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# ASSOCIATION BETWEEN LEARNING STYLES AND CLINICAL SIMULATION SATISFACTION IN CHILEAN NURSING EDUCATION

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## SUMMARY

*This study explored the relationship between learning styles and satisfaction with high-fidelity clinical simulation (HFCS) among undergraduate nursing students at a public university in Chile. A cross-sectional design was employed, involving 109 students from the third, fourth, and fifth years of the nursing program. Learning styles were identified using the CHAEA-32 inventory, and satisfaction with HFCS was measured through a validated scale. Data were analyzed using descriptive statistics and Spearman's rank-order correlation. The reflective learning style was the most prevalent (34.86%), while the active style was the least common (13.76%). Many students displayed multiple learning preferences, with 30.28% showing two dominant styles.*

*Overall satisfaction with HFCS was high (87.07%), with "Interpersonal Relationship" as the highest-rated dimension. Third-year students reported the highest satisfaction (90.71%), followed by fifth-year (94.05%) and fourth-year students (85.82%). A significant positive correlation between learning style and satisfaction with HFCS was found only among third-year students ( $p = 0.619$ ,  $p < 0.01$ ). The findings suggest that learning style may influence the effectiveness of simulation experiences, particularly in earlier stages of training. Understanding these dynamics can support improved educational strategies in nursing programs that incorporate simulation-based learning.*

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## Introduction

 In health sciences education, students are exposed to diverse areas of knowledge through various teaching methodologies, all aimed at facilitating integration into

the professional field. In the context of nursing education, emphasis is placed on the development of comprehensive professionals capable of applying biopsychosocial and ethical judgment to deliver humanized, high-quality care throughout the life cycle. In Chile, as of 2023, a total of 37,366 students were enrolled in nursing

programs at institutions including universities within the Council of Rectors, private universities, and professional institutes. Of these, 19.5% were men (7,298 students) and 80.5% were women (30,068 students) (Ministerio de Educación, 2023).

To optimize the development of competencies in nursing students,

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**KEYWORDS / Clinical Simulation / Educational Measurement / Learning Styles / Nursing Education / Student Satisfaction /**

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it is important to recognize that knowledge acquisition is influenced by various learning styles (LS). According to Duque *et al.* (2017), these styles can be identified using the Honey-Alonso Learning Styles Questionnaire (CHAEA), which classifies learners as Active, Reflective, Theoretical, or Pragmatic. Identifying predominant learning styles facilitates intellectual development and supports effective and efficient instructional strategies. Additionally, it provides a foundation for planning tailored educational interventions.

#### *Learning styles according to the CHAEA model and their relationship with simulation-based learning satisfaction*

The CHAEA model (Honey and Mumford, 1986; Alonso *et al.*, 1994) defines four distinct learning styles: Active, Reflective, Theoretical, and Pragmatic. These styles describe preferences in acquiring and processing information within educational environments:

- Active learners are enthusiastic about new experiences and prefer learning through action. They tend to engage fully in group activities, simulations, and practical exercises.
- Reflective learners prefer to observe and contemplate before taking action. Their understanding is enhanced through analysis, introspection, and review of prior experiences.
- Theoretical learners are inclined toward logic, structure, and theoretical constructs. They seek to understand underlying principles and value clearly organized information.
- Pragmatic learners focus on practical application. They favor learning that is directly applicable to real-life situations and immediately usable in professional contexts.

These learning styles may be conceptually associated with specific dimensions of satisfaction in clinical simulation. For instance, Active learners often value the Session Structure dimension, as it involves direct participation, defined roles, and immersive hands-on scenarios. Reflective learners tend to align with the Meaningful Learning dimension, benefiting from debriefing, guided analysis, and reflective processes. Theoretical learners may relate to both Session Structure and Meaningful Learning, particularly when simulations are well-structured and theoretically grounded. Pragmatic learners are likely to experience greater satisfaction when simulations emphasize real-world applicability, effective communication, and problem-solving features linked to the Interpersonal Relationship dimension.

Understanding these connections is essential for designing simulation-based educational strategies that address diverse learning preferences and enhance educational effectiveness.

