



How do decision making and fairness mediate the relationship between involuntary hospitalisation and perceived coercion among psychiatric inpatients?

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ABSTRACT

Background: Coercion perceived by psychiatric inpatients is not exclusively determined by formal measures such as involuntary admissions, seclusion or restraint, but is also associated with patients' characteristics and professionals' attitude.

Aims: This study examined how inpatients' involvement in the decision making process, the respect of their decision making preference, and their feeling of having been treated fairly mediate the relationship between involuntary hospitalisation and perceived coercion both at admission and during hospital stay.

Methods: Mediation analysis was performed in order to study the relationship between involuntary hospitalisation and perceived coercion among 230 patients, voluntarily and involuntarily admitted in six psychiatric hospitals.

Results: 32.2% of the participants were involuntarily hospitalised. Taken individually, stronger participants' involvement in decision making process, better respect for their decision making preference and higher level of perceived fairness partially mediated the relationship between involuntary hospitalisation and perceived coercion by reducing the level of the latter both at admission and during the hospitalisation. In multiple mediator models, only involvement and respect played an important role at admission. During the hospitalisation, perceived fairness was the most relevant mediator, followed by involvement in decision making.

Conclusions: During psychiatric hospitalisation patients' involvement in decision making, respect of their decision making preference and perceived fairness determined the relationship between involuntary hospitalisation and perceived coercion, but not in the same way at admission and during the stay. Involving patients in decision making and treating them fairly may be more relevant than taking account of their decision making preference in order to reduce perceived coercion.

1. Introduction

1.1. Perceived coercion

The level of coercion perceived by people with mental disorders does not depend exclusively on the formal coercive measures, such as involuntary admission, seclusion or restraint, they are subjected to (Lidz

et al., 1995). Several studies have shown that even people admitted voluntarily could feel coerced and that, conversely, involuntary hospitalisation did not systematically lead to perceived coercion (Golay et al., 2019b; Katsakou et al., 2011; Newton-Howes and Stanley, 2018; O'Donoghue et al., 2014). Other factors may cause people to feel coerced. Firstly, informal coercion, which refers to non-statutory forms of coercion such as persuasion, interpersonal leverage, inducement or

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threat, may induce perceived coercion (Szmukler and Appelbaum, 2008). Informal coercion can be applied by professionals or relatives in order to improve treatment adherence or to limit the use of formal coercion (Hotzy and Jaeger, 2016; Klingemann et al., 2022; Lidz et al., 1998). Secondly, the perception of not being involved in a fair decision making process (procedural justice) can reinforce perceived coercion (Lidz et al., 1995; Poythress et al., 2002). Thirdly, a higher level of perceived coercion is also associated with variables such as female gender (Fiorillo et al., 2012; O'Callaghan et al., 2021), older age (Bindman et al., 2005), ethnicity (Bindman et al., 2005; O'Callaghan et al., 2021), severity and type of symptoms, like positive symptoms in schizophrenia (Fiorillo et al., 2012; O'Callaghan et al., 2021), poorer level of social functioning (Fiorillo et al., 2012), lower degree of insight (Bindman et al., 2005), lack of dignity (Plunkett et al., 2022) and previous experiences of coercion (O'Callaghan et al., 2021).

A thorough understanding of perceived coercion and the factors influencing it is essential, especially in light of the effects it may have on people with mental disorders and their prognosis. Perceived coercion was found to negatively impact patients' perception of the therapeutic relationship with their caregivers (Lee and Seo, 2021; Sheehan and Burns, 2011; Theodoridou et al., 2012). A lower level of perceived coercion was linked to higher levels of treatment satisfaction (Katsakou et al., 2010; Priebe and Miglietta, 2019; Strauss et al., 2013; Woodward et al., 2017). A higher level of perceived coercion during the psychiatric admission was associated with an increased risk of suicide attempts after discharge (Jordan and McNeil, 2020). However, its role in patient engagement with care is less obvious. (Bindman et al., 2005; Jaeger et al., 2013). The long-term impact of high levels of perceived coercion on patients remains controversial and needs further evaluation (O'Donoghue et al., 2015).

