



# Language and stigmatization of individuals with mental health problems or substance addiction in the Netherlands: An experimental vignette study

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## Abstract

Persons with mental health problems and/or substance addictions (MHPSA) are stigmatised more than persons with physical conditions. This includes stigmatisation by care professionals. Stigma is considered one of the most important barriers for recovery from these conditions. There is an ongoing debate that use of language can exacerbate or diminish stigmatisation. Therefore, we conducted an experiment examining how four different ways of referring to a person with (a) alcohol addiction, (b) drug addiction, (c) depression and (d) schizophrenia are related to stigmatising attitudes by care professionals in the Netherlands. We partially replicated two studies performed in the United States and used surveys with vignettes containing either 'disorder-first', 'person-first', 'victim' and 'recovery' language, which were randomly assigned to participants ( $n = 361$ ). No significant differences between language conditions were found for any of the vignettes. Our findings suggest that subtle differences in language to refer to persons with mental health problems or substance addictions have no effect on stigmatising attitudes by care professionals in the Netherlands. However, more research is needed to determine the effect of language use on other groups, such as individuals with MHPSA.

## KEYWORDS

experiment, language, mental health, professionals, stigma, substance addiction

## 1 | INTRODUCTION

There are various ways to refer to individuals who experience mental health problems and/or substance addictions (MHPSA), which is often done arbitrarily in public (including media) as well as in

professional settings. Terms like 'substance abuser', 'drug addict' or 'a person with a substance use disorder' are often used interchangeably. This is similar with mental health problems, for example, 'schizophrenic' or 'person with schizophrenia'. However, implicit assumptions that are linked to some of these terms are believed to

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contribute to the stigmatisation of these individuals. There are many examples of 'terms to use' and 'terms to avoid' in the addiction and mental health field (Botticelli & Koh, 2016; Harris & Felman, 2012; Rose, Thornicroft, Pinfold, & Kassam, 2007). The issue raises questions on whether language matters and on what terms should be used (Edwards, Arif, & Hadgson, 1981; Richards, 2018; White, 2004). We know that stigmatisation can harm individuals with MHPSA and act as a barrier for recovery (Lasalvia et al., 2013; Plooy & van Weeghel, 2009; Thornicroft, Brohan, Rose, Sartorius, Leese, Brohan, Rose, Sartorius, & Leese, 2009), so it is important to examine how to prevent or reduce this. However, debates concerning the effect of language on stigmatisation are rarely based on empirical investigation (Kelly & Westerhoff, 2010). Therefore, we conducted an experiment, to examine how language to refer to persons with MHPSA is associated with various degrees of stigmatising attitudes by care professionals who work with individuals with MHPSA.

Stigmatisation can be described as a process that involves labelling, segregation, stereotyping, prejudice and discrimination and is socially discrediting (Link & Phelan, 2001). In his classic work, Goffman states that stigma can reduce a "whole and usual person to a tainted, discredited one" (p. 31963). Theories on stigma around MHPSA have described the impact on individuals in two major ways. First, individuals with MHPSA can perceive themselves as failing and not living up to normative standards, which can lead to negative self-regarding attitudes, such as shame (Flanagan, 2013). This is also referred to as self- or internalised stigma. Second, there is also an interpersonal source, namely, public stigmatisation (Matthews, Dwyer, & Snoek, 2017), which can lead to discrimination.

Persons with MHPSA can experience (social) dysfunctions and loss of opportunity related to particular symptoms of their condition. The negative impact on a person's quality of life is often worsened by public stigma (Corrigan et al., 2000; Rüscher, Angermeyer, & Corrigan, 2005). Even if they recover and manage their disorder well enough to function in society, it is still likely that they will struggle because they are being discriminated against as a result of stigmatisation (Jenkins & Carpenter-Song, 2008). Stigmatisation not only negatively impacts a person's social network, employment situation and confidence, but also his or her access to and availability of care and support (Livingston & Boyd, 2010). For substance addictions, stigma is even cited as one of the major reasons why people do not access treatment, which is linked to delayed recovery (Substance Abuse & Mental Health Services Administration, 2008).