This theoretical framework also contextualizes previous empirical findings on learning style distributions among nursing students. For example, a study by Caballero *et al.* (2020) on learning styles and academic performance in nursing students reported a predominance of Reflective and Theoretical styles (15.9 and 14.2 points, respectively), while Pragmatic and Active styles were less favored (13.7 and 11 points, respectively).

Consequently, it is necessary to implement diverse teaching methodologies that address various learning styles (LS). One such strategy is clinical simulation (CS), which has been incorporated into many nursing education programs. As described by Ayala *et al.* (2019), CS involves hypothetical, controlled scenarios that replicate real-life clinical environments. It allows for the assessment and documentation of practical competencies following theoretical instruction. This methodology compensates for the lack of direct clinical experience and coordination challenges within healthcare teams, thereby enhancing student and patient safety and improving satisfaction with the learning process (Sánchez and Guamán, 2022).

Numerous studies have highlighted the benefits of CS. For instance, Yusef *et al.* (2021), in a study conducted at Universidad Austral de Chile, surveyed 106 nursing students with experience in CS. Over 88% reported that CS facilitated the integration of theoretical and practical knowledge, and approximately 95% agreed that it improved critical thinking and decision-making skills. Participants also emphasized the value of engaging with professional scenarios in a safe environment, receiving constructive feedback, and identifying areas for improvement. These factors contribute to increased satisfaction across different LS by promoting active engagement and self-awareness regarding learning outcomes (Sánchez and Guamán, 2022).

Similarly, a study by Felipe-López (2022) at Universidad del Papaloapan, Mexico, involving 159 nursing students, found that participants rated CS highly in terms of its usefulness for developing critical thinking, decision-making, team communication, and integration of theory and practice. The use of realistic scenarios supported the development of technical skills, clinical confidence, and a strong sense of professional competence.

Given this context, it is important to explore the relationship between students' LS and their satisfaction with CS. Aligning CS with students' preferred LS could strengthen performance, facilitate the acquisition of competencies associated with graduate profiles, and increase satisfaction with educational experiences. Thus, the objective of this study is to determine the relationship between LS and satisfaction with CS among nursing students.

#### *Theoretical background*

The process of acquiring knowledge varies significantly among individuals. In the context of nursing education, it is critical to provide students with the appropriate tools to support their professional development and ensure alignment with the graduate profile of their institution. At the university under study, the nursing graduate profile is characterized by humanized care, continuous learning, social responsibility, respect for diversity, and a commitment to innovation and excellence in service to society.

From this perspective, educational strategies such as CS are valuable because they allow for learning through trial and error without putting actual patients at risk (Guevara-Fernández and Solera-Porras, 2022). Moreover, healthcare professionals are expected to deliver high-quality and safe care, which requires rigorous training and assessment. Kolb's experiential learning theory (1984), which aligns with Piaget's constructivist views, posits that knowledge results from the interaction between an individual and their environment, giving rise to meaningful representations that guide experience (Villarreal, 2023).

Considering LS, students are active participants in their educational process, each with unique physical, cognitive, and psychosocial developmental stages that influence how they acquire and process information. Even when exposed to the same environment and content, students respond differently depending on their LS, which are also shaped by factors such as age, stimulation, and cultural experience (Espinár, 2020).

Therefore, educators must be flexible, adapt their planning to class dynamics, and account for individual learning rhythms, interests, and cognitive processing differences (Duque *et al.*, 2018). One advantage of CS as a learning methodology is that it closely replicates real-life clinical situations, thereby strengthening patient safety and reducing adverse events (Sánchez and Guamán, 2022).

Clinical simulation integrates cognitive, clinical, and soft skills, aligning with constructivist and meaningful learning approaches (Guevara-Fernández and Solera-Porras, 2022). According to Sánchez and Guamán (2022), simulation is not only a teaching strategy but also a learning methodology that requires specific competencies from both students and educators. As noted by Palma *et al.* (2021), the effectiveness of simulation depends on adequate preparation for both groups, including clear guidance, safe environments for making mistakes, role clarity, and a shift in the educator's role from transmitter of knowledge to facilitator and coach.

