concerns related to care management for older adults' wellbeing as well as managing conflicting needs. The attachment behavioral system works together with the caregiving system. Thus, stronger attachment bonds were associated with a greater amount of care management services provided. For instance, the caregiving system generally leads individuals allude to their relationship partner's distress signals and it typically triggers actions that will protect, promote, and secure appropriate care management needed for healthy well-being (Pietromonaco et al., 2014). As such, the feeling of pain and guilt seeing their loved relations experience unfavorable health conditions triggers providing care management services and a closer attachment bond. More so, the attachment bond stimulates family members to restore relationships with older adults, despite the challenges and threats in providing care. Hence, threats to the attachment bond include pain, burden, or stress which may influence the attachment behavioral system. Given these challenges, older adults with illnesses are often attached to family members whom they perceive as obliged to provide care management (Koruk, 2017).

Methods

Study Area

The study was conducted in the Enugu-North senatorial zone, Enugu State. Enugu State is one of the 36 States in the South-East geo-political zone in Nigeria; with three senatorial zones, including Enugu-North. The total population figure of Enugu State is about 4.1 million based on reports from the National Bureau of Statistics (2018). Reports from the last national census held by the National Population Commission (NPC, 2006), have it that in this state, the total population of persons aged 20–59 years accounts for about 1,492,844 while older adults aged 60 years and older have a total population of about 224,906. However, based on the NPC (2006) population data, the 2020 total population projection for persons 20–59 years accounts for 2,239,266 while 337,359 is for adults aged 60 years and older.

In Enugu State, there are about 36 cottage hospitals, 366 primary healthcare centers and approximately 700 private health facilities (Uzochukwu et al., 2014). These public health facilities operate at the primary, secondary, and tertiary levels and are mal-distributed politically. However, the state generally lacks facilities and personnel particularly in the rural areas, with an estimated staff strength of 4,422 as of 2016 (Ndibuagu et al., 2015). The justification for selecting the study area could be attributed to several reports and studies on the caregiving stress experienced among family members in Nsukka. For instance, Okoye & Asa (2011) found that caregivers' age and the level of income are all significantly related to the level of stress experienced. More so, the locality has small-sized private for-profit health facilities but is dominated by government and mission health institutions. Despite this, it remains characterized by heavy disease burdens and great out-of-pocket financing, as is the case with most communities in Nigeria. From the Enugu-North senatorial zone, Nsukka Local Government Area (L.G.A) was purposely selected as the study locality. Nsukka L.G.A consists of a semi-urban area made up of 17 rural communities, with a major urban area that is Nsukka urban (Ugwuishiwu et al., 2016). The rationale was that owing to proximity, most rural indigenes migrate to urban areas for health services.

Population and Sampling

In the study area, ten major health care facilities exist (Uzochukwu et al., 2014). The authors applied a simple random sampling procedure through balloting for selecting two government and two mission health facilities. The names of the ten government health facilities in Nsukka urban were listed on small pieces of paper in a basket that was shuffled. Using the hand drawing method, two of the researchers were asked to pick one piece of paper. The same method was adopted to select two out of the ten health facilities in the study area. Thus, the authors drew two government and two mission health facilities. According to Lune and Berg (2017), simple random sampling constitutes a sampling method that allows a sample to be chosen from a population of interest so that the probability of selecting each item in the population is the same. The criteria for selecting the hospitals were based on the institutions' ownership, and the subsidized service charge. Again, another rationale for picking government and missionary institutions involved giving the researchers the opportunity to have an in-depth understanding of the situation under study, in that it will allow us to collect diverse views from the study participants in different health institutions. The selected government-owned hospitals include Nsukka General Hospital (NGH) and the University of Nigeria Medical Center (UNMC), while the missionary-owned hospitals consisted of Bishop Shanahan Hospital (BSH) and Faith Foundation Hospital (FFH), all situated in Nsukka urban.

The age distribution of persons 20–59 years in Enugu State (Nigeria), is perceived to be the productive population. The rationale is that this age distribution consists of the active age group who are actively involved in production (labor) and providing services. More so, it is expected that at 20 years one must have completed the secondary level of education and can be able to provide care management including basic activities of daily living, whereas in the public service sector, retirement commences at the age of 60 years. In Nigeria and Enugu state in particular, no available data exists on health and social service used by adults aged

60 years and older. The only available service for them involves the relationship with family members, feeling connected to them, as well as to their community, church, friends, or neighborhood, which all contribute to their wellbeing and feeling of independence. These local institutions usually serve as a safety net for older adults (Okoye, 2013), whilst being responsible for providing food, drink, basic health and social services (Echeta & Ezeh, 2017).

Sampling Procedure and Data Collection

The authors employed the qualitative research method in generating data for this study. In research, this approach is concerned with perspectives and interpretations of people based on their care management experiences as it seeks to gain further insights into the thinking and behavior of people (Philips et al., 2016). Focus Group Discussions (FGDs) served as the main source of data collection because of the large number of ideas, issues, topics, and even solutions to a problem that can be generated. This is a structured discussion aimed to gain an in-depth understanding of a situation or gather information on a particular research topic, from a maximum of ten participants (for each session) with the same characteristics (Nyumba et al, 2018). With the medical health care workers' assistance in the in-patient care (IPC) or out-patient departments (OPD) in the selected hospitals between October and December 2020, family members (aged 19–59 years) were selected who provided care management to older adults (aged 60 and older). We utilized a combination of purposive and snowball sampling techniques to contact the respondents. To ensure equal gender representation, we pulled together 12 men and 12 women (three males and females from each hospital) respectively, across the location (hospitals), making 24 participants in the locality. We were careful to choose central locations, scheduled dates, and times to ease their movements and reaffirmed them that the conversations were going to be short so they could attend to their private affairs. Two FGD sessions (all men and women) were conducted and neither exceeded 90 minutes.

We started the process with the focus group by conducting a general introduction involving all the participants and researchers present for the discussion, the objective of which consisted of reading to the participants, after giving the assurance of confidentiality, anonymity, and obtaining an oral consent by the participants to audio-recording, their willingness to participate and freedom to decline during the discussion. We took time to explain the above to participants that could not seamlessly understand the objective of the discussion. Researchers designed questions with probes termed "Focus Group Discussion Guide for Older Adults' Caregivers" was used to elicit the participants' responses. The discussion question guide has two sections comprising section A (demographic characteristics of participants) and section B, which focused on the major information relevant to the research questions. To uphold confidentiality, the participants were given numbers (as names) to identify responses from them. We held our group discussions in a round sitting position with a large table at the center (used for tape recording and note-taking). Major topics discussed were their perception of care management for older adults (probe for negative and positive responses), type of care management provided for the older adults, major challenges experienced in providing care management, action taken when severe health challenge is experienced (probe for health services utilized and reasons) and knowledge of health workers including social workers.

The FGD guide was collectively designed by six researchers and pretested with a group of four caregivers who provide care management to older adults with illnesses in a private hospital. Insights from the pretest were captured in the final polishing of the FGD guide before the main study. Among the six researchers trained to assist in this study, two persons moderated, two were coders who took notes and the other two monitored the recording mechanism. We took care to ensure the effective involvement of all the participants. The discussions occurred in English and Igbo languages, depending on what the participants were comfortable with. No interpreters were involved as all the researchers were conversant with both languages. Since the research was conducted during the relaxation of the COVID-19 lockdown (October 2020), all health guidelines – including social distancing, face mask wearing, and the use of alcohol-based hand sanitizers – were adopted.

This approach attaches importance to rich contextualized descriptions based on experience and is free from pre-existing prejudices (Spiegelberg, 2012). We were guided by phenomenology in the qualitative research which allowed us to discuss our participants' experiences and concerns regarding our research topic in light of the phenomenological research approach's aim. More so, the content of the FGD guide dealt with the concerns of caregivers relating to care management for older adults with illnesses and intended to capture as closely as possible how the phenomenon manifests within the context in which the experience takes place (Giorgi & Giorgi, 2003). This approach thus helped us to adequately capture the caregivers' phrases and nuances, and see events as they appeared to them.

Data Analysis Procedure

Data were analyzed after transcription in the English language. The researchers who did the transcriptions are grounded in the Igbo language, even though just a few participants expressed themselves in Igbo. After transcription, we compared the contents of the transcripts with the field notes to ensure coherence. Next, we coded the data into parent and child nodes. An inductive coding approach was adopted, meaning and themes were generated as we studied the transcripts. The use of thematic clusters to understand and communicate qualitative data is rooted in phenomenology (Braun & Clarke, 2014; Creswell & Creswell, 2018). To add more rigor to our analysis, we handed the analysis spreadsheet with relevant discussions to two peers for further examination. Their insights contributed to the final checks on the analysis spreadsheet. These exercises stand in line with peer debriefing and observer triangulation in qualitative research (Padgett, 2008). The themes generated were developed following the research questions as described in the field experience (Babbie, 2010). The rationale behind the use of themes is to help with classifying responses. The themes include family members' perception of care management, major impediments of family members in care management, and the knowledge of geriatric social workers' role in care management of older adults with illnesses.

Results

Socio-Demographic Characteristics of the Sample

First, we present the findings on the study participants' socio-demographic characteristics. The participants were all caregivers who are either married, single, or widowed, and who are providing care management to older adults with illnesses at the time we conducted this study. A good number (75%) of the participants had blood ties - as family member caregivers - and, as such, did not receive any reward for providing filial care; whereas (25%) of the participants were family members who received gratification/reward. More than half (58.3%) of the respondents were married, and 54.2% had secondary school education and below. In terms of monthly income, while above half (66.7%) receive more than 30,000 naira monthly (equivalent to above $60); others (33.3%) receive less. Most of the respondents were family caregivers aged 30–59 years. They are predominantly Christians. Table 1 reveals further information.

Table 1. Summary of socio-demographic data of participants

Socio-demographic	Frequency	%
Gender		
Male	12	50.0
Female	12	50.0
Total	24	100.0
Receiving a reward when caring for an older adult		
No	18	75.0
Yes	06	25.0
Total	24	100.0
Marital status		
Married at present	14	58.3
Not married at present	10	41.7
Total	24	100.0
Educational status		
Secondary school and below	13	54.2
Post-secondary school	11	45.8
Total	24	100.0
Earning above minimum wage (30,000 naira)		
Yes	16	66.7
No	08	33.3
Total	24	100.0
Age		
19–30 years	09	37.5
31–59 years	15	62.5
Total	24	100.0

Family Members' Perception of Care Management for Older Adults with Illnesses

With the exception of a very few, most participants highlighted that care management of older adults is a filial responsibility. While some of them responded to the cultural perception of filial responsibility, others were of the view that it remains a personal decision prompted by one's emotions. A few participants stressed that filial responsibility is gradually becoming extinct and hardly ever practiced due to the associated difficulties. We are listing some typical quotes below:

> Older parents must be cared for. It has been practiced by our forefathers' years back and should continue. If we don't care for them, who then will do so? I know that with the care management I provide for Mama now, my children will reciprocate this gesture in my old age. (Male FGD/Participant 2/BSH)
>
> Providing care management for older adults though is an accepted traditional norm; it is also an emotionally driven activity. I feel pain and guilt seeing Papa in a poor health condition. Honestly, I will not relent because it is his right. I also know that it is often accompanied by all-around blessings which the older adults who have been adequately cared for are known to give. (Male FGD/Participant 3/FFH)
>
> With the practice of the extended family system in my place, there are large family members. So, we take it in turns such that everyone participates in providing care management. Though my sibling does not like it, as it affects their job, immediate family relationship, and even decline in their health status. (Female FGD/Participant 5/NGH)
>
> The stress of care management for old parents could become so much that you can even transfer aggression to your husband or your children. We know how difficult they can be. Yet you have to cook, attend to the children when they need to eat or do their homework. Your husband will also need attention. I do not get angry so easily, but I have observed I am changing ever since my father started staying with us. He is old and sick. (Female FGD/Participant 2/BSH)
>
> You see, older parents complain about so many issues including waist pain, swollen legs, and stomach ache, you name it. I try to ensure they receive care, but they never tell you that it is getting any better or at least recognize your efforts. Recently, I insisted on ignoring them. (Male FGD/Participant 10/UNMC)

Caregivers' Major Impediments to Care Management for Older Adults with Illnesses

Under this theme, our result revealed caregivers' major challenges in care management for older adults with illnesses. They include the age and attitude of older adults, changing contemporary society, caregivers' financial challenges, and the effect of older adults' health status on care management.

Age and attitude of older adults

Narratives illustrate that older adults' age and attitude are important concerns for participants. With aging comes physical weakness, affecting health-related activities, including managing medications, coordinating care, and attending medical encounters. So, advancement in age comes with associated attitudinal changes which may be negative. The participants wished that their older adults would understand their predicament regarding the impact this may have on providing care management. The quotes below show how age and attitude impact older adults' care management.

> Feeding these days has not been easy owing to aging. Though we cook the food to be as soft as possible, there may be the need to mash the food or feed Papa aided with an apparatus (feeding aid). Most times, my siblings may not do this, but I must do it for him to eat and stay alive. (Female FGD/Participant 06/NGH/)
>
> Because mama finds it difficult to swallow, oftentimes when you give her drugs, you may find it underneath the bed. When you mash drugs and mix them with food, she finds it difficult to assimilate, lamenting that it is bitter. I cannot add sugar to her drugs since she is diabetic. I only wish she understands that I am becoming frustrated. (Male FGD/Participant 09/UNMC)
>
> Owing to old age, mobility has been a challenge for my mum. Recently, I bought a pooh for easy defecation. She has refused to use it but often ends up defecating before entering the convince room. This is difficult for me as I end up quarreling with her and the hospital staff. (Female FGD/Participant 11/FFH)

A male participant who was extremely vocal frightened us by saying:

> There are times when papa will tell us to call his kinsmen to conduct a departure meeting on his behalf and also prayer groups to pray for him if he does not live to experience the next day. This usually is very difficult for us as we do not know what could happen next. Sometimes, they come and nothing happens. (Male FGD/Participant 07/BSH/)

Changing Contemporary Society

From the narratives, the changing contemporary Nigerian society was indicated as an important concern in care management for older adults with illnesses. On this issue, some of the participants attributed the change to modernization in terms of the quest for education, job opportunity, adoption of the Western family system, and reduced family size. For instance, a participant after a deep sigh responded:

> Our society upholds a filial care system. Here, caregiving is perceived as an obligation that must be performed by family members. In contemporary society, however, things have changed owing to modernization; everyone wants to go to school, get a job, and live in the cities. This makes it difficult for older adults to receive adequate care management from family caregivers. (Male FGD/Participant 11/NGH/)

Another talks about the adoption of the Western family system, with a reduced family size as an outcome. In his view, the gerontology system is fading; care is concentrated on immediate nuclear family members. He emphasized that the extended family system ensures more assistance from family members. We are providing a typical quote below.

> [...] Times have changed. Though the gerontology system with family networking and decisions taken by the older kinsmen and women is cherished, most of us are not willing to abandon our families and reside in the village with older parents. The contemporary Nigerian society adopts the nuclear family system with fewer family members; a minimum of three and a maximum of four only. Concentration is on the nuclear family while the extended family system is gradually fading. (Male FGD/Participant 03 /BSH)

We discovered that some participants held the idea about the fading of traditional families, whereas other participants maintained the opinion that relegating this responsibility to paid assistants (formal caregivers) is as good as performing it. Hear this participant:

> Life is filled with numerous difficulties which must be satisfied. Care management of older adults is no longer perceived as an obligation to be performed by family members alone. Older adults are now left in their homes in the villages with paid assistants to provide them with care. This is to enable family members to perform other responsibilities. (Female FGD/Participant 01/ UNMC)

Caregivers' Financial Challenge

An important concern for participants consists in what they referred to as the rising cost in the charges of health service demand. This identified challenge transcends to an increasing responsibility for family caregivers in providing health needs of older adults and at the same time fulfilling their own family needs. Most of them have no regular income and this affects the quality of care management they receive, regular utilization of health services, and procurement of medical drugs. See some illustrative quotes.

> I desire to provide financial health assistance for my hypertensive mother, but you see, I am saddled with the responsibility of my children as my husband is late [deceased]. I don't have a regular paid income to cope with my responsibilities. So with what can I procure drugs for her? It is what I have that I can offer. It will be good if you (pointing at the researchers) tell the government to provide free health care for all aged parents. (Female FGD/Participant 03/FFH)

> We were admitted to this hospital two months ago. Papa has this illness the doctors called type 2 diabetes, which has refused to heal. Currently, I am begging the doctor to discharge us because I cannot cope with the health charges here. (Male FGD/ Participant 04/UNMC)

> In other countries, health care for older adults is given priority just like other vulnerable groups, but this is not so here. The government and healthcare sector is not prepared to function effectively. This is why our rich political leaders will always travel abroad in search of adequate healthcare services. (Male FGD/ Participant 01/UNMC)

To the next participant, it was both on financial challenge and regular health service utilization with no external support from her siblings. Hear her:

> The burden would have been less on me if my siblings were cooperating. Both our parents are alive and from time to time they fall ill. As the first daughter, I have tried to manage their health needs in this hospital but their health service bills are my problem. My siblings have abandoned everything to me. If only I can have my way to reach some charity organizations to come to my aid. (Female FGD/ Participant 06/NGH)

While lamenting economic concerns, and lack of support from government and private organizations, some participants confessed that they advocated for alternative health care options. Most of them consider the option of using non-institutional health facilities so that they do not go into debt. A typical quote can be seen below:

> […] Yes, I encourage my parents to consider the use of traditional medicine… I tell them to use local medicine within the community…because it is cheaper and better for us…more so it is made from our local tree roots and leaves…it has been used by our forefathers…thank God alternative medicine doctors are increasing [gaining importance] every day in our communities…we want to see more of them. (Male FGD/Participant 05/FFH)

Effect of Older Adults' Health Status on Care Management

According to the participants' narratives, the effect of older adults' health status on care management constitutes an important concern, one which translates to increased health care responsibility. So, the challenging health status of older adults is accompanied by an increasing number of healthcare related activities. They reported that providing care management to older adults, particularly to those with ill health, is not an easy ordeal for it takes a lot of patience, humility, endurance, and perseverance. The quotes below are personal experiences:

> My mother has been bedridden for weeks resulting from chronic illness. She cannot move out of the bed and as such defecates there. I wash her bed linen, bathe her, change her lying position, and ensure that her room is neat so as not to scare the rest of the family members and health staff. (Female FGD/Participant 09/FFH)
>
> Oftentimes, I beg my children to assist. This they will do but with disgust. We take it in turns but they always ask me how long this will last? This question I find difficult to answer though I know it will one day come to an end [she sighs in grief]. (Female FGD/Participant 12/BSH)

Caregivers' Knowledge of Geriatric Social Worker's Intervention

The knowledge of geriatric social workers' services and intervention roles were identified by some study participants. Observe this illustrative quote:

> […] Well, I think there is one social worker in this hospital, but I do not know what they can do in this situation. It will be good if these social workers can assist us in providing for older adults in poor health. A good number of them need care management. (Female FGD/Participant 05 /UNMC)

Many of the study participants do not know who geriatric social workers are and what they do. As narrated by this participant: "I don't know them and who are they?" Another participant responded: "I have heard about them but I don't know how they can help in this situation. I would suggest they should help teach young caregivers about providing humane services, especially to the aged".

Discussion

Despite the advancements in medical science and health technology, the care management of older adults has remained suboptimal. With an increasing aging population in Nigeria (UNDESA, 2020) and with older adults' vulnerability to illnesses (Mcgregor et al, 2018); care and attention to the older adults should be a priority. Just like other African countries, the Nigerian government is yet to prioritize the health needs of older adults as obtained with other vulnerable groups like children and expectant mothers (Kana et al, 2015). Given this fact, the care management of older adults is relegated to family members and this has evolved to a degree of concern. This is attributed to certain concerns including the age and attitude of older adults, changing contemporary society, and caregivers' financial challenges, among others. Though findings from our study depict that the traditional filial care of older adults remains a norm in African countries, it is gradually fading away. This evidently raises the importance of the welfare, health needs, and well-being of older adults, particularly in such a time as this. More so, it raises the concern of family caregivers and should serve as a starting point in achieving the UNDESA (2016) Sustainable Development Goal (SDG) 3: "To ensure healthy lives and promote wellbeing for all at all ages". This is particularly relevant with fading traditional filial care and with inadequate commitment from the Nigerian government. It becomes then imperative to swiftly move into action adequate intervention programs and health policies, which include the Senior Citizen Center Act (SCCA) and Senior Citizen Health Insurance Program (SCHIP) (Adebajo, 2018; Dokpesi, 2017).

In our conversations regarding health care management for older adults, people stressed the fact that the increasing age of older adults comes with a certain negative attitude. More so, these attitudes – despite their nature – must be endured, which is a clear indication that older adults' health care needs must be managed till their demise. The family members fulfill this service amidst their own need to advance across social and economic obligations. Some of the participants lamented that providing health needs for older family members – particularly those with demanding care management – requires virtues including patience, humility, endurance, and perseverance. In this present study, we discovered that the challenging health status of older adults is accompanied by increasing healthcare related activities. These activities include managing medications, coordinating care, and attending routine medical visitations among other encounters (Wolff et al, 2013). Several studies evidence the high involvement of family caregivers in the care of older adults in Nigeria (Okoye, 2012; Oluwabamide & Ebhafona, 2012). It becomes then important to note that the finding on the high involvement of caregivers could be associated with this study's theoretical framework. The Attachment theory is conceptualized as the family caregivers' uncompromising effort to continue providing for older adults' health needs (Simpson & Rholes, 2017). These needs are associated with the importance of providing for health care demands and how to manage conflicting health needs. In all, however, the worry exists that these family caregivers could in the future grow exhausted. Moreover, given the current changing orientations involving fading traditional families, Echeta & Ezeh (2017) following Olaore & Agwu (2020), observed that fulfilling healthcare demands for older adults with illnesses in Nigeria through family caregivers might be unsustainable in times to come. A need exists to advocate for external assistance, particularly in providing health care activities for older adults in the public domain. Social workers, with their skills in community mobilization and advocacy, could lead this push. Scholars can open up the conversation scientifically, and push this into the academic space.