1.2. Shared decision making

Recent reviews highlighted that shared decision making interventions limited the use of coercion in psychiatry (Barbui et al., 2021) and, more specifically, the patient's perception of being coerced (Fiorillo et al., 2020). Shared decision making can be defined as a process in which patients and professionals exchange information in order to build consensus on the best treatment options and to reach agreement on the care to be implemented (Charles et al., 1997). Self-determination, choice and autonomy, core principles of shared decision making process, are also key aspects of recovery-oriented care (Chmielowska et al., 2021).

However, not all patients want to be involved in the same way in medical decisions affecting them (Kiesler and Auerbach, 2006). Preference for participation can range from "passive", when the patient prefers to leave the entire choice of treatment to the doctor, to "highly active", when the patient prefers to make the final decision alone. In between is the "collaborative" form, when the patient prefers to decide on the best treatment option together with the doctor. Previous studies have shown that patients' willingness to participate in decisions declined in more critical situations, whether facing somatic (Ende et al., 1989) or psychiatric conditions (Hill and Laugharne, 2006). In addition, the decision making preference of a person may change over time (Morandi et al., 2017). Other factors are associated with a higher desire for participation in decision making. For example, among people with schizophrenia, younger age, poor satisfaction with treatment, negative attitude toward medication, better perceived self-decision making skills and higher education were related to higher participation preference (Hamann et al., 2005, 2011).

Although shared decision making is strongly recommended, its application in psychiatry is limited by many barriers (Chmielowska et al., 2021; Hamann and Heres, 2014). Taking into account the preferred decision making style of patients and involving them appropriately in decision making processes may nevertheless contribute to their well-being. A recent study has shown that a higher degree of participation in clinical decisions was associated with improved social

functioning and quality-of-life and reduced interpersonal conflicts, sense of loneliness, feelings of inadequacy, and withdrawal in friendships after one year (Luciano et al., 2022). Decision making style may also have an impact on service use. Indeed, an active style increases the number of hospital stays, their duration and health care costs (Cosh et al., 2017).

1.3. Fairness and procedural justice

In mental health care, procedural justice can be defined as the fact that, in a process potentially leading to coercive measures, the persons concerned are treated with objectivity (fairness), have the opportunity to be heard (voice), feel that their opinion is taken into account (validation), are accompanied in a dignified and respectful manner (respect), perceive that professionals genuinely care about them (motivation), and receive sufficient information and explanations about the procedures (information) (Lind and Tyler, 1988; Wittouck and Vander Beken, 2019). The level of procedural justice experienced by people with mental disorders is unrelated to the use of formal coercive measures (O'Donoghue et al., 2011), but it may reduce perceived coercion (Munetz et al., 2014). The feeling of having been treated fairly, even in a coercive setting, seems to contribute to people's well-being (Beijersbergen et al., 2014; Kopelovich et al., 2013).

1.4. Aim

The aim of this study was to examine, among a population of psychiatric inpatients, how their involvement in the decision making process, the respect of their decision making preference, and their feeling of having been treated fairly mediate the relationship between involuntary admission and perceived coercion both at admission and during hospital stay. To the best of our knowledge, this was the first study to look at the links between perceived coercion, decision making and fairness at the time of psychiatric hospitalisation.