This study uses the CHAEA-32 scale, a shortened version of the original 80-item CHAEA questionnaire, developed by Vega and Patiño (2013) and validated by Astudillo-Araya *et al.* (2024). The 32-item instrument uses a Likert scale (0 to 5) to classify students into the four LS categories. To measure satisfaction with CS, the Clinical Simulation Quality and Satisfaction Survey, validated in Chile by Astudillo-Araya *et al.* (2023), will also be applied. This 12-item instrument assesses three dimensions: Meaningful Learning, Session Structure, and Interpersonal Relationships.

By explicitly examining how each LS may relate to specific satisfaction dimensions, this study offers a theoretical and empirical framework for understanding students' experiences in simulation-based education. Such alignment is essential to formulate and test hypotheses that explore whether particular learning styles are more likely to be associated with higher satisfaction, thereby enabling the development of more effective pedagogical strategies.

This study focuses on third-, fourth-, and fifth-year nursing students and aims to identify which LS are most and least associated with satisfaction in CS. The findings will support efforts to tailor simulation experiences to specific learning preferences, fostering greater development of cognitive, procedural, and attitudinal skills.

Understanding satisfaction with CS is essential, as it enables educators to distinguish between effective and ineffective elements, thereby enriching the overall learning experience and contributing to quality education (Padilla *et al.*, 2024).

Based on this perspective, the present study examines the relationship between learning styles (LS) and satisfaction with clinical simulation among nursing students at the university under study. Specifically, it aims to answer the

following research question: Is there a relationship between LS and satisfaction with CS among third-, fourth-, and fifth-year nursing students?

The general objective of this study is to determine the relationship between learning styles (LS) and satisfaction with clinical simulation (CS) among third-, fourth-, and fifth-year nursing students at a Chilean university. To address this objective, the study also aims to:

- Describe the sociodemographic and academic characteristics of the students, including age, sex, academic year, academic performance, and the number of previous high-fidelity simulations.
- Identify the learning styles of nursing students according to their academic year.
- Determine the level of satisfaction with clinical simulation.
- Establish the relationship between learning styles and the level of satisfaction with clinical simulation, disaggregated by academic year.

Through a comprehensive analysis of these variables, the present study seeks to provide evidence that supports the optimization of simulation-based learning and the personalization of pedagogical strategies in nursing education.

## Methods

### Design

A quantitative, cross-sectional, and correlational design was employed to examine the relationship between nursing students' learning styles and their satisfaction with clinical simulation. This methodological approach is commonly used to explore associations between variables measured at a single point in time (Polit and Beck, 2021).

### Setting and participants

The study was conducted at the School of Nursing of a university in southern Chile during the second semester of 2024. The participants included undergraduate nursing students enrolled in CS courses during the academic year. A non-probabilistic convenience sampling method was applied, resulting in a sample of 109 students who voluntarily agreed to participate and met the inclusion criteria: enrollment in the nursing program and previous experience with CS.

The minimum required sample size was calculated based on expected correlation coefficients using G\*Power version 3.1, with a significance level ( $\alpha$ ) of 0.05 and statistical power of 0.80 (Faul *et al.*, 2009). G\*Power is a

free statistical software developed at the University of Düsseldorf, designed to conduct power analyses for a wide range of statistical tests, including t-tests, ANOVA, correlation, regression, and chi-square tests. It enables researchers to estimate required sample sizes, determine achieved power, and perform sensitivity analyses. Due to its user-friendly interface and versatility, G\*Power is widely used in the social, behavioral, and health sciences.

### Data collection instruments

Two validated instruments were used. The CHAEA-32 questionnaire was employed to assess learning styles (Active, Reflective, Theoretical, and Pragmatic) using 32 items with a six-point Likert-type scale response format (Vega and Patiño, 2013; Betancourt *et al.*, 2021; Astudillo-Araya *et al.*, 2024). The Clinical Simulation Quality and Satisfaction Survey was utilized to evaluate three dimensions: meaningful learning, session structure, and interpersonal relationships, using a five-point Likert scale (Astudillo-Araya *et al.*, 2023).