Our findings demonstrate that because certain caregivers were concerned about financial challenges; participants were ready to adopt the option of traditional medicine as an alternative to modern medicine. It is important to note: in the current study, we discovered that since family caregivers are mostly married and are advanced in age; they are involved in decision making for older adult health needs. They also advise them on the need to engage in alternative medicine to keep them out of debt. But we are worried for those who might not have the wherewithal for alternative medicine. We see that in developed contexts, alternative medicine could be used as a treatment option – but not as an alternative to financial challenges. However, in a developing context (Schnabel et al, 2014), pulling together people with common medical knowledge to share their experiences will certainly help achieve medical advancement and social workers are key to galvanizing such support services. Social workers collaborate with other medical and non-medical professionals who could help them navigate work and manage health challenges that impact care for older adults. This is achieved by playing meditating, counseling, referral, and resource mobilization roles, including at community levels and where the older adults reside. Again, they can advocate with the collaboration of available Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) on the need for the Nigerian government to introduce various community bases, health services, and programs to support older adults in the country. Some of these services include nursing homes, senior centers, friendly visiting programs, adult protective services, hospitals-at-home, and most importantly, free health care policy for all older adults as has been suggested by Dokpesi (2017) and Okoye (2013).

In the course of this study, the research also revealed that family caregivers who provide care management to older adults afflicted with chronic illnesses themselves experience physical and psychological burdens linked to several adverse physical health effects – including feelings of guilt, stress, and difficulties – and are most likely to provide poor care management. It was also found that providing this activity affects the sense of personal dissatisfaction which may compound the low quality of life among care providers, as has been reported by Faronbi and Olagun (2017), and Wojujutari (2016). A specific area of this study encourages geriatric social work practice, particularly for institutional healthcare in various communities. These professionals can advocate and intensify health education during early and regular health facility visits. They could equally organize health programs, including home out-patient care, and healthcare visits, among various healthcare services. Additionally, counseling and discourse sections for support networks of family caregivers and their care recipients draw on follow-up programs and encourage them to continue to provide care needs. This will fill the gap in the shortage of various unavailable, but needed, health services.

Regarding other studies that advocated for the introduction of institutionalized care for older adults in Nigeria (Faronbi & Olagun, 2017; Okoye & Asa, 2011; Oluwabamide & Ebhafona, 2012), our study highlights that participants are in dire need of assistance, particularly knowledgeable health experts who can assist in providing for older adults' health needs (Oluwabamide & Ebhafona, 2012). From our interaction, we observed that the participants were less reliant on government welfare support services. However, they suggested that consideration should be given to older adult health needs as provided to other vulnerable groups. This is why we asked about their knowledge of geriatric health workers. However, very few of them are aware of their assistance; the majority of those in the missionary hospitals had little or no knowledge of them. In this regard, we are of the view that geriatric social workers, i.e., trained professionals, should be engaged by government and mission health institutions to champion human welfare and more closely engage with family caregivers who provide care to older adults in Nigeria. More so, poor visibility and non-professionalization of the social work profession in Nigeria remains a challenge for social workers aiming to collaborate with Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs), in order to provide care management for older adults' healthy wellbeing.

Indeed, caring for older adults could be difficult, challenging, and so demanding (Tanyi et al., 2018). This pertains especially when the care recipient is diagnosed with a chronic illness (Wolff et al, 2020). We revealed that the participants struggle to cope with this demand, reaching the decision to employ young paid assistants. Within this backdrop we argue that the health care management of older adults should be managed till their death. Though some participants narrated negative perceptions that people have of older adults, the majority believed that providing care till death has divine sanction and the blessing from parents, as well. Therefore, it is imperative to provide strategies on how to make care management of older adults with illnesses less difficult for caregivers. In our conversations, we stressed the need not just for their inclusion in the health education curriculum but for public health education on providing care to older adults. This could be disseminated via various social media with geriatric social workers, CSO, and NGOs taking the lead.

Strengths and Limitations

The researchers acknowledge some limitations in this study. First, the opinions of older adults were not ascertained to determine whether they themselves perceived the care management provided for them as optimal or suboptimal. Second, the family caregivers in this study were drawn from a particular locality. These limitations notwithstanding, we believe that this study's findings remain valid.

Conclusion, Implications and Future Directions

Equity and equality are core concerns in the Sustainable Development Goals (Together2030, 2019). Older adults constitute a vulnerable group, one whose health needs should be considered with utmost importance, especially as aging sets in. Family caregivers' concern for older adults' care management shows the level of attachment bond that exists among family members. However, the attachment bond comes with many attendant consequences that are less discussed, but still managed. The management of this role not only exposes older adults' vulnerability to the risk of utilizing traditional medicine as an alternative, but also exposes the neglect of older adults and the social support services meant for them. This is the gap CSOs and NGOs tend to fill by proffering interventions to older adults and their caregivers with the collaboration of geriatric social workers. Although participants in this study demonstrated less reliance on government involvement in older adults' welfare, we advocate that the Nigerian government – like other high-income countries – should recognize geriatric social workers, using existing primary healthcare institutions in various zones, established to attend to the health needs of older adults and the health challenges of caregivers, particularly in Nsukka.

Perhaps in a future study the need will arise to choose a more representative sample that will include participants from other senatorial zones of Enugu State. The researchers, therefore, recommend a similar study that would capture older adults' opinions on care management provided by their family caregivers. More research on geriatric social work practice is paramount in Nigeria.

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Author contributions

Jacinta Chibuzor ENE: conceptualization, methodology, funding acquisition, investigation, project administration, data management, interpretation, writing original draft, writing review and editing.

Ngozi Eucharia CHUKWU: conceptualization, project administration, data management, interpretation, supervision, writing review and editing.

Henry Tochukwu AJIBO: design, formal analysis, interpretation, writing review and editing.

All authors gave their final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of interest statement

The authors have no conflicts of interest to disclose. The researchers acknowledged that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

Ethical statement

This manuscript is the authors' original work.

The study was reviewed and approved by the Nsukka General Hospital (NGH), and the Strategic Contacts Ethics and Publications (STRACEP) of the University of Nigeria, Nsukka Campus, Enugu State with the clearance code: UNNEC/05/0021/Ph.D./SW/10-ST08/0024.

All participants engaged in the research voluntarily and anonymously, and provided their written informed consent to participate in this study.

Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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RESEARCH ARTICLE

Development and Validation Regarding the Lithuanian Version of the Positive and Negative Affect Schedule (PANAS-X)

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Introduction: The Positive and Negative Affect Schedule (PANAS-X), a widely used and accepted instrument developed to assess multidimensional emotional experience, is used in various social and clinical settings. It has an underlying hierarchical structure of the higher order for the positive affect (PA) and negative affect (NA), and the lower order discrete affect scales that describe specific emotions; however, very little is known about the psychometric properties that this version of the instrument has.Aims: This study aims to investigate the psychometric properties in the Lithuanian version of PANAS-X, including the analysis for the factor structure of the higher and lower order scales, reliability, and validity characteristics.

Methods: The study includes a demographically representative Lithuanian sample (N = 322, with an average age of 37.34, SD = 12.50). For the psychometric evaluation of the PANAS-X, researchers performed item analysis, reliability, convergent-discriminant validity, and confirmatory factor analysis.

Results: The confirmatory factor analysis results support the basic structure of the PANAS-X PA, NA, and the discrete affect scales, although some scales were modified according to the item characteristics. The convergent validity is confirmed by the relations of the PA and NA as well as the discrete affect scales to the related constructs, which include personality traits, general, and psychological well-being.

Conclusions: The Lithuanian version of PANAS-X can be considered a reliable and valid instrument for structuring positive, negative, and specific emotional experiences.

Keywords: positive and negative affect, emotions, PANAS-X, psychometric properties, Lithuanian adaptation.

Introduction

One of the most widely accepted self-report measures for emotions is the Positive and Negative Affect Schedule (PANAS). Developed by Watson, Clark, and Tellegen (1988), its purpose is to assess two general positive and negative dimensions of affect. The positive affect (PA) refers to the pleasant experience related to such descriptors as active, enthusiastic, or happy, while the negative affect (NA) represents aversive feelings such as shame or lethargy. Later, Watson and Clark (1999) proposed the Positive and Negative Affect Schedule – Expanded Form (PANAS-X) – which was a product of investigating the hierarchical structure of emotional experience. The two-factor PANAS model was supplemented by a hierarchical taxonomic scheme recognised in the same data. This scheme proposes that two broad higher-order dimensions reflecting the valence of emotion are each composed of several correlated yet ultimately distinguishable scales of the discrete affect.

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The PA and NA account for most of the mood descriptors' variance (Watson & Tellegen, 1985) and have been consistently validated in different cultures and languages, such as English (Crawford & Henry, 2014), German (Krohne et al., 1996), Korean (Lim et al., 2010), Serbian (Mihić et al., 2014), Italian (Terraciano et al., 2003), Japanese (Sato & Yasuda, 2001). The instrument is also adapted to different demographics (Merz et al., 2013; Ortuño-Sierra et al., 2019), vocational (Dahiya & Rangnekar, 2019) or clinical samples (Serafini et al., 2016). The measure's utility is flexible in terms of a relevant time frame for the described emotional state (Watson & Clark, 1999). It can also serve as a screening tool for mood-related symptoms (Cohen et al., 2017) and is useful for many healthcare professionals in monitoring mood fluctuations. Recent research involving PANAS-X contributes to the exploration of the more complex emotional structure and content in affective and other disorders (Domaradzka & Fajkowska, 2019; Watson & Stanton, 2019). Despite the wide usage of PANAS-X, few studies investigate the hierarchical structure of the construct provided by this measure, which include Polish (Fajkowska & Marszał-Wiśniewska, 2009), Portuguese (Costa et al., 2020) amd Romanian (Cotigă, 2012) populations.

The emotional experience measurement situation in Lithuania remains also problematic regarding not only the specific, but also the broader, dimensions of affect. There is a lack of valid Lithuanian instruments with a theoretical foundation that could be used to differentiate the multidimensional emotional experience. Even though Lithuanian scholars have made a few attempts to apply PANAS in order to measure positive and negative emotionality (Maslenikova & Bulotaitė, 2013; Šilinskas & Žukauskienė, 2004;), yet scarce, if any, research has been carried out on the psychometric properties and the inner two-factor structure within the construct of affect of the Lithuanian PANAS has not been confirmed, which is essential to consider the cultural and linguistic aspects.

Studies suggest that Lithuanians might have specific semantic expressions for the emotional experiences. For example, a Big Five model confirmation study involving Lithuanian-speakers revealed the specific factor structure that includes such dimensions as "mental-toughness" or "intellect" (Livaniene & De Raad, 2016), which can reflect mental abilities as important criteria for the inner experience. Lithuanians also tend to use more words reflecting negative experiences and describe themselves more negatively than positively. In studies conducted to determine which features Lithuanians typically use to describe their national character, the most mentioned characteristics are related to anger, jealousy, selfishness, difficulties in communicating, indifference, unreliability (Čiužas & Ratkevičienė, 2005), and diligence or envy (Papaurėlytė-Klovienė, 2009). Lithuanians are also often viewed as a quite individualistic nation, which can be associated with specific problems of the mental health field, such as having one of the highest rates of suicides in Europe (World Health Organization, 2019), or the stigma of mental health problems in Lithuanian culture being still very relevant in terms of seeking help, compared to more Western societies (Chambers et al., 2010; Endriulaitienė et al., 2019). These can all possibly contribute to the general perception of negative emotions. Considering the notion that the prevailing emotional states and their interrelations could be specific to this population, it is important to consider whether the model of emotional experiences presented by previous authors would correspond to the description of emotions regarding Lithuanian-speakers. The direct translation proves insufficient for a more detailed differentiation of the discrete individual emotional states; therefore, it should be supplemented with a selection of the words most relevant to the emotional experience. Selecting items based on reliability and validity characteristics could improve the quality of future research in this area. Overall, cultural and linguistic features should be considered both in the process of translation and the analysis of the relations of constructs.

To respond to these methodological issues for future research on emotional experiences in Lithuania, the current study focuses on providing an adapted Lithuanian version of PANAS-X and investigating the psychometric properties of the PA and NA model with the underlying composition for the discrete emotional states. To achieve this goal, this study involves examining the construct validity using the confirmatory factor analysis (CFA) by exploring the internal structure of the PANAS-X instrument and its hierarchical organization for the lower order specific affect, as well as the higher order PA and NA; examining the internal consistency characteristics of the Lithuanian PANAS-X using composite reliability estimates; and exploring the convergent validity aiming to determine the relations of PANAS-X subscales with the related constructs.

Taking into account a lack of the instruments validated for measuring the emotional experience in the Lithuanian population, in order to verify the convergent validity of this construct, other tools measuring constructs related to PA and NA may be used. Therefore, the relations with personality dimensions, emotional aspects of psychological well-being, and general psychological wellness have been examined in this study. Positive and negative emotionality stands closely associated with such personality traits as extraversion or neuroticism (Watson & Clark, 1992), which altogether are known to be related to well-being and happiness (Costa & McCrae, 1980). Optimism or negative emotionality subscales of psychological well-being may also broadly reflect the PA and NA dimensions, alongside the general descriptor of psychological wellness.

Table 1. The Main Demographic Characteristics of the Study Sample

Age Group		18–24 (*n* = 52)	25–34 (*n* = 105)	35–44 (*n* = 69)	45–54 (*n* = 54)	55–64 (*n* = 42)	Total (*N* = 322)
Gender	Men, *n* (%)	26 (50.0)	57 (54.29)	37 (53.62)	20 (37.04)	14 (33.33)	154 (47.83)
	Women, *n* (%)	26 (50.0)	48 (45.71)	32 (46.38)	34 (62.96)	28 (66.67)	168 (52.17)
Place of Residence	City (densely populated areas), *n* (%)	23 (44.23)	75 (71.43)	43 (62.32)	24 (44.44)	17 (40.48)	182 (56.52)
	Town (semi-dense areas), *n* (%)	17 (32.69)	21 (20.0)	21 (30.43)	23 (42.59)	19 (45.24)	101 (31.37)
	Rural areas, *n* (%)	12 (23.08)	9 (8.57)	5 (7.25)	7 (12.96)	6 (14.28)	39 (12.11)
Level of Education	Primary, lower secondary, *n* (%)	3 (5.77)	0 (0)	1 (1.45)	0 (0)	0 (0)	4 (1.25)
	Upper secondary, vocational, *n* (%)	37 (71.15)	16 (15.24)	13 (18.84)	8 (14.81)	10 (24.39)	84 (26.17)
	Higher, *n* (%)	12 (23.08)	89 (84.76)	55 (79.71)	46 (85.19)	31 (75.61)	233 (72.58)

Methods

Participants and Procedures

The study included 322 individuals (mean age: 37.34, *SD* = 12.50; 154 men, 47.83%; 168 women, 52.17%) who participated voluntarily, signing informed consent forms approved by the Research Ethics Committee of the Institute of Psychology in Vilnius University, and completed the final translated version of the Lithuanian PANAS-X along with the instruments for eploring the convergent validity. The sample was composed to represent the demographic situation of the Lithuanian population as accurately as possible. Lithuania's general demographic data was retrieved from Statistics Lithuania (2012). All the participants were divided into four age groups, taking into account Lithuanian demographic characteristics of age, gender, place of residence, and education. Samples of the demographic characteristics are provided in Table 1.

Measures

The Lithuanian Positive and Negative Affect Schedule-Expanded Version (PANAS-X)

The original PANAS-X (Watson & Clark, 1999) is the measure of the affective experience which can be described using the higher-order PA and NA scales and the discrete emotional states with a total number of 60 items. In all, 11 different emotional content scales represent the negative affect (fear, sadness, guilt, hostility), the positive affect (joviality, self-assurance, attentiveness), and other states (shyness, fatigue, serenity, surprise). These scales represent factors that repeatedly have emerged in structural analyses (Watson & Clark, 1999). The authors of PANAS-X have given permission to translate and adapt the instrument to the Lithuanian population.

Following the work of Watson and Clark (1999), developing the Lithuanian PANAS-X version included several stages. The first stage was focused on the translation of items according to the cultural-adaptation guidelines (Beaton et al., 2000), and the "de-centering" process (Hambleton & Bollwark, 1991). It involved modifying items during the translation to achieve the most possible equivalence between the original and the translated terms. Three experts provided the English translation (i.e., an English native speaker, a Lithuanian linguistic specialist, and an experienced clinical psychologist), and the authors reached a final list via a general comparison of the translations. As the preliminary analysis revealed that some of the words did not have a direct translation (e.g., *"scornful", "jittery", "shaky"*), therefore a selection of the synonyms most relevant to the essence of each category was made. Some items that also did not have any closely related synonyms were dismissed (e.g., *"excited", "blue", "upset"*), leading to the addition of the new items that fit into the given category (e.g., several terms that represent the category of shyness like *"sheepish"* or *"timid"*, are all directly translatable to Lithuanian as *"shy"*. This category, therefore, was supplemented by similar category descriptors as *"modest"*: the term *"blue"* was replaced by the closest term *"melancholic"*). It appeared that the most variants of possible synonyms stood in the Negative Affect category (e.g., *"ashamed"* could be represented as *"susigėdęs", "sugėdintas", "jaučiantis gėdą"; "loathing" - "nekenčiantis", "jaučiantis panieką", "pasibjaurėjęs"*). Ultimately, a pilot version of 100 items was compiled. This version of the instrument was administered to 100 participants to select the best-suited previously added synonyms for the words that had no direct translation. The respondents were asked to rate the extent to which they had experienced each affect during the past week. The responses were indicated on a 5-point scale labeled *"not at all", "little", "moderately", "quite a bit"*, and *"extremely".*

To identify which descriptors should be revised or removed, the items were analysed based on the classical test theory (Penfield, 2013). This process included the analysis of the item's discriminative properties (corrected item-total correlation, Cronbach's alpha, and alpha if item is deleted), and the difficulty (the mean of the responses). Items or the items' synonyms with poorer psychometric characteristics were dismissed. Also, following the original authors (Watson & Clark, 1999), the specification remained that the terms should not have a secondary loading of .25 or greater in either analysis. The revised list of the Lithuanian PANAS-X items included 65 descriptors and was administered to the current study's participants, provided with the same instructions as in the pilot study, in order to prepare the final reliable and valid version of the instrument.

The Lithuanian Psychological Well-Being Scale (PWBS)

Psychological well-being is a broad construct that reflects a subjective evaluation of an individual's life in general or in certain domains (Ryff & Keyes, 1995). Among several subscales, the Lithuanian PWBS (Bagdonas et al., 2013) includes The Negative Emotionality and Optimism / Control subscales that generally reflect positive and negative subjective experiences of emotions. The negative emotionality subscale reveals a person's overall experience of negative emotions (Kairys et al., 2013). The Optimism / Control subscale overall covers the positive dimension of emotionality. Both subscales consisted of a total of 18 items, each item can be rated from 1 to 5 on a Likert-type scale. In this study, Cronbach's α for the Optimism/Control subscale is .86 (M = 28.21, SD = 6.69), the Negative Emotionality Cronbach's α = .89 (M = 22.48, SD = 7.43). The authors of the PWB Scale gave the permission to use and include in this study only the two relevant subscales.

The Big Five Inventory (BFI)

The Big Five Inventory (BFI) (John et al., 1999; John et al., 2008) is a multidimensional personality inventory based on the Big Five theory (Goldberg, 1993) that reflects basic personality traits. It consists of a 44 item-self-report measure designed to assess Neuroticism, Extraversion, Openness, Conscientiousness, and Agreeableness; each item can be rated from 1 to 5 on the Likert scale. The Lithuanian version of the inventory (Genevičiūtė-Janonienė & Endriulaitienė, 2008) is accessible through the official site of the Berkeley University Lab. In the present study, the estimates of Cronbach‘s α are .75 (Extraversion; M = 3.27, SD = 0.66); .70 (Agreeableness; M = 3.53, SD = 0.56); .68 (Conscientiousness; M = 3.47, SD = 0.64); .74 (Neuroticism; M = 3.07, SD = 0.81); and .52 (Openness; M = 3.40, SD = 0.57).

WHO-5

The World Health Organisation-Five Well-Being Index (WHO-5) (World Health Organization, 1998), a short self-reported unidimensional measure of current mental wellbeing, is a construct closely related to the overall experienced emotional attitude towards one's life. WHO-5 can be seen as the general indicator of a positive or negative feeling about one's being. The WHO-5 has been found to have adequate validity in screening for depression and measuring outcomes in clinical trials, therefore it is used in the Lithuanian samples (Psychiatric Research Unit, WHO Collaborating Centre in Mental Health, 1999). The range of total WHO-5 scores can fluctuate between 0 and 100. In our study, on the average, participants scored 49.29 (SD = 20.26); Cronbach's α = .87.