Studies have shown that care professionals also engage in stigmatisation of patients with MHPSA (van Boekel, Brouwers, van Weeghel, & Garretsen, 2015; Rao et al., 2009; Ronzani, Higgins-Biddle, & Furtado, 2009; Rüscher et al., 2005; Vistorte et al., 2018). For persons with substance addictions, this can contribute to poor mental and physical health, non-completion of treatment, delayed recovery and increased involvement in risky behaviour (van Boekel, Brouwers, van Weeghel, & Garretsen, 2013; Livingston, Milne, Fang, & Amari, 2012). For persons with mental health problems, studies have demonstrated that stigmatisation by care professionals can act as a barrier to social participation, successful vocational integration and seeking

### What is known about this topic

- Stigmatisation harms individuals with mental health problems and/or addictions and is a barrier for their recovery, as it can have a negative impact on societal participation, functioning and well-being.
- Health and social care professionals also engage in the stigmatisation of individuals with mental health problems and/or addictions.
- Terminology or language use can have an effect on stigmatising attitudes.

### What this paper adds

- We did not find a relation between language and stigmatisation by health and social care professionals in the Netherlands in a replication study of two experiments performed in the United States that did find significant relations.
- The contribution of language to stigmatising attitudes by health and social care professionals might be negligible and different approaches are needed to reduce stigmatisation in this target group.

effective treatment (Lasalvia et al., 2013; Plooy & van Weeghel, 2009; Thornicroft et al., 2009).

These consequences not only negatively impact *clinical* recovery but also impact *personal* recovery, which is described as a process that has impact on multiple life domains, such as (mental) health, legal issues, and social- and economic functioning and well-being, and includes subjective outcomes such as self-esteem, empowerment and self-determination (Anthony, 1993; White, 2007). This paradigm of recovery is endorsed in the mental health and the addiction field. In their scoping review, van Weeghel, van Zelst, Boertien, and Hasson-Ohayon (2019) named stigma as one of the most important barriers for personal recovery.

Concerns over language to refer to individuals with MHPSA are not new. More than 40 years ago, the WHO published a paper on substance-related terminology (Keller, 1977). It was then believed that the diagnostic term 'abuse' should be avoided (p. 32, 28) because of negative connotations. In 2004, the U.S. Substance Abuse and Mental Health Services Administration stated that 'abuse' was stigmatising because it blames the individual, and demeaning because it labels a person by his/her illness and ignores human dignity (SAMHSA, 2004). Nevertheless, the term 'abuse' was widely used. The DSM-5 (American Psychiatric Association, 2013), for example, has only recently replaced the distinction between 'abuse' and 'dependence' by 'substance use disorders', and in 2016 the government of the United States issued a document named 'Changing the language of Addiction' (Botticelli & Koh, 2016) in which they promote the use of person-first language (PFL). A similar effort was made by

the American Psychiatric Association which provides instructions for journalists on how to report about mental health problems and suicide (American Psychiatric Association, 2015).

Despite long-going advocacy against using stigmatising language to refer to persons with MHPSA, empirical investigations in this area are rare. In the field of substance addiction, Kelly, Dow, and Westerhoff (2010), Kelly and Westerhoff (2010) conducted two empirical (vignette) studies concerning language used to describe persons with substance addictions: one among clinicians and one among participants from a broader convenience sample (with mostly healthcare professionals). Individuals in these vignettes were labelled as either 'a substance abuser' or as 'having a substance use disorder'. A questionnaire assessed perceived causes of the problem, social threat and whether the individual should receive therapeutic versus punitive action. In both experiments, participants' exposure to either substance abuser or substance use disorder terminology elicited systematically different judgements (Kelly & Westerhoff, 2010). Compared with substance use disorder, substance abuser was linked to more wilful misconduct, greater social threat and more deserving of punishment. In the field of mental health, there are studies that have examined aspects of language and stigmatisation, such as labelling of mental health problems as mental illness (Angermeyer & Matschinger, 2003) and types of information that can reduce stigmatisation (Jensen et al., 2013). Furthermore, PFL has been advocated in this field (Penn et al., 1994). However, no similar (empirical) studies that examine the specific effects of wording on stigmatisation exist to our knowledge.

## 2 | AIMS

With this study, we want to contribute to empirical investigation of the relation between different ways of referring to persons with MHPSA and stigmatising attitudes. We do this by partly replicating the studies conducted by Kelly and colleagues in the United States (Kelly et al., 2010; Kelly & Westerhoff, 2010). We recruited a similar convenience sample, consisting mostly of healthcare-focused professionals, but from the Netherlands. Like the original studies (Kelly et al., 2010; Kelly & Westerhoff, 2010), we used vignettes in which the term to refer to a person with MHPSA was different in each condition. In the Netherlands, both mental health problems and substance addictions can typically be described using disorder-first language (DFL) (e.g. schizophrenic or addict), PFL (e.g. person with schizophrenia or individual with an addiction) or victim language (VL) (e.g. person who is suffering from depression). A recently emerging way to describe someone with MHPSA is through recovery language (RL) (e.g. person who is recovering from depression), which has not yet been studied in this context. Thus, different than the replicated studies (Kelly et al., 2010; Kelly & Westerhoff, 2010), we used four language conditions, instead of two. Furthermore, we expanded on these studies that only included vignettes about persons with substance addictions, by including vignettes about persons with mental health problems because debates about stigmatisation and language are similar in this field.

