Determining Factors of Adherence to Psychological Therapy in a Chilean University Context: A Multinomial Logistic Analysis

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ABSTRACT

This study explores the determinants influencing adherence to psychological therapy among university students in a Chilean clinical setting. Using a multinomial logistic regression model, we examine the impact of various factors, including sociodemographic characteristics, academic performance, and clinical supervisor attributes on therapy adherence. Key findings indicate that adherence is significantly affected by patient compliance rates, hours in therapy, and the quality of clinical supervision, with a notable gender difference showing higher adherence rates among female patients. The study underscores the importance of patient-provider relationships and highlights the role of personalized support in enhancing adherence to therapy. These results have practical implications for mental health service optimization in educational institutions and contribute to a more comprehensive understanding of the factors that influence therapy adherence in higher education contexts. Future research is recommended to assess the universality of these findings across diverse cultural and educational settings.

Keywords: Therapy adherence, University students, Multinomial logistic regression, Psychological therapy, Mental health services

INTRODUCTION

Adherence to psychological therapy is critical for achieving positive mental health outcomes, particularly within university student populations where mental health issues are increasingly prevalent (Conway & O'Connor, 2016). Studies have shown that adherence to therapy can be influenced by numerous factors, including sociodemographic characteristics, patienttherapist relationships, and academic pressures (Kohn et al., 2018). In recent years, mental health has gained attention globally, yet Latin America faces significant barriers, such as limited funding, insufficient mental health infrastructure, and stigma associated with seeking psychological help (Alarcón & Aguilar-Gaxiola, 2000; Betancourt & Chambers, 2016). These barriers often lead to inadequate mental health services, particularly in university contexts where students may struggle with high levels of stress, anxiety, and other psychological challenges (Lund, 2020).

In Chile, mental health policies have evolved over the past few decades, transitioning from an asylum-based approach to a community-centered model integrated within primary healthcare (Gatica-Saavedra & Vicente, 2020). University clinical settings, like the Psychological Clinic (CAPSI) at Universidad Andrés Bello, play a vital role in providing accessible mental health services to students while also functioning as training facilities for psychology students (Foladori, 2009). These clinics allow students to gain practical experience under supervision, an essential component of professional development in psychology (Rodríguez & Seda, 2013). However, ensuring high levels of adherence to therapy in such settings remains challenging, as students may face barriers related to time management, academic workload, and other personal factors (Soto et al., 2021).

This study seeks to identify the factors that influence adherence to psychological therapy among university students, specifically examining sociodemographic characteristics, academic performance, and the attributes of clinical supervisors. By focusing on a Chilean university context, this research aims to contribute valuable insights into the factors that drive adherence to therapy in educational settings with limited resources, helping to inform mental health policy and practice within similar contexts. Understanding these determinants is crucial for optimizing mental health services and improving therapy outcomes for students in higher education.

METHODOLOGY

This study utilizes a quantitative approach to examine factors influencing adherence to psychological therapy among university students at the Psychological Clinic (CAPSI) of Universidad Andrés Bello in Chile. A multinomial logistic regression model was selected to assess the impact of various independent variables on therapy adherence, allowing for an analysis of the probability of adherence based on multiple influencing factors. The sample includes 245 patients aged between 22 and 38 years, with an average age of 25.5 years. Data were collected from patient records at CAPSI for the year 2022, with ethical considerations ensuring confidentiality and anonymity.

Variables and Measurements

The dependent variable in this model is the degree of adherence to therapy, measured by the percentage of patient attendance over the course of treatment. Independent variables include:

• Compliance percentage (p_compliance): This variable measures patient compliance based on session attendance.

- Child and adolescent psychopathology attendance (a_psychopathology): Average attendance in sessions focused on psychopathology.
- Total hours assisted (h_assisted): The cumulative number of hours a patient participated in therapy.
- Professional practice hours (a_professional_practice): Average hours of professional practice for students conducting therapy.
- Scheduled therapy hours (h_scheduled): Total hours scheduled for each session.
- Social absences (s_absences): The number of absences due to social or personal reasons.

Statistical Analysis

The multinomial logistic regression model was used to predict adherence levels based on these variables, applying a variance inflation factor (VIF) analysis to assess multicollinearity. Only variables with VIF values below 2 were included, ensuring the model's robustness. This model accounts for 68% of the variability in therapy adherence, with high statistical significance (p < 0.05) in most predictor variables. SPSS software was employed for data processing and analysis.

Ethical Considerations

All data collection procedures adhered to ethical standards for research involving human participants. Approval was obtained from the university's ethics committee, and informed consent was secured from all patients included in the study. Data were anonymized to maintain patient confidentiality and protect sensitive information.

RESULTS

The analysis reveals several key factors that significantly influence adherence to psychological therapy among university students at CAPSI. The multinomial logistic regression model accounted for 68% of the variance in therapy adherence, indicating a robust explanatory capacity ($R^2 = 0.68$, p < 0.05).

Patients with higher compliance rates (i.e., consistent attendance) demonstrated significantly greater adherence to therapy sessions ($\beta = 0.326$, t = 12.491, p < 0.001). This suggests that patients who are initially more engaged are more likely to continue attending therapy sessions over time, highlighting the importance of early engagement strategies.

