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Metadehumanization in severe alcohol-use disorders: links with fundamental needs and clinical outcomes.

Running title: Metadehumanization in severe alcohol-use disorders

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Abstract

Background

Dehumanization, i.e., the denial of one's humanity, has important consequences for social interactions. Earlier works mainly studied the dehumanizer's perspective, neglecting victims and particularly psychiatric populations. This study's goal is thus to investigate if patients with severe alcohol-use disorders (SAUD) feel dehumanized by others and to reveal factors linked to metadehumanization.

Methods

A cross-sectional study in 120 patients with SAUD as diagnosed by their psychiatrist using DSM-IV criteria.

Results

Participants reported significant levels of metadehumanization, which were directly or indirectly linked to fundamental needs threat (γ = .41, p < .001), decreased positive emotions (indirect effect = -.11, p < .05), reduced self-esteem (indirect effect = -.16, p < .01), reduced use of functional coping strategies focused on the search of social support (γ = -.20, p < .05), and increased use of dysfunctional coping strategies (indirect effect = .15, p < .01) such as excessive alcohol-use (indirect effect = .10, p < .05).

Conclusions

Patients feel dehumanized by others, an experience linked to important deleterious factors for patients' wellbeing and treatment.

Keywords: dehumanization, fundamental needs, alcohol-dependence, self-esteem, emotions

1. Introduction

Dehumanization, i.e., the denial of other individuals' humanity, has been initially studied in the context of genocides and repeatedly linked to multiple forms of violence (Kelman, 1973; Kteily & Bruneau, 2017; Steuter & Wills, 2010). Dehumanization is based on the denial of essentially or uniquely human characteristics: civility, refinement, moral sensibility, rationality, maturity, emotional responsiveness, interpersonal warmth, cognitive openness, agency, and depth (Haslam, 2006). Dehumanization can also occur by associating someone with a non-human entity. Many metaphors can provoke these dehumanizing perceptions (e.g., "*these people are… trash, apes, savages, vermin, animals*", Goff et al., 2008; Haslam, 2006; Loughnan et al., 2014; Mekawi et al., 2019; Utych, 2018). Blatant dehumanization has been observed in deeply entrenched conflicts (e.g., Rwandan genocide, Ong, 2016). Subtler forms have also been reported in various contexts such as education (e.g., impersonal assessments denounced as dehumanizing), intergroup relations (e.g., individuals can dehumanize outgroups), and other situations such as work or customer-employee interactions (Caesens, Stinglhamber, Demoulin, & De Wilde, 2017; Haslam, 2006; Henkel, Boegershausen, Hoegg, Aquino, & Lemmink, 2018; Leyens et al., 2001). From the perpetrators' perspective, dehumanization has been linked to outcomes such as reduced help to victims, social distancing, harsh treatments, and violent behaviors (Cuddy, Rock, & Norton, 2007; Fasoli et al., 2016; Kteily, Hodson, & Bruneau, 2016; Viki, Osgood, & Phillips, 2013).

1.1. Dehumanization in medicine and psychiatry

Although denounced as endemic in medicine (Haque & Waytz, 2012), dehumanization has never been explored in psychiatric populations, despite all signs pointing toward them being particularly dehumanized (Fontesse, Demoulin, Stinglhamber, & Maurage, 2019). First, dehumanization is based on the perception that one lacks human characteristics (e.g., rationality, self-restraint, logic, maturity, or interpersonal warmth; Haslam, 2006). Lacking

such characteristics is inherent to some mental illnesses (e.g., interpersonal warmth in psychopathy; self-restraint in addictive disorders). As they are considered as lacking key human attributes, psychiatric populations are prone to be confronted with dehumanization. Second, mental illness stigma literature attests to the stigmatization against people with mental illness (Abdullah & Brown, 2011; Ross & Goldner, 2009), and stigmatized targets tend to be dehumanized (Cameron, Harris, & Payne, 2016; Harris & Fiske, 2006)[i]. Following this reasoning, laypeople, but also clinicians might dehumanize some psychiatric populations, if not all. Past research supported this idea, dehumanization being participants' default response when reading about a person labeled with mental illness (Martinez, Piff, Mendoza-Denton, & Hinshaw, 2011).