We presented four vignettes to our participants representing different MHPSA: drug addiction, alcohol addiction, depression and schizophrenia. Drug addiction was chosen because it is the most stigmatised disorder and we chose alcohol addiction because it is the most common addiction (van Boekel et al., 2015; Room, Rehm, Trotter, Paglia, & Ustunel, 2001). Schizophrenia was chosen because it is the most stigmatised mental health problem, and depression was included as it is the most common mental disorder overall (Lasalvia et al., 2013; Thornicroft et al., 2009). Our aim is to analyse whether there are systematic differences in stigmatising attitudes of (mental) healthcare and support professionals associated with the four language conditions in any of the vignettes. Based on literature and previous empirical studies, we hypothesise that person-first and RL is associated with less stigmatising attitudes and higher recovery expectations among professionals, than disorder-first or VL.

## 3 | METHOD

This study is a partial replication of two studies performed by Kelly et al. (2010), Kelly and Westerhoff (2010). We performed a similar experiment using surveys with either one of the four language conditions followed by items that measure attitudes related to stigmatisation, combined in subscales. We used a similar convenience sample, aiming primarily on (mental) health professionals (professionals that worked with patients with MHPSA). Furthermore, we included items on demographics and several measures that were used in the original studies. However, we also included items not used in the original studies that were more appropriate for our expanded scope that included mental health problems and recovery expectations. In Table S1, exact methodological comparisons are presented between this study and the studies by Kelly et al. (2010), Kelly and Westerhoff (2010).

### 3.1 | Study population and protocol

Participants for this study were recruited from February to March 2019 and constituted a convenience sample of primarily addiction, mental health and social care professionals. We approached various (mental) health and addiction care organisations, shelters, probation organisations, general practices and university Medical and Health science faculties in the Netherlands to target care professionals who work with persons with MHPSA. Organisations were asked to spread recruitment messages linking to an online survey among their employees or students. Furthermore, we used social media, newsletters, magazines and printed flyers handed out at conferences. The only eligibility criterion included in the call was that participants worked, or could potentially work, with persons with MHPSA. Participants self-reported their gender, age, education level, professional field and work experience. A pilot study ( $n = 10$ ) was performed among researchers and students, which led to minor

adjustments in the vignettes and questions. A raffle of coupons (two coupons of 100 euro) was used as an incentive. Participants were not compensated in any other way and ethical approval was obtained through the Ethics Review Board (ERB) of REDACTED in the Netherlands (reference: REDACTED).

To prevent biased responses, it was important that the participants were not aware of the focus of the study on *language* and *stigmatisation*. For this reason, we used a message with minimal general information stating that the research focused on "expectations of and experience with patients/clients with mental health problems and substance addictions".

The survey started with questions on demographics. Subsequently, four persons were described in separate vignettes with drug addiction, alcohol addiction, depression or schizophrenia respectively. Each vignette was followed by questions that measured stigmatising attitudes (described below). The different language conditions were randomly and evenly assigned to participants ( $n = 361$ ). The key advantages of this method were (a) to control for known and unknown factors and minimise covariate effects so that the participants across all conditions were statistically comparable, (b) to eliminate both intentional and unintentional human bias during the experiment and (c) to evaluate error effects because of the sound probabilistic theory that underlies randomisation (Salkind, 2010). Median completion time of the survey was 16.5 min and the

completion rate was 66% ( $n = 361/547$ ) and was not found to significantly differ between conditions.

## 4 | MEASURES

### 4.1 | Independent variables

Each survey contained vignettes with 'disorder-first' (DFL), 'person-first' (PFL), 'victim' (VL) or 'recovery' (RL) language, which were randomly assigned to participants. The four language conditions represented the four independent variables (DFL, PFL, VL or RL). Each participant was presented a version of the survey containing the same language condition in each of the four vignettes (see for translated example Figure 1). The vignettes were based on real and anonymised cases of clients of an addiction and mental healthcare organisation in the Netherlands. Information that could influence stigmatising attitudes was removed as much as possible. Previous studies showed, for example, that having no work or causing nuisance was linked with highly stigmatising attitudes (Oudejans & Spits, 2018; Perkins, Raines, Tschopp, & Warner, 2009).