Data Analysis

Descriptive statistics such as correlations between the variables were calculated using the IBM SPSS Statistics version 23, the properties of reliability and CFA were conducted using the Mplus (version 8.4) (Muthén & Muthén, 2017). There were no missing data on any measure. The model fit was assessed using the chi-square test, the comparative fit index (CFI), the goodness of fit index, the Tucker Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual, using the provided guidelines of the appropriate indexes (Hu & Bentler, 1995). Some disagreements arise on what estimator should be employed when performing CFA in the case of PANAS-X. The problem may arise should the score of the PANAS-X items deviate from normality, which can be quite probable, especially regarding strong emotions. Maximum likelihood (ML) assumes multinormal distribution; so as a result, it could affect the significance of the ML tests. Other methods can address this issue involving asymmetrical distribution of categorical data by not assuming normality as diagonally weighted least squares (DWLS) (e.g., Terracciano et al., 2003); however, the model results after using DWSL can lead to a tendency to smaller RMSEA and larger CFI as well as TLI index values, which can result in errors of model-fit (Xia & Yang, 2018); therefore, when using DWLS, conventional cut-offs of model fit indices should be reviewed. Since it is suggested to treat variables with five or more categories as continuous (Rhemtulla et al., 2012), in this case, ML would be sensitive to asymmetric category thresholds, especially when the sample size remains considerably small. Thus, in this study, the CFA models were evaluated using the maximum likelihood (ML) method as estimator.

Following the criterion proposed by Fornell and Larker (1981), the discriminant properties of the construct were examined by computing the average variance extracted (AVE), the properties of internal consistency in our study were assessed by providing Cronbach's alpha coefficients and composite reliabilities (CR). CR as the indicator of the shared variance among the observed variables is useful in the process of developing a new instrument (Raykov & Grayson, 2003); especially when using alpha, a risk exists of being biased, as it depends on a number of parameter characteristics for a measurement. CR calculated in conjunction with structural equation modelling allows considering both types of error and is essential for measuring the construct on the abstract level. AVE estimates the degree of variance accounted for by a construct in relation to the level due to measurement error (Fornell & Larcker, 1981).

Results

The Construct Validity of the Lithuanian PANAS-X

Discrete Emotions – Lower order scales

After eliminating some synonyms with poor results during the item analysis (e.g., the item *"nervous"* had several alternatives, among which the best suited was *"nerimaujantis"*), 54 items were used to verify the model of lower-order distinct emotions. The CFA discrete affect scales findings of the original PANAS-X model revealed that statistics associated with it were χ^2 (1169) = 2665.45, $p < .001$; RMSEA = 0.06, 90% CI [.06, .66]; CFI = 0.86; TLI = 0.84; SRMR = 0.07, which according to Hair et al. (2010), led to unsatisfactory model fit results. Changes were made after examining single item characteristics and model-fit characteristics, which included the scales of Sadness (*"melancholic",* as the alternative to *"blue"*, demonstrated poor results and was removed), Fear (*"jittery"* and *"shaky"* were respectively represented by *"įsitempęs"* and *"netvirtas"*), and Hostility. Emotionally strong terms appeared not to be a common descriptor of the participants' emotional states. For example, the term *"disgusted"* was not a good marker of the Hostility subscale. The term has several synonyms in Lithuanian that remain substantially equivalent (*"pasišlykštėjęs"* and *"pasibjaurėjęs"*); therefore, the word has been selected according to the model-fit and reliability characteristics. Other changes were oriented toward the positive affective states, which were more difficult to differentiate. Some items representing Joviality and Self-Assurance categories were highly interrelated; therefore, the items with the strongest intercorrelations were replaced by more distinguishable markers consistent with the given category (e.g., the item *"fearless"*-*"bebaimis"* was replaced by the word *"brave"*-*"drąsus"*; due to its high correlation, *"determined"* - *"užtikrintas"* was moved from Attentiveness to Self-Assurance). The corrected model of the discrete affect states consisted of 51 descriptors and the provided model fit statistics were χ^2 (1061) = 1908.007, RMSEA = 0.05, 90% CI [.04, .50]; CFI = 0.92; TLI = 0.91; SRMR = 0.05, which indicated the model's acceptability within the recommended criteria (Hair et al., 2010). Sufficiently large factor scores of each item were obtained as shown in Table 2.

Positive and Negative Affect – Higher order scales

The CFA findings of the original PA and NA scales in the Lithuanian sample revealed that the associated statistics stood at χ^2 (134) = 606.40, RMSEA = 0.09, 90% CI [.08, .10]; CFI = 0.87; TLI = 0.85; SRMR = 0.06; therefore, the model was not acceptable. The changes included the added correlation between the errors of *"atkaklus"* (the closest translation is *"determined"*) and *"ryžtingas" ("decisive").* Also, *"budrus" ("alert")* was replaced by the more fitting item *"atidus"* (possible translation *"focused"*). The results of the corrected model provided statistics that came to χ^2 (141) = 279.53, RMSEA = 0.05, 90% CI [.04, .60]; CFI = 0.95; TLI = 0.94; SRMR = 0.05 (Table 3), which can be considered satisfactory with relatively large factor scores for each item.

Table 2. Standardized Factor Loadings for the Best-Fitting Model of the Specific Affect Scales of the Lithuanian PANAS-X

Subscale *(Lithuanian)*	Descriptor *(Lithuanian)*	M *(SD)*	Standardized factor loading
Basic Negative Emotion Scales			
Fear *(Baimė)*	afraid *(bijantis)*	2.07 (1.09)	.66
	scared *(išsigandęs)*	1.76 (1.08)	.75
	nervous *(nerimaujantis)*	2.78 (1.19)	.77
	jittery *(įsitempęs)**	2.68 (1.16)	.73
	shaky *(netvirtas)**	2.26 (1.16)	.78
	frightened *(išgąsdintas)*	1.61 (0.96)	.62
Hostility *(Priešiškumas)*	angry *(piktas)*	2.34 (1.21)	.82
	irritable *(susierzinęs)*	2.65 (1.21)	.84
	scornful *(pasipiktinęs)**	2.38 (1.19)	.79
	hostile *(priešiškas)*	2.10 (1.12)	.72
	loathing *(jaučiantis neapykantą)*	1.87 (1.15)	.70
	disgusted *(pasibjaurėjęs)*	1.58 (0.98)	.63
Guilt *(Kaltė)*	disgusted with self *(pasibjaurėjęs savimi)*	1.73 (1.14)	.77
	guilty *(kaltas)*	1.96 (1.09)	.77
	angry at self *(piktas ant savęs)*	2.16 (1.21)	.85
	ashamed *(jaučiantis gėdą)*	1.66 (1.02)	.70
	dissatisfied with self *(nepatenkintas savimi)*	2.33 (1.23)	.87
Sadness *(Liūdesys)*	sad *(liūdnas)*	2.47 (1.19)	.87
	downhearted *(nusiminęs)*	2.37 (1.17)	.87
	lonely *(vienišas)*	2.16 (1.32)	.76
	alone *(vienas)*	2.22 (1.32)	.65
Basic Positive Emotion Scales			
Joviality *(Gyvybingumas)*	joyful *(džiugus)*	3.07 (1.02)	.74
	merry *(linksmas)***	3.18 (1.10)	.86
	cheerful *(džiaugsmingas)*	3.18 (1.05)	.84
	happy *(laimingas)*	3.24 (1.08)	.87
	enthusiastic *(entuziastingas)*	2.71 (1.10)	.42
	lively *(gyvybingas)*	2.92 (1.00)	.46
Self-Assurance *(Užtikintumas)*	decisive *(ryžtingas)***	2.80 (1.05)	.79
	bold *(užtikrintas)**	2.86 (1.05)	.83
	daring *(drįstantis)*	2.86 (1.05)	.67
	fearless *(drąsus)**	2.86 (1.05)	.74
	confident *(pasikliaujantis savimi)*	3.17 (1.02)	.74
	strong *(stiprus)*	2.99 (1.10)	.66
Attentiveness *(Dėmesingumas)*	attentive *(dėmesingas)*	3.15 (1.00)	.82
	concentrating *(susikaupęs)*	3.06 (1.04)	.80
	alert *(atidus)**	3.30 (1.06)	.82
	determined *(atkaklus)**	3.09 (1.04)	.38
Other Affective States			
Shyness *(Drovumas)*	shy *(drovus)*	2.03 (1.00)	.56
	diffident *(nepasitikintis savimi)***	2.17 (1.15)	.90
	bashful *(nedrąsus)**	1.98 (1.00)	.69
	modest *(kuklus)***	2.40 (1.04)	.48
Fatigue *(Nuovargis)*	drowsy *(apsnūdęs)*	2.54 (1.18)	.86
	tired *(pavargęs)*	3.03 (1.19)	.62
	exhausted *(išsekęs)***	2.47 (1.27)	.76
	sleepy *(mieguistas)*	2.63 (1.19)	.90
Serenity *(Ramybė)*	relaxed *(atsipalaidavęs)*	2.68 (1.06)	.81
	at ease *(atsipūtęs)*	2.63 (1.15)	.69
	calm *(ramus)*	3.21 (1.01)	.71
Surprise *(Nuostaba)*	surprised *(nustebęs)*	2.07 (1.01)	.68
	astonished *(priblokštas)*	1.70 (0.98)	.55
	amazed *(nustebintas)*	2.15 (0.99)	.71

Note. * an equivalent term or a synonym; ** a new term.

Table 3. Standardized Factor Loadings for the Best-Fitting PA and NA Scale Model's of the Lithuanian PANAS-X

Subscale	Descriptor *(Lithuanian)*	Standardized factor loading
Negative Affect	afraid *(bijantis)*	.60
	frightened *(išgąsdintas)*	.56
	hostile *(priešiškas)*	.53
	irritable *(susierzinęs)*	.63
	guilty *(kaltas)*	.74
	ashamed *(jaučiantis gėdą)*	.59
	upset *(prislėgtas)**	.83
	distressed *(nelaimingas)**	.84
	nervous *(nerimaujantis)*	.71
	jittery *(įsitempęs)**	.64
Positive Affect	active *(aktyvus)*	.77
	determined *(atkaklus)**	.66
	focused *(atidus)***	.60
	decisive *(ryžtingas)***	.78
	enthusiastic *(entuziastingas)*	.80
	inspired *(įkvėptas)*	.66
	interested *(susidomėjęs)*	.59
	proud *(besididžiuojantis savimi)*	.60
	strong *(stiprus)*	.62

Note. * an equivalent term or a synonym; ** a new term.

Table 4. Composite Reliabilities (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), Average Shared Variance (ASV) for the Lower and Higher Order Scales

Subscale	CR	AVE	MSV	ASV
Fear	.83	.50	.52	.27
Hostility	.88	.61	.48	.20
Guilt	.90	.32	.45	.24
Sadness	.87	.63	.46	.25
Joviality	.92	.30	.48	.19
Self-Assurance	.88	.35	.44	.15
Attentiveness	.86	.30	.40	.12
Serenity	.78	.36	.42	.14
Shyness	.80	.37	.40	.15
Fatigue	.88	.37	.40	.17
Surprise	.69	.37	.14	.06
General Positive Affect	.89	.48	.07	.01
General Negative Affect	.90	.49	.07	.01

Reliability and Discriminant Validity

The values of internal consistency are reflected by Cronbach's alpha coefficients, which for the discrete affect scales were .87 (Fear), .87 (Hostility), .89 (Guilt), .88 (Sadness), .91(Joviality), .89 (Self-Assurance), .85 (Attentiveness), .82 (Shyness), .88 (Fatigue), .78 (Serenity), and .63 (Surprise). As for the Positive and Negative Affect scales, the Cronbach's alphas were .89 (PA) and .90 (NA). All values indicate satisfactory internal consistency, with only the scale of Surprise having a relatively lower coefficient, although it is important to note that the scale consists of only three items.

The Composite Reliability (CR) estimates were computed, which are provided in Table 4. All CRs fall within the range of .69 to .92 for the specific affect scales and .89 to .90 respectively for the General Positive Affect and Negative Affect Scales. The CR measures of the lower and higher-order scales exceed the generally suggested threshold of .60 (Hair et al., 2010) which indicates proper reliability characteristics.

The discriminant validity measures are reported in Table 4. The estimates of AVE revealed that some of the distinct affect scales were not satisfactory according to the recommended threshold values (AVE > .50; Hair et al., 2010). The values of maximum shared variance (MSV) and average shared variance (ASV) for the PA and NA scales provided in Table 4 demonstrated proper characteristics (MSV < AVE; ASV < AVE; Hair et al., 2010). The discriminative properties of specific affects were questionable, as the square root of the AVE should be greater than any other correlation between the latent variables (Fornell & Larcker, 1981). As seen in Table 5, specific affect scales had relatively strong intercorrelations, especially among the basic negative emotions.

Overall, the results have shown that the Lithuanian PANAS-X serves as an essentially reliable and valid instrument except for the discriminative properties of some lower order scales.

Table 5. Intercorrelations of the Specific Affect, the PA and NA Scales

Subscale	Fear	Hostility	Guilt	Sadness	Joviality	Self-Assurance	Attentive-ness	Serenity	Shyness	Fatigue	Surprise	GeneralPA	GeneralNA
Fear	(.71)												
Hostility	.69**	(.78)											
Guilt	.72**	.64**	(.56)										
Sadness	.68**	.64**	.67**	(.79)									
Joviality	−.31**	−.24**	−.33**	−.44**	(.55)								
Self-Assurance	−.21**	−.09	−.28**	−.25**	.69**	(.59)							
Attentiveness	−.13**	−.14*	−.23**	−.20**	.56**	.66**	(.55)						
Serenity	−.40**	−.22**	−.28**	−.32**	.63**	.50**	.38**	(.60)					
Shyness	.65**	.40**	.60**	.49**	−.22**	−.21**	−.05	−.23**	(.61)				
Fatigue	.63**	.59**	.54**	.56**	−.20**	−.14*	−.11*	.36**	.36**	(.61)			
Surprise	.26**	.25**	.06	.09	.35**	.31**	.38**	.14*	.14*	.18**	(.61)		
General PA	−.22**	−.14**	−.28**	−.30**	.81**	.87**	.79**	.54**	−.15**	−.18**	.40**	(.70)	
General NA	.91**	.81**	.83**	.80**	−.39**	−.24**	−.19**	−.40**	.61**	.66**	.20**	−.27**	(.70)

Note. *p<.050; **p<.001. Correlations ≥ |.30| are in bold. The diagonal elements shown in parentheses represent the square root of the average variance extracted (AVE) and the other elements are the correlations among constructs.

Convergent Validity

The convergent and discriminant pattern can be recognized in identifying the relations with personality traits and general well-being as shown in Table 6. Most of the significant relations of PANAS-X can be found within the WHO-5 and BFI-Neuroticism subscale. As expected, the PANAS-X subscales representing negative emotionality stood significantly negatively related to WHO-5 and BFI-Extraversion, and positively related to BFI- Neuroticism, which marked negative emotionality patterns, while the positive affect PANAS-X subscales demonstrated the reverse results, which reflected positive emotionality. The general PA and NA scales reflected similar results to those of the corresponding lower order scales. In general, the relations of higher and lower order scales of the Lithuanian PANAS-X and other related constructs show the expected tendencies regarding the convergent validity of the instrument.

Discussion

The purpose of this study was to investigate the psychometric properties of the PANAS-X version for the Lithuanian population, which was the first attempt to provide any of the adapted versions of this instrument in Lithuania. In general, with some modifications, the results of the confirmatory factor analysis were similar to those reported in the original (Watson & Clark, 1999). The PANAS-X scales loaded on two separate and internally consistent negatively correlated factors that were interpretable as PA and NA, as well as the distinct affect scales. The evidence provided in this article confirmed that the Lithuanian PANAS-X can be used to examine the valence of emotional experience and the underlying specific emotions.

The Construct Validity of the Higher and Lower Order Affect Scales

The analysis mainly supported the structure of the PANAS-X lower order distinct affect and the higher order PA and NA scales, although the final Lithuanian PANAS-X version required some changes.

The modifications regarding the issues of translation firstly included the lower order scales and led to some inconsistencies compared to the original. In the case of Fear and Shyness, choosing among several equivalent

Table 6. Correlations of the Specific Affect, the PA and NA Scales, and the Related Constructs

Subscale	WHO-5	PWBS-O/C	PWBS-NE	BFI-Extra-version	BFI-Agreebleness	BFI-Conscien-stious-ness	BFI-Neuroticism	BFI-Openness
Fear	–.47**	–.40*	.68**	–.25**	–.19**	–.25**	.55**	.17**
Hostility	–.37**	–.21*	.65**	–.19**	–.41**	–.22**	.51**	.09
Guilt	–.40**	–.33	.60**	–.29**	–.27**	–.36**	.57**	.07
Sadness	–.48**	–.19*	.74**	–.24**	–.26**	–.25**	.54**	.12*
Joviality	.72**	.39*	–.33**	.50**	.29**	.22**	–.42**	.19**
Self-Assurance	.61**	.51**	–.04	.48**	.21**	.30**	–.45**	.25**
Attentive-ness	.48**	.37*	–.00	.26**	.25**	.44**	–.32**	.21**
Serenity	.62**	.36	–.14*	.20**	.15*	.02	–.44**	.02
Shyness	–.32**	–.25**	.53**	–.40**	–.10	–.19**	.49**	.06
Fatigue	–.40**	–.25**	.53**	–.17**	–.12*	–.22**	.35**	.08
Surprise	.12*	.10	.03	.19**	.09	.15*	–.03	.20**
General PA	.71**	.43*	–.10	.48**	.26**	.33**	–.42**	.35**
General NA	–.53**	–.30**	.78**	–.27**	–.30**	–.30**	.62**	.15**

Note. *$p<.050$; **$p<.001$. Correlations ≥ |.30| are in bold. PWBS-O/C – Lithuanian Psychological Well Being Scale-Optimism/Control subscale; PWBS-NE – Lithuanian Psychological Well Being Scale-Negative Emotionality subscale; BFI – Big Five Inventory.

Lithuanian fear markers as *"jittery"* or *"shaky"* was complicated due to many possible synonyms. The problem regarding Shyness was the lack of possible translatable items; therefore, this scale's scope of meaning was broadened by descriptors like *"diffident"* or *"modest"*. Some emotions reflecting strong negative feelings (e.g., *"disgusted"*, *"loathing"*) demonstrated poorer model-fit results unless they were directed toward oneself (e.g., *"disgusted with self"*). The marker *"disgusted"* was also problematic; it was rated on average lower than the term *"disgusted with self"*. Some theoretical models (Ekman, 1971; Izard, 1991) consider Disgust as one of the basic emotions, and it remains important in terms of fully reflecting broad emotional experience; hence, it was kept in the model's final version, since Watson and Clark (1999) proposed it. Lithuanians, it can be assumed, may tend to direct negative emotions more towards oneselves. As mentioned earlier, studies suggest that Lithuanians have specific semantic expressions for emotional experiences (Livaniene & De Raad, 2016), and tend to describe themselves more negatively than positively, using such characteristics as angry, jealous, or selfish (Čiužas & Ratkevičienė, 2005). On the other hand, generally, people are unlikely to express any stronger emotions (Watson & Stanton, 2017). The current study did not include the manipulations of emotional experience and the data were collected naturalistically; therefore, further investigations are needed to address the cultural specificities related to negative emotions. These results are contrary to the work of the original authors (Watson & Clark, 1999), where the subscales of negative affect like Hostility emerged with fairly clear loadings, although the primary two or three markers of the content scales related to negative affects such as Hostility, Fear, or Sadness mirror the results of Zevon and Tellegen's (1982) Mood Checklist, which served as the basis of the initial set for the original PANAS-X authors.

Looking at the scales related to positive emotional content, the main challenge involved the positive scales being highly interrelated. The difficulties in differentiating specific states were present when dealing with such positive affect scales as Joviality or Self-Assurance, indicating fairly high loadings on the higher order PA scales, which confirms the results of the previous research (Fajkowska & Marszał-Wiśniewska, 2009; Mihić et al., 2014; Watson & Clark, 1999). One of the priorities was to select such items that represent the subscale as the primary markers. It refers to the original work (Zevon & Tellegen, 1982; Watson & Clark, 1999), where after the first step of extracting distinct affect scales, another step of identifying specific positive dimensions had to be done. The analysis showed that mainly two or three markers with the highest loading match the original work (e.g., happy, cheerful; bold, fearless, confident; calm, relaxed, at ease). However, after carrying out a careful item selection, some of the items demonstrated difficulties of fitting into the category (the items that are originally placed into the category of Joviality seemed to form a new factor related to a general positive arousal). After reducing the number of potential items, the model was improved by selecting words less related to the alleged category of *"arousal"* and more to a general positivity (e.g., new item *"merry"*). It may reflect a cultural tendency to process positive emotionality less specifically in terms of the content.

A less visible but still noticeable pattern of interconnectedness can be seen in the scales of guilt and sadness, as these descriptors serve as the essential markers of negative emotionality, also confirming the authors' findings in the original PANAS-X (Watson & Clark, 1999). This pattern seems likely to show the trace of a hierarchical structure consisting of nonspecific Positive Activation and Negative Activation dimensions (Watson & Stanton, 2017). High intercorrelations can signify the emotional blends which make up the higher level of NA. The hierarchical structure is also evident from the fact that subscales of the same valence have notably strong interrelations, forming a higher level super-cluster (e.g., Sadness, Fear, Guilt, Hostility indicate negative emotionality), and have strong but slightly smaller negative relations with the scales of the opposite valence (in this case, Joviality, Self-Assurance, Attentiveness, which are the markers of positive emotionality). Recent findings of intercultural emotion semantics (Jackson et al., 2019) confirm that valence and physiological activation are considered as universal constraints to variability in different languages.