Additionally, we argue that patients with severe alcohol-use disorders (SAUD) might be particularly dehumanized, notably because they are more strongly stigmatized than other psychiatric populations, and perceived as dangerous and unpredictable (Pescosolido et al., 2010; Schomerus et al., 2011). Such stereotypes lead to social rejection; an essential cause of dehumanization (Bastian & Haslam, 2010). Additionally, dehumanization can be motivated by the desire to avoid exhaustion from helping patients (Cameron et al., 2016). We argue that patients with SAUD are perceived as particularly exhausting because relapse rates after treatment are very high (43% of relapse during the year following treatment; (Weisner, Matzger, & Kaskutas, 2003). As patients with SAUD are strongly rejected, stigmatized, and are certainly perceived as exhausting to help, they are likely to be dehumanized. The first neuroimaging study of dehumanization supported this reasoning, as participants presented brain activations patterns congruent with dehumanization only when observing people who are homeless or addicted (Harris & Fiske, 2006).

1.2. Dehumanization from the victims' perspective

Compared to the in-depth exploration of dehumanization from the authors' perspective, the victims' perspective has been neglected (Haslam & Loughnan, 2014; Haslam & Stratemeyer, 2016). So far, it has been shown that metadehumanization (i.e., the subjective perception of

being dehumanized by others) elicits negative emotions (e.g., anger, sadness, guilt, shame), aversive self-awareness and cognitive deconstruction (Bastian & Crimston, 2014; Bastian & Haslam, 2011; Zhang, Chan, Xia, Tian, & Zhu, 2017). Metadehumanization might arise when one has been treated as unequal, disrespected or if his/her identity have been treated as invaluable (Bastian & Haslam, 2011). Common maltreatments such as being envied, embarrassed, ostracized, treated instrumentally or hypocritically have been shown to provoke metadehumanization in the victim, the victim feels that he/she have been dehumanized by others (Bastian & Haslam, 2011). In organizational psychology, feeling dehumanized by his/her organization is associated with lower job satisfaction, higher emotional exhaustion, increased surface acting (e.g., faking emotions to meet requirements), more negative self-perceptions, and higher psychosomatic strains (Caesens et al., 2017; Nguyen & Stinglhamber, 2018). Similar effects might affect psychiatric patients. This study will thus investigate the presence and determinants of metadehumanization in patients with SAUD.

The model proposed here is inspired by the self-determination theory (SDT), which focuses on fundamental needs (e.g. autonomy, competence, meaning and belonging needs) to understand humans (Williams, 1997). These needs are the psychological counterpart of physical needs (e.g., hunger, thirst): every human feels them and, when unsatisfied, important negative consequences affect people's physical and mental health (Baumeister & Leary, 1995; Leary, Kelly, Cottrell, & Schreindorfer, 2013). Metadehumanization has been proposed to affect victims' fundamental needs (Bastian & Crimston, 2014; Christoff, 2014). Indeed, as dehumanization is linked to incompetence attribution it might convey the idea that one is incompetent, thus potentially threatening the need for competence (Li, Leidner, & Castano, 2014). Moreover, being human is an essential part of social identity, used to construct meaning about the world early in life; denying such a primary identity could thwart the need for meaning. Being dehumanized by others might also disrupt the sense of belonging to the human community, thus threatening the need to belong (Bastian &

Crimston, 2014). Considering that fundamental needs threat bears important aversive consequences (Baumeister & Leary, 1995), we moreover hypothesized that it would be associated with adverse effects on three crucial domains of human functioning, namely emotions, cognitions, and behaviors. These categories will be respectively operationalized with positive and negative emotions, self-esteem, and coping strategies; factors of utmost importance for patients' wellbeing and clinical prognosis (Cooper, Frone, Russell, & Mudar, 1995; Tomaka, Morales-Monks, & Shamaley, 2013; Zywiak, Westerberg, Connors, & Maisto, 2003). Finally, stigmatization will be controlled for in our dehumanization model, as dehumanization and stigmatization are distinct[a] but related concepts (Cameron et al., 2016; Kteily et al., 2016).