For the RL condition, we used language pursuant to the recently developed conceptual framework of personal recovery from mental health problems or addiction (Anthony, 1993; White, 2007). In this

#### 'Disorder-first language' (DFL)

Ben is a 38-year-old alcoholic. He is married but sometime has issues with his partner. He experiences a lot of responsibilities at home. It is not the first time that Ben is an alcoholic, he has had treatment before. Now, he drinks, at least half but usually a whole, bottle of wine daily. The general practitioner has referred him to addiction treatment again.

#### 'Person-first language' (PFL)

Ben is 38 years old and has an alcohol addiction. He is married but sometime has issues with his partner. He experiences a lot of responsibilities at home. It is not the first time that Ben has an alcohol addiction, he has had treatment before. Now, he drinks, at least half but usually a whole, bottle of wine daily. The general practitioner has referred him to addiction treatment again.

#### 'Victim language' (VL)

Ben is 38 years old and suffers from an alcohol addiction. He is married but sometime has issues with his partner. He experiences a lot of responsibilities at home. It is not the first time that Ben suffers from an alcohol addiction, he has had treatment before. Now, he drinks, at least half but usually a whole, bottle of wine daily. The general practitioner has referred him to addiction treatment again.

#### 'Recovery language' (RL)

Ben is 38 years old and is in recovery from an alcohol addiction. He is married but sometime has issues with his partner. He experiences a lot of responsibilities at home. It is not the first time that Ben is in recovery from an alcohol addiction, he has had treatment before. Now, he drinks, at least half but usually a whole, bottle of wine daily. The general practitioner has referred him to addiction treatment again.

FIGURE 1 Example of a study vignette for a person with alcohol addiction

framework, recovery is described as a process, rather than an outcome. Still having symptoms of mental health problems or addiction does not exclude a person from being 'in recovery'. Accordingly, we described the persons in the vignettes in the RL condition as being 'in recovery from...', referring to the process.

## 4.2 | Descriptive variables

Gender, age, education level, professional field and years of work experience were collected. Furthermore, information about familiarity with MHPSA was measured by asking 'do you know anyone with mental health problems and/or substance addiction in your personal environment?' 'have you worked with clients/patients with mental health problems and/or substance addiction?' to which participants could answer: yes, someone with (a) drug addiction, (b) alcohol addiction, (c) depression, (d) schizophrenia, (e) maybe I'm not sure or (f) no. We also asked if participants had experienced MHPSA

themselves at any time in their life to which they could answer: (a) yes, but not anymore, (b) yes, and I still do, (c) no never, (d) maybe, I'm not sure or (e) I don't want to answer. In Table 1, the 'yes' categories were combined.

## 4.3 | Dependent variables

The survey presented 24 Likert-scaled (9-point) items that asked levels of agreement with various statements for each type of MHPSA: 6 questions formulated by the authors, 6 questions represented the blame and control scale (2 subscales) that covers attributions by clinicians to patients with MHPSA (Kloss & Lisman, 2003), 8 questions from the Attribution Questionnaire (AQ-8:14), 3 questions obtained from the studies by Kelly and Westerhoff (2010) and 1 question based on a semantic differential scale by Corrigan, Bink, Fokuo, and Schmidt (2015). A higher score meant a higher level of agreement. The questions formulated by the authors were based on