### Procedure and ethical considerations

The study received approval from the university's Research Ethics Committee, ensuring compliance with the ethical principles outlined in the Declaration of Helsinki (World Medical Association, 2013). After obtaining ethics approval, eligible students were invited to participate during scheduled class sessions. Participants were provided with detailed information regarding the purpose of the study, procedures, confidentiality measures, and their rights. Electronic informed consent was obtained prior to data collection.

Participation was entirely voluntary, and it was clearly stated that the decision to participate or not would have no impact on academic performance. Data collection was conducted using anonymous, self-administered online questionnaires distributed through a secure institutional platform. Completion of both instruments required approximately 20 minutes. All data were handled confidentially and were anonymized to protect participants' identities throughout the research process.

### Data analysis

Table I presents the sociodemographic and academic characteristics of the participating students, which contextualize the subsequent analysis of learning styles and satisfaction.

The data were analyzed using IBM SPSS Statistics, version 29. Descriptive statistics—including means, standard deviations, and frequency distributions—were calculated for sociodemographic, academic, and study-related variables. To assess normality assumptions, the Kolmogorov-Smirnov test was applied to the main quantitative variables. Given that the data did not follow a normal distribution, non-parametric methods were used. Specifically, Spearman's rank-order correlation was conducted to examine the relationship between learning styles (as measured by CHAEA-32 scores) and satisfaction with clinical simulation. The significance level was set at  $p < .05$  for all statistical tests.

To ensure analytical clarity in interpreting Tables II and III, students were classified into one of three categories based on their CHAEA-32 scores: (1) those with a single dominant learning style, (2) those exhibiting multiple styles, and (3) those without a clearly defined style. A single dominant style was assigned when one of the four CHAEA dimensions showed the highest score. Multiple styles were identified when two or more styles had closely comparable scores (within  $\pm 1$  point), indicating a balanced or flexible learning profile. Undefined styles were attributed when no clear dominance was observed across the four dimensions.

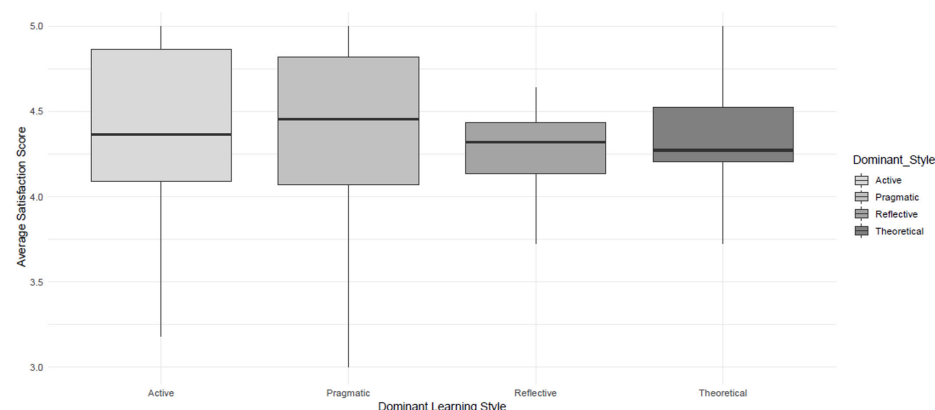


Figure 1. Average Satisfaction by Dominant Learning Style.

TABLE I  
DISTRIBUTION OF NURSING STUDENTS ACCORDING TO PERSONAL AND ACADEMIC CHARACTERISTICS

Variable	Category	Percentage (%)
Age (mean = 22.1 ± 1.2)	20 years	15.59
	21 years	32.11
	22 years or more	52.29
Gender	Male	22.94
	Female	77.06
Academic year	Third year	34.86
	Fourth year	55.05
	Fifth year	10.09
Academic performance*	4.0 – 4.9	0.92
	5.0 – 5.9	58.72
	6.0 – 7.0	40.37
Previous HFCS sessions	1 session	1.83
	2 sessions	13.76
	3 or more sessions	84.40

\*Based on a grading scale from 1.0 to 7.0.

## Results

The study included a total of 109 nursing students, whose socio-demographic and academic characteristics are summarized in Table I. Regarding age, 52.29% of participants were 22 years old or older. The sample was predominantly composed of female students

(77.06%), and most participants were enrolled in their fourth year of study (55.05%). In terms of academic performance, 58.72% of students reported grade point averages ranging from 5.0 to 5.9 on a 1.0 to 7.0 scale. With respect to prior high-fidelity clinical simulation sessions, 84.40% reported participation in three or more sessions.