To sum up, all signs point towards patients with SAUD being a population particularly dehumanized. Surprisingly, research on this topic is entirely lacking. Following the arguments developed above, metadehumanization should be linked to fundamental needs threat. Metadehumanization should also, directly or indirectly (through fundamental needs threat), be linked to negative consequences regarding patients' emotions (increased negative emotions, decreased positive emotions), cognitions (lower self-esteem), and behaviors (decreased functional coping strategies and increased dysfunctional ones).

1.3. Aims of the study

Our aim was to survey patients with SAUD for the presence of metadehumanization. We further investigated the existence of associations between metadehumanization and patients' emotions, cognitions, and behaviors.

[a] Dehumanization arose to explain extreme interpersonal behaviors and its measures emerged from studies investigating essential and uniquely human characteristics (Haslam, 2006; Kelman, 1973; Leyens et al., 2000, 2001). Conversely, stigmatization studies started on marginalized groups and its measures emerged from stereotypes attributed to these specific groups (Kurzban & Leary, 2001; Mak, Poon, Pun, & Cheung, 2007). Dehumanization is "the denial of full humanness" (Goffman, 1963); stigmatization is "an attribute that is deeply discrediting" (Haslam, 2006). Moreover, dehumanization can occur in positive evaluations (e.g. describing an athletic person as a "beast") whereas stigmatization is negative in essence.

2. Materials and methods

2.1. Participants

Psychiatrists selected participants based on the following inclusion criteria: being a patient with SAUD involved in detoxification treatment for at least 14 days and being free from other major medical problems and neurological disease. One hundred and twenty French-speaking patients with SAUD were recruited (mean age = 48.3, S.D. = 10.9, 86 males). Patients had a mean of 2.61 (S.D. = 3.18) past alcohol detoxification treatments. Before the detoxification treatment, patients consumed 19.45 (S.D. = 12.15) alcohol units/day (10 grams of ethanol). The mean SAUD duration was 13.6 years (S.D. = 10.88). Patients were not paid for participation. Patients provided written informed consent.

2.2. Procedure

Patients were recruited during their detoxification stay in six Belgian hospitals from September 2017 to June 2018. They received a full description of the study. The survey was completed in two one-hour sessions. All procedures contributing to this work comply with the ethical standards of the Helsinki Declaration of 1975, as revised in 2008. All procedures involving patients were approved by the bioethical committee of the University (Cliniques Universitaires Saint-Luc, UCLouvain, Belgium; approval number B403201732246).

2.3. Materials

The survey measured metadehumanization, fundamental needs threat, emotions, self-esteem, coping strategies, alcohol-related characteristics, and demographics. This study is part of a larger project exploring emotional and cognitive correlates of SAUD. All scales were 7-point Likert-type scales, and all scores computed ranged from 1 to 7.

2.3.1. Metadehumanization

Metadehumanization was measured using a 13-item scale (α = .93) assessing how participants felt dehumanized by society (e.g., "*As an alcohol-dependent person, society*

treats me like an animal", "[…] *as an object*", "[…] *as if I was emotionless*", "[…] *as someone lacking intelligence and competence*", "[…] *as if I was lacking empathy and sensitivity*", see supplementary material 1 for the full scale). This scale focuses on participants' perception of being dehumanized by society. The scale was adapted from previous work on organizational dehumanization, which is a form of metadehumanization where the dehumanizer is one's organization (Caesens et al., 2017). Items were based on the bi-dimensional model of dehumanization distinguishing animalistic and mechanistic dehumanization (Haslam, 2006). However, this distinction did not hold in this study, as attested by the particularly high correlation (r = .93) found between items initially classified in animalistic and mechanistic categories. Accordingly, a global dehumanization score was computed from all items. It thus encompasses known criteria of dehumanization, such as immaturity, superficiality, and coldness as well as direct metaphors to non-human entities. Agreement with the items was measured using a 7-point Likert-type scale ("Completely disagree", "Disagree", "Slightly disagree", "Neither agree, nor disagree", "Slightly agree", "Agree", "Completely agree"). Answers were averaged to compute a mean score ranging from 1 to 7.