2. Material and methods

2.1. Participants

Participants were recruited, regardless of the status of their hospitalisation (voluntary/involuntary), throughout six psychiatric hospitals in the French-speaking part of Switzerland between March 2020 and June 2022. Inclusion criteria were to be between 18 and 65 years old, to have been hospitalised for a total duration between 7 and 15 days at the time of assessment and to be sufficiently proficient in French to complete the questionnaire. This ensured participants formed a rather homogeneous group in terms of duration of hospitalisation elapsed at the time of assessment. Patients diagnosed with dementia (F00–F09) or Intellectual disability (F70–F79) were excluded. Participants were contacted directly on site to take part in the study on a voluntary basis. To avoid selection bias and more often approach patients known by the staff to be collaborative, each hospital unit established a list of eligible patients, who were then randomly selected. All assessments were administered at the same time by a research assistant (trained master's degree psychology students or 6th year medical students, independent of the hospital team) during one session immediately following the inclusion in the study. That means all measurements were performed between 7 and 15 days of hospitalisation. Approval for this study was granted by the Human Research Ethics Committee of the Canton Vaud, Switzerland (protocol #2016–00768). Written informed consent was obtained from all participants and all methods were carried out in accordance with the recommendations of the Human Research Ethics Committee of the Canton Vaud and the Declaration of Helsinki.

2.2. Measures

2.2.1. Involuntary hospitalisation

Information on the admission status of the participants was based on the data transmitted by the six psychiatric hospitals where they were recruited.

2.2.2. Perceived coercion

The French version of the MacArthur Admission Experience Survey (AES) short form was used to measure participants' perceived coercion at admission (Golay et al., 2017). This 16-items scale is divided into three subscales and a total score. The Perceived Coercion score focuses on freedom, choice, initiative, control and influence over coming into hospital; the Negative Pressures score focuses on being forced, threatened or physically forced to come into hospital; and the Voice score focuses on having a chance to voice an opinion about coming into hospital. In this study we used the total score in order to capture perceived coercion during admission. This score is closely related to the Perceived coercion score but demonstrated higher reliability and higher convergent validity (Golay et al., 2017).

The French version of the Coercion Experience Scale (CES; Golay et al., 2019a) was used to measure participants' perceived coercion during hospitalisation. The questionnaire is based on 29 five-point Likert-type items divided into five subscales: a Humiliation/coercion score, a Physical adverse effects score, an Interpersonal separation score, a Negative environmental influences score and a Fear score. In this study we used the Humiliation/coercion score to capture perceived coercion during hospitalisation. The instruction of the French validated version specified that the terms "coercive measures" referred to the following measures imposed on patients during their stay: confinement, limitations of contact with relatives, seclusion, restraint and pharmacological contention.

2.2.3. Involvement, respect for decision making preference and perceived fairness

Participants' involvement in decision making was assessed with the Clinical Decision making Involvement and Satisfaction Scale-Patient Version (CDIS-P; Slade et al., 2014). Participants' involvement was rated between 1 (active) and 5 (passive). This score was rescaled between 0 and 4 and reversed so that a high score indicated active involvement. Participants' wish to be involved in decision making was assessed using the Participation in Decision Making subscale of the Clinical Decision Making Style Scale-Patient Version (CDMS-P; Puschner et al., 2013). It assessed patients' wish to actively participate to decisions with a score between 0 (no wish to participate to decisions) and 4 (wish to decide for themselves).

The respect for the participants' decision making preference was operationalized as the absolute distance between the participants' involvement score (CDIS-P) and the participants' wish to participate in decision making (CDMS-P). This score naturally ranged between 0 and 4. It was re-scaled so that higher values indicated higher respect for the participants' preference.

Participants' perceived fairness of treatment pressures was measured following Swartz et al. (2004). The Index of fairness was calculated summing the participants answers to the following items: "Overall, the pressures or things people have done to try to get me into treatment or to stay in treatment (1) Were done by people who tried to be fair to me (2) Were done for my own good (3) Were not done out of real concern for me (reverse coded) (4) Didn't make me feel respected as a person (reverse coded)".

2.3. Statistical analysis

Mediation analyses were performed in order to study whether the relationship between involuntary hospitalisation and perceived coercion, either at admission or during the stay, was mediated by

involvement, respect for decision making preference or perceived fairness.