**TABLE 1** Sample characteristics by language condition (n = 361)

	Total %	DFL (n = 96)	PFL (n = 95)	VL (n = 88)	RL (n = 82)	Test of difference between conditions
Gender, % (n) women	77.6 (280)	81.3 (78)	80.0 (76)	68.2 (60)	80.5 (66)	$\chi^2 = 7.41, p = .285$
Age, mean (SD)	40.4 (12.5)	38.0 (12.6)	41.0 (12.1)	40.9 (13.1)	41.7 (12.1)	$F = 1.63, p = .183$
Education level, % (n)						$\chi^2 = 8.60, p = .476$
High school	5.5 (20)	8.3 (8)	6.3 (6)	4.5 (4)	2.4 (2)	
Secondary vocational	9.7 (35)	8.3 (8)	9.5 (9)	9.1 (8)	12.2 (10)	
Higher vocational	49.3 (178)	43.8 (42)	49.5 (47)	46.6 (41)	58.5 (48)	
University	35.5 (128)	39.6 (38)	34.7 (33)	39.8 (35)	26.8 (22)	
Profession, % (n)						$\chi^2 = 18.00, p = .803$
Addiction treatment	32.4 (117)	32.3 (31)	36.8 (35)	33.0 (29)	26.8 (22)	
Mental healthcare	25.2 (91)	27.1 (26)	23.2 (22)	25.0 (22)	25.6 (21)	
Social support	16.1 (58)	12.5 (12)	14.7 (14)	13.6 (12)	24.4 (20)	
Nurse practitioner	5.5 (20)	4.2 (4)	3.2 (3)	8.0 (7)	7.3 (6)	
Probation	4.2 (15)	3.1 (3)	5.3 (5)	2.3 (2)	6.1 (5)	
General practitioner	1.4 (5)	2.1 (2)	1.1 (1)	1.1 (1)	1.2 (1)	
Student	8.9 (32)	11.5 (11)	9.5 (9)	9.1 (8)	4.9 (4)	
Other	6.4 (23)	7.3 (7)	6.4 (6)	8.0 (7)	3.6 (3)	
Years of work experience in the field of MHPSA, mean (SD)	12.2 (10.0)	10.6 (10.0)	12.3 (10.0)	13.7 (11.2)	12.5 (8.6)	$F = 1.47, p = .221$
Personal contact with persons with MHPSA, % (n) yes	87.8 (317)	87.5 (84)	89.5 (85)	83.0 (73)	91.5 (75)	$\chi^2 = 3.22, p = .360$
Work experience with persons with MHPSA, % (n) yes	98.6 (355)	99.0 (95)	97.9 (93)	97.7 (86)	100 (82)	$\chi^2 = 2.10, p = .551$
Has or had mental health problems and/or addiction, % (n) yes	43.5 (157)	39.6 (38)	49.5 (47)	46.6 (41)	37.8 (31)	$\chi^2 = 3.40, p = .334$

Abbreviation: DFL, disorder-first language; MHPSA, mental health problems and/or substance addictions; PFL, person-first language; RL, recovery language; VL, victim language.

the widely endorsed conceptual framework for personal recovery in mental health called CHIME, which is an acronym of Connectedness, Hope and optimism about the future, Identity, Meaning in life and Empowerment (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011; van Weeghel et al., 2019).

#### 4.4 | Analysis

Survey data were processed and analysed through SPSS 25. Our relatively large participants-to-item ratio (>15:1) allowed us to do exploratory factor analyses to derive subscales and reduce the

number of statistical comparisons and type 1 error rates. Because of the assumption that the factors would correlate, as most factors do in social sciences (Costello & Osborne, 2005), we chose an oblique Promax rotation that allows correlation. The blame and control subscales by Kloss and Lisman (2003) were excluded from these factor analyses. The rest of the items ( $n = 18$ ) were analysed for each of the four vignettes. There was a strong overlap in the outcomes of the factor analyses among the four vignettes, which yielded four interpretable factors labelled for which reliability analyses (Table 2) were performed: (1) social threat ( $\alpha = 0.70$ – $0.79$ ), (2) unpredictability ( $\alpha = 0.75$ – $0.84$ ), (3) discrimination ( $\alpha = 0.57$ – $0.66$ ) and (4) recovery expectations ( $\alpha = 0.53$ – $0.68$ ).

**TABLE 2** Means comparisons and one-way analyses of variance (ANOVA) between language conditions for each MHPSA and reliability analyses for each subscale<sup>a</sup>