2.3.2. Fundamental needs threat

Fundamental needs threat was measured using a 12-item scale (α = .85) assessing participants' threat of belonging, control, self-esteem, and meaning needs (e.g. "*As an alcohol-dependent person, I feel little accepted in society*"; "*As an alcohol-dependent person, I feel valued and respected in society*" reverse coded; Zadro et al., 2004). This scale focused on participants' perceived dissatisfaction with their fundamental needs. After inverting the scores of reversed items, the fundamental needs threat score was computed from all items.

2.3.3. Positive and negative emotions

Participants' emotions were measured using the French version of the Positive and Negative Affect Schedule (Pélissolo, Rolland, Perez-Diaz, Jouvent, & Allilaire, 2007; Watson, Clark, & Tellegen, 1988). This 31-item scale distinguishes positive emotions (tenderness and joy), negative emotions (fear, sadness, anger, and shame), and surprise. Following our

hypotheses, surprise was left out. The positive emotions score (α = .90) was computed by averaging participants' scores on tenderness and joy items and the negative emotions (α = .95) score by averaging scores on fear, sadness, anger, and shame items.

2.3.4. Self-esteem

Different dimensions of participants' self-esteem were measured using the 20-item State Self-Esteem Scale (Heatherton & Polivy, 1991). This scale encompasses self-esteem regarding performance (e.g., "*I feel as smart as others*"), sociability (e.g., "*I feel concerned about the impression I am making*," reversed) and appearance (e.g., "*I feel satisfied with the way my body looks right now*"). However, analyses were conducted on general self-esteem (α = .88), computed from all items, as no hypothesis was based on sub-dimensions.

2.3.5. Coping strategies

Participants' coping strategies when facing a troubling event was measured through the French adaptation of the Ways of Coping Checklist (27 items; Bruchon-Schweitzer, Cousson, Quintard, Nuissier, & Rascle, 1996; Folkman & Lazarus, 1988). This scale distinguishes three dimensions: functional coping strategies centered on problem solving (α = .88; e.g., "*I fought for what I wanted*") or on the search of social support (α = .77; e.g., "*I talked with someone about what I was feeling*") and dysfunctional coping centered on emotions (α = .75; e.g., "*I felt bad that I could not avoid the problem*"). Two items were added to measure participants' alcohol-use as coping (r = .65; e.g., "*I drank alcohol to feel better*"). We computed the dimensions mean.

2.3.6. Stigma awareness

Stigma awareness was measured using the Stigma Awareness dimension of the Self-Stigma in Alcohol Dependence Scale (SSAD; Schomerus et al., 2011). This dimension assesses participants' perception of stigma held from the public against their group (people with alcohol dependence/severe alcohol-use disorder). A general header was presented to participants ("I think that the public perceive people with severe alcohol-use disorder as…").

Sixteen items describing commonly held stereotypes against people with severe alcohol-use disorder were then presented (e.g. lazy, weak-willed, violent). A mean stigma awareness score was computed by averaging participants' responses to all items (α = .92).

2.4. Statistical analyses

Analyses were conducted using StataSE 15 and SPSS 25. The path-analysis model was estimated using maximum likelihood with missing values (Wright, 1934). Compared to classical regressions, path-analysis allow for complex models testing so that all relations are controlled for all other relations (Loehlin, 1998). In order to control for stigma awareness, unstandardized residuals were saved from a regression of stigma awareness on metadehumanization. These residuals are the part of variance of metadehumanization that is not explained by stigma awareness. Using these residuals leads to a metadehumanization variable controlled for stigma awareness, without losing statistical power. The raw metadehumanization score was thus used for descriptive statistics and correlations, while the stigma-corrected metadehumanization score was used in the path-analysis model.