All models were specified a priori on a theoretical basis (Fig. 1). Involuntary hospitalisation was introduced as the independent variable and either the AES total score or the CES humiliation/coercion score as the dependent variable. Involvement, respect for decision making preference and perceived fairness were introduced one at a time as mediators. A full model including all three mediators was also estimated. These mediation models allowed us to determine whether significant indirect effects between involuntary hospitalisation and perceived coercion could be observed. Such indirect effect indicates the amount of mediation. Partial mediation is the situation in which the path between involuntary hospitalisation and perceived coercion is reduced but still statistically significant when the mediator is introduced. Complete mediation describes the case where the path between involuntary hospitalisation and perceived coercion is no longer significant after the introduction of the mediating variable. The total effect is the addition of the direct effect and the indirect effects. Mediation analyses were performed using the Jamovi 2.2.5 software using the jAMM GLM Mediation Model Module which relies on R packages and a structural equation modelling (SEM) framework. Standard errors were estimated with the Bootstrap Percentile method.

3. Results

Of the 321 eligible patients invited to take part in the study, 230 (71.6%) agreed to participate. 74 participants (32.2%) had been involuntarily hospitalised. 124 participants (53.9%) were women. Age ranged from 18 to 64 years old ($M = 39.47$, $SD = 13.72$). All participants were French-speakers, and the majority (73.5%; $n = 169$) were Swiss. Primary diagnosis, based on the *International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10)* are presented in Table 1.

Involvement partially mediated the relationship between involuntary hospitalisation and perceived coercion at admission (Total effect $B = 3.85$, $p < 0.001$, Direct effect $B = 2.22$, $p < 0.001$, Indirect effect $B = 1.62$, $p < 0.001$, % mediated = 42.1%) as well as respect for preference (Total effect $B = 3.85$, $p < 0.001$, Direct effect $B = 2.80$, $p < 0.001$, Indirect effect $B = 1.05$, $p = 0.001$, % mediated = 27.3%) and perceived fairness (Total effect $B = 3.85$, $p < 0.001$, Direct effect $B = 3.20$, $p < 0.001$, Indirect effect $B = 0.64$, $p = 0.004$, % mediated = 16.6%).

The results of the multiple mediator model (including all three mediators) for perceived coercion at admission are presented in Table 2. Significant indirect effects indicate partial mediation of involvement (% mediated = 33.5%) and respect for preference (% mediated = 16.5%). The R^2 of the perceived coercion at admission score was 0.192, indicating that a large part of perceived coercion was not accounted for by the involuntary hospitalisation itself.

During hospitalisation, involvement partially mediated the relationship between involuntary hospitalisation and perceived coercion and humiliation (Total effect $B = 16.82$, $p < 0.001$, Direct effect $B = 13.26$, $p < 0.001$, Indirect effect $B = 3.56$, $p = 0.001$, % mediated =

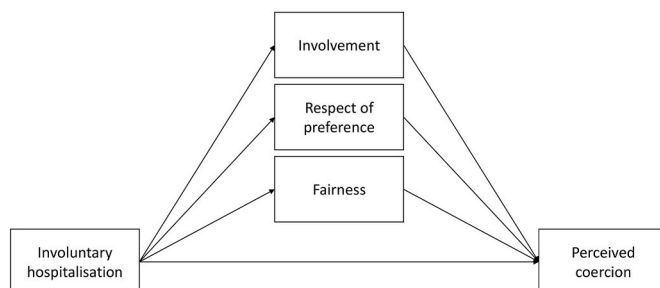


Fig. 1. Mediation theoretical model.

