

## Developing the Japanese Version of the Patient's Health Belief Questionnaire on Psychiatric Treatment: Reliability and Validity Analysis

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Thematic Area: Clinical Psychology

### Abstract

**Introduction:** Non-adherence to treatment protocols significantly raises the risk of recurrence and hospitalization in depression patients. While healthcare providers have emphasized guidelines and patient education (Jorm et al., 2003), there is a growing need to understand patients' beliefs about psychiatric treatment to offer more personalized support (Carlos & Jose, 2019). This study addresses this gap by adapting and evaluating the Patient's Health Belief Questionnaire (PHBQPT), a valid scale designed to comprehensively assess beliefs about psychiatric treatment in six subscales (Carlos & Jose, 2019) to Japanese patients.

**Method:** We conducted a survey to assess the reliability and validity of PHBQPT among outpatient depression patients (N = 59). This research was approved by the Waseda University Academic Research Ethics Committee on Human Research (Approval No: 2023-015).

**Results:** Following the item analysis of PHBQPT, seven items were excluded, resulting in a refined scale structure. An exploratory factor analysis of the remaining items revealed a three-factor structure: perceived effectiveness of medication ( $\alpha = .71$ ), the necessity of treatment behaviors ( $\alpha = .74$ ), and internal locus of health ( $\alpha = .72$ ). The internal consistency of the PHBQPT Japanese version was robust, indicating its reliability as a psychological tool.

**Discussion:** The final 13-item Japanese version of the PHBQPT is brief, enhancing its practicality for quick assessments in outpatient settings. Understanding patients' perceptions of their illness and treatment is crucial for shared decision-making, which has been linked to improved patient satisfaction with treatment outcomes (Duncan et al., 2010). This tool's use in psychiatric outpatient care is expected to identify patients' concerns and questions, enabling healthcare providers to offer more effective support and personalized care. The ongoing data collection process anticipates a final sample size of  $n = 100$ . Subsequent to the augmentation of the sample size, additional exploratory analyses will be undertaken.

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## Introduction

- Patients with depression are at significantly increased risk of relapse and hospitalization by not complying with medical appointments or medication..
- While previous interventions have focused on guidelines and patient education (Jorm et al., 2003), there is an increasing need to understand patients' beliefs about psychiatric treatment in order to provide more individualized support (Cuevas & Leon, 2019).
- **The Patient's Health Belief Questionnaire** has been validated as a scale to assess beliefs about psychiatric treatment (Carlos & Jose, 2019). The PHBQPT is a 20-item scale that is valid and reliable with reproducible psychometric properties. It has six subsfactors, Insight, Internal Health Locus of Control, Doctor Health Locus of Control, Negative Aspects of Medication, Positive Aspects of Medication, and Psychological Reactance.

## Method

**Participants** : 70 outpatients with depression at 7 psychiatric clinics in Japan(27 men and 43 women, with mean age of 43.50±12.33).

**Procedure** : Internal consistency, item-total and item-item correlations were calculated and factorial structure was analysed.

**Item** : ①The Patient Health Beliefs Questionnaire (PHBQPT) (Cuevas & Leon, 2019) was used in the survey after obtaining prior permission from the original authors and translating it into Japanese. ②Wake Forest Physician Trust Scale – the Interpersonal Trust in a Physician scale(Oguro et al.,2021)③Therapeutic reactance scale(Imajo, 1993) ④Antidepressant adherence scale(Sakurai, 2022)

**Ethical considerations** : We conducted this study with the approval of the Waseda University Ethics Review Procedures concerning Research with Human Subjects (2023-015).

**COI** : The authors have no competing interests to disclose.

## Objectives

The aim of this study is Develop and evaluate the Japanese Version of the Patient's Health Belief Questionnaire in a sample of outpatients with depression in Japan.

## Results

Table 1. Factor structure of Japanese Version of the Patient's Health Belief Questionnaire (PHBQPT) (N = 70)

Cronbach's coefficient $\alpha = 0.795$	1	2	3	4	5	6
<b>I. Insight</b>						
2 I need medication for my mental health problem	0.84	0.02	0.10	0.05	-0.05	-0.05
12 I feel more normal on medication	0.66	-0.13	-0.02	0.02	-0.30	0.00
19 Taking medication will prevent me from having a breakdown	0.59	-0.11	-0.13	0.00	0.08	0.18
1 I have a mental health problem	0.56	0.19	-0.04	-0.17	0.34	-0.10
3 I need the assistance of a mental health professional (psychologist or psychiatrist)	0.48	0.03	0.10	0.02	0.31	0.12
<b>II. Internal Health Locus of Control</b>						
4 I am directly responsible for my condition getting better or worse	0.05	0.82	0.02	-0.05	-0.11	0.09
9 The main thing which affects my condition is what I myself do	-0.13	0.79	0.11	-0.05	-0.12	0.07
15 If my condition takes a turn for the worse, it is because I have not been taking proper care of myself	-0.08	0.69	-0.15	0.13	0.11	-0.13
<b>III. Negative Aspects of Medication</b>						
13 Medication makes me feel tired and sluggish	0.07	-0.04	0.90	-0.05	0.01	-0.13
8 I feel strange, "doped up", on medication	-0.09	0.05	0.75	0.12	0.04	0.09
<b>IV. Positive Aspects of Medication</b>						
12 Medications make me feel more relaxed	-0.03	-0.01	0.06	0.94	-0.02	0.00
18 My thoughts are clearer on medication	0.42	0.02	-0.03	0.57	-0.11	0.08
<b>V. Psychological Reactance</b>						
20 I become angry when my freedom of choice is restricted	-0.13	-0.11	0.04	-0.06	0.93	0.10
6 When someone forces me to do something, I feel like doing the opposite	-0.05	0.01	-0.05	0.31	0.34	-0.33
<b>VI. Positive Aspects of Treatment</b>						
10 Following doctor's orders to the letter is the best way to keep my condition from getting any worse	0.20	0.02	-0.04	-0.09	-0.01	0.60
7 For me, the good things about medication outweigh the bad	0.00	0.04	0.00	0.26	0.14	0.54

Note. Analysis using the main factor method and Promax rotation.