3. Results

The mean metadehumanization level among patients with SAUD was 3.20 (see Table 1 for the means, standard deviations, Cronbach alphas, and correlations). Metadehumanization was positively associated with fundamental needs threat (γ = .41, p < .001; see Fig. 1 for a graphical representation of the results). Metadehumanization was negatively related to the search of social support as coping (γ = -.20, p < .05) and to negative emotions (γ = -.19, p < .05)[b]. Fundamental needs threat was negatively related to positive emotions (β = -.27, p < .01) and self-esteem (β = -.40, p < .001). Moreover, fundamental needs threat was positively

[b] When testing the model without fundamental needs threat, links between metadehumanization and self-esteem (β = -.25, p < .01), coping centered on problem solving (β = -.22, p < .05), search of social support as coping (β = -.23, p < .01), and dysfunctional coping (β = .23, p < .01) were significant.

linked to negative emotions (β = .42, p < .001), dysfunctional coping strategies (β = .37, p < .001) and alcohol-use as a coping strategy (β = .26, p < .01).

Table 1. Descriptive statistics, Cronbach alphas, and correlations between variables.

	M	*SD*	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Metadehumanization	3.20	1.42	(.93)								
2. Fundamental needs threat	4.43	1.15	.62***	(.85)							
3. Negative emotions	4.08	1.48	.20*	.35***	(.95)						
4. Positive emotions	3.95	1.39	-.14	-.26**	-.16	(.86)					
5. Self-esteem	4.18	1.02	-.35***	-.43***	-.51***	.28**	(.88)				
6. Coping problem	2.87	0.70	-.27**	-.21*	-.30**	.30**	.51***	(.88)			
7. Coping social support	3.26	0.67	-.25**	-.15	-.02	.26**	.17	.58***	(.75)		
8. Dysfunctional coping	2.95	0.62	.31***	.40***	.42***	-.27**	-.41***	-.21*	.01	(.77)	
9. Alcohol-use as coping	2.88	1.13	.13	.23*	.33***	-.28**	-.35***	-.38***	-.14	.40***	(.78)

*Note. N = 120. Cronbach alphas are between brackets on the diagonal. *p < .05; ** p < .01; *** p < .001.*

Furthermore, indirect effects, from metadehumanization to the outcomes through fundamental needs threat, showed that metadehumanization was indirectly linked to negative emotions (indirect effect = .17, p < .01) and to positive emotions (indirect effect = -.11, p < .05). Indirect effects of metadehumanization through fundamental needs threat on self-esteem (indirect effect = -.16, p < .01), dysfunctional coping strategies (indirect effect = .15, p < .01), and alcohol-use as coping (indirect effect = .10, p < .05) were also significant.

Figure 1.