Table 1
Sample description (N = 230).

	n	%
Involuntary hospitalisation	74	32.2
Gender, female	124	53.9
Age (mean ± SD)	39.47 ± 13.72	
Swiss Nationality	169	73.5
Main Diagnosis		
Mental and behavioural disorders due to psychoactive substance use (F10)	19	8.3
Mental and behavioural disorders due to psychoactive substance use (F11–F19)	8	3.5
Schizophrenia (F20–F29)	58	25.2
Mood affective disorders (F30–F31)	29	12.6
Mood affective disorders (F32–F39)	55	23.9
Neurotic, stress-related and somatoform disorders (F40–F48)	19	8.3
Personality disorders (F60–F69)	34	14.8
Psychological development disorders (F80–F89)	1	0.4
No diagnostic information available	7	3.0
AES total score (mean ± SD)	4.64 ± 4.11	
CES Humiliation/Coercion score (mean ± SD)	21.75 ± 17.92	
Involvement score (mean ± SD)	1.93 ± 1.45	
Respect of preference score (mean ± SD)	2.60 ± 0.96	
Fairness score (mean ± SD)	15.61 ± 4.79	

52.2%) as well as respect for preference (Total effect B = 16.82, p < 0.001, Direct effect B = 13.85, p < 0.001, Indirect effect B = 2.98, p = 0.009, % mediated = 17.7%) and perceived fairness (Total effect B = 16.82, p < 0.001, Direct effect B = 11.61, p < 0.001, Indirect effect B = 5.21, p < 0.001, % mediated = 31.0%).

The results of the multiple mediator model for perceived coercion and humiliation during hospitalisation are presented in Table 3.

Table 2
Multiple mediation model for perceived coercion at admission.

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Involuntary hospitalisation ⇒ Involvement ⇒ AES total score	1.289	0.2740	0.7827	1.8902	0.1553	4.71	<0.001
	Involuntary hospitalisation ⇒ Respect of preference ⇒ AES total score	0.634	0.1992	0.2691	1.0414	0.0763	3.18	0.001
	Involuntary hospitalisation ⇒ Fairness ⇒ AES total score	0.261	0.1339	0.0282	0.5548	0.0314	1.95	0.052
Component	Involuntary hospitalisation ⇒ Involvement	-1.040	0.1947	-1.4175	-0.6549	-0.3354	-5.34	<0.001
	Involvement ⇒ AES total score	-1.240	0.1489	-1.5363	-0.9509	-0.4630	-8.33	<0.001
	Involuntary hospitalisation ⇒ Respect of preference	-0.563	0.1395	-0.8288	-0.2915	-0.2758	-4.04	<0.001
	Respect of preference ⇒ AES total score	-1.126	0.2027	-1.5282	-0.7317	-0.2766	-5.55	<0.001
	Involuntary hospitalisation ⇒ Fairness	-2.558	0.6710	-3.8725	-1.2094	-0.2497	-3.81	<0.001
	Fairness ⇒ AES total score	-0.102	0.0454	-0.1900	-0.0132	-0.1257	-2.24	0.025
Direct	Involuntary hospitalisation ⇒ AES total score	1.661	0.4869	0.7603	2.6570	0.2001	3.41	<0.001
Total	Involuntary hospitalisation ⇒ AES total score	3.845	0.5213	2.8231	4.8667	0.4381	7.38	<0.001

Note. a = Confidence intervals computed with the Bootstrap percentiles method.

Table 3
Multiple mediation model for perceived coercion and humiliation during hospitalisation.

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Involuntary hospitalisation ⇒ Involvement ⇒ CES Humiliation/Coercion score	1.654	0.807	0.2432	3.3836	0.0446	2.05	0.040
	Involuntary hospitalisation ⇒ Respect of preference ⇒ CES Humiliation/Coercion score	1.042	0.661	-0.0300	2.5556	0.0281	1.58	0.115
	Involuntary hospitalisation ⇒ Fairness ⇒ CES Humiliation/Coercion score	4.659	1.258	2.2077	7.1513	0.1255	3.70	<0.001
Component	Involuntary hospitalisation ⇒ Involvement	-1.040	0.203	-1.4401	-0.6225	-0.3354	-5.13	<0.001
	Involvement ⇒ CES Humiliation/Coercion score	-1.591	0.668	-2.8955	-0.2730	-0.1329	-2.38	0.017
	Involuntary hospitalisation ⇒ Respect of preference	-0.563	0.153	-0.8769	-0.2901	-0.2758	-3.69	<0.001
	Respect of preference ⇒ CES Humiliation/Coercion score	-1.851	0.982	-3.8189	0.0892	-0.1018	-1.89	0.059
	Involuntary hospitalisation ⇒ Fairness	-2.558	0.662	-3.8509	-1.2761	-0.2497	-3.86	<0.001
	Fairness ⇒ CES Humiliation/Coercion score	-1.822	0.213	-2.2128	-1.3627	-0.5027	-8.57	<0.001
Direct	Involuntary hospitalisation ⇒ CES Humiliation/Coercion score	9.469	2.170	5.4784	13.9442	0.2552	4.36	<0.001
Total	Involuntary hospitalisation ⇒ CES Humiliation/Coercion score	16.824	2.272	12.3710	21.2779	0.4395	7.40	<0.001