	DFL (N = 96)	PFL (N = 95)	VL (N = 88)	RL (N = 82)	ANOVA (F-values)	Cronbach's $\alpha$
<b>Social threat</b>						
Drug addiction	2.30 (1.15)	2.18 (1.03)	2.04 (1.04)	2.06 (1.00)	1.19	0.748
Depression	1.59 (0.74)	1.52 (0.65)	1.66 (0.82)	1.56 (0.62)	0.60	0.698
Alcohol addiction	1.96 (1.11)	1.82 (0.86)	1.87 (1.20)	1.81 (0.86)	0.43	0.794
Schizophrenia	2.63 (1.30)	2.54 (1.24)	2.56 (1.15)	2.45 (1.08)	0.34	0.765
<b>Unpredictability</b>						
Drug addiction	4.04 (1.52)	4.02 (1.53)	4.03 (1.58)	4.22 (1.50)	0.32	0.762
Depression	3.10 (1.16)	3.08 (1.31)	3.15 (1.39)	3.28 (1.32)	0.42	0.753
Alcohol addiction	3.67 (1.64)	3.47 (1.49)	3.45 (1.60)	3.68 (1.59)	0.57	0.799
Schizophrenia	5.01 (1.74)	5.28 (1.65)	5.32 (1.74)	5.22 (1.59)	0.61	0.838
<b>Discrimination</b>						
Drug addiction	3.85 (1.35)	3.97 (1.24)	4.06 (1.24)	3.77 (1.14)	0.94	0.646
Depression	3.06 (1.21)	2.99 (1.06)	3.00 (1.15)	2.97 (1.22)	0.09	0.595
Alcohol addiction	3.67 (1.33)	3.64 (1.27)	3.78 (1.28)	3.64 (1.39)	0.22	0.659
Schizophrenia	3.67 (1.13)	3.79 (1.09)	3.66 (1.11)	3.71 (1.11)	0.25	0.574
<b>Recovery expectations</b>						
Drug addiction	3.83 (1.43)	3.65 (1.39)	3.92 (1.44)	3.80 (1.24)	0.61	0.533
Depression	3.72 (1.48)	3.44 (1.45)	3.72 (1.52)	3.57 (1.32)	0.85	0.609
Alcohol addiction	3.73 (1.43)	3.88 (1.48)	3.76 (1.36)	3.76 (1.36)	0.85	0.611
Schizophrenia	5.27 (1.62)	5.43 (1.65)	5.54 (1.69)	5.23 (1.39)	0.72	0.675
<b>Blame</b>						
Drug addiction	5.14 (1.38)	5.70 (1.35)	5.36 (1.44)	5.20 (1.27)	3.11*	0.636
Depression	3.80 (1.54)	3.85 (1.56)	3.86 (1.54)	4.05 (1.46)	0.43	0.739
Alcohol addiction	4.73 (1.74)	5.16 (1.75)	5.04 (1.74)	5.14 (1.84)	1.17	0.827
Schizophrenia	2.44 (1.33)	2.26 (1.30)	2.58 (1.46)	2.49 (1.42)	0.90	0.827
<b>Control</b>						
Drug addiction	5.06 (1.40)	4.94 (1.58)	4.82 (1.59)	4.74 (1.67)	0.74	0.637
Depression	4.71 (1.58)	4.61 (1.63)	4.38 (1.70)	4.67 (1.56)	0.71	0.739
Alcohol addiction	4.78 (1.69)	4.95 (1.76)	4.75 (1.78)	4.78 (1.65)	0.27	0.741
Schizophrenia	2.79 (1.48)	2.87 (1.39)	2.96 (1.52)	2.90 (1.43)	0.22	0.806

Abbreviation: DFL, disorder-first language; MHPSA, mental health problems and/or substance addictions; PFL, person-first language; RL, recovery language; VL, victim language.

<sup>a</sup>A higher score represents a higher level of agreement.

\* $p < .05$



Six Pearson's chi-squared tests were performed as randomisation checks across conditions on demographic variables. Means were calculated for each subscale and one-way analyses of variance (ANOVA) were performed on each subscale to test for differences between the four language conditions.

## 5 | RESULTS

Participants had a mean age of 40 and three quarters were women (77.6%), almost half had a higher vocational degree (49.3%) and more than one third a university degree (35.5%). The most reported professional field was 'addiction treatment' (32.4%), followed by 'mental health care' (25.2%) and social care (16.1%). The mean years of work experience in their current field was 12 years ( $SD = 10.0$ ). Almost all participants had work experience with patients with MHPSA (98.6%) or had personal contacts with someone with MHPSA (87.8%). More than two fifths reported to have or have had MHPSA themselves (43.5%). Groups did not differ on any characteristics ( $p > .18$ ) between conditions (Table 1).

One-way analyses of variance (ANOVA) revealed no significant differences among DFL, PFL, VL or RL on all subscales for any of the vignettes. The only exception is the 'blame' subscale ( $F = 3.11$ ,  $p = .026$ ) in the vignette about drug addiction (Table 2). Tukey's HSD test revealed that PFL scored significantly higher on 'blame' than DFL ( $p = .027$ ) in the vignette about drug addiction.

Spearman correlations showed significant correlations between the subscales (factors) yielded from the factor analyses (Supplementary Table 2). Two high ( $r > .5$ ) positive correlations were found between 'discrimination' and 'unpredictability' for the drug and alcohol addiction vignettes, which were *medium* ( $r = .3-.5$ ) for depression and schizophrenia (Cohen, 1988). Another high positive correlation was found between 'control' and 'blame' in the schizophrenia vignette, which was *medium* for the other vignettes.