Table 2. Interitem correlations and Correlations

	1	2	3	4	5	6	7	8
Japanese Version of the Patient's Health Belief Questionnaire								
1 Insight	-							
2 Internal Health Locus of Control	.31 **	-						
3 Negative Aspects of Medication	.21	.28 *	-					
4 Positive Aspects of Medication	.69 **	.24 *	.04	-				
5 Psychological Reactance	.31 *	.12	.20	.10	-			
6 Positive Aspects of Treatment	.46 **	.14	-.10	.43 **	-.02	-		
7 Trust in Physician	.02	.08	-.41 **	.30 *	-.28 *	.25	-	
8 Therapeutic Reactance	.06	-.04	.36 **	.06	.45 **	-.07	-.36 **	-
9 Medication Adherence	-.04	.04	-.31 *	.04	.04	.06	.14	-.14

Note. \*p < .05, \*\*p < .01

- Item analysis of the PHBQPT resulted in the exclusion of four items and refinement of the scale structure.
- The factorial analysis confirmed the validity of a six-subscale structure in our sample(Table 1).

## Discussion

- The Japanese version of the PHBQPT contains 16 items, and compared with the original version of the scale, it lacked the Doctor Health Locus of Control. Patients with depression tend to blame themselves for mood changes and treatment efforts (Heider, 1958), and need the cooperation and support of their health care providers to solve treatment difficulties.
- It is hoped that **using this tool in the psychiatric outpatient setting will clarify patients' concerns and questions**, allowing health care providers to provide more effective care (Duncan et al., 2010).
- The ongoing data collection process anticipates a final sample size of N = 100. Further exploratory analyses will be conducted after the sample size is increased.

## Conclusions

The PHBQPT is a simple, valid, and reliable scale with 16 items. The Japanese version of the PHBQPT is appropriate for further investigation of attitudes toward psychiatric treatment.

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## 発表成果報告書

\* ご自身の研究発表の概要だけでなく、学会での国際交流体験などにつきましても必ずご記載ください。

### 【大会概要】

2024年7月21日から26日にチェコ・プラハで行われた33rd International Congress of Psychology (ICP2024)に参加した。会議では、ポスター発表や各セッションが実施され、各国で実施されている研究成果に触れながら、研究者と交流を深めることができた。

### 【研究発表概要】※抄録より変更あり

本会議では、うつ病患者の精神科受診に対する信念を測定する尺度であるPHBQPT日本語版の信頼性・妥当性の検討結果について発表した。

問題と目的：うつ病外来患者数の増加や長期治療に伴い、うつ病外来患者には受療行動の自己管理が求められている(下津, 2005)。受療行動の不遵守はうつ病の再発や入院リスクを高めることから、これまで受療行動支援として治療者のガイドライン遵守指導や患者への知識普及が行われてきたが(Jorm et al., 2003)、近年では、うつ病患者の精神科受診に対する信念を理解し、個別の支援を提供する必要性が高まっている(Carlos & Jose, 2019)。うつ病外来患者における受療行動への意識を測定するためには、うつ病患者の精神科受診に対する信念を包括的にとらえる必要がある。よって、精神科受診に対する患者の信念を6つの下位尺度で測定することのできるThe Patient's Health Belief Questionnaire on Psychiatric Treatment(以下、PHBQBT; Carlos & Jose, 2019)を用いることが妥当である。

方法：本研究では、Carlos & Jose (2019)によって提案された「The Patient's Health Belief Questionnaire on Psychiatric

Treatment(PHBQPT)」の日本語版を開発し、うつ病外来患者70名を対象に、尺度の信頼性・妥当性の検討を目的とした質問紙調査を行った。本研究は、早稲田大学人間科学学術院「人を対象とする研究に関する倫理委員会」の承認を得て実施された(承認番号 2023-015)。

結果・考察：探索的因子分析を実施した結果、洞察、健康の内的帰属感、服薬への否定的態度、服薬への肯定的態度、心理的リアクタンス、治療への肯定的態度の6因子構造16項目が採択された。本尺度を外来診察における初診時や待ち時間に実施することで、診察時の困りごとの相談や治療方針の検討につなげることが考えられる。このように、患者が自身の疾病や治療に対してどのように考えているかを把握し、治療方針の決定に活かすことは、共同意思決定として着目されており、治療に対する患者の満足度の増加に関連することが示されている(Duncan et al., 2010)。PHBQPT日本語版を精神科外来診療において活用することで、治療上で患者が抱える不安や疑問を把握し、治療者の支援につなげることが想定される。

### 【体験記】

ポスター発表時間では会場内に多くのポスターが並べられ、聴衆の方と対面にて議論を行うことができた。また、アプリケーションを通じた抄録参照によって、会場内で交流がかなわなかった研究者からの質疑やメッセージを受け取ることができ、研究への姿勢や熱意を実感することができたと感じる。今後は、本会議で得た知識や経験をもとに、これまで以上に精力的に研究活動に取り組みたい。(日本語 1200字以内)

採用された方についてはウェブページ等で内容が公開される場合があります。