To explore the relationship between learning styles and satisfaction with clinical simulation, the boxplot in Figure 1 complements the information presented in Table II. While Table II provides a summary of learning style distribution across academic years—highlighting the predominance of the reflective style (34.86%) and the lower representation of the active style (13.76%)—the boxplot illustrates the variation in satisfaction levels according to students' dominant learning styles. By presenting measures of central tendency and dispersion for each style, the boxplot offers further insight into whether particular learning styles are associated with higher or lower satisfaction with simulation experiences, beyond

TABLE II  
FREQUENCY AND PERCENTAGE OF STUDENTS BY LEARNING STYLE AND ACADEMIC YEAR

Academic Year	Active (%)	Reflective (%)	Theoretical (%)	Pragmatic (%)
3rd (n=38)	13.16 (5)	18.42 (7)	28.95 (11)	18.42 (7)
4th (n=60)	15.00 (9)	43.33 (26)	18.33 (11)	18.33 (11)
5th (n=11)	9.09 (1)	45.46 (5)	27.27 (3)	9.09 (1)
Total	13.76 (15)	34.86 (38)	22.94 (25)	17.43 (19)



their frequency. This combined analysis enhances the understanding of how learning preferences may influence perceptions of clinical simulation.

In addition to single-style preferences, a subset of students exhibited undefined or multiple learning styles (Table III). Undefined styles accounted for 8.26% of the total sample. Students with two dominant preferences represented 30.28%, while 10.09% demonstrated three preferences. Only 4.59% displayed four preferences, and 2.75% had mixed styles, with two styles equally dominant. The most frequent dual-style combinations were pragmatic-active and reflective-pragmatic.

Regarding satisfaction with HFCS, the results indicated high overall satisfaction, with an average total score of 87.07% across all academic years (Table IV). Among the three

dimensions evaluated, “Interpersonal Relationship” yielded the highest mean score (89.3%), while “Session Structure” had the lowest (79.6%).

When analyzed by academic year, third-year students reported the highest overall satisfaction (90.71%), with “Meaningful Learning” again scoring highest (88.1%) and “Session Structure” lowest (83.2%). Fourth-year students reported lower satisfaction (85.82%), with “Session Structure” scoring the lowest (75.2%). Fifth-year students exhibited the highest satisfaction levels across all dimensions, with an overall score of 94.05%, and “Meaningful Learning” reaching the highest value (94.8%).

Normality tests using the Shapiro-Wilk test confirmed non-normal distributions for both learning style and satisfaction variables ( $p < 0.05$ ), justifying the use of Spearman’s rank-order

correlation. As shown in Table V, a significant positive correlation between learning styles (CHAEA-32 scores) and satisfaction was observed exclusively among third-year students ( $\rho = 0.619$ ,  $p < 0.01$ ). No significant associations were found for fourth- or fifth-year students.

This pattern is visually supported by Figure 2, where the regression line for third-year students shows a marked positive slope, indicating a stronger relationship between the variables. In contrast, the lines for fourth- and fifth-year students are nearly flat, reflecting the absence of a meaningful association.

Discussion

The sociodemographic and academic profile of the 109 nursing students included in this study is consistent with national trends and previous research. A majority were enrolled in the fourth year of their program (55.05%), aligning with typical enrollment distributions. The predominance of female students (77.06%) reflects national data, where over 80% of nursing students are women (Ministerio de Educación, 2023).

Most participants were aged 22 years or older, consistent with findings reported by Chambi-Choque *et al.* (2020) and Olimpo *et al.* (2021), confirming typical academic progression. Regarding academic performance, the majority reported GPAs between 5.0 and 5.9, in agreement with previous studies,

TABLE III  
DISTRIBUTION OF PARTICIPANTS WITH UNDEFINED OR MULTIPLE LEARNING

LS Classification	3rd year	4th year	5th year	Total (%)
Undefined LS	6	2	1	8.26
Two-preference LS	7	22	4	30.28
Three-preference LS	3	6	2	10.09
Four-preference LS	1	4	0	4.59
Mixed LS (100%-100%)	2	1	0	2.75

LS: Learning style.