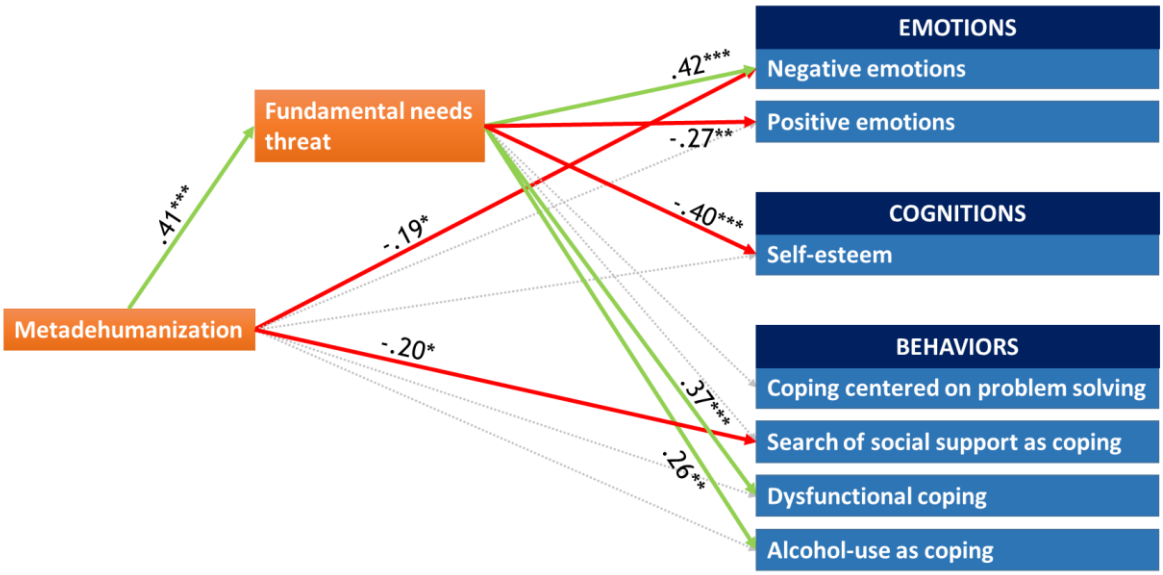

Figure. 1 Statistical model tested [$\chi^2(5)=6.60$ RMSEA = .05; CFI = .99]. Significant standardized regressions paths depicted as large arrows; non-significant paths as dotted lines. Covariances, not depicted, were entered between significantly correlated dependent variables. *$p < .05$; ** $p < .01$; *** $p < .001$

Note: colors should be used for the online version but not in print

4. Discussion

This study is the first to investigate metadehumanization in a psychiatric population, namely patients with SAUD. The first crucial finding is that patients with SAUD report a significant level of metadehumanization (M = 3.20, S.D. = 1.42 on a 1-7 Likert scale) even though the items used in the metadehumanization scale were blatant (e.g., "*As a patient with SAUD, society treats me like an object*", "*[…] as an under-evolved being*"). This study thus reveals that patients with SAUD do feel dehumanized by others during detoxification treatment.

As hypothesized, metadehumanization was linked to fundamental needs threat, even after controlling for stigma awareness. One of the central insights of our results is that metadehumanization and fundamental needs, although currently unexplored in psychiatry, are core variables for the well-being and clinical outcomes of patients with SAUD. Indeed, considering direct and indirect relations, metadehumanization was linked to emotional (decreased positive emotions), cognitive (decreased self-esteem), and behavioral (reduced functional coping strategies, increased dysfunctional and alcohol-related coping strategies) deleterious outcomes. These relationships should warrant both clinicians' and researchers' attention.

Indeed, all the factors investigated here in relation to metadehumanization constitute major contributors to SAUD. At the emotional level, people use alcohol to reduce negative emotions or to enhance positive ones (Cooper et al., 1995). Experiencing negative emotions is one of the main reasons for relapsing, and this type of relapse is particularly severe

(Zywiak et al., 2003). At the cognitive level, low self-esteem increases the use of dysfunctional coping strategies such as substance use (Tomaka et al., 2013). Finally, at the behavioral level, coping strategies centered on problem-solving are negatively associated with alcohol problem severity (Spangenberg & Campbell, 1999). Reduced use of coping strategies centered on the search for social support is concerning because it can lead to loneliness, itself linked to poor prognosis and inability to change (Åkerlind, Hörnquist, Akerlind, & Hornquist, 1992). Dysfunctional coping strategies such as emotional avoidance are associated with increased severity of drinking problems (Moos, Brennan, Fondacaro, & Moos, 1990). Finally, alcohol-use as a coping strategy is an essential predictor of alcohol abuse (Britton, 2004; Cooper, Russell, & George, 1988). Altogether, metadehumanization and fundamental needs threat are associated to an increase in all risk factors investigated (negative emotions, dysfunctional coping, and alcohol-use as coping) and a decrease in all protective factors (positive emotions, self-esteem, coping strategies centered on problem-solving, and the search of support). These strong and coherent relationships, controlled for stigma awareness, suggest that metadehumanization might constitute an underestimated but critical lever in the vicious circle of SAUD.