Regarding the higher order PA and NA scales, it can be observed that in this study, some of those terms were replaced as well, and PA consists only of nine descriptors, as opposed to the original where there are ten of them (Watson & Clark, 1999) (e.g., the terms *"distressed"* and *"upset"* were replaced into similar broad concepts of negative emotional experience; the term *"alert"* was replaced by the other term *"determined"* that falls into the category of Attentiveness). Although this may be seen as a failed attempt to confirm the content of the original work, we argue that the main structure was mainly preserved, as our primary goal was for the higher order scales not to represent specific terms as accurately as possible, but instead to reflect a different content of emotions in a similar manner (i.e., to keep a similar number of terms representing different dimensions of affect). Thus, this criterion, as well as the results of item-analysis, led to the final set of PA and NA descriptors.

Overall, our results reveal that the underlying structure of the PANAS-X is similar to the structure of the original PANAS-X, provided by Watson and Clark (1999), although some cultural variation in the content of the higher and lower order scales may show more complex patterns than expected. Further comparison to the results in other cultures, however, is complicated due to the lack of studies involving the second order content of affect provided by PANAS-X; the existing research also does not provide a more detailed explanation for the construction of the specific scales. Nevertheless, it can be concluded that the overall structure demonstrated adequate results.

Reliability and Discriminant Validity

The present study has proven that the composite reliability estimates, which confirm the internal consistency, were satisfactory for both PA and NA, and for the scales of discrete affect, as well. However, the results concerning the convergent and discriminant characteristics demonstrated ambiguous results. During the selection process for the descriptors, the main goal was to avoid unnecessary synonyms which did not add any explanatory value to the data distribution. As mentioned before, it could be assumed that the Lithuanian speakers tended to describe the affective experience in a less differentiated way. Overall, the final version of PANAS-X included fewer descriptors than the original one, even though some markers were added with more flexible cut-off scores to reflect a broader and more theoretically based spectrum of emotionality. This may be related to the samples used in previous studies being mostly demographically homogeneous, usually composed of students (e.g., Watson & Clark, 1999). Future studies on affect differentiation in different age groups could provide more detailed and grounded interpretations.

Convergent Validity

The tendencies of the relations between the PA and NA with other related constructs, such as personality traits or general psychological measures of well-being, supported the instrument's convergent validity, similarly to the previous findings (Watson & Clark, 1992; 1999). As expected, the PA demonstrated the relations with the WHO-5, Optimism / Control subscale of the PWBS. Supporting similar results of previous studies (Cotigă, 2012; Fajkowska & Marszał-Wiśniewska, 2009; Mihić et al., 2014), the PA and NA relations to extraversion and neuroticism confirmed the idea that extraversion leads to positive emotions and neuroticism leads to negative emotions (as in Costa & McCrae, 1980). A clear divergent pattern was also observed in the case of distinct affective states. The specific scales that are regarded as the components of general NA, such as fear, hostility, guilt, and sadness, were related to the Negative Emotionality and negatively linked to the Optimism / Control subscales of the PWBS as well as the marker of the psychological wellness WHO-5. The negative affect scales were linked to Neuroticism and the positive affect scales were linked to Extraversion; conversely negative relations were present as well. Other traits in the context of specific emotions seemed to demonstrate tendencies that proved more independent from emotional valence, as they had visible, but still weaker, links to the PANAS-X scales.

Strengths and Limitations

Although this study investigated a complex structure of emotional experience in a demographically representable sample of the Lithuanian population, the study has some limitations. The comparison of Lithuanian PANAS-X structure to that originally produced by the authors is burdened by the linguistic differences of items used in the analysis, which may cover the underlying culturally specific affective patterns. Given the process of translation, which ultimately resulted in some differences of number and meaning in the chosen items, the measure's Lithuanian version might not be comparable to the original PANAS-X. Furthermore, a larger number of the participants would be needed to confirm the observed patterns. Also, the validity indicating the convergent patterns was limited to the existing Lithuanian instruments that measured similar, but not identical, constructs of emotional experience.

Conclusion, Implications and Future Directions

In conclusion, the PANAS-X relations with constructs of psychological well-being and personality traits confirmed its convergent validity, allowing PANAS-X to be considered an appropriate instrument for structuring positive, negative, and specific emotional experiences. It can be seen as an important contribution to the future cross-cultural studies of the specific affect in various research contexts.

To broaden the forthcoming research into the emotional experience of the Lithuanian population, future studies should be oriented to developing reliable and valid measures to be used with different time instructions. As NA can be considered a general indicator of subjective distress, the instrument could serve as a tool in not only the scientific field, but also in the mental health care context, thus, further comparative research would be valuable when delving into the perception of emotional experience in various clinical samples in different cultures; for example, whether depressiveness in various Lithuanian age groups has similar affective components as in other countries.

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All participants engaged in the research voluntarily and anonymously, and provided their written informed consent to participate in this study.
Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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RESEARCH ARTICLE

“Performing Emotions and Suffering”

Recovery of Depressive Symptoms Involving Adolescent Intervention in Art and Dance Schools

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Introduction: In previous studies, a large majority of dance students reported mental health issues, mainly eating disorders and depression.
Aims: This project aimed to promote mental health and well-being as well as prevent maladaptive and risky behaviors – namely suicidal behavior – among adolescents who attend art and dance schools. It was implemented in sequential stages, including six moments of classroom intervention for adolescents.
Methods: A quasi-experimental research design was applied, with two assessment moments (before and after the intervention) using questionnaires filled out by the adolescents.
Results: The project was implemented in three art schools (Center and South of Portugal), and the sample consisted of 122 adolescents. 72.9% of our sample were girls aged 12–18 years ($M = 13.88$; $SD = 1.54$). Boys showed significantly higher well-being scores ($M = 16.53$; $SD = 4.24$ vs $M = 14.67$, $SD = 4.17$), and girls showed higher coping scores ($M = 153.3$; $SD = 13.53$ vs $M = 146.73$; $SD = 13.22$). Concerning depressive symptoms, 34.8% of adolescents had moderate/severe depressive symptoms, which decreased by 10% after the intervention.
Conclusions: Adolescents attending art schools might be more vulnerable to developing mental distress, and this intervention proved to be an effective approach for promoting mental health and well-being as well as preventing suicidal behaviors.

Keywords: mental health, prevention, suicide, adolescents, art schools

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Introduction

In adolescence, issues related to the body and body image play an important role, and social beauty standards influence adolescents' satisfaction with their body image. As they grow older, adolescents become more aware of their bodies and more concerned about and demanding with their body image (WHO, 2010a).

However, adolescents attending art schools – namely dance schools – experience body-related issues with greater intensity because their body is their work instrument in the search for an idealized ballet dancer's physique. In addition to their identity formation processes, therefore, these adolescents are more vulnerable to the influence of the idealized physical models conveyed by the media and their peers (Monthuy-Blanc et al., 2010).

On the one hand, dance allows for new perceptions of the self and the other; on the other hand, it is both physically and psychologically demanding, leaving young people in a situation of greater vulnerability to developing eating disorders (Tavares, 2013) due to the demands of body esthetics and the performance of physical activity to achieve the current beauty ideal (Stice & Shaw, 2002). Thus, prevention remains of particular relevance to break a potential cycle between stress, low self-esteem, body dissatisfaction, and psychopathological disorders, particularly depression and eating disorders (Moksnes et al., 2016).

Suicidal behaviors constitute maladaptive behaviors that can emerge during adolescence; thus, it is important to act preventively, with suicide prevention being a global imperative (WHO, 2019).

Recent studies have made significant advances in our understanding of suicide prevention and promoted changes in healthcare professionals' attitudes towards individuals having suicidal behaviors.

In order to promote mental health, WHO (2008) recommends promoting the integration of socio-emotional learning into the curricular and extracurricular activities and into the cultures of pre-schools and schools. Programs with psychosocial and well-being issues improve targeted social emotional skills, life skills, communication skills, problem-solving skills, self-awareness, flexibility, anger management, self-esteem, self-efficacy, life satisfaction, positive body perception and mental health literacy, with more effectiveness should they use interactive methods such as games and small group work according to a systematic review lead by Bidik and Sisman (2021). They also reinforced the idea that nurses should conduct school-based mental health programs with high methodological quality that focus on positive psychosocial well-being. The *Mais Contigo - Tela de Emoções* project aims to respond to this need for a school-based intervention to promote mental health and well-being and prevent suicidal behaviors in art and dance schools.

The prevalence of mental disorders is high among children and young people aged 5 to 14 years and 15 to 19 years. WHO estimates that approximately 20% of children and adolescents develop at least one mental health condition before the age of 18 and that learning difficulties, attention deficit, psychomotor disturbances, behavior disorders, indiscipline, and other- and self-directed violence can manifest in intense emotional suffering (WHO, 2010b).

The results of a meta-analysis conducted by Polanczyk et al. (2015) indicate that the worldwide-pooled prevalence among children and adolescents was 13.4% for mental disorders in general, 6.5% for anxiety disorders and 2.6% for depressive disorders in particular.

Women are more vulnerable to depression and have an increased risk for chronicity (Nock et al., 2013). Several studies in adolescent populations draw attention to the severity of the depressive psychopathological context associated with suicidal behaviors (Callahan et al., 2012). Suicidal behaviors are considered maladaptive, multi-determined behaviors that develop in a continuum of increasingly severe thoughts and behaviors, from suicidal ideation to completed suicide (Direção Geral da Saúde, 2013; WHO, 2014a).

From an epidemiological perspective, close to 800,000 people die due to suicide every year (WHO, 2017, 2019). Compared to other age groups, suicide rates have increased at an alarming pace among youths and are the second leading cause of death during childhood and adolescence, as well as the 10th leading cause of death for all ages (Centers for Disease Control and Prevention, 2017).

Suicide was the third leading cause of death among adolescents aged 15–19 years, with the number of deaths relatively similar between boys and girls in this age group. Suicide was the second leading cause of death in girls aged 15–19 years (after maternal conditions) and the third leading cause of death in boys (after road injury and interpersonal violence) in this age group (WHO, 2019).

Every year, approximately 164,000 adolescents die by suicide, and it is estimated that 4 million attempt suicide (Picazo-Zappino, 2014; Venta & Sharp, 2014). Self-injury constitutes a significant risk factor for adolescent suicidal behavior, affecting approximately 18% of adolescents worldwide (Muehlenkamp et al., 2012; Nock et al., 2013).

Therefore, it is essential to promote adolescents' psychological well-being and protect them from adverse experiences and risk factors that may affect their potential, not only for their well-being during adolescence but also for their physical and mental health in adulthood (WHO, 2010b). Bidik and Sisman (2021) highlighted that programs focusing on improving positive mental health and well-being are more effective than programs focusing on reducing mental health problems, and suggested programs that encourage social and emotional development in schools should be increased. In Europe, suicide prevention was considered one of the five top priorities in mental health in the European Pact for Mental Health and Well-Being (WHO, 2008). In Portugal, suicide prevention is a priority, and the National Plan for Suicide Prevention (DGS, 2013), with an extension until 2020, puts forward several guidelines for suicide prevention among the general population and the risk groups, namely adolescents (DGS, 2013).

According to Grove et al. (2013), dancers are at risk of mental health issues due to the high physiological and psychological demands of dancing. Winden et al. (2020) found that 96.9% of students reported at least one physical/mental health problem, of whom 44.6% reported mental health issues. Adolescents in art schools, particularly in dance schools, have shown a greater vulnerability to eating disorders and depression (Moksnes et al., 2016). Among ballet students, 31.3% reported a history of disordered eating behaviors (Thomas et al., 2011), and an association seems to exist between body image and psychological functioning, namely regarding self-esteem and negative affect (Ricciardelli & McCabe, 2002). In a systematic review, Mainwaring and Finney (2017) concluded that psychological variables (stress, psychological distress, disordered eating, and coping) could affect the incidence and outcome of dance injury among dancers. Winden et al. (2020) suggest including coping skills training as a part of injury prevention programs; but, as mentioned by Mainwaring et al. (2001), there is a culture of injury, pain and tolerance focused on physical aspects and neglecting the psychological issues. Furthermore, we can identify negative attitudes and beliefs about mental illness and toward suicidal behaviour in health students and professionals (Gil & Lourerio, 2016; Vedana et al., 2020).

WHO recommends that promotion programs for adolescents and prevention programs for adolescents at risk of mental health conditions require a multilevel approach, highlighting:

1. school-based interventions, such as organizational changes for a safe, secure, and positive psychological environment; teaching mental health and life skills; training social gatekeepers in detecting and managing suicide risk; school-based prevention programs for adolescents vulnerable to mental health conditions;
2. prevention programs targeted at vulnerable adolescents, such as those affected by humanitarian and fragile settings, and minority or discriminated groups;
3. multisectoral suicide prevention programs.

The preventive model associated with healthy and risky behaviors in certain populations, including suicide prevention, involves strategies at the three levels of prevention: universal, selective, and indicated (Scott & Guo, 2012), where the school is seen as one of the most important community contexts for the promotion of young people's mental health (WHO, 2010b). Healthcare professionals, namely primary care providers, and educational agents serve in a key position to detect signs of risk at an early stage among adolescents and refer them to specialized help (Scott & Guo, 2012; WHO, 2014a). Using self-reported instruments could enable an understanding regarding the dancers' mental health for managing care (Grove et al., 2013).

After testing the effectiveness of the Mais Contigo project in similar groups from mainstream schools, it was important to assess the effectiveness of an intervention adapted to artistic education (Tela de Emoções), in a context of greater vulnerability to mental suffering.

This project aimed to promote mental health and well-being as well as prevent maladaptive and risky behaviors, namely suicidal behaviors, among adolescents in art and dance schools. It was implemented in sequential stages, including six moments of classroom intervention for adolescents. The research questions were:

1. What are the characteristics of the mental health of adolescents attending art schools?
2. How effective is the Mais Contigo – Tela de Emoções project in the dimensions of coping, well-being, self-concept, and depressive symptoms?

Methods

The Design of the Intervention Program

The *Mais Contigo - Tela de Emoções* project derives from the *+Contigo* program that began in 2009, aimed at 7th to 12th grade students (Santos et al., 2014). It uses a specific approach to respond to the greater vulnerability to mental health problems of adolescents attending art schools, with the purpose of improving their mental health and preventing suicidal behaviors.

The *Mais Contigo - Tela de Emoções* project is a longitudinal research project using a multilevel network intervention to increase knowledge about mental health and suicide as well as develop skills related to the identification and referral of risk situations, involving the education community (parents and tutors/guardians, educational agents, and adolescents) and primary care professionals from the reference area. Its main objectives are to promote mental health and well-being and prevent maladaptive and risky behaviors, namely suicidal behaviors, among 7th to 12th grade art students, and increase healthcare and education professionals' knowledge about risky behaviors. Its specific objectives are to promote well-being; fight against mental health stigma; promote self-concept, self-esteem, problem-solving skills, and assertiveness in communication; reduce depressive symptoms, problems of perfectionism and social pressure associated with the body image; and strengthen support networks in health services. The methodology included socio-educational games and role-plays. In one of the initial games, the rights of people with mental illness are reinforced by role-playing situations related to mental illness. In another game, the participants build puzzles about adolescence-related concepts and the tasks of adolescence are reinforced, de-dramatizing the "harmful" role often attributed to this age group. In the game "How I see myself and how other people see me," adolescents are asked to reflect on happiness, self-esteem, and confidence, and, together with the rest of the class, identify appropriate strategies for improving their well-being and mental health, reinforcing the support network and fighting against signs of mental suffering. In another game, students are asked to introduce themselves by mentioning two individual qualities and describe a colleague based on two qualities that characterize him/her while emphasizing everyone's importance and promoting group cohesion. In the problem-solving strategy, the challenge is to identify solutions based on real facts rather than on imagination, identifying the problem and choosing solutions using the support group. In another game called "Question box," the adolescents place questions about the body and the role of the body image in a box and the answers are discussed within the class. In another activity, "Compliments in the palm of your hand," students are asked to draw an outline of their hand on a sheet of paper and then their colleagues write a quality of the student on each finger, identifying him/her through his/her qualities. The facilitator's role emphasizes the importance of "all fingers" in terms of overall good functioning.

The project is sponsored by the Nursing School of Coimbra, the Honor Society of the Nursing School of Coimbra, and the Health Administration of the Center Region, IP.

The school-based interventions are conducted by nurses of the school health teams (DGS, 2015), in collaboration with the project's coordination team and other partners (differentiated health care units in the mental health area). The local authorities and other community structures are important local partners in developing specific initiatives in the regions where the intervention is underway.

The *Mais Contigo - Tela de Emoções* project is implemented in six steps (Figure 1):

Step 1 - Training healthcare professionals;
Step 2 - Raising educational agents' awareness and identifying social gatekeepers;
Step 3 - Raising parents'/educators' awareness;
Step 4 - *Mais Contigo - Tela de Emoções* intervention with adolescents;
Step 5 - Assessing the intervention and analyzing the results;
Step 6 - Sharing and disseminating the results.

Figure 1. +Contigo-Tela de Emoções Project Intervention Model

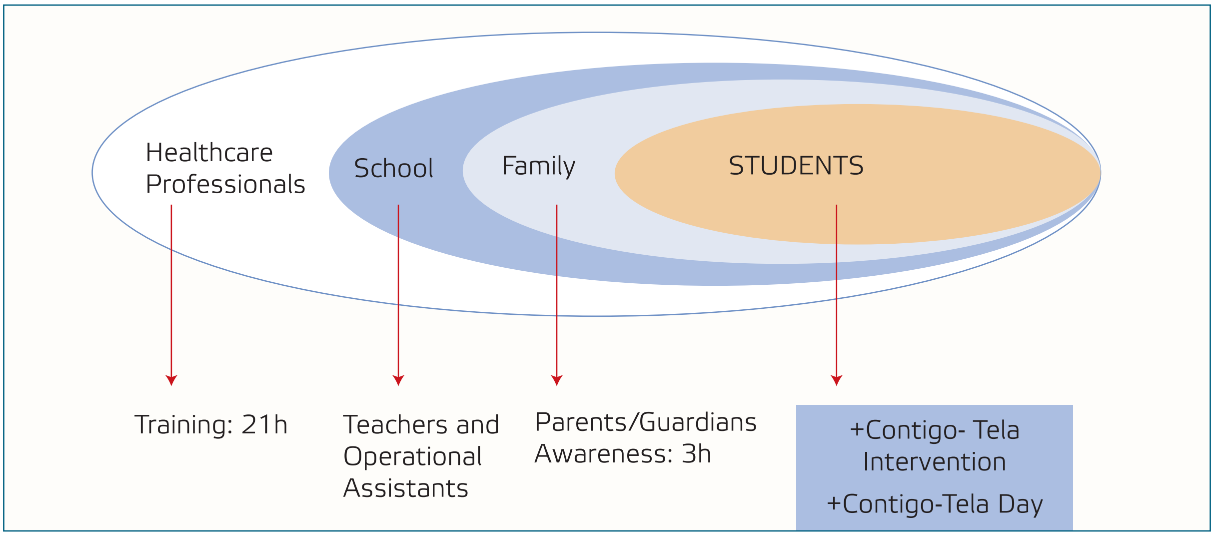
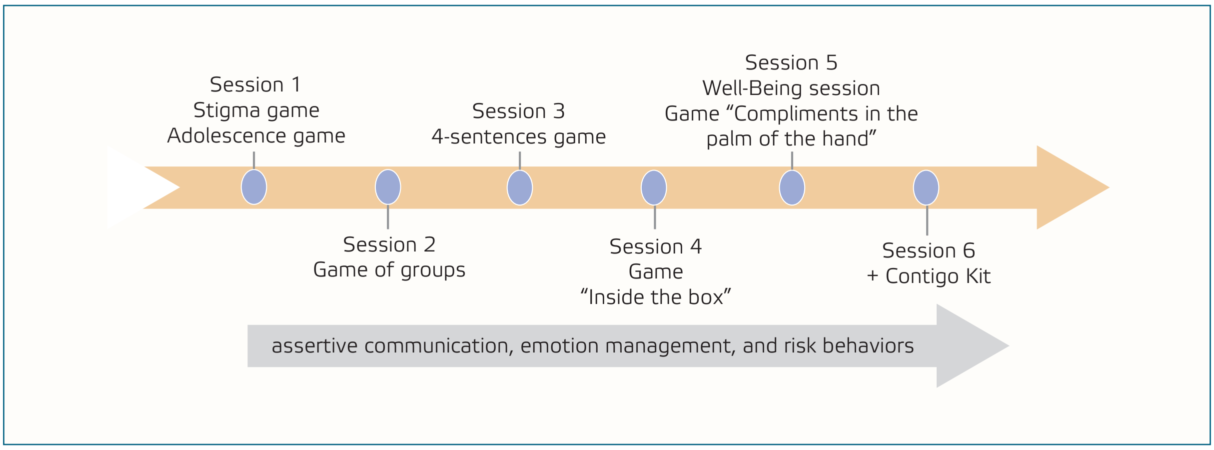


Figure 2. +Contigo Intervention Plan



The intervention phase, Step 4, includes six 45-minute sessions every two weeks where a series of topics are explored, namely regarding

1. mental illness stigma (through a game in which they played the role of a mental patient, with a subsequent discussion about their social representations of a person with a mental illness);
2. adolescence (through the characterization of adolescence using a single word, and discussion about the reasons for characterizing adolescence and how adolescence should be experienced);
3. self-esteem (students are invited to explore how they see themselves and how their peers see them, identifying strategies to improve their self-esteem);
4. body image (the students are invited to place questions anonymously, in a box, to be then discussed in a session to identify cognitive distortions regarding body image, how it affects their self-esteem, and how to cope with these issues);
5. problem-solving skills (analysis of a problem based on four questions: what I see, what I feel, what I imagine, what I want, and discuss the several implications of the problem, aiming at its resolution);
6. and well-being (the students are invited to discuss their definition of well-being and identify two qualities in themselves and their colleagues, agreeing to promote the well-being of the class).