TABLE IV  
SATISFACTION SCORES ACCORDING TO ACADEMIC YEAR AND SIMULATION DIMENSION

Academic Year	Dimension	Min	Max	Median	Mean ( $\bar{x}$ )	Percentage ** (%)
All years	Meaningful Learning	19	35	32	31	88.57
	Session Structure	4	10	8	7.96	79.6
	Interpersonal Relationship	2	10	9	8.93	89.3
	Total Score	33	55	49	47.89	87.07
3rd	Meaningful Learning	21	35	31	30.84	88.1
	Session Structure	4	10	9	8.32	83.2
	Interpersonal Relationship	6	10	9	8.74	87.4
	Total Score	34	55	49	49.89	90.71
4th	Meaningful Learning	19	35	32	30.70	87.7
	Session Structure	4	10	8	7.52	75.2
	Interpersonal Relationship	6	10	9	8.98	89.8
	Total Score	29	55	49	47.2	85.82
5th	Meaningful Learning	27	35	35	33.18	94.8
	Session Structure	8	10	10	9.18	91.8
	Interpersonal Relationship	8	10	9	9.36	93.6
	Total Score	45	55	54	51.73	94.05

\*\* Percentage of  $\bar{x}$  relative to maximum possible score per dimension.

TABLE V  
SPEARMAN'S CORRELATION BETWEEN LEARNING STYLES AND  
SATISFACTION BY ACADEMIC YEAR

Academic Year	Variable	Spearman's $\rho$	Sig. (2-tailed)
3rd year (n= 38)	CHAEA-32	0.619**	< 0.01
4th year (n= 60)	CHAEA-32	0.167	0.202
5th year (n= 11)	CHAEA-32	-0.037	0.914

\*\* Correlation is significant at the 0.01 level (2-tailed).

despite variations in performance categorization (Ruiz and Martini, 2020).

A substantial proportion (84.40%) had participated in three or more clinical simulation sessions, likely increasing the reliability of the satisfaction measurements—in contrast to studies reporting limited exposure (Astudillo-Araya *et al.*, 2023).

Findings related to learning styles (LS) partially corroborate prior studies. The Reflective style was the most prevalent, especially among fourth-year students, followed by the Theoretical style, a pattern consistent with results from Arias *et al.* (2020). Notably, a considerable number of students exhibited mixed LS profiles, suggesting a greater degree of flexibility in learning preferences.

These patterns may reflect broader educational trends in Latin

America, where similar student demographics and curricular structures are commonly observed (Caballero *et al.*, 2020; Guevara-Fernández and Solera-Porras, 2022). Accordingly, the findings may be generalizable to other nursing programs across the region. Identifying predominant learning styles among students may support educators in Latin American institutions in designing clinical simulation activities that are more pedagogically appropriate and engaging. This is especially relevant in educational settings where traditional lecture-based approaches are still predominant, and simulation is being integrated as a key strategy to enhance patient safety and clinical reasoning (Sánchez and Guamán, 2022). Adapting simulation to align with regional learning preferences may promote more meaningful learning experiences and

increased satisfaction in culturally similar academic contexts.

Comparative analysis by academic year revealed that learning styles tend to evolve over time. Third-year students predominantly preferred the Theoretical style, whereas fourth-year students favored the Reflective style. This shift may reflect the increasing cognitive demands encountered as students face more complex clinical scenarios, a trend also noted by Bravo *et al.* (2020).

The study tested two hypotheses regarding the relationship between learning styles and satisfaction with clinical simulation. Neither hypothesis was supported: although Reflective learners reported slightly higher satisfaction than Theoretical learners, these differences were not statistically significant.

Nevertheless, clinical simulation remains a central pedagogical strategy in nursing education, offering safe, realistic environments for skills development. Its effectiveness may be enhanced when aligned with students' learning preferences. For instance, Reflective learners benefit from structured debriefing, Theoretical learners from conceptual frameworks, and Active learners from real-time engagement.