Note. a = Confidence intervals computed with the Bootstrap percentiles method.

Significant indirect effects indicate partial mediation of perceived fairness (% mediated = 27.7%) and involvement (% mediated = 9.8%). The R² of the perceived coercion and humiliation score was 0.193.

4. Discussion

This study confirmed that the level of coercion perceived by people with mental health problems did not depend exclusively on being involuntarily admitted, and that both the decision making process and the feeling of having been treated fairly impacted it (Fiorillo et al., 2020; Lidz et al., 1995; Munetz et al., 2014; Poythress et al., 2002). More specifically, this study showed that, at the time of a psychiatric hospitalisation, patients' involvement in decision making process, respect for their decision making preference and perceived fairness all mediated the relationship between involuntary hospitalisation and perceived coercion, but in different ways at admission or during psychiatric hospitalisation. A substantial part of perceived coercion was also not related to the decision of involuntary hospitalisation.

Taken individually, the three factors mediated the relationship between involuntary hospitalisation and perceived coercion by reducing the level of the latter both at admission and during the hospitalisation. However, when taken altogether, highlighting their unique and specific influence, only participants' involvement and respect for decision making preference continued to play an important role at admission. Likewise, during the hospitalisation, participants' perceived fairness was the most relevant mediator in the multiple model, followed by involvement in decision making, while respect for their decision making preference showed no significant effect.

Both were partial mediations. This mean that patients' involvement in decision making, the respect for their preference and their perceived fairness accounted for some, but not all the relationship between

involuntary hospitalisation and perceived coercion. This was in line with previous research that showed that other variables such as informal coercion (Hotzy and Jaeger, 2016; Klingemann et al., 2022; Lidz et al., 1998; Szmukler and Appelbaum, 2008) and patients' characteristics could influence their level of perceived coercion (Bindman et al., 2005; Fiorillo et al., 2012; Lidz et al., 1995; O'Callaghan et al., 2021; Plunkett et al., 2022; Poythress et al., 2002).

This study also highlighted that regardless of patients' preferences for decision making, they must be involved in medical decisions affecting them at the time of admission and treated fairly during their stay, if their perceived coercion has to be reduced. In specific clinical situations, for example, when patients are no longer capable of discernment, refuse care and the risk for themselves or other is important, coercion may be inevitable (Hamann and Heres, 2014). However, even in such context, it is still possible for professionals to involve patients by explaining why coercive measures are necessary and by providing them information about the procedure and their rights. Furthermore, patients' point of view on their situation and preferences regarding specific aspect of coercive measures can always be taken into account. For example, when forced medication has to be administered, patients can be consulted on the desired molecule, the modalities of its administration or its dosage. Moreover, in addition to reducing perceived coercion, involving patients in decision making may also lead to a decrease in the use of formal coercion (Stovell et al., 2016).