Assertive communication, emotion management, and risky behaviors are crosscutting topics explored throughout the intervention process. Expository, interrogative, and interactive methods are used, as well as role-playing and socio-educational games (Figure 2).

The coordination team provides a guide and didactic-pedagogical materials for the sessions to the school health teams (local facilitators). It should be noted that the facilitators receive a 21-hour training before the implementation of this project.

In the post-intervention phase, the same questionnaire is applied to assess the intervention's effectiveness.

The project's implementation in the 2018–2019 academic year was co-funded by the Portuguese Directorate-General of Health (DGS-J-26–18–1).

Research Methodology

The project used a quasi-experimental design and had two assessment moments (before and after the intervention). The project used a quasi-experimental design and had two assessment moments (before and after the intervention). All students voluntarily participated in the intervention, for which reason no control group was used.

The classroom intervention has three phases:

1. Pre-intervention
2. Intervention
3. Post-intervention

The effectiveness of the *Mais Contigo - Tela de Emoções* project is assessed through a quantitative research study. In the pre- and post-intervention phases, a questionnaire including several measurement instruments is applied to assess the variables of well-being, depressive symptoms, self-concept, coping, and risk of suicidal behaviors. All measurement instruments are validated for the Portuguese population.

Ethical Procedures

Concerning the formal and ethical aspects, the permission to apply the +Contigo questionnaire (No. 0224900002 and No. 0224900004) was obtained from the educational project services of the Portuguese Directorate-General for Education, while ensuring the participants' anonymity and confidentiality. Informed consent was also obtained from the parents/tutors. Adolescents aged 16 or above are free to participate or refuse participation.

Each student completes the questionnaire in the classroom in approximately 30–40 minutes, under the local facilitators' supervision. The questionnaires are then placed in sealed envelopes and identified with the school's name as well as the adolescents' school year and class.

Participants and Data Collection

The project involved 7th to 10th grade students of the art and dance course from schools of three regions in Portugal (Coimbra, Lisbon, Faro), who participated in the project during the 2018–2019 academic year, constituting a total of 122 adolescents.

The sample is mostly composed of female adolescents (72.9%), with a mean age of around 14 years (*SD* = 1.54), distributed between the 7th and 10th grades, with approximately two-thirds of them attending the 8th and 9th grades (Table 1).

Table 1. Sample characterization by gender, age, and school year

Gender	Phase 1 *n* (%)	Phase 3 *n* (%)
Male	33 (27%)	33 (27%)
Female	89 (73%)	89 (73%)
Total	122 (100%)	122 (100%)
Age	**Phase 1**	**Phase 2**
Maximum	18	18
Minimum	12	12
Mean	13.88	14.07
SD	1.36	1.54
School year	**Phase 1 *n* – %**	**Phase 2 *n* – %**
7th grade	17 (13.9%)	17 (13.9%)
8th grade	42 (34.4%)	42 (34.4%)
9th grade	41 (33.6%)	43 (35.2%)
10th grade	22 (18%)	20 (16.4%)
Total	122 (100%)	122 (100%)

Measurements

WHO Well-Being (WBI-5)

The *WBI-5* (Johansen, 1989) is a widely used self-report instrument that assesses psychological well-being using 5 short questions rated on a 4-point Likert-type scale. In the Portuguese version (Santos et al., 2014) the value of Cronbach's alpha was α = .86. In the present study it was α = .78, which is substantial according to Landis and Koch (1977).

Toulousaine Scale of Coping

The *Toulousaine Scale of Coping* (Esparbès et al., 1993) is a questionnaire with 54 items, containing a Likert-type scale with 5 options, which assesses coping. The Portuguese adaptation of the Toulousaine Scale of Coping (Tap et al., 2005) was reduced to 51 items, and Cronbach's alpha was α = .78. In the present study, Cronbach's alpha score was α = .68, which is substantial according to Landis and Koch (1977).

Beck Depression Inventory-II

The *Beck Depression Inventory-II* (Beck & Steer, 1987) is a scale with 21 items, each corresponding to a symptom of depression. A four-point scale exists for each item ranging from 0 to 3. On two items (16 and 18) there are seven options to indicate either an increase or decrease of appetite and sleep. In the original study, Cronbach's alpha was α = .93, in the validation study for Portugal it was α = .93 (Martins, 2000). In the present study, Cronbach's alpha was α = .91, which is "almost perfect" according to Landis and Koch (1977). Cut-off score guidelines for the BDI-II are provided with the recommendation that thresholds should be adjusted based on the characteristics of the sample, and the purpose for applying the BDI-II. A total score of 0–13 is considered as a minimum, 14–19 as a mild, 20–28 as a moderate, and 29–63 as a severe range of measured depression symptoms.

Table 2. Mean, SD and test scores in the individual dimensions by gender

Gender Dimensions	Female *M (SD)*	Male *M (SD)*	Test value	*p*
Well-Being	14.67 (4.17)	16.53 (4.24)	2.10[a]	.038
Coping	153.30 (13.22)	146.73 (13.53)	–2.15[a]	.034
Self-Concept	39.63 (9.76)	40.23 (10.40)	–0.60[b]	.555
Depressive Symptoms	14.63 (10.16)	15.00 (15.13)	–0.52[b]	.602

[a] T-test
[b] Kruskal-Wallis

Table 3. Mean scores in the individual dimensions by school year

School year Dimensions	7th *M (SD)*	8th *M (SD)*	9th *M (SD)*	10th *M (SD)*	Test value	*p*
Well-Being	16.87 (4.78)	15.00 (3.68)	14.37 (4.69)	14.50 (4.04)	0.50[a]	.679
Coping	149.45 (11.47)	147.20 (10.20)	148.52 (16.64)	152.68 (13.66)	1.50[a]	.219
Self-Concept	41.41 (11.51)	40.18 (10.59)	38.13 (10.33)	39.06 (7.42)	4.06[b]	.255
Depressive Symptoms	13.86 (12.96)	17.10 (9.43)	17.34 (12.00)	22.15 (11.79)	3.12[b]	.373

[a] ANOVA
[b] Kruskal-Wallis

Piers-Harris Self-Concept Scale

The *Piers-Harris Self-Concept Scale* (Piers & Herzberg, 2002) assesses self-concept in children and adolescents, it is a dichotomous scale with 60 questions; here, Cronbach's alpha was $\alpha = .91$. The validation for Portugal (Veiga, 2006) reduced the scale to 51 items and Cronbach's alpha was $\alpha = .90$. In this study, it was $\alpha = .89$.

Statistical Analysis

Data was processed and analyzed using IBM SPSS, version 23 for Windows XP. After confirming the sample's normal distribution (Kolmogorov-Smirnov test: $p < .050$), the Student's t-test for paired samples or ANOVA was used; when the distribution was not normal, we used Kruskal-Wallis, Mann-Whitney or Wilcoxon tests.

The results are presented as a whole so that individual schools cannot be identified, thus protecting the participants' anonymity.

Results

By using Kolmogorov-Smirnov tests, the scales of Well-Being and Coping have a normal distribution ($p = .705$ and $p = .897$, respectively) while Self-concept and Depression scales do not have a normal distribution ($p = .032$ and $p = .005$ respectively). According to our results, parametric or non-parametric tests were used for testing mean differences.

Table 4. Mean scores in the several dimensions by intervention phase

Phase Dimensions	Phase 1 *M (SD)*	Phase 3 *M (SD)*	Test value	*p*
Well-Being	14.94 (4.45)	15.14 (4.21)	–0.24[a]	.804
Coping	148.76 (13.90)	151.62 (13.35)	–0.75[a]	.455
Self-Concept	38.78 (11.67)	39.59 (11.56)	–0.83[b]	.406
Depressive Symptoms	17.60 (9.80)	14.72 (9.87)	–2.11[b]	.035

[a] Paired sample t-test
[b] Wilcoxon

No significant differences were found in self-concept when compared by gender and school year (Table 2 and Table 3). Boys scored higher than girls in the well-being dimension, which varied across the school years without statistical significance. When compared by gender, depressive symptoms were slightly higher in boys and varied slightly across the school years but without statistical significance. With regard to coping, girls scored higher than boys, and small changes were found across the school years, revealing a statistically significant difference in the comparison by gender.

Overall, a positive evolution was observed between Phase 1 and Phase 3 in the mean scores of the well-being, coping, self-concept, and depressive symptoms dimensions, with the latter showing a statistically significant difference (Table 4).

Table 5. Depressive symptoms by intervention phase- Wilcoxon test

Phase Dimensions	Phase 1 (%)	Phase 3 (%)	Test value – Z	*p*
No depressive symptoms	47.0	57.5	−2.07	.038
Mild depressive symptoms	18.3	17.7		
Moderate depressive symptoms	15.7	14.2		
Severe depressive symptoms	19.1	10.6		

[a] Paired sample t-test
[b] Wilcoxon

Concerning depressive symptoms, the number of adolescents with mild, moderate, or severe depressive symptoms decreased between Phase 1 and Phase 3, from 53% to 42.5%. Moderate and severe symptoms decreased from 34.8% to 24.8% (Table 5). Between Phase 1 and Phase 2, the number of adolescents without depressive symptoms increased from 47% to 57.5%.

Discussion

Contemporary dance students are at a high risk for mental health issues and a need exists for a wider perspective of mental health symptoms (Mathisen et al., 2022; Widen et al., 2020); schools offer a strong platform for early identification and treatment of mental health conditions in children and adolescents (WHO, 2022). This project aimed to promote mental health and well-being as well as prevent maladaptive and risky behaviors, namely suicidal behaviors, among adolescents in art and dance schools.

In our study, two-thirds of the sample were female, which is common in other studies (Mathisen et al., 2022; Widen et al., 2020) The prevalence of female adolescents seems to be a characteristic of dance classes in art schools, making it difficult to control the factors that can increase the percentage of depressive symptoms, compared to other similar studies.

The prevalence of depressive symptoms in this study (34.8% of adolescents with moderate or severe depressive symptoms and 53% of adolescents with mild symptoms) stands higher than the one found in a national study in which 17.7% of adolescents presented moderate or severe depressive symptoms and 13.5% of adolescents presented mild symptoms (Erse et al., 2016), but remains in line with Mathisen et al. (2022) who found that 20-60% of the dancers had symptoms of anxiety or depression, symptoms of low energy availability, and/or symptoms of eating disorders and disordered eating behavior. These results may be associated with the prevalence of female adolescents, given the higher prevalence of depressive symptoms in female adolescents found in other studies; however, no statistically significant differences based on gender were found in this study, similarly to the study from Widen et al. (2020). These results may be associated with another specific characteristic of this group of adolescents. Dance students are exposed to higher body image demands and stress levels, which often lead to personal distress, low self-esteem, body dissatisfaction, and psychopathological disorders, with a particular emphasis on depression and eating disorders (Moksnes et al., 2016; Murray et al., 2013).

The multicenter study developed in 11 European countries – Saving and Empowering Young Lives in Europe (SEYLE) – identified some asymmetries in the depression rate, although with lower scores than those found in this study, with the highest score (19.4%) found in Israel (Iosue et al., 2012), which is clearly below the score found in dance and art schools in Portugal.

The results regarding depressive symptoms across the school years revealed no significant differences, increasing until 9th grade and decreasing in 10th grade.

This sample showed high levels of depressive symptoms and a high vulnerability to suicidal behaviors. However, unlike other similar samples, girls are not more vulnerable than boys. In turn, coping, self-concept, and well-being scores are not qualitatively different from those found in other similar studies.

After the *Mais Contigo-Tela de Emoções* intervention, moderate and/or severe depressive symptoms decreased by around 10%.

Boys register higher well-being scores than girls, which follows a trend identified in previous studies in Portugal (Simões et al., 2018) but not confirmed in other international studies (Mathisen et al., 2022). In relation to the association between this variable and the school year, no significant differences were found. The highest mean score registered in 7th grade, and decreased to 10th grade, perhaps due to the developmental aspects of late adolescence or the increasing demands placed on their bodies influencing necessary recovery time (Grove et al., 2013).

In both Phase 1 and Phase 3, girls showed higher coping scores. These results are relevant due to the high level of student stress in art and dance schools (Grove et al., 2013) and the linkage between stress and depression (Moksnes et al., 2016) and the utility of coping strategies. In the comparison by school year, no significant differences were found despite some variations in coping scores.

Self-concept scores slightly improved between Phase 1 and Phase 3, although no significant differences displayed. Boys scored slightly higher than girls. No significant differences were found in self-concept by school year, despite some variations. These results are different from those noted in similar studies where boys scored higher than girls, and the scores tend to decrease throughout the school years (Santos et al., 2014).

The difference between the number of girls and boys in this sample may be the reason underlying these peculiarities.

One may conclude that the *Mais Contigo- Tela de Emoções* project proved to be effective in reducing depressive symptoms. Although the other dimensions (well-being, coping, and self-concept) improved in the second assessment, this improvement was not statistically significant.

Strengths and Limitations

Given the association between physical disorders (injuries) and some mental health dimensions (stress, psychological distress, disordered eating, and coping) identified in previous studies, we find it beneficial to monitor the physical injuries reported by the students throughout the school year.

The lack of a control group with similar characteristics constitutes a limitation and its lack may weaken the conclusions regarding the intervention's effectiveness. Previous studies with similar populations attending regular education, however, indicate a decrease in the analyzed dimensions throughout the academic year (Santos et al., 2014). Over the next academic years, implementing the *Mais Contigo-Tela de Emoções* project in similar schools with more robust samples and utilizing a control group will strengthen the results' validity for these adolescents who stand in greater need of school health care.

Conclusion, Implications and Future Directions

Primary care, differentiated care, and education professionals were involved in the *Mais Contigo-Tela de Emoções* project's implementation, who received specific training. Joint meetings were held to make the necessary adjustments to each class and/or context and to ensure the implementation of a similar intervention and homogenous data processing. The results were processed as a whole to preserve the anonymity and privacy of each context.

The sample in this study demonstrated high levels of depressive symptoms and nearly two-thirds of them showed moderate and/or severe symptoms. This situation reinforces the need for preventive proximity and referral/monitoring measures in these art schools, because depressive symptoms are a risk factor for suicidal behaviors.

The lack of significant differences in depressive symptoms between girls and boys, higher coping scores among girls, and variations of scores in the dimensions across the school years are relevant results in terms of designing intervention programs for this specific population.

Based on the conducted studies, higher well-being scores in boys than in girls seem to be a characteristic at a national level.

The *Mais Contigo-Tela de Emoções* project proved to be effective in improving the dimensions under analysis, particularly depressive symptoms. This finding is very relevant considering the high percentage of adolescents with depressive symptoms in our sample. The fact that no self-injury or other suicidal behavior was identified or reported during the intervention is another important aspect in assessing its effectiveness. However, the sample's characteristics require a closer and more systematic supervision to promote and strengthen the existing resources, particularly in the mental health area.

Given the diversity of contexts, the results have an ecological validity and cannot be generalized. They should be interpreted as indicators of the increased vulnerability to mental health problems for adolescents attending art schools, more specifically dance courses.

The high prevalence of depression, the serious repercussions on adolescents' physical and mental well-being, and the strong association between depression and suicidal behaviors call for early detection, treatment, and follow-up by mental health professionals.

Schools are ideal settings to promote mental health and invest in prevention. Thus, school-based programs for preventing depression and suicidal behaviors should be developed to assess the presence and severity of depressive symptoms and implement preventive strategies aimed at increasing individual skills, self-esteem, problem-solving skills, and help-seeking behaviors, as well as reducing the risk factors and strengthening the protective factors.

This project's multilevel approach allows for improving the mental health literacy levels of teachers, parents/guardians, and students, enabling them to identify the signs and symptoms of depression and the risk factors associated with suicidal behaviors, as well as to intervene in an informed, appropriate, and prompt manner. This project effectively reduced depressive symptoms, with partially satisfactory results in improving the other dimensions (well-being, coping, and self-concept).

Students in art schools, particularly dance and entertainment schools, use their bodies intensively, building and rebuilding images of the body undergoing two transformations: one associated with adolescence and another one associated with the desire to have a dancer's ideal body type. Thus, art students remain more vulnerable to mental disorders, requiring a specific approach for promoting mental health and well-being as well as preventing suicidal behaviors.

This study reinforces the importance of having mental health professionals in schools and investing more into training primary care professionals from the school health teams because their intervening in adolescence and changing life trajectories will increase the number of potential life-years saved. Due to the pandemic crisis, these kinds of programs are increasing in importance.

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Author contributions

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All authors gave final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of interest statement

The authors have no conflicts of interest to disclose.

Ethical statement

This manuscript is the authors' original work.
The study was reviewed and approved by the educational project services of the Portuguese Directorate-General for Education, license number: 0224900002 and 0224900004.
All participants engaged in the research voluntarily and anonymously, and provided their written informed consent to participate in this study.
Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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RESEARCH ARTICLE

An Empirical Study of Ancient Wisdom

Effect of Anasakti (Non-Attachment) and Ahamkara (Ego) on Well-Being Amongst Indians

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Introduction: According to Indian psychology, *anasakti* (non-attachment) and *ahamkara* (ego) play a significant role in determining true happiness.
Aims: To study the role of *anasakti* (non-attachment) and *ahamkara* (ego) on the level of well-being amongst Indian adults.
Methods: For the current study, 240 educated, urban Indian adults (Females = 104, Males = 136) were surveyed to investigate the relationship of *anasakti* (non-attachment) and *ahamkara* (ego) with well-being variables.
Results: Anasakti ("non-attachment") was revealed to be a significant factor in ensuring life satisfaction and experiencing positive emotions. Although ahamkara ("ego") contributed significantly toward higher cognitive well-being and affective states, it better predicted negative emotions.
Conclusions: The current study's findings may widen our understanding of "What makes people happy?" and may add to the global well-being literature.

Keywords: non-attachment, ego, well-being, yoga psychology, India

Introduction

Well-being stands among the widely researched concepts and is relevant in ensuring the quality of our existence. It is now accepted that well-being consists of a positive and holistic state, which includes physical, mental, social, and spiritual well-being (Keyes, 2014; Vaillant & Vaillant, 2005), rather than just an absence of psychological problems.

Technological and economic development has offered all possible measures for maintaining an effortless and comfortable lifestyle; however, achieving sustainable happiness or well-being remains challenging (Christopher,

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2018; Dabas & Singh, 2018; Diener & Seligman, 2004; Mishra, 2010; Wadhwa & Palvia, 2018). Further, it has been suggested that the idea of happiness may vary across societies and countries since it also depends on certain cultural and economic factors (European Social Survey, 2015), and thus needs more research across cultures.

In modern psychology, the definition and description of well-being and positive mental health have been evolving over the past few decades. From describing it as a collection of hedonistic moments to viewing it in terms of achieving a fulfilling life, scholars have used a variety of lenses to define happiness (Diener et al., 1985; Ryan & Deci, 2001). Later, the PERMA model (Positive emotion, Engagement, Relationships, Meaning, Accomplishment) was used to present a more holistic picture of well-being (Seligman, 2011). However, it has also been criticized for having limited cross-cultural implications (Khaw & Kern, 2014). Further, Kjell et al. (2016) argued that although the modern operationalisation of positive mental health is wide and varied, it mainly represents sense-based happiness, which largely depends on fulfilling egotistical expectations. Since such external and predominantly materialistic ways of achieving complete well-being are liable to change with time and context, therefore it often seems challenging for people to sustain long-lasting happiness (Dabas & Singh, 2018; Diener & Seligman, 2004; Dittmar et al., 2014; Elphinstone & Whitehead, 2019; Hoffman, 2007; Mishra, 2010; Salagame, 2013; Singh et al., 2016).

In this background, exploring relevant psychological concepts from the Indian knowledge traditions seems worthwhile. This knowledge has concluded that joy is the essential nature of humans and does not depend on worldly modes (Banavathy & Choudry, 2014; Singh & Modi, 2011). Moreover, other comparable constructs that play down the role of external and/or worldly sources for achieving long-lasting happiness, and emphasize a balanced stance towards the self, are present in the literature, such as mindfulness (Pearson et al., 2015), quiet ego (Bauer & Wayment, 2008) and self-compassion (Neff, 2003). Therefore, studies to further our understanding of such concepts and their significance for positive mental health seem fruitful. Additionally, the focus on Consciousness in Indian psychology will address people's concerns about spiritual growth and optimal functioning (Dalal & Misra, 2010) while resonating with the "panpsychism" school of European philosophy (Agrawal & Cornelissen, 2021).

Correlates of Happiness in Indian Traditions: Anasakti (Non-Attachment) and Ahamkara (Ego)

Indian thinkers have proposed that embodied humans have the experience of two selves; the metaphysical/transcendental Self (denoted with capital "S") and the empirical self. The metaphysical Self, (*Atman* or *Purusha)*, embedded in the transcendental Self (*Brahman*), is the true nature of a being. It is inherently blissful; therefore, realising this Self leads to utmost happiness (Banavathy & Choudry, 2014; Chandur & Sriram, 2018; Collins & Desai, 1986; Salagame, 2014). Indian scriptures such as the *Upanishads* and *Bhagavadgita* have suggested that true happiness is attained through self-realisation (Agrawal, 1982; Banavathy & Choudry, 2014; Salagame, 2013). It involves transcending the empirical-self based identity (*ahamkara*) and merging the individual soul with the transcendental Self (*Brahman*) or pure consciousness by following the path of *anasakti* (non-attachment) and removing attachments to the materialistic world (Banth & Talwar, 2012; Bhushan & Jha, 2005; Chandur & Sriram, 2018; Pande & Naidu, 1992).