## 6 | DISCUSSION

This study examined the effect of four randomly assigned language conditions on perceptions and expectations of care professionals about persons with drug addiction, alcohol addiction, depression and schizophrenia. Exposure to either of the four language conditions was not found to be associated with systematically different judgments regarding perceived social threat and unpredictability, attribution of blame and control, expectations of recovery or levels of discrimination. The blame subscale was the only variable found to differ significantly in the experimental conditions in the vignette about an individual with drug addiction. This effect came solely from the item 'To what extent do you feel that Michael could have avoided the problems he has?', in which a 'drug addict' was perceived less likely to be able to prevent his problems compared with 'a person with a drug addiction'. However, as there was no difference in items that measured similar concepts, we do not consider this single

finding convincing enough to draw conclusions from and want to avoid capitalisation on chance. Based on these results, we cannot conclude that referring to a person with MHPSA with specific language elicits systematically different attitudes related to stigmatisation in care professionals in the Netherlands.

Assumptions on stigmatising effects of language are common (American Psychiatric Association, 2015; Botticelli & Koh, 2016; Keller, 1977; Kelly, 2004; SAMHSA, 2004), however, we did not find such effects in this empirical study. An explanation could be that the differences between the vignettes were too subtle. Almost all participants had professional experience with persons with MHPSA and also for quite some time (the mean years of work experience in the field was 12 years). Having such experience may explain why professionals are unaffected by changing some words in a case vignette. Perceptions of persons with MHPSA likely have already been formed. Thornicroft, Rose, and Mehta (2010), for example, describe something called *physician bias*: because professionals tend to spend the most time with patients who have difficulties to recover or relapse, they tend to have a more pessimistic look on treatment outcomes. In our study, however, stigmatising attitudes were not particularly high in any of the subscales measured in this study. Furthermore, a study in the Netherlands showed that social distance to persons with addictions is a good indicator for stigmatising attitudes (van Boekel et al., 2015). Participants in this study can be considered to have a small social distance to persons with MHPSA: almost 90 per cent has or had personal contact with persons with MHPSA and more than 40 per cent (currently) has or (ever) had MHPSA themselves.

However, in the two American addiction-focused studies (Kelly et al., 2010; Kelly & Westerhoff, 2010) that were replicated in this study, the same minimal stimuli and participants with small social distance to MHPSA applied. Contrary to our results, these studies do report significant differences between two language conditions: 'substance abuser' elicited more negative judgements compared with 'a person with a substance use disorder'. One of the studies among clinicians only found a small effect regarding the degree to which punitive action should be taken, and whether an individual with a substance-related condition is more culpable for his problems (Kelly & Westerhoff, 2010a). The other study with a broader convenience sample (mostly healthcare professionals) reported more negative judgements on all subscales in vignettes where 'substance abuser' was used compared with 'substance use disorder' (Kelly et al., 2010). This raises the question whether American professionals are more sensitive to language than Dutch professionals or that differences in culture or language account for our different findings. Anthropologist Hall (1976) described ways how human communication styles differ across cultures. He distinguished low-context and high-context cultures. In low-context cultures, meaning is more explicitly expressed either verbally or orally, whereas in high-context cultures meaning is best conveyed through context, such as gestures and social customs ('what is said' (low-context) vs. 'how it is said' (high-context)). Although both the U.S. and the Netherlands are typically described as low context cultures, it is possible that care

professionals in the U.S. are lower on the 'high-low context' continuum, as an effect of language was found in the American studies.

Another explanation for our different findings can be the time-frame in which the American studies were performed (2008 and 2009). Although relatively recent, there have been many efforts in the last 10 years to promote awareness and reduce stigmatisation of persons with addictions and mental health problems. The personal recovery paradigm (Anthony, 1993; White, 2007), which has particular attention for stigma, is still increasingly being endorsed in the mental health and addictions field in the Netherlands. A general reduction in stigmatising attitudes could have contributed to the reduction in sensitivity for language.

Our findings suggest that subtle differences in language to refer to persons with MHPSA has no effect on stigmatising attitudes by care professionals in the Netherlands. This means that if reducing stigmatisation by professionals in the Netherlands is the goal, language is not the most effective focus. This does not mean, however, that language does not matter at all. Language potentially affects other groups than professionals. A similar study among the general public, for example, could yield different results. Moreover, a recent Dutch publication highlights the importance of language *from professionals to clients* and warns for the negative effect DFL can have on clients (Oosterkamp, Benning, & Bergsma, 2016). Although there is no empirical study to support this, research has shown, for example, that the framework of addiction (disease model vs. psychological and social conceptualisation) that is conveyed to clients by professionals impacts their agency in relation to substance use (Wiens & Walker, 2015). In other words: what professionals say to their clients about their condition has an impact on clients. Further exploration of this focus in relation to language and stigmatisation is recommended.