In summary, although no strong associations were found between learning styles and satisfaction,

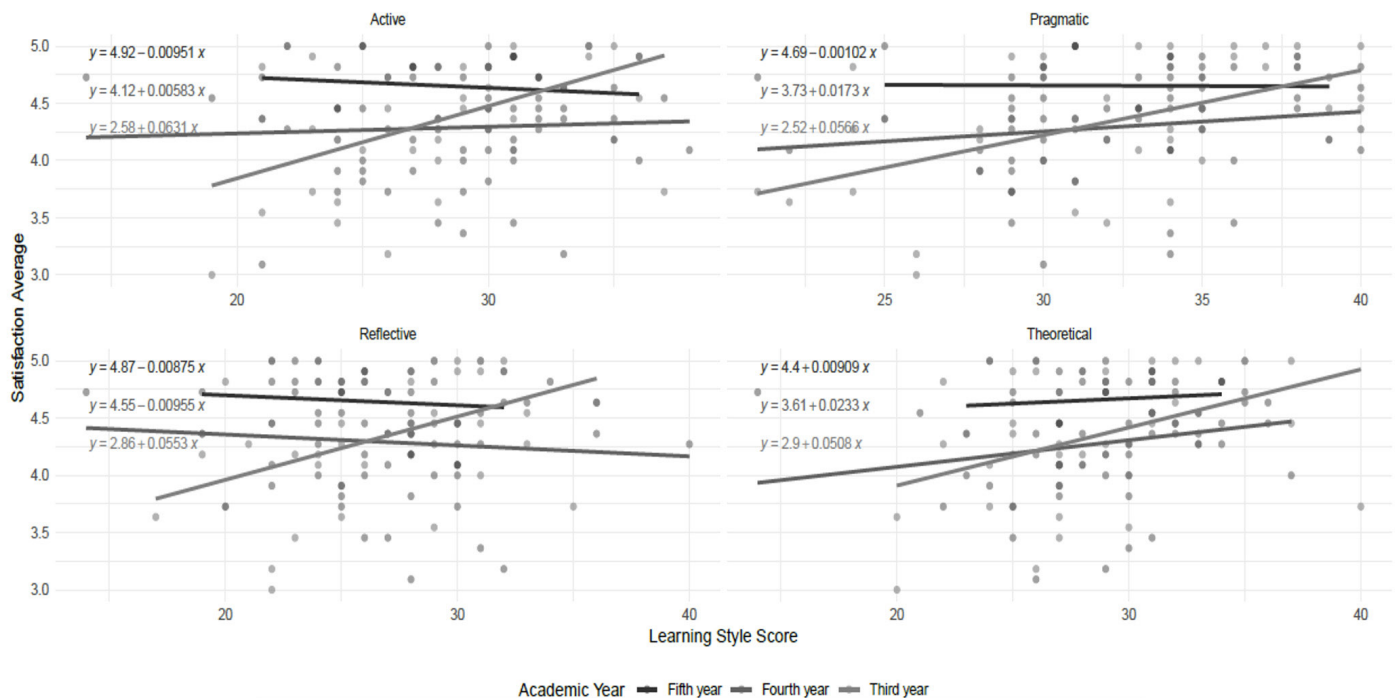


Figure 2. Scatter plots with regression lines showing the relationship between learning style scores (CHAEA-32) and satisfaction with high-fidelity clinical simulation, by academic year.

simulation practices can still be optimized by accounting for individual differences. Future research should investigate how instructional design can more effectively accommodate diverse learning needs.

## Conclusions

This study examined the relationship between learning styles and satisfaction with high-fidelity clinical simulation among third-, fourth-, and fifth-year nursing students at a Chilean university. The sample was predominantly composed of female students, mostly aged 22 years or older, with the fourth academic year representing the highest proportion. Most participants reported academic performance within the 5.0 to 5.9 range and had previous experience with at least three simulation sessions, providing an appropriate basis for evaluating satisfaction.

In terms of learning styles, the Reflective style emerged as the most prevalent overall, particularly among fourth- and fifth-year students, while the Active style was the least preferred across all academic levels. Notably, third-year students showed a stronger preference for the Theoretical style. Despite these variations, students from all academic years reported high satisfaction levels across all assessed dimensions, indicating a generally favorable perception of clinical simulation as a teaching strategy.