In the psychological literature, authors have noted that many psycho-spiritual concepts originating in Eastern cultures are difficult to define; for example, issues related to the definition of mindfulness have been widely discussed (Anālayo, 2019; Nilsson & Kazemi, 2016). Along similar lines, *anasakti* (non-attachment) also remains a hard-to-define concept, with scholars giving multiple and occasionally overlapping definitions (Gupta & Agrawal, 2021). Nevertheless, based on the available descriptions, *anasakti* (non-attachment) represents non-clinginess to desires and non-insistence on over-controlling life events and selfish actions. It also emphasises task excellence without self-centred concern for results (Pande & Naidu, 1992; Pande & Tewari, 2011).

It is important to note that the Indian tradition involves many schools of thought, predominantly falling under the Hindu, Buddhist & Jain categories. Every school has emphasized the idea of non-attachment; however, here, the concept of non-attachment and ego will be discussed within the context of Hinduism and Buddhism since most research works have followed these two religions for defining the concept.

Anasakti (Non-Attachment) from the Hindu Perspective

Anasakti (non-attachment) may be considered the standard term for illustrating the notion of non-attachment in India. It seems to carry the essence of non-attachment better than the term itself (Hoffman, 2007). *Anasakti* (non-attachment) has been used in both formal psychological works, as well as folk stories and cultural phrases

(Bhushan & Jha, 2005; Banth & Talwar, 2012; Chandur & Sriram, 2018; Pande & Naidu, 1992; Singh & Raina, 2015). Hindu scriptures describe it as a mental state free from *asakti* (attachment) and the resulting emotional fluctuations. It largely contributes to establishing a state where the mind remains a keen observer of events without being affected by the same (Banth & Talwar, 2012; Chandur & Sriram, 2018). Therefore, it motivates a person to be involved in worldly affairs without selfish interests (Bhushan & Jha, 2005; Pande & Naidu, 1992). By inculcating *anasakti* (non-attachment), anyone can have a flourishing and peaceful life, even in the face of extreme difficulties. Hence, as per classical Indian philosophy, *anasakti* (non-attachment) embodies spiritualism and excellence in living (Pande & Naidu, 1992).

Non-Attachment (Anasakti) in Buddhist Teachings

As per Buddhism, non-attachment is a subjective quality involving freedom from a fixation, sensory or mental objects, or from the urge to direct life events, and openness to life without desiring specific experiences (Elphinstone et al., 2015; Sahdra et al., 2010; Sahdra & Shaver, 2013; Whitehead et al., 2020).

It may be noted that both the knowledge systems (Hindu and Buddhist) view attachment as the root cause of our endless suffering. They also agree that *anasakti* (non-attachment) requires one to transcend their egotistic tendencies and rigid beliefs regarding self, others, and life so that the individual can be free from attachments (Bhawuk, 2000, 2008; Gupta & Agrawal, 2020; Sahdra et al., 2010).

Anasakti (Non-Attachment) Versus Asakti (Attachment)

The idea of non-attachment seems universally prevalent across schools of thought and religion; however, it is especially salient and thereby widely discussed in the Hindu and Buddhist scriptures (Huxley, 1941). Within these Eastern knowledge traditions, *asakti* (attachment) is viewed as "psychic cement" (Agrawal, 1982, p. 1), a psychological phenomenon that keeps one's sense of self glued to worldly events and actions. In this manner, *asakti* (attachment) binds the self to the empirical world (*prakriti*) and holds them back from experiencing or realising the transcendental Self (Bhushan & Jha, 2005).

Ahamkara (Ego) in Hindu Thought

As per Vedanta, *ahamkara* (ego) emerges when the deeper Self identifies itself with the material aspect (*prakriti*) and with the body (*deha*) due to primary ignorance (*avidya*) while ignoring its metaphysical aspect (*Atman/Purusa*) (Salagame, 2011). Salagame et al. (2005) have proposed four aspects of *ahamkara* (ego) based on Hindu Vedantic ideas which include: (a) a sense of uniqueness in terms of having distinct characteristics (*vaishishtya*), (b) a sense of doer-ship in terms of being the agent and having control over every action and its outcomes (*kartatva*), (c) having an identification with worldly objects, in terms of me and mine (*abhimana*), and (d) having a sense of differentiation in terms of separation between I versus not-I (*dvaita bhava*) (Salagame & Raj, 1999; Salagame et al., 2005).

Self in Buddhism

Within Buddhism, belief in a static, permanent self has been considered ignorance since the self is supposed to be transient (Paranjpe, 2002). As per Buddhist psychological literature, the detriment of having a misconceived notion of a fixed self is that it leads one to avoid the reality of this world's and its objects' transitory nature. Thereby, it creates defensiveness in individuals against this reality (Brazier, 2003). Gradually, the person gets attached to the self and believes that fulfilling the desires of this self would bring happiness. Such misperception makes a person regard everything as an extension of their self, leading to the development of egoism. With egoism, the person becomes self-centred and egocentric (Dambrun & Ricard, 2011). Therefore, in Buddhism, developing the state of *no-self* or releasing the attachment to the sense of self is suggested as the path of freedom from personal sufferings (Dambrun & Ricard, 2011; Shiah, 2016).

Anasakti (Non-Attachment) and Positive Outcomes

In empirical research, it has been found that *anasakti* (non-attachment) leads one to focus on work excellence without insistence on a distinct outcome or feeling and, therefore, increases productivity and satisfaction

(Mulla & Krishnan, 2008; Pande & Naidu, 1992). It is also associated with the development of emotional equanimity towards different life circumstances and hence promises less distress and better mental health during challenging life events (Banth & Talwar, 2012; Budiarto, 2019; Pande & Tewari, 2011; Wang et al., 2016). Besides, such a non-attached approach induces unconditional care and concern for others (Singh & Raina, 2015), along with hopefulness (Shaw, 1995), and a more optimistic view of life (Agrawal & Jaiswal, 2013). *Anasakti* (non-attachment) has also been found to be associated with wisdom (Jeste & Vahia, 2008) and other indicators of an optimal psychological development, such as self-actualisation and self-transcendence (Whitehead et al., 2020).

Ahamkara (Ego) and Psychological Functioning

As discussed earlier, the ego-based identity or *ahamkara* (ego) has certain implications for one's psychological functioning. As per Salagame's model, an over or under-emphasis on any single aspect of *ahamkara* (ego) may lead to mental health problems, such as anxiety (Rekha, 1995; Salagame & Raj, 1999) and personality disorders (Salagame et al., 2005). Gaur (2011) has suggested that people with a high *ahamkara* (ego) may engage in self-adoration while neglecting others and may even put others' interests at stake for their benefit. Nevertheless, some scholars have also highlighted *ahamkara*'s (ego) utility in human life. For example, in "Integral Yoga", Sri Aurobindo argues that an individual achieves an existence out of the common mass through *ahamkara* (ego) (Aurobindo 2005; Reddy, 1990). Similarly, Raghuram (2007) suggests that *ahamkara* (ego) may help in knowing and carrying out essential life activities and social responsibilities and, therefore, recommends disciplining it instead of obliterating it.

In summary, although the terms *anasakti* (non-attachment) and *ahamkara* (ego) are rooted in the Indian tradition, these psychological concepts seem to have universal applications. They are linked to the idea of a deeper Self or Consciousness, which is the source of unconditional happiness and well-being. Even in European philosophy, the primacy of Consciousness (panpsychism) has been an essential element over the centuries (Agrawal & Cornelissen, 2021). Further, recent research with Western samples has also reported that non-attachment and going beyond egoistic concerns are associated with positive functioning (Sahdra et al., 2010; Wayment et al., 2011; Whitehead et al., 2020). Nevertheless, more research employing diverse samples, tools and methodologies is required.

Measuring the Indian Concepts of Anasakti (Non-Attachment) and Ahamkara (Ego)

In psychological research, it has been noted that many psycho-spiritual concepts originating in Eastern cultures are hard to define in a precise manner. For example, the issues related to describing mindfulness have been widely discussed (Anālayo, 2019; Nilsson & Kazemi, 2016). On similar lines, *anasakti* (non-attachment) is also hard to define and scholars have given multiple and sometimes overlapping definitions (Gupta & Agrawal, 2020). In research, *anasakti* (non-attachment) is usually assessed using scales based on perspectives given in either Bhagavadgita (Pande & Naidu, 1992), Yoga (Bhushan & Jha, 2005), or Buddhism (Sahdra et al., 2010). Although all these perspectives are categorised as Eastern philosophical thought, subtle variations could be found in definitions and interpretations of the same concept within these philosophical reflections. Therefore, psychological measures rooted in specific knowledge traditions may also tap into similar yet distinct aspects of *anasakti* (non-attachment), and it was noted that such scales had shown good psychometric properties. Similar issues have been reported for the definition and measurement of *ahamkara* (ego), with few tools available (Gupta & Agrawal, 2021).

The current study has tried to overcome these issues in the best way possible. *Anasakti* (non-attachment) was operationalised as "an inner state of freedom, which lacks clinging to ideas, expectations, extrinsic motivations, materialistic desires or selfish interests, contains a complete engagement in tasks while also working for the larger good of humanity, and maintains composure in pleasant or unpleasant experiences" (Gupta & Agrawal, 2020, pp. 3). *Ahamkara* (ego) was operationalised as a self-sense, which includes a sense of separation from others, identification with worldly matters, and a belief that one possesses unique characteristics and views oneself as the agent of every action.

Three distinct standardized anasakti-scales based on different knowledge traditions were designed for the current research to gain a multi-dimensional view of *anasakti* (non-attachment). For the *ahamkara* (ego), the only available scale was utilised; details are given in the tools section and further discussed in the study's limitations.

Rationale for the Study

Self is the centre around which all experiences revolve (Mishra, 2010), and the concept of *anasakti* (non-attachment) and *ahamkara* (ego) may be directly applied to this self. Based on the description of these two indigenous concepts and their effects, it might be proposed that they are theoretically different concepts and may produce different outcomes. The theory suggests a potentially negative relationship between them, which needs to be tested empirically. Further, these two concepts can be contemplated as well-being variables, such as subjective well-being, job satisfaction (Banth & Talwar, 2012; Singh & Raina, 2015; Upadhyay & Vashishtha, 2014), social harmony (Bishoyi, 2017) and growth (Whitehead et al., 2020). Beyond that, combining measures based on Indian philosophy with mainstream psychological measures may reveal contemporary implications for these indigenous concepts based on centuries-old knowledge traditions. An empirical investigation of such associations may provide nuanced insights into how these philosophical concepts could impact one's mental health and/or adaptive functioning. Furthermore, investigating well-being variables that have not been previously studied in relation to anasakti and ahamkara would help develop interventions based on these philosophical concepts, to improve the quality of life. Additionally, the *ahamkara* (ego) model (Salagame et al., 2005) remains more or less valid, as reported in another empirical study (Gupta & Agrawal, 2021). A significant feature of the sub-components of *ahamkara* (ego) is that these might be present in different degrees among people, giving them a layered sense of identity (Gaur, 2011; Salagame et al., 2005). Every identity requires one to think, feel, and behave in a specific manner. Hence, these identities may cumulatively enhance one's sense of *ahamkara* (ego) and make it challenging to experience one's transcendental Self.

Since ours was an exploratory study, we could not formulate any specific hypothesis. However, based on psychological literature, it was broadly expected that a higher level of *anasakti*/ non-attachment would lead to higher well-being. In contrast, lower levels of *ahamkara*/ ego will be associated with better well-being.

Methods

Participants

We adhered to all ethical codes for the current study, and ethical clearance was obtained through the institute's doctoral committee (License number: IITP/1421HS01/17/31). This cross-sectional study recruited participants from the urban areas of Patna (North India) using purposive and convenience sampling techniques. We invited adults with at least twelve years of formal education and the ability to read, write, and speak Hindi/English. They were given a choice to opt for filling the questionnaire either in offline or online mode.

The final sample (N = 240) included 136 men and 104 women, their age ranging from 20–60 years (Mean age = 38.17 years, SD = 11.45 years). Table 1 suggests that a considerable proportion of the sample described themselves as Hindu, married, employed, and postgraduates, who were living with their families (More details in Gupta & Agrawal, 2021).

Measurements

The measures used in this research could be divided into three parts: measurements of *anasakti*/ non-attachment, *ahamkara*/ ego, and well-being constructs.

Scale of Anasakti (SA)

Following the philosophy of Bhagavadgita, Pande and Naidu (1992) developed the first scale of *anasakti*. It has 28 items and measures *anasakti* (non-attachment) on five dimensions: outcome vulnerability (ten items), attachment (four items), effort orientation (eight items), endurance and equipoise (three items), and physical-sensual non-identification (three items). Outcome vulnerability (OV) subscale indicates excessive concern for outcomes, and attachment (ATT) deals with one's susceptibility to others' criticism, appreciation and tendency to compare oneself with others. Effort orientation (EO) assesses one's emphasis on task excellence and duty orientation, while endurance and equipoise (EE) indicate a tolerance for psychical and emotional distress. Physical-sensual non-identification (PI) indicates the absence of desire for material objects and sensual pleasures. A few items require reverse coding and the total possible scores range from 28 to 140. Previous studies have reported this scale's adequate reliability and validity (Shaw, 1995; Pande & Tewari, 2011). In the current study, Cronbach's alpha value was .82.

Table 1. Socio-demographic details of the study participants (N=240)

Age range (years)	N	*Mean* (years)	*SD* (years)
20–60	240	38.17	11.45
Participants' Demography	Details	Frequency (N)	Percentage (%)
Gender	Male	136	56.7
	Female	104	43.3
Religion	Hindu	204	85.0
	Muslim	16	6.7
	Religious affiliation not mentioned	20	8.3
Education Level	Up to 12th	14	6.0
	Graduate	53	22.0
	Post Graduate	132	55.0
	M.Phil/ PhD	41	17.0
Employment Status	Employed	106	44.0
	Unemployed	134	56.0
Marital Status	Married	127	53.0
	Unmarried	103	43.0
	Divorced/separated	8	3.3
	Widow/widower	2	0.7
Current Living Settings	With family	156	65.0
	With roommates	36	15.0
	Alone	48	20.0
Yearly Household Income	Less than 2 lakhs*	37	15.4
	2–5 lakhs	88	36.7
	5–8 lakhs	69	28.7
	8–12 lakhs	22	9.2
	More than 12 lakhs	24	10.0

Note. *1 lakh Indian rupee is approximately equivalent to 1445 USD

Nonattachment Scale (NAS)

Elphinstone et al. (2015) developed this seven-item scale, which constitutes a shorter version of the original 30-items Nonattachment Scale based on Buddhist psychology (Sahdra et al., 2010). It is a six-point Likert type scale and the scores range from 7–42. Previous studies found the scale a reliable measure (Sahdra et al., 2015; Sahdra et al., 2016; Whitehead et al., 2020), just as it proved to be in the current study ($\alpha = .81$).

Test of Asakti-Anasakti (TAA)

Bhushan and Jha (2005) developed this four-point Likert type scale having 40-items, based on *Patanjali*'s *Yoga Sutras*. The scale measures *anasakti* (non-attachment) and *asakti* (attachment) as two extremes of the same continuum. Ten items are negatively scored, and an agreement with them reflects *anasakti* (non-attachment), whereas 30 items are positively scored, and an agreement with those is suggestive of *asakti* (attachment). Hence, possible scores range from 40 to 160, with high TAA scores suggesting *asakti* (attachment), and low scores suggesting *anasakti* (non-attachment). No reverse scoring was done in order to follow the original scoring given by the authors. This test has shown adequate psychometric properties in previous studies with the Indian sample (Banth & Talwar, 2012; Bhushan & Jha, 2005; Pandey & Singh, 2015). In the current study, Cronbach's alpha value ($\alpha = .89$) was adequate.

Ahamkara Questionnaire (AQ)

In 1993, Raj developed this four-point Likert type scale (Salagame & Raj, 1999) having 18 items, following the *Vedanta* philosophy. It captures *ahamkara* (ego) inn four dimensions: identification (five items), individuality (five items), agency (four items), and separation (four items). Some of the items are reversely coded, so the total score on this instrument ranges from 18 to 72, where a higher score reflects a higher level of *ahamkara*. In previous studies, this questionnaire has demonstrated good reliability, where Cronbach's alpha value ranged from .70 to .89 (Salagame et al., 2005).

With the current sample, Cronbach's alpha value of this scale came to .55, below the popular acceptable value. We chose to proceed with the scale, however, since it was the only published and standardized scale for measuring ego as per the Indian model of self.

Satisfaction With Life Scale (SWLS)

Diener, Emmons, Larsen, and Griffin (1985) developed this well-established five-item scale. It measures overall life-related cognitive judgments on a seven-point Likert-type scale. For the present study, a single item, "I am satisfied with my life," from the original scale was used to evaluate one's overall satisfaction with life. Like the full version, this single-item version of SWLS remains also a widely used measure with consistent reliability and validity (Cheung & Lucas, 2014; Pavot & Diener, 2008).

Job Satisfaction Scale (JSS)

A three-item scale, with a seven-point Likert-type response format – included in the Michigan organization assessment questionnaire (Cammann et al., 1979) – was used to assess job satisfaction. The scores range from 7–21, and before analysis, item 2 was reverse coded so that a high value indicated greater job satisfaction. A widely used scale in the research literature, it has also been found reliable in the Indian context (Aloisio et al., 2019; Bowling & Hammond, 2008; Samson & Arulraj, 2007). This served as a reliable tool with the current study sample ($\alpha = .63$).

Mental Health Continuum-Short Form (MHC-SF)

This constitutes a shorter version of Keyes's (2002) 40-items Mental Health Continuum-Long Form. MHC-SF is a well-established six-point Likert-type measure of well-being used in various cultural settings. Eleven items were used from MHC-SF (Keyes, 2009) to assess psychological and social aspects of well-being, while another scale (PANAS-R; see below) captured the emotional aspect in the current study. The social well-being (SWB) subscale included five items, and the psychological well-being (PWB) subscale contained six items. Scores were summed up separately for each subscale to indicate the respective well-being. For SWB, scores range from 5 to 30; for PWB, they range from 6 to 36. MHC-SF serves as a well-established measure of well-being used in various cultural settings (Keyes, 2005, 2009; Singh et al., 2015). In the current sample, Cronbach's alpha value for SWB came to .83, and for PWB, it stood at .87.

Positive and Negative Affect Schedule, Revised (PANAS-R)

This 26-item five-point Likert type scale is the modified version of the original schedule (Barrett & Russell, 1998), further revised by Rao and Mehrotra (2006) for the Indian context. Thirteen items assess positive affect (PA), and another 13 items measure negative affect (NA). Further, PA and NA were subdivided into activated (eight items for each subscale) and deactivated (five items for each subscale) affect states. For example, statements like "feeling excited" show a positive, activated state, whereas "calm and relaxed" corresponds to a positive, deactivated state. On the other hand, "feeling angry" suggests a negative, activated state and "feeling exhausted" indicates a negative, deactivated state. Scores range from 13 to 65 for both PA and NA. This widely used and well-validated scale has shown adequate reliability within the Indian sample (Agrawal et al., 2010; Elias et al., 2016). With the current study sample, the internal consistency (Cronbach's α) was .91 for both PA and NA.

Table 2. Mean and Standard Deviation for All Measures

Measures	Total items	Possible range	Obtained range	*Mean (SD)*	Skewness	Kurtosis	Normality (Kolmogorov-Smirnov Test; *p* value)
Scale of Anasakti	28	28–140	48–134	94.85 (13.43)	.330	.556	.062
Outcome vulnerability	10	10–50	13–50	33.95 (6.68)	.068	.142	.055
Attachment	4	4–20	4–20	11.72 (3.17)	.092	−.384	.090
Effort orientation	8	8–40	13–39	27.93 (4.82)	−.121	−.136	.059
Endurance and equipoise	3	3–15	3–15	10.83 (2.38)	−.457	.147	.122
Physical-sensual non-identification	3	3–15	4–15	10.42 (2.46)	−.098	−.513	.098
Nonattachment Scale	7	7–42	7–42	31.83 (6.79)	−.720	.419	.102
Test of Asakti-Anasakti	40	40–160	44–138	85.29 (16.07)	.093	.114	.036
Ahamkara Questionnaire	18	18–72	22–61	44.80 (6.28)	−.362	.619	.057
Identification	5	5–20	5–20	12.80 (2.33)	−.123	−.579	.095
Individuality	5	5–20	5–19	12.85 (3.10)	−.292	.221	.122
Agency	4	4–16	4–16	9.81 (2.45)	.049	.069	.120
Separation	4	4–16	4–15	9.33 (2.33)	.184	−.569	.105
Positive Affect	13	13–65	18–65	43.08 (9.37)	−.234	−.070	.045
Positive Affect (activated)	8	8–40	8–40	26.27 (6.67)	−.248	−.192	.055
Positive Affect (deactivated)	5	5–25	6–25	16.82 (3.86)	−.177	−.343	.073
Negative Affect	13	13–65	13–57	25.73 (9.49)	.825	.330	.099
Negative Affect (activated)	8	7–35	8–37	15.86 (6.24)	.906	.614	.119
Negative Affect (deactivated)	5	5–25	5–22	9.87 (3.83)	.724	−.090	.137
Job Satisfaction Scale	3	3–21	3–21	16.63 (3.26)	−1.13	1.83	.149
MHC-SF Social Well-being	5	5–30	5–30	15.93 (6.91)	.06	−.99	.077
MHC-SF Psychological Well-being	6	6–36	6–36	24.50 (8.02)	−.73	−.24	.114
Satisfaction With Life Scale	1	1–7	1–7	5.37 (1.61)	1.423	1.326	.294

Note. *1 lakh Indian rupee is approximately equivalent to 1445 USD

Procedure

All measures were compiled into a questionnaire booklet. For the Hindi version of the booklet, instruments were first translated into Hindi and then back-translated into English. Subsequently, the reverse-translated version was compared with the original one to check for discrepancies or distorted meanings. The distorted meanings were corrected, and discrepancies were resolved satisfactorily through discussions. Two subject experts completed the entire process; they also had a good command of both languages. The researcher either administered these booklets to the participants in person or emailed the questionnaire (a Google-Form-based questionnaire). Their queries were resolved personally or over the phone (More details in Gupta & Agrawal, 2021).