## 7 | LIMITATIONS

The sample used in this study was a convenience sample, the study was performed online and the sample consisted mostly of highly educated mental health and addiction care professionals which limits the generalisability of our findings. We were not able to analyse non-response. The incentive to attract respondents also may have attracted persons outside our target group, which we were not able to verify. However, our recruitment strategy targeted specific organisations, professional LinkedIn groups and e-mail newsletters which increased the chances that participants were authentic. Furthermore, we were limited in the way that we could measure relevant concepts extensively. The target group of mental health and social care professionals often has a high work pressure and is not easily reached for surveys. Thus, it was important to keep the survey short. Another limitation was that participants potentially recognised the language manipulation. We received two e-mails from participants complaining about the 'stigmatising' language we used in our survey. Furthermore, the experimental differences between vignettes were very minimal. However, we did expose participants

to the language conditions twice in each vignette, as opposed to Kelly et al. (2010), Kelly and Westerhoff (2010) who only used the experimental terms once.

In addition, while vignettes are a commonly used tool in research to investigate how care professionals make decisions that affect their patients, concerns are also raised regarding limitations in construct and external validity. It is indeed hard to assess to what extent a written stimulus and participants' responses to it measures and represent 'real world' future behaviour. However, in the context of this experiment, it is not ethical to use real persons. The vignettes allowed us to combine the strengths of survey and experimental methodologies and to isolate key aspects of stigmatising attitudes. It was also notable that the completion rate of the survey was quite low (66%). Reasons may include that the survey was repetitive and time consuming, which could have been perceived as boring. Furthermore, given the high work pressure of mental health and social care professionals, participants potentially ran out of time or did not find the survey interesting enough to complete. Because of these limitations of vignette surveys, it is also important to study stigmatisation of persons with MHPSA through multiple research methods and disciplines. Qualitative studies could provide more insights into 'how' and 'why' stigmatisation of certain conditions or illnesses by professionals take place.

A limitation in our replication of the two American studies was that we were not able to use the same wording. In the United States, 'substance abuser' is a commonly used term as is 'someone with substance use disorder'. In the Netherlands, literal translations of these terms are not commonly used. Therefore, it is possible that similar results were not found because of the nature of the language conditions being different. However, the labels used in our study reflect common language better and were therefore more appropriate to examine in a Dutch setting. A strength of our study is that we expanded the focus of these experiments by adding mental health problems and recovery language as extra variables to the study.

We did not find similar results as the American studies. We think that this fact makes this study important to publish. An Open Science Collaboration (Open Science Collaboration, 2015) showed that only 36 per cent of replication studies in psychological science found significant effects versus 97 per cent of the original studies. Reporting 'null findings' lies at the heart of science. It provides us with equally important insights as studies with significant findings.

## 8 | CONCLUSION

Attitudes of care professionals in the Netherlands in relation to stigmatisation were not influenced by the language used in the vignettes. This may mean that perceptions of persons with mental health problems and or substance addictions are determined more by other things than language or terminology (e.g. personal or professional experience with persons with MHPSA). This suggests that if the goal is to reduce stigmatisation by care professionals,



a focus on language is not the most effective approach. However, despite the lack of empirical evidence of the effect of language in our study, there seems to be consensus about not using DFL to refer to persons with mental health problems or substance addictions because of the negative connotations (Botticelli & Koh, 2016; Harris & Felman, 2012; Rose et al., 2007; Thornicroft, Rose, Kassam, & Sartorius, 2007). Even if it does not help to reduce stigmatisation among professionals, using more accurate (or person-first) language may contribute to lessening public stigmatisation by drawing attention and awareness to the person instead of the disorder. Language can represent the notion that a person is not defined by his or her disorder and PFL carries more neutral connotations and distinguishes the person from his/her diagnosis or perceived membership in a group (Botticelli & Koh, 2016). Empirical studies are needed to also determine the effect of language use on individuals with MHPSA. The fewer stigma they perceive, the fewer barriers they will experience for their recovery.

### CONFLICT OF INTEREST

On behalf of all authors, the corresponding author states that there is no conflict of interest.

### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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