4.1. Limitations, theoretical implications, and perspectives

These seminal results could initiate multiple lines of research, notably regarding the links between metadehumanization and other alcohol-related consequences (e.g., cognitive deficits, relapse). As this study is the first to investigate metadehumanization in psychiatric patients, no study has yet compared the metadehumanization of different categories of patients. This question should thus be investigated to identify the clinical populations that are at risk of feeling dehumanized (e.g., psychiatric patients might be more dehumanized than other types of patients). In the same vein, authors of dehumanization could potentially be diverse (e.g., colleagues, family, or medical staff). Identifying the most potent sources of metadehumanization for patients could enrich future research and allow tailoring specific anti-dehumanization interventions. Moreover, we considered fundamental needs as a unique

factor in the present study, but the distinct fundamental needs (need for belonging, control, self-esteem, and meaning) might present differential links with metadehumanization and related variables, which should be explored in the future.

An additional finding of our study should also be underlined: although dehumanization often takes subtle forms, victims of dehumanization consciously perceive that society dehumanizes them, and this perception is linked to psychological suffering, afflicted self-esteem, and poor coping. However, the metadehumanization scores reported by patients might seem quite low because they do not reach the scale mid-point on average. We acknowledge that this constitutes a limitation. Nevertheless, we argue that scores on scales depend heavily on the items. The very blatant wording of our metadehumanization scale at least partly explains why patients do not report higher scores. Finally, metadehumanization was found to have reverse associations with negative emotions when looking at direct and indirect effects, respectively (i.e., negative associations for the direct effect, positive for the indirect effect). However, the total effect was non-significant, which suggest that these opposed effects cancel each other.

4.2. Clinical implications and perspectives

As metadehumanization seems central in patients' emotional, cognitive, and behavioral impairments, interventions preventing and reducing dehumanization in the field of medicine are needed. While treating patients as human beings is a basic standard usually considered as evident in psychiatric settings, patients' experience tells a different story, as they present dehumanization feelings that should alert healthcare workers, clinical practitioners, and policymakers. Actions should be considered to reduce patients' dehumanization: these could target SAUD patients, medical staff, or society. Psychiatric settings should evolve to reinforce characteristics linked to humanity attribution such as rationality, maturity, interpersonal warmth, and agency (Haslam, 2006). More efforts should be invested to favor patients' inclusion in society as social exclusion causes metadehumanization (Basitan & Haslam, 2010). Avoiding labels such as "mental illness" might also help as they are associated with

dehumanizing tendencies (Martinez et al., 2011). Actions targeting medical staff could start by informing them of the dehumanization issue. Importantly, dehumanization supposedly fulfills a functional role for medical staff (mainly by reducing emotional exhaustion) and tackling dehumanization should not come at medical staff expanse. However, alternative strategies could replace dehumanization (e.g., reducing medical staff workload, offering them better support; Christoff, 2014). Reducing patients' dehumanization thus also requires improving health care workers' well-being and working conditions. Finally, it is crucial for policymakers to consider ways to improve patients with SAUD's integration in society and society's perception of these patients (Schomerus et al., 2011). Global modifications at medical, societal and political levels are thus required to tackle dehumanization in psychiatry.

4.3. Conclusion

Patients with SAUD report a significant level of metadehumanization, which are strong predictors of a worrisome pattern of adverse outcomes: fundamental needs threat, increased negative emotions, decreased positive emotions, decreased self-esteem, decreased use of functional coping strategies and increased use of dysfunctional coping strategies including alcohol use.

Ethical standards

All procedures involving patients were approved by the bioethical committee of the University (Cliniques Universitaires Saint-Luc, UCLouvain, Belgium; approval number B403201732246). All procedures contributing to this work comply with the ethical standards of the Helsinki Declaration of 1975, as revised in 2008. Participants provided informed consent prior their inclusion in the study.

Declaration of interest

None

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