Results

The obtained raw data were cleaned and reverse-scored wherever required before being analyzed with SPSS 20. Means, standard deviations, skewness, and kurtosis of data were calculated and presented in Table 2. Only the scores on the Test of Asakti-Anasakti (TAA), Positive Affect (PA), and the Activated Subscale of Positive Affect were normally distributed in this sample.

Relationship between Anasakti (Non-Attachment) and Ahamkara (Ego)

The relationships among the variables were analysed using Spearman's Rank correlation coefficient and are presented in Table 3. Regarding the total scores on Ahamkara Questionnaire, the correlation value for both Scale of

Table 3. Spearman Rank Correlations Between Anasakti (non-attachment) and Ahamkara (ego)

	Scale of Anasakti	Outcome Vulnerability	Attachment	Effort Orienta-tion	Endurance & Equipoise	Physical-sensual non-identification	Non-attachment Scale	Test of Asakti-Anasakti	Ahamkara Question-naire	Identifi-cation	Indivi-duality	Agency	Separa-tion
Scale of Anasakti	--												
Outcome vulnerability	0.83**	–											
Attachment	0.72**	0.61**	–										
Effort orientation	0.58**	0.19**	0.19**	–									
Endurance and equipoise	0.49**	0.20**	0.18**	0.39**	–								
Physical-sensual non-identification	0.59**	0.45**	0.37**	0.17**	0.27**	–							
Nonattachment Scale	0.47**	0.31**	0.32**	0.41**	0.26**	0.15 (.022)*	–						
Test of Asakti-Anasakti	–0.72**	–0.64**	–0.64**	–0.31**	–0.33**	–0.44**	–0.44**	–					
Ahamkara Questionnaire	–0.27**	–0.27**	–0.27**	0.07	–0.11	–0.17**	–0.16 (.016)*	0.51**	–				
Identification	–0.33**	–0.32**	–0.38**	–0.09	–0.14 (.036)*	–0.22**	–0.24**	0.50**	0.62**	–			
Individuality	–0.17 (.010)*	–0.20**	–0.12	0.03	–0.16 (.017)*	–0.08	0.02	0.26**	0.65**	0.14 (.026)*	–		
Agency	–0.10	–0.14 (.030)*	–0.16 (.016)*	–0.05	–0.04	–0.02	–0.09	0.27**	0.65**	0.27**	0.31**	–	
Separation	–0.05	–0.02	0.00	–0.06	0.01	–0.12	–0.02	0.16 (.011)*	0.42**	–0.8	0.23**	0.05	–

Note. * (exact *p* value), ** (*p*< .001)

Anasakti (SA) ($r = -.27$, $p < .001$) and Nonattachment Scale (NAS) ($r = -.16$, $p < .016$) was a mild negative, and a moderate positive for scores on the Test of Asakti-Anasakti ($r = .53$, $p < .001$). So, a higher *ahamkara* (ego) was associated with a lower *anasakti* (non-attachment).

Relationships of Anasakti (Non-Attachment) and Ahamkara (Ego) with Positive Psychological Functioning

Anasakti (non-attachment) and higher well-being

In general, *anasakti* (non-attachment) was associated with higher well-being. In Table 4, after calculating Spearman's rank correlations, we found that Positive Affect (PA) (total, Activated and Deactivated) was positively correlated with the Scale of Anasakti (SA) ($r = .24$, $p < .001$; $r = .13$, $p < .040$; .34, $p < .001$, respectively) and the Nonattachment Scale (NAS) ($r = .34$, $p < .001$; $r = .26$, $p < .001$; $r = .40$, $p < .001$, respectively). Similarly, the Scale of Anasakti (SA) was modestly associated with cognitive well-being as exhibited through overall satisfaction with life (scores on Satisfaction with Life Scale; SWLS) ($r = .28$, $p < .001$) and the domain satisfaction with one's job (scores on Job Satisfaction Scale; JSS) ($r = .30$, $p < .001$). Interestingly, while the Physical-sensual Non-identification (PI) subscale within the Scale of Anasakti had a significant relationship with the Job Satisfaction Scale ($r = .18$, $p < .001$), the Attachment (ATT) subscale of this scale had a similar significant relationship with the Satisfaction with Life Scale ($r = .18$, $p < .001$). This indicates that the job satisfaction level increases when people have less desire for material objects, just as people having a lower tendency to compare themselves with other people experience an increased life satisfaction. Measures of cognitive well-being indicated a positive association with the Nonattachment Scale (NAS); however, it was stronger with the Job Satisfaction Scale ($r = .32$, $p < .001$) as compared to the Satisfaction with Life Scale ($r = .26$, $p < .001$). The psychological well-being subscale had a positive but mild correlation with Effort Orientation ($r = .16$, $p < .013$) and Endurance and Equipoise ($r = .18$, $p < .001$). With the social well-being subscale, only Effort Orientation (EO) ($r = .16$, $p < .015$) was significantly correlated. Another measure of non-attachment positively correlated with social well-being was NAS ($r = .16$, $p < .015$), although the correlation was mild.

Asakti (attachment) and lower well-being

Asakti (attachment) scores; reflected by higher scores on the Test of Asakti-Anasakti, were positively and moderately associated with Negative Affect (total, Activated, and Deactivated) ($r = .50$, $p < .001$; $r = .48$, $p < .001$; $r = .45$, $p < .001$, respectively). Further, Positive Affect (Deactivated) ($r = -.21$, $p < .001$) and cognitive well-being (assessed by measures of life satisfaction and job satisfaction) ($r = -.27$, $p < .001$; $r = -.29$, $p < .001$, respectively) demonstrated a negative correlation with the Test of Asakti-Anasakti (TAA). Along similar lines, the Negative Affect (NA) total, Activated and Deactivated all three showed negative correlations with the total score on the Nonattachment Scale (NAS) ($r = -.28$, $p < .001$; $r = -.23$, $p < .001$; $r = -.24$, $p < .001$, respectively) and the Scale of Anasakti (SA) ($r = -.47$, $p < .001$; $r = -.43$, $p < .001$; $r = -.47$, $p < .001$, respectively). Although Negative Affect (NA) demonstrated a negative association with all subscales of the Scale of Anasakti, it was more robust for Outcome Vulnerability (OV) ($r = -.43$; $r = -.39$; $r = -.42$, $p < .001$, respectively) and Attachment (ATT) ($r = -.40$; $r = -.39$; $r = -.34$, $p < .001$, respectively).

Ahamkara (ego) and higher well-being

Interestingly, *ahamkara* had a mixed relationship with well-being, at mild to modest strength, as presented in Table 4. Total scores on Ahamkara Questionnaire (AQ) indicated mild to modest positive correlations with Positive Affect (total and activated) ($r = .23$, $p < .001$; $r = .31$, $p < .001$, respectively) and the Psychological Well-being subscale ($r = .17$, $p < .001$). The total Positive Affect was associated with the Individuality ($r = .16$, $p < .014$) and Agency ($r = .17$, $p < .001$) subscales, while Positive Affect (activated) was positively associated with all four subscales of *ahamkara* (ego). The psychological ($r = .15$, $p < .018$) and social well-being ($r = .14$, $p < .030$) subscales were also associated with the Individuality subscale.

Table 4. Spearman Rank Correlations Between Anasakti, Ahamkara, and Measures Relevant to Well-Being Constructs

	Emotional Well-being						Cognitive Well-being		Psycho-logical Well-being	Social Well-being
	Positive Affect (Total)	Positive Affect (Activated)	Positive Affect (Deactivated)	Negative Affect (Total)	Negative Affect (Activated)	Negative Affect (Deactivated)	Satisfaction with Life Scale	Job Satisfaction Scale		
Scale of Anasakti	0.24**	0.13 (.040)*	0.34**	−0.47**	−0.43**	−0.47**	0.28**	0.30**	0.06	0.06
Outcome vulnerability	0.12	0.05	0.22**	−0.43**	−0.39**	−0.42**	0.17**	0.21**	0.02	−0.03
Attachment	0.07	−0.02	0.19**	−0.40**	−0.39**	−0.34**	0.18**	0.12	−0.07	0.02
Effort orientation	0.27**	0.20**	0.30**	−0.19**	−0.17 (.010)*	−0.21**	0.25**	0.27**	0.16 (.013)*	0.16 (.015)*
Endurance and equipoise	0.23**	0.13 (.040)*	0.32**	−0.24**	−0.21**	−0.24**	0.32**	0.26**	0.18**	0.11
Physical-sensual non-identification	0.05	−0.02	0.14 (.030)*	−0.22**	−0.19**	−0.24**	0.06	0.18**	−0.03	−0.05
Nonattachment Scale	0.34**	0.26**	0.40**	−0.28**	−0.23**	−0.24**	0.26**	0.32**	0.10	0.16 (.015)*
Test of Asakti-Anasakti	−0.03	0.06	−0.21**	0.50**	0.48**	0.45**	−0.27**	−0.29**	0.02	−0.03
Ahamkara Questionnaire	0.23**	0.31**	0.01	0.29**	0.29**	0.24**	−0.09	−0.08	0.17**	0.08
Identification	0.12	0.18**	−0.02	0.20**	0.19**	0.11	−0.02	0.04	0.10	−0.03
Individuality	0.16 (.014)*	0.26**	−0.04	0.30**	0.27**	0.27**	−0.06	−0.06	0.15 (.018)*	0.14 (.030)*
Agency	0.17**	0.20**	0.03	0.02	-0.00	0.04	0.01	0.10	0.05	0.02
Separation	0.11	0.14 (.025)*	0.06	0.25**	0.27**	0.20**	−0.22**	−0.22**	0.08	0.07

Note. * (exact p value), ** ($p< .001$)

Table 5. Stepwise Multiple Linear Regression Analyses on Well-Being Variables

Dependent variable	Significant predictors	Beta (β)	*t* value	Significance	R2 change	*F*
Positive Affect	Nonattachment Scale	.328	4.78	.000	.241	6.791**
	Ahamkara Questionnaire (Identification)	.182	2.61	.010		
	Scale of Anasakti (Outcome Vulnerability)	.192	2.25	.026		
	Scale of Anasakti (Endurance & Equipoise)	.178	2.61	.010		
Negative Affect	Test of Asakti-Anasakti	.265	2.76	.006	.266	9.131**
	Ahamkara Questionnaire (Separation)	.120	2.16	.032		
	Ahamkara Questionnaire (Agency)	–.188	–3.32	.001		
	Scale of Anasakti (Outcome Vulnerability)	–.241	–3.12	.002		
Satisfaction with Life Scale	Nonattachment Scale	.202	2.89	.004		
	Ahamkara Questionnaire (Identification)	.169	0.23	.018	.224	6.478**
	Ahamkara Questionnaire (Separation)	–.154	–2.46	.015		
	Scale of Anasakti (Endurance & Equipoise)	.244	3.52	.001		
Job Satisfaction Scale	Nonattachment Scale	.216	3.13	.002		
	Ahamkara Questionnaire (Separation)	–.178	–2.89	.004	.232	5.647**
	Ahamkara Questionnaire (Agency)	.155	2.47	.014		
	Scale of Anasakti (Endurance & Equipoise)	.170	2.48	.014		

Note. *1 lakh Indian rupee is approximately equivalent to 1445 USD

Ahamkara (ego) and lower well-being

Total *ahamkara* (ego) showed mild to modest positive correlations with Negative Affect (total and activated) ($r = .29$, $p < .01$; $r = .29$, $r = .29$, $p < .001$, respectively), along with Deactivated Negative Affect ($r = .24$, $r = .29$, $p < .001$). Similarly, Negative Affect (total and Activated) was associated with the Individuality ($r = .30$, $p < .001$; $r = .27$, $p < .001$, respectively), Separation ($r = .25$, $p < .001$; $r = .27$, $p < 0.001$, respectively) and Identification ($r = .20$, $p < .001$; $r = .20$, $p < .001$, respectively) subscales. Deactivated Negative Affect demonstrated a correlation with Individuality ($r = .27$, $p < 0.001$) and Separation ($r = .20$, $p < .001$). Separation negatively associated with both the Life Satisfaction Scale (SWLS) ($r = –.22$, $p < .001$) and the Job Satisfaction Scale (JSS) ($r = –.22$, $p < .001$).

Anasakti (Non-Attachment) and Ahamkara (Ego) as Predictors of Positive Mental Health

After determining the correlations, the variables having significant correlations were used for a stepwise multiple linear regression analysis to determine whether *anasakti* (non-attachment) and *ahamkara* (ego) can predict various mental health outcomes. For this, the effects of age and gender were controlled, and stepwise multiple linear regression analyses were performed with variables that had a significant correlation with *anasakti* (non-attachment) and *ahamkara* (ego). Since Positive affect (PA), Negative affect (NA), Satisfaction with Life and Job satisfaction had stronger relationships with the measures of *anasakti* (non-attachment) and *ahamkara* (ego) than with the psychological and social well-being scale, they were used as dependent variables. Table 4 presents the findings of the multiple regression analysis for Positive Affect (PA), Negative Affect (NA), the level of life satisfaction (SWLS), and job satisfaction (JSS) as the outcome variables. For their predictions, age and gender were controlled before scores of the Ahamkara Questionnaire and its subscales, Scale of Anasakti and its subscales, Nonattachment Scale (NAS) and the Test of

Asakti-Anasakti (TAA) were entered. Results revealed that the final regression model, which explained a 24% variance in Positive Affect (PA), included the Nonattachment Scale, Ahamkara questionnaire's Identification subscale, Scale of Ansakti's Outcome vulnerability, and the Endurance and Equipoise subscales. For Negative affect (NA), the Test of asakti-anasakti, the Ahamkara Questionnaire's Separation, the Agency subscale, and the Scale of Anasakti's (SA) Outcome Vulnerability subscale emerged as significant predictors for explaining a 27% variance in the Negative Affect (NA). The best predictors, which explained a 22% variance in the Satisfaction with Life Scale (SWLS), included the Nonattachment Scale, the Ahamkara Questionnaire's Identification and Separation subscale, and the Scale of Anasakti's Endurance and Equipoise subscale. The best-fitting regression model for the Job Satisfaction Scale (JSS) included the Nonattachment Scale, the Ahamkara Questionnaire's Separation and Agency subscales, and the Scale of Anasakti's Endurance and Equipoise subscale as it explained a 23% variance in the level of job satisfaction (JSS).

Discussion

The current study empirically explored possible associations between the psycho-philosophical concepts of *anasakti* (non-attachment) and *ahamkara* (ego), and measures of well-being, in a sample of urban, educated Indian adults. The results supported that *anasakti* (non-attachment) and *ahamkara* (ego) relate to well-being differently. They were assessed through frequent experiences of positive affect, presence of life and job satisfaction, and infrequent experiences of negative affect, along with some indications of psychological and social well-being.

Anasakti (non-attachment) was associated with a higher frequency of positive affect, especially the low energy type, such as feeling calm and relaxed. Previous research found similar results where *anasakti* (non-attachment) has been associated with better well-being (Elphinstone & Whitehead, 2019). Having a lower fixation on one's expectations from life and actions (Pande & Naidu, 1992; Whitehead et al., 2020), having equanimity and the ability to tolerate unpleasant situations (Banth & Talwar, 2012; Bhushan & Jha, 2005), as well as focusing less on outcomes and being process-oriented (Pande & Naidu, 1992) are all associated with well-being. People having a higher *anasakti* (non-attachment) understand that, unlike personal identity, surrounded by self-relevant feelings, beliefs, and mental images, their self remains genuinely more inclusive and spiritual (Collins & Desai, 1986; Mills, 2011). Thus, anasakti (non-attachment) provides the optimal conditions for expanding one's Consciousness, which goes beyond the body, material possessions, and the sense of ownership. Further, while working, people with *anasakti* (non-attachment) may maintain their calmness throughout the task due to their lack of anxiety about outcomes. Moreover, they view work as one's contribution to the betterment of the world; therefore, it brings a sense of fulfilment and contentment to them regardless of the work's results (Caza & Wrzesniewski, 2013; Pande & Naidu, 1992; Shaw, 1995; Upadhyay & Vashishtha, 2014). Further, those having greater *asakti* (attachment) also reported experiencing a higher frequency of negative or unpleasant emotions. People with higher *asakti* (attachment) may tend to be more fixated on their expectations and be more pleasure- or result-oriented. Many studies suggest that *asakti* (attachment) becomes manifested in the form of memories or concerns and expectations for future outcomes (Banth & Talwar, 2012; Bhushan & Jha, 2005). So, when a conflict between current happenings and an individual's expectations emerges, the individual may experience intense negative emotions (Whitehead et al., 2021).

Another interesting finding was that, unlike in previous studies (Banth & Talwar, 2012), in our sample, psychological and social well-being indicated a relation only with certain features of *anasakti* (non-attachment) rather than with an overall non-attached attitude towards life. Probably, this resulted when people could maintain a stance of equanimity and focus on effort rather than the outcomes of their actions. They were also more likely to experience a fulfilling and meaningful life and interpersonal relationships. Interestingly, the sense of *ahamkara* (ego) emerged as a unique predictor of cognitive and affective well-being, along with *anasakti* (non-attachment). Although results for *anasakti* (non-attachment) stood similar to that found in the literature, results were more nuanced for *ahamkara* (ego). Unlike in previous studies, our findings revealed that people with *ahamkara* (ego) might experience various positive and negative emotions. They may experience positive emotions like excitement, enthusiasm, or pride more frequently; however, they are less likely to experience pervasive life- and work-related satisfaction and often may experience negative emotions, ranging from anger to sadness. Identification predicted a positive affect and life satisfaction; agency predicted job satisfaction and a lowered negative affect. The separation component of *ahamkara* (ego) predicted a higher negative affect, and a lower sense of separation predicted cognitive well-being. When we take these findings together, one could say that *ahamkara* (ego) constitutes an important factor in determining a happy and fulfilling life, but only if balanced with a sense of interconnection and non-attachment. These findings added to the literature on the human capacity to integrate opposite poles of living (Carreno et al., 2021).

One of the current study's significant findings was the empirical establishment of the theoretical relationship between *anasakti* (non-attachment) and *ahamkara* (ego). Although many scholars explored the concepts of *anasakti* (non-attachment) and *ahamkara* (ego) separately, they have hinted at a negative association between them. Many of them pointed out that for developing *anasakti* (non-attachment), the removal of *ahamkara* (ego) is essential (Banth & Talwar, 2012; Bhushan & Jha, 2005; Elphinstone & Whitehead, 2019; Whitehead et al., 2018; Whitehead et al., 2021). Our study confirmed that people higher in *anasakti* (non-attachment) might be less egoistic. They may be less involved in personalizing every experience and, to define themselves, they do not depend on phenomenal experiences or objects. Additionally, when people are not involved in their egoistic selves, they may be willing to engage in tasks that do not promise any reward or may not even be pleasurable but are still worth doing. They may be able to resist temptations and are less susceptible to social comparisons.

Overall, the current study's findings supported the Hindu and Buddhist philosophy that *anasakti* (non-attachment) aligns with mental health by indicating an empirical link with the modern Western indicators of positive psychological functioning.

Strengths and Limitations

One of the notable strengths of this study is that it has empirically tested and proved the inverse relationship between *anasakti* (non-attachment) and *ahamkara* (ego). Based on the theoretical understanding of *anasakti* (non-attachment) and *ahamkara* (ego) as given in classical texts, both seem different and lead to different outcomes. To our knowledge, however, none of the studies has examined this relationship to date. The current research has filled this gap in the psychological literature.

Further, we have employed three measures to assess the independent variable *anasakti* (non-attachment), which allowed a multi-dimensional representation of *anasakti* (non-attachment) and further provided evidence that findings are independent from the types of measures.

Despite having theoretical and empirical relevance, the study does suffer from some limitations. A cross-sectional survey approach restrains determining the causal relationship between *anasakti* (non-attachment), *ahamkara* (ego), and mental health variables. Furthermore, the cross-sectional research methodology has been criticized for not providing any information on over-time changes in the measured variable compared to other methodologies (e.g., longitudinal). Nevertheless, cross-sectional studies seem to be a convenient alternative for preliminary evaluations of less explored variables. The male-dominated sample, confined to an urban community of a particular geographical region (North India), limited the results' generalisability to other samples belonging to different sections of the society or various socio-cultural backgrounds and clinical populations. The lack of data on the sample's meditative practices could have a confounding effect on increasing *anasakti* (non-attachment), lowering *ahamkara* (ego), or improving well-being. Self-reported measures might have compromised objectivity and truthfulness (Goodwin & Leech, 2006). Another limitation relates to the Ahamkara Questionnaire. Since this was the only available published measure of *ahamkara* (ego), the researchers decided to proceed with this tool. However, its low reliability necessitates a cautious interpretation of quantitative results obtained through the Ahamkara Questionnaire. Similarly, the Job Satisfaction Scale and a few subscales of anasakti indicated a lower internal consistency. It could be due to the shortness of these measures and the multidimensionality of the measured concept, which seems true in the case of the Job Satisfaction Scale and a few subscales of the Scale of Anasakti, respectively. Lastly, the heterogeneity of the sample could also lead to a low reliability of the measure.