The correlation analysis identified a statistically significant positive association only among third-year students, with Reflective learners demonstrating slightly higher satisfaction than their Theoretical counterparts. These results contradict the initial hypotheses, which anticipated greater satisfaction among Theoretical learners. However, the lack of significant associations in the upper academic years suggests that although learning styles may influence satisfaction at earlier stages, other factors likely assume a more central role as students progress through their clinical education.

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## ASOCIACIÓN ENTRE ESTILOS DE APRENDIZAJE Y SATISFACCIÓN CON LA SIMULACIÓN CLÍNICA EN LA FORMACIÓN DE ENFERMERÍA EN CHILE

Francisco Novoa-Muñoz, Ángela Astudillo-Araya, Marcela Espinoza-Espinoza, Pedro Severino-González y Guipsy Rebolledo-Aburto

### RESUMEN

*Este estudio analizó la relación entre los estilos de aprendizaje y la satisfacción con la simulación clínica de alta fidelidad (HFCS) en estudiantes de enfermería de pregrado de una universidad pública chilena. Se aplicó un diseño transversal a 109 estudiantes de tercer, cuarto y quinto año. Los estilos se identificaron mediante el inventario CHAEA-32, y la satisfacción se evaluó con una escala validada. Se utilizaron estadísticas descriptivas y correlación de Spearman. El estilo reflexivo fue el más frecuente (34,86%) y el activo el menos común (13,76%). El 30,28% presentó dos estilos dominantes. La satisfacción general con la HFCS fue alta (87,07%), siendo “Relación Inter-*

*personal” la dimensión mejor valorada. La mayor satisfacción se observó en tercer año (90,71%), seguido de quinto (94,05%) y cuarto año (85,82%). Solo en tercer año se halló una correlación positiva significativa entre estilo de aprendizaje y satisfacción ( $p=0,619$ ,  $p<0,01$ ). Estos resultados sugieren que la satisfacción con la simulación puede estar relacionada con los estilos de aprendizaje en etapas iniciales. Se observa una transición hacia estilos reflexivos a medida que avanza la formación, lo que resalta la necesidad de estrategias docentes flexibles. La HFCS, bien estructurada y contextualizada, permite atender diversas preferencias de aprendizaje.*

## ASSOCIAÇÃO ENTRE ESTILOS DE APRENDIZAGEM E SATISFAÇÃO COM A SIMULAÇÃO CLÍNICA NO ENSINO DE ENFERMAGEM NO CHILE

Francisco Novoa-Muñoz, Ángela Astudillo-Araya, Marcela Espinoza-Espinoza, Pedro Severino-González e Guipsy Rebolledo-Aburto

### RESUMO

*Este estudo analisou a relação entre estilos de aprendizagem e a satisfação com a simulação clínica de alta fidelidade (HFCS) em estudantes de graduação em enfermagem de uma universidade pública chilena. Aplicou-se um desenho transversal com 109 estudantes do terceiro, quarto e quinto ano. Os estilos foram identificados por meio do inventário CHAEA-32, e a satisfação foi avaliada com uma escala validada. Utilizaram-se estatísticas descritivas e correlação de Spearman. O estilo reflexivo foi o mais frequente (34,86%) e o ativo, o menos comum (13,76%). Cerca de 30,28% apresentaram dois estilos dominantes. A satisfação geral com a HFCS foi alta (87,07%), com des-*

*taque para a dimensão “Relação Interpessoal”. Os estudantes do terceiro ano apresentaram maior satisfação (90,71%), seguidos pelos do quinto (94,05%) e quarto ano (85,82%). Apenas no terceiro ano observou-se correlação positiva significativa entre estilo de aprendizagem e satisfação ( $p=0,619$ ,  $p<0,01$ ). Os resultados sugerem que a satisfação com a simulação pode estar relacionada aos estilos de aprendizagem, especialmente nas fases iniciais da formação. Observa-se uma transição para estilos mais reflexivos ao longo do curso, o que evidencia a necessidade de estratégias pedagógicas adaptativas. A HFCS, quando bem estruturada, favorece diferentes perfis de aprendizagem.*