Attendance in sessions specifically addressing child and adolescent psychopathology was positively correlated with therapy adherence ($\beta = 0.090$, t = 3.359, p = 0.001). This may indicate that patients who attend these specialized sessions are more likely to adhere due to the perceived relevance and tailored support provided in these areas.

Total hours assisted in therapy sessions also showed a positive association with adherence ($\beta = 0.084$, t = 3.322, p = 0.001), suggesting that patients with more exposure to therapy hours are more likely to adhere. Additionally, professional practice hours of student therapists positively

influenced adherence ($\beta = 0.042$, t = 2.358, p = 0.020), indicating that experience levels of the clinical staff could impact patient engagement.

Scheduled therapy hours had a negative relationship with adherence $(\beta = -0.080, t = -3.076, p = 0.003)$. This finding suggests that patients may struggle to maintain adherence if sessions are overly frequent or lengthy, potentially due to academic or personal constraints. Conversely, social absences, defined as absences due to personal or social reasons, were positively associated with adherence in the sense that patients who had occasional absences but returned to therapy tended to maintain adherence overall ($\beta = 0.066, t = 2.621, p = 0.010$).

The study also identified a notable gender difference, with female patients showing higher rates of adherence compared to male patients. This difference aligns with prior research suggesting that women are more likely to seek and adhere to psychological services, particularly in a university setting (Foladori, 2009; Rodríguez & Seda, 2013).

Overall, adherence to therapy is positively influenced by initial compliance, attendance in targeted sessions, and experienced clinical supervision. In contrast, factors like scheduled therapy hours may hinder adherence due to potential time constraints faced by students. These results underscore the need for personalized approaches in therapy scheduling and support strategies to enhance adherence among university students.

	Unstandardize Coefficients	ed	Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	268	.226		-1.185	.238
p_compliance	.326	.026	.676	12.491	.000
a_psychopathology	.090	.027	.179	3.359	.001
h_assisted	.084	.025	.1468	3.322	.001
a_professional_practice	.042	.018	.123	2.358	.020
h_scheduled	080	.026	-1.322	-3.076	.003
s_absences	.066	.025	.547	2.621	.010

 Table 1. Result of econometric model for the percentage of patient attendance (own creation, 2024).

R2= 68%; Fstatistic: 7489.88; p_value: 0.009.

CONCLUSION

This study provides valuable insights into the factors that influence adherence to psychological therapy among university students in a Chilean context. The results indicate that adherence is significantly shaped by patient compliance, attendance in specialized sessions, and the level of clinical experience of student therapists. High compliance rates and tailored support in sessions addressing specific psychopathologies were strongly associated with increased adherence, emphasizing the importance of early patient engagement and relevance in therapeutic content. Conversely, frequent or lengthy sessions appeared to reduce adherence, likely due to the additional academic and personal demands faced by students. These findings suggest that flexibility in therapy scheduling and targeted support could be effective strategies for improving adherence in university clinical settings.

Furthermore, the gender difference observed, with higher adherence rates among female students, aligns with existing research and highlights the need for further exploration into gender-specific approaches to therapy engagement. The study's findings underscore the potential benefits of adopting a multifaceted approach that combines personalized therapy plans, early engagement, and clinical supervision as a means to support mental health within educational institutions. By addressing the unique challenges faced by university students, mental health services can be better tailored to promote adherence, ultimately contributing to more positive outcomes and a healthier student population. Future research across diverse educational contexts could expand on these insights and explore the generalizability of the results to other cultural settings.

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REFERENCES

- Alarcón, R. D., & Aguilar-Gaxiola, S. A. (2000). Mental health policy developments in Latin America. *Bulletin of the World Health Organization*, 78(4), 483–490.
- Betancourt, T. S., & Chambers, D. A. (2016). Optimizing an era of global mental health implementation science. *JAMA Psychiatry*, 73(2), 99–100.
- Conway, M., & O'Connor, D. (2016). Social media, big data, and mental health: Current advances and ethical implications. *Current Opinion in Psychology*, 9, 77–82.
- Foladori, H. (2009). Initial fears among psychology students before starting clinical practice. *Terapia Psicológica*, 27(2), 161–168.
- Gatica-Saavedra, M., & Vicente, B. (2020). National mental health plan: Reflections on the implementation of the community psychiatry model in Chile. *Revista Médica de Chile*, 148(4), 500–505.
- Kohn, R., Ali, A. A., & Puac-Polanco, V. (2018). Mental health in the Americas: An overview of the treatment gap. *Revista Panamericana de Salud Pública*, 42, e1–e10.
- Lund, C. (2020). Reflections on the next ten years of research, policy, and implementation in global mental health. *Epidemiology and Psychiatric Sciences*, 29, e77.
- Rodríguez, R., & Seda, M. (2013). Clinical supervision in the training of psychology students: Challenges and opportunities. *Journal of Psychology and Behavioral Science*, 1(1), 45–53.
- Soto, C., Pérez, M., & Zamora, A. (2021). Challenges in therapeutic adherence among university students. *Latin American Journal of Psychology*, 53(1), 21–32.