Conclusion, Implications and Future Directions

In this cross-sectional study, 240 urban educated adults were surveyed using standard scales of *anasakti* (non-attachment), *ahamkara* (ego), and positive psychological functioning. Results fully supported previous studies that established the role of *anasakti* (non-attachment) in overall emotional well-being as well as life and job satisfaction but mildly supported the idea that greater *anasakti* (non-attachment) would result in better psychological or social well-being. Interestingly, our findings have provided a more nuanced understanding of the relationship between *ahamkara* (ego) and well-being, with both positive and negative associations based on the sub-components and contexts. It also highlighted that occasionally *ahamkara* (ego) might also render some unique benefits to an individual's psychological well-being, and to desirable affective states such as enthusiasm or inspiration.

The current study's results dealt with indigenous concepts of *anasakti* (non-attachment) and *ahamkara* (ego), which are rooted in classical Indian thoughts. These results may be utilized for developing an intervention to improve the overall well-being and spiritual growth of Indian people based on the Yoga-Vedantic psychological perspective. It may be especially useful for them since among Indians, many people find it easy to accept Yoga-Vedantic explanations regarding human life due to the belief systems transmitted from generation to generation (Gautam & Jain, 2010). Apart from spiritual transformation, concepts of *anasakti* (non-attachment) and *ahamkara* (ego) have shown their role in emotional experiences. While *ahamkara* (ego) remained mostly related to negative emotions, *anasakti* (non-attachment) stood mainly correlated with positive emotions. Developing *anasakti*-based interventions, therefore, could be useful for people dealing with life challenges, for example terminal illness and bereavement.

Future studies investigating the effect of *anasakti* (non-attachment) and *ahamkara* (ego) on psychological functioning, using research design beyond cross-sectional surveys such as experimental or longitudinal studies, are required to establish a causal relationship, if it exists. Furthermore, replicating the present finding with more diversified samples would add to the study's implications. Additionally, these concepts may be studied further across cultures and cross-culturally concerning positive mental health. Although empirical literature on well-being has been accumulating globally, certain contributing variables still remain hidden. Globally, it has been suggested that the idea of complete mental health involves both the functioning and spiritual aspect of living (Dittmar et al., 2014; Koltko-Rivera, 2006; Martins et al., 2021). By correlating Western indicators of positive mental health with the indigenous concepts of *anasakti* (non-attachment) and *ahamkara* (ego), the present study has provided empirical evidence for the model of complete well-being, which Indian psychology also proposes. If, in future works, similar results are found across cultures, interventions from the Indian psychological perspective could be planned, and insights from this study might come in handy. Europe has had a rich philosophical tradition with ideas complementary to Indian psychology, and in modern times the continent has also become geographically, culturally, and religiously diverse. Thus, an Indian-psychology-based mental health model, which involves traveling beyond *ahamkara* (ego) and developing *anasakti* (non-attachment) to achieve serenity and interconnectedness, could have vast implications for mental health services which strive to provide holistic well-being to European citizens.

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Author contributions

Kriti GUPTA: conceptualization, design, methodology, funding acquisition, investigation, data management, formal analysis, interpretation, writing original draft, writing review and editing.
Jyotsna AGRAWAL: conceptualization, design, methodology, project administration, data management, formal analysis, interpretation, supervision, writing original draft, writing review and editing.
All authors gave their final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of interest statement

The authors have no conflicts of interest to disclose.

Ethical statement

This manuscript is the authors' original work.
The study was reviewed and approved by the institute's doctoral committee, license number: IITP/1421HS01/17/31.
All participants engaged in the research voluntarily and anonymously, providing their written informed consent to participate in this study.
Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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RESEARCH ARTICLE

Mental Health Literacy Regarding Depression and Suicide

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Introduction: Mental health literacy enables individuals to recognize the symptoms associated with mental illness, and thus adjust their behavior to manage and seek help and treatment for mental illness.
Aims: The present research aims to study determinants of mental health literacy and whether an association exists between mental health literacy and the understanding of content related to depression and suicide.
Methods: In each group, the participants read one leaflet about depression or suicide and answered a questionnaire to assess their understanding. All the participants also filled out a mental health literacy self-report.
Results: The results showed higher mental health literacy for women and individuals with a higher education. Mental health literacy predicted the understanding of suicide content, but the same did not apply for depression.
Conclusions: Mental health literacy stands as an important factor to be considered in developing campaigns and promotional actions. However, its effect remains contingent on the contents and context. It is crucial to consider this interaction in maximizing the campaigns' impact on the population.

Keywords: mental health literacy, depression, risk of suicide, stigma, content understanding

Introduction

Mental Health Literacy

Jorm and his collaborators (1997) introduced the concept of mental health literacy. They defined it as the knowledge and beliefs about mental disorders that help recognise, manage, and prevent them. The concept of mental health literacy consists of the following attributes: knowledge of how to prevent mental disorders; recognition of the disease's onset; knowledge of the help options and treatments available; knowledge regarding self-help strategies for less serious problems; the skills to provide first aid to other people in crisis or developing a mental disorder (Jorm, 2012; WHO, 1998, 2001). The low level of mental health literacy is directly related to the absence of help-seeking behaviors, the difficulty in communicating with health professionals, and treatment adherence (Berkman et al., 2001; Kickbusch, 2001; Kickbusch et al., 2006; Kickbusch & Maag, 2008; Kutcher et al., 2016).

The concept of mental health literacy is evolving and based on the broader concept of health literacy. It has been evolving from a cognitive definition into integrating the individual's social and personal characteristics.

Mental health literacy is defined as the beliefs and knowledge about mental disorders and mental problems that will allow their recognition, management, and prevention (Kondilis et al., 2006; Lee et al., 2020).

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Mental health literacy is not limited only to the individual. It extends to the community and not only focuses on knowledge, but also considers attitudes and behaviors towards mental health issues (Kawachi & Berkman, 2000; Wahl, 2002).

Promoting mental health literacy remains essential to promote mental health, prevention, treatment, and to fight the stigma associated with mental disorders (Corrigan & Watson, 2007; Freebody & Luke, 1990). Stigma is particularly important and relates to negative beliefs held by a significant part of the general population. Furthermore, it is associated with intractability or disability conditions (Corrigan, 2004; Corrigan & Bink, 2016). Importantly, mental health literacy is related to stigma, which decreases with increased mental health literacy (Corbière et al., 2012; Naylor et al., 2009). So, promoting mental health literacy remains essential for mental disorders to be recognised early, in order to offer adequate intervention (Scott & Chur-Hansen, 2008).

Mental health literacy regarding depression can facilitate the search for professional help when the first symptoms appear, avoiding prolonged suffering, and suicide risk (Jorm & Wright, 2007; Zuckerbrot & Jensen, 2006). A study of the Australian population concludes that only 39% of the participants could recognise the symptoms associated with depression (Jorm et al., 1997). A study done in the UK using two identical case vignettes, both describing depression, concludes that the level of mental health literacy on depression varied according to the participant's gender (Swami, 2012). Another study investigating Portuguese adolescents to assess mental health literacy on depression, using a vignette describing a case of depression in a 16-year-old girl, also concluded that the percentage of participants who recognised the vignette as depression stood lower than their expectations (Loureiro et al., 2013).

These studies on mental health literacy demonstrate that the percentage of participants who recognise the symptoms associated with mental illness remains below expectations and that significant gender differences exist.

The World Health Organization dedicates every April 7 to celebrate World Health Day. In 2017, they chose depression as the theme, a disorder that can affect people of any age at any stage of life. The date marked the beginning of a campaign on depression. Under the motto "Let's talk", the initiative reinforces that there are ways to prevent depression and encourages to treat it, considering that it can lead to serious consequences. Talking openly about depression constitutes the first step in understanding it better and reducing its stigma (WHO, 2017).

The Present Study

Mental health literacy is directly related to preventing mental illness and promoting mental health as well as reducing stigma. The present study aims to evaluate the relationship between mental health literacy and sociodemographic characteristics, and to evaluate the association between mental health literacy and a questionnaire to understand the contents of a public health campaign for depression and suicide. To meet this broad goal, the authors formulated the following hypotheses:

1. The level of mental health literacy and the degree of understanding a written content about depression or suicide varies according to gender, education level, and proximity to mental health problems (being a relative or friend).
2. The level of mental health literacy is associated with the degree of understanding written contents about depression or suicide.

Method

Participants

The total sample of this study consists of 462 individuals, aged between 18 and 72 years, with a mean age of 30.27 years (*SD* = 12.14). However, the sample is divided into two groups. Group 1 contains the group of participants who answered the questionnaire on understanding the content on depression, and Group 2 involves the group of participants who answered the suicide content questionnaire. Group 1 (Depression) consists of 256 participants, aged between 18 and 72 years (*M* = 32.03, *SD* = 12.70), 81% female and 19% male. Group 2 (Suicide) consists of 206 participants, aged between 18 and 62 years (*M* = 28.09, *SD* = 11.06), 87% female and 13% male.

The predominant education level of the participants from both groups ranges from the academic level bachelor's degree to higher levels; Group 1 (68%) and Group 2 (59%), followed by secondary school level; Group 1 (25%) and Group 2 (37%).

Regarding the participants' location, we can see that in both groups, Lisbon is the residence district having the most participants, followed by Porto and Setúbal.

Instruments and Materials

The Portuguese version of the Mental Health Literacy Scale (MHLS) is a self-report instrument that assesses the level of mental health literacy, consisting of 35 items and six attributes: (a) recognition of disturbances; (b) knowledge in seeking information related to mental health; (c) knowledge about risk factors and their causes; (d) knowledge about treatments; (e) knowledge about available professional help and (f) attitudes that promote recognition in seeking help (Dias Neto et al., 2021), a socio-demographic questionnaire.

Two leaflets from the World Health Organization's "Let's talk" campaign, on depression and suicide, were used. The campaign's scope encompassed the prevention of depression and its treatment. The campaign aims to end mental health stigma by encouraging people to talk about depression. For people with depression, talking about their feelings with someone they can trust should be the first step toward recovery. The WHO adjusted the campaign for each region of the globe (WHO, 2017).

The WHO granted authorization to use and translate the leaflets. Special concern was given to their translation from English (Oliveira et al., 2015). Two translators whose mother language was English were asked to translate the leaflets, and two other translators were subsequently asked to retranslate these same leaflets, and the two versions were compared. In the preparation for leaflet translation, the following rules were respected: using simple and short sentences, avoiding metaphors and complex verbal forms, vague words, among others (Beaton et al., 2000; Ercikan, 1998).

After translating the leaflets and using the Newest Vital Sign (Martins & Andrade, 2014; Shealy & Threatt, 2016), as a reference, several questions were created to assess their contents. The questions were elaborated following a gradual increase in difficulty criteria. These criteria focused on the knowledge and attitudes or prejudices of the participants according to the questionnaire (depression or suicide).

Two questionnaires were prepared, each with six questions. After reading the leaflets (i.e., they would have access to the leaflets and their contents according to the group) the participants were asked to answer True or False. Each correct answer is scored with 1 and incorrect answers are scored with 0. A pre-test was performed on both questionnaires to validate the contents of the questionnaires (Oliveira et al., 2015).

Procedure

Two survey forms were created in *Google Forms,* which had the following order.

Form 1 started with the informed consent, and then the information leaflet on depression was presented. After that, the participants answered the questionnaire with the content about depression, followed by the Mental Health Literacy Scale, and ending with the socio-demographic questionnaire.

Form 2 started with the informed consent, and then the information leaflet with the content of the risk was presented. After that, the participants answered the questionnaire with the content about the suicide, followed by the Mental Health Literacy Scale, and ending with the sociodemographic questionnaire.

Two forms were submitted to a pre-test where the participants validated that they were functioning correctly online. Two ads were placed on the social network Facebook to get a greater number of responses.

Results

An average of 132.38 (*SD* = 11.99) was found for the mental health literacy scale. It stood higher than the average obtained in the study describing the adaptation and validation for the Portuguese version of the scale (*M* = 127.38, *SD* = 12.63).

In the questionnaire on the degree of understanding, the mean registered at 4.61 for depression and 5.00 for suicide.

Effects of Gender and Education Level

To check whether mental health literacy levels vary depending on gender, a T-test was applied to study the differences in mental health literacy, the degree of understanding depression, and suicide leaflets. Table 2 shows the results. Concerning gender, the female gender had a higher average score on the mental health literacy scaler. Regarding the degree of understanding the leaflets, no statistically significant differences appeared in the degree of understanding depression.

Table 1. Describes average value of the scale and content knowledge questionnaires as a function of education

	9th grade	Secondary School	Graduated or Higher	ANOVA
Mental health literacy	*M* = 119.21	*M* = 130.19	*M* = 134.46	*F*(2, 46) = 22.55 *p* < .001
	SD = 14.80	*SD* = 11.82	*SD* = 11.02	
Depression knowledge	*M* = 4.63	*M* = 4.70	*M* = 4.57	*F*(2, 25) = 0.42 *p* = .655
	SD = 0.80	*SD* = 1.05	*SD* = 0.96	
Suicide Risk Knowledge	*M* = 4.14	*M* = 5.22	*M* = 5.32	*F*(2, 20) = 7.47 *p* < .001
	SD = 1.34	*SD* = 0.79	*SD* = 0.74	

Table 2. Association between mental health literacy and understanding as well as clinical and demographic variables

	Mental health literacy	Understanding depression	Understanding suicide
Mental health literacy	Fem: *M* = 134.30, *SD* = 10.98	Fem: *M* = 4.60, *SD* = 1.00	Fem: *M* = 5.31, *SD* = 0.78
	Mal: *M* = 122.49, *SD* = 12.18	Mal: *M* = 4.67, *SD* = 0.86	Mal: *M* = 4.74, *SD* = 0.81
	t(460) = 8.4; *p* = .001	*t(254)*= –0.4; *p* = .675	*t(204)* = 3.5; *p* = .001
Education Level	9th: *M* = 119.21, *SD* = 14.80	9th: *M* = 4.63, *SD* = 0.80	9th: *M* = 4.14, *SD* = 1.34
	Sec.: *M* = 130.19, *SD* = 11.82	Sec.: *M* = 4.70, *SD* = 1.05	Sec.: *M* = 5.22, *SD* = 0.79
	Grd.: *M* = 134.46 *SD* = 11.02	Grd.: *M* = 4.57, *SD* = 0.96	Grd.: *M* = 5.30, *SD* = 0.74
	F(2, 46)= 22.55; *p* < .001	*F*(2, 25)= 0.42; *p* = .655	*F*(2, 20)= 7.47; *p* = .001
Personal experience	Yes: *M* = 136.16, *SD* = 10.21	Yes: *M* = 4.50, *SD* = 1.05	Yes: *M* = 5.30, *SD* = 0.82
	No: *M* = 129.35, *SD* = 12.46	No: *M* = 4.70, *SD* = 0.91	No: *M* = 5.18, *SD* = 0.80
	t(460) = 6.3; *p* < .001	*t(254)* = –1.6; *p* = .107	*t(206)* = 1.1; *p* = .291
Mental illness in a close person	Yes: *M* = 133,99, *SD* = 11.55	Yes: *M* = 4.62, *SD* = 0.97	Yes: *M* = 5.24, *SD* = 0.81
	No: *M* = 129.38, *SD* = 12.24	No: *M* = 4.61, *SD* = 0.99	No: *M* = 5.24, *SD* = 0.83
	t(460) = 4.0; *p* = .001	*t(254)* = 0.1; *p* = .938	*t(204)* = 0.0; *p* = .982

The ANOVA one-way test was conducted to study the impact of the education level on mental health literacy and the degree of knowledge about depression and suicide. Education level was recoded into three groups (i.e., 9th grade, secondary school, and graduated or higher, because we only had one answer with the 4th grade). The results, presented in Table 1, show a significant difference. Participants with higher education levels have higher mental health literacy scores. For understanding the leaflets, different results were found. No significant differences manifested for depression. For the suicide leaflet, higher education levels indicated a greater understanding of the suicide leaflet.

A three-way ANOVA was conducted to compare the main effects of gender, education, and group (depression vs suicide) as well as their interaction effects on the accuracy of depression and suicide risk. The results show that regarding gender ($F(1, 25) = 1.41$, $p = .235$) and education level knowledge ($F(2, 20) = 4.00$, $p = .019$) no statistically significant differences in the accuracy of depression or suicide risk knowledge appeared.

The interaction effect was not significant ($F(2, 22) = 0.92$, $p = .407$), indicating that no combined effect existed for gender, education level and group on the accuracy of depression and suicide risk knowledge (Table 2).

Another three-way ANOVA was conducted to compare the main effects of gender, education, and group (depression vs suicide) as well as their interaction effects on the Mental Health Literacy Scale; the interaction effect was significant ($F(2, 25) = 4.66$, $p < 0.001$), indicating that a combined effect existed for gender, education level and group on the level of Mental Health Literacy (Table 2).

Proximity to Having or Having Had a Mental Health Problem

To study possible variations in the level of mental health literacy depending on whether a mental health problem has been diagnosed or not, the mental health literacy scale results were compared according to the diagnosis. We applied the T-test for the two content knowledge questionnaires (See the results in Table 2). Statistically significant differences exist in mental health literacy depending on the presence or absence of a mental health diagnosis. Those who have already been diagnosed with a mental health problem possess an average higher score on the mental health literacy scale than those who have not been diagnosed with any mental health problem.

No statistically significant differences were found regarding the possible influence of a mental health diagnosis on the depression and suicide questionnaires. The average scores obtained by the participants who have already been diagnosed with a mental health problem remain very similar to those who have not.

The authors used T-test to assess whether mental health literacy and the understanding of the depression and suicide leaflets vary depending on having or not having family members or friends with a mental illness. The results show a statistically significant difference in mental health literacy in terms of having family or friends suffering from a mental illness. Thus, participants having family members or friends suffering from a mental illness obtained, on average, a higher score than those who have no family members or friends with mental illness. Regarding depression, participants with family members or friends having a mental disorder score similar to those who do not have family members or friends with a mental illness. Concerning the understanding of suicide contents, it varies depending on whether the participant has family members or friends suffering from a mental illness or not. Participants who have family members or friends with a mental illness have equal scores on the questionnaire of knowledge about the risk of suicide compared to those who do not have family members or friends with a mental illness.

Mental Health Literacy and Understanding Depression and Suicide Related Content

Through linear regression, we verified that there is no association between the values obtained in the mental health literacy scale and the questionnaire that assesses the degree of content knowledge about depression with $\beta = -.02$, $t(254) = .0,5$, $p = .648$, which indicates that the values obtained in the questionnaire on the degree of content knowledge about depression are not related to the values obtained in the mental health literacy scale, as also confirmed by the ANOVA, with $R^2 = .00$, $F(2, 20) = 0.97$, $p = .648$.

On the other hand, linear regression verifies that there is a correlation between the values obtained in the mental health literacy scale and in the questionnaire that assesses the degree of content knowledge about the risk of suicide with $\beta = .257$, $t(204) = 3.8$, $p < .000$, confirmed by the ANOVA results with $R^2 = .06$, $F(2, 14) = 0.79$, $p < .001$. These results confirm that the regression model statistically predicts the result variable, and it allows us to conclude that when the mental health literacy scale score increases, it also increases the degree of suicide content knowledge.

Discussion

The present study sought to assess the determinants and the relationship between mental health literacy and the understanding of mental health-related content. The results suggest differences in mental health literacy according to gender and level of education. The female participants (Lee et al., 2020) and participants with a higher level of education have a higher level of mental health literacy (Pedro & Amaral, 2016).

The statistical analysis of the questionnaires' results that assessed the degree of content knowledge about depression shows no difference depending on gender, education level, and proximity to the mental illness. However, different results were obtained in similar studies, such as those conducted in the United Kingdom and Sweden. Researchers found that female participants had a higher level of mental health literacy about depression (Furnham et al., 2011; Melas et al., 2013).

Regarding education level, the results were as expected for suicide and partly for mental health literacy, but not for depression, which could be related to the study's context. Alternatively, the content used in the questionnaire' elaboration contributed to this result.

The statistical analysis also showed that the degree of knowledge concerning the content about suicide stands higher than that of depression. The effects of socio-demographic variables (gender and education) on the results obtained in the content knowledge questionnaires were divergent. There are statistical differences in the understanding of suicide content regarding demographic variables. In depression, these differences do not exist. Stigma may contribute to these results, as it remains very present and renders it difficult to identify classic symptoms of depression (such as lack of energy, difficulty in lifting, among others); stigma even hinders acceptance by those suffering from depression and needing help themselves. It should be noted that the proximity to mental illness did not generate any variation in the mean values of both content knowledge questionnaires.

Strengths and Limitations

The present study has some limitations. The sample was non-probabilistic, and some features suggest its lack of representativeness. Most of the participants were female, were younger than 35, and had higher education levels. The questionnaires that assess the degree of understanding depression and suicide risk contents were constructed for the present study.

The leaflets' contents and the way they are arranged may have affected the participants' understanding.

Conclusion, Implications and Future Directions

The present study raises several implications. The results support the need to create programs more suited to each target population they are intended for. Considering these contextual aspects remains crucial in promoting mental health literacy about these highly prevalent disorders. Such fine-grained design can involve using a language and content more adjusted to a particular group, to promote an earlier recognition of mental illness, and thus increase access to health services and empowerment in the populations.

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Author contributions
David D. NETO: conceptualization, design, methodology, investigation, project administration, data management, formal analysis, interpretation, supervision, writing original draft, writing review and editing.
Pramod L. MAUGI: conceptualization, design, methodology, investigation, data management, formal analysis, interpretation, writing original draft, writing review and editing.
All authors gave their final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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This manuscript is the authors' original work.
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All participants engaged in the research voluntarily and anonymously, providing their written informed consent to participate in this study.
Data are stored in coded materials and databases without personal data, and the authors have policies in place to manage and keep data secure.

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