Moving forward in this direction, reducing perceived coercion among people with mental disorder is also about overcoming the many barriers that still limit the use of shared decision making in mental health care (Chmielowska et al., 2021; Hamann and Heres, 2014). These barriers exist on professionals' side in the form of time constraints, their view of patients as unsuitable and of shared decision making approach as nonbeneficial, the conviction that shared decision making is already applied, and the fear to make the wrong decision and to have to face legal consequences. On patients' side, self-stigma or loss of motivation after negative experiences of care could limit their investment in decision making process.

Some important elements relating to temporality were also highlighted in this study. At admission, but not during the stay, respect for the patients' decision making preference played a significant role in the relationship between involuntary hospitalisation and perceived coercion. A hypothesis that could explain this difference is the fact that when confronted with critical situations, some patients are more reluctant to get involved in the choices relating to the therapeutic options envisaged and prefer to let doctors decide what should be done (Ende et al., 1989; Hill and Laugharne, 2006). Moreover, severity of symptoms, quality of therapeutic alliance, patients' attitudes towards care or previous experience of coercion could have a greater impact on whether or not patients wish to be informed or take part in medical decision at admission rather than during the hospitalisation (Giacco et al., 2014; Hamann et al., 2005, 2011; Morán-Sánchez et al., 2019).

During the stay, but not at admission, perceived fairness played the most significant role in the relationship between involuntary hospitalisation and perceived coercion. It is possible that in the context of crisis leading to hospitalisation, patients have less opportunity to take into account the constituent elements of perceived fairness as measured by the fairness index: equity, beneficence, genuine interest, respect and dignity. These aspects may be more easily captured during the stay, in a setting where patients have the opportunity to develop regular links with carers, to discuss treatment options with them and to see how their views are taken into account and applied in care.

This study had some limitations. Firstly, perceived coercion at admission and during the stay was measured using two different scales (AES and CES humiliation/coercion score) that are correlated ($r = 0.58$) but which did not capture exactly the same dimensions (Golay et al., 2019c) and were therefore not entirely comparable. This could explain to some extent the differences between the two mediation models. However, the main objective of our study was not to compare absolute

levels of perceived coercion at different times of hospitalisation but potential pathways between involuntary hospitalisation and perceived coercion. Secondly, we decided to limit the mediation model to three mediators. This choice allowed us to highlight and compare the importance of these variables in the relationship between involuntary hospitalisation and perceived coercion but cannot account for all perceived coercion. Consequently, further work should be undertaken with other important variables to better understand perceived coercion. Fourthly, involuntary admitted patients could be seen as reluctant to take part in any study. However, many patients were willing to express themselves about coercion, which is a topic that looked very important to them. Since the proportion of involuntary patients in our sample (about one third) closely matches the proportion of involuntary hospitalisations in the hospital, we have little reasons to believe the recruitment was biased towards compliant patients. Fifthly, we did not rely on a continuous measure of formal coercion. The amount of coercion received is not dichotomous, but the legal decision of involuntary hospitalisation is. We also did not include measures of informal coercion. Finally, this study did not look at the decision making style of professionals, which has also an impact on patients. For example, patients' unmet needs decrease more over time when their clinicians preferred active to passive or shared decision making (Puschner et al., 2016).

5. Conclusions

At the time of a psychiatric hospitalisation, patients' involvement in decision making, respect of their decision making preference and their perceived fairness determined the relationship between involuntary hospitalisation and perceived coercion, but not in the same way at admission and during the stay. Involving patients in decision making and treating them fairly may be more relevant than taking account of their decision making preference in order to reduce perceived coercion.

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CRediT authorship contribution statement

Stéphane Morandi: Conceptualization, Formal analysis, Writing – original draft. **Benedetta Silva:** Conceptualization, Writing – review & editing. **Guillaume Pauli:** Investigation, Writing – review & editing. **Debora Martinez:** Investigation, Writing – review & editing. **Mizué Bachelard:** Writing – review & editing. **Charles Bonsack:** Conceptualization, Writing – review & editing. **Philippe Golay:** Conceptualization, Data curation, Formal analysis, Writing – review & editing.

Declaration of competing interest

None.

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